Pilling® | KMedic®

# SURGICAL INSTRUMENTS CATALOG

German Engineering. American Design. World-Class Quality.

Teleflex®

# GENERAL INFORMATION

Pilling® and KMedic® Surgical Instruments . . . 7
Customer Service . . . 8
Guarantee/Warranty . . . 9
Care and Cleaning . . . 10
Policies and Procedures . . . 11
Trademarks . . . 12
Instrumentation Services . . . 13
N-Compass™ Instrument Management System . . . 14
Scales and Gauges . . . 16
Measuring Guidelines and Common Jaw Patterns of Surgical Instruments . . . 18

# GENERAL INSTRUMENTS AND PRODUCTS

Overview . . . 20
Knife Handles . . . 22
Forceps and Clamps . . . 25
Scissors . . . 101
Needle Holders . . . 150
Retractors, Hand-Held . . . 185
Retractors, Self-Retaining . . . 216
Retractors, Table-Mounted . . . 238
Suction Tubes . . . 243
Extended Length/Open Bariatric . . . 249
OB/GYN . . . 262
Urology . . . 292
Rectal . . . 298
Miscellaneous General . . . 307
Micro Clips and Appliers . . . 315
Instrument Accessories . . . 322
Floor Grade Instruments . . . 349
Specialty Sponges . . . 357
Weck® Specialty Products . . . 367
Container Systems . . . 368
Weck® Ligation Solutions . . . 373

# EAR, NOSE AND THROAT INSTRUMENTS

Overview . . . 386
Laryngoscopes . . . 388
Subglottiscopes . . . 406
Instrumentation for Laryngoscopes . . . 416
Bronchoscopes . . . 437
Telescopes and Accessories . . . 442
Rigid Endoscope/Telescope Compatibility Chart . . . 444
Esophagoscopes . . . 446
Instrumentation for Bronchoscopes and Esophagoscopes . . . 451
Fiber Optic Cables . . . 463

Bougies/Dilators . . . . . 465
Tracheostomy Tubes . . . . . 469
Ear Instruments . . . . . 493
Nasal Instruments . . . . . 503
Mouth and Throat Instruments . . . . . 521
Scope and Light Carriers Identification Index . . . . . 534

## CARDIAC, VASCULAR AND THORACIC INSTRUMENTS

Overview . . . . . 542
CVT Forceps and Clamps . . . . . 544
Bulldog® and Micro Vessel Clamps . . . . . 560
Pilling® Vascular Clamps . . . . . 573
Vascular Clamps . . . . . 575
Aortic Vascular Clamps . . . . . 628
Scissors . . . . . 656
CVT Needle Holders . . . . . 674
Titanium Instruments: Forceps and Clamps . . . . . 686
Titanium Instruments: Scissors . . . . . 704
Titanium Instruments: Needle Holders . . . . . 707
Rib Instruments . . . . . 714
CVT Retractors . . . . . 720
Valve Instruments . . . . . 751
Aortic Punches . . . . . 762
Heparin Cannulae . . . . . 764
Suction Tubes . . . . . 765
Vascular Dilators . . . . . 768
Valvulotomes . . . . . 772
Mediastinoscopy . . . . . 774
Video-Assisted Thoracoscopy . . . . . 780
Miscellaneous CVT . . . . . 793
Specialty Sets . . . . . 798

## ORTHOPEDIC INSTRUMENTS

Overview . . . . . 804
KMedic® Wire And Pin Implants . . . . . 806
Kirschner Wires, Steinmann Pin, Vickers K-Wire Dispensers . . . . . 809
Vickers Easidriver . . . . . 812
KMedic® Gratloch™ Wire Bender . . . . . 814
Wire Twisters And Wire/Pin/Rod Cutters . . . . . 816
KMedic® Corwin Wire Twister . . . . . 819
KMedic® P.I. Wire Twister And Tightener . . . . . 820
KMedic® Jet Wire Twister . . . . . 821
About KMedic® Wire And Pin Cutters . . . . . 822
KMedic® Large Pin Cutter . . . . . 830
KMedic® Cable Cutter . . . . . 832
Table Top Rod Cutter . . . . . 834
Pliers . . . . . 835

Wire Guides and Traction Bows . . . 848
Ligature Carriers and Wire Passers . . . 849
Drills, Drill Bits and Guides . . . 850
KMedic® Drill Bit Sterilization Case . . . 857
Trephines . . . 868
Screw Drivers . . . 869
Bending Irons and Rod Holders . . . 877
Orthopedic Retractors . . . 882
Vickers Finger Retractor . . . 899
Bone Holding Instruments . . . 918
Bone Hooks and Awls . . . 942
Cartilage and Tendon Instruments . . . 946
Dissectors and Elevators . . . 953
Bone Files and Rasps . . . 970
Curettes . . . 979
Osteotomes . . . 992
Smartracks for Osteotomes . . . 1001
Chisels and Gouges . . . 1002
Bone Tamps and Impactors . . . 1009
Mallets . . . 1011
Bone Cutting Forceps . . . 1019
Rongeurs . . . 1023
KMedic® Spinal Rongeurs and Punches . . . 1045
KMedic® Cleanpunch® Rongeurs . . . 1047
TL Spinal Implant Removal System . . . 1066
Nail Instruments . . . 1068
Bone Saws and Knives . . . 1075
Plaster Cast Instruments . . . 1078
Measuring Devices . . . 1082
Smartracks . . . 1085
Specialty Trays . . . 1090
Miscellaneous Orthopedic . . . 1091

## OPHTHALMIC INSTRUMENTS

Overview . . . 1100
Forceps . . . 1102
Scissors . . . 1112
Needle Holders . . . 1121
Hooks . . . 1122
Curettes . . . 1124
Knives . . . 1125
Specula . . . 1125
Lacrimal Probes/Dilators . . . 1126
Eye Spuds/Needles . . . 1127
Irrigation Cannula . . . 1128
Calipers . . . 1130
Cutting Block . . . 1130
Eye Shields . . . 1131

## LAPAROSCOPIC INSTRUMENTS


Overview . . . . . 1132
Handle Types . . . . . 1134
5 mm Dissectors, Grasping Forceps . . . . . 1135
10 mm Dissectors . . . . . 1138
5-10 mm Biopsy Forceps . . . . . 1139
5 mm Bipolar Forceps . . . . . 1141
5 mm Ratcheted Graspers . . . . . 1142
5 mm Needle Holders . . . . . 1147
5 mm Scissors . . . . . 1148
Trays . . . . . 1149
Electrodes and Coagulators . . . . . 1150
Verres Needles . . . . . 1151
Cannulas . . . . . 1151
Probes . . . . . 1151
Knot Pushers . . . . . 1151
Telescopes . . . . . 1152
Retractors . . . . . 1152

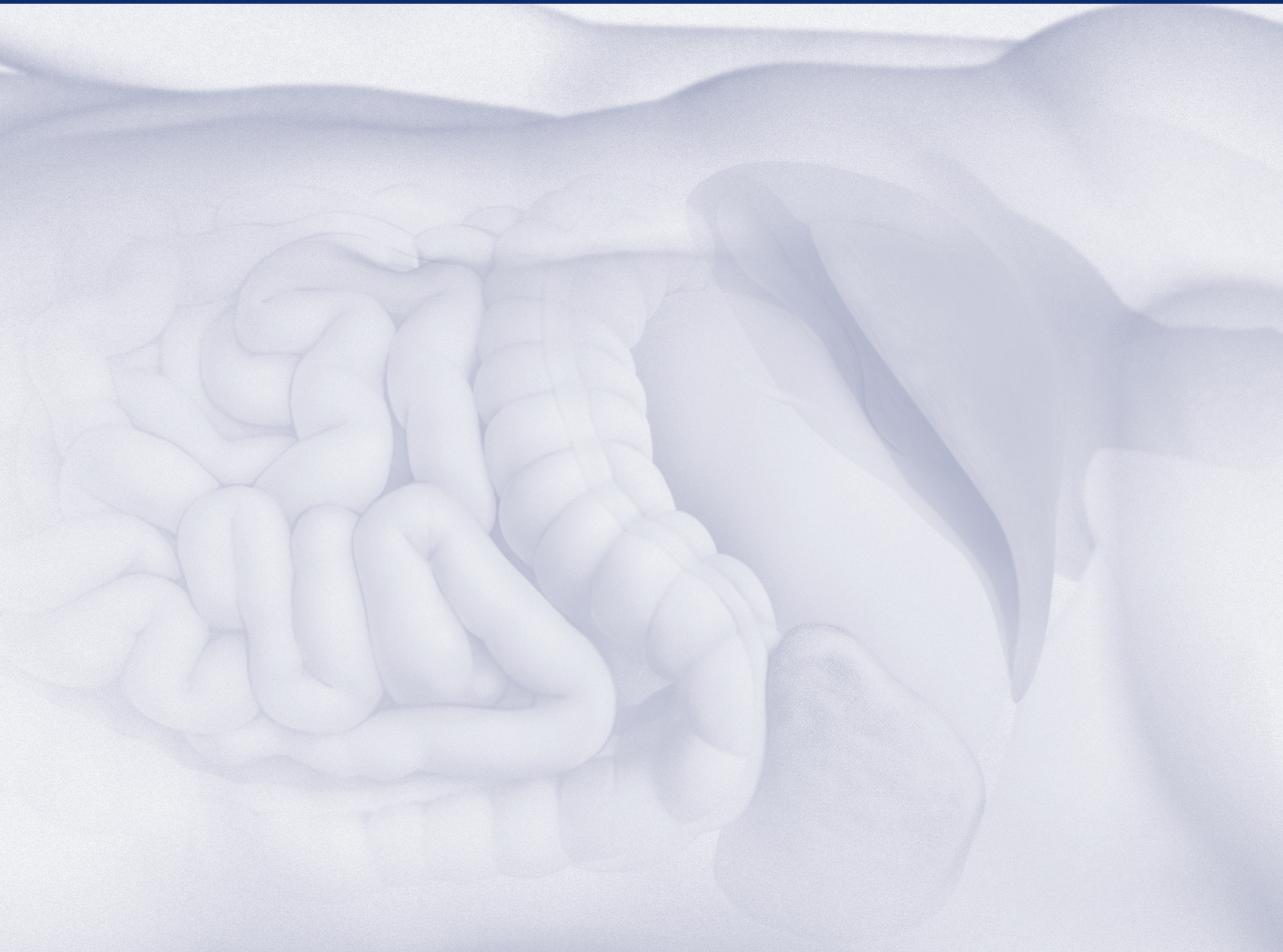

## ELECTROSURGICAL INSTRUMENTS


Overview . . . . . 1154
Biceps Non-stick Bipolar Forceps and Cords . . . . . 1156
Biceps Forceps and Cords . . . . . 1157
Disposable Electrodes . . . . . 1159
Electrodes . . . . . 1160
Monopolar Handswitching Forceps . . . . . 1160
Coagulation Suction Tubes . . . . . 1161


## ADDITIONAL SURGICAL PRODUCTS


Overview . . . . . 1162
Deklene® Maxx™ Polypropylene Suture . . . . . 1164
Tevdek®/Polydek® Braided Polyester Suture . . . . . 1164
NextStitch® Valve Suture . . . . . 1164
Gabbay Frater Suture Organizer . . . . . 1164
Taut® Cholangiography Catheters . . . . . 1165
Taut® System One™ Common Bile Duct Exploration Kit . . . . . 1166
Weck Vista® Bladeless Laparoscopic Access Ports . . . . . 1167
Weck EFx™ Endo Fascial Closure System . . . . . 1168
Weck® Visistat® Fixed Head Skin Staplers . . . . . 1169
Weck® Rotating Head Skin Stapler . . . . . 1169
Weck® Skin Staple Extractors . . . . . 1169

INDEX . . . . . 1170



# PILLING® AND KMEDIC® SURGICAL INSTRUMENTS

## Quality that builds confidence

For nearly 200 years, Pilling® quality instruments have been provided to surgeons across the world to help improve the standard of patient care. The Pilling® Brand is especially known globally in the CVT and ENT specialties with numerous proprietary instruments co-developed with leading surgeons in these fields.

George P. Pilling joined a company started in 1814 that fashioned jewelry and fraternal emblems and guided the business into a new role. As hospitals in the Philadelphia, Pennsylvania area needed new tools to provide improved care for their patients, the Pilling Company met that important need and established itself as the oldest surgical instrument manufacturer in the United States.

Today, the Pilling® Brand is an important part of the Teleflex® Brand portfolio, and continues its legacy in providing high quality, hand-crafted instrumentation that meets the surgeon's requirements.

Over the years, the Pilling® Brand has maintained high standards of quality and continues to emphasize customer service and satisfaction. As surgical procedural needs change, specialty surgeons can count on Pilling® branded instruments to meet their new requirements.

KMedic®, another member of the Teleflex® Family of brands, offers the most extensive line of orthopedic instruments with more than 2,000 patterns. Just like our Pilling® brand, our KMedic® Line of orthopedic instruments conform to the highest standards of precision and reliability, consistency of pattern and lasting value.

# PILLING® AND KMEDIC®

American designed. German engineered. World-class quality.

Pilling® and KMedic® Branded surgical instruments are made from 100% German and U.S. forgings to ensure the highest quality and impeccable functionality. These instruments are fully guaranteed for the quality of material and workmanship and has been subjected to an established quality control process that consists of a comprehensive product inspection that verifies the form, fit, and function of all the instruments.

Pilling® Forceps and Scissors are made of the finest stainless steel, processed to obtain optimum corrosion resistance, resilience and strength.

Ratchets on Pilling® Vascular Clamps provide indispensable finite control for arterial clamping. Ratchets are designed with the steps (1 x 7, 1 x 9, 1 x 11) to furnish the specific amounts of required compression.

Pilling® DeBakey® Jaws are designed to clamp and hold without slipping. Cardiovascular clamps featuring these jaws will grip tissue delicately but firmly, or will completely occlude a vessel, reducing the danger of crushing or causing undue damage to the intima.

The LIFE-LOK® Box Lock construction of all Pilling® Vascular Clamps and a growing assortment of general instruments have virtually eliminated cracked and broken box locks. This major improvement materially prolongs the useful life of these expensive instruments and reduces the necessity for repair or replacement.

We are able to provide **laser surface or ebonized finishes** for most stainless steel instruments to provide the appropriate reflection-lowering finish for their use in laser surgery.

**We continually strive to improve our products, therefore changes may result. All specifications and measurements in this Catalog may vary within accepted industry standards or change without notice. Teleflex® will not be responsible for any printing errors contained herein.**

**Measurements given in our Catalog refer to overall length, unless specified otherwise.**

**Reproduction of illustrations or descriptions is prohibited without the express written consent of Teleflex®.**

***For more information on Pilling® and KMedic® Products, or to place an order, contact Customer Service at 866-246-6990.***

# PILLING® AND KMEDIC® SURGICAL INSTRUMENTS

## Guarantee/Warranty

This warranty information may be modified from time to time by Teleflex®. Please check the Pilling® Instruments on-line catalog website for the most current warranty information: Pillinginstruments.com

Except as provided below, all surgical instruments stamped or etched with the Pilling® or KMedic® Brand shall be free from manufacturing defects in material or workmanship for the life of the instrument. Teleflex®'s sole responsibility under all warranty shall be, at Teleflex®'s option, to either repair, replace, or refurbish any instrument proving defective, free of charge. Teleflex® makes no warranty with respect to In-Ex branded instruments, lenses, malleable items, micro instruments, bougies and disposable products. This guarantee is void if instruments are not maintained or repaired properly, or if they are not used for their intended surgical purpose.

### LIFE-LOK® BOX-LOCK

Pilling® Instruments that feature the LIFE-LOK® box-lock are warranted not to break or crack in the box lock area due to stress buildup for the life of the instrument.

### NEEDLE HOLDERS

Pilling® Needle Holders containing Tungsten Carbide (TC) inserts are warranted against cracking or fragmenting in the jaw for (3) years.

### TUNGSTEN CARBIDE INSERTS

KMedic® Scissors, Needle Holders and Wire Cutters that obtain Tungsten Carbide (TC) inserts, are guaranteed for (3) years. Replacement parts, such as springs, are guaranteed for (1) year.

### NON-DISPOSABLE LAPAROSCOPIC INSTRUMENTS

Pilling® Non-Disposable Laparoscopic Instruments are warranted against failure in normal use for one (1) year. This warranty does not cover routine sharpening or refurbishment, or repair of damage caused by misuse.

The above warranties are contingent upon the proper maintenance and use of the instruments and do not cover instruments that have been modified without Teleflex®'s approval or which have been subjected to unusual stress, or on which the original identification marks have been removed or altered.

### TELESCOPES AND LIGHT CARRIERS

All light carriers and Rod Lens Telescopes etched with the Pilling® Name shall be free from manufacturing defects in material or workmanship. Any parts proving defective in the first 12 months of ownership will be serviced, repaired or replaced at Teleflex®'s option, free of charge.

This limited warranty is the only warranty provided by Teleflex®. Teleflex® disclaims all other warranties, either express or implied, including but not limited to implied warranties of merchantability and fitness for particular purpose. In no event shall Teleflex® have any liability for indirect, consequential, special, incidental or punitive damages, however caused, on any theory of liability and whether or not it has been advised of the possibility of such damages.

# CARE AND CLEANING

High quality surgical instruments are typically made from surgical grade stainless steel (i.e., 410, 420 etc.). The grade varies by manufacturer and by type of instrument. For example, a scissor may be fabricated of 420 stainless steel to enable the blades to be hardened adequately for long life. A forceps on the other hand usually does not require the same hardness, and may be fabricated from a 410 grade.

Malleable retractors are made of yet another grade. The grade of stainless steel selected for specific instruments is critical for long serviceability. The grade of steel reflects its hardness and its resistance to corrosion. Unfortunately, there is an inverse relationship, that is, the more the steel can be hardened, the greater its susceptibility to corrosion.

In an effort to reduce corrosion problems, Teleflex® specially treats (passivates) its instruments to make the surface less chemically active with its environment. All Weck® Instruments feature this special high gloss finish. This finish reduces the number of pits in the instrument, which in turn reduces the number of sites where corrosion can occur. These steps are necessary due to the environment, which is very harsh as a consequence of the composition of blood and other fluids, the chemicals used to clean and disinfect the instruments, and finally the methods used to sterilize them.

## USE

Use instruments for their intended purpose only.

## CLEANING

Instruments should be thoroughly cleaned with cleaners such as: Wec-Kleen®, Weck® Liquid Detergent, Weck Instrument Cleaner or Wec-Wash® as soon as possible after use. Once blood or other foreign matter has dried, removal is very difficult. If left in place these contaminants can provide sites for corrosion to begin. Distilled water (pH near 7) is recommended for soaking and cleaning instruments. If cleaning manually, avoid use of wire brushes or abrasive powders as these can create sites for corrosion. An ultrasonic cleaner is recommended.

## CARE

After a thorough cleaning, instruments with moving parts should be lubricated using a product such as Weck-Lube® or Wec-Kreem® to keep surfaces lubricated. It is important to use water soluble lubricating agents only.

## STERILIZATION

The use of repeated flash cycles is damaging to instruments, therefore a standard steam cycle is preferred. Instruments should be arranged in an open position and instruments fabricated from different metals should be separated to avoid electrochemical reactions. Refer to the sterilizer manufacturer's instructions and AORN guidelines for proper sterilization techniques.

## MAINTENANCE

Routine inspection for damaged tips, jaw alignment, loose box-locks, and worn or damaged ratchets can identify problems. If caught early these problems can often be repaired at a much lower cost than the replacement price of an instrument which has become damaged beyond repair. Contact your Teleflex® Sales Representative to see the Weck® Care and Cleaning Products, set up an instrument inspection program, and review our extensive repair capabilities.

***To locate Instructions For Use (IFU) and Cleaning and Sterilization Instructions for Pilling® Instruments, go to: www.teleflex.com/ifu.***

# POLICIES AND PROCEDURES

## REFURBISHING/REPAIR SERVICE

Even the finest surgical instruments may need to be repaired or refurbished. Teleflex® recognizes the need to provide rapid responses and quick turnaround times in these situations.

We accept all brands and types of surgical instruments in need of refurbishment or repair. To expedite your repair, include hospital name and address, department to return, and a contact name and phone number. Any surgical instrument which needs refurbishing or repair, regardless of manufacturer, should be forwarded to:

Teleflex®
Surgical Instrument Repair
4177 Varsity Drive Unit B
Ann Arbor, MI 48108
(877) TFX- RPR1
(877) 839-7771

## TERMS AND CONDITIONS

Standard terms are: net 30 days; F.O.B. shipping point, unless otherwise approved in writing by Teleflex®.

All orders are subject to approval and acceptance by Teleflex®.

Teleflex® reserves the right to alter or suspend credit, refuse shipment or cancel unfilled orders, when credit conditions or delivery delays from the customer warrant such action.

## PARTIAL SHIPMENTS AND SPECIAL ORDERS

Due to demand for certain products, Teleflex® cannot guarantee that every product will be available for immediate shipment. If a back order situation occurs, partial shipment will be made where possible. Your invoice will indicate any product on back order.

If partial shipments are not acceptable or practical, we will make every effort to ship the complete order at the earliest possible time.

Certain products are built to order and are subject to availability of raw materials. These products may require longer lead times.

## RETURN GOODS POLICY

All returns must be accompanied by a "Return Goods Authorization Number" which is available by calling our Customer Service Department at 866-246-6990. Teleflex®'s invoice number, order number and date of receipt of goods must be supplied to customer service in order to obtain a return goods number.

All returns must be made within sixty (60) days of invoice date. The products must be unused and in the original packaging.

Returned goods must be shipped prepaid to:
Teleflex®
11425 N. Distribution Cove
Olive Branch, MS 38654

The goods should also be accompanied by a copy of the invoice or packing list and a return goods authorization number. All returns are subject to the Teleflex® instrument's inspection and acceptance.
There will be a $5.00 per instrument charge for removal of etching applied at the customer's request.
The following items are non-returnable, other than for a manufacturing defect:

- Sterilized products
- Discontinued products
- Engraved instruments or instruments etched by hospital
- Instruments returned after sixty (60) days of invoice date
- Custom or modified items
- Silicone goods
- Disposable products

# TELEFLEX® TRADEMARKS

Pilling®

BICEPS®
BULLDOG®
CLEAR ADVANTAGE®
DIGITATE®
HEMOCLIP®
CLEANPUNCH®
HEM-O-LOK®
IDENTI-LOOPS®
LIFE-LOK®
PILLING®
KMEDIC®
PLASTI STATS®
TECHNIQUE®
VISISTAT®

WEC-JAW®
WEC-KLEEN®
WECK-LUBE®
WEC-PEN FTC®
WEC-WASH®
WECK®
KAISER-PILLING®
K-P®
KLINTMALM™
MAKI™
MCDOUGAL™
N-COMPASS™
WECK-RACK™

# INSTRUMENTATION SERVICES

In addition to providing our customers with a comprehensive product line of surgical instruments, Teleflex® also offers the following programs and services:

- N-COMPASS™ Instrument Management System
- Repair Service
- Custom Instruments Service
- Complimentary Instrument Etching
- Special Instrument Finishes

***For more information on these services, please contact your Teleflex® Surgical Sales Specialist or customer service at 866.246.6990.***

# N-COMPASS™ INSTRUMENT MANAGEMENT SYSTEM

## Your Path To Total Instrument Management

### THE N-COMPASS SYSTEM SAVES TIME AND MONEY BY:

- Minimizing risk of errors in instrument set assembly, which can help reduce OR schedule delays
- Enabling Central Processing staff to locate instruments to locate instruments by providing offering the functionality to search hospital inventory
- Identifies frequently used instrument sets and helps you manage inventory relative to case volume
- Minimizing risk of purchasing errors and increased requisition processing time by clear identification of instrument requirements and vendors

### THE N-COMPASS SYSTEM PUTS YOU IN CONTROL:

#### CUSTOMIZE COUNT SHEETS

- Use and update easily
- Include images of each instrument and the assembled instrument set
- Customize to your specific needs
- Make and save global instrument changes

#### INSTRUMENT LOCATOR

- Search by catalog number, description, or vendor
- Search set inventory to locate a specific instrument eliminating the need to open sets

#### INSTRUMENT REPAIR RECORDS

- Generate instrument/equipment repair reports
- Review repair status
- Create repair/replacement requisitions automatically

#### INSTRUMENT INVENTORY

- Produce a complete instrument inventory
- Sort instrument inventory by instrument type, catalog number, description, vendor, set name, and surgical specialty

#### DIGITAL IMAGE DATABASE

- More than 20,000 individual instrument images at your fingertips
- Import assembled set images
- Save time and reduce errors in new and replacement instrument ordering
- Train new employees more easily with identified instruments and sets

*The N-COMPASS Instrument Management System is a software-based management tool designed by Teleflex that allows you the freedom to customize and manage your instrument count sheets.*

### CROSS REFERENCE LIST

- Simplify instrument ordering by cross referencing instruments with leading suppliers

### PRICING/BUDGETING

- Dollar values for each instrument, set, and specialty
- Easy access to pricing to assist in budgeting and financial planning

### REPORTS

- Generate staff productivity and set use reports
- Track data on set usage to help identify both high and low set usage

### N-COMPASS SERVICES PROVIDED BY TELEFLEX:

- Software installation
- On-site physical set inventory
- Data entry and verification
- Digital images of Pilling®, Weck® and KMedic® Instruments
- Standardization of instrument patterns
- Customized count sheets
- On-site training

# SCALES AND GAUGES

## CONVERSION SCALE

| TO CONVERT FROM | TO | MULTIPLY BY |
|---|---|---|
| Ounces (AVDP.) | Grams | 28.349523 |
| Ounces (APOTH.) | Grams | 31.103486 |
| Grains | Grams | 0.06479891 |
| Pounds (AVDP.) | Kilograms | 0.45359237 |
| Inches | Centimeters | 2.54 |
| Feet | Meters | 0.3048 |
| Yards | Meters | 0.9144 |
| Ounces (U.S. Fluid) | Cubic Centimeters | 29.573730 |
| Ounces (British Fluid) | Cubic Centimeters | 28.41305 |
| Quarts (U.S. Fluid) | Liters | 0.9463264 |
| Cubic Inches | Cubic Centimeters | 16.387064 |
| Grams | Grains | 15.432358 |
| Grams | Ounces (AVDP.) | 0.35273962 |
| Grams | Ounces (APOTH.) | 0.32150737 |
| Kilograms | Pounds (AVDP.) | 2.2046226 |
| Millimeters | Inches | 0.039370079 |
| Centimeters | Inches | 0.39370079 |
| Meters | Feet | 3.2808399 |
| Cubic Centimeters | Cubic Inches | 0.61023744 |
| Cubic Centimeters (Fluid) | Ounces (U.S. Fluid) | 0.33814023 |
| Liters | Quarts (U.S. Fluid) | 1.056718 |

## FAHRENHEIT AND CENTIGRADE SCALES

| F° | C° |
|---|---|
| 500 | 260 |
| 401 | 205 |
| 392 | 200 |
| 383 | 195 |
| 374 | 190 |
| 356 | 180 |
| 347 | 175 |
| 338 | 170 |
| 329 | 165 |
| 320 | 160 |
| 311 | 155 |
| 302 | 150 |
| 284 | 140 |
| 275 | 135 |
| 266 | 130 |
| 248 | 120 |
| 239 | 115 |
| 230 | 110 |
| 212 | 100 |
| 203 | 95 |
| 194 | 90 |
| 176 | 80 |
| 167 | 75 |
| 140 | 60 |
| 122 | 50 |
| 113 | 45 |
| 105 | 40.56 |
| 104 | 40 |
| 104 | 40 |
| 100 | 37.8 |
| 98.5 | 36.9 |
| 95 | 35 |
| 86 | 30 |
| 77 | 25 |
| 68 | 20 |
| 50 | 10 |
| 41 | 5 |
| 32 | 0 |
| 23 | -5 |
| 14 | -10 |
| +5 | -15 |
| -4 | -20 |
| -13 | -25 |
| -22 | -30 |
| -40 | -40 |
| -76 | -60 |

# SCALES AND GAUGES

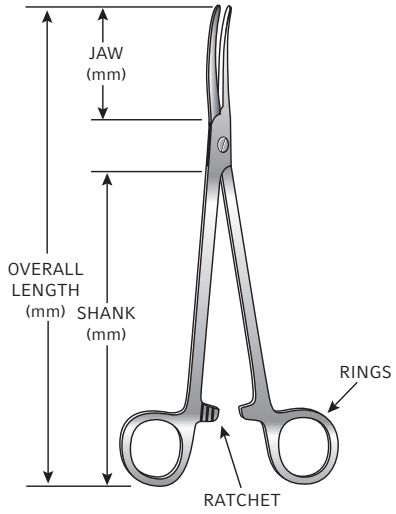
## COMPARATIVE SCALES OR GAUGES

| DIAMETERS IN MILLIMETERS | AMERICAN | FRENCH | ENGLISH |
|---|---|---|---|
| 1/3 | | 1 | |
| 1/2 | 1 | | |
| 2/3 | | 2 | |
| 1 | 2 | 3 | |
| 1-1/3 | | 4 | |
| 1-1/2 | 3 | | |
| 1-2/3 | | 5 | |
| 2 | 4 | 6 | |
| 2-1/3 | | 7 | 1 |
| 2-1/2 | 5 | | |
| 2-2/3 | | 8 | 2 |
| 3 | 6 | 9 | 3 |
| 3-1/3 | | 10 | |
| 3-1/2 | 7 | | |
| 3-2/3 | | 11 | 4 |
| 4 | 8 | 12 | 5 |
| 4-1/3 | | 13 | |
| 4-1/2 | 9 | | |
| 4-2/3 | | 14 | |
| 5 | 10 | 15 | 6 |
| 5-1/3 | | 16 | 7 |
| 5-1/2 | 11 | | |
| 5-2/3 | | 17 | 8 |
| 6 | 12 | 18 | 9 |
| 6-1/3 | | 19 | 10 |
| 6-1/2 | 13 | | |
| 6-2/3 | | 20 | 11 |

| DIAMETERS IN MILLIMETERS | AMERICAN | FRENCH | ENGLISH |
|---|---|---|---|
| 7 | 14 | 21 | |
| 7-1/3 | | 22 | 12 |
| 7-1/2 | 15 | | |
| 7-2/3 | | 23 | 13 |
| 8 | 16 | 24 | |
| 8-1/3 | | 25 | 14 |
| 8-1/2 | 17 | | |
| 8-2/3 | | 26 | 15 |
| 9 | 18 | 27 | 16 |
| 9-1/3 | | 28 | 17 |
| 9-1/2 | 19 | | |
| 9-2/3 | | 29 | |
| 10 | 20 | 30 | 18 |
| 10-1/3 | | 31 | 19 |
| 10-1/2 | 21 | | |
| 10-2/3 | | 32 | 20 |
| 11 | 22 | 33 | 21 |
| 11-1/3 | | 34 | 22 |
| 11-1/2 | 23 | | |
| 11-2/3 | | 35 | 23 |
| 12 | 24 | 36 | 24 |
| 12-1/3 | | 37 | 25 |
| 12-1/2 | 25 | | |
| 12-2/3 | | 38 | 26 |
| 13 | 26 | 39 | 27 |
| 13-1/3 | | 40 | 28 |

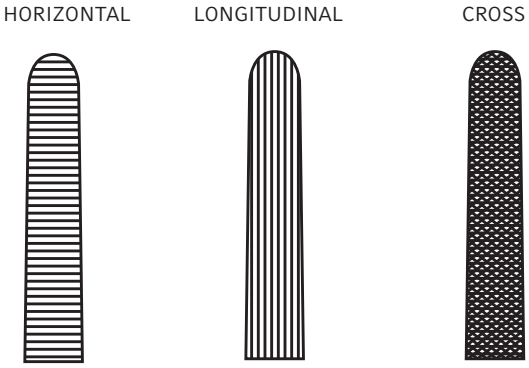
# MEASURING GUIDELINES AND COMMON JAW PATTERNS OF SURGICAL INSTRUMENTS

High quality, handcrafted instrument measurements will vary slightly. Instruments in this catalog are stainless steel unless otherwise noted.

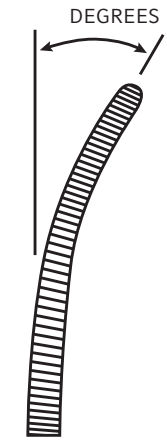



## COMMON JAW SURFACES FOUND ON HEMOSTATS AND CLAMPS

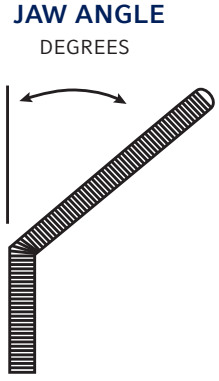
### SERRATIONS



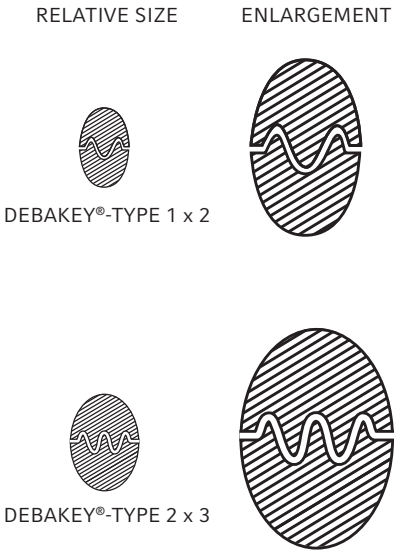

## JAW CURVATURE




## JAW ANGLE

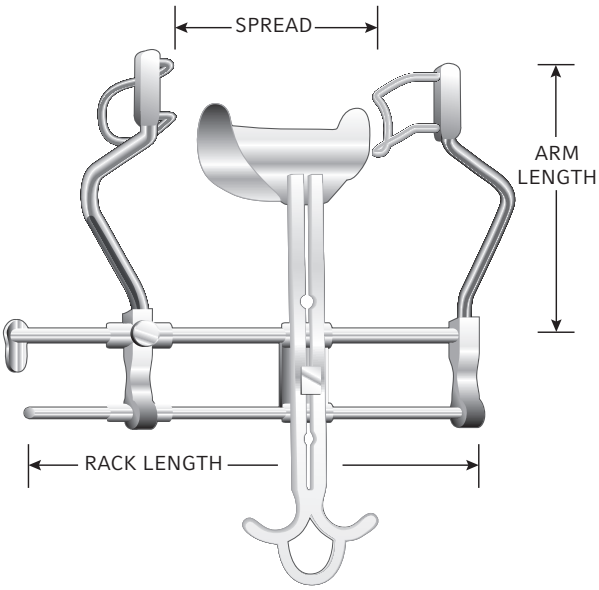


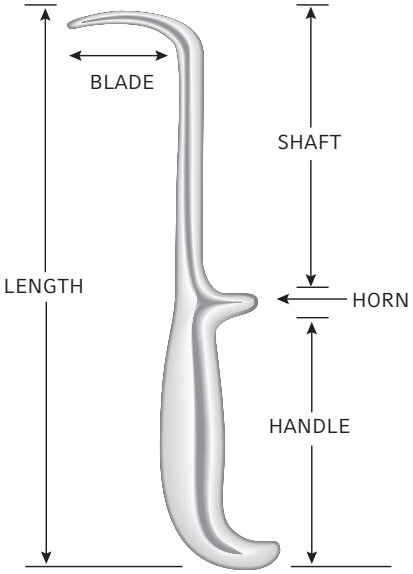

## JAW CROSS SECTIONS

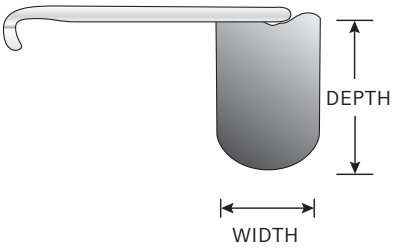


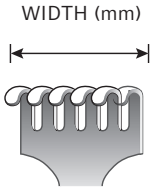

## COMMON SURFACES FOUND ON NEEDLE HOLDERS WITH TUNGSTEN CARBIDE INSERTS

## FROM INNER SURFACE OF SIDE BLADES

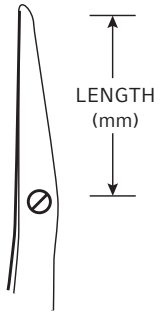


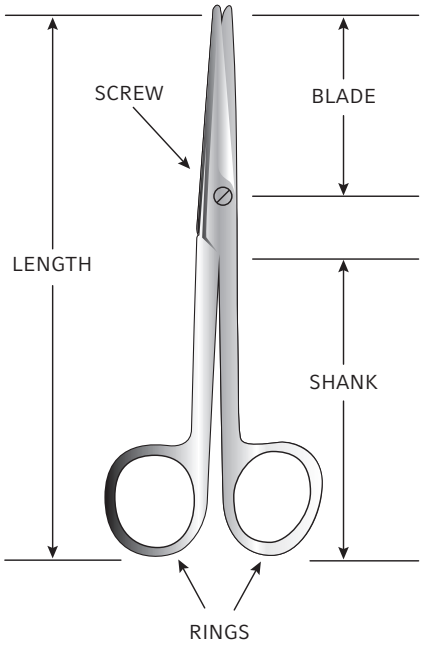



## BLADE LENGTH




## RING HANDLE




## BLADE CURVATURE

PILLING

# GENERAL INSTRUMENTS

Pilling® Surgical Innovation and Quality

## CHAPTER OVERVIEW

It has been the innovations developed through the Pilling® Brand and responsiveness to the needs of healthcare professionals which have established Teleflex® as a leader in surgical instrumentation.

Today, in addition to the worldwide recognition for excellence achieved in the area of Cardiovascular, Thoracic and Ear/Nose/Throat surgical instrumentation, Teleflex® also provides a full range of Pilling General Instrumentation manufactured to our traditionally high standards of quality and value.

## PRODUCTS

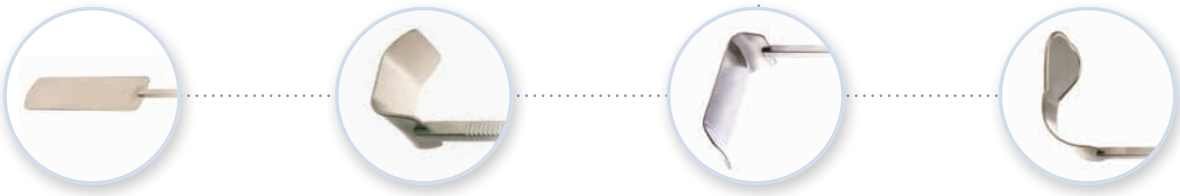
Our extensive line of Pilling® General Instruments are made from German stainless steel and include the following:

- Scissors
- Needle Holders
- Hemostats
- Dressing, Sponge and Tissue Forceps
- Knife Handles
- Hand-Held, Self-Retaining Retractors
- Suction Tubes
- Extended-Length Instruments
- Trays
- And many more

## FEATURED PRODUCT

Pilling® CircuTract Retracting System

- Maximum exposure for optimal visibility
- Compatible with all Bookwalter® Retractor Components
- Full complement of bariatric components
- Easy assembly



*Bookwalter is a registered trademark of Specialty Surgical Instrumentation Inc.*

# KNIFE HANDLES

## General

### KNIFE HANDLES

352950

352951

352952

352953

352954

352957

352959

Correctly fit knife handle to standard surgical blades. The distal ends are tapered and beveled for use in blunt dissection. Each handle is contoured for firm grip, strength, manipulation and comfort. They are sold one handle each per package.

| ITEM # | DESCRIPTION |
|---|---|
| 352950 | Size 3, fits blade sizes 10, 11, 12 and 15 |
| 352951 | Size 3L, fits blade sizes 10, 11, 12 and 15. Measures 8-3/8" (21.5 cm) not including blade. |
| 352952 | Size 3LA, fits blade sizes 10, 11, 12 and 15 |
| 352953 | Size 4, fits blade sizes 20, 21, 22, 23, 24 and 25 |
| 352954 | Size 4, fits blade sizes 20, 21, 22, 23, 24 and 25. Measures 8-3/8" (21.5 cm) not including blade. |
| 352957 | Size 7, fits blade sizes 10, 11, 12 and 15 |
| 352959 | Size 9, fits blade sizes 10, 11, 12 and 15 |

# KNIFE HANDLES

## General

### ROUND SHAFT BEAVER BLADE HANDLES

456002

456005

| ITEM # | DESCRIPTION |
|---|---|
| 456002 | Replacement collet |
| 456005 | #3KM, 2-31/32" (7.5 cm) |
| 456006 | #3K, 4-1/8" (10.5 cm) |
| 456007 | #3KL, 6" (15 cm) |

## Specialty

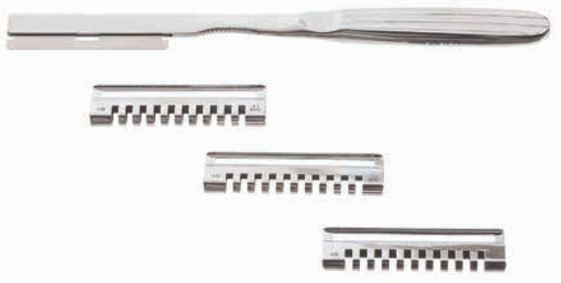
### WEBSTER SKIN GRAFT KNIFE HANDLE

050230

Use with blade no. 450205, 7-3/8" (18.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 050230 | Handle only |

### GOULIAN SKIN GRAFT KNIFE SET



050200

Includes: 1 handle 7-1/4" (18.5 cm), 5 single edge blades 2-1/4" (5.5 cm), 3 depth gauges and guards: 008, 010, 012.

| ITEM # | DESCRIPTION |
|---|---|
| 050200 | Complete |

# KNIFE HANDLES

## Specialty

### GOULIAN DEPTH GAUGE AND GUARDS

050203

2-3/8" (6 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 050201 | 0.004" |
| 050202 | 0.006" |
| 050203 | 0.008" |
| 050204 | 0.010" |
| 050205 | 0.012" |
| 050206 | 0.014" |
| 050207 | 0.016" |
| 050208 | 0.018" |
| 050209 | 0.020" |
| 050211 | 0.024" |
| 050212 | 0.026" |
| 050213 | 0.028" |

### WECPREP BLADES

450205

Single edge carbon steel blade. Use with 050200 and 050230.

| ITEM # | DESCRIPTION |
|---|---|
| 450205 | 2-1/4" (5.5 cm), carton of 50 |

### HOLINGER LARYNGEAL KNIFE HANDLE

506705

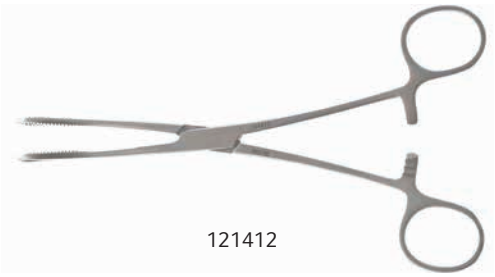
For use with surgical blades no. 10, 11, 12 and 15.

| ITEM # | DESCRIPTION |
|---|---|
| 506705 | 11" (28 cm) |

# FORCEPS AND CLAMPS

## Sponge Forceps

### BALLENGER SPONGE FORCEPS



121412

| ITEM # | DESCRIPTION |
|---|---|
| 121410 | Straight, smooth jaws, 7-1/4" (18.5 cm) |
| 121412 | Straight, serrated jaws, 7-1/4" (18.5 cm) |
| 121422 | Curved, serrated jaws, 7" (18 cm) |

### FOERSTER SPONGE FORCEPS

121417

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 121415 | Straight, smooth jaws, 9-3/4" (25 cm) |
| 121417 | Straight, serrated jaws, 9-3/4" (25 cm) |
| 121425 | Curved, smooth jaws, 9-1/2" (24 cm) |
| 121427 | Curved, serrated jaws, 9-1/2" (24 cm) |

### FOERSTER SPONGE FORCEPS

454100

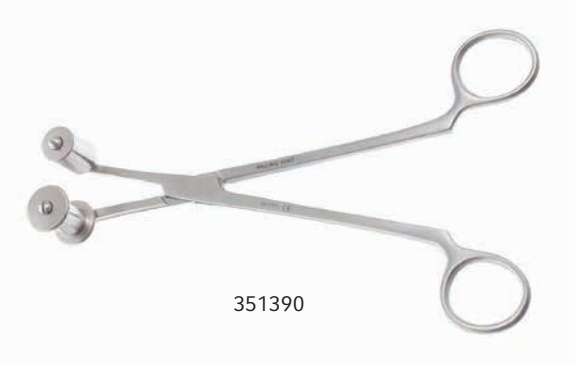
Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 454100 | Straight, cross serrated jaws, 9-1/2" (24 cm) |

# FORCEPS AND CLAMPS

## Tubing Clamps

### GUNNAR ROLLER CLAMPS



351390

| ITEM # | DESCRIPTION |
|---|---|
| 351390 | For "milking" pump tubing 1/2" (12.5 mm) diameter, 7-1/8" (18 cm) |

### LORE TUBE HOLDING FORCEPS

536275

Full serrations, serrated jaws grasp drape without puncturing. Fitting on shanks holds tubing securely and without drag when not in use. Suction tube may be stored in protective metal sleeve.

| ITEM # | DESCRIPTION |
|---|---|
| 536275 | Angled, 2.6 mm tip, 6-1/4" (16 cm) |

### MORSE TOWEL CLIP TUBING HOLDERS

351353

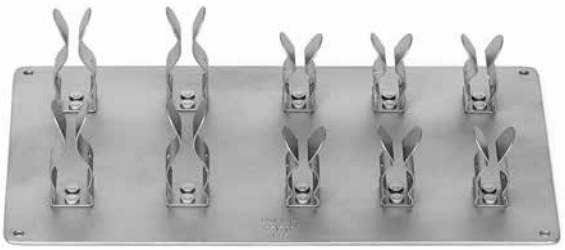
For holding extracorporeal tubing to drapes giving positive fixation. The serrated inner surface of the tube holding ring closes down on the tubing but does not collapse or reduce the lumen. Sizes listed are for outside diameter of extracorporeal tubing.

| ITEM # | DESCRIPTION |
|---|---|
| 351351 | For 3/16" and 1/4" tubing |
| 351352 | For 5/16" and 3/8" tubing |
| 351353 | For 7/16" and 1/2" tubing |
| 351354 | For 9/16" and 5/8" tubing |
| 351355 | For 11/16" and 3/4" tubing |

# FORCEPS AND CLAMPS

## Tubing Clamps

### NICHOLS TUBING HOLDER

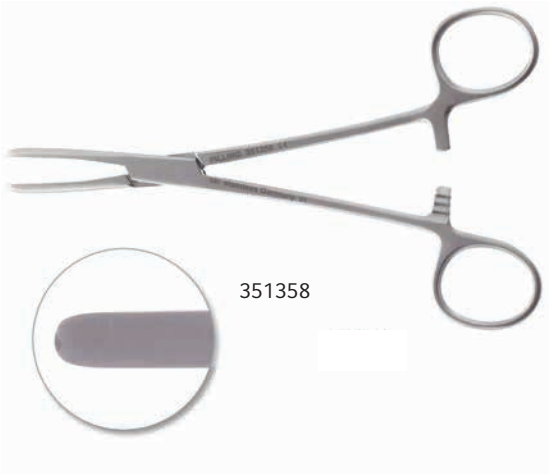


351370

Specially designed to hold and support the weight of the various diameters of tubing used by the pump-oxygenator, keeping them "in-line."

| ITEM # | DESCRIPTION |
|---|---|
| 351370 | 4-1/2" x 7-1/4" (11.4 x 18.5 cm) metal plate is perforated so it may be held in place with towel clamps. |

### PRESBYTERIAN HOSPITAL TUBING CLAMP



351358

Durable construction with smooth jaws for clamping off tubing without damage.

| ITEM # | DESCRIPTION |
|---|---|
| 351358 | 6-1/2" (16.5 cm) |

# FORCEPS AND CLAMPS

## Tubing Clamps

### VORSE TUBING OCCLUDING CLAMPS

351374

Heavy construction with jaws designed for positive occlusion of Silastic®, Tygon® and similar thick-walled tubings.

| ITEM # | DESCRIPTION |
|---|---|
| 351373 | For tubing 1/4" I.D. (3/8" O.D.), 6-1/8" (15.5 cm) |
| 351374 | For tubing 3/8" I.D. (5/8" O.D.), 7-3/8" (18.5 cm) |
| 351375 | For tubing 1/2" I.D. (3/8" O.D.), 8-1/8" (20.5 cm) |

### VORSE TUBING OCCLUDING CLAMPS WITH SAFETY GUARD

351377

The familiar Vorse-type tube-occluding clamp supplied with a safety guard to prevent the box lock from puncturing the tubing. Heavy construction with jaw designed for positive non-slip occlusion of Silastic®, Tygon® and similar thick-walled tubing.

| ITEM # | DESCRIPTION |
|---|---|
| 351376 | For tubing 1/4" I.D. (3/8" O.D.), 6-1/8" (15.5 cm) |
| 351377 | For tubing 3/8" I.D. (5/8" O.D.), 7-3/8" (18.5 cm) |
| 351378 | For tubing 1/2" I.D. (3/8" O.D.), 8-1/8" (20.5 cm) |

# FORCEPS AND CLAMPS

## Towel Clamps

### EDNA TOWEL FORCEPS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 121655 | Single row of non-penetrating teeth, 5-1/2" (14 cm) |
| 121656 | 4" (10 cm) |

### EDNA NON-PERFORATING TOWEL CLAMPS

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 454320 | 3-3/4" (9.5 cm) |
| 454322 | 5-3/8" (13.5 cm) |

# FORCEPS AND CLAMPS

## Towel Clamps

### BACKHAUS TOWEL CLAMPS

454305

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 454300 | 3-1/2" (9 cm) |
| 454305 | 5-1/4" (13.5 cm) |

### BACKHAUS TOWEL FORCEPS

121600

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 121605 | 3-1/2" (9 cm) |
| 121600 | 5-1/4" (13.5 cm) |

### BACKHAUS TOWEL FORCEPS EBONIZED

447050

Ebonized for laser surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 447050 | 3-1/2" (9 cm) |

# FORCEPS AND CLAMPS

## Towel Forceps

### JONES CROSS-ACTION TOWEL FORCEPS

121640

| ITEM # | DESCRIPTION |
|---|---|
| 121640 | 3-1/2" (9 cm) |

### PEERS TOWEL FORCEPS

121650

Double opposing row of non-penetrating teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 121650 | 5-3/4" (14.5 cm) |

### ROEDER TOWEL FORCEPS

121610

| ITEM # | DESCRIPTION |
|---|---|
| 121610 | With ball stops, 5-1/4" (13.5 cm) |

# FORCEPS AND CLAMPS

## Splinter Forceps

### CARMALT SPLINTER FORCEPS

KM39412

| ITEM # | DESCRIPTION |
|---|---|
| KM39410 | Straight, serrated, 4-3/8" (11 cm) |
| KM39412 | Curved, serrated, 4-3/8" (11 cm) |

### FEILCHENFELD SPLINTER FORCEPS

KM39386

| ITEM # | DESCRIPTION |
|---|---|
| KM39386 | Straight, serrated, 3-1/4" (8.5 cm) |
| KM39390 | Straight, serrated, 4-1/2" (11.5 cm) |

### PLAIN SPLINTER FORCEPS

KM39364

| ITEM # | DESCRIPTION |
|---|---|
| KM39364 | Straight, serrated, 3-1/2" (9 cm) |
| KM39366 | Straight, serrated, 0.6 mm tip, 4-1/2" (11.5 cm) |

### SPLINTER FORCEPS

181559

| ITEM # | DESCRIPTION |
|---|---|
| 181556 | Straight, serrated, 3-1/8" (8 cm) |
| 181557 | Straight, serrated, 4" (10 cm) |
| 181559 | Straight, serrated, 5" (12.5 cm) |

# FORCEPS AND CLAMPS

## Splinter Forceps

### VANGUARD SPLINTER LIBERATOR

KM39534

| ITEM # | DESCRIPTION |
|---|---|
| KM39534 | Trocar in reversible handle, 5" (12.5 cm) |
| KM39536 | Trocar point only |

### VIRTUS SPLINTER FORCEPS

KM39478

| ITEM # | DESCRIPTION |
|---|---|
| KM39478 | Straight, serrated, 6" (15 cm) |

### WILLIAMS SPLINTER FORCEPS

KM39509

KM39511 KM39513

| ITEM # | DESCRIPTION |
|---|---|
| KM39509 | Straight, serrated, 5-1/2" (14 cm) |
| KM39511 | 45 degree angled, serrated, 5-1/4" (13.5 cm) |
| KM39513 | 90 degree angled, serrated, 5-1/2" (14 cm) |

# FORCEPS AND CLAMPS

## Dressing Forceps

### THUMB DRESSING FORCEPS

181106

Pilling® Pattern, satin finish. Standard, serrated tips.

| ITEM # | DESCRIPTION |
|---|---|
| 181102 | 2.7 mm tip, 5" (12.5 cm) |
| 181104 | 3.4 mm tip, 5-1/2" (14 cm) |
| 181106 | 3.5 mm tip, 6" (15 cm) |
| 181108 | 4 mm tip, 7-1/4" (18.5 cm) |

### THUMB DRESSING FORCEPS

465115

Weck® Pattern, bright finish. Standard, serrated tips.

| ITEM # | DESCRIPTION |
|---|---|
| 465100 | 2.6 mm tip, 4-5/8" (11.5 cm) |
| 465105 | 2.7 mm tip, 5" (12.5 cm) |
| 465110 | 3 mm tip, 5-5/8" (14.5 cm) |
| 465115 | 3.5 mm tip, 6-1/4" (16 cm) |
| 465120 | 3.6 mm tip, 7-7/8" (20 cm) |
| 465125 | 4 mm tip, 9-7/8" (25 cm) |
| 465130 | 4.7 mm tip, 12" (30.5 cm) |

### THUMB FORCEPS

465160

Weck® Pattern, bright finish. Narrow, serrated tips.

| ITEM # | DESCRIPTION |
|---|---|
| 465150 | 2 mm tip, 4-5/8" (11.5 cm) |
| 465155 | 2 mm tip, 5" (12.5 cm) |
| 465160 | 2 mm tip, 5-5/8" (14.5 cm) |
| 465165 | 2 mm tip, 6" (15 cm) |
| 465170 | 2.1 mm tip, 7-7/8" (20 cm) |

### ADSON DRESSING FORCEPS

181220

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 181220 | 4-3/4" (12 cm) |

# FORCEPS AND CLAMPS

## Dressing Forceps

### ADSON DRESSING FORCEPS

057200

Weck® Pattern, serrated tip.

| ITEM # | DESCRIPTION |
|---|---|
| 057200 | Standard, 1.3 mm tip, 4-3/4" (12 cm) |
| 057202 | Delicate, 1.2 mm tip, 5" (12.5 cm) |

### ADSON DRESSING FORCEPS TC

057205

Weck® Pattern, tungsten carbide.

| ITEM # | DESCRIPTION |
|---|---|
| 057205 | Standard, 4-3/4" (12 cm), TC |

### ADSON DRESSING FORCEPS

KM39060

KMedic® Pattern.

| ITEM # | DESCRIPTION |
|---|---|
| KM39058 | Micro tip, serrated, 1 mm tip, 4-3/4" (12 cm) |
| KM39060 | Delicate, serrated, 1.2 mm tip, 4-3/4" (12 cm) |
| KM39062 | Standard tip, serrated, 4-3/4" (12 cm) |
| KM39059 | Micro serrated, 1 mm tip, 6" (15 cm) |
| KM39052 | Serrated, 1.2 mm tip, 6" (15 cm) |

### EWALD DRESSING FORCEPS

181237

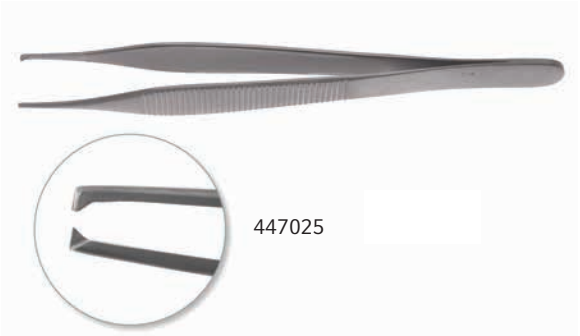
Pilling® Pattern, satin finish. Delicate tips designed for careful handling of tissue. Handles are broad for comfortable, secure grasp.

| ITEM # | DESCRIPTION |
|---|---|
| 181237 | Serrated, 4-3/4" (12 cm) |

# FORCEPS AND CLAMPS

## Dressing Forceps

### ADSON LASER TISSUE FORCEPS



447025

Ebonized.

| ITEM # | DESCRIPTION |
|---|---|
| 447025 | 1 x 2 teeth, 4-3/4" (12 cm) |

### CUSHING DRESSING FORCEPS

181410

Serrated handles, scraper end.

| ITEM # | DESCRIPTION |
|---|---|
| 181410 | Straight, serrated tips, 7" (18 cm) |

### CUSHING DRESSING FORCEPS TC

351860

| ITEM # | DESCRIPTION |
|---|---|
| 351860 | Straight, 6-7/8" (17.5 cm), TC |

### CUSHING DRESSING FORCEPS

466200

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 466200 | Straight, serrated, 1.5 mm tip, 7" (18 cm) |

### CUSHING GUTSCH DRESSING FORCEPS

466211

Tungsten carbide.

| ITEM # | DESCRIPTION |
|---|---|
| 466211 | Serrated, 1.8 mm tip, 6-7/8" (17.5 cm), TC |
| 466210 | Serrated, 1.6 mm tip, 7" (18 cm), TC |

# FORCEPS AND CLAMPS

## Dressing Forceps

### CUSHING BAYONET DRESSING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 351861 | 7-1/2" (19 cm), TC |

### CUSHING GUTSCH BAYONET DRESSING FORCEPS

466220

Serrated handles, scraper end.

| ITEM # | DESCRIPTION |
|---|---|
| 466220 | Serrated, 1.5 mm tip, 7-1/4" (18.5 cm) |

### GERALD DRESSING FORCEPS

351900

These are full-size dressing forceps with only the distal portion narrowed to provide light, delicate tips that maintain alignment.

| ITEM # | DESCRIPTION |
|---|---|
| 351900 | Serrated, 7" (18 cm) |
| 351902 | Serrated, 9-3/4" (25 cm) |

### GERALD DRESSING FORCEPS TC

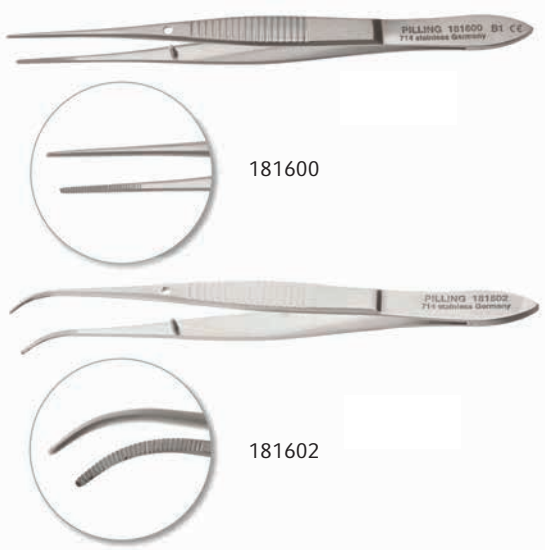
466225

| ITEM # | DESCRIPTION |
|---|---|
| 466225 | Straight, serrated, 1.1 mm tip, 6-7/8" (17.5 cm), TC |

# FORCEPS AND CLAMPS

## Dressing Forceps

### IRIS DRESSING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 181600 | Straight, 4" (10 cm) |
| 181602 | Slightly curved, 4" (10 cm) |

### DRESSING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| KM38082 | Curved, fine point serrated, 5" (12.5 cm) |

### GRUENWALD BAYONET FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 466151 | Serrated, 2.3 mm tip, 8-3/8" (21.5 cm) |

# FORCEPS AND CLAMPS

## Dressing Forceps

### JANSEN BAYONET DRESSING FORCEPS

466150

| ITEM # | DESCRIPTION |
|---|---|
| KM55100 | Serrated, 2.1 mm tip, 6-1/4" (16 cm) |
| 466150 | Serrated, 2.4 mm tip, 7-5/8" (19.5 cm) |

### LUCAE BAYONET DRESSING FORCEPS

027100

| ITEM # | DESCRIPTION |
|---|---|
| 027100 | Delicate, 1.5 mm tip, 5-1/2" (14 cm) |

### LUCAE BAYONET DRESSING FORCEPS

031100

| ITEM # | DESCRIPTION |
|---|---|
| 031100 | Serrated, 2 mm tip, 6-1/2" (16.5 cm) |

### THUMB BAYONET DRESSING FORCEPS

395118

| ITEM # | DESCRIPTION |
|---|---|
| 395118 | Angled, smooth, 7-1/4" (18.5 cm) |

# FORCEPS AND CLAMPS

## Dressing Forceps

### NEVINS FORCEPS

466160

| ITEM # | DESCRIPTION |
|---|---|
| 466160 | Straight, 1.5 mm serrated tip, 6-3/4" (17 cm) |

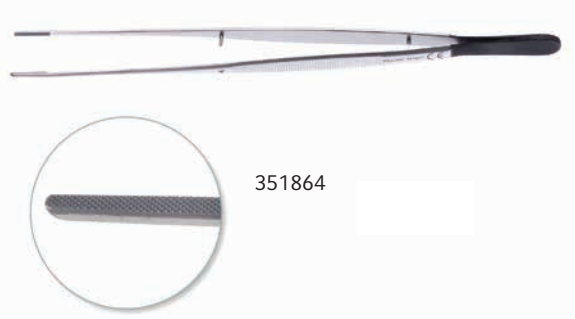
### POTTS-SMITH DRESSING FORCEPS

351854

Fine, serrated tips.

| ITEM # | DESCRIPTION |
|---|---|
| 351850 | 7-1/4" (18.5 cm) |
| 351852 | 8-1/4" (21 cm) |
| 351854 | 9-5/8" (24.5 cm) |
| 351856 | 10-1/4" (26 cm) |
| 351858 | 11-7/8" (30 cm) |

### POTTS-SMITH TECHNIQUE® DRESSING FORCEPS



351864

Narrow, serrated, TC tips.

| ITEM # | DESCRIPTION |
|---|---|
| 351862 | 7" (18 cm), TC |
| 351863 | 8" (20.5 cm), TC |
| 351864 | 9-3/4" (25 cm), TC |
| 351865 | 10-1/4" (26 cm), TC |

# FORCEPS AND CLAMPS

## Dressing Forceps

### BRIGHAM DRESSING FORCEPS

466170

| ITEM # | DESCRIPTION |
|---|---|
| 466170 | Serrated, 1.7 mm dissecting tip, 6-1/8" (15.5 cm) |

### SEMKEN DRESSING FORCEPS

KM39086

| ITEM # | DESCRIPTION |
|---|---|
| 181270 | Serrated, 5" (12.5 cm) |
| KM39086 | Serrated, 1.8 mm tip, 6" (15 cm) |

## Tissue Forceps

### THUMB TISSUE FORCEPS

181131

Pilling® Pattern, satin finish. 1 x 2 teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 181127 | 2 mm tip, 5" (12.5 cm) |
| 181129 | 2.6 mm tip, 5-1/2" (14 cm) |
| 181131 | 2.4 mm tip, 6" (15 cm) |
| 181133 | 3.3 mm tip, 7-1/4" (18.5 cm) |
| 181139 | 3.4 mm tip, 11-3/4" (30 cm) |

### THUMB TISSUE FORCEPS

181166

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 181155 | 1 x 2 teeth, extra-fine 2.6 mm tip, 5-1/2" (14 cm) |
| 181166 | 2 x 3 teeth, 6-1/4" (16 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### TISSUE FORCEPS

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM38304 | 3 x 4 teeth, 5-1/2" (14 cm) |

### THUMB TISSUE FORCEPS

467115

Weck® Pattern, bright finish. 1 x 2 teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 467100 | 2.0 mm tip, 4-1/2" (11.5 cm) |
| 467105 | 2.2 mm tip, 5" (12.5 cm) |
| 467110 | 2.2 mm tip, 5-5/8" (14.5 cm) |
| 467115 | 2.3 mm tip, 6-1/4" (16 cm) |
| 467120 | 2.7 mm tip, 8" (20.5 cm) |
| 467125 | 3.4 mm tip, 9-5/8" (24.5 cm) |

### TISSUE FORCEPS

181310

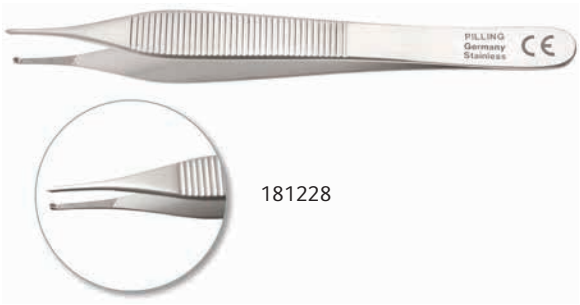
Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 181310 | 1.5 mm tip, 1 x 2 teeth, serrated, 6" (15 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

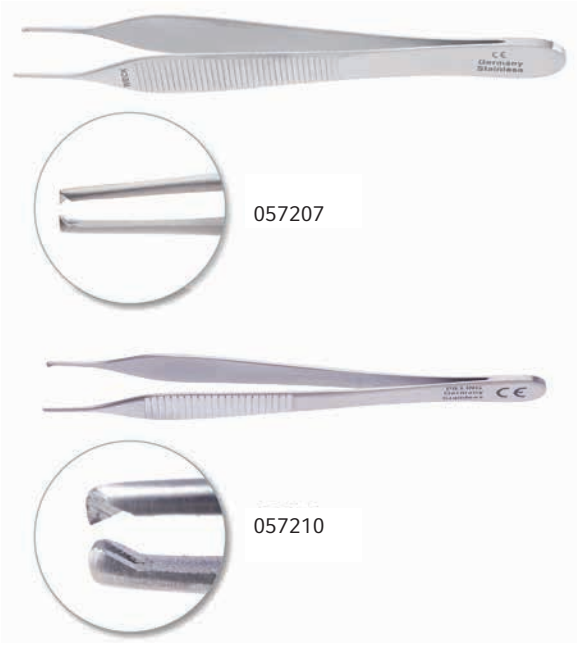
### ADSON TISSUE FORCEPS




Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 181223 | 1 x 2 teeth, 4-3/4" (12 cm) |
| 181225 | 2 x 3 teeth, 5" (12.5 cm) |
| 181228 | 1 x 2 teeth, serrated, 4-3/4" (12 cm) |

### ADSON TISSUE FORCEPS




Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 057207 | 1 x 2 teeth, 1.3 mm tip, 4-3/4" (12 cm) |
| 057210 | Standard, 1 x 2 teeth, 1.4 mm tip, 4-3/4" (12 cm) |
| 057212 | Delicate, 1 x 2 teeth, 1.2 mm tip, 5" (12.5 cm) |
| 057214 | Delicate, serrated, 1 x 2 teeth, 1.3 mm tip, 4-7/8" (12.5 cm) |
| 057230 | 2 x 3 teeth, 2 mm tip, 5" (12.5 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### CALLISON-ADSON TISSUE FORCEPS

057220

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 057220 | 1 x 2 teeth with tying platform, 1.3 mm tip, 4-3/4" (12 cm) |

### ADSON TISSUE FORCEPS

KM39057

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM39056 | Micro 1 x 2 teeth, 0.8 mm tip, 4-3/4" (12 cm) |
| KM39057 | Micro 1 x 2 teeth, 0.9 mm tip, 6" (15 cm) |
| KM39064 | Delicate 1 x 2 teeth, 4-3/4" (12 cm) |
| KM39050 | 1 x 2 teeth, 1.2 mm tip, 6" (15 cm) |

### ADSON-DEBAKEY® TISSUE FORCEPS

KM39054

KMedic® Pattern, satin finish. DeBakey® teeth.

| ITEM # | DESCRIPTION |
|---|---|
| KM39054 | 1.5 mm tip, 4-3/4" (12 cm) |

### BROWN-ADSON TISSUE FORCEPS

181235

Pilling® Pattern, satin finish. Delicate tips designed for careful handling of tissue. Handles are broad for comfortable, secure grasp.

| ITEM # | DESCRIPTION |
|---|---|
| 181235 | 9 x 9 teeth, 4-3/4" (12 cm) |

### BROWN-ADSON TISSUE FORCEPS

057250

Weck® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 057250 | 7 x 7 teeth, 2 mm tip, 4-3/4" (12 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### ADSON BROWN LASER TISSUE FORCEPS

Ebonized.

| ITEM # | DESCRIPTION |
|---|---|
| 447030 | Straight, 9 x 9 teeth, 4-3/4" (12 cm) |

### EWALD TISSUE FORCEPS

181240

Pilling® Pattern, satin finish. Delicate tips designed for careful handling of tissue. Handles are broad for comfortable, secure grasp.

| ITEM # | DESCRIPTION |
|---|---|
| 181240 | 1 x 2 teeth, 4-3/4" (12 cm) |

### HUDSON TISSUE FORCEPS

057215

| ITEM # | DESCRIPTION |
|---|---|
| 057215 | 1 x 2 teeth, heavy, 1.5 mm tip, 5" (12.5 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### BEASLEY-BABCOCK TISSUE FORCEPS

057302

| ITEM # | DESCRIPTION |
|---|---|
| 057302 | 6 x 6 teeth, 5-1/4" (13.5 cm) |

### BONNEY TISSUE FORCEPS

181327

Strong, rugged construction. Serrated tying platform. Non-slip handles.

| ITEM # | DESCRIPTION |
|---|---|
| 640524 | 1 x 2 teeth, 3.3 mm tip, 6-3/4" (17 cm) |
| 181327 | 2 x 3 teeth, 6-3/4" (17 cm) |

### BROWN TISSUE FORCEPS

342965

Small 9 x 9 sets of teeth run longitudinally along narrow jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 181255 | 6" (15 cm) |
| 342965 | 8" (20.5 cm) |
| 342967 | 9-1/2" (24 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### CUSHING BAYONET TISSUE FORCEPS

468240

Serrated handles, scraper end.

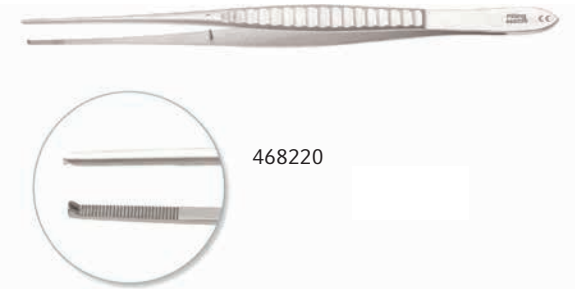
| ITEM # | DESCRIPTION |
|---|---|
| 468240 | 1 x 2 teeth, 7-1/4" (18.5 cm) |

### CUSHING GUTSCH TISSUE FORCEPS

468230

| ITEM # | DESCRIPTION |
|---|---|
| 468230 | 1 x 2 teeth, serrated, 7" (18 cm) |

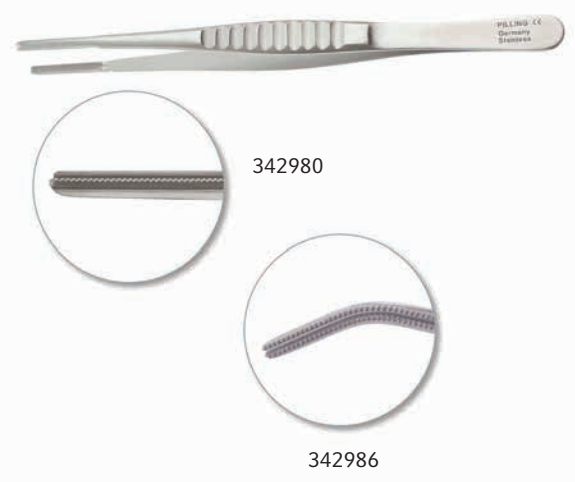
### CUSHING TISSUE FORCEPS



468220

| ITEM # | DESCRIPTION |
|---|---|
| 468220 | 1 x 2 teeth, serrated, 7" (18 cm) |

### DEBAKEY® THORACIC TISSUE FORCEPS



342980

342986

The row of 1 x 2 DeBakey®-type serrations on the tips are designed to be large and strong enough to handle relatively large masses of tissue. Because of the groove construction and light spring tension, they may be used to hold and handle suture material as well. These forceps are of heavier design than the DeBakey® Vascular Tissue Forceps (351800 through 351814 on page 48). The distal portion is tapered to a 3 mm DeBakey®-type Tip.

| ITEM # | DESCRIPTION |
|---|---|
| 342980 | Straight, 3 mm tip, 6-1/8" (15.5 cm) |
| 342981 | Straight, 3 mm tip, 7-3/4" (19.5 cm) |
| 342982 | Straight, 3 mm tip, 9-1/2" (24 cm) |
| 342984 | Straight, 3 mm tip, 12" (30.5 cm) |
| 342986 | Angled, 3 mm tip, 12" (30.5 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### DEBAKEY® VASCULAR TISSUE FORCEPS

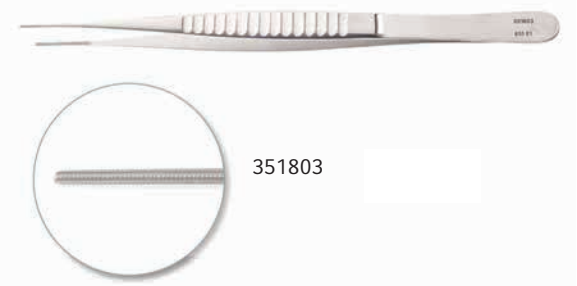
351800

351810

Standard. The distal 2 cm of these forceps is a narrow DeBakey®-type serration with a width of 2 mm. The body of the instrument is constructed especially to prevent feathering and all pins and projections have been omitted to help eliminate suture catchers. Jaws are very well-fitted for handling tiny vessels as well as the smallest suture material.

| ITEM # | DESCRIPTION |
|---|---|
| 351800 | Straight, 2 mm tip, 6" (15 cm) |
| 351802 | Straight, 2 mm tip, 7-3/4" (19.5 cm) |
| 351804 | Straight, 2 mm tip, 9-1/2" (24 cm) |
| 351808 | Straight, 2 mm tip, 12" (30.5 cm) |
| 351810 | Angled, 2 mm tip, 6" (15 cm) |
| 351812 | Angled, 2 mm tip, 7-3/4" (19.5 cm) |
| 351814 | Angled, 2 mm tip, 9-1/2" (24 cm) |

### DEBAKEY®-DIETHRICH DELICATE VASCULAR TISSUE FORCEPS



351803

Designed for micro-vascular and coronary artery surgery. The distal portion is tapered to a 1 mm extra fine DeBakey®-type serration.

| ITEM # | DESCRIPTION |
|---|---|
| 351801 | Straight, delicate, 1 mm tip, 6" (15 cm) |
| 351803 | Straight, delicate, 1 mm tip, 7-3/4" (19.5 cm) |
| 351806 | Straight, delicate, 1 mm tip, 9-1/2" (24 cm) |

### DEBAKEY® ULTRALIGHT FORCEPS

351821

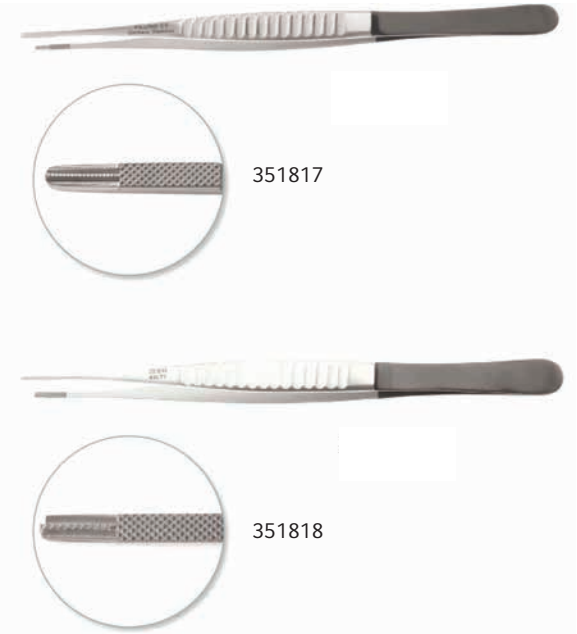
Approximately one-half the weight of standard DeBakey® Forceps, similar to that of titanium but at a much lower price. Ebonized stainless steel to reduce glare. Reduced tension minimizes fatigue and allows better control of delicate tissues.

| ITEM # | DESCRIPTION |
|---|---|
| 351820 | 1.5 mm tip, 6" (15 cm) |
| 351821 | 1.5 mm tip, 7-3/4" (19.5 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### DEBAKEY® CARBIDE FORCEPS




DeBakey®-type serrations at distal tip. Tungsten carbide insert behind the jaw for secure needle pulling actions.

| ITEM # | DESCRIPTION |
|---|---|
| 351815 | Regular forceps, 6" (15 cm), TC |
| 351817 | Regular forceps, 7-3/4" (19.5 cm), TC |
| 351818 | Delicate forceps, 7-3/4" (19.5 cm), TC |
| 351819 | Regular forceps, 9-1/2" (24 cm), TC |
| 351824 | Delicate forceps, 9-1/2" (24 cm), TC |

### VASCULAR DEBAKEY® BAYONET TISSUE FORCEPS

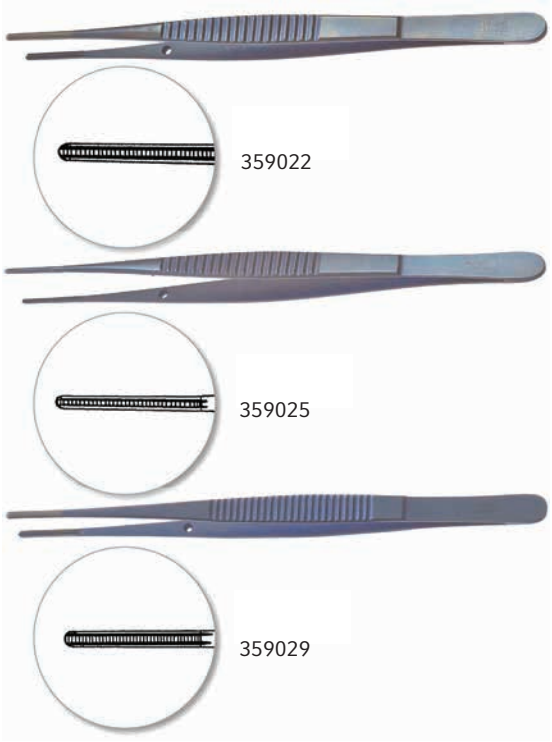
Debakey®-type serrations with a bayonet shape. Angled handles for difficult access and increased visibility.

| ITEM # | DESCRIPTION |
|---|---|
| 351845 | Fine, 1.3 mm tip, 7-3/4" (19.5 cm) |
| 351843 | Standard, 2.0 mm tip, 7-3/4" (19.5 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### DEBAKEY® TITANIUM TISSUE FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 359024 | Straight, flat handle, 1.5 mm jaw width, 6" (15 cm) |
| 359025 | Straight, flat handle, 1.5 mm jaw width, 7-5/8" (19.5 cm) |
| 359021 | Straight, flat handle, 2.5 mm jaw width, 6" (15 cm) |
| 359022 | Straight, flat handle, 2.5 mm jaw width, 7-5/8" (19.5 cm) |
| 359027 | Straight, flat handle, 3 mm jaw width, 6" (15 cm) |
| 359028 | Straight, flat handle, 3 mm jaw width, 7-5/8" (19.5 cm) |
| 359029 | Straight, flat handle, 3 mm jaw width, 9-1/2" (24 cm) |
| 359030 | Angular, flat handle, 2.5 mm jaw width, 5-7/8" (15 cm) |
| 359031 | Angular, flat handle, 2.5 mm jaw width, 7-1/2" (19 cm) |
| 359032 | Angular, flat handle, 2.5 mm jaw width, 9-1/4" (23.5 cm) |

### FERRIS SMITH TISSUE FORCEPS

468190

| ITEM # | DESCRIPTION |
|---|---|
| 468190 | 2 x 3 teeth with 4 mm serrated tying platform. 6-7/8" (17.5 cm) |

### GERALD TISSUE FORCEPS

351905

These are full-size tissue forceps with only the distal portion narrowed to provide light, delicate tips that maintain alignment.

| ITEM # | DESCRIPTION |
|---|---|
| 351905 | 1 x 2 teeth, 7" (18 cm) |
| 351907 | 1 x 2 teeth, 9-3/4" (25 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### GERALD DEBAKEY® TISSUE FORCEPS

Delicate, tapered DeBakey®-type serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 351901 | 7" (18 cm) |
| 351908 | 8" (20.5 cm) |
| 351909 | 9-1/2" (24 cm) |
| 351910 | Angled, 6-7/8" (17.5 cm) |

### GRAEFE TISSUE FORCEPS

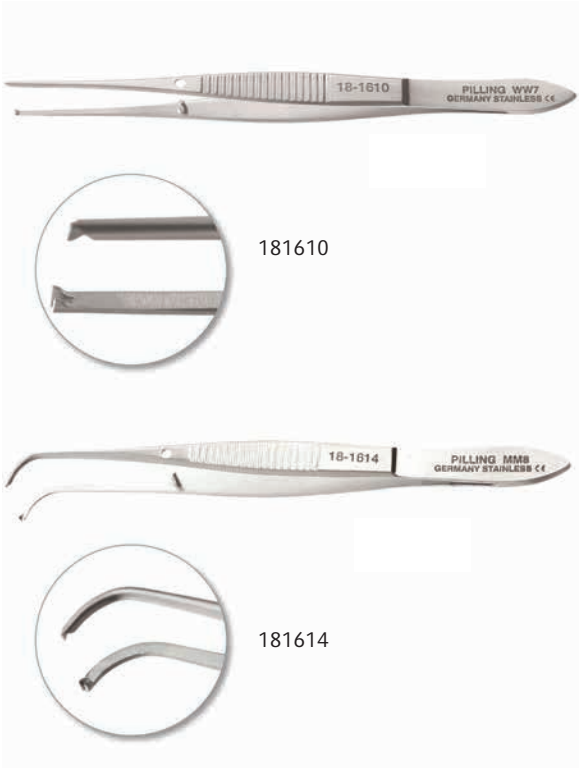
181250

| ITEM # | DESCRIPTION |
|---|---|
| 181250 | 5 x 6 teeth, 4-3/8" (11 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### IRIS TISSUE FORCEPS




Delicate.

| ITEM # | DESCRIPTION |
|---|---|
| 181610 | Straight, 1 x 2 teeth, 4" (10 cm) |
| 181614 | Full curve, 1 x 2 teeth, 3-3/4" (9.5 cm) |
| 181604 | Full curve, 3-3/4" (9.5 cm) |

### SEMKIN TISSUE FORCEPS

181272

These delicate forceps are midway in size between Iris forceps and delicate standard tissue forceps.

| ITEM # | DESCRIPTION |
|---|---|
| 181272 | 1 x 2 teeth, 5" (12.5 cm) |
| KM39088 | 1 x 2 teeth, 6-1/4" (16 cm) |

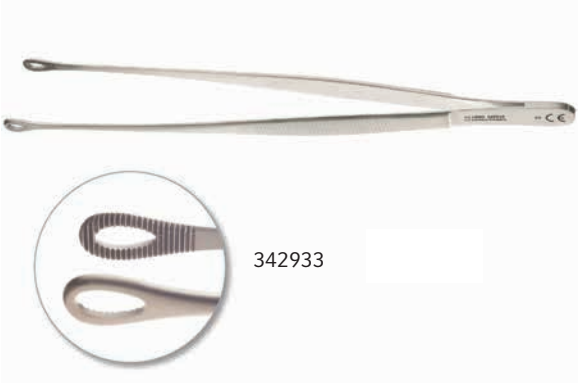
# FORCEPS AND CLAMPS

## Tissue Forceps

### NELSON TISSUE FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 342950 | 6 x 7 sharp, fine teeth, 9" (23 cm) |

### SINGLEY TISSUE FORCEPS




Serrated ring end 8.5 mm wide. Medium-heavy construction.

| ITEM # | DESCRIPTION |
|---|---|
| 342933 | 9" (23 cm) |

### ADAMS TISSUE FORCEPS

351835

| ITEM # | DESCRIPTION |
|---|---|
| 351835 | Delicate, 1 mm tip, 8" (20.5 cm), TC |

### TUTTLE THORACIC TISSUE FORCEPS

342935

Light construction. Ring tips 6.8 mm wide.

| ITEM # | DESCRIPTION |
|---|---|
| 342935 | 9" (23 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### CORONARY ULTRA FINE TISSUE FORCEPS

351838

Tungsten carbide.

| ITEM # | DESCRIPTION |
|---|---|
| 351837 | 7" (18 cm), TC |
| 351838 | 8" (20.5 cm), TC |
| 351839 | 9" (23 cm), TC |

### WHEELER TECHNIQUE® PLAQUE AND VESSEL FORCEPS

351827

Very powerful grip at tip.

| ITEM # | DESCRIPTION |
|---|---|
| 351825 | DeBakey®-type jaw, 1.6 mm, 5-1/2" (14 cm) |
| 351827 | DeBakey®-type jaw, 1.6 mm, 7-1/8" (18 cm) |
| 351829 | DeBakey®-type jaw, 1.6 mm, 8-3/4" (22 cm) |

### CRAFOORD TISSUE FORCEPS

351898

Serrated tips are built up to provide an unusually secure grip.

| ITEM # | DESCRIPTION |
|---|---|
| 351898 | Serrated, 8" (20.5 cm) |

### POTTS-SMITH TISSUE FORCEPS

351872

Fine, serrated, 1 x 2 distal teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 351870 | 7-1/4" (18.5 cm) |
| 351872 | 8-1/4" (21 cm) |
| 351874 | 9-1/2" (24 cm) |
| 351876 | 10-1/4" (26 cm) |

# FORCEPS AND CLAMPS

## Tissue Forceps

### RUSSIAN TISSUE FORCEPS

181365

| ITEM # | DESCRIPTION |
|---|---|
| 181360 | 6" (15 cm) |
| 181365 | 8" (20.5 cm) |
| 181370 | 10" (25.5 cm) |

### C.W. MAYO TISSUE FORCEPS

342910

Russian-type fenestrated tips are 6.7 mm wide and deeply serrated.

| ITEM # | DESCRIPTION |
|---|---|
| 342910 | 9" (23 cm) |

### DAVIS TISSUE FORCEPS

342915

Russian-type jaws, 7.5 mm wide.

| ITEM # | DESCRIPTION |
|---|---|
| 342915 | Straight, serrated, 10" (25.5 cm) |

### SELMAN TISSUE FORCEPS

351842

Small diameter circular tips have meshing teeth for secure, non-damaging grip.

| ITEM # | DESCRIPTION |
|---|---|
| 351840 | 6" (15 cm) |
| 351841 | 8" (20.5 cm) |
| 351842 | 10" (25.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

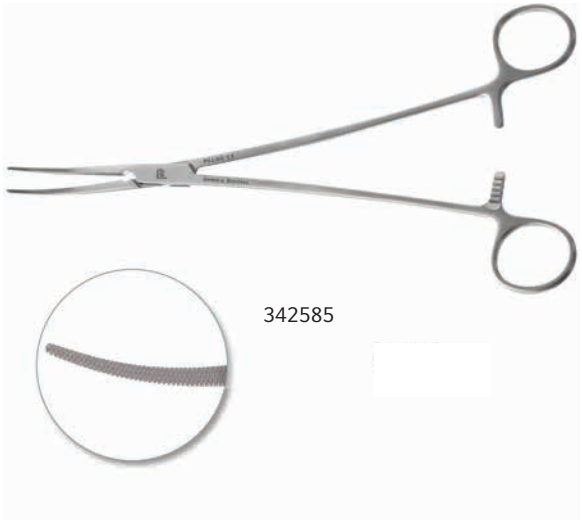
### ADSON HEMOSTATIC FORCEPS

477191

30 mm jaw, 2 mm tip, two-thirds serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 477190 | Straight, 7-1/2" (19 cm) |
| 477191 | Curved, 7-1/8" (18 cm) |

### PILLING® THORACIC ARTERY FORCEPS



342585

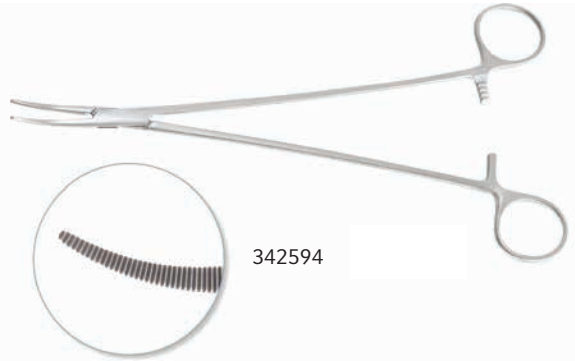
Slim, slightly curved jaws have very light criss-cross serrations making this an excellent instrument for handling suture material as well as delicate tissue.

| ITEM # | DESCRIPTION |
|---|---|
| 342585 | Serrated, 2" (5 cm) tip length, 2 mm tip width, 9-1/4" (23.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### LEJEUNE THORACIC FORCEPS



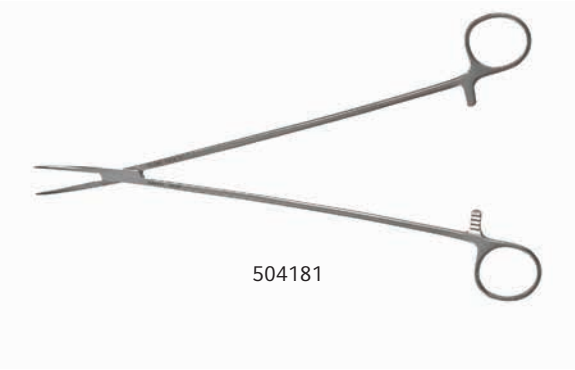

| ITEM # | DESCRIPTION |
|---|---|
| 342594 | Slightly curved, serrated, 1-3/8" (3.5 cm) tip length, 1.8 mm tip width, 9-3/8" (24 cm) |

### BENGOLEA FORCEPS

Lightweight, with narrow, criss-cross serrated jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 342587 | Slightly curved, serrated, 2 mm wide tip, 8-1/2" (21.5 cm) |

### BRIDGE HEMOSTATIC FORCEPS



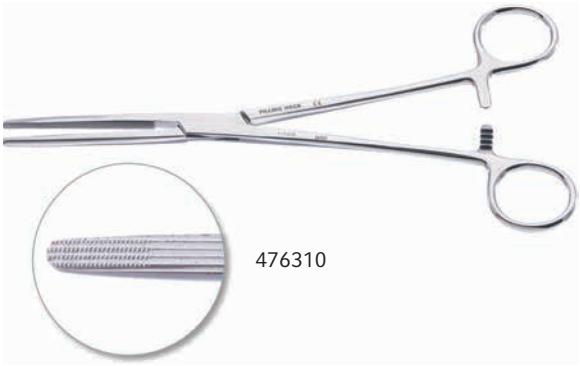

32 mm serrated jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 504180 | Straight, 2 mm tip, 11-1/8" (28.5 cm) |
| 504181 | Curved, 2 mm tip, 11" (28 cm) |
| 540111 | Curved, 1.6 mm tip, 6-7/8" (17.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### CARMALT FORCEPS



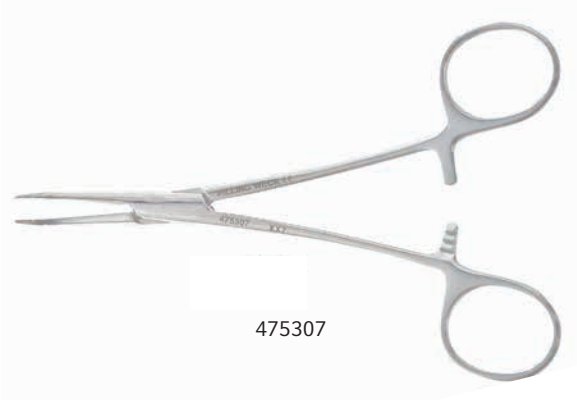

Cross-serrated tip with longitudinally serrated jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 476300 | Straight, 43 mm jaw, 3 mm tip, 6-1/2" (16.5 cm) |
| 476310 | Straight, 58 mm jaw, 4 mm tip, 8-1/4" (21 cm) |
| 476330 | Curved, 43 mm jaw, 3 mm tip, 6-1/2" (16.5 cm) |
| 476340 | Curved, 58 mm jaw, 4 mm tip, 8-1/4" (21 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

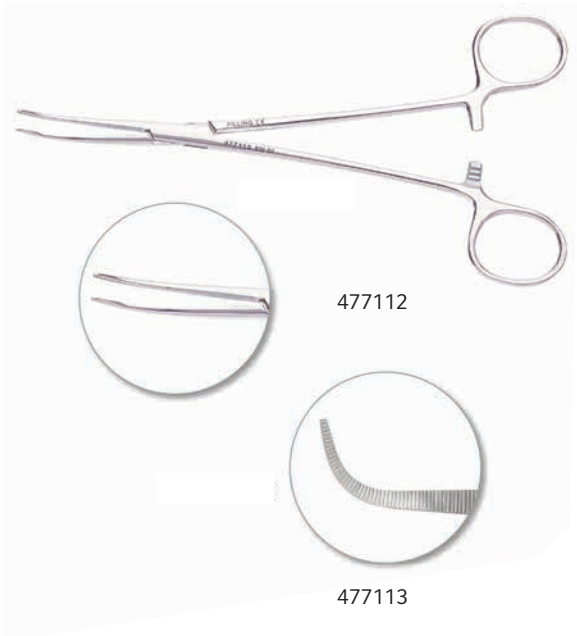
### COLLER FORCEPS



475307

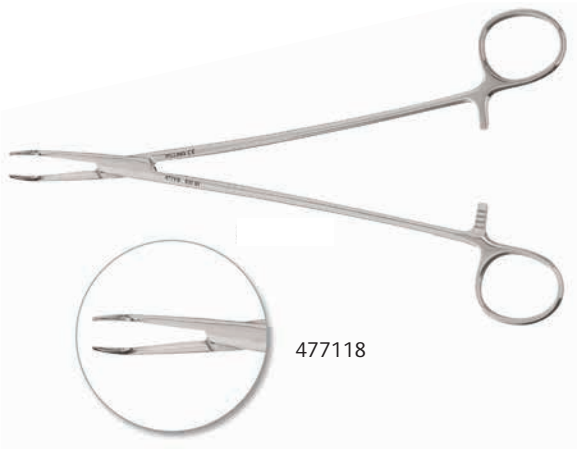
| ITEM # | DESCRIPTION |
|---|---|
| 475305 | Skillman serrations, straight, 31 x 1.7 mm tip, 5-1/2" (14 cm) |
| 475306 | Skillman serrations, curved, 29 x 1.7 mm tip, 5-3/8" (13.5 cm) |
| 475307 | Skillman serrations, strongly curved, 26 x 1.7 mm tip, 5-3/8" (13.5 cm) |
| 477109 | Straight, 38 x 1.8 mm tip, 1 x 3 catch, 6-5/8" (17 cm) |
| 477110 | Curved, 38 x 1.8 mm tip, 1 x 3 catch, 6-5/8" (17 cm) |
| 477112 | Curved, 42 x 1.7 mm tip, 1 x 3 catch, 7-1/4" (18.5 cm) |
| 477113 | Strongly curved, 37 x 1.6 mm tip, 1 x 3 catch, 7" (18 cm) |
| 477116 | Curved, 44 x 2 mm tip, 4 x 4 catch, 9-3/8" (24 cm) |
| 477117 | Strongly curved, 40 x 2 mm tip, 4 x 4 catch, 9-1/4" (23.5 cm) |
| 477118 | Angled, 32 x 2 mm tip, 4 x 4 catch, 8-7/8" (22.5 cm) |

477110



477112

477113



477118

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### COLLIER HEMOSTATIC FORCEPS

182086

A Crile-type forceps with a lighter distal end for more delicate procedures.

| ITEM # | DESCRIPTION |
|---|---|
| 182085 | Straight, 5-1/2" (14 cm) |
| 182086 | Curved, 5-1/2" (14 cm) |
| 182090 | Straight, 6-1/4" (16 cm) |
| 182095 | Curved, 6-1/4" (16 cm) |
| 182097 | Straight, 7-3/4" (19.5 cm) |
| 182098 | Curved, 7-1/4" (18.5 cm) |

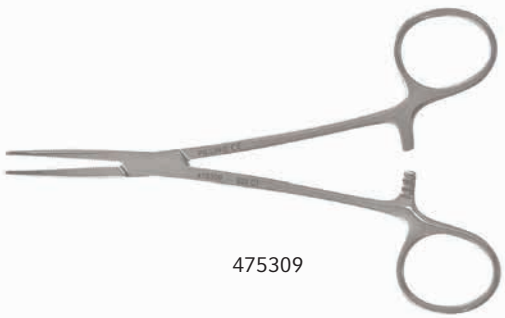
### CRILE HEMOSTATS

182060

Pilling® Pattern, satin finish, standard tip, full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 182050 | Straight, 5-3/4" (14.5 cm) |
| 182060 | Curved, 5-1/2" (14 cm) |
| 182070 | Straight, 6-1/4" (16 cm) |
| 182080 | Curved, 6-1/4" (16 cm) |

### CRILE FORCEPS



475309

Weck® Pattern, bright finish, full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 475308 | Straight, 5-5/8" (14.5 cm) |
| 475309 | Curved, 5-3/4" (14.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

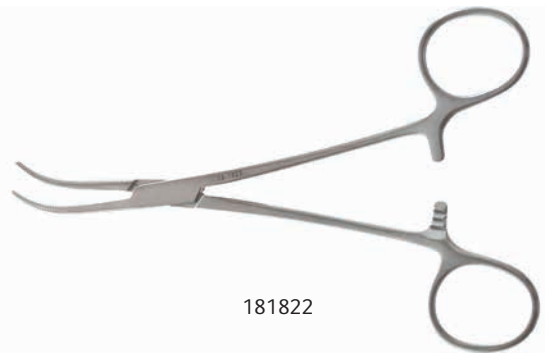
### CRILE FORCEPS

475311

Weck® Pattern, bright finish, delicate, full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 475310 | Straight, 1.8 mm tip, 5-1/2" (14 cm) |
| 475311 | Curved, 1.8 mm tip, 5-3/8" (13.5 cm) |
| 475312 | Straight, 1.7 mm tip, 6-3/8" (16 cm) |
| 475313 | Curved, 2 mm tip, 6-1/4" (16 cm) |

### DANDY HEMOSTATIC FORCEPS

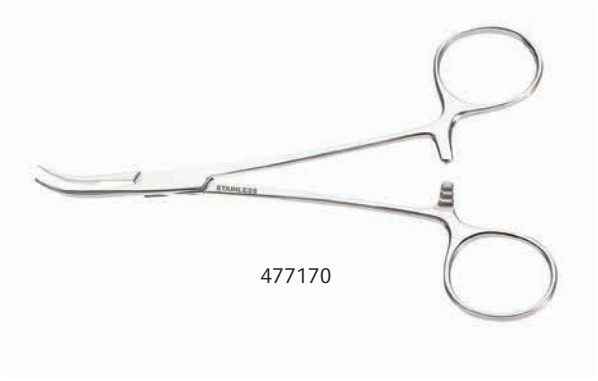


181822

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 181822 | Curved sideways, 5-1/2" (14 cm) |

### DANDY KOLODNY FORCEPS



477170

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 477170 | Curved sideways, one-half horizontal serrations, 5-3/8" (13.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### HALSTED MOSQUITO FORCEPS

Pilling® Pattern, satin finish, full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 182300 | Straight, 5-1/4" (13.5 cm) |
| 182310 | Curved, 5-1/8" (13 cm) |
| 182350 | Straight, 4" (10 cm) |
| 182355 | Curved, 4" (10 cm) |

### HALSTED MOSQUITO FORCEPS

Weck® Pattern, bright finish, serrated jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 475084 | Straight, 1.2 mm tip, 4-3/4" (12 cm) |
| 475086 | Curved, 1.2 mm tip, 4-5/8" (11.5 cm) |
| 475100 | Straight, 1.6 mm tip, 5-1/4" (13.5 cm) |
| 475101 | Curved, 1.6 mm tip, 5-1/8" (13 cm) |

### HALSTED MOSQUITO FORCEPS WITH TEETH

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 475102 | Straight, 1 x 2 teeth, 1.5 mm tip, 5" (12.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### HARTMAN MOSQUITO FORCEPS

Weck® Pattern, bright finish. Delicate, serrated jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 475080 | Straight, 20 mm jaw, 1.3 mm tip, 4" (10 cm) |
| 475082 | Curved, 20 mm jaw, 1.3 mm tip, 4" (10 cm) |

### MOSQUITO FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 075118 | Curved, fully serrated, 1.7 x 2 mm tip, 7-1/4" (18.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### MOSQUITO FORCEPS SERRATED

| ITEM # | DESCRIPTION |
|---|---|
| KM36078 | Curved, serrated, 1 x 2 teeth, 5" (12.5 cm) |

### SKILLMAN MOSQUITO FORCEPS

Weck® Pattern, bright finish. Full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 475130 | Straight, 1.6 mm tip, 5-1/4" (13.5 cm) |
| 475131 | Curved, 1.6 mm tip, 5-1/8" (13 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### JONES HEMOSTAT

182160

Sturdy construction, fully serrated.

| ITEM # | DESCRIPTION |
|---|---|
| 182160 | Straight, 5" (12.5 cm) |

### KELLY FORCEPS

182110

Pilling® Pattern, satin finish. Half serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 182100 | Straight, 5-3/4" (14.5 cm) |
| 182110 | Curved, 5-1/2" (14 cm) |

### KELLY FORCEPS

475211

Weck® Pattern, bright finish. Half serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 475210 | Straight, 5-1/2" (14 cm) |
| 475211 | Curved, 5-1/2" (14 cm) |

# FORCEPS AND CLAMPS

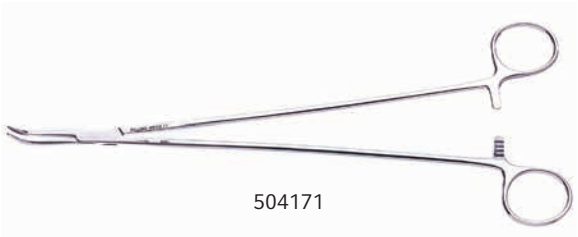
## Hemostatic Forceps and Clamps

### LAHEY TRACTION FORCEPS

171155

| ITEM # | DESCRIPTION |
|---|---|
| 171155 | Straight, 3 x 3 teeth, 6" (15 cm) |

### LAWRENCE HEMOSTATIC FORCEPS

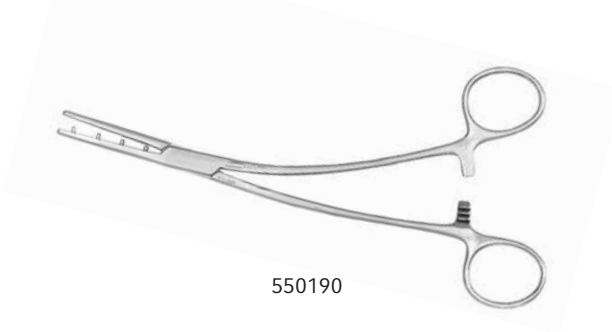


504171

Curved, serrated jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 504171 | 31 mm jaw, 2 mm tip, 10-3/4" (27.5 cm) |
| 540140 | 30 mm jaw, 1.7 mm tip, 6-3/4" (17 cm) |

### MASTIN MUSCLE FORCEPS



550190

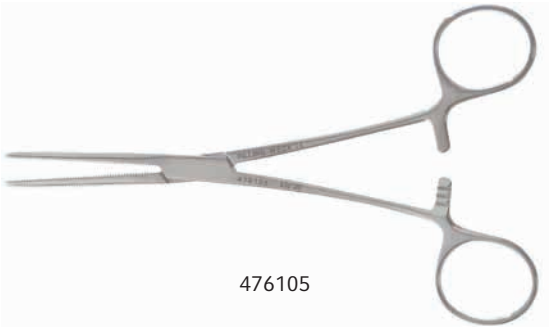
42 mm jaw with cross serrations on pin side only.

| ITEM # | DESCRIPTION |
|---|---|
| 550190 | Curved on side, 3.1 mm tip, 6-5/8" (17 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### MAYO-PEAN FORCEPS



476105

Weck® Pattern, bright finish. Straight hemostatic forceps with full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 476105 | 2.9 mm tip, 6-5/8" (17 cm) |
| 476106 | 2.4 mm tip, 6-5/8" (17 cm) |
| 476110 | 3.3 mm tip, 7-1/4" (18.5 cm) |
| 476115 | 3.7 mm tip, 8-1/4" (21 cm) |
| 476120 | 3.7 mm tip, 8-3/4" (22 cm) |
| 476125 | 3.8 mm tip, 10-3/8" (26.5 cm) |

### MAYO-PEAN FORCEPS

476170

Weck® Pattern, bright finish. Curved hemostatic forceps with full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 476150 | 2.5 mm tip, 5-5/8" (14.5 cm) |
| 476155 | 2.9 mm tip, 6-1/2" (16.5 cm) |
| 476156 | 2.4 mm tip, 6-1/2" (16.5 cm) |
| 476160 | 3.3 mm tip, 7-1/8" (18 cm) |
| 476165 | 3.7 mm tip, 8-1/4" (21 cm) |
| 476170 | 3.5 mm tip, 9-1/4" (23.5 cm) |
| 476175 | 3.8 mm tip, 10-1/4" (26 cm) |

### PEAN CLAMPS

185065

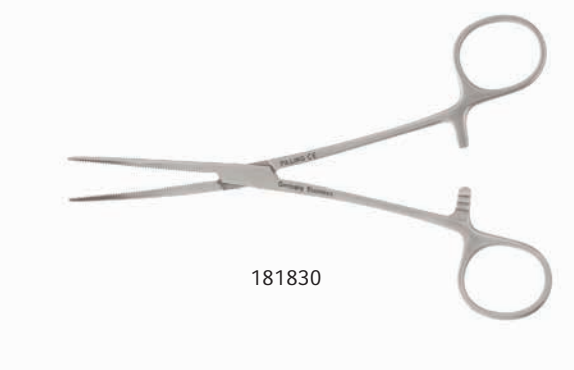
Pilling® Pattern, satin finish. Horizontal serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 185060 | Straight, 8-1/8" (20.5 cm) |
| 185065 | Curved, 8-1/8" (20.5 cm) |
| 185066 | Curved, 9-1/4" (23.5 cm) |
| 185067 | Straight, 10-1/8" (25.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### ROCHESTER-PEAN FORCEPS



181830

Pilling® Pattern, satin finish. Straight, full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 181830 | Curved, 2 mm tip, 6-1/2" (16.5 cm) |

### ROCHESTER-PEAN FORCEPS

182405

Pilling® Pattern, satin finish. Straight, full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 182400 | 2.7 mm tip, 5-1/2" (14 cm) |
| 182405 | 2.8 mm tip, 6-1/2" (16.5 cm) |
| 182415 | 3.0 mm tip, 7-1/4" (18.5 cm) |
| 182420 | 3.2 mm tip, 8" (20.5 cm) |

### ROCHESTER-PEAN FORCEPS

182440

Pilling® Pattern, satin finish. Curved, full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 182440 | 3.2 mm tip, 5-1/2" (14 cm) |
| 182445 | 2.8 mm tip, 6-1/4" (16 cm) |
| 182455 | 3.0 mm tip, 7-1/4" (18.5 cm) |
| 182460 | 3.2 mm tip, 8" (20.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

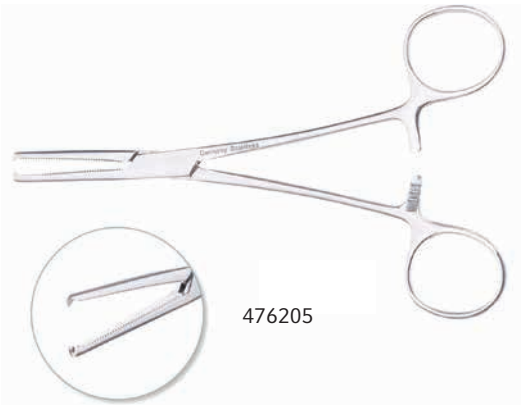
### ROCHESTER-PEAN FORCEPS, 12"

KM36362

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM36360 | Hemostatic, straight, 4.6 mm tip, 12" (30.5 cm) |
| KM36362 | Curved, serrated, 12" (30.5 cm) |

### OCHSNER FORCEPS (KOCHER)



476205

Weck® Pattern, bright finish. Straight hemostatic forceps with full serrations, 1 x 2 teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 476200 | 3 mm tip, 5-5/8" (14.5 cm) |
| 476205 | 4.2 mm tip, 6-3/8" (16 cm) |
| 476206 | Light model, 2.5 mm tip, 6-3/8" (16 cm) |
| 476210 | 3.3 mm tip, 7-1/4" (18.5 cm) |
| 476215 | 4.5 mm tip, 8" (20.5 cm) |
| 476220 | 5.5 mm tip, 8-7/8" (22.5 cm) |
| 476225 | 5 mm tip, 10-3/8" (26.5 cm) |

### OCHSNER FORCEPS (KOCHER)

476255

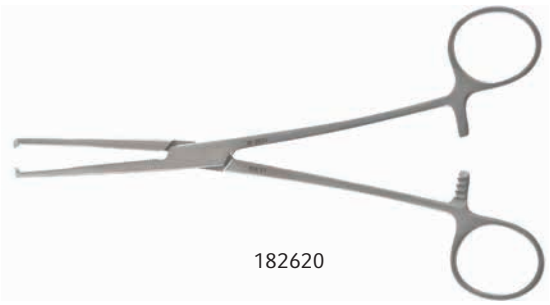
Weck® Pattern, bright finish. Curved hemostatic forceps with full serrations, 1 x 2 teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 476250 | 2.7 mm tip, 5-1/2" (14 cm) |
| 476255 | 2.6 mm tip, 6-1/4" (16 cm) |
| 476260 | 3.6 mm tip, 7-1/4" (18.5 cm) |
| 476265 | 3.4 mm tip, 7-7/8" (20 cm) |
| 476270 | 4 mm tip, 8-3/4" (22 cm) |
| 476275 | 4 mm tip, 10-1/4" (26 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### ROCHESTER-OCHSNER FORCEPS (KOCHER)



182620

Pilling® Pattern, straight. Full serrations, 1 x 2 teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 182600 | 5-1/2" (14 cm) |
| 182605 | 6-1/4" (16 cm) |
| 182615 | 7-1/4" (18.5 cm) |
| 182620 | 8" (20.5 cm) |

### ROCHESTER-OCHSNER FORCEPS (KOCHER)

182670

Pilling® Pattern, curved. Full serrations, 1 x 2 teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 182655 | 6-1/4" (16 cm) |
| 182665 | 7-1/4" (18.5 cm) |
| 182670 | Curved, 1 x 2 teeth, 8" (20.5 cm) |

### PROVIDENCE HOSPITAL FORCEPS

475200

Weck® Pattern, bright finish. Two-thirds serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 475200 | Straight, 2 mm tip, 5-3/8" (13.5 cm) |
| 475201 | Curved, 2 mm tip, 5-3/8" (13.5 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### PROVIDENCE HOSPITAL HEMOSTATS

Pilling® Pattern, satin finish. Half serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 182140 | Straight, 5-3/4" (14.5 cm) |
| 182150 | Curved, 5-5/8" (14.5 cm) |

### RANKIN FORCEPS

Pilling® Pattern, satin finish. Half serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 182120 | Straight, 6-1/4" (16 cm) |
| 182130 | Curved, 6-1/4" (16 cm) |

### RANKIN-KELLY HEMOSTAT FORCEPS

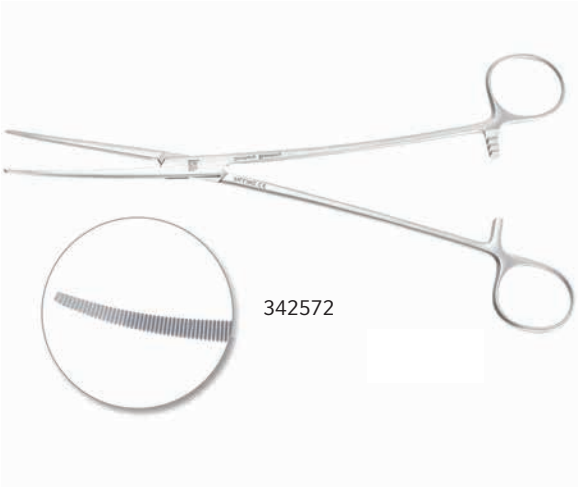
KMedic® Pattern, satin finish. Three-quarter serrations.

| ITEM # | DESCRIPTION |
|---|---|
| KM36196 | Straight, 6-1/4" (16 cm) |
| KM36198 | Curved, serrated, 6-1/4" (16 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

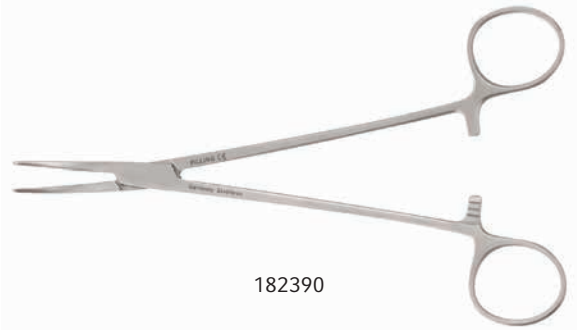
### SAROT INTRA-THORACIC ARTERY FORCEPS




Slender, slightly curved forceps with serrated jaws. Specially designed for pulmonary resections, cardiovascular and esophageal surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 342571 | Medium, serrated, 1/2" (1.5 cm) tip length, 1.6 mm tip width, 7-5/8" (19.5 cm) |
| 342572 | Large, serrated, 2-1/4" (5.5 cm) tip length, 2 mm tip width, 9" (23 cm) |

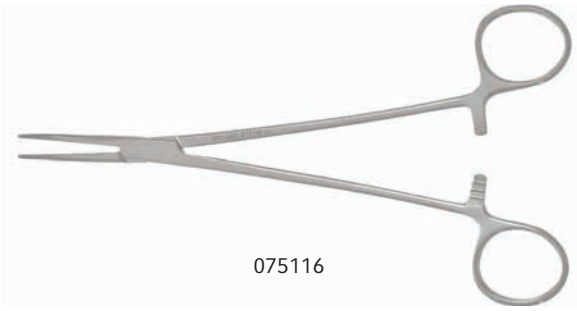
### SCHNIDT FORCEPS (TONSIL)




Pilling® Pattern, satin finish. Half serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 182390 | Half curved, 7-1/2" (19 cm) |

### SCHNIDT FORCEPS (TONSIL)




Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 075116 | Slightly curved, 7-1/4" (18.5 cm) |
| 075120 | Lightly curved, serrated, 2 mm tip, 7-1/2" (19 cm) |
| 075122 | Strongly curved, serrated, 2 mm tip, 7-1/2" (19 cm) |

# FORCEPS AND CLAMPS

## Hemostatic Forceps and Clamps

### VANDERBILT VESSEL FORCEPS

342590

This hemostatic-type forceps is particularly useful in cardiovascular and thoracic surgery but has been used extensively in general surgery as well. The elongated handles afford access to a number of surgical sites. Jaws are of a standard cross-serration design.

| ITEM # | DESCRIPTION |
|---|---|
| 342590 | Slightly curved, 2" (5 cm) tip length, 2 mm tip width, 8-5/8" (22 cm) |

### SERREFINES CROSS-ACTION CLAMPS

182205

Cross-action, full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 182200 | Straight, 1-1/2" (4 cm) |
| 182205 | Straight, 2-1/4" (5.5 cm) |
| 182210 | Curved, 1-3/8" (3.5 cm) |

## Extra Delicate Hemostatic Forceps

### JACOBSON HEMOSTATIC FORCEPS

443507

Pilling® Pattern, satin finish. These delicate forceps feature tips as fine as 0.8 mm and can be used in a number of microsurgical procedures.

| ITEM # | DESCRIPTION |
|---|---|
| 443500 | Straight, 0.8 mm tip, 3-7/8" (10 cm) |
| 443502 | Curved, 0.8 mm tip, 3-7/8" (10 cm) |
| 443505 | Straight, 0.8 mm tip, 5-1/8" (13 cm) |
| 443507 | Curved, 0.8 mm tip, 5-1/8" (13 cm) |
| 443508 | Full curved, 0.8 mm tip, 4-7/8" (12.5 cm) |
| 443510 | Curved, 1.2 mm tip, 7-1/8" (18 cm) |
| 443512 | Full curved, 1 mm tip, 7-1/8" (18 cm) |

# FORCEPS AND CLAMPS

## Extra Delicate Hemostatic Forceps

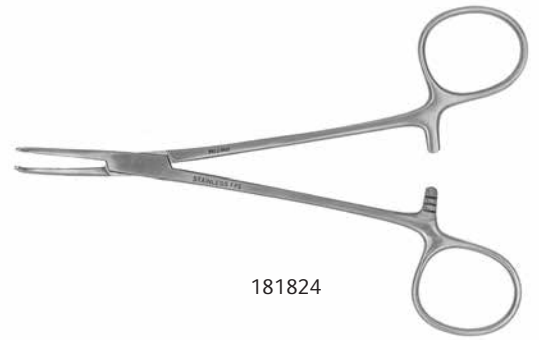
### MICRO MOSQUITO FORCEPS

KM36165

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM36164 | Straight, 1 mm tip, 5" (12.5 cm) |
| KM36165 | Curved, serrated, extremely fine tips, 5" (12.5 cm) |

### PLASTI STATS® ADSON FORCEPS



181824

| ITEM # | DESCRIPTION |
|---|---|
| 181824 | Curved, 1/2" (12.5 mm) jaw serration, 5-1/2"(14 cm) |

### PLASTI STATS® COLLIER FORCEPS

181804

| ITEM # | DESCRIPTION |
|---|---|
| 181804 | Curved, 7-1/2" (19 cm) |

# FORCEPS AND CLAMPS

## Extra Delicate Hemostatic Forceps

### PLASTI STATS® CRILE HEMOSTATS

181802

Full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 181800 | Straight, 1-1/4" (32 mm) jaw, 5-3/4" (14.5 cm) |
| 181802 | Curved, 1-1/4" (32 mm) jaw, 5-1/2" (14 cm) |

### PLASTI STATS® KOCHER FORCEPS

181832

| ITEM # | DESCRIPTION |
|---|---|
| 181832 | Straight, 1 x 2 teeth, full serrations, 5-1/2" (14 cm) |

### PLASTI STATS® MOSQUITO FORCEPS

181806

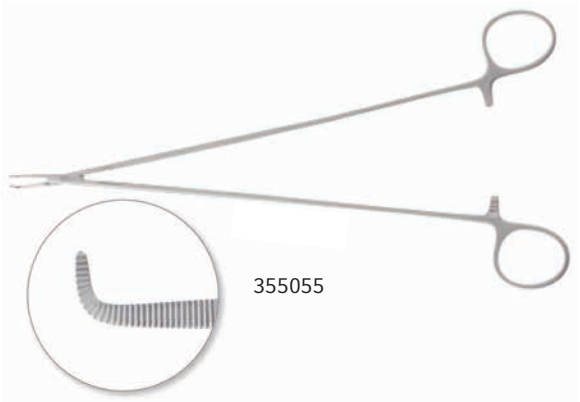
Full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 181810 | Straight, 3/4" (2 cm) jaw, 4" (10 cm) |
| 181812 | Curved, 5/8" (1.5 cm) jaw, 4" (10 cm) |
| 181818 | Straight, 1/2" (12.5 mm) jaw, 4-3/4" (12 cm) |
| 181820 | Curved, 1/2" (12.5 mm) jaw, 4-5/8" (11.5 cm) |
| 181814 | Straight, 3/4" (2 cm) jaw, 5" (12.5 cm) |
| 181816 | Curved, 3/4" (2 cm) jaw, 5" (12.5 cm) |
| 181806 | Straight, 1" (2.5 cm) jaw, 5-1/2" (14 cm) |
| 181808 | Curved, 1" (2.5 cm) jaw, 5-1/2" (14 cm) |

# FORCEPS AND CLAMPS

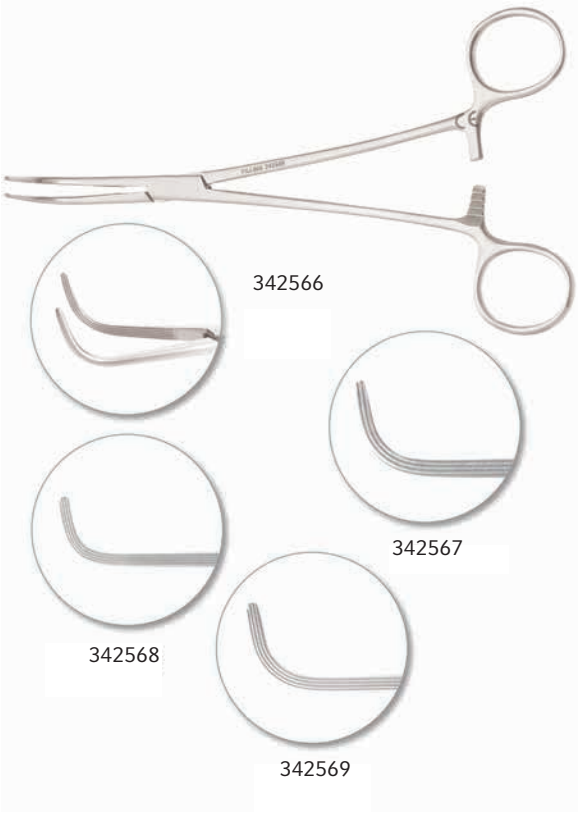
## Right Angle Clamps

### CROUCH CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 355055 | 10-1/4" (26 cm) |

### DEBAKEY® RIGHT ANGLE FORCEPS




With full length longitudinal serrations and cross serrations at tip.

| ITEM # | DESCRIPTION |
|---|---|
| 342566 | 7-5/8" (19.5 cm) |
| 342567 | 9" (23 cm) |
| 342568 | 10-1/4" (26 cm) |
| 342569 | 11-3/8" (29 cm) |

# FORCEPS AND CLAMPS

## Right Angle Clamps

### DIETHRICH RIGHT ANGLE CLAMPS

| ITEM # | DESCRIPTION |
|---|---|
| 355798 | Serrated jaw, 5-3/8" (13.5 cm) |
| 355799 | Serrated jaw, 4-7/8" (12.5 cm) |
| 355800 | Serrated jaw 8 mm past angle, 7-1/4" (18.5 cm) |
| 355801 | Longitudinally serrated jaw 8 mm past angle, 7-1/4" (18.5 cm) |

### FINOCHIETTO THORACIC FORCEPS

A utility clamp for use as ligature carrier, hemostat or dissector. Particularly good in ligation during esophageal surgery. Blades have longitudinal serrations and holes for threading ligature.

| ITEM # | DESCRIPTION |
|---|---|
| 342615 | Angled, longitudinal serrations, 1-1/8" (3 cm) tip length, 9-1/2" (24 cm) |

# FORCEPS AND CLAMPS

## Right Angle Clamps

### GEMINI FORCEPS

A more delicate modification of the Mixter Forceps. Slender, acutely curved jaws with full serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 342596 | 7-1/4" (18.5 cm) |
| 342597 | 9" (23 cm) |
| 342598 | 11-1/8" (28.5 cm) |

### GRAY CYSTIC DUCT FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 172550 | Curved jaws and shafts.<br>Set of two: 8-1/4" (21 cm) and 9-1/4" (23.5 cm) |

### HARRINGTON CLAMPS

Right angle jaw. Dull, non-glare finish stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 342632 | Heavy construction, longitudinal serrations,<br>1-1/2" (4 cm) tip length, 12-3/8" (31.5 cm) |
| 342633 | Light construction, longitudinal serrations,<br>1-1/2" (4 cm) tip length, 12-3/8" (31.5 cm) |

# FORCEPS AND CLAMPS

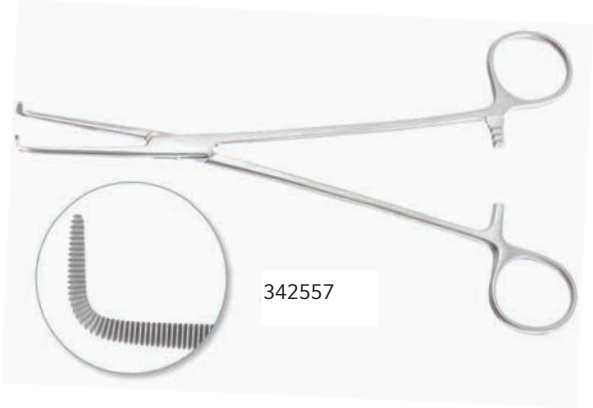
## Right Angle Clamps

### JACKSON TRACHEAL HEMOSTAT

514480

| ITEM # | DESCRIPTION |
|---|---|
| 514480 | Acutely curved, 5-3/8" (13.5 cm) |

### KANTROWITZ FORCEPS


342557

True right angle forceps with cross serrated jaws. Useful for grasping and dissecting in thoracic, vascular and general surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 342557 | Serrated, 3/4" (2 cm) tip length, 2 mm tip width, 7-7/8" (20 cm) |
| 342558 | Serrated, 9-1/2" (24 cm) |
| 342559 | Serrated, 3/4" (2 cm) tip length, 2 mm tip width, 10-5/8" (27 cm) |

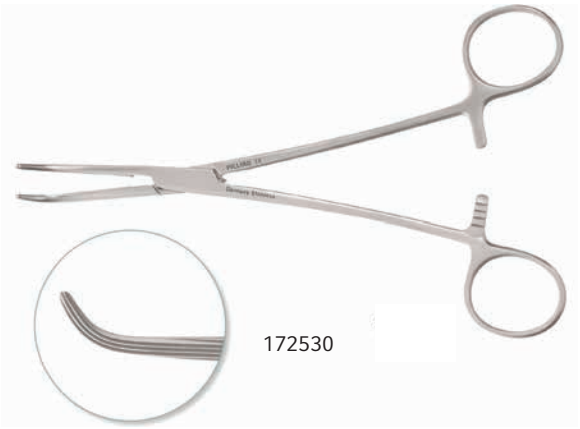
# FORCEPS AND CLAMPS

## Right Angle Clamps

### LAHEY DISSECTING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 496105 | Longitudinal serrations, 2.4 mm tip, 7-7/8" (20 cm) |
| 496110 | Horizontal serrations, 44 mm jaw, 2.4 mm tip, 7-3/4" (19.5 cm) |
| 496111 | Longitudinal serrations, 46 mm jaw, 2.5 mm tip, 7-3/4" (19.5 cm) |

### LAHEY GALL DUCT FORCEPS, SLENDER BLADES




| ITEM # | DESCRIPTION |
|---|---|
| 172530 | Longitudinal serrations, 7-1/2" (19 cm) |
| 172531 | Standard serrations, 7-1/2" (19 cm) |
| 172532 | Longitudinal serrations, 8-7/8" (22.5 cm) |

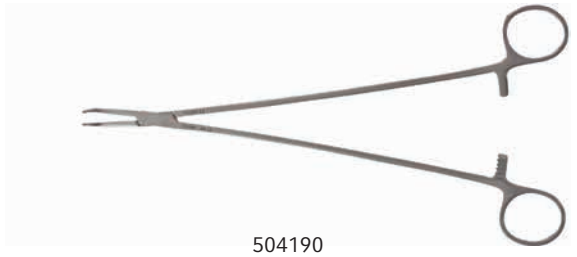
# FORCEPS AND CLAMPS

## Right Angle Clamps

### LOWER GALL DUCT FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 172525 | Short jaws, fully curved, longitudinal serrations, 7-1/2" (19 cm) |

### MEEKER HEMOSTATIC DISSECTING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 540150 | 90 degree-angled, serrated, 23 mm jaw, 1.8 mm tip, 6-3/8" (16 cm) |
| 504190 | 90 degree-angled, serrated, 28 mm jaw, 1.8 mm tip, 10-5/8" (27 cm) |

### MACQUIGG-MIXTER FORCEPS

An excellent general purpose forceps and bronchus clamp. Longitudinally serrated jaws, right-angle tip.

| ITEM # | DESCRIPTION |
|---|---|
| 342611 | Curved, longitudinal serrations, 1-5/8" (4 cm) tip length, 8-5/8" (22 cm) |

# FORCEPS AND CLAMPS

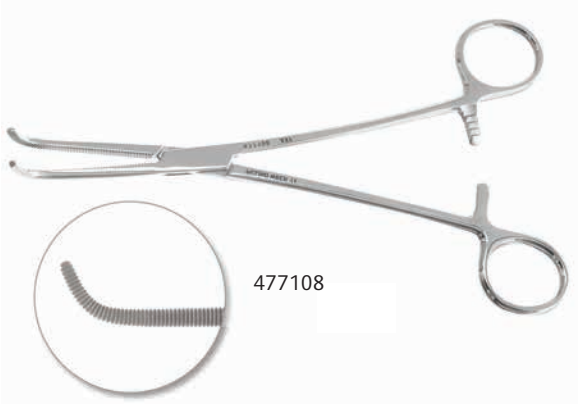
## Right Angle Clamps

### MIXTER THORACIC FORCEPS

Regular model. Available with DeBakey®-type jaw or standard serrated jaw, 3/4" (2 cm) long.

| ITEM # | DESCRIPTION |
|---|---|
| 342603 | Half curved, serrated, 5/8" (1.5 cm) tip length, 2.3 mm tip width, 9-1/8" (23 cm) |
| 342600 | Curved, DeBakey®-type jaw, 1" (2.5 cm) tip length, 2.8 mm tip width, 9-1/4" (23.5 cm) |
| 342601 | Strongly curved, serrated, 3/4" (2 cm) tip length, 8-3/4" (22 cm) |

### MIXTER CLAMPS




| ITEM # | DESCRIPTION |
|---|---|
| 477108 | 40 degree-angled, fully serrated, 50 mm jaw, 3 mm tip, 7-3/4" (19.5 cm) |

### MIXTER DISSECTING FORCEPS

Two-thirds serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 477091 | 26 mm jaw, 2 mm tip, 7-1/4" (18.5 cm) |
| 477092 | 40 mm jaw, 2.2 mm tip, 9" (23 cm) |
| 477093 | 55 mm jaw, 2.4 mm tip, 11" (28 cm) |

# FORCEPS AND CLAMPS

## Right Angle Clamps

### MIXTER FORCEPS

KM36566

| ITEM # | DESCRIPTION |
|---|---|
| KM36566 | Fully curved, serrated, 9" (23 cm) |

### MIXTER GALL DUCT FORCEPS

172503

Acutely curved jaws. Full serrations run entire length of jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 172500 | 6-1/4" (16 cm) |
| 172503 | 7-1/8" (18 cm) |
| 172506 | 8-3/4" (22 cm) |

### PEDIATRIC MIXTER DISSECTING FORCEPS

477090

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 477090 | 24 mm jaw, 2 mm tip, 5-1/4" (13.5 cm) |

# FORCEPS AND CLAMPS

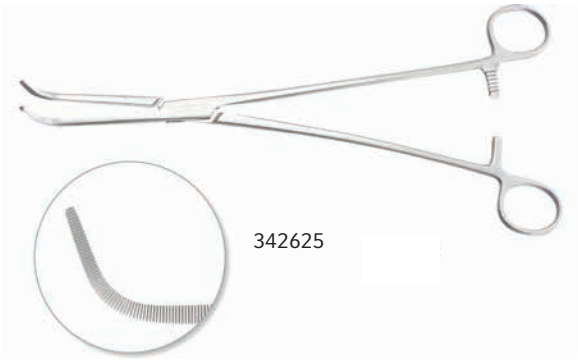
## Right Angle Clamps

### MIXTER "PEDI" GALL DUCT FORCEPS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 172495 | Delicate, 5-1/8" (13 cm) |

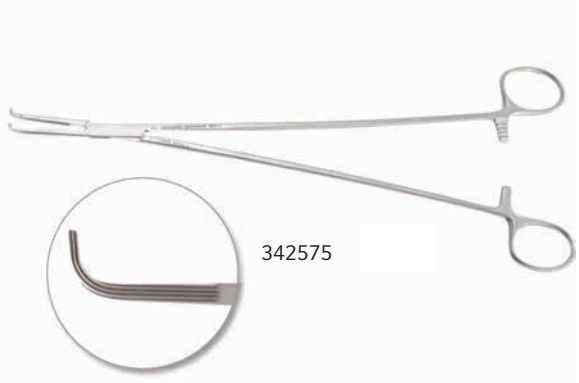
### RIENHOFF SWAN-NECK CLAMP




A double-curved forceps with delicately rounded tips.

| ITEM # | DESCRIPTION |
|---|---|
| 342625 | Serrated, 10-5/8" (27 cm) |

### ROOS SCALENECTOMY FORCEPS




Designed to give a secure hold on the scalene muscle during scalenectomy.

| ITEM # | DESCRIPTION |
|---|---|
| 342575 | Right angle, longitudinal serrations, 1/2" (1.5 cm) tip length, 1.5 mm tip width, 11" (28 cm) |

# FORCEPS AND CLAMPS

## Right Angle Clamps

### RUMEL THORACIC FORCEPS

342511

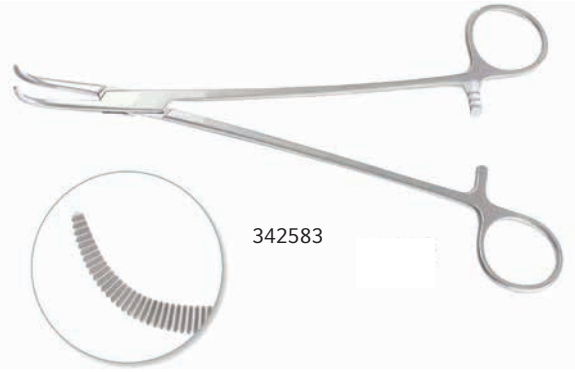
342533

342501

Furnished with DeBakey®-type jaw or standard serrated jaws. In addition to being one of the more popular thoracic artery forceps, they are especially suited for passing tapes around the cava or pulmonary artery in open heart surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 342501 | A curved, DeBakey® jaw, 2-3/4" (7 cm) tip length, 9-5/8" (24.5 cm) |
| 342504 | D curved, DeBakey® jaw, 1-1/8" (3 cm) tip length, 2.8 mm tip width, 9-3/4" (25 cm) |
| 342511 | A curved, serrated, 1/2" (1.5 cm) tip length, 2.4 mm tip width, 9-3/8" (24 cm) |
| 342513 | C curved, serrated, 3/4" (2 cm) tip length, 2 mm tip width, 9-5/8" (24.5 cm) |
| 342514 | D curved, serrated, 1" (2.5 cm) tip length, 2.4 mm tip width, 9" (23 cm) |
| 342533 | Child size, fully curved, standard serrated, 2 mm tip width, 7-7/8" (20 cm) |

### SAWTELL HEMOSTATIC FORCEPS



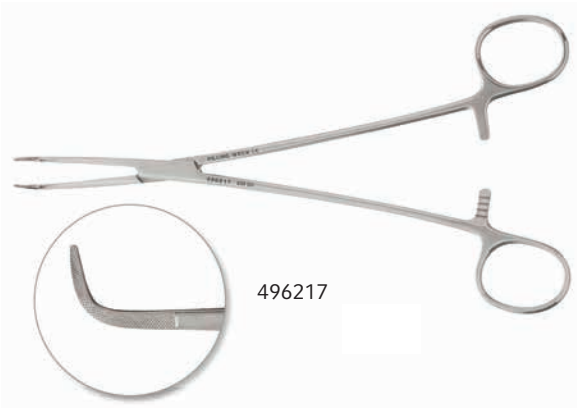
342583

| ITEM # | DESCRIPTION |
|---|---|
| 342583 | Full curved, heavy tips, 7-1/4" (18.5 cm) |

# FORCEPS AND CLAMPS

## Right Angle Clamps

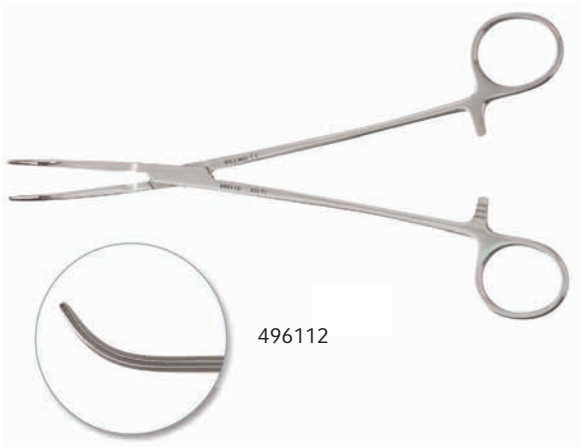
### STOREY HEMOSTATIC FORCEPS




33 mm jaw with cross serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 496215 | Slightly curved, 8-3/4" (22 cm) |
| 496216 | Strongly curved, 8-5/8" (22 cm) |
| 496217 | Right angle, 8-3/8" (21.5 cm) |

### WESTPHAL DISSECTING FORCEPS



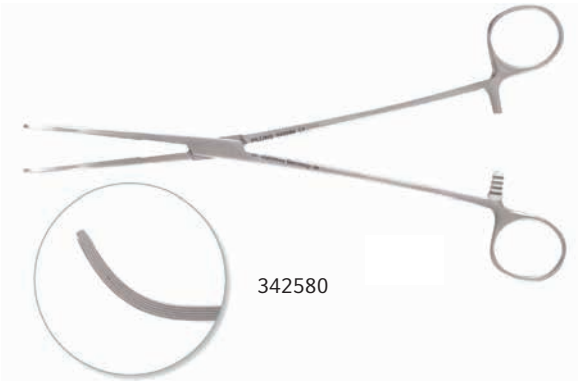

Longitudinal serrations, narrow tip.

| ITEM # | DESCRIPTION |
|---|---|
| 496112 | Angled, 7-7/8" (20 cm) |

# FORCEPS AND CLAMPS

## Right Angle Clamps

### WILLAUER FORCEPS

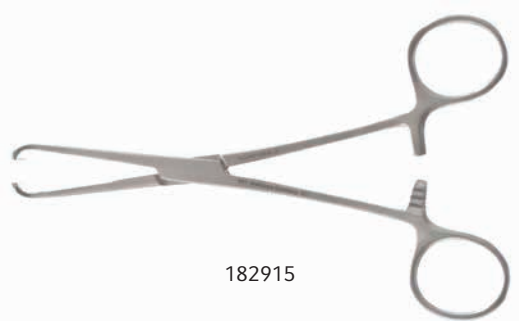



Lightweight full curved, longitudinally serrated jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 342580 | 2" (5 cm) tip length, 9-1/2" (24 cm) |

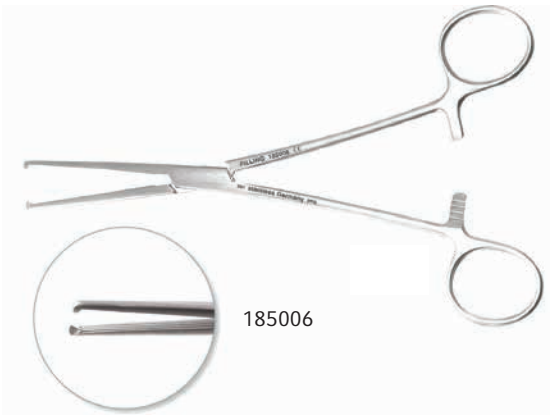
## Gastrointestinal Forceps and Clamps

### ADAIR-ALLIS INTESTINAL TISSUE FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 182915 | 9 x 10 Teeth, 6-1/4" (16 cm) |

### ALLEN INTESTINAL CLAMPS




Longitudinal serrations, 1 x 2 teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 185005 | Jaws 3-3/4" (9.5 cm), 9-1/2" (24 cm) |
| 185006 | Jaws 2-3/8" (6 cm), 8" (20.5 cm) |
| 185010 | Pediatric size, delicate, jaws 2-1/8" (5.5 cm), 6-1/4" (16 cm) |

# FORCEPS AND CLAMPS

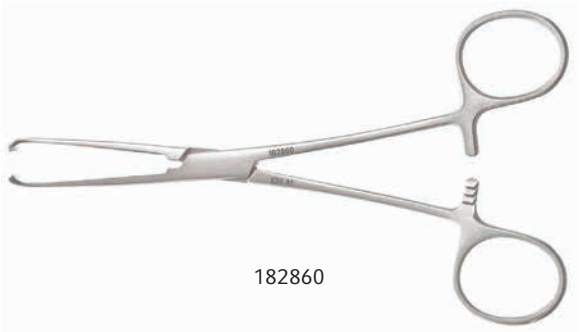
## Gastrointestinal Forceps and Clamps

### ALLIS DELICATE TISSUE FORCEPS

Weck® Pattern, bright finish, 6-1/8" (15.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 541100 | 2 x 3 teeth , 3.8 mm tip |
| 541120 | Straight, delicate, 3 x 4 teeth , 4 mm tip |

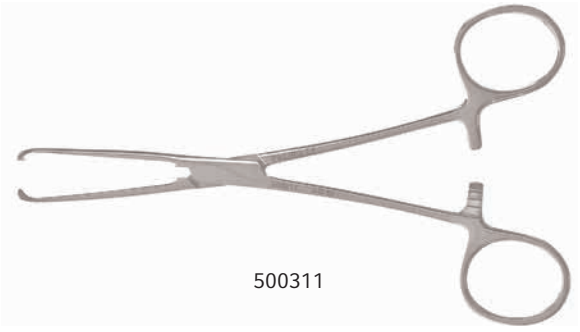
### ALLIS TISSUE FORCEPS




Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 182795 | 3 x 4 teeth, 6" (15 cm) |
| 182850 | 4 x 5 teeth, 6" (15 cm) |
| 182860 | 5 x 6 teeth, 6" (15 cm) |
| 182870 | 5 x 6 teeth, 7-1/2" (19 cm) |
| 182875 | 5 x 6 teeth, 9" (23 cm) |
| 182880 | 4 x 5 teeth, 5-3/4" (14.5 cm) |

### ALLIS TISSUE FORCEPS



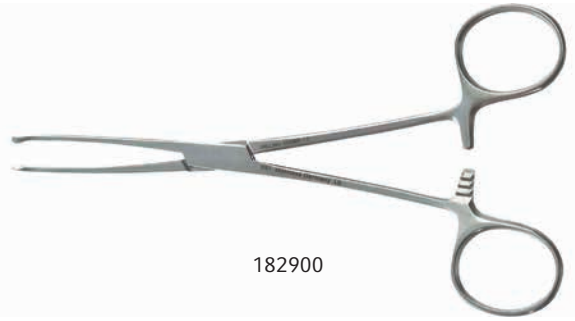

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 541094 | 3 x 4 teeth, 5" (12.5 cm) |
| 500310 | 3 x 4 teeth, 6-1/8" (15.5 cm) |
| 500311 | 4 x 5 teeth, 6-1/8" (15.5 cm) |
| 500312 | 5 x 6 teeth, 6-1/8" (15.5 cm) |
| 500316 | 5 x 6 teeth, 7-1/2" (19 cm) |

# FORCEPS AND CLAMPS

## Gastrointestinal Forceps and Clamps

### JUDD-ALLIS INTESTINAL FORCEPS



182900

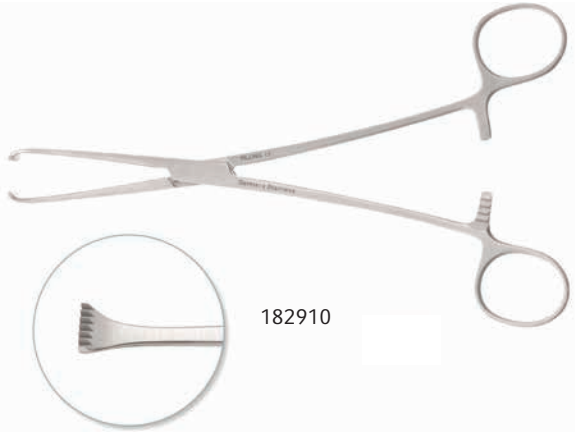
| ITEM # | DESCRIPTION |
|---|---|
| 182900 | 3 x 4 teeth, 6" (15 cm) |
| 182905 | 3 x 4 teeth, 7-1/4" (18.5 cm) |

### LOCKWOOD-ALLIS INTESTINAL TISSUE FORCEPS

182920

| ITEM # | DESCRIPTION |
|---|---|
| 182920 | Light model, flattened jaws, 5 x 6 teeth, 6-1/4" (16 cm) |

### THOMS-ALLIS TISSUE AND TRACTION FORCEPS



182910

| ITEM # | DESCRIPTION |
|---|---|
| 182910 | 6 x 7 teeth, 8" (20.5 cm) |

# FORCEPS AND CLAMPS

## Gastrointestinal Forceps and Clamps

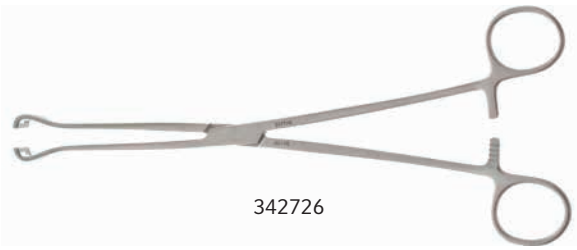
### WILLAUER-ALLIS TISSUE FORCEPS

342720

Extra-long, springy, Allis-type forceps with 5 x 6 teeth. Dull, non-glare finish stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 342720 | 10" (25.5 cm) |
| 342721 | 11-1/4" (28.5 cm) |

### BABCOCK TISSUE FORCEPS



342726

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 183010 | 6-1/4" (16 cm) |
| 183020 | 7-7/8" (20 cm) |
| 342725 | Serrated, 9-1/2" (24 cm) |
| 342726 | Serrated, 9-1/2" (24 cm) |

### BABCOCK TISSUE FORCEPS

500399

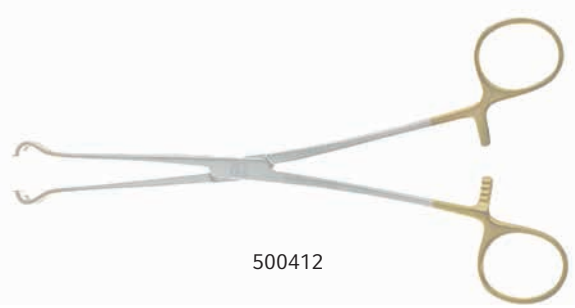
Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 500399 | 5.8 mm tip, 5-3/4" (14.5 cm) |
| 500400 | 8.3 mm tip, 6-3/8" (16 cm) |
| 500402 | 10 mm tip, 7-7/8" (20 cm) |

# FORCEPS AND CLAMPS

## Gastrointestinal Forceps and Clamps

### BABCOCK TISSUE FORCEPS

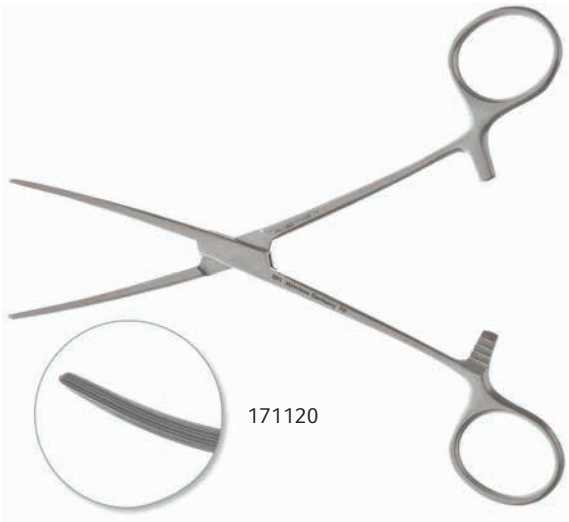


500412

Tungsten carbide jaw tips.

| ITEM # | DESCRIPTION |
|---|---|
| 500410 | 3/8" (9.5 mm) tip, 6-1/2" (16.5 cm), TC |
| 500412 | 7/16" (11 mm) tip, 7-7/8" (20 cm), TC |

### BAINBRIDGE FORCEPS



171120

Pilling® Pattern, satin finish. Slender blades longitudinally serrated.

| ITEM # | DESCRIPTION |
|---|---|
| 171117 | Straight, 7-1/4" (18.5 cm) |
| 171120 | Curved, 6-3/4" (17 cm) |
| 171122 | Curved, 7-1/4" (18.5 cm) |

# FORCEPS AND CLAMPS

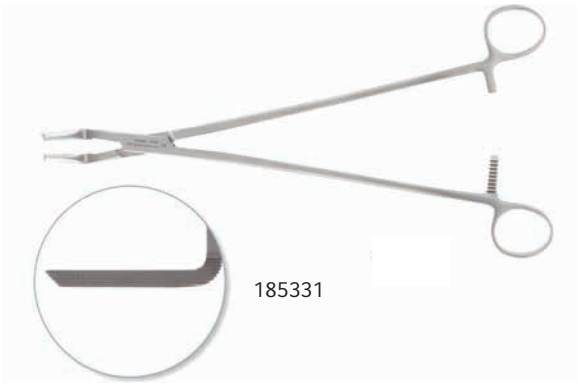
## Gastrointestinal Forceps and Clamps

### DEBAKEY® BAINBRIDGE CLAMPS

With narrow DeBakey®-type jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 353560 | Straight, 40 x 2.4 mm jaws, 7" (18 cm) |
| 353562 | Straight, 80 x 2.8 mm jaws, 7-7/8" (20 cm) |
| 353565 | Curved, 60 x 2.4 mm jaws, 7" (18 cm) |

### BEST COLON CLAMP



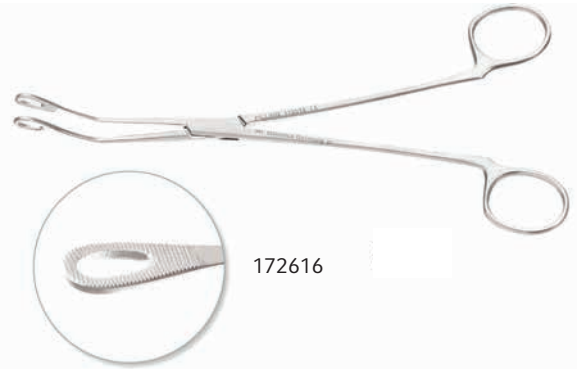

Right angle design for open anastomosis. Strong crushing jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 185331 | 2-5/8" (6.5 cm) jaw size, 10-5/8" (27 cm) |

# FORCEPS AND CLAMPS

## Gastrointestinal Forceps and Clamps

### BLAKE GALLSTONE GRASPING FORCEPS




Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 172616 | Curved, serrated, 8" (20.5 cm) |

### CYSTIC DUCT CATHETER CLAMPS

For open cholangiography.

| ITEM # | DESCRIPTION |
|---|---|
| 172570 | Accepts 4 Fr. catheter, 7-1/2" (19 cm) |
| 172571 | Accepts 6 Fr. catheter, 7-1/2" (19 cm) |

# FORCEPS AND CLAMPS

## Gastrointestinal Forceps and Clamps

### DEBAKEY® THORACIC DISSECTING FORCEPS

342560

342560

342561

342562

342563

342565

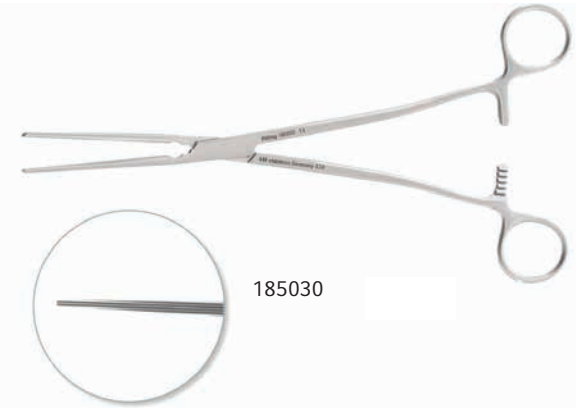
DeBakey®-type jaws. The jaws are narrowed and thinned to a minimum size and double-curved. This provides a lightweight, sure-holding forceps for dissecting and passing tapes and ligatures around vessels.

| ITEM # | DESCRIPTION |
|---|---|
| 342560 | C curved, 3/8" (1 cm) tip length, 8-1/8" (20.5 cm) |
| 342561 | D curved, 1/2" (1.5 cm) tip length, 2.8 mm tip width, 8-1/4" (21 cm) |
| 342562 | C curved, 5/8" (1.5 cm) tip length, 2.8 mm tip width, 9-5/8" (24.5 cm) |
| 342563 | D curved, 7/8" (2 cm) tip length, 9-1/2" (24 cm) |
| 342565 | D curved, 3/4" (2 cm) tip length, 10-1/4" (26 cm) |

# FORCEPS AND CLAMPS

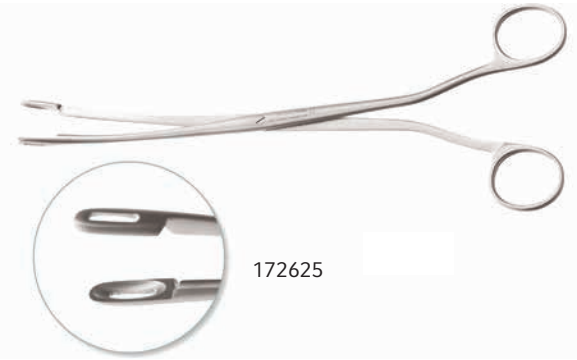
## Gastrointestinal Forceps and Clamps

### DENNIS ANASTOMOSIS CLAMP



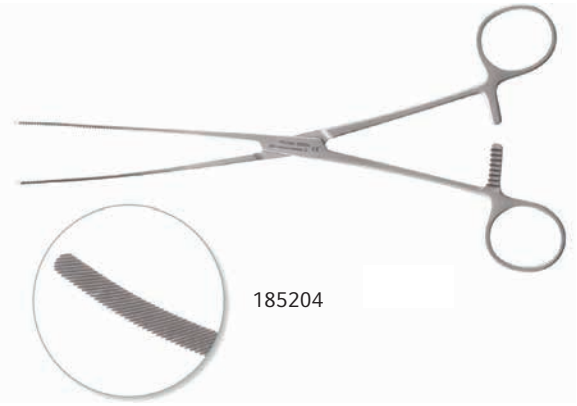

| ITEM # | DESCRIPTION |
|---|---|
| 185030 | 54 mm jaws, 9-1/4" (23.5 cm) |

### DESJARDIN GALLSTONE GRASPING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 172625 | 9-1/4" (23.5 cm) |

### DOYEN INTESTINAL CLAMPS



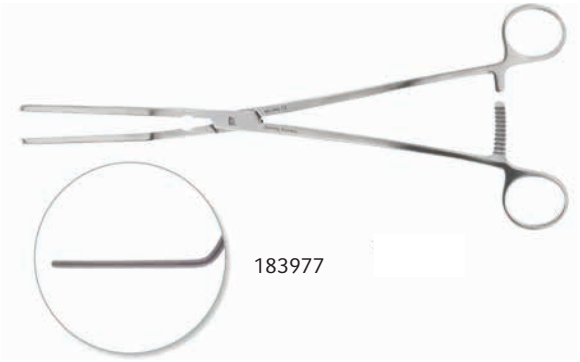

Soft blades, diagonal serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 185202 | Straight, 9-1/8" (23 cm) |
| 185204 | Curved, 9" (23 cm) |

# FORCEPS AND CLAMPS

## Gastrointestinal Forceps and Clamps

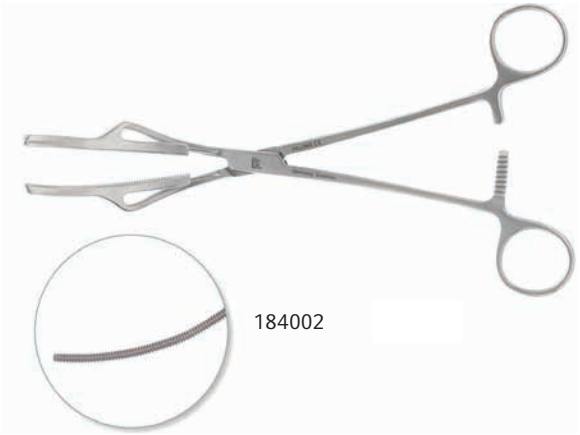
### HAYES ANTERIOR RESECTION CLAMPS




70 degree-angled, 1 x 2 DeBakey® Jaws, angular shafts.

| ITEM # | DESCRIPTION |
|---|---|
| 183975 | 2-3/8" (6 cm) jaws, 9-7/8" (25 cm) |
| 183977 | 3-1/8" (8 cm) jaws, 10-1/2" (26.5 cm) |

### KLINTMALM™ LIVER TRANSPLANT CLAMPS




The KLINTMALM™ Liver Transplant Clamp is designed to securely occlude the suprahepatic inferior vena cava of the recipient during anastomosis of the donor liver.

- Unique "teething" design of a single row against a double row of teeth helps prevent slippage and scissoring of the jaw.
- An even-parallel closure of the jaw helps prevent blood seepage and helps minimize the risk of the vena cava slipping from the clamp.
- Jaw curvature is designed to meet the anatomical requirements of the upper abdomen and to reduce trauma to the liver.

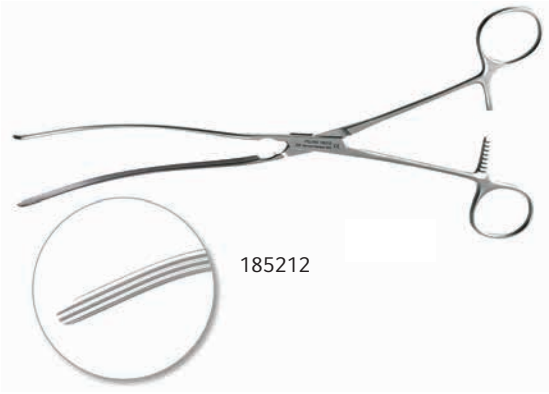
A standard vascular clamp on the cuff of the vena cava and diaphragm may not always properly close due to the amount of tissue in the clamp. The use of a standard vascular clamp may result in clamp insecurity and slippage leading to the possible retraction of the vena cava into the diaphragm, and visual obstruction caused by pooling blood.

| ITEM # | DESCRIPTION |
|---|---|
| 184001 | Small 2-1/2" (6.5 cm) jaw, 7-1/8" (18 cm) |
| 184002 | Medium 3-1/8" (8 cm) jaw, 8-3/8" (21.5 cm) |
| 184003 | Large 3-3/8" (8.5 cm) jaw, 9-7/8" (25 cm) |

# FORCEPS AND CLAMPS

## Gastrointestinal Forceps and Clamps

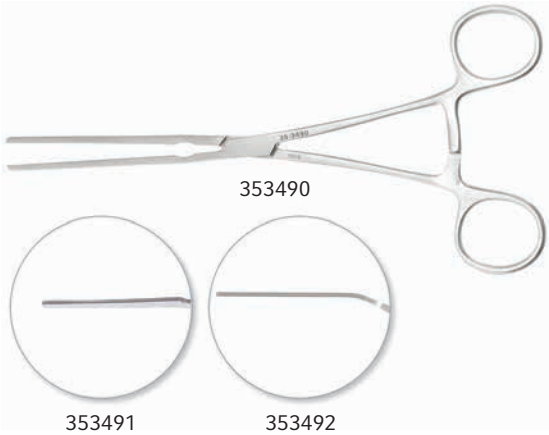
### KOCHER INTESTINAL CLAMPS




Soft blades, longitudinal serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 185210 | Straight, 10" (25.5 cm) |
| 185212 | Curved, 9-7/8" (25 cm) |
| 185214 | Straight, 10-3/4" (27.5 cm) |

### LELAND JONES CLAMPS




Delicate DeBakey® Jaws, 2.4 mm wide. LIFE-LOK® Box Lock. Versatile clamps which have been found useful in small bowel procedures.

| ITEM # | DESCRIPTION |
|---|---|
| 353490 | Straight, 8-1/8" (20.5 cm) |
| 353491 | Angled 15 degrees, 8-1/8" (20.5 cm) |
| 353492 | Angled 30 degrees, 8" (20.5 cm) |

### MIXTER FORCEPS

Long model. Very useful for deep dissection and as a bronchus clamp.

| ITEM # | DESCRIPTION |
|---|---|
| 342606 | Strongly curved, serrated (3 cm) tip length, 10-3/4" (27.5 cm) |
| 342605 | Strongly curved, DeBakey® Jaw, 1-3/8" (3.5 cm) tip length, 11" (28 cm) |

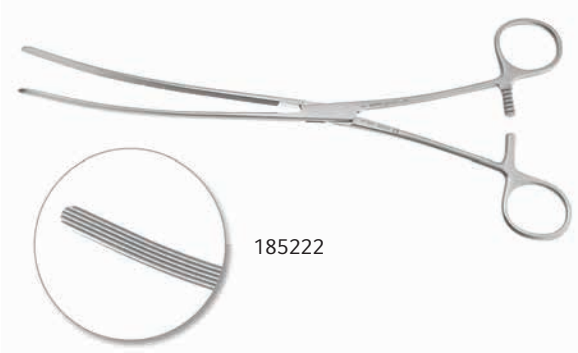
# FORCEPS AND CLAMPS

## Gastrointestinal Forceps and Clamps

### MAYO (GUYON) VESSEL CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| 172560 | 9-1/4" (23.5 cm) |

### MAYO-ROBSON INTESTINAL CLAMPS




Longitudinal serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 185220 | Straight, 10-1/4" (26 cm) |
| 185222 | Curved, 10" (25.5 cm) |

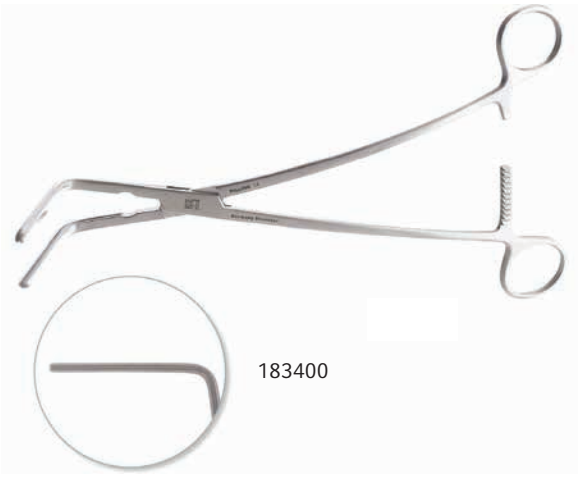
# FORCEPS AND CLAMPS

## Gastrointestinal Forceps and Clamps

### PENNINGTON FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 475250 | Serrated, triangular, 14 x 11 mm jaw, 6-1/8"(15.5 cm) |
| 616370 | Serrated, triangular, 16 x 12.5 mm jaw, 8-1/4" (21 cm) |

### PILLING® GUT AND COLON CLAMPS




90 degree angled, 1 x 2 DeBakey®-type Jaws, curved shafts.

| ITEM # | DESCRIPTION |
|---|---|
| 183400 | 2-3/4" (7 cm) jaws, 9-3/8" (24 cm) |
| 183410 | 3-5/8" (9 cm) jaws, 9-5/8" (24.5 cm) |

# FORCEPS AND CLAMPS

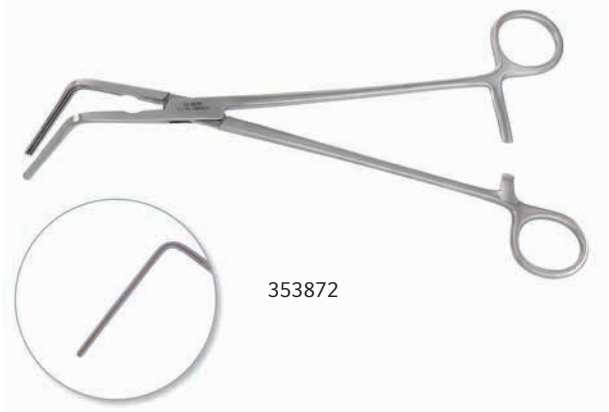
## Gastrointestinal Forceps and Clamps

### STONE INTESTINAL CLAMPS

Handle may be used at any angle. Narrow longitudinally serrated blades. Set consists of 2 clamps with tip locks and 2 applying forceps.

| ITEM # | DESCRIPTION |
|---|---|
| 185402 | Set. With 4-3/8" (11 cm) length clamps |
| 185404 | Clamp with tip lock, 3-3/8" (8.5 cm) |

### STRELINGER RIGHT ANGLE CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 353872 | Large size, 3-1/4" (8.5 cm) DeBakey®-type jaws angled 90 degrees, 9-5/8" (24.5 cm) |

# SCISSORS

## Bandage Scissors and Shears

### ESMARCH BANDAGE SCISSORS

142425

One large finger ring.

| ITEM # | DESCRIPTION |
|---|---|
| 142425 | 7-3/4" (19.5 cm) |

### ESMARCH PLASTER SHEARS

463885

| ITEM # | DESCRIPTION |
|---|---|
| 463885 | 7-7/8" (20 cm) |

### HERCULES PLASTER SCISSORS

KM31834

For lightweight plaster or aluminum casts.

| ITEM # | DESCRIPTION |
|---|---|
| KM31834 | Angled, one blade serrated, 7-1/2" (19 cm) |

# SCISSORS

## Bandage Scissors and Shears

### HI-LEVEL BANDAGE SCISSORS

KM31792

The delicate offset shanks provide better leverage. The fine knob slides easily under finger and toe bandages.

| ITEM # | DESCRIPTION |
|---|---|
| KM31792 | Shanks angled on side, one serrated blade, 5-1/2" (14 cm) |

### KMEDIC® UTILITY SHEARS

KM31836

Effective for cloth or cotton wadding. One smooth and one serrated blade.

| ITEM # | DESCRIPTION |
|---|---|
| KM11202 | Ring handles, 7-1/2" (19 cm) |
| KM31836 | 8-1/4" (21 cm) |

### KNOWLES BANDAGE SCISSORS

KM31804

For finger and toe bandages.

| ITEM # | DESCRIPTION |
|---|---|
| KM31804 | Straight, one serrated blade, 5-1/2" (14 cm) |

# SCISSORS

## Bandage Scissors and Shears

### LISTER BANDAGE SCISSORS

KM31680

| ITEM # | DESCRIPTION |
|---|---|
| KM31680 | 4-1/2" (11.5 cm) |

### LISTER BANDAGE SCISSORS

142415

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 142415 | 5-3/4" (14.5 cm) |
| 142420 | 7-1/4" (18.5 cm) |
| 142422 | 8" (20.5 cm) |

### LISTER BANDAGE SCISSORS

463810

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 463810 | 5-3/4" (14.5 cm) |
| 463830 | 7-1/4" (18.5 cm) |

# SCISSORS

## Bandage Scissors and Shears

### LISTER BANDAGE SCISSORS

One large finger ring.

| ITEM # | DESCRIPTION |
|---|---|
| 463840 | 8" (20.5 cm) |

### MOLESKIN SCISSORS

One blade serrated.

| ITEM # | DESCRIPTION |
|---|---|
| KM69820 | Straight, 7" (18 cm) |
| KM69824 | Curved, 7-1/2" (19 cm) |

# SCISSORS

## Bandage Scissors and Shears

### MAKI™ SCISSORS

463820

Uniquely designed teeth to grip bottle caps, needles, tubing.

| ITEM # | DESCRIPTION |
|---|---|
| 463820 | 5-3/4" (14.5 cm) |

### UNIVERSAL SHEARS

142452

Stainless steel, comfortable polymer handles, serrated.

| ITEM # | DESCRIPTION |
|---|---|
| 142452 | 7-1/2" (19 cm) |

### UTILITY SCISSORS

KM31832

With autoclavable plastic finger rings.

| ITEM # | DESCRIPTION |
|---|---|
| KM31832 | Lister-type, one serrated blade, 5-3/4" (14.5 cm) |

# SCISSORS

## Stitch and Suture Removal Scissors

### HILL STITCH SCISSORS

KM35084

| ITEM # | DESCRIPTION |
|---|---|
| KM35084 | Curved, 4-3/8" (11 cm) |

### LITTAUER STANDARD SUTURE SCISSORS

142325

| ITEM # | DESCRIPTION |
|---|---|
| 142325 | 5-1/2" (14 cm) |

### LITTAUER STITCH SCISSORS

KM35120

| ITEM # | DESCRIPTION |
|---|---|
| KM35120 | Straight, 5-1/2" (14 cm) |

# SCISSORS

## Stitch and Suture Removal Scissors

### LITTLER STITCH SCISSORS

KM35078

| ITEM # | DESCRIPTION |
|---|---|
| KM35078 | Curved, 4-5/8" (11.5 cm) |

### NORTHBENT STITCH SCISSORS

KM35104

| ITEM # | DESCRIPTION |
|---|---|
| KM35104 | Curved on side, 4-3/4" (12 cm) |

# SCISSORS

## Stitch and Suture Removal Scissors

### SHORTBENT STITCH SCISSORS

KM35080

| ITEM # | DESCRIPTION |
|---|---|
| KM35080 | Curved on side, delicate, 3-1/2" (9 cm) |

### SPENCER SCISSORS

142312

Pilling® Pattern, satin finish. Very delicate for fine sutures.

| ITEM # | DESCRIPTION |
|---|---|
| 142312 | 5" (12.5 cm) |

# SCISSORS

## Stitch and Suture Removal Scissors

### SPENCER STITCH SCISSORS

KM35092

KMedic® Pattern, satin finish. Delicate, straight.

| ITEM # | DESCRIPTION |
|---|---|
| KM35068 | 3-1/2" (9 cm) |
| KM35092 | 4-3/4" (12 cm) |

### SPENCER STITCH SCISSORS

520135

520140

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 520135 | Slightly curved, 20 mm blades, 3-1/2" (9 cm) |
| 520140 | Straight, serrated, 30 mm blades, 5" (12.5 cm) |

# SCISSORS

## Stitch and Suture Removal Scissors

### SUTURE REMOVAL SCISSORS

056120

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 056120 | Curved, pointed, 22 mm blades, 4-3/4" (12 cm) |

## Wire Cutting Scissors

### BANTAM WIRE CUTTING SCISSORS

520150

Serrated 18 mm blades.

| ITEM # | DESCRIPTION |
|---|---|
| 520150 | Straight, 4-3/8" (11 cm) |
| 520152 | Curved, 4" (10 cm) |

# SCISSORS

## Wire Cutting Scissors

### HEATH SUTURE AND WIRE CUTTING SCISSORS

520120

| ITEM # | DESCRIPTION |
|---|---|
| 520120 | Curved sideways, serrated, 23 mm blades, 6" (15 cm) |

### ROGER WIRE CUTTING SCISSORS

520130

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 520130 | One serrated blade, 15 mm blades angled sideways, 5" (12.5 cm) |

### WIRE SCISSORS

142518

Pilling® Pattern, satin finish. Angular with notch for wire.

| ITEM # | DESCRIPTION |
|---|---|
| 142515 | Stainless steel blades, one serrated, 5" (12.5 cm) |
| 142518 | TC blades, 5" (12.5 cm) |

# SCISSORS

## Wire Cutting Scissors

### WIRE CUTTING SCISSORS

KM35200

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM35200 | Angular carbide, one serrated blade, 4-3/4" (12 cm), TC |

### VERNON WIRE SCISSORS

790310

Straight, serrated blades.

| ITEM # | DESCRIPTION |
|---|---|
| 790310 | 32 mm blades, 5-3/4" (14.5 cm) |
| 790315 | 42 mm blades, 7-1/2" (19 cm) |

## Operating Scissors

### DELICATE OPERATING SCISSORS

460180

Sharp/Blunt.

| ITEM # | DESCRIPTION |
|---|---|
| 460180 | Straight, 5" (12.5 cm) |

# SCISSORS

## Operating Scissors

### OPERATING SCISSORS, B/B

460170

Blunt/Blunt, stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 460165 | Straight, 5" (12.5 cm) |
| 460219 | Curved, 5-1/2" (14 cm) |
| 460170 | Straight, 5-3/4" (14.5 cm) |
| 460179 | Straight, 6" (15 cm) |
| 460177 | Straight, 7" (18 cm) |

### OPERATING SCISSORS, S/B

460220

Sharp/Blunt, stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 460100 | Straight, 4-3/4" (12 cm) |
| 460105 | Straight, 5" (12.5 cm) |
| 460110 | Straight, 5-1/2" (14 cm) |
| 460220 | Curved, 5-1/2" (14 cm) |
| 460175 | Straight, 6" (15 cm) |
| 460115 | Straight, 6-3/4" (17 cm) |

### OPERATING SCISSORS, S/S

460245

Sharp/Sharp, stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 460245 | Curved, 5-1/2" (14 cm) |
| 460135 | Straight, 5" (12.5 cm) |
| 460140 | Straight, 5-1/2" (14 cm) |

# SCISSORS

## Operating Scissors

### OPERATING SCISSORS, TC

464502

5-1/2" (14 cm), TC.

| ITEM # | DESCRIPTION |
|---|---|
| 464500 | Sharp/Blunt |
| 464502 | Sharp/Sharp |

### OPERATING SCISSORS

141146

141106

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 141146 | Sharp/Blunt, straight, 5-1/2" (14 cm) |
| 141106 | Sharp/Sharp, straight, 5-3/4" (14.5 cm) |

## Mayo-Type Scissors

### MAYO BEVELED BLADE SCISSORS

141317

| ITEM # | DESCRIPTION |
|---|---|
| 141310 | Straight, 5-3/4" (14.5 cm) |
| 141315 | Curved, 5-3/4" (14.5 cm) |
| 141312 | Straight, 6-3/4" (17 cm) |
| 141317 | Curved, 6-3/4" (17 cm) |

# SCISSORS

## Mayo-Type Scissors

### MAYO ROUND SURFACE BLADE SCISSORS

141332

| ITEM # | DESCRIPTION |
|---|---|
| 141332 | Straight, 6-3/4" (17 cm) |

### MAYO DISSECTING SCISSORS

460400

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 460410 | Curved, 43 mm blades, 5-1/2" (14 cm) |
| 460400 | Straight, 43.5 mm blades, 5-5/8" (14.5 cm) |
| 460420 | Straight, 51.5 mm blades, 6-3/4" (17 cm) |
| 460430 | Curved, 49.5 mm blades, 6-3/4" (17 cm) |
| 460620 | Straight, 64 mm blades, 8-3/4" (22 cm) |
| 460630 | Curved, 64 mm blades, 8-3/4" (22 cm) |

### MAYO DISSECTING SCISSORS

460461

Weck® Pattern, bright finish, lightweight, 6-1/2" (16.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 460460 | Straight |
| 460461 | Curved |

# SCISSORS

## Mayo-Type Scissors

### MAYO DISSECTING SCISSORS, TC

142220

Pilling® Pattern, satin finish. Beveled blade.

| ITEM # | DESCRIPTION |
|---|---|
| 142220 | Curved, 5-1/2" (14 cm), TC |
| 142235 | Curved, 9" (23 cm), TC |
| 142237 | Straight, 9" (23 cm), TC |

### MAYO DISSECTING SCISSORS, TC

464600

Weck® Pattern, bright finish. Round blade.

| ITEM # | DESCRIPTION |
|---|---|
| 464605 | Curved, 5-3/4" (14.5 cm), TC |
| 464615 | Curved, 6-1/2" (16.5 cm), TC |
| 464600 | Straight, 5-3/4" (14.5 cm), TC |
| 464610 | Straight, 6-1/2" (16.5 cm), TC |

# SCISSORS

## Mayo-Type Scissors

### MAYO NOBLE SCISSORS

6-1/2" (16.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 460600 | Straight |
| 460601 | Curved |

### MAYO-HARRINGTON SCISSORS

11" (28 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 462120 | Straight |
| 462121 | Curved |

### MAYO-STILLE SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| KM34306 | Straight, 5-1/2" (14 cm) |
| KM34308 | Curved, 5-1/2" (14 cm) |
| KM34310 | Straight, 6-3/4" (17 cm) |
| KM34312 | Curved, 6-3/4" (17 cm) |

# SCISSORS

## Mayo-Type Scissors

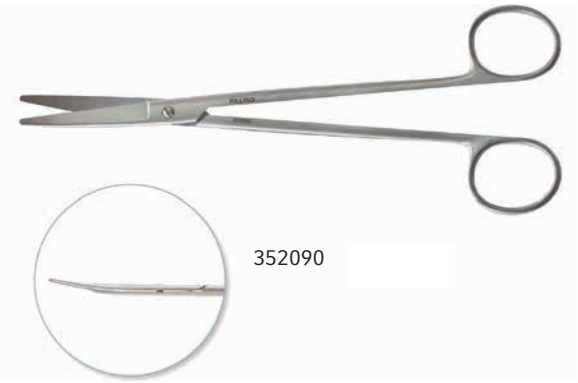
### CHURCH SCISSORS

352250

Lightly constructed, long scissors with a beveled surface. Mayo style blades. Blunt, dissecting tips.

| ITEM # | DESCRIPTION |
|---|---|
| 352250 | Curved, 6-3/4" (17 cm) |
| 352240 | Straight, 7" (18 cm) |

### COOLEY-MAYO CURVED SCISSORS



352090

| ITEM # | DESCRIPTION |
|---|---|
| 352090 | 7-1/2" (19 cm) |

### DOYEN ABDOMINAL SCISSORS

KM34336

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM34334 | Straight, 7" (18 cm) |
| KM34336 | Curved, 7" (18 cm) |

# SCISSORS

## Mayo-Type Scissors

### DOYEN SCISSORS

141395

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 141395 | Straight, 7-1/4" (18.5 cm) |

### DOYEN FERGUSON SCISSORS

460720

| ITEM # | DESCRIPTION |
|---|---|
| 460720 | Angled on flat, 59 mm blades, 7-1/8" (18 cm) |

### SIMS SCISSORS

KM67174

8" (20.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM67164 | Straight, Sharp/Sharp blades |
| KM67166 | Straight, Sharp/Blunt blades |
| KM67168 | Straight, Blunt/Blunt blades |
| KM67170 | Curved, Sharp/Sharp blades |
| KM67172 | Curved, Sharp/Blunt blades |
| KM67174 | Curved, Blunt/Blunt blades |

# SCISSORS

## Mayo-Type Scissors

### SISTRUNK FINE SCISSORS

Delicate, 5-1/2" (14 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM34348 | Straight |
| KM34354 | Curved |

### SISTRUNK HEAVY SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| KM34356 | Straight, 5-1/2" (14 cm) |

### JORGENSON SCISSORS

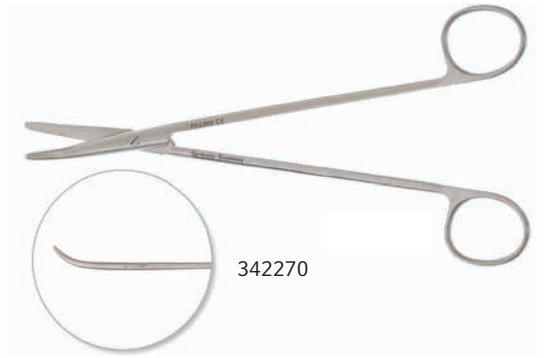
Heavy, rigid body with acutely curved blades that taper to a rounded narrow tip.

| ITEM # | DESCRIPTION |
|---|---|
| 342273 | 8-3/4" (22 cm) |

# SCISSORS

## Mayo-Type Scissors

### THOREK SCISSORS


342270

Medium weight construction, round surface, acutely curved blades.

| ITEM # | DESCRIPTION |
|---|---|
| 342270 | 7-1/4" (18.5 cm) |
| 342272 | 10" (25.5 cm) |

### MARTIN CARTILAGE SCISSORS

790320

| ITEM # | DESCRIPTION |
|---|---|
| 790320 | Curved, serrated blades, 8" (20.5 cm) |

### DEAN SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| KM34642 | Angled, serrated, 7" (18 cm) |

### GORNEY RHYTIDECTOMY SCISSORS

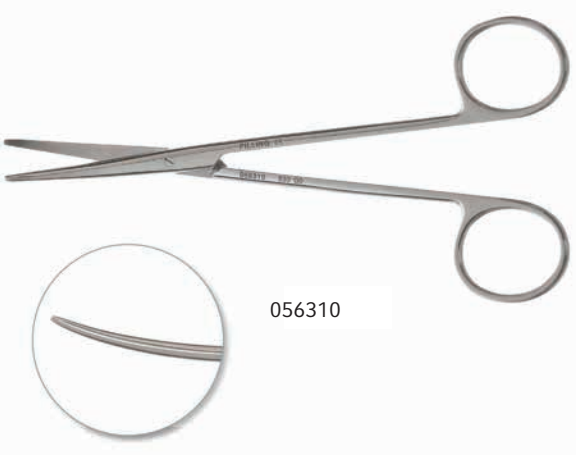
442560

| ITEM # | DESCRIPTION |
|---|---|
| 442560 | Straight, serrated, 6-3/4" (17 cm) |

# SCISSORS

## Metzenbaum-Type Scissors

### BABY METZENBAUM SCISSORS




Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 056310 | Curved, 5-3/4" (14.5 cm) |

### LAHEY (BABY METZ) SCISSORS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 141450 | Straight, 5-3/4" (14.5 cm) |
| 141452 | Curved, 5-3/4" (14.5 cm) |

### METZENBAUM SCISSORS, DELICATE

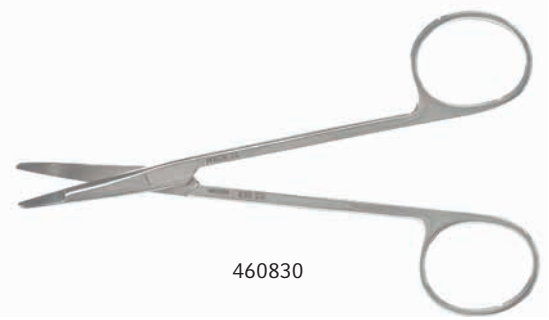
Pilling® Pattern, satin finish. Delicate curved.

| ITEM # | DESCRIPTION |
|---|---|
| 141448 | 5-1/2" (14 cm) |
| 352235 | 7" (18 cm) |
| 352237 | 8" (20.5 cm) |

# SCISSORS

## Metzenbaum-Type Scissors

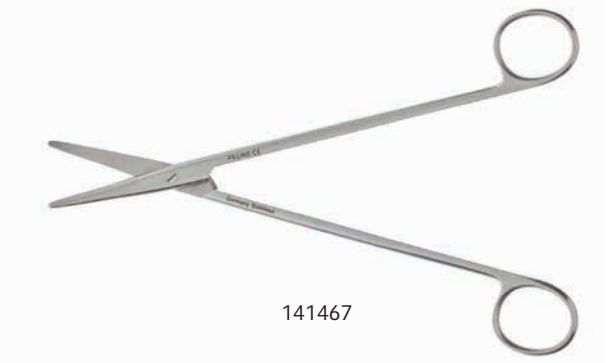
### METZENBAUM SCISSORS, DELICATE



460830

| ITEM # | DESCRIPTION |
|---|---|
| 460830 | Curved, 29 mm delicate blades with cut-out, 5" (12.5 cm) |

### METZENBAUM SCISSORS



141467

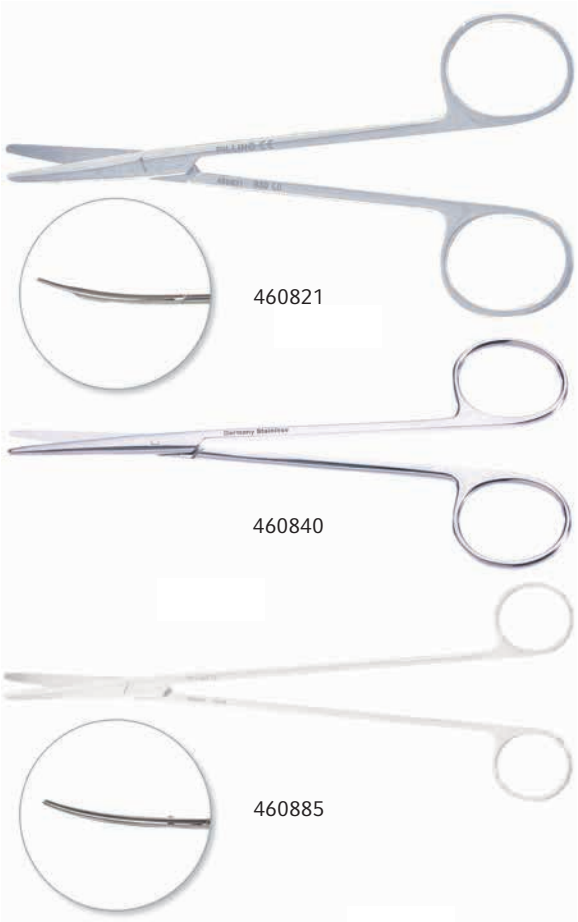
Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 141460 | Straight, 7" (18 cm) |
| 141462 | Curved, 7" (18 cm) |
| 141467 | Curved, 8-1/4" (21 cm) |
| 141469 | Curved, 9" (23 cm) |

# SCISSORS

## Metzenbaum-Type Scissors

### METZENBAUM SCISSORS




Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 460820 | Straight, 5" (12.5 cm) |
| 460821 | Curved, 5" (12.5 cm) |
| 460840 | Straight, 5-3/8" (13.5 cm) |
| 460841 | Curved, 5-3/8" (13.5 cm) |
| 460880 | Straight, 5-3/8" (13.5 cm) |
| 460881 | Curved, 5-3/8" (13.5 cm) |
| 460870 | Straight, 7" (18 cm) |
| 460871 | Curved, 7" (18 cm) |
| 460884 | Straight, 9" (23 cm) |
| 460885 | Curved, 9" (23 cm) |
| 462105 | Straight, 10-3/8" (26.5 cm) |
| 462110 | Curved, 10-1/4" (26 cm) |
| 460889 | Curved, 11" (28 cm) |

# SCISSORS

## Metzenbaum-Type Scissors

### METZENBAUM SCISSORS

KMedic® Pattern, satin finish, 6" and 8".

| ITEM # | DESCRIPTION |
|---|---|
| KM34458 | Straight, 6" (15 cm) |
| KM34462 | Curved, 6" (15 cm) |
| KM34472 | Straight, 8" (20.5 cm) |
| KM34474 | Curved, 8" (20.5 cm) |

### METZENBAUM SCISSORS, TC

Sharp/Sharp.

| ITEM # | DESCRIPTION |
|---|---|
| 464707 | Curved, 5-3/4" (14.5 cm), TC |
| 464712 | Straight, 7" (18 cm), TC |
| 464718 | Curved, 7" (18 cm), TC |
| 464722 | Straight, 9" (23 cm), TC |
| 464727 | Curved, 9" (23 cm), TC |

# SCISSORS

## Metzenbaum-Type Scissors

### METZENBAUM SCISSORS, TC

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 464700 | Straight, 5-3/4" (14.5 cm), TC |
| 464705 | Curved, 5-3/4" (14.5 cm), TC |
| 464710 | Straight, 7" (18 cm), TC |
| 464715 | Curved, 7" (18 cm), TC |
| 464720 | Straight, 9" (23 cm), TC |
| 464725 | Curved, 9" (23 cm), TC |

### METZENBAUM SCISSORS, DELICATE, TC

Delicate. Blunt/Blunt.

| ITEM # | DESCRIPTION |
|---|---|
| 464701 | Straight, 5-3/4" (14.5 cm), TC |
| 464706 | Curved, 5-3/4" (14.5 cm), TC |
| 464711 | Straight, 7" (18 cm), TC |
| 464716 | Curved, 7" (18 cm), TC |
| 464721 | Straight, 9" (23 cm), TC |
| 464726 | Curved, 9" (23 cm), TC |

# SCISSORS

## Metzenbaum-Type Scissors

### DEBAKEY® SCISSORS

Sturdy Metzenbaum-type scissors. Black rings for quick identification.

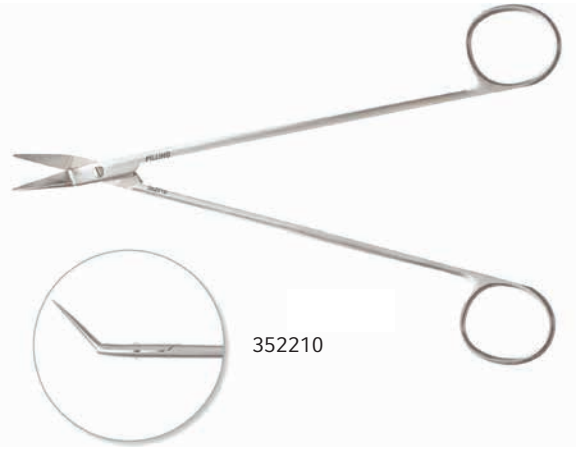
| ITEM # | DESCRIPTION |
|---|---|
| 342160 | Curved, 5-3/4" (14.5 cm), TC |
| 342162 | Curved, 7" (18 cm), TC |
| 342166 | Curved, 9-1/8" (23 cm), TC |
| 342167 | Curved, 10-1/4" (26 cm), TC |
| 342168 | Curved, 11-1/4" (28.5 cm), TC |
| 342169 | Curved, 12" (30.5 cm), TC |

### DEBAKEY®-METZENBAUM DISSECTING SCISSORS

Curved blades. These scissors are proportionately matched in weight.

| ITEM # | DESCRIPTION |
|---|---|
| 342200 | Curved, 5-7/8" (15 cm) |
| 342201 | Curved, 7" (18 cm) |
| 342202 | Curved, 8-1/8" (20.5 cm) |
| 342203 | Curved, 9-1/8" (23 cm) |
| 342204 | Curved, 10-1/4" (26 cm) |
| 342206 | 12-1/4" (31 cm) |

### DEMARTEL ACUTELY ANGLED SCISSORS




Lightweight construction.

| ITEM # | DESCRIPTION |
|---|---|
| 352210 | Angled on flat 50 degrees, short, 16 mm blades, sharp tips, 7" (18 cm) |

# SCISSORS

## Metzenbaum-Type Scissors

### DEMARTEL SCISSORS

Very slim, light construction.

| ITEM # | DESCRIPTION |
|---|---|
| 352120 | Straight, sharp blades, 6-3/4" (17 cm) |
| 352106 | Angled on flat, blunt blades, 6-3/4" (17 cm) |
| 352109 | Curved, blunt blades, 6-3/4" (17 cm) |
| 352129 | Curved, sharp blades, 6-3/4" (17 cm) |
| 352100 | Straight, blunt blades, 7" (18 cm) |
| 352103P | Angled on flat, blunt tips, 7" (18 cm) |
| 352123 | Angled on flat, sharp blades, 7" (18 cm) |
| 352126 | Angled to side, sharp blades, 6-7/8" (17.5 cm) |

### FERGUSON LONG DISSECTING SCISSORS

With Metzenbaum-type, curved blades.

| ITEM # | DESCRIPTION |
|---|---|
| 342275 | 10-1/4" (26 cm) |

# SCISSORS

## Metzenbaum-Type Scissors

### NELSON LOBECTOMY SCISSORS

Pilling® Pattern, satin finish, medium weight with rounded Metzenbaum-type curved blades.

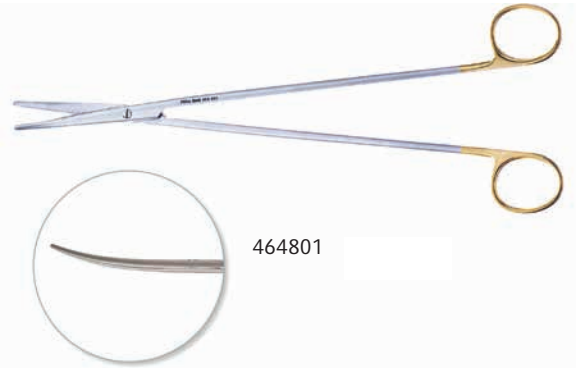
| ITEM # | DESCRIPTION |
|---|---|
| 342242 | 10-1/4" (26 cm) |
| 342243 | 11-1/4" (28.5 cm) |
| 342245 | 14-1/4" (36 cm) |

### NELSON SCISSORS

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 462148 | Straight, 8" (20.5 cm) |
| 462149 | Curved, 8" (20.5 cm) |
| 462150 | Straight, 9" (23 cm) |
| 462151 | Curved, 9" (23 cm) |

### NELSON SCISSORS, TC




| ITEM # | DESCRIPTION |
|---|---|
| 464800 | Curved, 11-1/8" (28.5 cm), TC |
| 464801 | Curved, 11-1/4" (28.5 cm), TC |

# SCISSORS

## Metzenbaum-Type Scissors

### JAMISON-METZENBAUM TENOTOMY SCISSORS

The standard Metzenbaum-style curved blades have specially narrowed tenotomy type distal tips.

| ITEM # | DESCRIPTION |
|---|---|
| 342220 | 6" (15 cm) |
| 342221 | 7" (18 cm) |
| 342222 | 8" (20.5 cm) |
| 342223 | 9" (23 cm) |

### POTTS TENOTOMY SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 640280 | Curved, 6" (15 cm) |

# SCISSORS

## Metzenbaum-Type Scissors

### LINCOLN-METZENBAUM SCISSORS

460883

Rounded, narrow dissecting tips.

| ITEM # | DESCRIPTION |
|---|---|
| 460883 | Curved, 5-3/8" (13.5 cm) |
| 460873 | Curved, 7" (18 cm) |

### LINCOLN SCISSORS

462201

Small, rounded dissecting blades.

| ITEM # | DESCRIPTION |
|---|---|
| 461310 | Straight, 6-1/2" (16.5 cm) |
| 461311 | Curved, 6-1/2" (16.5 cm) |
| 462201 | Curved, 11" (28 cm) |

### STRULLY PROBED TIP SCISSORS

462530

| ITEM # | DESCRIPTION |
|---|---|
| 462530 | Curved, 8" (20.5 cm) |

# SCISSORS

## Delicate and Iris-Type Scissors

### DIGITATE®-HEIFETZ SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 066102 | Curved, 5-3/4" (14.5 cm) |
| 066100 | Straight, 5-3/4" (14.5 cm) |
| 066104 | Straight, 4-3/4" (12 cm) |

### MCCLURE IRIS SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 144295 | Angled, 4-3/4" (12 cm) |

### IRIS SCISSORS WITH BARRAQUER HANDLE

| ITEM # | DESCRIPTION |
|---|---|
| 055502 | Curved, 18 mm blades, 5-3/4" (14.5 cm) |

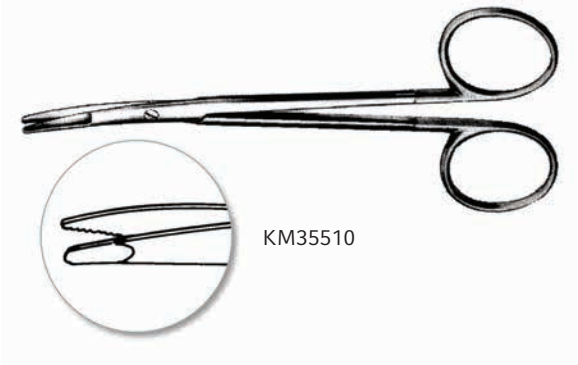
# SCISSORS

## Delicate and Iris-Type Scissors

### BIRO DERMAL NAEVUS SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| KM35515 | Angled on flat, sharp outside edges, 4" (10 cm) |

### BLEPHAROPLASTY SCISSORS




| ITEM # | DESCRIPTION |
|---|---|
| KM35510 | Curved flat tips, one serrated and one carbide blade, 4-1/2" (11.5 cm), TC |

# SCISSORS

## Delicate and Iris-Type Scissors

### GRADLE SCISSORS

KM53318

Slightly curved, Sharp/Sharp.

| ITEM # | DESCRIPTION |
|---|---|
| KM53316 | 3-3/4" (9.5 cm) |
| KM53318 | 4" (10 cm) |

### IRIS MINIATURE SCISSORS

055100

| ITEM # | DESCRIPTION |
|---|---|
| 055100 | Straight, 15 mm blades, 3-1/2" (9 cm) |

# SCISSORS

## Delicate and Iris-Type Scissors

### IRIS RIBBON SCISSORS

KM53267

| ITEM # | DESCRIPTION |
|---|---|
| KM53265 | Curved, 3-3/4" (9.5 cm) |
| KM53267 | Curved, 4" (10 cm) |

### IRIS SCISSORS

144300

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 144300 | Straight, 4-1/2" (11.5 cm), stainless steel |
| 144310 | Curved, 4-1/2" (11.5 cm), stainless steel |
| 144315 | Straight, 4-1/2" (11.5 cm), TC |
| 144317 | Curved, 4-1/2" (11.5 cm), TC |

### IRIS SCISSORS

462600

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 462600 | Curved, 25 mm blades, 4-1/2" (11.5 cm) |
| 462605 | Straight, 25 mm blades, 4-1/2" (11.5 cm) |
| 462640 | Straight, 30 mm blades, 5" (12.5 cm) |
| 462641 | Curved, 28 mm blades, 5" (12.5 cm) |

# SCISSORS

## Delicate and Iris-Type Scissors

### IRIS SCISSORS, TC

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 462632 | Straight, 4-1/2" (11.5 cm), TC |
| 462633 | Curved, 4-1/2" (11.5 cm), TC |

### JOSEPH SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 442510 | Straight, 5-3/4" (14.5 cm) |
| 442512 | Curved, 5-3/4" (14.5 cm) |

### KAYE SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 464220 | Curved, 32 mm serrated blades, 4-1/2" (11.5 cm), TC |

# SCISSORS

## Delicate and Iris-Type Scissors

### KELLY FISTULA SCISSORS

KM34607

Smooth, Sharp/Sharp.

| ITEM # | DESCRIPTION |
|---|---|
| KM34602 | Straight, 6-1/4" (16 cm) |
| KM34607 | Curved, 6-1/4" (16 cm) |
| KM34612 | Angled, 6-1/4" (16 cm) |

### DUFFIELD SCISSORS

461431

Sharp/Sharp.

| ITEM # | DESCRIPTION |
|---|---|
| 461430 | Straight, 28 mm blades, 6-1/2" (16.5 cm) |
| 461431 | Curved, 28 mm blades, 6-1/2" (16.5 cm) |

### KNAPP IRIS SCISSORS

144340

One sharp and one blunt point, 4-1/2" (11.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 144338 | Straight |
| 144340 | Curved |

# SCISSORS

## Delicate and Iris-Type Scissors

### LA GRANGE SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| KM34621 | Curved, 4-1/2" (11.5 cm) |

### PAR SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 464810 | Curved, 4-1/2" (11.5 cm), TC |

# SCISSORS

## Delicate and Iris-Type Scissors

### PLASTIC SCISSORS

442502

| ITEM # | DESCRIPTION |
|---|---|
| 442502 | Curved, 4-3/4" (12 cm) |

### PLASTIC SCISSORS

056201

Pointed, sharp, 34 mm blades, 4-3/4" (12 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 056200 | Straight |
| 056201 | Curved |

# SCISSORS

## Delicate and Iris-Type Scissors

### RAGNELL SCISSORS, DELICATE

442576

| ITEM # | DESCRIPTION |
|---|---|
| 442576 | Half-curved, 4-3/4" (12 cm) |

### RAGNELL SCISSORS

KM34560

Curved, flat blunt tips.

| ITEM # | DESCRIPTION |
|---|---|
| KM34560 | 5" (12.5 cm) |
| KM34562 | 7" (18 cm) |

### SHEA VEIN GRAFT SCISSORS

442525

| ITEM # | DESCRIPTION |
|---|---|
| 442525 | Flat tips, 4-3/4" (12 cm) |

# SCISSORS

## Delicate and Iris-Type Scissors

### STEVENS TENOTOMY

KM53174

KMedic® Pattern, satin finish, Sharp/Sharp points.

| ITEM # | DESCRIPTION |
|---|---|
| KM53174 | Straight, 4-3/8" (11 cm) |
| KM53176 | Curved, 4-3/8" (11 cm) |

### STEVENS TENOTOMY

144352

Pilling® Pattern, satin finish, slender style.

| ITEM # | DESCRIPTION |
|---|---|
| 144350 | Straight, 4-1/2" (11.5 cm) |
| 144352 | Slightly curved blades, 4-1/2" (11.5 cm) |

### STEVENS TENOTOMY, DELICATE

442515

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 442515 | Curved, 5" (12.5 cm) |

# SCISSORS

## Delicate and Iris-Type Scissors

### STEVENS TENOTOMY

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 462680 | Straight, 4-1/2" (11.5 cm) |
| 462681 | Curved, 4-1/2" (11.5 cm) |
| 056110 | Curved, 5-1/8" (13 cm) |

### STRABISMUS SCISSORS

Pilling® Pattern, satin finish. Rounded blades and tips.

| ITEM # | DESCRIPTION |
|---|---|
| 144319 | Straight, 4-1/2" (11.5 cm), TC |
| 144321 | Curved, 4-1/2" (11.5 cm), TC |
| 144330 | Straight, round shank, 4-3/4" (12 cm), stainless steel |
| 144332 | Curved, round shank, 4-3/4" (12 cm), stainless steel |

### STRABISMUS SCISSORS

Weck® Pattern, bright finish. Rounded 30 mm dissecting blades.

| ITEM # | DESCRIPTION |
|---|---|
| 462690 | Straight, 4-1/2" (11.5 cm) |
| 462691 | Curved, 4-1/2" (11.5 cm) |

# SCISSORS

## Delicate and Iris-Type Scissors

### WUTZLER SCISSORS

28 mm dissecting blades.

| ITEM # | DESCRIPTION |
|---|---|
| 462540 | Straight, Blunt/Blunt blades, 5" (12.5 cm) |
| 462541 | Curved, Blunt/Blunt blades, 5" (12.5 cm) |
| 462550 | Straight, Sharp/Sharp blades, 4-3/4" (12 cm) |

### GOLDMAN-FOX SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| KM34648 | Curved, serrated, 5" (12.5 cm) |

# SCISSORS

## Super-Cut and Ultimate-Cut Scissors

Our KMedic® Super-Cut Scissors and Pilling® Ultimate-Cut Scissors are manufactured with the finest surgical stainless steel, the latest heat treating methods and master craftsmanship.

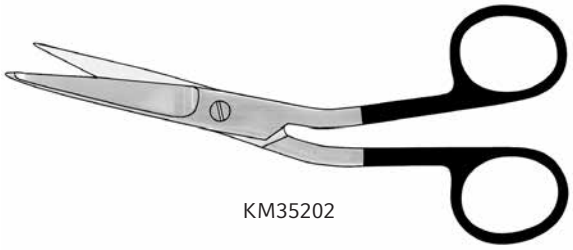
Both style scissors are designed with one razor sharp blade edge. The Super-Cut scissors' opposite blade has a standard smooth edge, while the Ultimate-Cut scissors' opposite blade incorporates a micro-serrated edge.

### SUPER-CUT LISTER BANDAGE SCISSORS

KM35210

| ITEM # | DESCRIPTION |
|---|---|
| KM35210 | 5-3/4" (14.5 cm) |
| KM35212 | 7-1/4" (18.5 cm) |

### SUPER-CUT HI-LEVEL BANDAGE SCISSORS

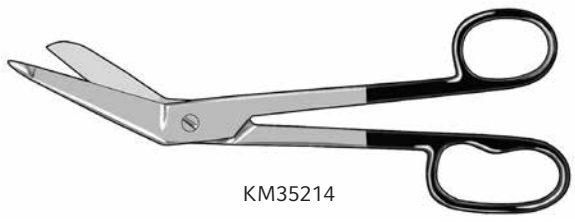


KM35202

The delicate offset shanks and the sharp Super-Cut edge provide better leverage. The fine knob slides easily under finger bandages.

| ITEM # | DESCRIPTION |
|---|---|
| KM35202 | Straight, angled on side, 5-1/2" (14 cm) |

### SUPER-CUT LISTER BANDAGE SCISSORS WITH LARGE FINGER RING



KM35214

Razor sharp scissors ideal for cutting heavy material including: moleskin, drapes and stockinette. Not recommended for fiberglass or plaster splints. Oversized finger ring helps relieve pressure on the third metacarpal.

| ITEM # | DESCRIPTION |
|---|---|
| KM35214 | Straight, 8" (20.5 cm) |

# SCISSORS

## Super-Cut and Ultimate-Cut Scissors

### SUPER-CUT OPERATING SCISSORS

KM35250

Sharp/Blunt.

| ITEM # | DESCRIPTION |
|---|---|
| KM35220 | Straight, 5-1/2" (14 cm) |
| KM35250 | Curved, 5-3/4" (14.5 cm) |

### SUPER-CUT MAYO SCISSORS

KM35298

Beveled blades, blunt points.

| ITEM # | DESCRIPTION |
|---|---|
| KM35280 | Straight, 5-3/4" (14.5 cm) |
| KM35286 | Curved, 5-3/4" (14.5 cm) |
| KM35292 | Straight, 6-3/4" (17 cm) |
| KM35298 | Curved, 6-3/4" (17 cm) |
| KM35316 | Straight, 9-1/4" (23.5 cm) |
| KM35322 | Curved, 9" (23 cm) |
| KM35340 | Curved, 11" (28 cm) |

### ULTIMATE-CUT COOLEY SCISSORS

463950

| ITEM # | DESCRIPTION |
|---|---|
| 463950 | Curved, with one serrated blade, 7-3/4" (19.5 cm) |

# SCISSORS

## Super-Cut and Ultimate-Cut Scissors

### SUPER-CUT (BABY) METZENBAUM SCISSORS

KM35364

Blunt points.

| ITEM # | DESCRIPTION |
|---|---|
| KM35364 | Straight, 4-1/2" (11.5 cm) |
| KM35370 | Curved, 4-1/2" (11.5 cm) |

### SUPER-CUT METZENBAUM SCISSORS

KM35382

Blunt points.

| ITEM # | DESCRIPTION |
|---|---|
| KM35380 | Straight, 6" (15 cm) |
| KM35382 | Curved, 5-5/8" (14.5 cm) |
| KM35392 | Straight, 7" (18 cm) |
| KM35394 | Curved, 7" (18 cm) |
| KM35396 | Curved, delicate, 7" (18 cm) |
| KM35406 | Curved, 8" (20.5 cm) |
| KM35418 | Curved, 9" (23 cm) |
| KM35430 | Curved, 11-1/4" (28.5 cm) |

### SUPER-CUT JAMISON SCISSORS

KM35496

| ITEM # | DESCRIPTION |
|---|---|
| KM35496 | Curved blunt points, very delicate, 6-1/4" (16 cm) |

# SCISSORS

## Super-Cut and Ultimate-Cut Scissors

### SUPER-CUT STEVENS SCISSORS

Blunt points. Delicate short narrow tips for dissecting fine tissue.

| ITEM # | DESCRIPTION |
|---|---|
| KM35484 | Straight, 4-1/2" (11.5 cm) |
| KM35490 | Curved, 4-1/2" (11.5 cm) |
| KM35494 | Curved, 5-1/4" (13.5 cm) |

### SUPER-CUT IRIS SCISSORS

Sharp points.

| ITEM # | DESCRIPTION |
|---|---|
| KM35450 | Straight, 3-1/2" (9 cm) |
| KM35452 | Curved, 3-1/2" (9 cm) |
| KM35454 | Straight, 4-1/2" (11.5 cm) |
| KM35460 | Curved, 4-1/2" (11.5 cm) |

# SCISSORS

## Super-Cut and Ultimate-Cut Scissors

### ULTIMATE CUT MAYO SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 463900 | Straight, 6-3/4" (17 cm) |
| 463901 | Curved, 6-3/4" (17 cm) |
| 463903 | Curved, 9-1/8" (23 cm) |

### ULTIMATE CUT METZENBAUM SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 463910 | Straight, 5-3/4" (14.5 cm) |
| 463911 | Curved, 5-3/4" (14.5 cm) |
| 463912 | Straight, 6-7/8" (17.5 cm) |
| 463913 | Curved, 7" (18 cm) |
| 463915 | Curved, 9" (23 cm) |

### ULTIMATE CUT POTTS SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 463941 | Angled 45 degrees, with one serrated blade, 7-1/4" (18.5 cm) |

# SCISSORS

## Super-Cut and Ultimate-Cut Scissors

### ULTIMATE CUT STEVENS TENOTOMY SCISSORS

463920

| ITEM # | DESCRIPTION |
|---|---|
| 463920 | Straight, 4-1/2" (11.5 cm) |
| 463921 | Curved, 4-1/2" (11.5 cm) |

### IRIS SCISSORS

463932

Sharp/Sharp.

| ITEM # | DESCRIPTION |
|---|---|
| 463930 | Straight with one serrated blade, 4-1/2" (11.5 cm) |
| 463932 | Curved with one serrated blade, 4-1/2" (11.5 cm) |

# NEEDLE HOLDERS

## General Needle Holders

### BAUMGARTNER NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 152710 | 11.7 x 2.2 mm jaw, 5-1/4" (13.5 cm), TC |

### BAUMGARTNER BULLDOG® NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 510181 | 1.6 mm jaw, 5" (12.5 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### BROWN NEEDLE HOLDER

055200

| ITEM # | DESCRIPTION |
|---|---|
| 055200 | Regular, convex jaw with fine oblique serrations, 15 x 2.7 mm, 5" (12.5 cm), stainless steel jaw |

### CONVERSE NEEDLE HOLDER

443100

| ITEM # | DESCRIPTION |
|---|---|
| 443100 | Large rings, 14 x 2.3 mm jaw, 5" (12.5 cm), stainless steel jaw |

### DERF NEEDLE HOLDERS

055135

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 055135 | 10.2 x 2.4 mm jaw, 4-3/4" (12 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### DERF NEEDLE HOLDERS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 152798 | 7.5 x 1.7 mm jaw, 4-1/2" (11.5 cm), TC |

### DERF NEEDLE HOLDER STANDARD - STAINLESS STEEL JAW

| ITEM # | DESCRIPTION |
|---|---|
| 443120 | 9.5 x 2 mm jaw, 5" (12.5 cm) |

# NEEDLE HOLDERS

## General Needle Holders

### GILLIES NEEDLE HOLDER SCISSORS

Large offset thumb ring.

| ITEM # | DESCRIPTION |
|---|---|
| 152496 | 2.2 mm jaw, 6-1/4" (16 cm), TC |

### HALSEY NEEDLE HOLDERS

KMedic® Pattern, satin finish. Stainless steel jaw.

| ITEM # | DESCRIPTION |
|---|---|
| KM41064 | Smooth, 2.5 mm jaw, 5" (12.5 cm) |
| KM41066 | Serrated, 2.2 mm jaw, 5-1/4" (13.5 cm) |

# NEEDLE HOLDERS

## General Needle Holders

### HALSEY NEEDLE HOLDERS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 152802 | Smooth, 11.5 x 1.8 mm jaw, 5-1/4" (13.5 cm), TC |
| 152800 | Serrated, 11 x 2.2 mm jaw, 5-1/4" (13.5 cm), TC |

### JOHNSON BULLDOG® NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 510311 | 9.7 x 2.5 mm, Bulldog® Jaw, 4-3/4" (12 cm), TC |

### JOHNSON NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 510312 | 12 x 2 mm jaw, 4-3/4" (12 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### NEIVERT NEEDLE HOLDER

152805

Off-set ring handle.

| ITEM # | DESCRIPTION |
|---|---|
| 152805 | 16 x 2 mm jaw, 5-1/4" (13.5 cm), TC |

### PAR NEEDLE HOLDERS

510335

| ITEM # | DESCRIPTION |
|---|---|
| 510335 | 13 x 2 mm jaw, 5" (12.5 cm), TC |
| 510395 | 11 x 1.8 mm jaw, 5-1/2" (14 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### WEBSTER NEEDLE HOLDERS

152808

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 152808 | 10.2 x 1.8 mm smooth jaw, 4-1/2" (11.5 cm), TC |

### WEBSTER NEEDLE HOLDERS

510325

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 510325 | Delicate, smooth, 13 x 2.2 mm jaw, 4-3/4" (12 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### WEBSTER BULLDOG® NEEDLE HOLDER

510321

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 510321 | Delicate, smooth, 13.5 x 2 mm Bulldog® jaw, 4-3/4" (12 cm), TC |

### WEBSTER NEEDLE HOLDERS

152448

| ITEM # | DESCRIPTION |
|---|---|
| 152448 | 16 x 2.2 mm smooth stainless steel jaw, 5" (12.5 cm) |

# NEEDLE HOLDERS

## General Needle Holders

### WEBSTER NEEDLE HOLDERS

KM41068

| ITEM # | DESCRIPTION |
|---|---|
| KM41068 | Smooth, stainless steel jaw, 5" (12.5 cm) |

### OLSEN HEGAR NEEDLE HOLDER AND SCISSORS

510440

510441

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 510440 | 11 x 3.2 mm jaw, 5-3/4" (14.5 cm), TC |
| 510441 | 15 x 3.1 mm jaw, 6" (15 cm), stainless steel jaw |
| 510445 | 11.5 x 3.2 mm jaw, 7" (18 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### OLSEN-HEGAR NEEDLE HOLDERS

Combination needle holder and suture scissors. KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM41424 | Delicate, 4-3/4" (12 cm) |
| KM41428 | 5" (12.5 cm) |
| KM41440 | Delicate, 4-1/2" (11.5 cm), TC |
| KM41452 | 6-1/2" (16.5 cm), TC |

### RYDER FRENCH EYE NEEDLE HOLDERS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 152760 | 20 x 2 mm jaw, 6" (15 cm), TC |
| 152762 | 20.5 x 2 mm jaw, 7-1/4" (18.5 cm), TC |
| 152764 | 20 x 2 mm jaw, 8" (20.5 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

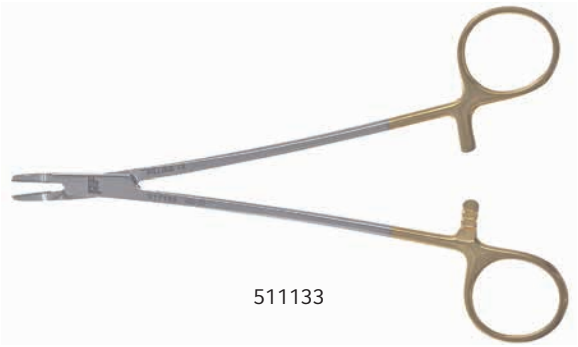
### RYDER BULLDOG® NEEDLE HOLDERS

511132

Weck® Pattern, bright finish. French eye with fine serrations and delicate, tapered, Bulldog® Jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 511115 | 9.5 x 2 mm jaw, 5" (12.5 cm), TC |
| 511130 | 12 x 2 mm jaw, 6" (15 cm), TC |
| 511132 | 13 x 1.7 mm jaw, 7" (18 cm), TC |
| 511134 | 13 x 2 mm jaw, 7-3/4" (19.5 cm), TC |
| 511138 | 12.5 x 1.8 mm jaw, 10" (25.5 cm), TC |

### RYDER NEEDLE HOLDERS



511133

Weck® Pattern, bright finish. French eye with fine serrations and delicate, tapered jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 511131 | 12.5 x 2 mm jaw, 6-1/4" (16 cm), TC |
| 511133 | 13 x 2.2 mm jaw, 7" (18 cm), TC |
| 511135 | 12.5 x 1.7 mm jaw, 8" (20.5 cm), TC |
| 511139 | 12 x 2 mm jaw, 10" (25.5 cm), TC |

### RYDER EXTRA FINE TECHNIQUE® NEEDLE HOLDERS

354994

Pilling® Pattern, satin finish. Sculptured 1 mm wide jaws designed for the finest vascular, plastic and nerve suture needles. Lightweight throughout (average weight 1 oz).

| ITEM # | DESCRIPTION |
|---|---|
| 354990 | 11.5 x 1.3 mm jaw, 5-1/4" (13.5 cm), TC |
| 354992 | 12.5 x 1.2 mm jaw, 6" (15 cm), TC |
| 354994 | 14.3 x 1.2 mm jaw, 7" (18 cm), TC |
| 354996 | 14.5 x 1.2 mm jaw, 8" (20.5 cm), TC |
| 354998 | 15 x 1.3 mm jaw, 9" (23 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### CRILE WOOD NEEDLE HOLDERS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 152771 | Left-handed, 7" (18 cm), TC |
| 152780 | 6" (15 cm), TC |
| 152781 | Smooth, 6" (15 cm), TC |
| 152782 | 7" (18 cm), TC |
| 152784 | 8" (20.5 cm), TC |
| 152786 | 9" (23 cm), TC |
| 152790 | Curved, 7" (18 cm), TC |
| 152792 | Curved, 9-1/4" (23.5 cm), TC |

### CRILE WOOD NEEDLE HOLDERS

Weck® Pattern, bright finish. Delicate, tapered-tip.

| ITEM # | DESCRIPTION |
|---|---|
| 510400 | 6" (15 cm), TC |
| 510405 | 7" (18 cm), TC |
| 510410 | 8" (20.5 cm), TC |
| 510415 | 9" (23 cm), TC |
| 510420 | 10-1/4" (26 cm), TC |
| 510430 | 12-1/4" (31 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### CRILE MURRAY BULLDOG® NEEDLE HOLDERS

510241

Weck® Pattern, bright finish. Long, slender Bulldog® Jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 510241 | 15.4 x 1.8 mm jaw, 6-1/4" (16 cm), TC |
| 510251 | 15.5 x 2.4 mm jaw, 7" (18 cm), TC |

### CRILE WOOD BULLDOG® NEEDLE HOLDERS

510211

Weck® Pattern, bright finish. Bulldog® Jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 510201 | Light, 6-1/4" (16 cm), TC |
| 510211 | Heavy, 6-1/4" (16 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### HEGAR BAUMGARTNER NEEDLE HOLDERS

Serrated stainless steel jaw.

| ITEM # | DESCRIPTION |
|---|---|
| KM41162 | Serrated, 5" (12.5 cm) |
| KM41164 | Serrated, 5-3/4" (14.5 cm) |

### MAYO HEGAR NEEDLE HOLDERS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 152720 | 14.5 x 3 mm jaw, 6-1/2" (16.5 cm), TC |
| 152402 | 23 x 2.8 mm jaw, 7-1/4" (18.5 cm), TC |
| 152722 | 16.5 x 3.3 mm jaw, 7-1/2" (19 cm), TC |
| 152724 | 17 x 2.8 mm jaw, 8" (20.5 cm), TC |
| 152406 | 17 x 2.8 mm jaw, 9-1/4" (23.5 cm), TC |
| 152772 | Left-handed, 13 x 2.4 mm jaw, 6-1/4" (16 cm), TC |

# NEEDLE HOLDERS

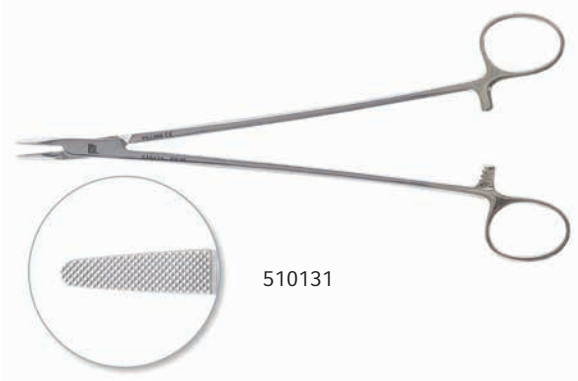
## General Needle Holders

### MAYO HEGAR NEEDLE HOLDERS

Weck® Pattern, bright finish, narrow.

| ITEM # | DESCRIPTION |
|---|---|
| 510100 | 14.6 x 2.6 mm jaw, 6" (15 cm), TC |
| 510110 | 16.2 x 2.8 mm jaw, 7" (18 cm), TC |
| 510120 | 15.7 x 3 mm jaw, 8" (20.5 cm), TC |
| 510130 | 16.4 x 3.2 mm jaw, 9" (23 cm), TC |
| 510140 | 16.3 x 3.5 mm jaw, 11-3/4" (30 cm), TC |

### MAYO HEGAR NEEDLE HOLDERS




Weck® Pattern, bright finish, Bulldog® Jaw, narrow.

| ITEM # | DESCRIPTION |
|---|---|
| 510101 | 15.5 x 3 mm jaw, 6" (15 cm), TC |
| 510111 | 16 x 2.8 mm jaw, 7" (18 cm), TC |
| 510121 | 19 x 2.7 mm jaw, 8" (20.5 cm), TC |
| 510131 | 20 x 3 mm jaw, 9" (23 cm), TC |

# NEEDLE HOLDERS

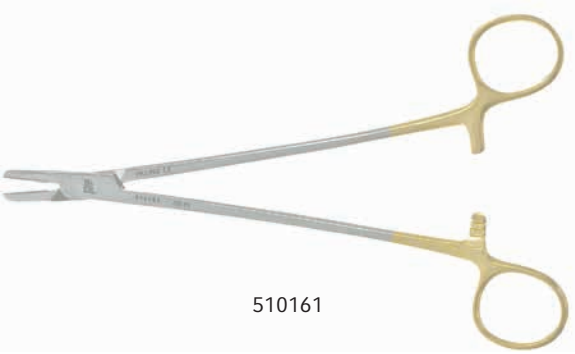
## General Needle Holders

### MAYO HEGAR NEEDLE HOLDERS

Serrated, stainless steel jaw.

| ITEM # | DESCRIPTION |
|---|---|
| KM41270 | 5-1/2" (14 cm) |
| KM41272 | 6" (15 cm) |
| KM41278 | 7" (18 cm) |
| KM41284 | 8" (20.5 cm) |
| KM41286 | 10-1/2" (26.5 cm) |
| KM41300 | 5" (12.5 cm), TC |

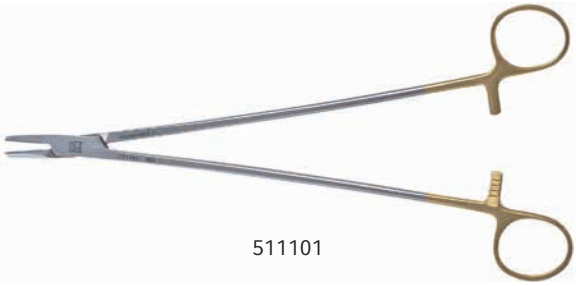
### MAYO HEGAR BROAD BULLDOG® NEEDLE HOLDERS




Weck® Pattern, bright finish, Bulldog® Jaw, broad.

| ITEM # | DESCRIPTION |
|---|---|
| 510151 | 12 x 4 mm jaw, 7" (18 cm), TC |
| 510161 | 17 x 3.5 mm jaw, 8" (20.5 cm), TC |

### MASSON BULLDOG® NEEDLE HOLDERS

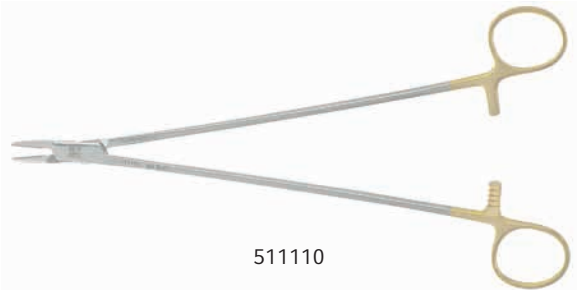



| ITEM # | DESCRIPTION |
|---|---|
| 511101 | Heavy, 18.5 x 3 mm jaw, 10-1/4" (26 cm), TC |
| 511102 | Light, 18.5 x 3.2 mm jaw, 10-1/4" (26 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

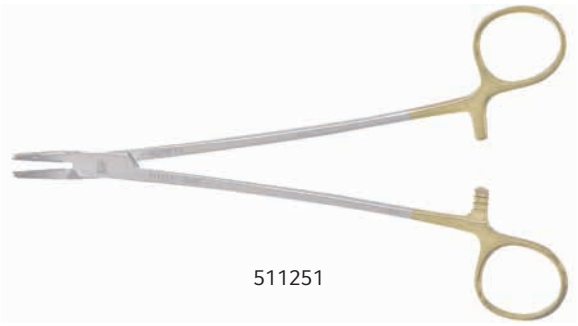
### MASSON NEEDLE HOLDERS



511110

| ITEM # | DESCRIPTION |
|---|---|
| 511110 | 15.5 x 2.4 mm jaw, 7" (18 cm), TC |
| 511112 | 16 x 3.2 mm jaw, 11-3/4" (30 cm), TC |

### HEANEY BULLDOG® NEEDLE HOLDER



511251

| ITEM # | DESCRIPTION |
|---|---|
| 511251 | 19.3 x 3.2 mm curved Bulldog® Jaw, 8" (20.5 cm), TC |

### HEANEY NEEDLE HOLDERS

511250

| ITEM # | DESCRIPTION |
|---|---|
| 511250 | 20.5 x 2.6 mm curved jaw with cross serrations, 8" (20.5 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### HEANEY NEEDLE HOLDERS

511252

| ITEM # | DESCRIPTION |
|---|---|
| 511252 | 3.2 mm straight jaw, 8" (20.5 cm), serrated stainless steel jaw |

### HEANEY NEEDLE HOLDERS

152837

| ITEM # | DESCRIPTION |
|---|---|
| 152837 | 25.6 x 2.5 mm curved jaw, 10-1/2" (26.5 cm), TC |

### MCALLISTER BULLDOG® NEEDLE HOLDER

510221

| ITEM # | DESCRIPTION |
|---|---|
| 510221 | Long, delicate, 14.5 x 1.8 mm, Bulldog® Jaw, 7" (18 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### SAROT NEEDLE HOLDERS

510467

Weck® Pattern, bright finish. Parallel shanks with offset finger rings.

| ITEM # | DESCRIPTION |
|---|---|
| 510467 | 16.5 x 1.8 mm jaw, 7" (18 cm), TC |
| 510469 | 17 x 1.8 mm jaw, 9" (23 cm), TC |

### SAROT NEEDLE HOLDER

152796

| ITEM # | DESCRIPTION |
|---|---|
| 152796 | 19.5 x 1.8 mm jaw, 10-1/4" (26 cm), TC |

# NEEDLE HOLDERS

## General Needle Holders

### STRATTE NEEDLE HOLDERS

| ITEM # | DESCRIPTION |
|---|---|
| 152855 | 22 x 2.7 mm jaw, 8" (20.5 cm), TC |
| 343027 | Reverse curved, 9" (23 cm), TC |

## CVT-Type Needle Holders

### BAILEY CARDIAC TECHNIQUE® NEEDLE HOLDER

Very light construction throughout with fine tapered tips. Jaws are lightly scored for use with smallest size needles and sutures. Tungsten Carbide.

| ITEM # | DESCRIPTION |
|---|---|
| 354931 | 17 x 2 mm jaw, 7" (18 cm), TC |

# NEEDLE HOLDERS

## CVT-Type Needle Holders

### DEBAKEY® TECHNIQUE® NEEDLE HOLDERS

Carefully designed with light, short Tungsten Carbide jaws. Constructed in weight proportional to total length. May be purchased individually or as matched set of four.

| ITEM # | DESCRIPTION |
|---|---|
| 354900 | No. 1. Length, 18.2 x 2 mm jaw, 7" (18 cm), TC |
| 354902 | No. 2. Length, 21.5 x 1.8 mm jaw, 9-1/4" (23.5 cm), TC |
| 354904 | No. 3. Length, 21.5 x 2.3 mm jaw, 10-1/2" (26.5 cm), TC |
| 354906 | No. 4. Length, 19 x 2.6 mm jaw, 11-3/4" (30 cm), TC |
| 354908 | Matched set of four, TC |

### FINOCHIETTO NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 152842 | 25.5 x 2.5 mm jaw, 10-1/2" (26.5 cm), TC |

# NEEDLE HOLDERS

## CVT-Type Needle Holders

### GERBODE TECHNIQUE® NEEDLE HOLDER

343000

Medium-light construction. A strong full-sized needle holder with jaws tapered to 2 mm width for holding fine needles.

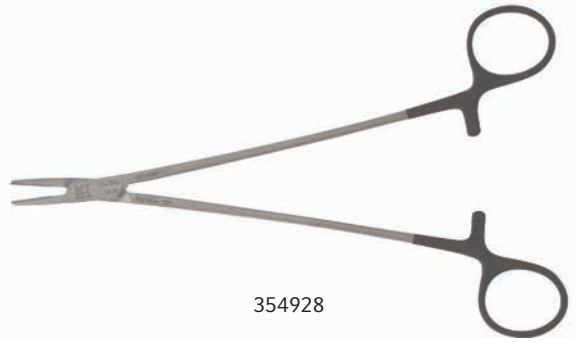
| ITEM # | DESCRIPTION |
|---|---|
| 343000 | 16.5 x 2 mm jaw, 10-1/2" (26.5 cm), TC |

### HOWELL CORONARY TECHNIQUE® NEEDLE HOLDER

354920

| ITEM # | DESCRIPTION |
|---|---|
| 354920 | 14 x 1.6 mm jaw, 7-1/4" (18.5 cm), TC |

### HOWELL VALVE TECHNIQUE® NEEDLE HOLDER


354928

| ITEM # | DESCRIPTION |
|---|---|
| 354928 | 19 x 2 mm jaw, 8" (20.5 cm), TC |

# NEEDLE HOLDERS

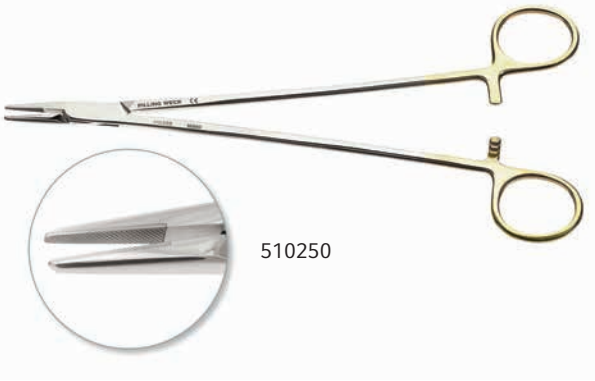
## CVT-Type Needle Holders

### JAMISON TECHNIQUE® NEEDLE HOLDER

Long, slender needle holder. Jaws are lightly serrated.

| ITEM # | DESCRIPTION |
|---|---|
| 354941 | 19.8 x 1.8 mm jaw, 9" (23 cm), TC |

### JULIAN NEEDLE HOLDER




| ITEM # | DESCRIPTION |
|---|---|
| 510250 | Straight, 21 x 2 mm jaw, 8" (20.5 cm), TC |

### PILLING® EXTRA LIGHT TECHNIQUE® NEEDLE HOLDERS

Thinner shanks and box locks than Pilling® Thin Needle Holders for reduced weight and more "feel."

| ITEM # | DESCRIPTION |
|---|---|
| 354981 | 17 x 1.8 mm jaw, 6" (15 cm), TC |
| 354982 | 17.5 x 1.6 mm jaw, 7" (18 cm), TC |

# NEEDLE HOLDERS

## CVT-Type Needle Holders

### PILLING® INTRACARDIAC TECHNIQUE® NEEDLE HOLDERS

| ITEM # | DESCRIPTION |
|---|---|
| 354985 | 17 x 1.8 mm jaw, 7" (18 cm), TC |
| 354986 | 11.5 x 1.6 mm jaw, 8" (20.5 cm), TC |
| 354987 | 20.5 x 2 mm jaw, 9-1/4" (23.5 cm), TC |
| 354988 | 20.5 x 2 mm jaw, 10-1/4" (26 cm), TC |

### PILLING® THIN VASCULAR AND CORONARY TECHNIQUE® NEEDLE HOLDERS

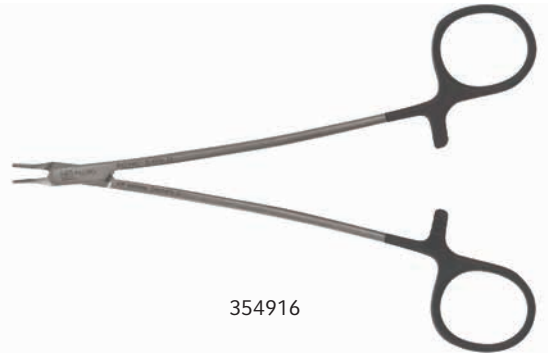
Delicately proportioned, slender needle holders.

| ITEM # | DESCRIPTION |
|---|---|
| 354961 | 16 x 1.7 mm jaw, 7" (18 cm), TC |
| 354960 | 16 x 1.8 mm jaw, 6" (15 cm), TC |
| 354962 | 20 x 1.8 mm jaw, 8-1/4" (21 cm), TC |
| 354958 | 20.5 x 1.8 mm jaw, 9" (23 cm), TC |
| 354959 | 20.5 x 2.2 mm jaw, 10-1/4" (26 cm), TC |

# NEEDLE HOLDERS

## CVT-Type Needle Holders

### W.M. LEMMON TECHNIQUE® NEEDLE HOLDERS



354916

| ITEM # | DESCRIPTION |
|---|---|
| 354915 | Delicate, 15.5 x 2.3 mm jaw, 5-3/4" (14.5 cm), TC |
| 354916 | 14.5 x 1.5 mm jaw, 6-3/4" (17 cm), TC |
| 354917 | 15.5 x 2.3 mm jaw, 7-1/2" (19 cm), TC |

### WANGENSTEEN NEEDLE HOLDER

152850

| ITEM # | DESCRIPTION |
|---|---|
| 152850 | 29.4 x 2.3 mm jaw, 10-3/4" (27.5 cm), TC |

# NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### MICRO VASCULAR ROUND HANDLE NEEDLE HOLDERS

| ITEM # | DESCRIPTION |
|---|---|
| 357654 | Straight, without lock, 1.1 mm smooth jaw, 7-3/8" (18.5 cm) |
| 357655 | Curved, without lock, smooth, 7-3/8" (18.5 cm) |
| 357656 | Straight, with lock, 1.2 mm smooth jaw, 7-1/2" (19 cm) |
| 357657 | Curved, with lock, 0.6 mm smooth jaw, 7-3/8" (18.5 cm) |
| 357667 | Straight, with lock, 7-3/8" (18.5 cm), TC |
| 357672 | Straight, with lock, 0.6 mm smooth jaw, 8-1/8" (20.5 cm) |
| 357674 | Straight, with lock, 0.6 mm smooth jaw, 9" (23 cm) |
| 357675 | Curved, with lock, 0.6 mm smooth jaw, 9" (23 cm) |
| 357676 | Straight, with lock, 8" (20.5 cm), TC |
| 357677 | Curved, with lock, 1 mm jaw, 8" (20.5 cm), TC |

### BARRAQUER MICRO NEEDLE HOLDERS

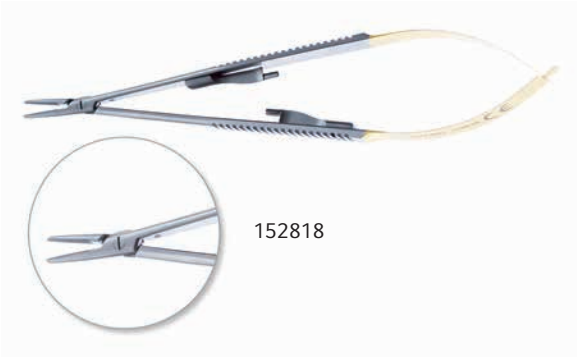
With lock, round handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM44167 | Straight, smooth, 5-1/2" (14 cm) |
| KM44163 | Curved, smooth, 5-1/2" (14 cm) |
| KM44169 | Straight, smooth, 7" (18 cm) |
| KM44165 | Curved, smooth, 7" (18 cm) |
| KM44168 | Straight, smooth, 5-1/2" (14 cm), TC |
| KM44164 | Curved, smooth, 5-1/2" (14 cm), TC |
| KM44157 | Straight, serrated, 5-1/2" (14 cm), TC |
| KM44155 | Curved, serrated, 5-1/2" (14 cm), TC |
| KM44170 | Straight, smooth, 7" (18 cm), TC |
| KM44166 | Curved, smooth, 7" (18 cm), TC |
| KM44158 | Straight, serrated, 7" (18 cm), TC |
| KM44156 | Curved, serrated, 7" (18 cm), TC |

# NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### CASTROVIEJO NEEDLE HOLDERS




| ITEM # | DESCRIPTION |
|---|---|
| 152818 | Straight, 11 x 1.4 mm jaw, 6" (15 cm), TC |
| 152819 | Curved, 12 x 1.4 mm jaw, 5-3/4" (14.5 cm), TC |

### MICRO SURGERY NEEDLE HOLDERS

Flat handle, smooth jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 152825 | Straight, 12.5 x 1.4 mm jaw, 6" (15 cm), TC |
| 152827 | Curved, 13 x 1.4 mm jaw, 6" (15 cm), TC |

### CASTROVIEJO MICRO NEEDLE HOLDERS

With lock.

| ITEM # | DESCRIPTION |
|---|---|
| KM44201 | Straight, serrated, 5-1/2" (14 cm) |
| KM44200 | Curved, serrated, 5-1/2" (14 cm) |
| KM44204 | Straight, smooth, 7" (18 cm) |
| KM44202 | Curved, smooth, 7" (18 cm) |
| KM44205 | Straight, serrated, 7" (18 cm) |
| KM44203 | Curved, serrated, 7" (18 cm) |
| KM44208 | Straight, serrated, 5-1/2" (14 cm), TC |
| KM44215 | Straight, smooth, 7" (18 cm), TC |
| KM44214 | Curved, smooth, 7" (18 cm), TC |
| KM44207 | Curved, serrated, 7" (18 cm), TC |

# NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### CASTROVIEJO MICRO NEEDLE HOLDERS

KM44219

Without lock.

| ITEM # | DESCRIPTION |
|---|---|
| KM44218 | Curved, serrated, 5-1/2" (14 cm) |
| KM44219 | Straight, serrated, 5-1/2" (14 cm) |
| KM44220 | Curved, smooth, 7" (18 cm) |
| KM44221 | Curved, serrated, 7" (18 cm) |
| KM44222 | Straight, smooth, 7" (18 cm) |
| KM44223 | Straight, serrated, 7" (18 cm) |

### CASTROVIEJO MICRO NEEDLE HOLDERS TC

KM44210

Without lock.

| ITEM # | DESCRIPTION |
|---|---|
| KM44210 | Curved, serrated, 5-1/2" (14 cm), TC |
| KM44211 | Curved, serrated, 7" (18 cm), TC |
| KM44212 | Straight, serrated, 5-1/2" (14 cm), TC |
| KM44213 | Straight, serrated, 7" (18 cm), TC |
| KM44216 | Curved, smooth, 7" (18 cm), TC |
| KM44217 | Straight, smooth, 7" (18 cm), TC |

### CASTROVIEJO MICRO NEEDLE HOLDERS

355559DG

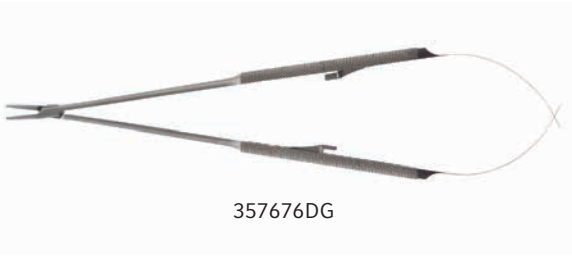
Fine, straight, with round handle and lock. 1 mm Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 355558DG | 9" (23 cm) |
| 355559DG | 10" (25.5 cm) |
| 355560DG | 12" (30.5 cm) |

# NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### CASTROVIEJO MICRO NEEDLE HOLDERS



357676DG

Round handle with Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 357656DG | Straight, with lock, 1.2 mm, 7" (18 cm) |
| 357676DG | Straight, with lock, 1.2 mm, 8" (20.5 cm) |
| 357677DG | Curved without lock, 1 mm, 8" (20.5 cm) |

### CASTROVIEJO NEEDLE HOLDERS

354964DG

Straight, with flat handle and lock. Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 354964DG | 1.8 mm, 7-1/4" (18.5 cm) |
| 354965DG | 8" (20.5 cm) |

### CASTROVIEJO TECHNIQUE® NEEDLE HOLDERS

354964

| ITEM # | DESCRIPTION |
|---|---|
| 354964 | Straight, 13 x 1.4 mm jaw, 7-1/4" (18.5 cm), TC |
| 354965 | Straight, 13 x 1.4 mm jaw, 8" (20.5 cm), TC |

# NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### MICRO SURGERY TECHNIQUE® NEEDLE HOLDERS

Flat handle, smooth jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 354966 | Straight, 13 x 1.4 mm jaw, 7" (18 cm), TC |
| 354967 | Straight, 13 x 1.4 mm jaw, 8" (20.5 cm), TC |

### SPENCER CORONARY TECHNIQUE® NEEDLE HOLDER

354969

| ITEM # | DESCRIPTION |
|---|---|
| 354969 | Straight, smooth, 12 x 1.2 mm jaw, 0.9 mm tip, 7" (18 cm), TC |

### GIANNINI TECHNIQUE® NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 354971 | Straight, 17.5 x 1.8 mm jaw, 10-1/4" (26 cm), TC |

### JACOBSON MICRO NEEDLE HOLDER

357603DG

| ITEM # | DESCRIPTION |
|---|---|
| 357603DG | Straight with flat handle, lock, 18 x 1.3 mm Diama-Grip jaw, 8-1/2" (21.5 cm) |

# NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### JACOBSON MICRO NEEDLE HOLDERS

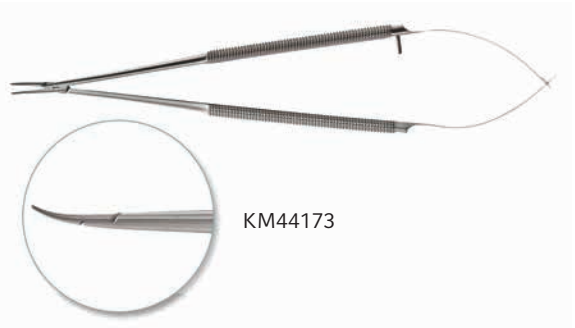
| ITEM # | DESCRIPTION |
|---|---|
| 358001 | Straight, round handle, with lock, 11 x 0.8 mm Diama-grip jaw, 9" (23 cm) |
| 358002 | Straight, round handle, with lock, 1.8 mm Diama-grip jaw, 9" (23 cm) |
| 358003 | Straight, round handle, with lock, 16 x 0.9 mm Diama-grip jaw, 8-1/4" (21 cm) |

### JACOBSON MICRO-SURGICAL NEEDLE HOLDERS

Castroviejo-type lock can be removed if not required. Stainless steel jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 357601 | Straight, flat handle, with lock, 13 x 1.3 mm smooth jaw, 7" (18 cm) |
| 357603 | Straight, flat handle, with lock, 13.5 x 1.2 mm smooth jaw, 8-1/2" (21.5 cm) |

### BARRAQUER MICRO NEEDLE HOLDERS




Without lock, round handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM44175 | Straight, smooth, 5-1/2" (14 cm) |
| KM44171 | Curved, smooth, 5-1/2" (14 cm) |
| KM44177 | Straight, smooth, 7" (18 cm) |
| KM44173 | Curved, smooth, 7" (18 cm) |
| KM44176 | Straight, smooth, 5-1/2" (14 cm), TC |
| KM44172 | Curved, smooth, 5-1/2" (14 cm), TC |
| KM44161 | Straight, serrated, 5-1/2" (14 cm), TC |
| KM44159 | Curved, serrated, 5-1/2" (14 cm), TC |
| KM44178 | Straight, smooth, 7" (18 cm), TC |
| KM44174 | Curved, smooth, 7" (18 cm), TC |
| KM44162 | Straight, serrated, 7" (18 cm), TC |
| KM44160 | Curved, serrated, 7" (18 cm), TC |

# NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### BARRAQUER DELICATE NEEDLE HOLDERS

With lock, round handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM44133 | Straight, smooth, 5-1/2" (14 cm) |
| KM44129 | Curved, smooth, 5-1/2" (14 cm) |
| KM44135 | Straight, smooth, 7" (18 cm) |
| KM44131 | Curved, smooth, 7" (18 cm) |
| KM44134 | Straight, smooth, 5-1/2" (14 cm), TC |
| KM44130 | Curved, smooth, 5-1/2" (14 cm), TC |
| KM44123 | Straight, serrated, 5-1/2" (14 cm), TC |
| KM44121 | Curved, serrated, 5-1/2" (14 cm), TC |
| KM44136 | Straight, smooth, 7" (18 cm), TC |
| KM44132 | Curved, smooth, 7" (18 cm), TC |
| KM44124 | Straight, serrated, 7" (18 cm), TC |
| KM44122 | Curved, serrated, 7" (18 cm), TC |

### BARRAQUER DELICATE NEEDLE HOLDERS

Without lock, round handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM44151 | Straight, smooth, 5-1/2" (14 cm) |
| KM44137 | Curved, smooth, 5-1/2" (14 cm) |
| KM44153 | Straight, smooth, 7" (18 cm) |
| KM44139 | Curved, smooth, 7" (18 cm) |
| KM44152 | Straight, smooth, 5-1/2" (14 cm), TC |
| KM44138 | Curved, smooth, 5-1/2" (14 cm), TC |
| KM44127 | Straight, serrated, 5-1/2" (14 cm), TC |
| KM44125 | Curved, serrated, 5-1/2" (14 cm), TC |
| KM44154 | Straight, smooth, 7" (18 cm), TC |
| KM44150 | Curved, smooth, 7" (18 cm), TC |
| KM44128 | Straight, serrated, 7" (18 cm), TC |
| KM44126 | Curved, serrated, 7" (18 cm), TC |

# NEEDLE HOLDERS

## Wire Twisters

### BAUMGARTEN WIRE TWISTER

| ITEM # | DESCRIPTION |
|---|---|
| 142521 | Heavy square, 17.5 x 5 mm jaw, 8-1/8" (20.5 cm), TC |

### RUBIO TECHNIQUE® WIRE TWISTER

| ITEM # | DESCRIPTION |
|---|---|
| 351349 | 12 x 4.5 mm jaw, 5" (12.5 cm), TC |

# NEEDLE HOLDERS

## Wire Twisters

### BERRY STERNAL TECHNIQUE® NEEDLE HOLDER

A large, heavy-duty needle holder with 6 mm wide jaws designed to securely hold the large needles used to close sternotomies. LIFE-LOK® Box Lock.

| ITEM # | DESCRIPTION |
|---|---|
| 343030 | 28 x 6 mm jaw, 7-3/4" (19.5 cm), TC |

### WIRE FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 351348 | 5-3/8" (13.5 cm) |

# NEEDLE HOLDERS

## Suture Tags

### GREGORY TECHNIQUE® SUTURE "STAY" CLAMPS

Smooth jaw hemostats for tagging sutures. May be used with or without rubber shodding.

| ITEM # | DESCRIPTION |
|---|---|
| 351830 | Straight, 3-7/8" (10 cm), TC |
| 351831 | Curved, 3-7/8" (10 cm), TC |

# RETRACTORS, HAND-HELD

## Skin Hooks

### CONVERSE SKIN HOOKS

442147

| ITEM # | DESCRIPTION |
|---|---|
| 442147 | Small, 7-1/4" (18.5 cm) |
| 442145 | Large, 7" (18 cm) |

### COTTLE SKIN HOOKS

054135

054120

| ITEM # | DESCRIPTION |
|---|---|
| 054120 | Sharp, 2 prongs, 12 mm between prongs, 5-7/8" (15 cm) |
| 054135 | Sharp, 3.5 mm hook, 4-7/8" (12.5 cm) |

### FLEXIBLE RAKE RETRACTOR SKIN HOOKS

KM52182

| ITEM # | DESCRIPTION |
|---|---|
| KM52174 | Sharp, 1 prong, 6-1/4" (16 cm) |
| KM52176 | Sharp, 2 prongs, 6-1/4" (16 cm) |
| KM52182 | Sharp, 3 prongs, 6-1/4" (16 cm) |
| KM52184 | Blunt, 1 prong, 6-1/4" (16 cm) |
| KM52188 | Blunt, 2 prongs, 6-1/4" (16 cm) |
| KM52192 | Blunt, 3 prongs, 6-1/4" (16 cm) |

### FOMON RETRACTOR

054500

| ITEM # | DESCRIPTION |
|---|---|
| 054500 | Ball tip, 2 prongs, 10 mm between prongs, 6-3/8" (16 cm) |

# RETRACTORS, HAND-HELD

## Skin Hooks

### FREER RETRACTOR

| ITEM # | DESCRIPTION |
|---|---|
| 481175 | Sharp, 2 prongs, 5-7/8" (15 cm) |

### FREER SKIN HOOK

| ITEM # | DESCRIPTION |
|---|---|
| KM52040 | Sharp, 2 prongs, 2.5 mm wide, 6" (15 cm) |

### GILLIES CONVERSE SKIN HOOKS

| ITEM # | DESCRIPTION |
|---|---|
| 054128 | Small, sharp, 3 mm hook, 7-3/8" (18.5 cm) |
| 054130 | Large, sharp, 4 mm hook, 7-1/8" (18 cm) |

### GUTHRIE SKIN HOOK

| ITEM # | DESCRIPTION |
|---|---|
| 054126 | Sharp, 2 prongs, 2 mm between prongs, 5-1/8" (13 cm) |

# RETRACTORS, HAND-HELD

## Skin Hooks

### JOHNSON SKIN HOOK

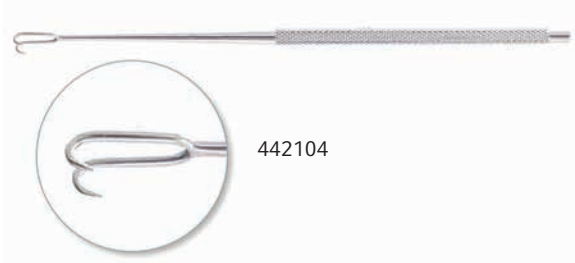
| ITEM # | DESCRIPTION |
|---|---|
| 054125 | Sharp, 5 mm hook, 6-1/2" (16.5 cm) |

### JOSEPH SKIN HOOKS

Sharp, 4 mm hook. Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 054100 | 1 prong, 6-1/8" (15.5 cm) |
| 054102 | 2 prongs, 2 mm between prongs, 6-1/4" (16 cm) |
| 054105 | 2 prongs, 5 mm between prongs, 6-1/4" (16 cm) |
| 054107 | 2 prongs, 6 mm between prongs, 6-1/4" (16 cm) |
| 054110 | 2 prongs, 9 mm between prongs, 6-1/8" (15.5 cm) |

### JOSEPH SKIN HOOKS




Pilling® Pattern, bright finish. 6-1/4" (16 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 442100 | 1 prong |
| 442102 | 2 prongs, 3 mm |
| 442104 | 2 prongs, 5.5 mm |
| 442106 | 2 prongs, 7 mm |
| 442108 | 2 prongs, 10 mm |

### KLEINERT-KUTZ SKIN HOOKS

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 054140 | Small, 3 mm hook, 6-1/4" (16 cm) |
| 054142 | Medium, 5 mm hook, 6-1/4" (16 cm) |
| 054144 | Large, 7 mm hook, 6-1/8" (15.5 cm) |

# RETRACTORS, HAND-HELD

## Skin Hooks

### KLEINERTZ-KUTZ HOOK

KM52060

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM52060 | 3 mm hook, 6-1/4" (16 cm) |
| KM52064 | 5 mm hook, 6-1/4" (16 cm) |
| KM52068 | 6 mm hook, 6-1/4" (16 cm) |

### KMEDIC® SKIN HOOK

KM52055

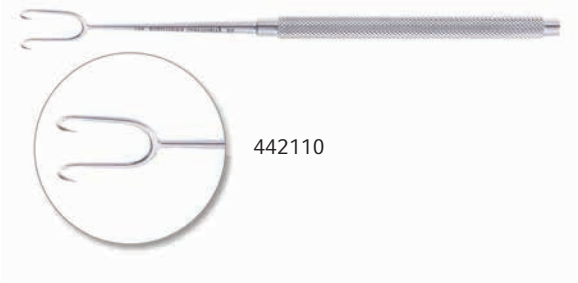
| ITEM # | DESCRIPTION |
|---|---|
| KM52055 | 1 sharp prong, 2 mm hook, 4-3/4" (12 cm) |

### O'CONNER SKIN HOOK

164786

| ITEM # | DESCRIPTION |
|---|---|
| 164786 | Sharp, 5-3/8" (13.5 cm) |

### PECK-JOSEPH SKIN HOOK



442110

| ITEM # | DESCRIPTION |
|---|---|
| 442110 | 2 prongs, 10 mm between prongs, 5-5/8" (14.5 cm) |

### RIGID RAKE RETRACTOR SKIN HOOKS

KM52172

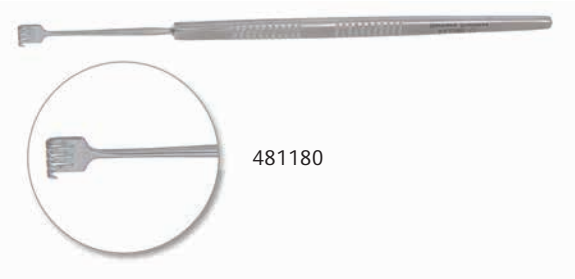
6-1/2" (16.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM52156 | Sharp, 1 prong |
| KM52158 | Sharp, 2 prongs, 6-1/2" (16.5 cm) |
| KM52162 | Sharp, 3 prongs, 6-1/2" (16.5 cm) |
| KM52164 | Blunt, 1 prong, 6-1/2" (16.5 cm) |
| KM52166 | Blunt, 2 prongs, 6-1/2" (16.5 cm) |
| KM52172 | Blunt, 3 prongs, 6-1/2" (16.5 cm) |

# RETRACTORS, HAND-HELD

## Skin Hooks

### ROLLET RETRACTOR



481180

| ITEM # | DESCRIPTION |
|---|---|
| 481180 | Sharp, 4 prongs, 2.8 x 5.5 mm, 5-1/4" (13.5 cm) |

### SCHNITMAN SHARP SKIN HOOK WITH EYE

524230

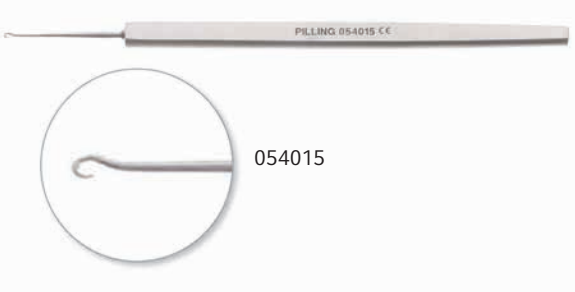
| ITEM # | DESCRIPTION |
|---|---|
| 524230 | 6-1/2" (16.5 cm) |

### TYRELL HOOKS

KM54342

| ITEM # | DESCRIPTION |
|---|---|
| KM54338 | 1 sharp prong, 5" (12.5 cm) |
| KM54342 | 1 blunt prong, 5" (12.5 cm) |

### TYRELL HOOKS




054015

Delicate, 1.3 mm hook, 4-3/4" (12 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 054015 | Sharp |
| 054016 | Blunt |

### WIENER SKIN HOOKS

KM54346

Single hook, 5" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM54346 | Sharp |
| KM54348 | Blunt |

# RETRACTORS, HAND-HELD

## Hook and Rake Retractors

### DANDY NERVE HOOK

185714

| ITEM # | DESCRIPTION |
|---|---|
| 185714 | Straight, 5.1 mm hook, 9" (23 cm) |

### SISSON NERVE HOOK

060120

| ITEM # | DESCRIPTION |
|---|---|
| 060120 | Blunt, 90 degree angled, 7 mm hook, 6-1/8" (15.5 cm) |

### JACKSON TRACHEAL TENACULUM

514413

| ITEM # | DESCRIPTION |
|---|---|
| 514413 | Hook depth 1/4" (0.5 cm), 5-1/4" (13.5 cm) |

### NEWS TRACHEA RETRACTOR

070114

| ITEM # | DESCRIPTION |
|---|---|
| 070114 | Sharp, 10 mm hook, 5-7/8" (15 cm) |

# RETRACTORS, HAND-HELD

## Hook and Rake Retractors

### TRACHEA HOOK

054165

| ITEM # | DESCRIPTION |
|---|---|
| 054165 | Sharp, 8.7 x 1.4 mm hook, 7-1/2" (19 cm) |
| KM52098 | Hupp Trachea Hook, sharp, 6-1/2" (16.5 cm) |

### SOLVAY SPAY HOOK

801886

| ITEM # | DESCRIPTION |
|---|---|
| 801886 | 8" (20.5 cm) |

### JACKSON TRACHEAL RETRACTOR, DOUBLE ENDED

514414

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 514414 | Double-pronged, 1" wide x 1/4" deep (2.5 cm x 0.5 cm) blade, 6-7/8" (17.5 cm) |

# RETRACTORS, HAND-HELD

## Hook and Rake Retractors

### JACKSON TRACHEA RETRACTOR

070116

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 070116 | 2 prongs, 7" (18 cm) |

### DINGMAN ZYGOMA HOOK

026275

| ITEM # | DESCRIPTION |
|---|---|
| 026275 | Sharp, 13 mm hook, 7" (18 cm) |

### BERNAY FINGER RAKE TRACHEAL RETRACTORS

514433

514438

| ITEM # | DESCRIPTION |
|---|---|
| 514430 | 1 prong, sharp, 6-5/8" (17 cm) |
| 514431 | 2 prongs, sharp, 6-5/8" (17 cm) |
| 514433 | 3 prongs, sharp, 6-5/8" (17 cm) |
| 514435 | 1 prong, blunt, 6-5/8" (17 cm) |
| 514436 | 2 prongs, blunt, 6-5/8" (17 cm) |
| 514437 | 3 prongs, blunt, 6-5/8" (17 cm) |
| 514438 | 4 prongs, blunt, 6-5/8" (17 cm) |

### LAHEY FINGER RETRACTORS

KM52086

| ITEM # | DESCRIPTION |
|---|---|
| KM52082 | 1 prong, 4-3/4" (12 cm) |
| KM52086 | 2 sharp prongs, 5" (12.5 cm) |
| KM52087 | 3 sharp prongs, 5" (12.5 cm) |

# RETRACTORS, HAND-HELD

## Hook and Rake Retractors

### BLAIR (ROLLET) RETRACTOR

KM54368

| ITEM # | DESCRIPTION |
|---|---|
| KM54366 | Rigid, 4 sharp prongs, 6 mm wide blade, 5" (12.5 cm) |
| KM54368 | Rigid, 4 blunt prongs, 5 mm wide blade, 5" (12.5 cm) |
| KM54372 | Flexible, 4 sharp prongs, 5-1/2" (14 cm) |

### MURPHY RAKE RETRACTORS

164444

164454

| ITEM # | DESCRIPTION |
|---|---|
| 164443 | Sharp, 3 prongs, 7-3/4" (19.5 cm) |
| 164444 | Sharp, 4 prongs, 8" (20.5 cm) |
| 164446 | Sharp, 6 prongs, 7-7/8" (20 cm) |
| 164453 | Blunt, 3 prongs, 8" (20.5 cm) |
| 164454 | Blunt, 4 prongs, 8" (20.5 cm) |
| 164456 | Blunt, 6 prongs, 7-3/4" (19.5 cm) |

### VOLKMANN POCKET RETRACTORS

164374

| ITEM # | DESCRIPTION |
|---|---|
| 164374 | Sharp, 4 prongs, 4-1/2" (11.5 cm) |
| 164376 | Sharp, 6 prongs, 4-1/2" (11.5 cm) |
| 164384 | Blunt, 4 prongs, 4-1/2" (11.5 cm) |

# RETRACTORS, HAND-HELD

## Hook and Rake Retractors

### VOLKMANN RAKE RETRACTORS

164403

164414

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 164402 | Sharp, 2 prongs, 8-1/2" (21.5 cm) |
| 164403 | Sharp, 3 prongs, 8-1/2" (21.5 cm) |
| 164404 | Sharp, 4 prongs, 8-1/2" (21.5 cm) |
| 164406 | Sharp, 6 prongs, 8-1/2" (21.5 cm) |
| 164412 | Blunt, 2 prongs, 8-1/2" (21.5 cm) |
| 164413 | Blunt, 3 prongs, 8-1/2" (21.5 cm) |
| 164414 | Blunt, 4 prongs, 8-1/2" (21.5 cm) |
| 164416 | Blunt, 6 prongs, 8-1/2" (21.5 cm) |

### VOLKMAN RETRACTORS

KM52264

KMedic® Pattern, satin finish. Sharp.

| ITEM # | DESCRIPTION |
|---|---|
| KM52266 | 6 prongs, 1-1/8" wide x 1/2" deep blade (3 x 1.5 cm), 8-1/2" (21.5 cm) |
| KM52254 | 1 prong, 1/2" deep blade (15 mm), 8-1/2" (21.5 cm) |
| KM52264 | 4 prongs, 3/4" wide x 1/2" deep blade (18 x 13 mm), 8-1/2" (21.5 cm) |

### MUELLER RAKE RETRACTOR

KM52338

| ITEM # | DESCRIPTION |
|---|---|
| KM52338 | 8 prongs, 1-1/2" (38 mm) wide |

### DEEP RAKE RETRACTORS

KM52294

| ITEM # | DESCRIPTION |
|---|---|
| KM52292 | 4 blunt prongs, 2-1/4" wide x 1-1/2" deep (5.5 x 4 cm) |
| KM52294 | 4 blunt prongs, 2-1/4" wide x 2" deep (5.5 x 5 cm) |
| KM52296 | 4 blunt prongs, 2-1/4" wide x 2-1/2 deep (5.5 x 6.5 cm) |
| KM52298 | 4 blunt prongs, 2-1/4" wide x 3" deep (5.5 x 7.5 cm) |

# RETRACTORS, HAND-HELD

## Hook and Rake Retractors

### ISRAEL RETRACTOR

481390

| ITEM # | DESCRIPTION |
|---|---|
| 481390 | Blunt, 4 prongs, 41 x 43 mm, 7-3/8" (18.5 cm) |

### OLLIER RAKE RETRACTOR

KM52282

| ITEM # | DESCRIPTION |
|---|---|
| KM52282 | 4 blunt prongs, 5.5 cm wide x 4 cm deep blade, 9" (23 cm) |

### FREEMAN FACE LIFT RETRACTOR

442295

| ITEM # | DESCRIPTION |
|---|---|
| 442295 | 1-5/8" (4 cm) wide blade, 7-1/8" (18 cm) |

# RETRACTORS, HAND-HELD

## Single-Ended Retractors

### BREWSTER RETRACTORS

164656

Curved, convex blades.

| ITEM # | DESCRIPTION |
|---|---|
| 164650 | 3/4" x 1-3/4" (2 x 4.5 cm) blade, 8-1/2" (21.5 cm) |
| 164652 | 1" x 2" (2.5 x 5 cm) blade, 9" (23 cm) |
| 164656 | 1-3/4" x 2-1/2" (4.5 x 6.5 cm) blade, 9-1/4" (23.5 cm) |
| 164658 | 1-7/8" x 2-7/8" (5 x 7.5 cm) blade, 9-1/2" (24 cm) |

### COTTLE ALAR RETRACTOR

442210

| ITEM # | DESCRIPTION |
|---|---|
| 442210 | 1/2" (1.5 cm) wide blade, 5-1/2" (14 cm) |

### CUSHING DECOMPRESSION RETRACTOR

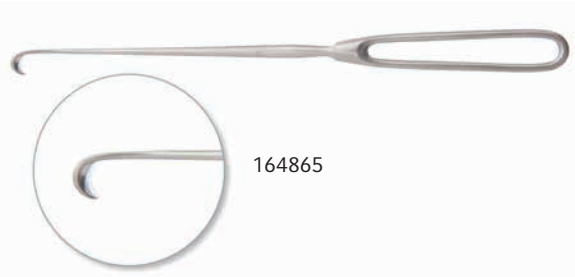
481220

| ITEM # | DESCRIPTION |
|---|---|
| 481220 | 21 x 10 mm blade, 8-1/8" (20.5 cm) |

# RETRACTORS, HAND-HELD

## Single-Ended Retractors

### CUSHING NERVE AND VEIN RETRACTOR




Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 164865 | 12 mm wide blade, 8-1/2" (21.5 cm) |

### CUSHING NERVE AND VEIN RETRACTORS

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 481230 | 16 x 15 mm blade, 8-5/8" (22 cm) |
| 481231 | 14.5 x 15 mm blade, 12-3/4" (32.5 cm) |

### DESMARRES LID RETRACTORS

| ITEM # | DESCRIPTION |
|---|---|
| 421610 | Size 1, 12 mm wide blade, 5-3/8" (13.5 cm) |
| 421620 | Size 2, 13 mm wide blade, 5-3/8" (13.5 cm) |
| 421630 | Size 3, 15 mm wide blade, 5-3/8" (13.5 cm) |
| 421640 | Size 4, 17 mm wide blade, 5-3/8" (13.5 cm) |

### GREEN RETRACTOR

| ITEM # | DESCRIPTION |
|---|---|
| 481520 | Fenestrated, 21 x 24 mm blade, 8-7/8" (22.5 cm) |

# RETRACTORS, HAND-HELD

## Single-Ended Retractors

### LAHEY RETRACTOR

481610

| ITEM # | DESCRIPTION |
|---|---|
| 481610 | 30 x 5 mm blade, 7-3/4" (19.5 cm) |

### LANGENBECK RETRACTORS

164632

Distal blade tip, slightly curved. Flat handle.
Length 8-1/2" (21.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 164630 | 3/8" x 1-5/8" (1 x 4 cm) blade |
| 164631 | 1/2" x 1-5/8" (1.3 x 4 cm) blade |
| 164632 | 5/8" x 1-5/8" (1.5 x 4 cm) blade |

### LITTLE RETRACTOR

481500

| ITEM # | DESCRIPTION |
|---|---|
| 481500 | Curved, 20 x 12 mm blade, 7-1/2" (19 cm) |

# RETRACTORS, HAND-HELD

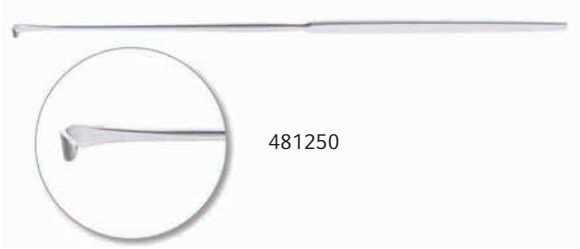
## Single-Ended Retractors

### LOVE NERVE RETRACTORS

KM51532

| ITEM # | DESCRIPTION |
|---|---|
| KM51530 | Straight, 7 mm wide blade, 8-1/2" (21.5 cm) |
| KM51532 | Angled 45 degrees, 7 mm wide blade, 7" (18 cm) |
| KM51534 | Angled 90 degrees |

### LOVE NERVE RETRACTORS



481250

| ITEM # | DESCRIPTION |
|---|---|
| 481250 | 4 x 6 mm blade, straight, 8" (20.5 cm) |

### MCBURNEY RETRACTOR

481530

| ITEM # | DESCRIPTION |
|---|---|
| 481530 | Fenestrated, 20 x 16 mm blade, 7-5/8" (19.5 cm) |

# RETRACTORS, HAND-HELD

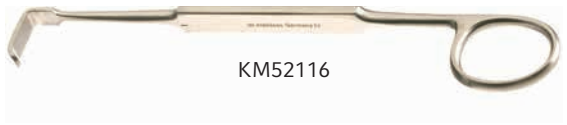
## Single-Ended Retractors

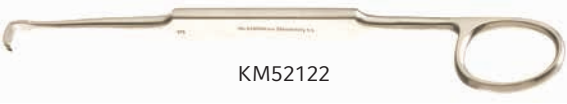
### MEYERDING FINGER RETRACTORS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 164790 | 7.5 x 17 mm blade, 6-7/8" (17.5 cm) |

### MEYERDING FINGER RETRACTORS



KMedic® Pattern, satin finish, 7" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM52116 | #1, 7 mm wide x 18 mm deep blade |
| KM52118 | #2, 6 mm wide x 17 mm deep blade, with teeth |
| KM52122 | #3, 4 mm wide x 8 mm deep blade, with teeth |
| KM52124 | #4, 4 mm wide x 10 mm deep blade |
| KM52128 | #5, 4 mm wide x 7 mm deep blade |
| KM52130 | #6, 8 mm wide x 7 mm deep blade, 3 sharp prongs |

# RETRACTORS, HAND-HELD

## Single-Ended Retractors

### SAUERBRUCH RETRACTORS

164636

Long, slender blades with slightly curved tips. Hollow handle.

| ITEM # | DESCRIPTION |
|---|---|
| 164635 | 5/8" x 1-3/4" (1.5 x 4.5 cm) blade, 9" (23 cm) |
| 164636 | 7/8" x 2-1/2" (2 x 6.5 cm) blade, 9" (23 cm) |
| 164637 | 3/4" x 2-7/8" (2 x 7.5 cm) blade, 8-7/8" (22.5 cm) |

### SEMB RETRACTOR

341640

For retracting the muscles during resection of the posterior medial ends of the ribs and during freeing of the transverse processes and separation of the vertebrocostal joints. Stainless steel blade.

| ITEM # | DESCRIPTION |
|---|---|
| 341640 | Small, blade 3/4" wide x 1-3/4" deep (2 x 4.5 cm) |

## Double-Ended Retractors

### "S" RETRACTOR

054620

| ITEM # | DESCRIPTION |
|---|---|
| 054620 | Blade A 1/4" wide x 3/8" deep (6 x 10 mm),<br>Blade B 1/2" wide x 5/8" deep (13.5 x 15 mm)<br>Overall length 5-1/4" (13.5 cm) |

# RETRACTORS, HAND-HELD

## Double-Ended Retractors

### KLEINERT-RAGNELL RETRACTOR

442260

| ITEM # | DESCRIPTION |
|---|---|
| 442260 | Blade A 1/4" wide x 3/4" deep (5.6 x 20 mm),<br>Blade B 1/8" wide x 3/8" deep (3.7 x 10 mm),<br>Overall length 6-1/8" (15.5 cm) |

### BREWSTER PHRENIC RETRACTORS

341635

Nested set of 2.

| ITEM # | DESCRIPTION |
|---|---|
| 341635 | Large blade 1-3/8" x 1-1/2" wide (20 x 40 mm) x 1-3/8" deep (35 mm),<br>Small blade 1" wide x 3/8" deep (25 x 10 mm),<br>Overall length 5-7/8" (15 cm) |

### CHILDREN'S HOSPITAL RETRACTOR

164754

| ITEM # | DESCRIPTION |
|---|---|
| 164754 | Blade A 3/8" wide x 3/4" deep (10 x 19 mm),<br>Blade B 1/4" wide x 3/4" deep (6 x 19 mm),<br>Overall length 6-1/8" (15.5 cm) |

# RETRACTORS, HAND-HELD

## Double-Ended Retractors

### CRILE RETRACTOR

480100

| ITEM # | DESCRIPTION |
|---|---|
| 480100 | Large blade 1/4" wide x 3/4" deep (7.5 x 20 mm), Small blade 1/4" wide x 5/8" deep (5 x 17 mm), Overall length 4-1/8" (10.5 cm) |

### DAVIS RETRACTORS

442245

| ITEM # | DESCRIPTION |
|---|---|
| 442245 | Blade A 3/8" wide (10 mm), Blade B 1/4" wide (6 mm), Overall length 6-1/8" (15.5 cm) |

### DAVIS RETRACTORS

KM52076

| ITEM # | DESCRIPTION |
|---|---|
| KM52076 | Blade A 1/4" wide x 5/8" deep blade (6 x 17 mm), Blade B 3/8" wide x 3/4" deep blade (9 x 20 mm), Overall length 6" (15 cm) |

### FARABEUF RETRACTORS

164702

Nested set of 2.

| ITEM # | DESCRIPTION |
|---|---|
| 164700 | Blade A 5/8" wide x 1-1/8" deep (15 x 28 mm), Blade B 5/8" wide x 1-1/4" deep (15 x 30 mm), Overall length 6" (15 cm) |
| 164702 | Blade A 3/8" wide x 1" deep (10 x 25 mm), Blade B 1/2" wide x 1-1/4" deep (12 x 30 mm), Overall length 4-1/2" (11.5 cm) |

# RETRACTORS, HAND-HELD

## Double-Ended Retractors

### GOELET RETRACTOR

480150

| ITEM # | DESCRIPTION |
|---|---|
| 480150 | Blade A 1" wide x 1-1/8" deep (26 x 30 mm),<br>Blade B 1-1/4" wide x 1-7/8" deep (31 x 47 mm),<br>Overall length 7-1/2" (19 cm) |

### INFANT RETRACTOR

480105

| ITEM # | DESCRIPTION |
|---|---|
| 480105 | Blades 3/8" x 1/2" (10 x 13 mm), 5-5/8" (14.5 cm) |

### LUKENS THYMUS RETRACTOR

514412

| ITEM # | DESCRIPTION |
|---|---|
| 514412 | Blade 3/8" wide x 1/4" deep (9 x 6 mm),<br>Overall length 6-7/8" (17.5 cm) |

### MAYO-COLLINS RETRACTORS

164710

Nested set of 2.

| ITEM # | DESCRIPTION |
|---|---|
| 164710 | Blade A 3/4" wide x 1-1/8" deep (20 x 30 mm),<br>Blade B 3/4" wide x 1-1/4" deep (20 x 35 mm),<br>Overall length 6" (15 cm) |

# RETRACTORS, HAND-HELD

## Double-Ended Retractors

### PARKER RETRACTORS

480170

| ITEM # | DESCRIPTION |
|---|---|
| 480170 | Small set of 2 retractors.<br>Short retractor: Blade A 7/8" wide x 5/8" deep (21 x 16 mm), Blade B 1" wide x 5/8" deep (25 x 16 mm), Overall length 5-1/2" (14 cm) |
| 480172 | Large set of 2 retractors.<br>Short retractor: Blade A 1" wide x 1" deep (25 x 24 mm), Blade B 1" wide x 1" deep (26 x 24 mm), Overall length 6-3/4" (17 cm) |

### PARKER-MOTT RETRACTORS

164698

Set of 2.

| ITEM # | DESCRIPTION |
|---|---|
| 164698 | 1" x 2-1/2" (25 x 65 mm) blades,<br>Overall length 5-3/4" (14.5 cm) |

### RAGNELL RETRACTOR

054600

| ITEM # | DESCRIPTION |
|---|---|
| 054600 | Blade A 3 mm wide x 8 mm deep,<br>Blade B 5 mm wide x 17 mm deep,<br>Overall length 5-3/4" (14.5 cm) |

# RETRACTORS, HAND-HELD

## Double-Ended Retractors

### RAGNELL RETRACTOR

KM52094

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM52094 | Blade A 4 wide x 8 mm deep,<br>Blade B 6 wide x 15 mm deep, Overall length<br>5-3/4" (14.5 cm) |

### ROUX RETRACTORS

480140

480145

7-1/4" (18.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 480140 | Small:<br>Blade A 1-1/8" wide x 1" deep (27 x 25 mm),<br>Blade B 1-3/8" wide x 1-1/2" deep (34 x 38 mm) |
| 480145 | Large:<br>Blade A 1-1/4" wide x 1-3/8" deep (31 x 36 mm),<br>Blade B 1-1/4" wide x 1-7/8" deep (31 x 47 mm) |

### SENN RETRACTORS

164750

Pilling® Pattern, satin finish. 1/4" x 3/4" (6 x 19 mm) flat blade, 6-1/4" (16 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 164750 | 3 sharp prongs |
| 164752 | 3 blunt prongs |

### SENN-KANAVEL DELICATE RETRACTOR

054590

| ITEM # | DESCRIPTION |
|---|---|
| 054590 | 3 sharp 7 x 7 mm prongs, 21 x 6 mm blade,<br>6-1/2" (16.5 cm) |

# RETRACTORS, HAND-HELD

## Double-Ended Retractors

### MILLER-SENN RETRACTORS

480125

9.8 mm prongs, 21 x 6.5 mm blade, 6-1/2" (16.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 480125 | 3 sharp prongs |
| 480126 | 3 blunt prongs |

### U.S. ARMY (ARMY-NAVY) RETRACTORS

164715

Nested set of 2.

| ITEM # | DESCRIPTION |
|---|---|
| 164715 | 5/8" (1.5 cm) wide blade, 8-1/2" (21.5 cm) |

## Abdominal-Type Retractors

### DEAVER RETRACTORS

KM51238

Hollow grip handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM51230 | 1" wide x 10" long blade (2.5 x 25.5 cm) |
| KM51232 | 1" wide x 12" long blade (2.5 x 30.5 cm) |
| KM51234 | 1" wide x 13" long blade (2.5 x 33 cm) |
| KM51240 | 2" wide x 12" long blade (5 x 30.5 mm) |
| KM51236 | 2-1/2" wide x 14-1/2" long blade (6.5 x 37 cm) |
| KM51242 | 3" wide x 12" long blade (7.5 x 30.5 cm) |
| KM51238 | 3-1/2" wide x 12" long blade (9 x 30.5 cm) |

# RETRACTORS, HAND-HELD

## Abdominal-Type Retractors

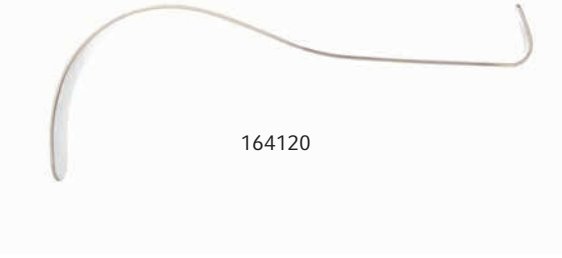
### DEAVER RETRACTORS

164110

164112

164115

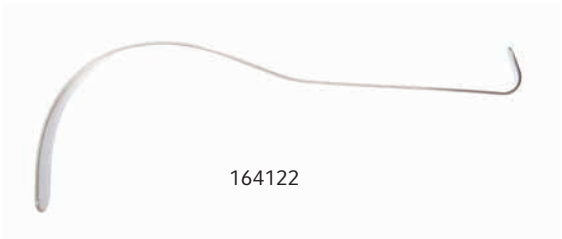
164118



164120

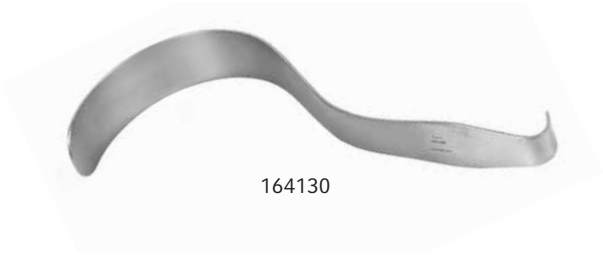
Standard design. Rigid stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 164110 | 3/4" (2 cm) wide, 6-7/8" (17.5 cm) |
| 164112 | 7/8" (2 cm) wide, 7-7/8" (20 cm) |
| 164115 | 1" (2.5 cm) wide, 8-7/8" (22.5 cm) |
| 164118 | #1, 1" (2.5 cm) wide, 8-1/8" (20.5 cm) |
| 164120 | #2, 1" (2.5 cm) wide, 9-7/8" (25 cm) |
| 164122 | #3, 1" (2.5 cm) wide, 12" (30.5 cm) |
| 164125 | #4, 1" (2.5 cm) wide, 14-3/8" (36.5 cm) |
| 164130 | #5, 1-1/2" (4 cm) wide, 11-7/8" (30 cm) |
| 164132 | #6, 2" (5 cm) wide, 12" (30.5 cm) |
| 164134 | #7, 3" (7.5 cm) wide, 12" (30.5 cm) |



164122

164125



164130

164134

# RETRACTORS, HAND-HELD

## Abdominal-Type Retractors

### W.M. LEMMON EXTRA DEEP DEAVER RETRACTORS

341732

Distal blade section extended to provide working depth of 9-1/2" (24 cm). Blade length 15" (38 cm). Large fluted handles.

| ITEM # | DESCRIPTION |
|---|---|
| 341730 | 1" (2.5 cm) wide blade |
| 341732 | 2" (5 cm) wide blade |

### WILLAUER-DEAVER RETRACTORS

341722

Deaver blades mounted on comfortable handle.

| ITEM # | DESCRIPTION |
|---|---|
| 341720 | Narrow, 1" wide x 6-1/4" deep (2.5 x 16 cm) blade, 14-1/2" (37 cm) |
| 341722 | Wide, 2" wide x 6-1/4" deep (5 x 16 cm) blade, 14-1/2" (37 cm) |

### DEEP DEAVER RETRACTORS

481826

Stainless steel, hollow handle.

| ITEM # | DESCRIPTION |
|---|---|
| 481825 | 6" deep x 1-1/2" (15 x 4 cm) blade, 13-3/4" (35 cm) |
| 481826 | 6" deep x 2" (15 x 5 cm) blade, 13-3/4" (35 cm) |
| 481827 | 6" deep x 2-1/2" (15 x 6.5 cm) blade, 13-3/4" (35 cm) |

# RETRACTORS, HAND-HELD

## Abdominal-Type Retractors

### DOYEN RETRACTORS

164521

Concave blade.

| ITEM # | DESCRIPTION |
|---|---|
| 164520 | 1-3/4" x 2-3/4" blade (4.5 x 7 cm), 8-3/4" (22 cm) |
| 164521 | 2-3/8" x 3-3/8" blade (6 x 8.5 cm), 9" (23 cm) |
| 164522 | 2-1/4" x 3-7/8" blade (5.5 x 10 cm), 9" (23 cm) |

### DEBAKEY®-COOLEY RETRACTOR

341740

Extra deep retractor of greater than usual width. Blade is carefully proportioned to provide maximum working depth and to prevent tendency toward slipping upward and out. Satin finish to prevent glare from overhead lights.

| ITEM # | DESCRIPTION |
|---|---|
| 341740 | 7-1/4" (18.5 cm) deep blade with 2-1/4" (5.5 cm) Harrington end, 12-1/4" (31 cm) |

### HARRINGTON EXTRA DEEP RETRACTORS

341791

Extra deep with fluted handle, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 341790 | 2-1/4" wide x 8" deep blade (5.5 x 20.5 cm), 11-3/4" (30 cm) |
| 341791 | 4-1/2" wide x 7" deep blade (11.5 x 18 cm), 13-1/8" (33.5 cm) |

### HARRINGTON RETRACTORS

482371

Stainless steel, hollow handle.

| ITEM # | DESCRIPTION |
|---|---|
| 482370 | 135 x 44 mm blade, 12-3/4" (32.5 cm) |
| 482371 | 135 x 65 mm blade, 13" (33 cm) |

# RETRACTORS, HAND-HELD

## Abdominal-Type Retractors

### HARRINGTON SPLANCHNIC RETRACTORS

341773

Cross serrated retracting surface.

| ITEM # | DESCRIPTION |
|---|---|
| 341770 | 1-1/2" wide x 4-3/4" deep blade (4 x 12 cm), 12-1/2" (32 cm) |
| 341773 | 2-1/2" wide x 5" deep blade (6.5 x 12.5 cm), 12" (30.5 cm) |

### KELLY RETRACTORS

164526

Flat blade with slight upward turn on sides and downward turn on slightly reduced width distal edge.

| ITEM # | DESCRIPTION |
|---|---|
| KM51222 | 3" x 2-1/2" blade (76 x 64 mm), 9-3/4" (25 cm) |
| 164525 | 1-1/2" x 2" blade (38 x 50 mm), 9" (23 cm) |
| 164526 | 2" x 2-3/8" blade (50 x 61 mm), 9-1/2" (24 cm) |
| 164527 | 2-1/2" x 3" blade (64 x 76 mm), 10" (25.5 cm) |
| 164528 | 3" x 3-1/2" blade (76 x 90 mm), 10-1/2" (26.5 cm) |

### MAYO ABDOMINAL RETRACTOR

482350

| ITEM # | DESCRIPTION |
|---|---|
| 482350 | 40 x 70 mm blade, 11" (28 cm) |

### RICHARDSON APPENDECTOMY RETRACTOR

164540

| ITEM # | DESCRIPTION |
|---|---|
| 164540 | 3/4" wide x 2" deep blade (2 x 5 cm), 9-1/2" (24 cm) |

# RETRACTORS, HAND-HELD

## Abdominal-Type Retractors

### RICHARDSON RETRACTORS

164543

Blade face is relatively flat with lateral edges curved upwards. Distal edge is straight across and turned downward.

| ITEM # | DESCRIPTION |
|---|---|
| 164542 | 3/4" x 1-1/4" blade (20 x 32 mm), length 9-3/4" (25 cm) |
| 164543 | 1" x 1-1/4" blade (25 x 32 mm), length 9-3/4" (25 cm) |
| 164544 | 1-1/2" x 1-1/2" blade (38 x 38 mm), length 9-3/4" (25 cm) |

### RICHARDSON RETRACTORS

481618

481629

Stainless steel, hollow handle.

| ITEM # | DESCRIPTION |
|---|---|
| 481616 | 1" x 3/4" blade (25 x 20 mm), 9-1/2" (24 .5 cm) |
| 481617 | 1-1/4" x 1-1/4" blade (32 x 32 mm), 9-1/2" (24 .5 cm) |
| 481618 | 1-1/2" x 1-1/2" blade (38 x 38 mm), 9-1/2" (24 .5 cm) |
| 481629 | 2" x 3/4" blade (48 x 20 mm), 9-1/2" (24 .5 cm) |

### RICHARDSON-EASTMAN RETRACTORS

164550

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 164550 | Set of 2:<br>Small 10" (25.5 cm), blade A 33 x 30 mm, blade B 26 x 23 mm<br>Large 10-3/4" (27.5 cm), blade A 65 x 43 mm, blade B 42 x 38 mm |

# RETRACTORS, HAND-HELD

## Abdominal-Type Retractors

### RICHARDSON-EASTMAN RETRACTORS

480195

| ITEM # | DESCRIPTION |
|---|---|
| 480195 | Set of 2:<br>Small 9-7/8" (25 cm), blade A 30 x 29 mm, blade B 24 x 22 mm.<br>Large 10-5/8" (27 cm) blade A 63 x 42 mm, blade B 39 x 37 mm. Weck® Pattern, bright finish. |
| 480196 | Small only:<br>9-7/8" (25 cm), blade A 30 x 29 mm, blade B 24 x 22 mm. Weck® Pattern, bright finish. |
| KM51214 | Large only:<br>10-5/8" (27 cm), blade A 65 x 43 mm, blade B 39 x 38 mm. Satin finish. |

### WYLIE RENAL VEIN RETRACTORS

341797

Designed for the retraction of the left renal vein during procedures on the abdominal aorta or renal arteries. Gently curved distal tip for atraumatic control. Stainless Steel.

| ITEM # | DESCRIPTION |
|---|---|
| 341795 | Short, 1" wide x 3-3/4" deep (2.5 x 9.5 cm) blade, 11-3/4" (30 cm) |
| 341797 | Long, 1" wide x 6-7/8" deep (2.5 x 17.5 cm) blade, 12-3/4" (32.5 cm) |

### WYLIE SPLANCHNIC RETRACTOR

341780

| ITEM # | DESCRIPTION |
|---|---|
| 341780 | Rigid, acutely curved blade is 6-3/4" deep (17 cm). Distal 1/2" is angled inward and deeply cross serrated, which provides positive, non-slip traction. Blade is 2-1/2" wide (6.3 cm).<br>Large, fluted handle. Overall length 13" |

# RETRACTORS, HAND-HELD

## Ribbon-Type Malleable Retractors

### DAVIS BRAIN SPATULAS

380206

| ITEM # | DESCRIPTION |
|---|---|
| 380200 | 1/4" (6.5 mm) wide blade |
| 380202 | 3/8" (9.5 mm) wide blade |
| 380204 | 1/2" (12.5 mm) wide blade |
| 380206 | 5/8" (16 mm) wide blade |
| 380208 | 3/4" (19 mm) wide blade |
| 380210 | 1" (25.5 mm) wide blade |

### HAIGHT RETRACTORS

341694

Malleable "T"-shaped blades. For abdominal and intra-thoracic surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 341690 | 3" wide x 11-1/2" long (7.5 x 29 cm) |
| 341692 | 3-1/2" wide x 11-3/4" long (9 x 30 cm) |
| 341694 | 4" wide x 12" long (10 x 30.5 cm) |
| 341696 | 4-3/4" wide x 12-3/4" long (12 x 32.5 cm) |
| 341698 | 5-1/2" wide x 13-1/2" long (14 x 34.5 cm) |

### OCHSNER RIBBON RETRACTORS

164170

Malleable.

| ITEM # | DESCRIPTION |
|---|---|
| 164164 | 1" x 13" (2.5 x 33 cm) |
| 164166 | 1-1/4" x 13" (3 x 33 cm) |
| 164168 | 1-1/2" x 13" (4 x 33 cm) |
| 164170 | 2" x 13" (5 x 33 cm) |
| 164172 | 2-1/2" x 13" (6.5 x 33 cm) |
| 164174 | 3" x 13" (7.5 x 33 cm) |
| 442288 | 7/8" x 7" (2 x 18 cm) |

### RIBBON RETRACTORS



KM51766

Malleable.

| ITEM # | DESCRIPTION |
|---|---|
| KM51752 | 1/2" (12.5 mm) wide blade, 6" (15 cm) |
| KM51755 | 1" (25.5 mm) wide blade, 7-1/2" (19 cm) |
| KM51766 | 3/4" (19 mm) wide blade, 13" (33 cm) |

# RETRACTORS, HAND-HELD

## Specialty Retractors

### ALLISON LUNG RETRACTORS

341679

Wire, spatula-shaped blade.

| ITEM # | DESCRIPTION |
|---|---|
| 341678 | Child size, 10-1/4" (26 cm) |
| 341679 | Adult Size, 12-3/8" (31.5 cm) |

### DAVIDSON SCAPULA RETRACTORS

341650

| ITEM # | DESCRIPTION |
|---|---|
| 341650 | Small size, blade 2" (5 cm) wide, 7-3/4" (19.5 cm) |
| 341651 | Large size, blade 3-1/2" (9 cm) wide, 7-3/4" (19.5 cm) |

### DEVINE-MILLARD-AUFRECHT NASAL RETRACTOR FIBEROPTIC LIGHTING

525150

| ITEM # | DESCRIPTION |
|---|---|
| 525150 | 7-3/4" (19.5 cm) |

### FACE LIFT RETRACTOR FIBEROPTIC LIGHTING ON #2 DEAVER RETRACTOR

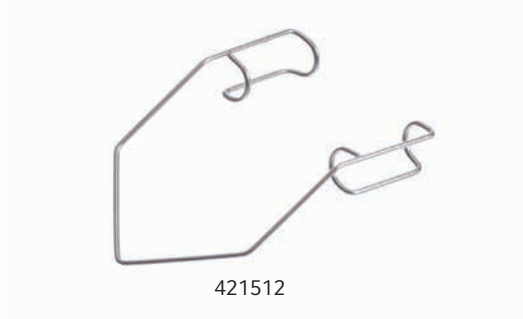
525215

| ITEM # | DESCRIPTION |
|---|---|
| 525215 | 10-5/8" (27 cm) |

# RETRACTORS, SELF-RETAINING

## Wire and Alm-Type Retractors

### BARRAQUER WIRE SPECULUMS

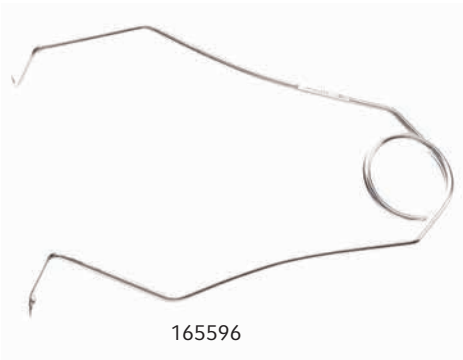


421512

All blades 3/16" (5 mm) deep.

| ITEM # | DESCRIPTION |
|---|---|
| 421510 | Small fenestrated blade, 3/8" wide (4 mm), overall length 1-1/8" (3 cm) |
| 421512 | Large fenestrated blade, 5/8" wide (16 mm), overall length 1-5/8" (4 cm) |

### FARR RETRACTORS



165596

| ITEM # | DESCRIPTION |
|---|---|
| 165595 | No. 1, blade 3/4" (2 cm), 5-1/2" (14 cm) |
| 165596 | No. 2, blade 1-1/8" (3 cm), 5-1/2" (14 cm) |
| 165597 | No. 3, blade 1-1/8" (3 cm), 9" (23 cm) |

### GRIESHABER WIRE RETRACTORS

165591

Useful for very small incisions in minor surgery and in laboratory uses.

| ITEM # | DESCRIPTION |
|---|---|
| 165590 | #1, delicate, thin wire, 1 prong, 3-1/4" (8.5 cm) |
| 165591 | #2, delicate, thin wire, 3-tooth blade, 3-1/4" (8.5 cm) |
| 165592 | #3, medium weight wire, single short prong, 4-3/4" (12 cm) |
| 351685 | Deep arteriotomy spring retractor, 3-1/4" (8.5 cm) |

# RETRACTORS, SELF-RETAINING

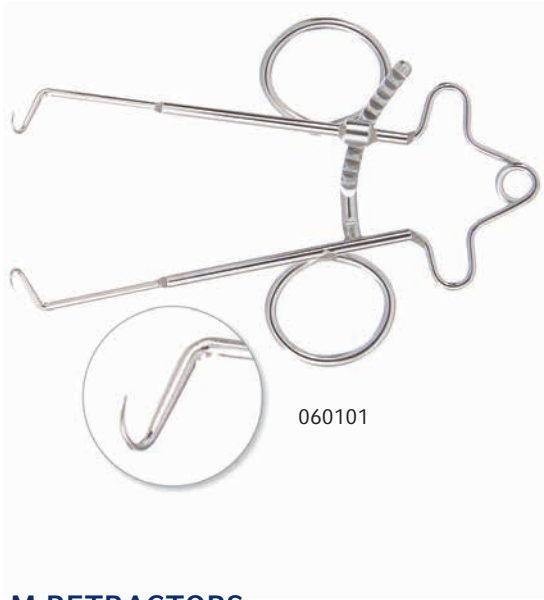
## Wire and Alm-Type Retractors

### HEISS RETRACTORS

165085

| ITEM # | DESCRIPTION |
|---|---|
| 165085 | 4 x 4 sharp prongs, 1/8" (3 mm) deep, 4-1/8" (10.5 cm) |
| 165086 | 4 x 4 blunt prongs, 1/8" (3 mm) deep, 4-1/8" (10.5 cm) |

### SKIN SELF-RETAINING RETRACTORS



060101

| ITEM # | DESCRIPTION |
|---|---|
| 060100 | Sharp prongs, lightly angled 55 degrees, 2-1/2" (6.5 cm) spread, 3-3/4" (9.5 cm) |
| 060101 | Sharp prongs, strongly angled 80 degrees, 2-1/2" (6.5 cm) spread, 3-1/2" (9 cm) |
| 060105 | Sharp prongs, strongly angled 80 degrees, 3-1/2" (9 cm) spread, 4-3/4" (12 cm) |

### ALM RETRACTORS

488210

For delicate minor surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 165510 | Small, 4 mm, semi-sharp teeth, 2-3/4" (7 cm) |
| 488210 | 4 x 4 blunt prongs, 3" (7.5 cm) |

# RETRACTORS, SELF-RETAINING

## Wire and Alm-Type Retractors

### JANSEN RETRACTORS

165550

| ITEM # | DESCRIPTION |
|---|---|
| 165550 | 3 x 3 blunt prongs, 5/16" (8 mm) deep, 3" (7.5 cm) spread, 4-3/8" (11 cm) |
| 165552 | 3 x 3 sharp prongs, 5/16" (8 mm) deep, 2" (5 cm) spread, 4-3/8" (11 cm) |

## Weitlaner, Gelpi and Henly-Type Retractors

### WEITLANER RETRACTORS

165352

165362

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 165348 | 2 x 3 sharp prongs, 4-1/2" (11.5 cm) |
| 165350 | 3 x 4 sharp prongs, 5-1/2" (14 cm) |
| 165352 | 3 x 4 sharp prongs, 6-1/2" (16.5 cm) |
| 165354 | 3 x 4 sharp prongs, 7-5/8" (19.5 cm) |
| 165356 | 3 x 4 sharp prongs, 9-1/2" (24 cm) |
| 165358 | 2 x 3 blunt prongs, 4-1/2"(11.5 cm) |
| 165360 | 3 x 4 blunt prongs, 5-1/2" (14 cm) |
| 165362 | 3 x 4 blunt prongs, 6-1/2" (16.5 cm) |
| 165364 | 3 x 4 blunt prongs, 7-5/8" (19.5 cm) |
| 165366 | 3 x 4 blunt prongs, 9-1/2" (24 cm) |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### WEITLANER RETRACTORS

488305

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 488305 | 2 x 3 sharp prongs, 4-1/2" (11.5 cm) |
| 488306 | 2 x 3 blunt prongs, 4-1/2" (11.5 cm) |

### WEITLANER RETRACTORS

KM52492

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM52492 | 2 x 3 sharp prongs 12 x 16 mm, 4" (10 cm) |
| KM52494 | 2 x 3 blunt prongs 13 mm, 4" (10 cm) |
| KM52498 | 3 x 4 sharp prongs, 5-1/4" (13.5 cm) |

### WULLSTEIN-WEITLANER RETRACTORS

029550

| ITEM # | DESCRIPTION |
|---|---|
| 029550 | Small, 3 x 3 sharp prongs, 11 mm deep x 12 mm wide, 4-3/8" (11 cm) |
| 029555 | Large, 3 x 3 sharp prongs, 11 mm deep x 12 mm wide, 5" (12.5 cm) |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### SCALP CONTOUR RETRACTORS

KM52546

Useful in hand procedures because handle is not obstructive.

| ITEM # | DESCRIPTION |
|---|---|
| KM52546 | 3 x 4 blunt prongs, 5-1/2" (14 cm) |
| KM52548 | 3 x 4 sharp prongs, 5-1/2" (14 cm) |

### ADSON RETRACTORS

488361

Straight shanks.

| ITEM # | DESCRIPTION |
|---|---|
| 488360 | 4 x 4 sharp prongs, 7-1/2" (19 cm) |
| 488361 | 4 x 4 blunt prongs, 7-1/2" (19 cm) |

### ADSON RETRACTORS

382722

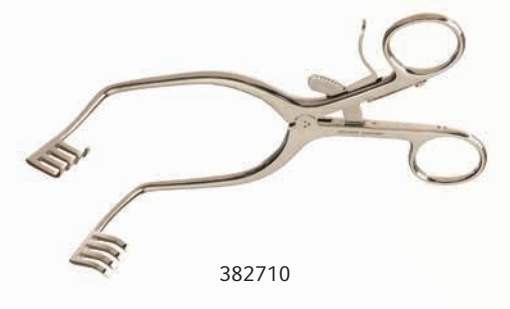
Contoured shanks.

| ITEM # | DESCRIPTION |
|---|---|
| 382722 | 4 x 4, sharp, 17 x 7 mm prongs, 7-1/4" (18.5 cm) |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### ANDERSON ADSON RETRACTOR



382710

Angled shanks.

| ITEM # | DESCRIPTION |
|---|---|
| 382710 | 4 x 4 blunt, 17 x 7 mm prongs, 6-3/4" (7 cm) |

### ADSON RETRACTOR

KM52474

Hinged arm design.

| ITEM # | DESCRIPTION |
|---|---|
| KM52474 | 4 x 5 blunt prongs, 13" (33 cm) |

### BECKMAN-WEITLANER RETRACTORS

165372

This modification involves the addition of the Beckman Hinge to Weitlaner Retractors. Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 165370 | 3 x 4 sharp prongs, 5-1/2" (14 cm) |
| 165372 | 3 x 4 sharp prongs, 6-1/2" (16.5 cm) |
| 165374 | 3 x 4 sharp prongs, 8-1/4" (21 cm) |
| 165380 | 3 x 4 blunt prongs, 5-1/2" (14 cm) |
| 165382 | 3 x 4 blunt prongs, 6-1/2" (16.5 cm) |
| 165384 | 3 x 4 blunt prongs, 8-1/4" (21 cm) |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### BECKMAN RETRACTOR

488370

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 488370 | 4 x 4 sharp prongs, 12-1/2" (32 cm) |

### BECKMAN RETRACTORS

KM52470

| ITEM # | DESCRIPTION |
|---|---|
| KM52470 | 4 x 4 sharp prongs, 27 mm, side blade 5/8" (1.5 cm) deep, 12-1/4" (31 cm) |
| KM52472 | 4 x 4 blunt prongs, 27 mm, side blade 5/8" (1.5 cm) deep, 12-1/4" (31 cm) |

### BECKMAN-ADSON LAMINECTOMY RETRACTORS

KM52484

With hinged blades.

| ITEM # | DESCRIPTION |
|---|---|
| KM52484 | 4 x 4 blunt prongs, 28 x 29 mm, 12-1/4" (31 cm) |
| KM52486 | 4 x 4 sharp prongs, 28 x 47 mm, 12-1/4" (31 cm) |
| KM52488 | 4 x 4 blunt prongs, 25 x 44 mm, 12-1/4" (31 cm) |
| KM52490 | 4 x 4 sharp prongs, 28 x 29 mm, 12-1/4" (31 cm) |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### BECKMAN-ADSON RETRACTORS

165402

Modification of Beckman having Adson blades.
4 x 4 blunt prongs. Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 165400 | 4 x 4 blunt prongs, 1" (2.5 cm) deep blades, 12-1/4" (31 cm) |
| 165402 | 4 x 4 blunt prongs, 1-1/4" (3 cm) deep blades, 13" (33 cm) |

### BECKMAN-EATON RETRACTOR

KM52476

| ITEM # | DESCRIPTION |
|---|---|
| KM52476 | 7 x 7 sharp prongs, 40 x 48 mm, 12-1/4" (31 cm) |

### BECKMAN-WEITLANER RETRACTORS

KM52542

With hinged blades. KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM52542 | 3 x 4 sharp prongs, 22 mm, 9-1/2" (24 cm) |
| KM52544 | 3 x 4 blunt prongs, 22 mm, 9-1/2" (24 cm) |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### DEBAKEY® GELPI RETRACTOR, SHORT MODEL

165439

| ITEM # | DESCRIPTION |
|---|---|
| 165439 | Sharp prongs, 5-3/8" (13.5 cm) |

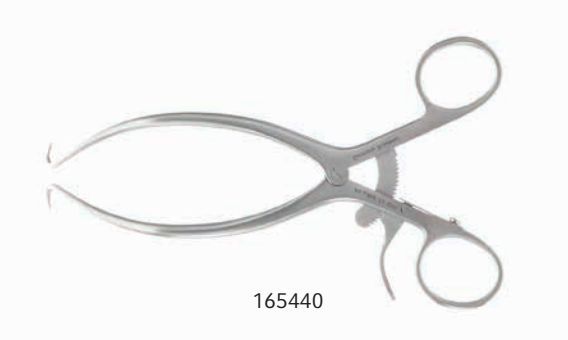
### GELPI RETRACTORS

488390

Weck® Pattern, bright finish. Sharp prongs.

| ITEM # | DESCRIPTION |
|---|---|
| 488390 | 7-1/4" (18.5 cm) |
| 488395 | 5-3/8" (13.5 cm) |

### GELPI STANDARD RETRACTOR



165440

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 165440 | Standard type (no stops), single sharp prongs, 7" (18 cm) |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### GELPI RETRACTORS

KM52768

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM52776 | 3-1/2" (9 cm) |
| KM52778 | 4-3/8" (11 cm) |
| KM52768 | 7-1/4" (18.5 cm) |
| KM52769 | With ball stops, 7" (18 cm) |

### GELPI-SELETZ RETRACTOR

KM52765

| ITEM # | DESCRIPTION |
|---|---|
| KM52765 | Sharp points, deep blades, 6-1/4" (16 cm) |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### JOHNSON NEUROMA RETRACTOR

KM52782

Designed to aid in the removal of interdigital neuroma. Tips overlap in closed position making insertion and removal of retractor easier. Provides excellent visibility of neuroma when retractor is in open position.

| ITEM # | DESCRIPTION |
|---|---|
| KM52782 | Sharp, 5" (12.5 cm) |

### WILTSE-GELPI RETRACTOR

KM52771

Deep, angled blades, sharp points.

| ITEM # | DESCRIPTION |
|---|---|
| KM52771 | Angled shaft, 10-7/8" (27.5 cm) |

### ORIGINAL HENLY POPLITEAL RETRACTOR

351779

A modification of the Weitlaner retractor with provisions for attachment of a third retractor blade for improved exposure in either the popliteal or carotid positions. Supplied with 3 center blades. The retraction surfaces of the center blades are grooved for soft tissue retraction.

| ITEM # | DESCRIPTION |
|---|---|
| 351779 | 4 x 3 prongs, center blades: 5/8" wide x 3/4" deep (1.5 x 2 cm), 5/8" wide x 1" deep (1.5 x 2.5 cm), 5/8" wide x 1-1/4" deep (1.5 x 3 cm), overall length 6-3/8" (16 cm) |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### HENLY POPLITEAL RETRACTOR

488350

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 488350 | With 3 detachable center blades: 16 mm wide x 20 mm / 26 mm / 32 mm, 6-3/8" (16 cm) |

### IMPROVED HENLY RETRACTORS

351679

With interchangeable center blades and side blades.

| ITEM # | DESCRIPTION |
|---|---|
| 351679 | Henly Retractor with straight arms, side blades slide onto arms |
| 351680 | Henly Retractor with arms spread outward. Both are complete with:<br>• 1 frame<br>• 3 center blades, 7/8", 1-1/8" and 1-1/4" deep x 5/8" wide, (2, 3 and 3 cm deep x 1.5 cm wide)<br>• 3 pair of side blades with blunt prongs, 1", 2" and 3" deep x 7/8" wide, (2.5, 5 and 7.5 cm deep x 2 cm wide) |

351680

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### IMPROVED HENLY RETRACTOR SIDE BLADES

351676

Shallow, medium and deep interchangeable sliding side blades.

| ITEM # | DESCRIPTION |
|---|---|
| 351676 | 1 pair, 1" x 7/8" (2.5 x 2 cm) |
| 351677 | 1 pair, 2" x 7/8" (5 x 2 cm) |
| 351678 | 1 pair, 3" x 7/8" (7.5 x 2 cm) |

### MAINI SIDE BLADE FOR HENLY RETRACTOR

351661

| ITEM # | DESCRIPTION |
|---|---|
| 351661 | 2-3/4 x 2" (7 X 5 cm), slide on |

### MAINI RICHARDSON DOUBLE ENDED CENTER BLADE FOR HENLY RETRACTOR

351664

| ITEM # | DESCRIPTION |
|---|---|
| 351664 | Blade ends are 31 and 40 mm wide |

# RETRACTORS, SELF-RETAINING

## Weitlaner, Gelpi and Henly-Type Retractors

### PILLING® MULTIPURPOSE RETRACTORS

351667

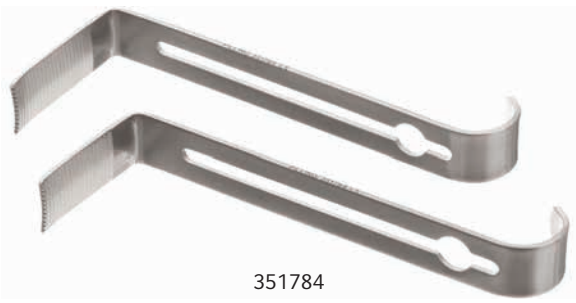
351670

351675

A versatile self-retaining Henly type retractor designed for use in the following surgical specialties: peripheral vascular surgery in the carotid, subclavian, femoral, popliteal and tibial regions. Spinal surgery in the cervical and lumbar regions. Orthopedic surgery in shoulder and hip procedures. General surgery for inguinal hernia, appendectomy and many minor procedures.

| ITEM # | DESCRIPTION |
|---|---|
| 351675 | Pilling® Multipurpose Retractor Set, complete with: 1 frame, 3 center blades in sizes 7/8", 1-1/8" and 1-1/4" deep x 5/8" wide (2, 2.8, and 3.2 cm deep x 1.5 cm wide), 3 pairs of side blades |
| 351666 | 1 pair side blades, 1-1/8" x 7/8" (3 x 2 cm) for 351675 |
| 351667 | 1 pair side blades, 2-1/8" x 7/8" (5.5 x 2 cm) for 351675 |
| 351668 | 1 pair side blades, 3-1/8" x 7/8" (8 x 2 cm) for 351675 |
| 351669 | Center blade, 7/8" x 5/8" (2 x 1.5 cm) for 351675 |
| 351670 | Center blade, 1-1/8" x 5/8" (3 x 1.5 cm) for 351675 |
| 351671 | Center blade, 1-1/4" x 5/8" (3 x 1.5 cm) for 351675 |
| 351672 | Center blade, 2" x 5/8" (5 x 1.5 cm) for 351675 |
| 351673 | Center blade, 2-1/2" x 5/8" (6.5 x 1.5 cm) for 351675 |

### EXTRA LONG CENTER BLADES



351784

Fits all Henly and Pilling® Multipurpose Retractors.

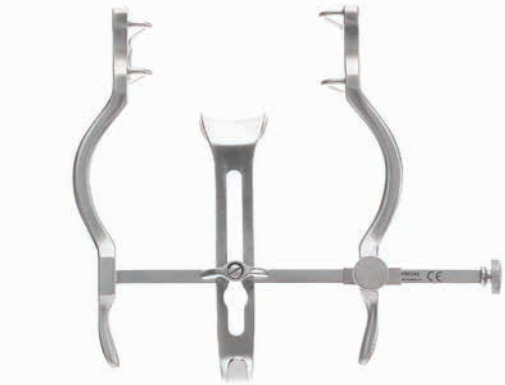
| ITEM # | DESCRIPTION |
|---|---|
| 351784 | Two extra-long center blades in sizes 1-1/2" (4 cm) and 1-3/4" (4.5 cm) deep x 5/8" (1.5 cm) wide |

# RETRACTORS, SELF-RETAINING

## Abdominal/Balfour-Type Retractors

### BALFOUR RETRACTORS

165200



165240

Trigger controlled, positive automatic ratchet retaining design. Free, smooth easy movement of all parts.
Large selection of blade designs and sizes.
Stainless steel construction.

| ITEM # | DESCRIPTION |
|---|---|
| 165200 | Wire lateral blades 2" deep (5 cm), center blade 3-5/8" wide x 1-3/4" deep (9 x 4.5 cm), 7" (18 cm) spread |
| 165203 | Wire lateral blades 4-3/8" deep (11 cm), center blade 4-3/16" deep x 2-1/2" wide (10.5 x 6.5 cm), 7" (18 cm) spread |
| 165240 | Pediatric. Miniature model, arms 3-1/2" long (9 cm), lateral blades 3/4" (2 cm) deep, 4" (10 cm) spread |

# RETRACTORS, SELF-RETAINING

## Abdominal/Balfour-Type Retractors

### BALFOUR RETRACTORS PERMANENT SIDE BLADE MODEL

165105

| ITEM # | DESCRIPTION |
|---|---|
| 165100 | Side blades 2-1/2" (6.5 cm) deep. Center blade 2-3/4" (7 cm) wide x 1-3/4" (4.5 cm) deep, standard size 8" (20.5 cm) opening |
| 165105 | Side blades 3-1/2" (9 cm) deep. Center blade 3-1/2" (9 cm) wide x 1-3/4" (4.5 cm) deep, standard size 8" (20.5 cm) opening |

### IMPROVED BALFOUR RETRACTORS INTERCHANGEABLE SIDE BLADE MODEL

165130

Lateral blades may be easily snapped on and off. Set includes 2 pairs of detachable wire lateral blades 2-1/2" (6.5 cm) and 3-1/2" (9 cm) deep.

| ITEM # | DESCRIPTION |
|---|---|
| 165130 | Center blade 2-1/2" (6.5 cm) wide, standard size, 8" (20.5 cm) opening |
| 165133 | Center blade 3-1/2" (8.8 cm) wide, extra wide 10-1/2" (26.5 cm) opening |
| 165135 | Extra solid lateral blades 2-1/2" (6.5 cm) deep, per pair |
| 165137 | Extra wire lateral blades, 2-1/2" (6.5 cm) deep, per pair |
| 165138 | Extra wire lateral blades, 3-1/2" (9 cm) deep, per pair |

165133

# RETRACTORS, SELF-RETAINING

## Abdominal/Balfour-Type Retractors

### TRANSPLANT RECOVERY BALFOUR RETRACTORS

165107

Transplant retractors for the recovery of the abdominal organs. Spiked lateral blades for maximum hold.

| ITEM # | DESCRIPTION |
|---|---|
| 165107 | Adult, 2 x 2 sharp prongs, blades 2-3/4" (7 cm), overall length of arms 7-7/8" (20 cm), 17" (43 cm) spread |

# RETRACTORS, SELF-RETAINING

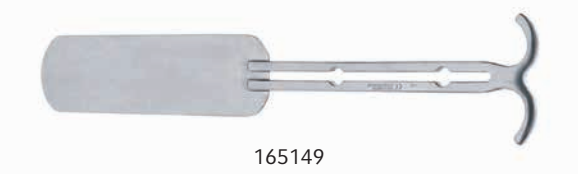
## Abdominal/Balfour-Type Retractors

### BALFOUR CENTER BLADES

165141

165142

165146



165149

These blades are made for use with the Balfour Retractors 165100 through 165133.

| ITEM # | DESCRIPTION |
|---|---|
| 165141 | Standard, 3-1/2" wide x 1-1/4" deep (8.8 cm x 3.2 cm) |
| 165142 | Standard, 2-3/4" wide x 1-3/4" deep (7 cm x 4.4 cm) |
| 165143 | Supra-Public, 3-1/2" wide x 2-5/8" deep (8.8 cm x 6.8 cm) |
| 165145 | Narrow, 1-5/8" wide x 3-1/2" deep (4.2 cm x 8.8 cm) |
| 165146 | Wide, 2-1/2" wide x 2-5/8" deep (6.3 cm x 6.8 cm) |
| 165147 | Wide, 2-1/2" wide x 3-1/2" deep (6.3 cm x 8.8 cm) |
| 165149 | Horgan malleable 2" wide x 7-3/4" long (5 x 19.5 cm) |
| 165150 | Horgan malleable 2-1/2" wide x 8" long (6.5 x 20.5 cm) |

### YU HOLTGREVE MALLEABLE BLADE

165160

| ITEM # | DESCRIPTION |
|---|---|
| 165160 | 2-1/2" wide x 5-7/8" deep x 9-3/8" long (6.5 x 15 x 24 cm) |

# RETRACTORS, SELF-RETAINING

## Abdominal/Balfour-Type Retractors

### BALFOUR FOURTH BLADE ATTACHMENTS

165170

Locks securely to arm of Balfour retractors, holding fourth blade. (Blade not included).

| ITEM # | DESCRIPTION |
|---|---|
| 165170 | For right arm |
| 165171 | For left arm |

### O'SULLIVAN-O'CONNOR ABDOMINAL RETRACTORS

485450

| ITEM # | DESCRIPTION |
|---|---|
| 165300 | Adjustable shape ring<br>Two lateral blades, 1" wide x 3" deep (2.5 x 7.5 cm).<br>Set complete with three detachable blades:<br>2 small, 1-3/4" wide x 3" deep (4.5 x 7.5 cm), and<br>1 large, 2-3/4" wide |
| 485450 | Blades on frame are 73 x 27 mm<br>Three detachable blades:<br>2 small, 1-3/4" wide x 3-1/8" deep (4.5 x 8 cm), and<br>1 large, 2-7/8" wide x 4" deep (7 x 10 cm)<br>Spread 12-1/2" (32 cm) |

### WEXLER BANTAM RETRACTOR

486100

For pediatric and minor surgery use. Set comes complete with frame, 1 center blade and 2 side blades.

| ITEM # | DESCRIPTION |
|---|---|
| 486100 | Center blade is 1-1/4" deep x 3/4" wide (3 x 2 cm), side blade is 1-1/8" deep x 7/8" wide (3 x 2.5 cm), 3-7/8" (10 cm) spread |

# RETRACTORS, SELF-RETAINING

## Abdominal/Balfour-Type Retractors

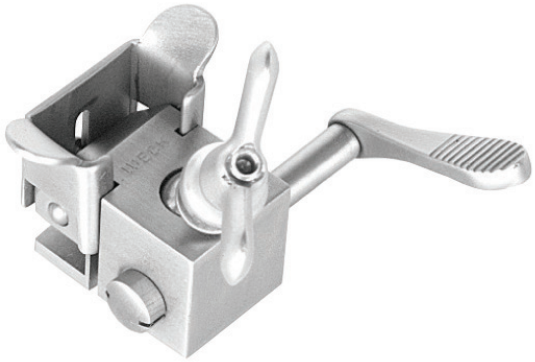
### WEXLER STANDARD OCTAGON FRAME

485205

Lateral catches for two blades.

| ITEM # | DESCRIPTION |
|---|---|
| 485205 | 11-5/16" x 9-3/16" (28.5 x 23.5 cm) |

### UNIVERSAL JOINT FOR WEXLER RETRACTORS



485210

| ITEM # | DESCRIPTION |
|---|---|
| 485210 | Allows rotation on ball with locking arm for Wexler Retractors |

### WEXLER DEAVER BLADE

485220

For Wexler Retractors.

| ITEM # | DESCRIPTION |
|---|---|
| 485220 | 2" wide x 4-5/16" deep (5 x 11 cm), 9" (23 cm) |

# RETRACTORS, SELF-RETAINING

## Abdominal/Balfour-Type Retractors

### WEXLER DEEP SPREADER

485262

For Wexler Retractors.

| ITEM # | DESCRIPTION |
|---|---|
| 485262 | 4" x 1-7/8" blades (10 x 5 cm), 5-1/4" (13.5 cm), pair of 2 |

### WEXLER EXPANDABLE BLADE

485225

| ITEM # | DESCRIPTION |
|---|---|
| 485225 | 2-3/4" (7 cm) wide blade, expands to 5" (12.5 cm) |

# RETRACTORS, SELF-RETAINING

## Thyroid Retractors

### HAMBURGER-BRENNAN-MAHORNER RETRACTOR

485270

Set comes complete with frame and 2 side blades.

| ITEM # | DESCRIPTION |
|---|---|
| 485270 | 7 pointed prongs, 18 x 32 mm, detachable side blades are 5-3/4" (14.5 cm), 33 x 29 mm blade, 4" (10 cm) spread, overall length 9-1/16" (23 cm) |

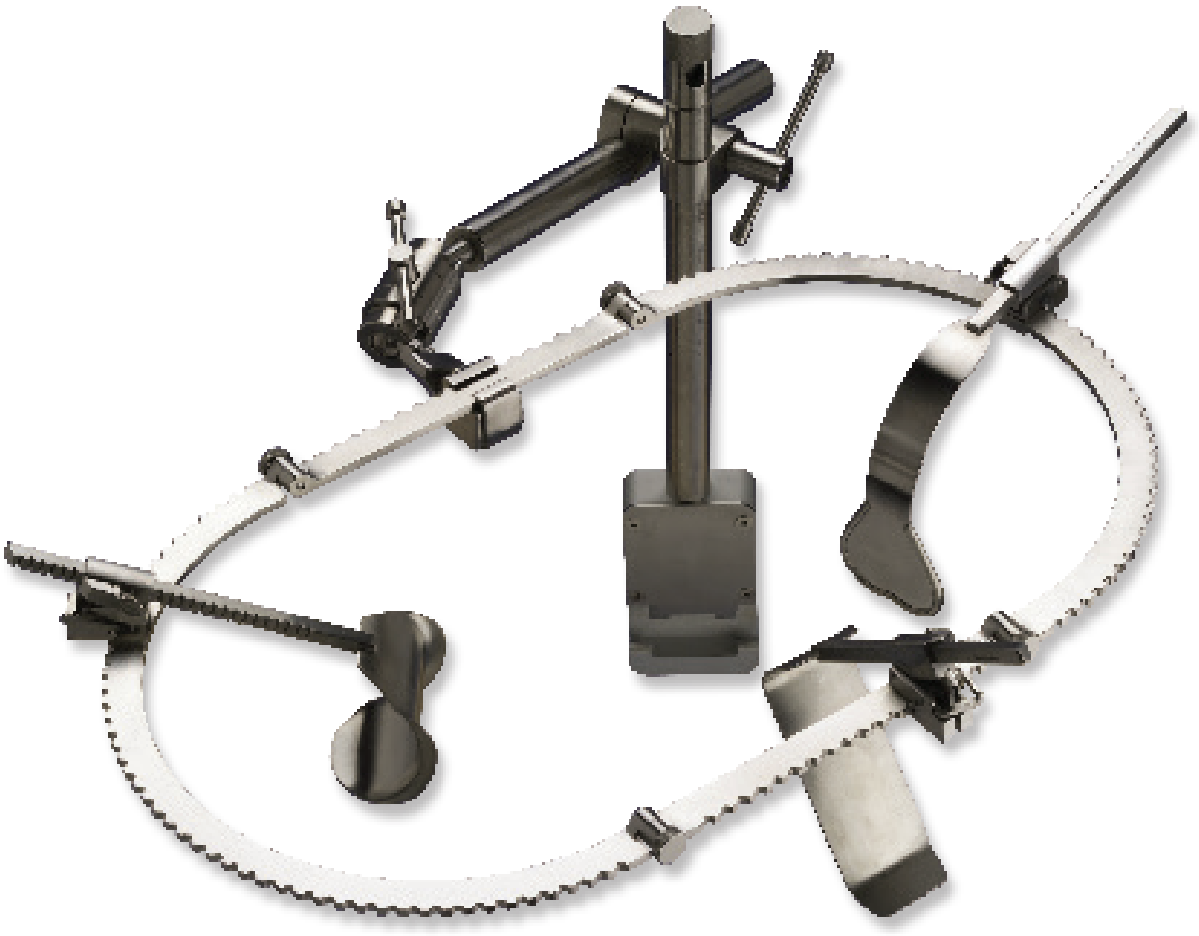
### MAHORNER THYROID RETRACTOR

485265

| ITEM # | DESCRIPTION |
|---|---|
| 485265 | 7 pointed prongs, 15 x 32 mm, 4-3/8" (11 cm) spread, overall 9" (23 cm) |

# RETRACTORS, TABLE-MOUNTED

## Circutract Retractor System



### MAXIMUM EXPOSURE SAVES OR TIME.

The familiar, easy-to-use Pilling® Circutract System provides maximum exposure for optimal visibility. With a comprehensive offering, our retractor blades are available in sizes ranging from pediatric to bariatric. All Circutract components are more affordable and completely compatible with the Bookwalter® system.

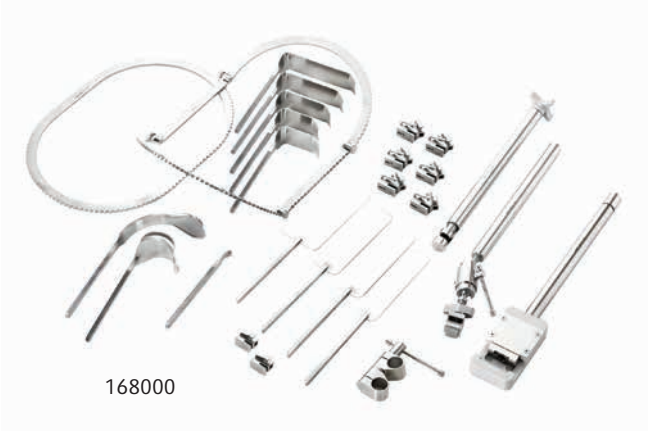
Circutract Set includes:

- Horizontal Bar, 14-1/2"
- Post Coupling Clamp
- Vertical Post Table Clamp, 12"
- Horizontal Flex Bar
- Non-Tilting Ratchet (2 per set)
- Advanced Tilting Ratchet (6 per set)
- Ribbon Blade, 2 x 6-1/2" (2 per set)
- Ribbon Blade, 1-1/2" x 6"
- Ribbon Blade, 3 x 6-1/2"
- Kelly Blade, 2 x 3" (2 per set)
- Kelly Blade, 2 x 4"
- Kelly Blade, 2 x 5"
- Kelly Blade, 2 x 6"
- Balfour Blade, 3 x 3-1/2"
- Gelpi Blade
- Harrington Blade, 2-1/2 x 5"
- Oval Ring - Medium
- Segmented Oval Ring - Medium

# RETRACTORS, TABLE-MOUNTED

## Circutract Retractor System

### CIRCUTRACT SET - COMPONENTS



168000

### CIRCUTRACT RETRACTOR SYSTEM

| ITEM # | QTY/ SET | DESCRIPTION |
|---|---|---|
| **168000** | | **Circutract Set - Components included:** |
| 168101 | 1 | Horizontal Bar, 14-1/2" |
| 168103 | 1 | Post Coupling Clamp |
| 168104 | 1 | Vertical Post Table Clamp, 12" |
| 168105 | 1 | Horizontal Flex Bar |
| 168110 | 2 | Non-Tilting Ratchet |
| 168111 | 6 | Advanced Tilting Ratchet |
| 168201 | 2 | Ribbon Blade, 2 x 6-1/2" |
| 168202 | 1 | Ribbon Blade, 1-1/2" x 6" |
| 168203 | 1 | Ribbon Blade, 3 x 6-1/2" |
| 168210 | 2 | Kelly Blade, 2 x 3" |
| 168211 | 1 | Kelly Blade, 2 x 4" |
| 168212 | 1 | Kelly Blade, 2 x 5" |
| 168213 | 1 | Kelly Blade, 2 x 6" |
| 168220 | 1 | Balfour Blade, 3 x 3-1/2" |
| 168221 | 1 | Gelpi Blade |
| 168222 | 1 | Harrington Blade, 2-1/2 x 5" |
| 168254 | 1 | Oval Ring - Medium |
| 168257 | 1 | Segmented Oval Ring - Medium |

### BARIATRIC COMPONENTS

| ITEM # | DESCRIPTION |
|---|---|
| 168263 | Bariatric Vertical Post, 18-3/8" |
| 168262 | Bariatric Segmented Ring - Extra-Large |
| 168205 | Bariatric Blade Malleable, 2 x 10" |
| 168206 | Bariatric Blade Malleable, 3 x 10" |
| 168207 | Bariatric Blade Malleable, 4 x 10" |
| 168208 | Bariatric Blade Malleable, 3 x 12" |
| 168209 | Bariatric Blade Malleable, 4 x 12" |
| 168223 | Bariatric Harrington Blade, 3-1/2 x 10" |
| 168218 | Bariatric Kelly Blade, 2 x 8" |

### ADDITIONAL COMPONENTS

| ITEM # | DESCRIPTION |
|---|---|
| 168102 | Extension Bar |
| 168214 | Kelly Blade, 1 x 1-1/4" |
| 168215 | Kelly Blade, 1 x 2-1/2" |
| 168216 | Kelly Blade, 2 x 1-1/2" |
| 168217 | Kelly Blade, 2 x 2-1/2" |
| 168253 | Oval Ring - Small |
| 168255 | Oval Ring - Large |
| 168256 | Segmented Oval Ring - Small |
| 168258 | Segmented Oval Ring - Large |
| 168250 | Round Ring - Small, 8-1/2" |
| 168251 | Round Ring - Medium, 10-1/2" |
| 168252 | Round Ring - Large, 12-1/2" |
| 168259 | Ring Straight Segments 4" - Sold in Pairs |
| 168260 | Ring Straight Segments 6" - Sold in Pairs |
| 168261 | Ring Straight Segments 8" - Sold in Pairs |
| 168156 | Segmented Ring Replacement Screw |
| 168232 | Rectal Blade, 22 x 2-3/4" |
| 168233 | Rectal Blade, 23 x 4" |
| 168204 | Ribbon Blade, 2 x 8" |
| 168245 | Vaginal Deaver Blade - Extra Small 1 x 3-1/2" |
| 168246 | Vaginal Deaver Blade - Small 1 x 4-1/2" |
| 168247 | Vaginal Deaver Blade - Medium 1 1/2 x 4-1/2" |
| 168248 | Vaginal Deaver Blade - Large 2 x 4-1/2" |
| 168228 | Rake Blade 3 Prong |
| 168229 | Rake Blade 4 Prong |
| 168230 | Rake Blade 6 Prong |
| 168243 | Lateral Vaginal Blade, 1 x 3" |
| 168244 | Posterior Vaginal Blade, 1 x 4-1/2" |
| 168249 | Vaginal Retractor Ring, 8 x 10-1/2" |
| 168196 | Malleable Pedi Blade, 3/4 x 3" |
| 168197 | Malleable Pedi Blade, 1 x 4" |
| 168198 | Malleable Pedi Blade, 1 x 5" |
| 168199 | Malleable Pedi Blade, 1-1/2 x 3" |
| 168200 | Malleable Pedi Blade, 1-1/2 x 4" |
| 168235 | Scoville Hook Blade, 2" |
| 168236 | Scoville Hook Blade, 3-1/4" |
| 168225 | Meyerding Blade, 2-1/3 x 2/3" |
| 168226 | Meyerding Blade, 3-1/3 x 1" |
| 168227 | Meyerding Blade, 3-3/4 x 2" |

# RETRACTORS, TABLE-MOUNTED

## Wishbone Retractor System

163100

163104

163102

163108

163103

### WISHBONE RETRACTOR SYSTEM

Basic system is supplied with a wide assortment of retractor blades for various purposes. Special blade requirements may be ordered economically from your Pilling® Weck® surgical representative. All components are constructed of heat-treated 400 Series stainless steel. There are no plastic washers or small parts.

- A single post table-mounted self-retaining retractor designed for any major abdominal vascular procedures of the aorta, iliacs and their branches.
- Allows use of multiple blades of various configurations, eliminating the need for second or third assistants.
- Non-wavering, non-tiring, self-retaining retraction provides better exposure, speeding the procedure with less postoperative pain.
- Far more versatile than the traditional types of self-retaining retractors. Less restrictive than enclosed ring and frame type retractors.
- Can be easily set up and positioned by the surgeon and one assistant. The rail clamp may be attached to the table rail over the patient drapes.
- Disc clamps on the table upright and crossbar are easily tightened and provide greater force and stability than other systems.
- Closed and open universal clamps that attach the retractor blades to the "wishbone" frame both feature a unique captive design. Clamps are easily cleaned ultrasonically without disassembling them.
- Open distal end of the "split wishbone" allows easier tunneling if grafting is required below the ilio-femoral junction. "split (two piece) wishbone" frame allows simplified handling and assembly and will fit standard sterilizing trays.

# RETRACTORS, TABLE-MOUNTED

## Wishbone Retractor System

### ABDOMINAL VASCULAR RETRACTOR SET WITH SPLIT WISHBONE - COMPONENTS

163109

163200

163201

163203

163211

163213

163400

163401

| ITEM # | DESCRIPTION | QTY. |
|---|---|---|
| 163000 | Complete set | 1 |
| ITEM # | SET COMPONENTS | SET QTY. |
| 163100 | Pilling® Table Clamp | |
| 163102 | Upright with Disc Clamp, 20-5/8" | |
| 163103 | Crossbar with attached Disc Clamp | |
| 163104 | Wishbone-Split Bar, left and right | |
| 163108 | Closed Universal Clamp | 6 |
| 163109 | Open Universal Clamp | 2 |
| 163200 | Splanchnic Retractor, 2 x 4-1/4" | |
| 163201 | Splanchnic Retractor, 2 x 6-1/4" | |
| 163203 | Renal Vein Retractor, 1 x 6" | 2 |
| 163211 | Mayo Retractor, standard, 2-5/8 x 2-1/4" | 2 |
| 163213 | Richardson Retractor, Swivel, 1 x 1-3/4" | |
| 163400 | Blade Holder, swivel with handle, 6-1/4" | 2 |
| 163401 | Blade Holder, swivel with knob, 9-1/4" | |
| 163406 | Fence Blade, swivel, 4 x 6" | |
| 163420 | Mayo Blade, swivel, 2-5/8 x 2-1/4" | |
| 163422 | Mayo Blade, wide swivel, 3-1/2 x 2-3/4" | |
| 163424 | Deaver Blade, swivel, 2-3/4 x 4-1/2" | |
| 163212 | Mayo Retractor, wide, 3-1/2 x 2-3/4" | |
| 163111 | Bariatric Crossbar | |
| 163117 | Bariatric Side Arm | |

163406

163420

163422

163424

163111

163117

# RETRACTORS, TABLE-MOUNTED

## Wishbone Retractor System

### WISHBONE LECHNER-HARRINGTON LIVER BLADE

163436

| ITEM # | DESCRIPTION |
|---|---|
| 163436 | 1-5/8" x 5" x 10" (4 x 12.5 x 25.5 cm) |

## Miscellaneous Retractors

### GOMEZ/POLY-TRACT POLY CLAMPS

166000

The Pilling® Poly-Clamp is a highly versatile operating table rail clamp for use with the Gomez, Poly-Tract Fowler, and other retractor systems, as well as with other equipment to be attached to the operating room table. The Poly-Clamp has been designed to fit the side rail of any currently manufactured U.S. or European operating room table.

| ITEM # | DESCRIPTION |
|---|---|
| 166000 | Single |
| 166002 | Set of four |

### RETRACTOR FIBER OPTIC "LIGHT BEAM"

163701

This malleable fiber optic light bundle can illuminate the many difficult-to-access surgical sites in the abdomen and pelvis. The captive clamp will attach to many standard table mounted and self-retaining retractors. It can be operated from fiber optic light sources which accept Pilling® Fiber Optic Cables.

| ITEM # | DESCRIPTION |
|---|---|
| 163701 | |

# SUCTION TUBES

## General

### ADSON SUCTION TUBES

536103

See "Scales and Gauges" chart in the beginning of the catalog for French size/mm conversion.

| ITEM # | DESCRIPTION |
|---|---|
| 536103 | Straight suction with finger valve, 4 mm tip, 8-1/4" (21 cm) |

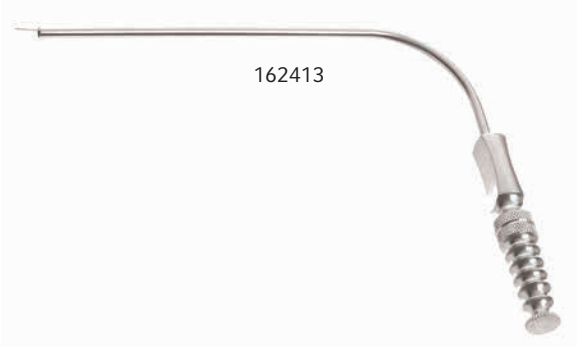
### ADSON SUCTION TUBES, CURVED

536100

Curved suction with finger valve. See "Scales and Gauges" chart in the beginning of the catalog for French size/mm conversion.

| ITEM # | DESCRIPTION |
|---|---|
| 536100 | 7 mm, 7-1/4" (18.5 cm) |
| 536104 | 6 mm, 8-1/4" (21 cm) |
| 536105 | 5 mm, 6-1/2" (16.5 cm) |

### FERGUSON-FRAZIER SUCTION TUBES

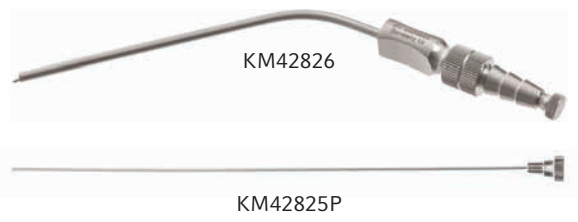


162413

Stainless steel tubes, block-type finger valve, complete with cleaning stylette. Angled. 4-7/8" (12.5 cm). Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 162410 | # 0, 6 Fr. tip |
| 162411 | # 1, 7 Fr. tip |
| 162412 | # 2, 8 Fr. tip |
| 162413 | # 3, 9 Fr. tip |
| 162414 | # 4, 10 Fr. tip |
| 162415 | # 5, 12 Fr. tip |
| 162416 | # 6, 14 Fr. tip |
| 162421 | Ferguson Stylet # 0 |

### FRAZIER SUCTION TUBES



KM42826

KM42825P

7" (18 cm). 1 Fr. = .33 mm. KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM42823 | 6 Fr. tip |
| KM42824 | 7 Fr. tip |
| KM42825 | 8 Fr. tip |
| KM42826 | 10 Fr. tip |
| KM42830 | 12 Fr. tip |
| KM42825P | Frazier Stylet 8 Fr. |

# SUCTION TUBES

## General

### FRAZIER SUCTION TUBES

KM42876

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM42863 | 7 Fr. tip, 4-1/2" (11.5 cm) |
| KM42864 | 9 Fr. tip, 4-1/2" (11.5 cm) |
| KM42866 | 11 Fr. tip, 4-1/2" (11.5 cm) |
| KM42873 | 7 Fr. tip, 7-1/2" (19 cm) |
| KM42874 | 9 Fr. tip, 7-1/2" (19 cm) |
| KM42876 | 11 Fr. tip, 7-1/2" (19 cm) |

### PEDIATRIC POOLE SUCTION TUBE

536107

| ITEM # | DESCRIPTION |
|---|---|
| 536107 | 16 Fr., 6 mm tip, 7-1/2" (19 cm) |

### POOL ABDOMINAL SUCTION TUBES

162210

Removable inner tube in multi-perforated outer tube.

| ITEM # | DESCRIPTION |
|---|---|
| 162210 | Large, 30 Fr., straight connector, 9-1/4" (23.5 cm) |
| 162212 | Small, 23 Fr., curved connector, 10-1/4" (26 cm) |

### YANKAUER SUCTION TUBES

162300

162301

| ITEM # | DESCRIPTION |
|---|---|
| 162300 | Standard adult size, 10 mm diameter. Tip has 2 mm central opening and four 2 mm, side openings. Length 11-1/2" (29 cm) |
| 162301 | Tip only for 162300 Yankauer, 1/2" (12.5 mm) |

# SUCTION TUBES

## General

### YANKAUER SUCTION TUBE WITH SWITCH VALVE

162345

For use with wall suction. Stopcock-type valve allows reliable "on-off" action. Tube is detachable for cleaning.

| ITEM # | DESCRIPTION |
|---|---|
| 162345 | 11-3/4" (30 cm) |

## Specialty

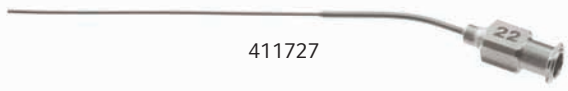
### BARON SUCTION TUBES

411702

With finger cut-off.

| ITEM # | DESCRIPTION |
|---|---|
| 411700 | 3 Fr. tip |
| 411702 | 5 Fr. tip |
| 411704 | 7 Fr. tip |

### ROSEN SUCTION TUBES




411727

| ITEM # | DESCRIPTION |
|---|---|
| 411720 | 14 Ga. tip, 3-3/4" (9.5 cm) |
| 411724 | 18 Ga. tip, 3-3/4" (9.5 cm) |
| 411726 | 20 Ga. tip, 3-3/4" (9.5 cm) |
| 411727 | 22 Ga. tip, 3-3/4" (9.5 cm) |
| 411728 | 24 Ga. tip, 3-3/4" (9.5 cm) |

# SUCTION TUBES

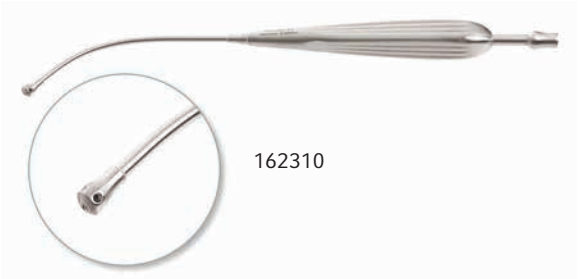
## Specialty

### FUKUSHIMA SUCTION TUBES

Teardrop opening allows surgeon to regulate force of suction.

| ITEM # | DESCRIPTION |
|---|---|
| KM42880 | 4 Fr. tip, 6-1/4" (16 cm) |
| KM42881 | 5 Fr. tip, 6-1/4" (16 cm) |
| KM42882 | 6 Fr. tip, 6-1/4" (16 cm) |
| KM42883 | 7 Fr. tip, 6-1/4" (16 cm) |
| KM42884 | 8 Fr. tip, 6-1/4" (16 cm) |
| KM42885 | 9 Fr. tip, 6-1/4" (16 cm) |
| KM42890 | 4 Fr. tip, 7" (18 cm) |
| KM42891 | 5 Fr. tip, 7" (18 cm) |
| KM42892 | 6 Fr. tip, 7" (18 cm) |
| KM42893 | 7 Fr. tip, 7" (18 cm) |
| KM42894 | 8 Fr. tip, 7" (18 cm) |
| KM42895 | 9 Fr. tip, 7" (18 cm) |
| KM42901 | 4 Fr. tip, 8" (20.5 cm) |
| KM42902 | 5 Fr. tip, 8" (20.5 cm) |
| KM42903 | 6 Fr. tip, 8" (20.5 cm) |
| KM42904 | 7 Fr. tip, 8" (20.5 cm) |
| KM42905 | 8 Fr. tip, 8" (20.5 cm) |
| KM42906 | 9 Fr. tip, 8" (20.5 cm) |

### ANDREWS INFANT SUCTION TUBE




6 mm diameter tip, permanently attached.

| ITEM # | DESCRIPTION |
|---|---|
| 162310 | 9-1/4" (23.5 cm) |

### ANDREWS PYNCHON SUCTION TUBE

| ITEM # | DESCRIPTION |
|---|---|
| 536220 | Curved, 6 mm tip, 3 mm diameter removable shaft, 9-5/8" (24.5 cm) |

# SUCTION TUBES

## Specialty

### COOLEY SUMP SUCTION TUBE

351547

Long, removable perforated outer tube with internal extension provides for fluid removal by sump-drain principle. Entire tube removable from handle for cleaning and rotatable for convenience.

| ITEM # | DESCRIPTION |
|---|---|
| 351547 | Curved, 9 mm tip, 12-7/8" (32.5 cm) |

### DEBAKEY® FIBEROPTIC ILLUMINATED SUCTION TUBE

351508

A modification of the DeBakey®-Yankauer Tube but with a special tip to provide for greater volume of aspirated fluids. Large distal central opening is surrounded by circular perforations and slots in the sides.

| ITEM # | DESCRIPTION |
|---|---|
| 351508 | 9.5 mm tip, 11-3/8" (29 cm) |

### DEBAKEY® SUCTION TUBES

351500

351501

| ITEM # | DESCRIPTION |
|---|---|
| 351500 | 9.5 mm tip, 11-3/8" (29 cm) |
| 351501 | Debakey® Suction Tube Tip for 351500, 3/8" (9.5 mm) |

# SUCTION TUBES

## Specialty

### DEBAKEY® SUCTION TUBE

351502

Distal opening with four side openings 3 mm long, 4 mm diameter.

| ITEM # | DESCRIPTION |
|---|---|
| 351502 | 3 mm diameter tip, 12-1/4" (31 cm) |

### DEBAKEY®-ADSON CORONARY SUCTION TUBES

351506

Distal opening with four side openings 3 mm long, 4 mm diameter.

| ITEM # | DESCRIPTION |
|---|---|
| 351504 | 6-1/8" (15.5 cm) |
| 351506 | 8-1/8" (20.5 cm) |

### MORSE-ANDREWS SUCTION TUBE

351505

Short length, small 3 mm outside diameter tube, terminating in 6 mm diameter tip which has one distal and four side openings. Handle is ebonized.

| ITEM # | DESCRIPTION |
|---|---|
| 351505 | 10-1/4" (26 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

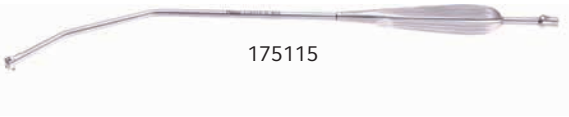
## Knife Handles/Suction Tubes

### KNIFE HANDLES

175055

| ITEM # | DESCRIPTION |
|---|---|
| 175055 | #3, 16" (40.5 cm) |
| 175056 | #3, 18" (45.5 cm) |

### YANKAUER SUCTION TUBES



175115

| ITEM # | DESCRIPTION |
|---|---|
| 175114 | 12" (30.5 cm) |
| 175115 | 14" (35.5 cm) |
| 175116 | 16" (40.5 cm) |
| 175117 | 18" (45.5 cm) |

### POOLE SUCTION TUBES

175086

| ITEM # | DESCRIPTION |
|---|---|
| 175083 | 30 Fr. tip, 12" (30.5 cm) |
| 175084 | 30 Fr. tip, 16" (40.5 cm) |
| 175085 | 30 Fr. tip, 18" (45.5 cm) |
| 175086 | 14" (35.5 cm) |

## Forceps and Clamps

### THUMB TISSUE FORCEPS

175109

| ITEM # | DESCRIPTION |
|---|---|
| 175109 | 1 x 2 teeth, 16" (40.5 cm) |
| 175110 | 1 x 2 teeth, 18" (45.5 cm) |

### POTTS SMITH FORCEPS

175087

| ITEM # | DESCRIPTION |
|---|---|
| 175087 | 14" (35.5 cm) |
| 175088 | 1 x 2 teeth, 14" (35.5 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

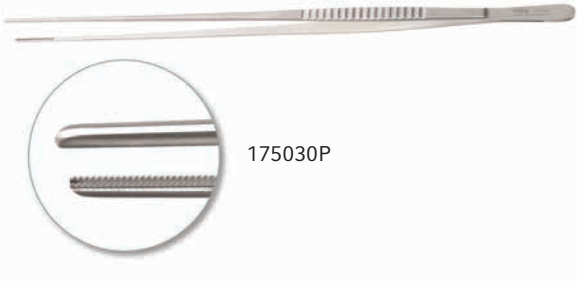
## Forceps and Clamps

### RUSSIAN TISSUE FORCEPS

175105

| ITEM # | DESCRIPTION |
|---|---|
| 175104 | 12" (30.5 cm) |
| 175105 | 14" (35.5 cm) |
| 175106 | 16" (40.5 cm) |

### DEBAKEY® TISSUE FORCEPS



175030P

| ITEM # | DESCRIPTION |
|---|---|
| 175026 | 12" (30.5 cm), TC |
| 175027 | 14" (35.5 cm), 2 mm |
| 175028 | 16" (40.5 cm), 2 mm |
| 175029 | 18" (45.5 cm), 2 mm |
| 175030P | 14" (35.5 cm), 3 mm |
| 175031 | 16" (40.5 cm), 3 mm |
| 175032 | 18" (45.5 cm), 2.5 mm |

### GERALD DRESSING FORCEPS

175037

| ITEM # | DESCRIPTION |
|---|---|
| 175037 | 12" (30.5 cm) |

### SINGLEY DRESSING FORCEPS

175107

| ITEM # | DESCRIPTION |
|---|---|
| 175107 | Serrated, 16" (40.5 cm) |
| 175108 | Serrated, 18" (45.5 cm) |

### FOERSTER SPONGE FORCEPS

175036

| ITEM # | DESCRIPTION |
|---|---|
| 175033 | Straight, 12" (30.5 cm) |
| 175034 | Straight, 14" (35.5 cm) |
| 175035 | Straight, 16" (40.5 cm) |
| 175036 | Straight, 18" (45.5 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

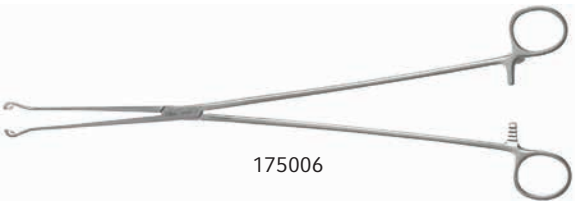
## Forceps and Clamps

### ALLIS TISSUE FORCEPS

175001

| ITEM # | DESCRIPTION |
|---|---|
| 175000 | 12" (30.5 cm) |
| 175001 | 14" (35.5 cm) |
| 175002 | 16" (40.5 cm) |
| 175003 | 18" (45.5 cm) |
| 175004 | X-action, 18" (45.5 cm) |

### BABCOCK TISSUE FORCEPS



175006

| ITEM # | DESCRIPTION |
|---|---|
| 175005 | 12" (30.5 cm) |
| 175006 | 14" (35.5 cm) |
| 175007 | 16" (40.5 cm) |
| 175008 | 18" (45.5 cm) |
| 175009 | X-action, 18" (45.5 cm) |

### BRIDGE X-ACTION FORCEPS

175010P

| ITEM # | DESCRIPTION |
|---|---|
| 175010P | Curved, 18" (45.5 cm) |

### CARMALT FORCEPS

175011

| ITEM # | DESCRIPTION |
|---|---|
| 175011 | Curved, 12" (30.5 cm) |

### CLARK ARTERY FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 175012 | Curved, 16" (40.5 cm) |
| 175013 | Curved, 18" (45.5 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

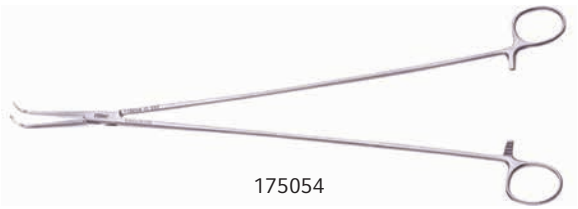
## Forceps and Clamps

### COLLIER ANDERSON CLAMPS

175017

| ITEM # | DESCRIPTION |
|---|---|
| 175016 | 10" (25.5 cm) |
| 175017 | 11" (28 cm) |
| 175018 | 14" (35.5 cm) |
| 175019 | 16" (40.5 cm) |

### KANTROWITZ RIGHT ANGLE FORCEPS



175054

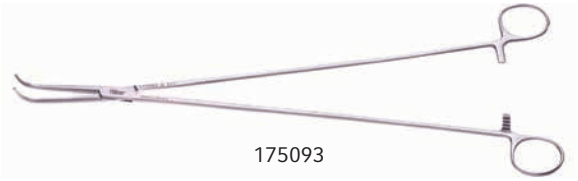
| ITEM # | DESCRIPTION |
|---|---|
| 175053 | 12" (30.5 cm) |
| 175054 | 14" (35.5 cm) |

### MIXTER RIGHT ANGLE FORCEPS

175073

| ITEM # | DESCRIPTION |
|---|---|
| 175073 | 16" (40.5 cm) |
| 175074 | 18" (45.5 cm) |

### MIXTER RIGHT ANGLE FORCEPS



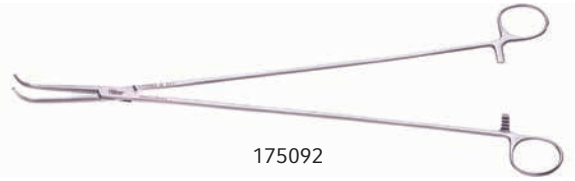
175093

| ITEM # | DESCRIPTION |
|---|---|
| 175093 | 14" (35.5 cm) |
| 175094 | 18" (45.5 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

## Forceps and Clamps

### RIGHT ANGLE CLAMP



175092

| ITEM # | DESCRIPTION |
|---|---|
| 175092 | 16" (40.5 cm) |

### RIGHT ANGLE X-ACTION FORCEPS

175095

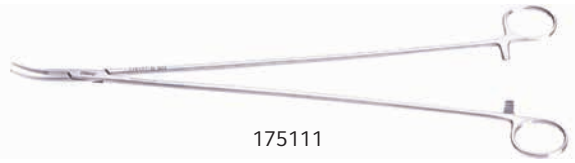
| ITEM # | DESCRIPTION |
|---|---|
| 175095 | 18" (45.5 cm) |

### KOCKER X-ACTION FORCEPS

175057

| ITEM # | DESCRIPTION |
|---|---|
| 175057 | Straight, serrated, 1 x 2 teeth, 18" (45.5 cm) |

### TONSIL CLAMP



175111

| ITEM # | DESCRIPTION |
|---|---|
| 175111 | 14" (35.5 cm) |

### TONSIL FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 175112 | Straight, serrated, 16" (40.5 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

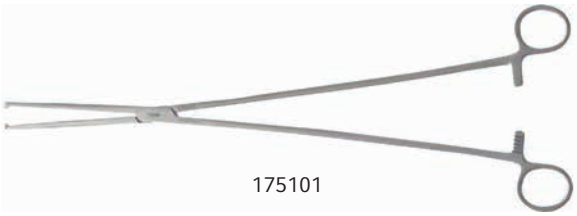
## Forceps and Clamps

### ZENKER FORCEPS

175113

| ITEM # | DESCRIPTION |
|---|---|
| 175113 | Straight, 14" (35.5 cm) |

### ROCHESTER OCHSNER FORCEPS



175101

| ITEM # | DESCRIPTION |
|---|---|
| 175096 | Straight, serrated, 1 x 2 teeth, 18" (45.5 cm) |
| 175100 | Straight, 14" (35.5 cm) |
| 175101 | Straight, serrated, 1 x 2 teeth, 16" (40.5 cm) |

### ROCHESTER PEAN FORCEPS

175097

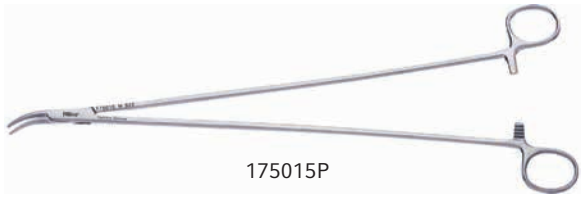
| ITEM # | DESCRIPTION |
|---|---|
| 175097 | Curved, 14" (35.5 cm) |
| 175098 | Curved, 18" (45.5 cm) |

### ROCHESTER PEAN HEMOSTATIC FORCEPS

175099

| ITEM # | DESCRIPTION |
|---|---|
| 175099 | 16" (40.5 cm) |

### CLARK HYSTERECTOMY CLAMPS



175015P

| ITEM # | DESCRIPTION |
|---|---|
| 175014 | 12" (30.5 cm) |
| 175015P | 14" (35.5 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

## Forceps and Clamps

### HEANEY BALLENTINE CLAMPS

175039

| ITEM # | DESCRIPTION |
|---|---|
| 175038 | Curved, 12" (30.5 cm) |
| 175039 | Straight, 12" (30.5 cm) |

### MASTERSON HYSTERECTOMY FORCEPS

175060

| ITEM # | DESCRIPTION |
|---|---|
| 175059 | Curved, 10" (25.5 cm) |
| 175060 | Straight, 10" (25.5 cm) |

### ROGERS HYSTERECTOMY FORCEPS

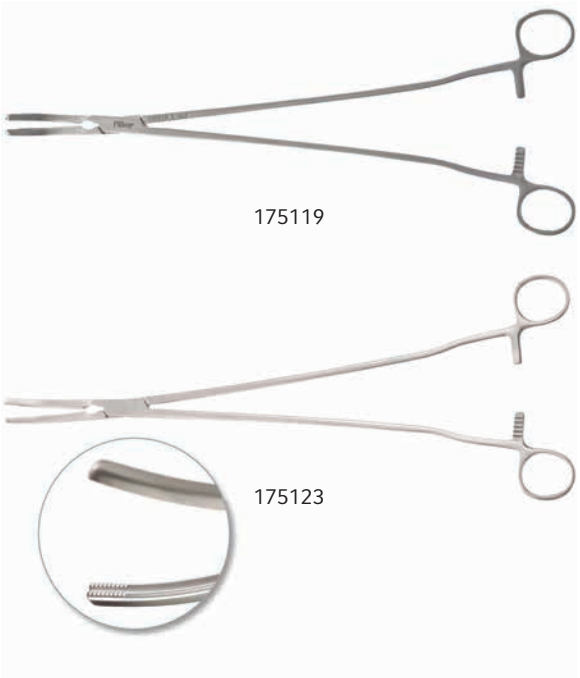
175103

| ITEM # | DESCRIPTION |
|---|---|
| 175102 | Curved, 10" (25.5 cm) |
| 175103 | Straight, 10" (25.5 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

## Forceps and Clamps

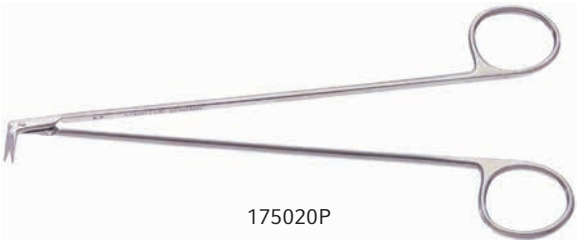
### Z-HYSTERECTOMY FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 175118 | Angled, 12" (30.5 cm) |
| 175119 | Angled, 14" (35.5 cm) |
| 175120 | Straight, 12" (30.5 cm) |
| 175121 | Straight, 14" (35.5 cm) |
| 175122 | Slight curved, 12" (30.5 cm) |
| 175123 | Slight curved, 14" (35.5 cm) |
| 175124 | Full curved, 12" (30.5 cm) |
| 175125 | Full curved, 14" (35.5 cm) |

## Scissors

### COOLEY SCISSORS




| ITEM # | DESCRIPTION |
|---|---|
| 175020P | Curved, 12" (30.5 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

## Scissors

### HYSTERECTOMY SCISSORS

175046

| ITEM # | DESCRIPTION |
|---|---|
| 175042 | Curved, 10-1/2" (26.5 cm), TC |
| 175043 | Curved, 12" (30.5 cm), TC |
| 175045 | Medium curved, 10-1/2" (26.5 cm), TC |
| 175046 | Medium curved, 12" (30.5 cm), TC |
| 175048 | Acutely curved, 10-1/2" (26.5 cm), TC |
| 175049 | Acutely curved, 12" (30.5 cm), TC |

### JORGENSON SCISSORS

175052

| ITEM # | DESCRIPTION |
|---|---|
| 175052 | Acutely curved, 14" (35.5 cm) |

### MAYO HARRINGTON SUPER-CUT SCISSORS

175061

| ITEM # | DESCRIPTION |
|---|---|
| 175061 | Medium curved, 12" (30.5 cm) |

### MAYO SCISSORS

175067

| ITEM # | DESCRIPTION |
|---|---|
| 175067 | Medium curved, 14" (35.5 cm), TC |
| 175068 | Medium straight, 14" (35.5 cm), TC |

# EXTENDED LENGTH/OPEN BARIATRIC

## Scissors

### METZENBAUM SCISSORS

175071

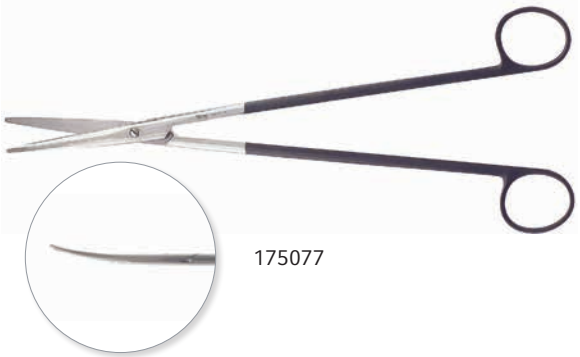
| ITEM # | DESCRIPTION |
|---|---|
| 175069 | Curved, 12" (30.5 cm), TC |
| 175070 | Curved, 14" (35.5 cm), TC |
| 175072 | Curved, 16" (40.5 cm), TC |
| 175071 | Curved, 18" (45.5 cm), TC |

### NELSON METZENBAUM SCISSORS

175075

| ITEM # | DESCRIPTION |
|---|---|
| 175075 | Curved, 16" (40.5 cm) |
| 175076 | Curved, 18" (45.5 cm) |

### NELSON METZENBAUM SUPER-CUT SCISSORS



175077

| ITEM # | DESCRIPTION |
|---|---|
| 175077 | Supercut, curved, 11-3/4" (30 cm) |

### POTTS TENOTOMY SCISSORS

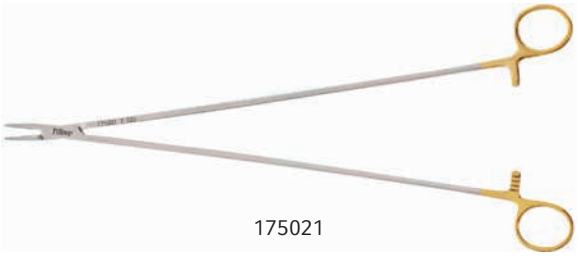
175090

| ITEM # | DESCRIPTION |
|---|---|
| 175089 | Curved, 10" (25.5 cm) |
| 175090 | Curved, 12" (30.5 cm) |
| 175091 | Curved, 14" (35.5 cm) |

# EXTENDED LENGTH/OPEN BARIATRIC

## Needle Holders

### CRILE WOOD NEEDLE HOLDERS



175021

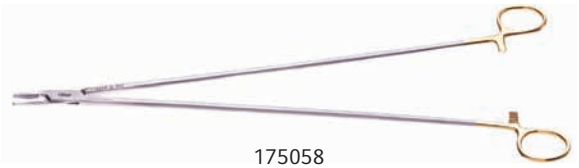
| ITEM # | DESCRIPTION |
|---|---|
| 175021 | 14" (35.5 cm), TC |
| 175022 | 16" (40.5 cm), TC |

### HEANEY NEEDLE HOLDERS

175041

| ITEM # | DESCRIPTION |
|---|---|
| 175040P | 12" (30.5 cm), TC |
| 175041 | 14" (35.5 cm), TC |

### MASSON NEEDLE HOLDER



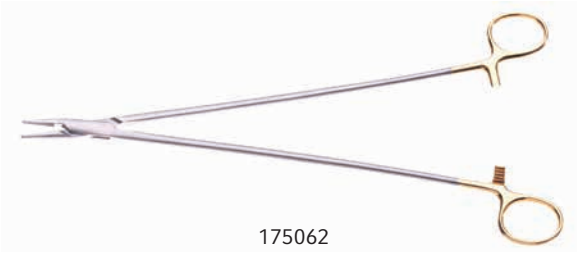
175058

| ITEM # | DESCRIPTION |
|---|---|
| 175058 | 16" (40.5 cm), TC |

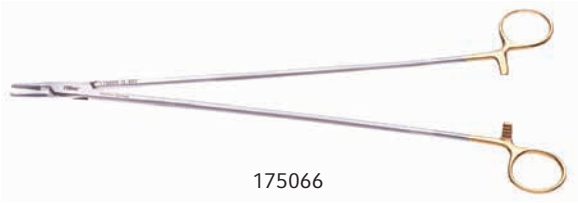
# EXTENDED LENGTH/OPEN BARIATRIC

## Needle Holders

### MAYO HEGAR NEEDLE HOLDERS



175062



175066

175063

| ITEM # | DESCRIPTION |
|---|---|
| 175062 | 12" (30.5 cm), TC |
| 175066 | 14" (35.5 cm), TC |
| 175063 | 18" (45.5 cm), TC |

### MAYO MASSON NEEDLE HOLDER

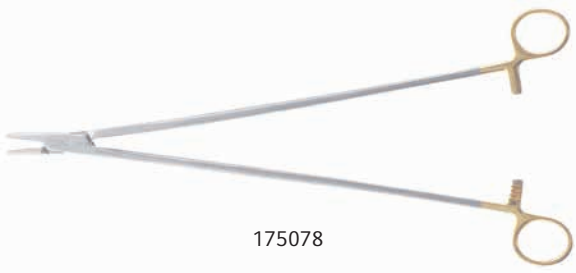
175065

| ITEM # | DESCRIPTION |
|---|---|
| 175065 | 18" (45.5 cm), TC |

# EXTENDED LENGTH/OPEN BARIATRIC

## Needle Holders

### NOLAN NEEDLE HOLDERS



175078

| ITEM # | DESCRIPTION |
|---|---|
| 175078 | 14" (35.5 cm), TC |
| 175079 | 16" (40.5 cm) |
| 175080 | Curved, 16" (40.5 cm), TC |
| 175081 | 16" (40.5 cm), TC |
| 175082 | 18" (45.5 cm) |

## Retractors

### CUSHING VEIN RETRACTORS

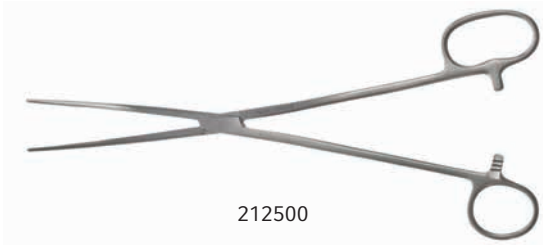
175024

| ITEM # | DESCRIPTION |
|---|---|
| 175023 | 12-1/2" (32 cm) |
| 175024 | 14" (35.5 cm) |
| 175025P | 16" (40.5 cm) |

# OB/GYN

## Forceps and Clamps

### BOZEMAN UTERINE DRESSING FORCEPS

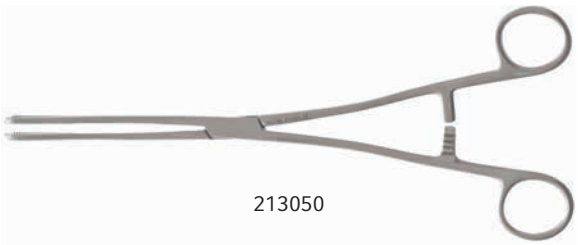


212500

212505

| ITEM # | DESCRIPTION |
|---|---|
| 212500 | Double-curved, one large ring, 10-1/4" (26 cm) |
| 212505 | Standard model, curved, 10-1/4" (26 cm) |

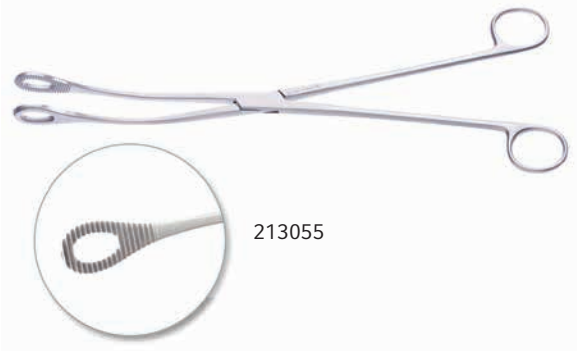
### DE LEE CERVICAL GRASPING FORCEPS



213050

| ITEM # | DESCRIPTION |
|---|---|
| 213050 | 10" (25.5 cm) |

### KELLY PLACENTA CLAMP



213055

| ITEM # | DESCRIPTION |
|---|---|
| 213055 | 12-5/8" (32 cm) |

# OB/GYN

## Forceps and Clamps

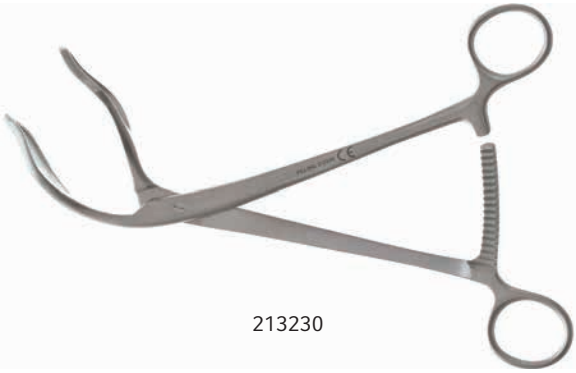
### POLK PLACENTA FORCEPS

770730

Fenestrated jaw with cross serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 770730 | Straight, 9-5/8" (24.5 cm) |

### SOMER UTERINE ELEVATING FORCEPS



213230

| ITEM # | DESCRIPTION |
|---|---|
| 213230 | 9" (23 cm) |

### WALLACE CAESAREAN FORCEPS

770405

| ITEM # | DESCRIPTION |
|---|---|
| 770405 | Serrated, 25 mm jaw, 8" (20.5 cm) |

# OB/GYN

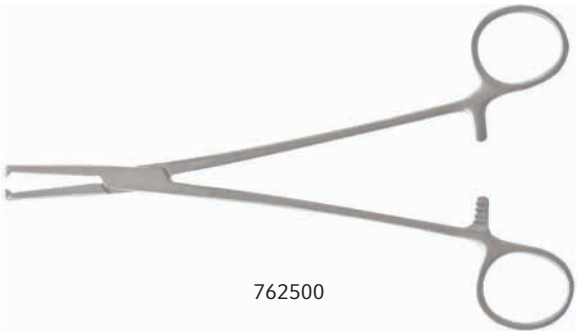
## Forceps and Clamps

### PHANEUF UTERINE ARTERY FORCEPS

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 214161 | Short, heavy jaws, 1 x 2 distal teeth, angled, 8-1/4" (21 cm) |

### PHANEUF UTERINE ARTERY FORCEPS




Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 762500 | Straight, serrated, 1 x 2 teeth, 4 mm tip, 8-1/4" (21 cm) |

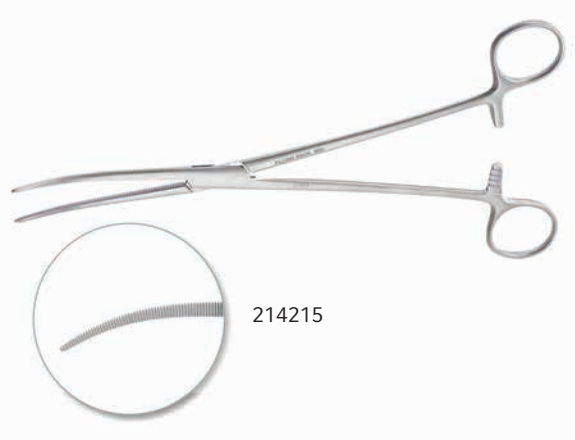
### BLAND CERVICAL TRACTION FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 213140 | Straight, 10 mm tip, 9-1/4" (23.5 cm) |

# OB/GYN

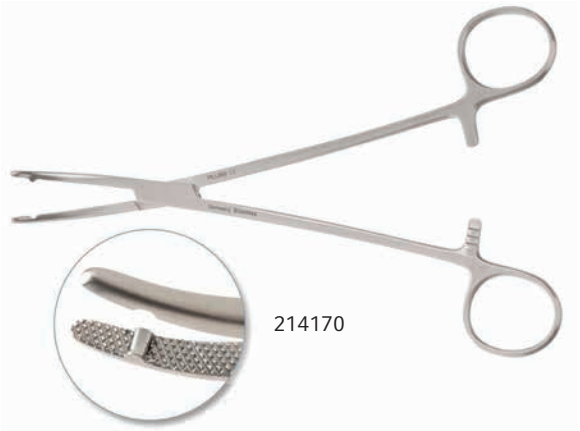
## Forceps and Clamps

### DEBAKEY® HYSTERECTOMY CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 214215 | Curved, 9-3/8" (24 cm) |

### HEANEY HYSTERECTOMY FORCEPS



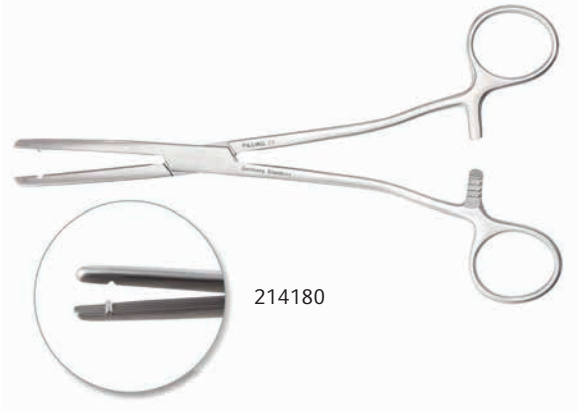
Double serrated jaws with cross-groove.

| ITEM # | DESCRIPTION |
|---|---|
| 214170 | Curved, light jaws, single groove, 8-1/4" (21 cm) |
| 214172 | Curved, heavy jaws, single groove, 8-1/4" (21 cm) |
| 214175 | Curved, heavy jaws, double groove, 8-1/4" (21 cm) |

# OB/GYN

## Forceps and Clamps

### HEANEY-BALLANTINE HYSTERECTOMY CLAMPS




Longitudinally serrated jaws. Single groove.

| ITEM # | DESCRIPTION |
|---|---|
| 214180 | Straight, 8-1/4" (21 cm) |
| 214182 | Curved, 8-1/8" (20.5 cm) |

### WERTHEIM-CULLEN PEDICLE CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| 214230 | Angled, longitudinally serrated jaws, 8-5/8" (22 cm) |

## Biopsy Punches

### EPPENDORFER BIOPSY PUNCH

| ITEM # | DESCRIPTION |
|---|---|
| KM65162 | Straight, 4 x 8 mm bite, 9" (23 cm) |

# OB/GYN

## Biopsy Punches

### KEVORKIAN-YOUNG CERVICAL BIOPSY FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 213036 | 10-1/8" (25.5 cm) |

### SCHUBERT BIOPSY PUNCHES

| ITEM # | DESCRIPTION |
|---|---|
| 766520 | Angled to side, 5 x 8 mm punch, 9-5/8" (24.5 cm) |
| 766522 | Straight, 5 x 8 mm punch, 11" (28 cm) |

### SCHUBERT BIOPSY PUNCHES

| ITEM # | DESCRIPTION |
|---|---|
| KM65115 | Straight, 8-1/2" (21.5 cm) |
| KM65118 | Angled, 10-1/2" (26.5 cm) |

# OB/GYN

## Biopsy Punches

### THOMAS-GAYLOR CERVICAL BIOPSY FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 213011 | Curved shanks, 9-1/4" (23.5 cm) |

### THOMAS-GAYLOR BIOPSY PUNCH

| ITEM # | DESCRIPTION |
|---|---|
| KM65084 | Interfitted jaw, 9-1/2" (24 cm) |

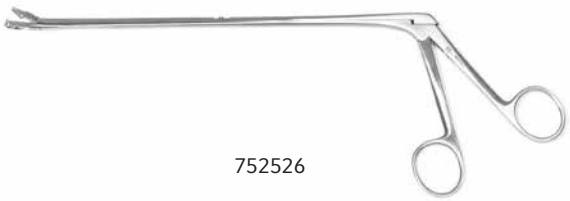
### TISCHLER BIOPSY PUNCHES

| ITEM # | DESCRIPTION |
|---|---|
| KM65188 | Straight, 3 x 5 mm, 8" (20.5 cm) |
| KM65186 | Straight, 3 x 7 mm, 9" (23 cm) |
| KM65204 | Shaft only, 3 x 7 mm bite |
| KM65205 | Pistol grip handle only for Tischler punch |

# OB/GYN

## Biopsy Punches

### WITTNER BIOPSY FORCEPS



752526

8 x 6 mm toothed basket jaw, 8-7/8" (22.5 cm) stem.

| ITEM # | DESCRIPTION |
|---|---|
| 752526 | Straight, 11-1/2" (29 cm) |

## Circumcision Clamps

### GOMCO® CIRCUMCISION CLAMPS

742110

| ITEM # | DESCRIPTION |
|---|---|
| 742100 | Extra small, 11 mm |
| 742102 | Newborn, 13 mm |
| 742104 | Infant, 15 mm |
| 742106 | Child, 16 mm |
| 742108 | Youth, 21 mm |
| 742110 | Adult, 26 mm |

### MOGEN CIRCUMCISION CLAMP

KM64227

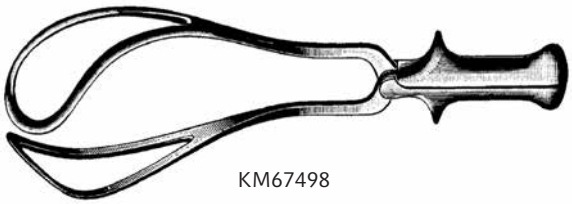
| ITEM # | DESCRIPTION |
|---|---|
| KM64227 | 2-7/8" (7.5 cm) |

# OB/GYN

## Delivery Forceps

### DE LEE OBSTETRICAL FORCEPS

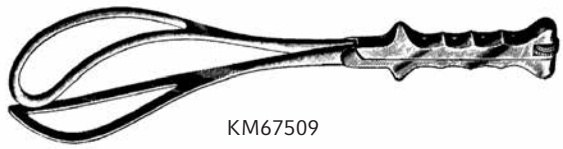
214595



KM67498

| ITEM # | DESCRIPTION |
|---|---|
| 214595 | 12" (30.5 cm) |
| KM67498 | Short model, fenestrated blades, 12" (30.5 cm) |
| KM67500 | Long model, fenestrated blades, 14" (35.5 cm) |

### ELLIOT OBSTETRICIAL FORCEPS



KM67509

| ITEM # | DESCRIPTION |
|---|---|
| KM67509 | Short model, fenestrated blades, 12-1/2" (32 cm) |
| KM67511 | Long model, fenestrated blades, 15" (38 cm) |

### MCCLEAN OBSTETRICIAL FORCEPS

KM67516

| ITEM # | DESCRIPTION |
|---|---|
| KM67516 | Solid blades, short shanks, 14" (35.5 cm) |

# OB/GYN

## Delivery Forceps

### MCLEAN-TUCKER-LUIKART OBSTETRICAL FORCEPS

214605

| ITEM # | DESCRIPTION |
|---|---|
| 214605 | 15-1/2" (39.5 cm) |

### SIMPSON OBSTETRICAL FORCEPS

214555

| ITEM # | DESCRIPTION |
|---|---|
| 214550 | 14" (35.5 cm) |
| 214555 | 12" (30.5 cm) |

### SIMPSON-LUIKART OBSTETRICAL FORCEPS

214570

| ITEM # | DESCRIPTION |
|---|---|
| 214570 | Fenestrated, smooth, 14" (35.5 cm) |
| KM67526 | Solid blades, 14" (35.5 cm) |

## Scissors

### BUSCH UMBILICAL SCISSORS

KM67294

| ITEM # | DESCRIPTION |
|---|---|
| KM67294 | Curved sideways, 6-1/2" (16.5 cm) |

# OB/GYN

## Scissors

### UMBILICAL SCISSORS

214090

| ITEM # | DESCRIPTION |
|---|---|
| 214090 | 4-1/8" (10.5 cm) |
| KM67292 | Straight, 4-3/8" (11 cm) |

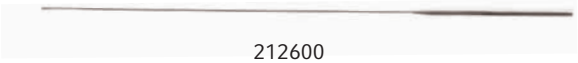
### BRAUN EPISIOTOMY SCISSORS

214081

| ITEM # | DESCRIPTION |
|---|---|
| 214081 | Wide lower blade, angled to side, 8-3/4" (22 cm) |

## Probes, Sounds and Dilators

### EMMETT UTERINE PROBE



212600

| ITEM # | DESCRIPTION |
|---|---|
| 212600 | Stainless steel, 11" (28 cm) |

# OB/GYN

## Probes, Sounds and Dilators

### SIMPSON UTERINE SOUND

212605

| ITEM # | DESCRIPTION |
|---|---|
| 212605 | 4 mm, graduated in inches, silver plated, 12-3/4" (32.5 cm) |

### SIMS UTERINE SOUNDS

212612

| ITEM # | DESCRIPTION |
|---|---|
| 212610 | 4 mm, non-graduated, silver plated, 12-3/4" (32.5 cm) |
| 212612 | 4 mm, graduated in cm, 12-3/4" (32.5 cm) |

### HANK UTERINE DILATORS

212666

Pilling® Pattern, satin finish. Double-ended. 11 sizes. 9-10 Fr. to 29-30 Fr. Length 10-3/4" (27.5 cm). Single dilator only on sizes 9-10 Fr. to 29-30 Fr. Single units.

| ITEM # | DESCRIPTION |
|---|---|
| 212659 | Hank Uterine Dilators, set of 6, sizes 11-12 Fr. to 21-22 Fr. (3.66 to 7.33 mm) |
| 212661 | 9-10 Fr. (3 x 3.3 mm) |
| 212662 | 11-12 Fr. (3.6 x 4 mm) |
| 212663 | 13-14 Fr. (4.3 x 4.7 mm) |
| 212664 | 15-16 Fr. (5 x 5.3 mm) |
| 212665 | 17-18 Fr. (5.7 x 6 mm) |
| 212666 | 19-20 Fr. (6.3 x 6.7 mm) |
| 212667 | 21-22 Fr. (7 x 7.3 mm) |
| 212668 | 23-24 Fr. (7.7 x 8 mm) |
| 212669 | 25-26 Fr. (8.3 x 8.7 mm) |
| 212670 | 27-28 Fr. (9 x 9.3 mm) |
| 212671 | 29-30 Fr. (9.3 x 10 mm) |

### HANK UTERINE DILATORS

752382

Weck® Pattern, bright finish. Double-ended. End lengths 2-1/2" (6.5 cm). Length 10-3/8" (26.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 752380 | 9/10 American (4.5 x 5 mm) |
| 752381 | 11/12 American (5.5 x 6 mm) |
| 752382 | 13/14 American (6.5 x 7 mm) |
| 752383 | 15/16 American (7.5 x 8 mm) |
| 752384 | 17/18 American (8.5 x 9 mm) |
| 752385 | 19/20 American (9.5 x 10 mm) |

# OB/GYN

## Probes, Sounds and Dilators

### HEGAR UTERINE DILATORS

212673

212678

Pilling® Pattern, satin finish. Double-ended, 7-7/8" (20 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 212673 | Set of 8, sizes 3 mm to 18 mm |
| 212675 | Size 3-4 mm |
| 212676 | Size 5-6 mm |
| 212677 | Size 7-8 mm |
| 212678 | Size 9-10 mm |
| 212679 | Size 11-12 mm |
| 212680 | Size 13-14 mm |
| 212681 | Size 15-16 mm |
| 212682 | Size 17-18 mm |

### HEGAR UTERINE DILATORS

752354

Weck® Pattern, bright finish. Double-ended, hollow, 7-7/8" (20 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 752338 | Size 1/2 mm |
| 752347 | Size 19/20 mm |
| 752348 | Size 21/22 mm |
| 752349 | Size 23/24 mm |
| 752351 | Size 25/26 mm |
| 752354 | Complete set in case |

# OB/GYN

## Probes, Sounds and Dilators

### PRATT UTERINE DILATORS

212647

Pilling® Pattern, satin finish. Double-ended, 11-5/8" (29.5 cm). Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 212647 | Set of 8 in canvas case, sizes 13-15 Fr. to 41-43 Fr. |

### PRATT UTERINE DILATORS

752394

Weck® Pattern, bright finish. Double-ended, 11-5/8" (29.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 752390 | Size 13-15 Fr. |
| 752391 | Size 17-19 Fr. |
| 752392 | Size 21-23 Fr. |
| 752393 | Size 25-27 Fr. |
| 752394 | Size 29-31 Fr. |
| 752395 | Size 33-35 Fr. |
| 752396 | Size 37-39 Fr. |
| 752397 | Size 41-43 Fr. |

## Curettes

### HEANEY BIOPSY CURETTE

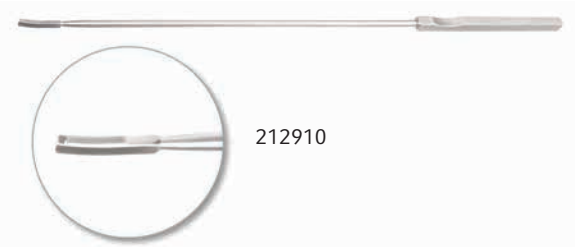
212905

| ITEM # | DESCRIPTION |
|---|---|
| 212905 | 9-3/4" (25 cm) |

# OB/GYN

## Curettes

### KEVORKIAN-YOUNGE BIOPSY CURETTE




Pilling® Pattern.

| ITEM # | DESCRIPTION |
|---|---|
| 212910 | 12-1/8" (31 cm) |

### KEVORKIAN-YOUNGE CURETTES

Sharp tip.

| ITEM # | DESCRIPTION |
|---|---|
| KM64796 | Without basket, 12" (30.5 cm) |
| KM64802 | With basket, 12" (30.5 cm) |

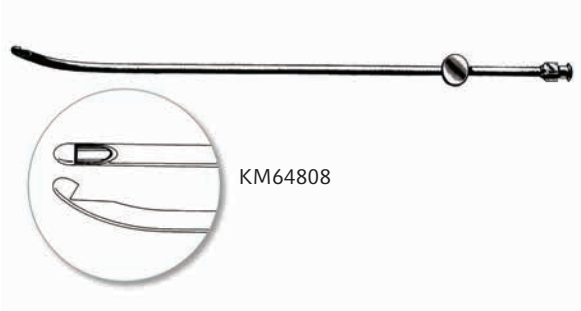
### NOVAK BIOPSY CURETTE

| ITEM # | DESCRIPTION |
|---|---|
| 212930 | Diameter 1/4" (6.5 mm), 9-1/4" (23.5 cm) |

# OB/GYN

## Curettes

### RANDALL SUCTION BIOPSY CURETTE




| ITEM # | DESCRIPTION |
|---|---|
| KM64808 | Sharp, curved, 4 mm diameter, 9-3/4" (25 cm) |

### SIMS UTERINE CURETTES

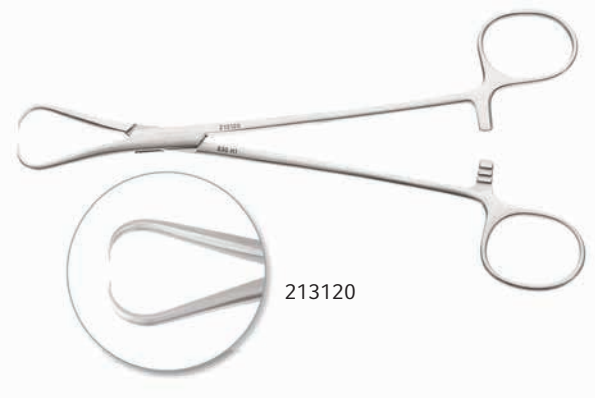
Sharp blades. Malleable shafts.

| ITEM # | DESCRIPTION |
|---|---|
| 212749 | Size 0, 10-7/8" (27.5 cm) |
| 212750 | Size 1, 11-1/4" (28.5 cm) |
| 212751 | Size 2, 11-1/4" (28.5 cm) |
| 212752 | Size 3, 11-3/8" (29 cm) |
| 212753 | Size 4, 11-1/2" (29 cm) |
| 212754 | Size 5, 11-1/2" (29 cm) |
| 212755 | Size 6, 11-5/8" (29.5 cm) |

# OB/GYN

## Tenaculums and Vulsellums

### ADAIR TENACULUM




| ITEM # | DESCRIPTION |
|---|---|
| 213120 | 6-7/8" (17.5 cm) |

### BARRETT TENACULUM

| ITEM # | DESCRIPTION |
|---|---|
| 213110 | 7-1/4" (18.5 cm) |

### BRAUN TENACULUM

| ITEM # | DESCRIPTION |
|---|---|
| 213100 | 9-5/8" (24.5 cm) |

# OB/GYN

## Tenaculums and Vulsellums

### DUPLAY TENACULUM

213085

| ITEM # | DESCRIPTION |
|---|---|
| 213085 | 9-7/8" (25 cm) |

### HULKA TENACULUM AND PROBE

754125

| ITEM # | DESCRIPTION |
|---|---|
| 754125 | Single tooth, probe 4-3/4" (12 cm) w/ 3.6 mm tip, 11-1/8" (28.5 cm) |

### JARCHO TENACULUM

213065

| ITEM # | DESCRIPTION |
|---|---|
| 213065 | 8" (20.5 cm) |

### SCHROEDER TENACULUM

213080

| ITEM # | DESCRIPTION |
|---|---|
| 213080 | 9-7/8" (25 cm) |

# OB/GYN

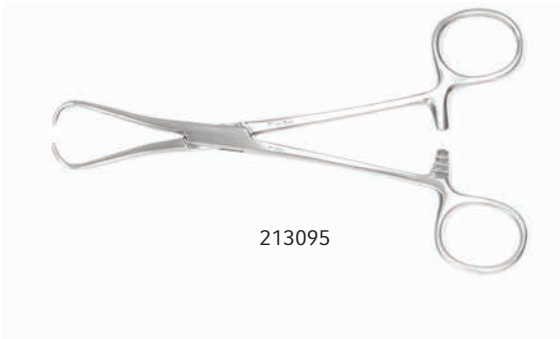
## Tenaculums and Vulsellums

### STAUDE TENACULUM

213090

| ITEM # | DESCRIPTION |
|---|---|
| 213090 | 5-3/8" (13.5 cm) |

### STAUDE-MOORE TENACULUM



213095

| ITEM # | DESCRIPTION |
|---|---|
| 213095 | 6-3/8" (16 cm) |

### WYLIE UTERINE TENACULUM

754160

| ITEM # | DESCRIPTION |
|---|---|
| 754160 | 1 x 2 teeth, 9-1/2" (24 cm) |

# OB/GYN

## Tenaculums and Vulsellums

### HENROTIN VULSELLUM

| ITEM # | DESCRIPTION |
|---|---|
| 213150 | 8-1/4" (21 cm) |

### JACOB'S VULSELLUM FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 213155 | Straight, 2 x 2 teeth, 8-1/4" (21 cm) |
| 213157 | Curved sideways, serrated, 2 x 2 teeth, 8-1/4" (21 cm) |

### KELLY VULSELLUM

| ITEM # | DESCRIPTION |
|---|---|
| 213160 | Curved sideways, 9-1/2" (24 cm) |

# OB/GYN

## Tenaculums and Vulsellums

### M.G.H. VULSELLUM

| ITEM # | DESCRIPTION |
|---|---|
| 213175 | 3 x 3 teeth, 6-1/8" (15.5 cm) |

### SCHROEDER VULSELLUM

| ITEM # | DESCRIPTION |
|---|---|
| 213180 | Straight, 9-7/8" (25 cm) |

### TEALE UTERINE VULSELLUM

| ITEM # | DESCRIPTION |
|---|---|
| 754370 | Curved sideways, 3 x 4 teeth, 9-1/4" (23.5 cm) |

# OB/GYN

## Specula

### GRAVES VAGINAL SPECULA

212001

212005

| ITEM # | DESCRIPTION |
|---|---|
| 212000 | Small, 7/8" (2 cm) blade |
| 212001 | Medium, 1-3/8" (3.5 cm) blade |
| 212002 | Large, 1-1/2" (4 cm) blade |
| 212005 | Medium, right open-sided vaginal specula |

# OB/GYN

## Specula

### PEDERSON VAGINAL SPECULA

212011

Narrow, straight side blades.

| ITEM # | DESCRIPTION |
|---|---|
| 212010 | Small, 3-1/4" x 1/2" (8.5 x 1.5 cm) |
| 212011 | Medium, 3-1/4" x 1" (8.5 x 2.5 cm) |
| 212012 | Large, 4-3/4" x 1" (12 x 2.5 cm) blades |

### SLENDER PEDERSON SPECULUM

KM64288

| ITEM # | DESCRIPTION |
|---|---|
| KM64288 | Narrow blades |

### KOGAN ENDOCERVICAL SPECULUM

KM64830

| ITEM # | DESCRIPTION |
|---|---|
| KM64830 | With gauge and set screw, 9-1/2" (24 cm) |

# OB/GYN

## Specula

### AUVARD WEIGHTED VAGINAL SPECULA

212196

| ITEM # | DESCRIPTION |
|---|---|
| 212195 | 3 lbs., 3" (7.5 cm) |
| 212196 | 2-1/2 lbs., 3-3/8" (8.5 cm) |
| 212197 | 3 lbs., 4" (10 cm) |

### GARRIGUE WEIGHTED VAGINAL SPECULUM

212185

| ITEM # | DESCRIPTION |
|---|---|
| 212185 | Cut-out handle allows drainage. Blade 1-5/8" x 3-1/8" (4 x 8 cm), weight 2 lbs., chrome plated |

### HENROTIN WEIGHTED VAGINAL SPECULUM

212187

| ITEM # | DESCRIPTION |
|---|---|
| 212187 | Blade 1-1/2" x 3-1/2" (3.8 x 9 cm), weight 3 lbs, chrome plated |

# OB/GYN

## Retractors

### DE LEE UNIVERSAL RETRACTOR

212350

| ITEM # | DESCRIPTION |
|---|---|
| 212350 | 3" x 2-1/8" (7.5 x 5.5 cm) blade, 9-1/2" (24 cm) |

### EASTMAN VAGINAL RETRACTORS

212275

| ITEM # | DESCRIPTION |
|---|---|
| 212271 | 1-3/8" x 3-1/4" (3.5 x 8.5 cm) |
| 212275 | 1-3/8" x 3-7/8" (3.5 x 10 cm) |

### HEANEY-SIMON VAGINAL RETRACTOR

212305

| ITEM # | DESCRIPTION |
|---|---|
| 212305 | 1-1/8" x 4-3/4" (2.5 x 12 cm), blade length 11" (28 cm) |

# OB/GYN

## Retractors

### JACKSON VAGINAL RETRACTORS

212264

| ITEM # | DESCRIPTION |
|---|---|
| 212263 | 1-9/16" x 3-1/4" (4 x 8.5 cm) |
| 212264 | 1-9/16" x 3-19/32" (4 x 9 cm) |
| 212265 | 1-19/32" x 4" (4 x 10 cm) |

### PRYOR-PEAN RETRACTOR

212295

| ITEM # | DESCRIPTION |
|---|---|
| 212295 | 1" x 4-1/2" (2.5 x 11.5 cm), blade length 10-3/8" (26.5 cm) |

### SIMS VAGINAL RETRACTORS

212228

Double-ended.

| ITEM # | DESCRIPTION |
|---|---|
| 212225 | 7/8" x 2-5/8" (2 x 6.5 cm) and 1" x 3-1/8" (2.5 x 8 cm) |
| 212226 | 1" x 2-1/2" (2.5 x 6.5 cm) and 1-1/4" x 3" (3 x 7.5 cm) |
| 212227 | 1" x 3-1/4" (2.5 x 8.5 cm) and 1-3/16" x 3-1/2" (3 x 9 cm) |
| 212228 | 1-1/4" x 3" (3 x 7.5 cm) and 1-3/8" x 3-1/4" (3.5 x 8.5 cm) |
| 212229 | 1-3/16" x 3-1/4" (3 x 8.5 cm) and 1-7/16" x 4" (3.5 x 10 cm) |

# OB/GYN

## Retractors

### SIMS VAGINAL RETRACTORS

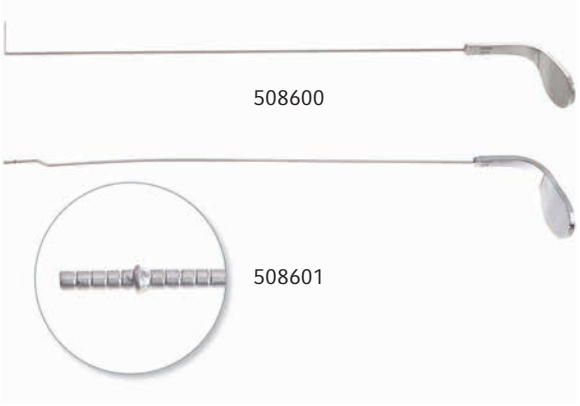
212241

Single-ended.

| ITEM # | DESCRIPTION |
|---|---|
| 212241 | 1-1/8" x 3-5/8" (3 x 9 cm) |
| 212242 | 1-1/2" x 3-1/2" (4 x 9 cm) |

## Laser Instruments

### BELLINA LASER RULERS



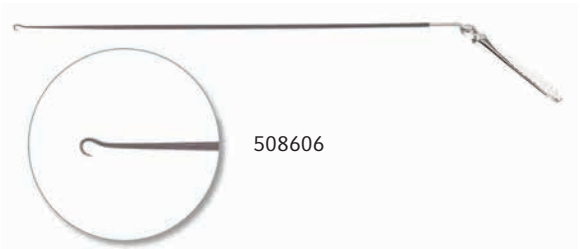
508600

508601

For determining depth and length of tissue for ablation purposes.

| ITEM # | DESCRIPTION |
|---|---|
| 508600 | Lateral ruler, graduated in millimeters up to 15 mm |
| 508601 | Straight ruler, graduated in millimeters with a ridge indicating the 5 mm mark |

### CERVICAL LASER HOOKS



508606

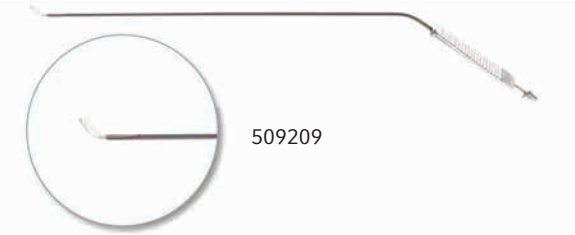
Ebonized for use with laser surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 508605 | Small, 2 mm hook, 6-1/2" (16.5 cm) working length, overall 9-1/2" (24 cm) |
| 508606 | Large, 4 mm hook, 7" (18 cm) working length, overall 9-7/8" (25 cm) |

# OB/GYN

## Laser Instruments

### LASER MIRROR



509209

Highly polished stainless steel front surface mirror. Suction to draw smoke and steam.

| ITEM # | DESCRIPTION |
|---|---|
| 509209 | 6 mm diameter, working length 8-1/4" (21 cm) |

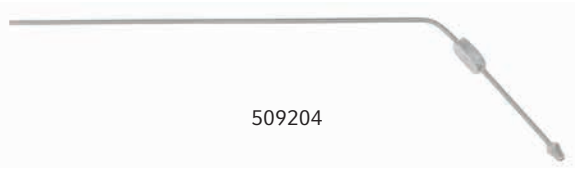
### MILAN-LONDON VACUUM TUBE

508602

Ebonized for use with laser surgery. Clips onto a standard metal Graves speculum for evacuation of smoke and plume.

| ITEM # | DESCRIPTION |
|---|---|
| 508602 | 4-7/8" (12.5 cm) |

### OSSOFF MICRO SUCTION TUBE EBONIZED



509204

Ebonized for use with laser surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 509204 | 7 Fr., working length 7-7/8" (20 cm) |

# OB/GYN

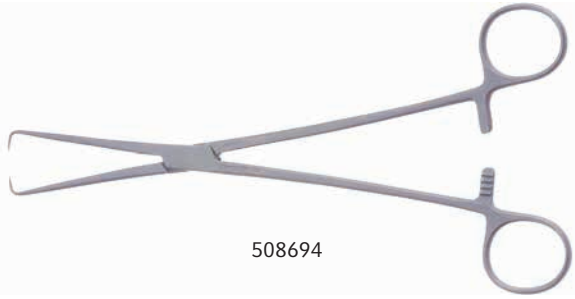
## Laser Instruments

### PILLING® LASER SPECULA

Inner blades are matte finished to help reduce reflection of the laser beam. External blades are polished stainless steel for ease of insertion. One smoke evacuation tube on the upper blade for rapid removal of steam and smoke from the ablated tissue. Available in three sizes.

| ITEM # | DESCRIPTION |
|---|---|
| 508610 | Small |
| 508612 | Medium |
| 508614 | Large |

### SCHROEDER TENACULUM




Ebonized for use with laser surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 508694 | 10" (25.5 cm) |

### THOMS-ALLIS VULSELLUM FORCEPS

Ebonized for use with laser surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 508696 | Straight, 6 x 7 Teeth, 8" (20.5 cm) |

# OB/GYN

## Miscellaneous

### BETHEA SHEET HOLDERS

214770

| ITEM # | DESCRIPTION |
|---|---|
| 214770 | 1" (2.5 cm) wide, 5" (12.5 cm) diameter |

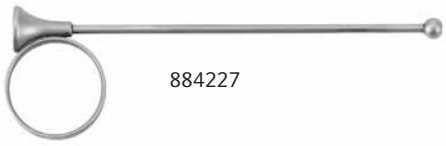
### EMMETT UTERINE TENACULUM HOOKS

KM65490

9" (23 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM65490 | #1, narrow, curved |
| KM65492 | #2, acutely angled |
| KM65494 | #3, slightly angled |
| KM65496 | #4, wide, curved |
| KM65498 | #5, double angled |

### IOWA TRUMPET NEEDLE GUIDE



884227

For paracervical anesthesia.

| ITEM # | DESCRIPTION |
|---|---|
| 884227 | Ball tip 7 mm, 5-1/2" (14 cm) |

# UROLOGY

## Forceps and Clamps

### HERRICK KIDNEY CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| 746550 | Angled, 41 mm jaw with longitudinal serrations, 9" (23 cm) |

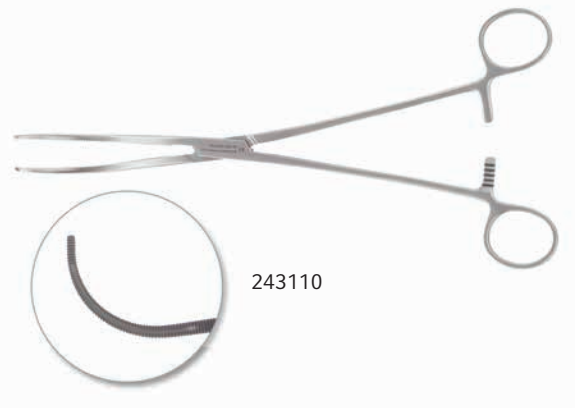
### RANDALL KIDNEY STONE GRASPING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 172650 | #1, 1/4" curved, 9-1/4" (23.5 cm) |
| 172655 | #2, 1/2" curved, 8-1/4" (21 cm) |
| 172660 | #3, 3/4" curved, 7-3/4" (19.5 cm) |
| 172665 | #4, Full Curved, 7-3/8" (18.5 cm) |

# UROLOGY

## Forceps and Clamps

### MAYO VESSEL CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 243110 | Curved, 1-1/2" (4 cm) tip length, 10" (25.5 cm) |

### MCDOUGAL™ PROSTATECTOMY CLAMPS

Secures the dorsal vein complex during radical retropubic prostatectomy. Useful for other deep retropubic or deep pelvic work when approached from the abdomen. Allows easy access in operative site obstructed by the pubis or other structures.

| ITEM # | DESCRIPTION |
|---|---|
| 242005 | Angled left, 1" (2.5 cm) tip length, 9-7/8" (25 cm) |
| 242006 | Angled right, 1" (2.5 cm) tip length, 9-7/8" (25 cm) |

# UROLOGY

## Forceps and Clamps

### VASECTOMY CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| 244001 | No scalpel ring clamp, 3.6 mm ring I.D., 5-1/2" (14 cm) |

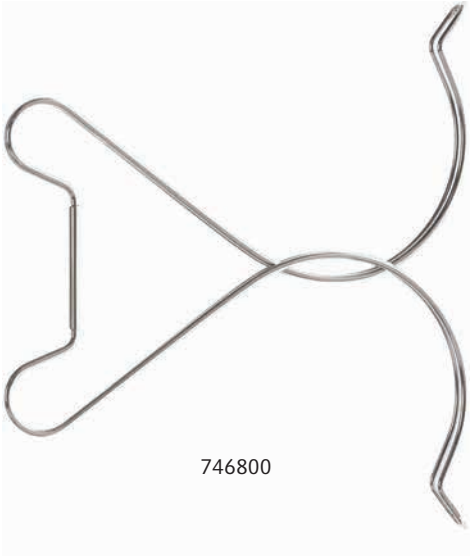
### VASECTOMY FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 244000 | No scalpel hemostat, 19 Ga. tip, sharp, 5-1/8" (13 cm) |

# UROLOGY

## Forceps and Clamps

### ZIPSER PENIS CLAMP



746800

| ITEM # | DESCRIPTION |
|---|---|
| 746800 | 3-3/8" (8.5 cm) |

## Dilators, Sounds and Needles

### DITTEL URETHRAL SOUNDS

KM64014

11-1/2" (29 cm). 1 Fr. = 0.33 mm.

| ITEM # | DESCRIPTION |
|---|---|
| KM64006 | Set of 14 in case |
| KM64008 | 8 Fr., 11-1/2" (29 cm) |
| KM64010 | 10 Fr., 11-1/2" (29 cm) |
| KM64012 | 12 Fr., 11-1/2" (29 cm) |
| KM64014 | 14 Fr., 11-1/2" (29 cm) |
| KM64016 | 16 Fr., 11-1/2" (29 cm) |
| KM64018 | 18 Fr., 11-1/2" (29 cm) |
| KM64020 | 20 Fr., 11-1/2" (29 cm) |
| KM64022 | 22 Fr., 11-1/2" (29 cm) |
| KM64024 | 24 Fr., 11-1/2" (29 cm) |
| KM64026 | 26 Fr., 11-1/2" (29 cm) |
| KM64028 | 28 Fr., 11-1/2" (29 cm) |
| KM64030 | 30 Fr., 11-1/2" (29 cm) |
| KM64032 | 32 Fr., 11-1/2" (29 cm) |
| KM64034 | 34 Fr., 11-1/2" (29 cm) |

# UROLOGY

## Dilators, Sounds and Needles

### VAN BUREN URETHRAL DILATORS

241120

10-7/8" (27.5 cm), even sizes, 8 Fr. to 32 Fr.

| ITEM # | DESCRIPTION |
|---|---|
| 241108 | 8 Fr. |
| 241110 | 10 Fr. |
| 241112 | 12 Fr. |
| 241114 | 14 Fr. |
| 241116 | 16 Fr. |
| 241118 | 18 Fr. |
| 241120 | 20 Fr. |
| 241122 | 22 Fr. |
| 241124 | 24 Fr. |
| 241126 | 26 Fr. |
| 241128 | 28 Fr. |
| 241130 | 30 Fr. |
| 241132 | 32 Fr. |

### LITVAK PEREYRA LIGATURE NEEDLE

214687

| ITEM # | DESCRIPTION |
|---|---|
| 214687 | 9-7/8" (25 cm) |

### STAMEY NEEDLES

214688

Used in conjunction with the treatment of urinary incontinence in the female.

| ITEM # | DESCRIPTION |
|---|---|
| 214688 | Straight, 9-3/4" (25 cm) |
| 214689 | Angled 15 degrees, 9-3/4" (25 cm) |
| 214691 | Angled 30 degrees, 9-3/4" (25 cm) |

# UROLOGY

## Catheter Guides

### FEMALE CATHETER SILVERS

740166

| ITEM # | DESCRIPTION |
|---|---|
| 740165 | 14 Fr., 5-7/8" (15 cm) |
| 740166 | 16 Fr., 5-7/8" (15 cm) |

### GUYON CATHETER GUIDE

746797

| ITEM # | DESCRIPTION |
|---|---|
| 746797 | 9 Fr., 13-1/4" (33.5 cm) |

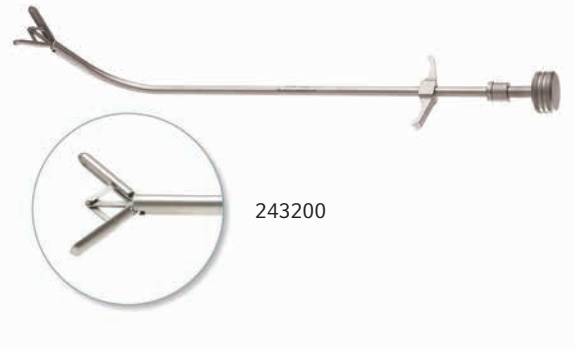
### VAN BUREN CATHETER GUIDE

746798

| ITEM # | DESCRIPTION |
|---|---|
| 746798 | 9 Fr., 13-3/4" (35 cm) |

## Retractors

### LOWSLEY PROSTATIC RETRACTORS



243200

| ITEM # | DESCRIPTION |
|---|---|
| 243200 | Curved, 9-1/2" (24 cm) |
| 243201 | Straight, 12-7/8" (32.5 cm) |

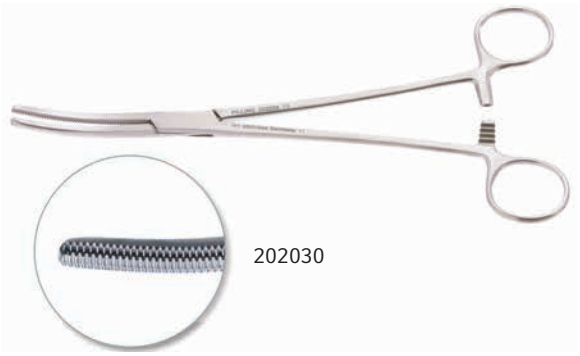
# RECTAL

## Forceps and Clamps

### BARRON HEMORRHOIDAL ALLIGATOR SEIZING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 202970 | 5 x 6 teeth, 11-3/4" (30 cm) |

### BUIE PILE CLAMP




Angiotribe jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 202030 | Curved, serrated, 5/8" (16 mm) tip length, 8-7/8" (22.5 cm) |

### FERGUSON ANGIOTRIBE FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| KM36816 | Straight, 6-1/2" (16.5 cm) |
| KM36818 | Curved, 6-1/2" (16.5 cm) |
| KM36826 | Straight, 7-1/2" (19 cm) |
| KM36828 | Curved, 7-1/2" (19 cm) |

# RECTAL

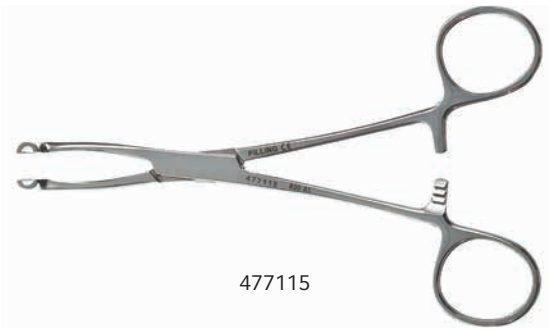
## Forceps and Clamps

### MCGIVNEY FORCEPS

KM63503

| ITEM # | DESCRIPTION |
|---|---|
| KM63503 | Angled shanks, 7-1/2" (19 cm) |

### PRATT "T" FORCEPS

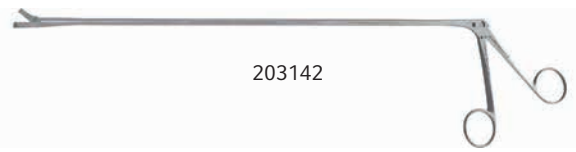


477115

Concave, T-shaped jaws, with serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 477115 | 6" (15 cm) |

### RECTAL BIOPSY FORCEPS



203142

| ITEM # | DESCRIPTION |
|---|---|
| 203142 | Oval, basket punch type. 13.5 x 4 mm jaw, 14-1/2" (37 cm) |

# RECTAL

## Forceps and Clamps

### ROTATING RECTAL BIOPSY FORCEPS

204004

204016

204018

Positive, universal handle. Curved upper jaw and serrated lower jaw give firm grasp and clean cut of tissue. Stems are rotatable full 360 degrees. Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 204004 | 10" (25.5 cm) stem only. Straight jaw. |
| 204016 | 13-7/8" (35 cm) stem only. Angular jaw. |
| 204018 | Handle only. |

# RECTAL

## Retractors and Specula

### HILL FERGUSON RECTAL RETRACTORS

730296

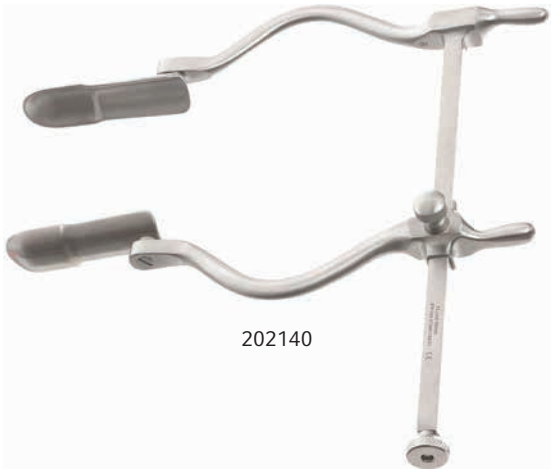
| ITEM # | DESCRIPTION |
|---|---|
| 730295 | Blade 2-3/8" x 1" (6 x 2.5 cm), 8-1/2" (21.5 cm) |
| 730296 | Blade 2-3/4" x 1-1/8" (7 x 3 cm), 9-1/2" (24 cm) |

### SAWYER RECTAL RETRACTORS

202151

| ITEM # | DESCRIPTION |
|---|---|
| 202150 | Small, blades 2-1/2" x 7/8" (6.5 x 2 cm), 10-5/8" (27 cm) |
| 202151 | Medium, blades 3" x 1-1/8" (7.5 x 3 cm), 11" (28 cm) |

### SMITH RECTAL RETRACTOR



202140

| ITEM # | DESCRIPTION |
|---|---|
| 202140 | Blade 2-13/16" (7 cm), 8-7/8" (22.5 cm) spread |

# RECTAL

## Retractors and Specula

### BODENHAMMER RECTAL SPECULUM

KM63300

| ITEM # | DESCRIPTION |
|---|---|
| KM63300 | Set screw, solid blades, 6" (15 cm) |

### BRINKERHOFF RECTAL SPECULA

KM63354

| ITEM # | DESCRIPTION |
|---|---|
| KM63354 | Small |
| KM63352 | Medium |
| KM63350 | Large |

# RECTAL

## Retractors and Specula

### FANSLER OPERATING SPECULUM

202105

| ITEM # | DESCRIPTION |
|---|---|
| 202105 | Slotted tube 2-3/8" (6 cm) long, 1-1/4" (3 cm) |

### FANSLER-IVES RECTAL SPECULA

KM63319

| ITEM # | DESCRIPTION |
|---|---|
| KM63318 | Chrome speculum with obturator |
| KM63319 | Rubber obturator only |

# RECTAL

## Retractors and Specula

### PRATT RECTAL SPECULA

| ITEM # | DESCRIPTION |
|---|---|
| 202060 | Large, blades 3-3/8" (8.5 cm) long, 1" (2.5 cm) diameter |
| 202062 | Small, blades 3-1/2" (9 cm) long, 3/4" (2 cm) diameter |

### SIMS RECTAL SPECULUM

| ITEM # | DESCRIPTION |
|---|---|
| 202067 | Fenestrated blades 3-1/2" (9 cm) long, 3/4" (2 cm) diameter |

# RECTAL

## Retractors and Specula

### HIRSCHMAN ANOSCOPES

202095

| ITEM # | DESCRIPTION |
|---|---|
| 202095 | Small, 5/8" (16 mm) tip diameter, 2-1/2" (6.5 cm) |
| 202096 | Medium, 3/4" (19 mm) tip diameter, 2-3/4" (7 cm) |
| 202097 | Large, 7/8" (22 mm) tip diameter, 2-3/4" (7 cm) |

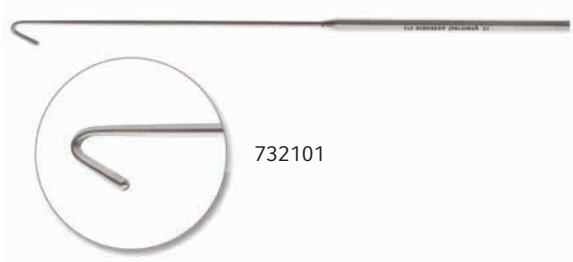
## Miscellaneous

### BARR CRYPT HOOK

202623

| ITEM # | DESCRIPTION |
|---|---|
| 202623 | Double-ended, 10-1/8" (25.5 cm) |

### MARTIN RECTAL HOOK



732101

| ITEM # | DESCRIPTION |
|---|---|
| 732101 | Hook 9 x 2 mm, 7" (18 cm) |

# RECTAL

## Miscellaneous

### PRATT CRYPT HOOK

202635

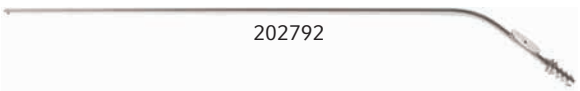
| ITEM # | DESCRIPTION |
|---|---|
| 202635 | Small hook, 8-7/8" (22.5 cm) |

### STEWART RECTAL HOOK

202630

| ITEM # | DESCRIPTION |
|---|---|
| 202630 | 7/8" (22 mm) hook, 8-7/8" (22.5 cm) |

### BUIE SUCTION TUBES



202792

Distal and side openings.

| ITEM # | DESCRIPTION |
|---|---|
| 202792 | Thumb valve control model, 15 Fr. diameter, 17" (43 cm) |

### LARRY PROBE AND GROOVE DIRECTOR

202600

| ITEM # | DESCRIPTION |
|---|---|
| 202600 | 5-7/8" (15 cm) |

# MISCELLANEOUS GENERAL

## Probes, Cannulae and Dilators

### WILLIAMS LACRIMAL PROBES

166490

5-1/8" (13 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 166480 | Size 1-2 |
| 166485 | Size 3-4 |
| 166490 | Size 5-6 |
| 166495 | Size 7-8 |

### BOWMAN LACRIMAL PROBES

426096

Sterling silver, 4-7/8" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 426090 | Size 0000-000 |
| 426092 | Size 00-0 |
| 426094 | Size 1-2 |
| 426096 | Size 3-4 |
| 426098 | Size 5-6 |
| 427002 | Size 7-8 |

### DOUBLE-ENDED PROBES



166573

Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 166571 | 5-1/8" (13 cm) |
| 166573 | 6-1/8" (15.5 cm) |

### GROOVED DIRECTOR AND TONGUE TIES

166611

Plain end, stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 166610 | 4-1/2" (11.5 cm) |
| 166611 | 5-1/8" (13 cm) |
| 166612 | 5-3/4" (14.5 cm) |
| 166613 | 6-1/4" (16 cm) |

### GROOVED DIRECTORS

166632

Probe point, stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 166632 | 5-1/2" (14 cm) |
| 166633 | 6-1/4" (16 cm) |

# MISCELLANEOUS GENERAL

## Probes, Cannulae and Dilators

### PROBES WITH PROXIMAL EYE

166503



KM42618

Malleable, stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 166500 | 4-1/2" (11.5 cm) |
| 166501 | 5-1/8" (13 cm) |
| 166502 | 5-3/4" (14.5 cm) |
| 166503 | 5-7/8" (15 cm) |
| 166504 | 7-1/8" (18 cm) |
| 166505 | 7-7/8" (20 cm) |
| 166507 | 9-7/8" (25 cm) |
| KM42618 | 10" (25.5 cm) |

### PROBES WITH PROXIMAL EYE

166523

Sterling silver.

| ITEM # | DESCRIPTION |
|---|---|
| 166520 | 4-1/2" (11.5 cm) |
| 166521 | 5-1/8" (13 cm) |
| 166522 | 5-3/4" (14.5 cm) |
| 166523 | 5-7/8" (15 cm) |
| 166527 | 9-7/8" (25 cm) |

### PATTERSON TROCAR AND CANNULA

534203

Stainless steel trocar tip with chrome plated handle allows for easy catheter insertion.

| ITEM # | DESCRIPTION |
|---|---|
| 534201 | Size 1, for 14 Fr. catheter, 7-3/4" (19.5 cm) |
| 534202 | Size 2, for 20 Fr. catheter, 8" (20.5 cm) |
| 534203 | Size 3, for 26 Fr. catheter, 8" (20.5 cm) |

# MISCELLANEOUS GENERAL

## Probes, Cannulae and Dilators

### BAKES COMMON DUCT DILATORS SET

172700

| ITEM # | DESCRIPTION |
|---|---|
| 172700 | Malleable stainless steel shafts. 9 tip sizes, 3 to 11 mm. Overall length 8-1/2" (21.5 cm). Set of 9 in plastic case. |

## Measuring Devices

### RULERS

KM39694

Flexible, graduated in inches and millimeters.

| ITEM # | DESCRIPTION |
|---|---|
| KM39692 | 6" (15 cm) |
| KM39694 | 8" (20.5 cm) |
| KM39698 | 12" (30.5 cm) |
| KM39700 | 20" (51 cm) |

### CENTIMETER SUBTRACTION RULER

504075

For accurate calculation, by subtraction, of the depth to which a scope has been inserted.

| ITEM # | DESCRIPTION |
|---|---|
| 504075 | 30 cm |

### KUNTSCHER X-RAY SCALE

KM48299

Ruler for X-rays.

| ITEM # | DESCRIPTION |
|---|---|
| KM48299 | Graduated in millimeters, 50 cm length (19-5/8") |

# MISCELLANEOUS GENERAL

## Measuring Devices

### MEASURING TAPE

KM48313

| ITEM # | DESCRIPTION |
|---|---|
| KM48313 | Linen, graduated in inches and centimeters up to 150 cm |

### POLK FINGER GONIOMETER

KM48310

Graduated in centimeters and inches.

| ITEM # | DESCRIPTION |
|---|---|
| KM48310 | 6" (15 cm) |

### ANGLE FINDER

KM48247

| ITEM # | DESCRIPTION |
|---|---|
| KM48247 | 4-1/8" (10.5 cm) |

# MISCELLANEOUS GENERAL

## Measuring Devices

### CASTROVIEJO CALIPERS

KM53042

428630

| ITEM # | DESCRIPTION |
|---|---|
| KM53042 | Graduated to 40 mm, 6-1/2" (16.5 cm) |
| 428630 | Straight, 0-20 mm scale, 3-3/8" (8.5 cm) |

### BONE COMPASS

KM48302

| ITEM # | DESCRIPTION |
|---|---|
| KM48302 | 8" (20.5 cm) |

### NEURO-CALIPER

KM48315

Inside measuring faces are extra-long (60 mm) for neurosurgery.

| ITEM # | DESCRIPTION |
|---|---|
| KM48315 | Graduated in inches and millimeters up to 5-3/4" (14.5 cm), inside and outside measuring, faces and depth bar, 9" (23 cm) |

# MISCELLANEOUS GENERAL

## Measuring Devices

### TOWNLEY FEMUR CALIPER

KM48314

| ITEM # | DESCRIPTION |
|---|---|
| KM48314 | Takes inside and outside measurements up to 4" (10 cm) |

## Dermal Instruments

### FOX CURETTES

KM29498

Round, 5-1/2" (14 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM29495 | 1 mm |
| KM29496 | 2 mm |
| KM29497 | 3 mm |
| KM29498 | 4 mm |
| KM29499 | 5 mm |
| KM29500 | 6 mm |

### GREG COMDONE EXTRACTOR

KM29606

| ITEM # | DESCRIPTION |
|---|---|
| KM29606 | One fenestrated cup and lancet blade with cap, 5" (12.5 cm) |

# MISCELLANEOUS GENERAL

## Dermal Instruments

### KEYES DERMAL SKIN PUNCHES

KM29513

Straight, sharp ring. 4" (10 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM29511 | 2 mm |
| KM29512 | 3 mm |
| KM29513 | 4 mm |
| KM29514 | 5 mm |
| KM29515 | 6 mm |
| KM29517 | 7 mm |

### KMEDIC® COMDONE EXTRACTOR (WALTON)

KM29604

| ITEM # | DESCRIPTION |
|---|---|
| KM29604 | One fenestrated cup and curved lancet with cap |

### PIFFARD CURETTES

KM29505

Oval, 5-1/2" (14 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM29503 | #1 small |
| KM29505 | #2 medium |
| KM29507 | #3 large |

### SAALFELD COMDONE EXTRACTOR

KM29566

| ITEM # | DESCRIPTION |
|---|---|
| KM29566 | Extra-fine, with lancet and one fenestrated cup, 4-1/2" (11.5 cm) |

# MISCELLANEOUS GENERAL

## Dermal Instruments

### SCHAMBERG COMDONE EXTRACTORS

KM29582

3-3/4" (9.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM29580 | Standard, crimped loops |
| KM29582 | Extra-fine, crimped loops |
| KM29584 | Square loops |

### UNNA COMDONE EXTRACTOR

KM29592

| ITEM # | DESCRIPTION |
|---|---|
| KM29592 | Fenestrated spoon ends, 5-3/4" (14.5 cm) |

## Ligature Carriers

### DESCHAMPS LIGATURE CARRIERS

152255

| ITEM # | DESCRIPTION |
|---|---|
| 152255 | Blunt point, left curved, 8-1/8" (20.5 cm) |
| 152256 | Blunt point, right curved, 8-1/8" (20.5 cm) |

# MICRO CLIPS AND APPLIERS

## Temporary Vessel Clips

### KLEINERT-KUTZ MICRO VESSEL CLIPS

065105

| ITEM # | DESCRIPTION |
|---|---|
| 065100 | Straight blade, 1 x 3 mm, 0.34" (8.5 mm) |
| 065105 | Straight blade, 1 x 5 mm, 0.40" (10 mm) |

### KLEINERT-KUTZ MICRO VESSEL CLIPS

065145

| ITEM # | DESCRIPTION |
|---|---|
| 065125 | Angled blade, 1 x 6 mm |
| 065145 | Curved blade, 1 x 5 mm |

### TEMPORARY OCCLUSION CLIPS

065108

| ITEM # | DESCRIPTION |
|---|---|
| 065108 | 7 x 2 mm blade |
| 065109 | 12 x 2 mm blade |

# MICRO CLIPS AND APPLIERS

## Temporary Vessel Clips

### MINI WECK® MICRO VESSEL APPROXIMATOR

065166

| ITEM # | DESCRIPTION |
|---|---|
| 065166 | 5 x 1 mm blades, 7/16" (11 mm) bar |

### LOUISVILLE MICRO VESSEL APPROXIMATOR WITH CLIPS

065172

With suture staying frame.

| ITEM # | DESCRIPTION |
|---|---|
| 065172 | 1.5 x 8 mm blades, 1/2" (12.5 mm) bar |
| 065173 | 1 x 5 mm blades, 7/16" (11 mm) bar |

# MICRO CLIPS AND APPLIERS

## Temporary Vessel Clips

### WECK® MICRO VESSEL APPROXIMATORS

065170

| ITEM # | DESCRIPTION |
|---|---|
| 065165 | 1.5 x 7.5 mm blades, 1/2" (12.5 mm) bar |
| 065170 | 1.5 x 7.5 mm blades, 3/4" (19 mm) bar |

### ULNAR RADIAL APPROXIMATOR

065190

| ITEM # | DESCRIPTION |
|---|---|
| 065190 | 12 x 12 mm blades, 1" (25.5 mm) bar |

# MICRO CLIPS AND APPLIERS

## Temporary Vessel Clips

### BRACHIAL LARGE VESSEL APPROXIMATORS

065195

| ITEM # | DESCRIPTION |
|---|---|
| 065195 | 14 mm uniform blades, 1" (25.5 mm) bar |
| 065196 | 14 mm tapered blades, 1" (25.5 mm) bar |

### BRACHIAL LARGE VESSEL CLIPS

065110

| ITEM # | DESCRIPTION |
|---|---|
| 065110 | 24 mm straight blade |
| 065111 | 24 mm tapered blade |

### VAN BEEK NERVE APPROXIMATORS

065151

| ITEM # | DESCRIPTION |
|---|---|
| 065151 | For median ulna nerves, 15 mm blade, 1" (25.5 mm) bar, 28 Ga. needles |
| 065152 | 10 mm blade, 5/8" (16 mm) bar |

### VASOVASOSTOMY APPROXIMATOR

065181

| ITEM # | DESCRIPTION |
|---|---|
| 065181 | 12 mm blades with serrated 2 mm cups, 3/4" (19 mm) bar |

# MICRO CLIPS AND APPLIERS

## Temporary Vessel Clips

### APPROXIMATION CLAMP

KM44030

| ITEM # | DESCRIPTION |
|---|---|
| KM44030 | Without suture holding frame, 1/2" (12.5 mm) |

### MICRO CLAMP APPLICATOR

KM44028

For Approximation Clamp KM44030.

| ITEM # | DESCRIPTION |
|---|---|
| KM44028 | 5-1/2" (14 cm) |

### KLEINERT-KUTZ MICRO CLIP APPLYING FORCEPS

065155

| ITEM # | DESCRIPTION |
|---|---|
| 065155 | 2-1/2" (6.5 cm) |

### RIZZUTI ANGLED MICRO CLIP APPLYING FORCEPS

065175

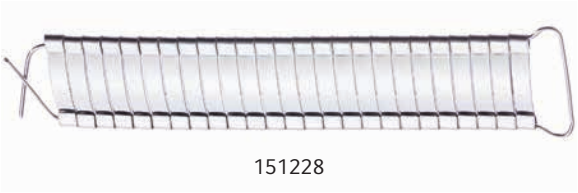
Applier opens approximator simultaneously or individually.

| ITEM # | DESCRIPTION |
|---|---|
| 065175 | 5-1/2" (14 cm) |

# MICRO CLIPS AND APPLIERS

## Temporary Vessel Clips

### MICHEL SKIN CLIPS



151228

| ITEM # | DESCRIPTION |
|---|---|
| 151222 | 11 mm, nickel silver, package of 100 |
| 151228 | 18 mm, nickel silver, package of 100 |

### MICHEL CLIP APPLYING FORCEPS

KM42254

| ITEM # | DESCRIPTION |
|---|---|
| KM42254 | 5" (12.5 cm) |

### RICHTER HEATH CLIP FORCEPS

151240

Removing forceps.

| ITEM # | DESCRIPTION |
|---|---|
| 151240 | 5-1/2" (14 cm) |

### MICHEL CLIP FORCEPS

151210

Applying and removing forceps.

| ITEM # | DESCRIPTION |
|---|---|
| 151210 | 4-3/4" (12 cm) |

# MICRO CLIPS AND APPLIERS

## Temporary Vessel Clips

### WACHENFELDT CLIP APPLYING AND REMOVING FORCEPS

KM42256

KM42258

| ITEM # | DESCRIPTION |
|---|---|
| KM42256 | 5" (12.5 cm) |
| KM42258 | Cross-action, 5" (12.5 cm) |

### MICRO CLAMP CASE

KM44031

| ITEM # | DESCRIPTION |
|---|---|
| KM44031 | 2-3/4" x 1-3/4" x 3/8" (70 x 44 x 9.5 mm) |

### MICRO CLIP STERILIZING TRAY

065199

| ITEM # | DESCRIPTION |
|---|---|
| 065199 | 1-3/4" x 2-3/4" x 1/2" (4.5 x 7 x 1.5 cm) |

# INSTRUMENT ACCESSORIES

## Containers and Trays

### 1 MM FINE PERFORATED CASES

087702

| ITEM # | DESCRIPTION |
|---|---|
| 087702 | Micro perforated utility case with sliding micro perforated lid, 3-1/2" x 3-1/2" x 3/4" |

### ALUMINUM UTILITY CASES

087750

Case includes lid and ultrasoft, silicon mat. Five-year warranty against defects in materials and workmanship.

| ITEM # | DESCRIPTION |
|---|---|
| 087747 | 4" x 8" x 3/4" |
| 087748 | 8-1/4" x 12-1/4" x 1" |
| 087749 | 8" x 14" x 1" |
| 087750 | 10" x 6" x 1" |

# INSTRUMENT ACCESSORIES

## Containers and Trays

### MICRO INSTRUMENT TRAYS

429601

Nylon coated and autoclavable. Stainless steel, with silicone racks. Perforated on top and bottom.

| ITEM # | DESCRIPTION |
|---|---|
| 429594 | Color coded blue, 8" x 12-1/2" (20.5 x 31.5 cm) |
| 429601 | Color coded red, 10-1/2" x 15" (26.5 x 38 cm) |

### DILATOR INSTRUMENT TRAYS

355286

355291

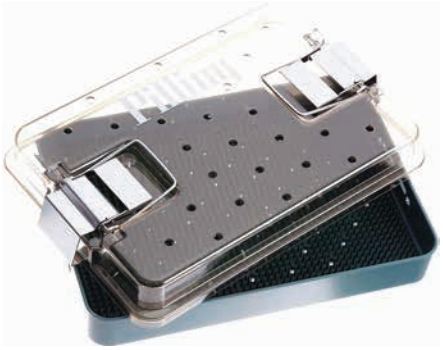
| ITEM # | DESCRIPTION |
|---|---|
| 355286 | DeBakey® Dilator Tray for 355285 (page 769), tray only, small, 5-3/4" x 9-1/4" x 3/4", holds 12 dilators |
| 355291 | DeBakey® Dilator Tray for 355290 (page 769), tray only, large, 5-3/4" x 16-3/4" x 3/4", holds 12 dilators |

# INSTRUMENT ACCESSORIES

## Containers and Trays

### POLYSULFONE STERILIZATION TRAYS

508002



508004

Polysulfone with lid. With silicone finger mat.

| ITEM # | DESCRIPTION |
|---|---|
| 508002 | 9-1/2" x 5-1/2" x 2-1/2" (24 x 14 x 6.5 cm) |
| 508004 | 9" x 13" x 1-3/4" (23 x 33 x 4.5 cm) |
| 521185 | 11" x 7" x 2" (28 x 18 x 5 cm) |
| 521186 | 10-3/4" x 12-3/4" (27.5 x 32.5 cm) |
| 521187 | 10-1/4" x 19-3/4" (26 x 50 cm) |

521185

### FLASH TRAYS

806024

| ITEM # | DESCRIPTION |
|---|---|
| 806024 | 10" x 6-1/2" x 2-1/2" (25.5 x 16.5 x 6.5 cm) |
| 806098 | 9" x 5" x 2" (23 x 12.5 x 5 cm) |

### SAFETY HANDLE

806026

Use with Flash Trays, 806024 and 806098.

| ITEM # | DESCRIPTION |
|---|---|
| 806026 | 10-1/8" (25.5 cm) |

# INSTRUMENT ACCESSORIES

## Containers and Trays

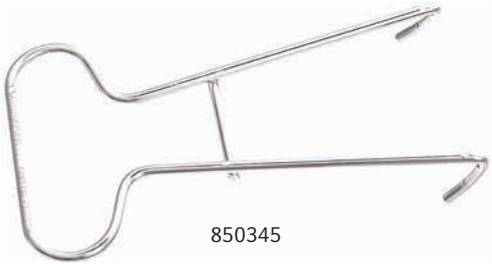
### STERILIZATION TRAYS

850360

Trays with handles and perforated bottoms.

| ITEM # | DESCRIPTION |
|---|---|
| 850350 | 10-3/8" x 10" x 3" (26.3 x 25.4 x 7.6 cm) |
| 850355 | 10-3/8" x 15" x 3" (26.3 x 38.1 x 7.6 cm) |
| 850360 | 10-3/8" x 20" x 3" (26.3 x 50.8 x 7.6 cm) |
| 101050 | 10" x 6-1/2" x 2-1/2" (25.5 x 16.5 x 6.5 cm), mesh bottom |
| 101054 | 13" x 20-1/4" x 3-1/2" (33 x 51.5 x 9 cm), mesh bottom |
| 101061 | 9-1/4" x 6-1/2" x 3/4" (23.5 x 16.5 x 2 cm), perforated bottom |

### REPLACEMENT TRAY HANDLE



850345

| ITEM # | DESCRIPTION |
|---|---|
| 850345 | Replacement handle for use with Weck® Special Trays (850325, 850330, 850340) |

### MULTIPURPOSE STAINLESS STEEL TRAYS

806040

Removable locking lid stores easily under tray during use.

| ITEM # | DESCRIPTION |
|---|---|
| 806034 | Stainless steel sterilizing tray with lid, 3-1/4" x 7" x 1-3/4" (8.5 x 18 x 4.5 cm) |
| 806040 | Stainless steel sterilizing tray with lid, 6" x 30" x 3-1/2" |
| 806048 | Stainless steel sterilizing tray with lid, 15" x 10-1/2" x 3-1/2" |
| 806050 | Stainless steel sterilizing tray with lid, 20" x 10-1/2" x 3-1/2" |
| 806052 | Stainless steel sterilizing tray with lid, 20-1/4" x 13" x 3-1/2" |

# INSTRUMENT ACCESSORIES

## Containers and Trays

### INSTRUMENT STERILIZATION TRAY

101075

This stainless steel tray is designed to accommodate all of the component parts of our Wishbone, Bariatric, Poly-Tract Full Abdominal or Upper Abdominal Retractor Systems, or a set or two of our bougies.

| ITEM # | DESCRIPTION |
|---|---|
| 101075 | Includes lid, 32" x 7" x 7" (81 x 18 x 18 cm) |

### HIGH MAYO PERFORATED TRAYS

806070

| ITEM # | DESCRIPTION |
|---|---|
| 806068 | 9" x 5" x 1-3/4" (23 x 12.5 x 4.5 cm) |
| 806070 | 10" x 6-1/2" x 2" (25.5 x 16.5 x 5 cm) |
| 806072 | 12-3/4" x 10-1/2" x 2-3/4" (31.5 x 26.5 x 7 cm) |
| 806074 | 12-1/4" x 7-3/4" x 2" (31 x 19.5 x 5 cm) |
| 806076 | 16-1/2" x 10" x 2-1/2" (42 x 25.5 x 6.5 cm) |
| 806078 | 20 3/4" x 12-3/4" x 2-1/2" (52.5 x 32.5 x 6.5 cm) |

### INSTRUMENT TRAYS

960364

| ITEM # | DESCRIPTION |
|---|---|
| 960364 | 12-1/4" x 7-3/4" x 2" (31 x 19.5 x 5 cm) |

### MAYO TRAYS

471210

Solid bottom.

| ITEM # | DESCRIPTION |
|---|---|
| 471185 | Tray 9" x 5" x 2" (23 x 12.5 x 5 cm) |
| 471210 | Tray 15-1/8" x 10-1/2" x 5/8" (38.5 x 26.5 x 1.5 cm) |
| 471175 | Tray 16-1/2" x 10" x 2-1/2" (42 x 25.5 x 6.5 cm) |
| 471215 | Tray 17-1/8" x 11-5/8" x 5/8" (43.5 x 29.5 x 1.5 cm) |

# INSTRUMENT ACCESSORIES

## Containers and Trays

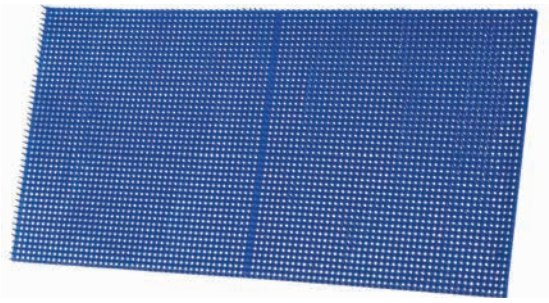
### PERFORATED MAYO TRAYS

806064

Perforated bottom.

| ITEM # | DESCRIPTION |
|---|---|
| 806058 | 13-3/4" x 9-3/4" x 1/2" (35 x 24.5 x 1 cm) |
| 806060 | 15" x 10-1/2" x 3/4" (38 x 26.5 x 2 cm) |
| 806062 | 17" x 11-5/8" x 1/2" (43 x 29.5 x 1 cm) |
| 806064 | 19" x 12-3/4" x 3/4" (48 x 32.5 x 19 cm) |
| 806066 | 21-1/4" x 16-1/4" x 3/4" (54 x 41 x 19 cm) |

### SILICONE MATS



087396

| ITEM # | DESCRIPTION |
|---|---|
| 087403 | Ultrasoft spike mat, 11" x 11" |
| 087419 | Ultrasoft spike mat, 11" x 16" |
| 087420 | Ultrasoft spike mat, 11" x 20-1/4" |
| 087396 | Ultrasoft spike mat, 11" x 22" |
| 087405 | Ultrasoft spike mat, 13" x 20-1/4" |
| 720000M | For Pilling® Laparoscopic Instrument Tray 720000 (page 1149) |
| 720001M | For Pilling® Laparoscopic Instrument Tray 720001 (page 1149) |

### PATE TRAY POSTS

850310

| ITEM # | DESCRIPTION |
|---|---|
| 850310 | Special posts to hold instruments in Weck® Special Trays (850325, 850330, 850340), package of a dozen |

# PILLING® STERILIZATION CASE & TRAY SOLUTIONS

## Organize. Protect. Store and Deliver Your Surgical Instruments.

### QUALITY & DURABILITY

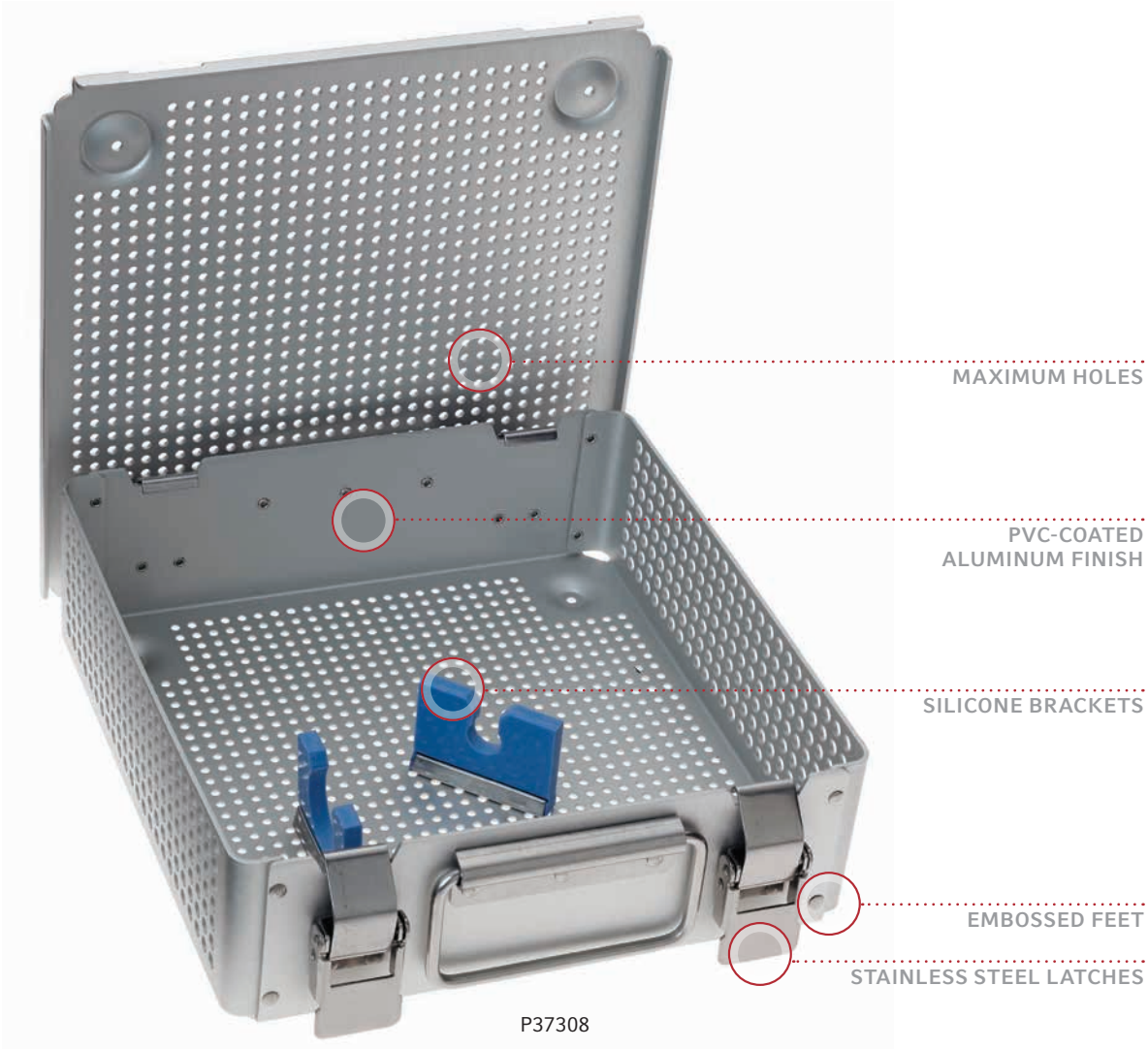
- Embossed feet will not break, fall off, tear wrap or hang up on wire racks.
- Tough and resilient silicone brackets with stainless steel channel.
- Strong stainless steel latches remain functional for years.
- PVC-coated aluminum provides a smoother "satin-like" finish on all anodized metal parts – instead of a heavy grain finish.

### CUSTOMIZABLE WITH SILICONE BRACKETS AND ACCESSORIES

- Customize trays with available accessories to accommodate various instrument geometries.

### PROCESSING FUNCTIONALITY

- Maximum holes results in a lighter instrument case.
- Maximum sterilant penetration.
- Improved drainage.




P37308

# INSTRUMENT ACCESSORIES

## Sterilization Case and Tray Solutions

### SCOPE CASE

P37314

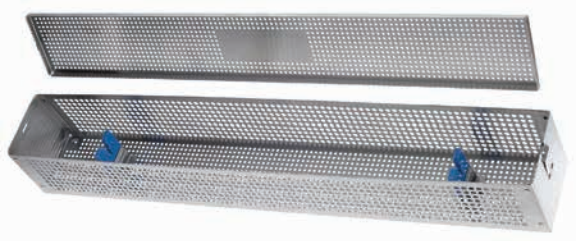
| ITEM # | DESCRIPTION |
|---|---|
| P37314 | For 2 - 4 scopes, with brackets,<br>ext. size: 4" x 17-1/2" x 1-1/2" (10 x 44.5 x 4 cm)<br>int. size: 3.57" x 17.19" x 1.35" (9 x 43.5 x 3.5 cm) |

### SCOPE CASE

P37319

| ITEM # | DESCRIPTION |
|---|---|
| P37319 | For up to 5 scopes/instruments, with brackets,<br>ext. size: 6-1/2" x 31" x 3" (16.5 x 78.5 x 7.5 cm)<br>int. size: 6" x 30" x 2.5" (15 x 76 x 6.5 cm) |

### SCOPE CASES



P37318

| ITEM # | DESCRIPTION |
|---|---|
| P37310 | Without brackets,<br>ext. size: 3" x 11" x 2-1/2" (7.5 x 28 x 6.5 cm)<br>int. size: 2.93" x 10.93" x 2.5" (7.5 x 28 x 6.5 cm) |
| P37311 | Without brackets,<br>ext. size: 3" x 18" x 2-1/2"<br>int. size: 2.93" x 17.93" x 2.46" (7.5 x 45.5 x 6 cm) |
| P37318 | For single bariatric scope, with brackets,<br>ext. size: 3-1/2" x 26" x 3-1/2" (9 x 66 x 9 cm) |
| P37312 | Two levels, with brackets, and camera and light cord compartments,<br>ext. size: 9" x 20" x 4" (23 x 51 x 10 cm)<br>int. size: 8.47" x 18.68" x 3.55" (21.5 x 47.5 x 9 cm) |
| P37313 | Two levels, without brackets or dividers, ext. size: 9" x 20" x 4" (23 x 51 x 10 cm) int. size:<br>8.47" x 18.68" x 3.55" (21.5 x 47.5 x 9 cm) |

# INSTRUMENT ACCESSORIES

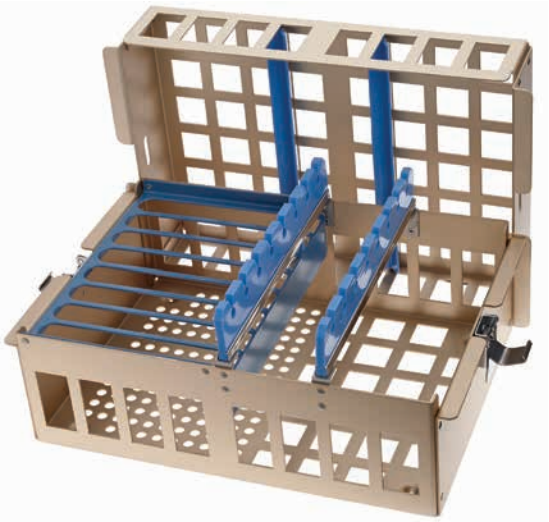
## Sterilization Case and Tray Solutions

### CAMERA AND LIGHT CORD CASES

P37308

| ITEM # | DESCRIPTION |
|---|---|
| P37308 | Camera Case, with brackets,<br>ext. size: 9" x 10" x 3" (23 x 25.5 x 7.5 cm)<br>int. size: 8.47" x 8.68" x 2.55" (21.5 x 22 x 6.5 cm) |
| P37309 | Light Cord Case,<br>ext. size: 9" x 9" x 1-1/2" (23 x 23 x 4 cm)<br>int. size: 8.57" x 8.72" x 1.18" (22 x 22 x 3 cm) |

### FORCEPS CASES



P37327

| ITEM # | DESCRIPTION |
|---|---|
| P37327 | Holds up to 8 rongeurs, designed for size 4 & 5 handles with handle guide,<br>ext. size: 9" x 13" x 6" (23 x 33 x 15 cm)<br>int. size: 8.59" x 12.09" x 5.84" (22 x 30.5 x 15 cm) |
| P37328 | For up to 16 arthroscopic and/or sinus forceps interlacing 8 forceps in each direction,<br>ext. size: 9" x 15" x 5" (23 x 38 x 12.5 cm)<br>int. size: 8.59" x 13.84" x 4.84" (22 x 35 x 12.5 cm) |

# INSTRUMENT ACCESSORIES

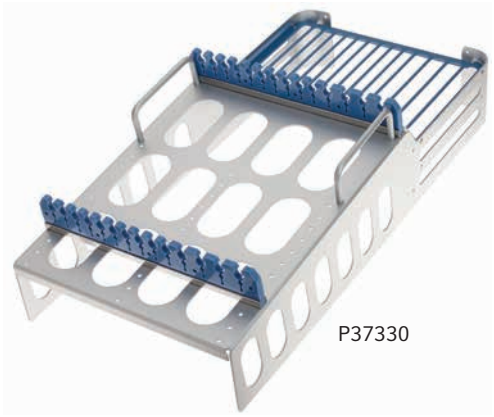
## Sterilization Case and Tray Solutions

### TWO-LEVEL LAP CHOLE CASES

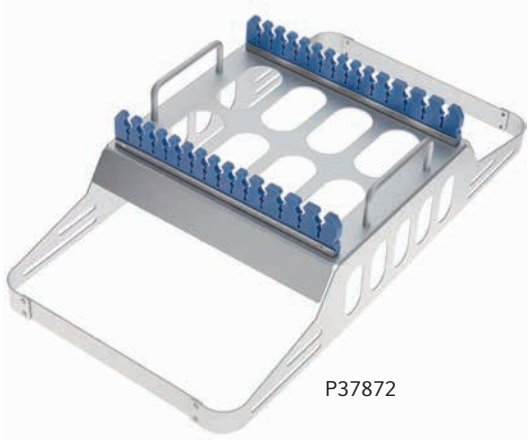
P37316

| ITEM # | DESCRIPTION |
|---|---|
| P37316 | With insert and brackets for up to 13-1/2" (35 cm) instruments, ext. size: 11" x 23" x 8" (28 x 58.5 x 20.5 cm) int. size: 10.7" x 21.62" x 7.66" (27 x 55 x 19.5 cm) |
| P37317 | With insert and brackets for up to 26" (65 cm) instruments, ext. size: 11" x 27" x 8" (28 x 68.5 x 20.5 cm) int. size: 10.7" x 25.62" x 7.66" (27 x 65 x 19.5 cm) |

### LAP CHOLE INSTRUMENT INSERTS



P37330



P37872

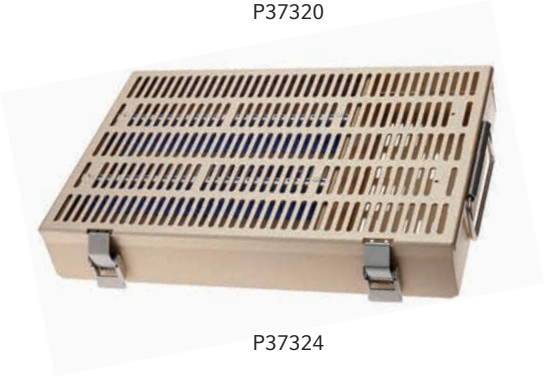
| ITEM # | DESCRIPTION |
|---|---|
| P37329 | Holds 14 instruments, 8" A-type container (fits in a 10" x 20" x 6" container), ext. size: 9-1/2" x 20" x 5-1/2" |
| P37330 | Holds 14 instruments (fits in a 10" x 20" x 6" container), ext. size: 9-1/2" x 20" x 5-1/2" |
| P37872 | Holds 14 instruments (fits in a 10" x 20" x 6" container), ext. size: 9.9" x 19-1/2" x 4.9" |

# INSTRUMENT ACCESSORIES

## Sterilization Case and Tray Solutions

### MICROSURGICAL CASES

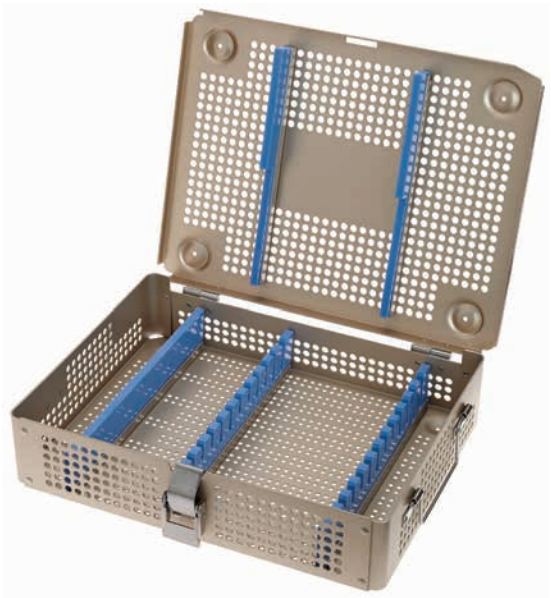
P37320



P37324

| ITEM # | DESCRIPTION |
|---|---|
| P37321 | Single-level, with pin mat, retainers,<br>ext. size: 10-1/2" x 10-1/2" x 1-1/2" (26.5 x 26.5 x 4 cm)<br>int. size: 9.84" x 10.2" x 1.23" (25 x 26 x 3 cm) |
| P37322 | Single-level, with pin mat, retainers,<br>ext. size: 10-1/2" x 15" x 1-1/2" (26.5 x 38 x 4 cm)<br>int. size: 9.84" x 14.68" x 1.23" (25 x 37.5 x 3 cm) |
| P37320 | Two levels, with pin mat, retainers,<br>ext. size: 10-1/2" x 10-1/2" x 2-1/2" (26.5 x 26.5 x 6.5 cm)<br>int. size: 9.84" x 10.2" x 2.32" (25 x 26 x 6 cm) |
| P37323 | Two levels, with pin mat, retainers, and long tray/<br>half height accessory area,<br>ext. size: 10-1/2" x 15" x 2-1/2" (26.5 x 38 x 6.5 cm)<br>int. size: 9.84" x 14.6" x 2.32" (25 x 37 x 6 cm) |
| P37325 | Two levels, with pin mat, retainers, and long tray/<br>half height accessory area,<br>ext. size: 10-1/2" x 19-1/2" x 2-1/2" (26.5 x 49.5 x 6.5 cm)<br>int. size: 9.84" x 19" x 2.32" (25 x 48.5 x 6 cm) |
| P37324 | Two levels, with pin mat, retainers, and short tray/<br>full height accessory area,<br>ext. size: 10-1/2" x 15" x 2-1/2" (26.5 x 38 x 6.5 cm)<br>int. size: 9.84" x 14.6" x 2.32" (25 x 37 x 6 cm) |
| P37326 | Two levels, with pin mat, retainers, and short tray/<br>full height accessory area,<br>ext. size: 10" x 19-1/2" x 2-1/2" (25.5 x 49.5 x 6.5 cm)<br>int. size: 9.84" x 19" x 2.32" (25 x 48.5 x 6 cm) |

### OSTEOTOME CASE



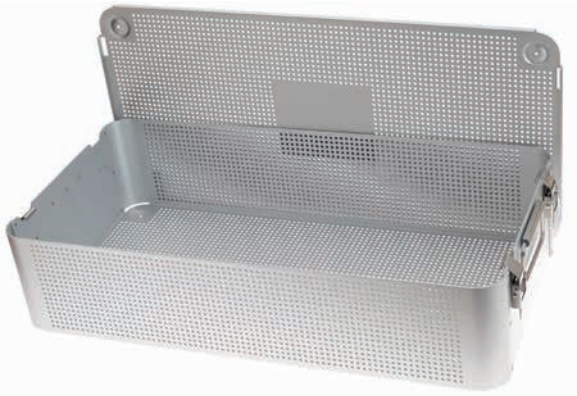
P37335

| ITEM # | DESCRIPTION |
|---|---|
| P37335 | For curved and straight Lambottes,<br>ext. size: 9" x 11-1/2" x 3" (23 x 29 x 7.5 cm)<br>int. size: 8.57" x 11.12" x 2.38" (22 x 28 x 6 cm) |

# INSTRUMENT ACCESSORIES

## Sterilization Case and Tray Solutions

### SURGICAL CASES AND TRAYS



P37332

| ITEM # | DESCRIPTION |
|---|---|
| P37315 | Case without brackets or pin mat,<br>ext. size: 10" x 21-1/2" x 2-1/2" (25.5 x 54.5 x 6.5 cm)<br>int. size: 9.72" x 20.65" x 2.42" (24.5 x 52.5 x 6 cm) |
| P37331 | Case without brackets or pin mat,<br>ext. size: 11" x 23" x 3-1/2" (28 x 58.5 x 9 cm)<br>int. size: 10.7" x 21.62" x 3.41" (27 x 55 x 8.5 cm) |
| P37304 | Case without brackets or pin mat,<br>ext. size: 11" x 27" x 3-1/2" (28 x 68.5 x 9 cm)<br>int. size: 10.88" x 25.62" x 3.41" (27.5 x 65 x 8.5 cm) |
| P37332 | Case without optional trays, support brackets,<br>or pin mat,<br>ext. size: 11" x 23" x 5" (28 x 58.5 x 12.5 cm)<br>int. size: 10.7" x 21.62" x 4.91" (27 x 55 x 12.5 cm) |
| P37333 | Case with optional trays and support brackets,<br>without pin mat,<br>ext. size: 11" x 23" x 5" (28 x 58.5 x 12.5 cm)<br>int. size: 10.7" x 21.62" x 4.91" (27 x 55 x 12.5 cm) |
| P37334 | Case with 2 optional trays and support brackets,<br>without pin mat,<br>ext. size: 11" x 23" x 5" (28 x 58.5 x 12.5 cm)<br>int. size: 10.7" x 21.62" x 4.91" (27 x 55 x 12.5 cm) |
| P37338 | Tray, 10-1/2" x 21-1/2" x 2-1/4" (26.5 x 54.5 x 5.5 cm) |
| P37419 | Tray, 10-1/2" x 21-1/2" x 2" (26.5 x 54.5 x 5 cm) |

### SURGICAL UTILITY CASES

| ITEM # | DESCRIPTION |
|---|---|
| P37336 | Ext. size: 5" x 10-1/2" x 2" (12.5 x 26.5 x 5 cm)<br>int. size: 4.5" x 10.29" x 1.63" (11.5 x 26 x 4 cm) |
| P37337 | With full pin mat, center lid retainer,<br>ext. size: 5" x 10-1/2" x 2" (12.5 x 26.5 x 5 cm)<br>int. size: 4.5" x 10.29" x 1.53" (11.5 x 26 x 4 cm) |

# INSTRUMENT ACCESSORIES

## Sterilization Case and Tray Solutions

### ACCESSORY BOXES

P37305

| ITEM # | DESCRIPTION |
|---|---|
| P37305 | With hardware,<br>ext. size: 1-1/2" x 3-1/2" x 1" (4 x 9 x 2.5 cm)<br>int. size: 1.44" x 3.16" x 1" (3.5 x 8 x 2.5 cm) |
| P37593 | Without hardware,<br>ext. size: 1-1/2" x 3-1/2" x 1" (4 x 9 x 2.5 cm)<br>int. size: 1.44" x 3.16" x 1" (3.5 x 8 x 2.5 cm) |

### "L" BRACKETS

P37545

| ITEM # | DESCRIPTION |
|---|---|
| P37545 | "L" brackets to support trays |

# INSTRUMENT ACCESSORIES

## Sterilization Case and Tray Solutions

### SS RISER BRACKET

P37564

| ITEM # | DESCRIPTION |
|---|---|
| P37564 | Used to elevate single wide brackets from the case floor, 0.5" x 1.5" |

### UNIVERSAL BRACKETS

P37339

| ITEM # | DESCRIPTION |
|---|---|
| P37358 | 5" long, 6 position |
| P37544 | 7.5" long, 6 position |
| P37339 | 7.5" long, 10 position |
| P37341 | 9.25" long, 14 position |
| P37306 | 10" long, 15 position |

### SLOTTED "U" BRACKETS

P37344

| ITEM # | DESCRIPTION |
|---|---|
| P37424 | (2 mm) 1.0" |
| P37346 | (3 mm) 1.0" |
| P37425 | (4 mm) 1.0" |
| P37347 | (5 mm) 1.0" |
| P37426 | (6 mm) 1.0" |
| P37348 | (7 mm) 1.0" |
| P37349 | (10 mm) 1.0" |
| P37350 | (12 mm) 1.0" |
| P37420 | (2 mm) 1.5" |
| P37421 | (3 mm) 1.5" |
| P37342 | (4 mm) 1.5" |
| P37422 | (5 mm) 1.5" |
| P37423 | (6 mm) 1.5" |
| P37343 | (7 mm) 1.5" |
| P37344 | (10 mm) 1.5" |
| P37345 | (12 mm) 1.5" |

# INSTRUMENT ACCESSORIES

## Sterilization Case and Tray Solutions

### PASS THRU BRACKETS

P37356

| ITEM # | DESCRIPTION |
|---|---|
| P37355 | (6 mm) 1.0" |
| P37429 | (7 mm) 1.0" |
| P37430 | (9 mm) 1.0" |
| P37356 | (10 mm) 1.0" |
| P37357 | (12 mm) 1.0" |
| P37487 | (13 mm) 1.0" |
| P37351 | (6 mm) 1.5" |
| P37352 | (7 mm) 1.5" |
| P37427 | (9 mm) 1.5" |
| P37353 | (10 mm) 1.5" |
| P37354 | (12 mm) 1.5" |
| P37428 | (13 mm) 1.5" |

### KEYHOLE BRACKETS

P37377

| ITEM # | DESCRIPTION |
|---|---|
| P37432 | (2 mm) 1.0" |
| P37433 | (3 mm) 1.0" |
| P37383 | (4 mm) 1.0" |
| P37384 | (5 mm) 1.0" |
| P37486 | (6 mm) 1.0" |
| P37385 | (7 mm) 1.0" |
| P37387 | (10 mm) 1.0" |
| P37388 | (12 mm) 1.0" |
| P37389 | (13 mm) 1.0" |
| P37431 | (2 mm) 1.5" |
| P37372 | (3 mm) 1.5" |
| P37373 | (4 mm) 1.5" |
| P37485 | (5 mm) 1.5" |
| P37374 | (6 mm) 1.5" |
| P37375 | (7 mm) 1.5" |
| P37376 | (10 mm) 1.5" |
| P37377 | (12 mm) 1.5" |
| P37378 | (13 mm) 1.5" |
| P37379 | (15 mm) 1.5" |
| P37380 | (19 mm) 1.5" |
| P37381 | (22 mm) 1.5" |
| P37382 | (25 mm) 1.5" |
| P37390 | (3 tier 10/5/3 mm) 1.5" |

# INSTRUMENT ACCESSORIES

## Sterilization Case and Tray Solutions

### V-SILICONE RETAINERS

P37361

| ITEM # | DESCRIPTION |
|---|---|
| P37361 | 9.5" |
| P37435 | 14.25" |
| P37436 | 18.25" |

### PIN MATS

P37437

| ITEM # | DESCRIPTION |
|---|---|
| P37437 | 1" x 4.5" |
| P37447 | 1" x 9.63" |
| P37448 | 1" x 14.25" |
| P37449 | 1" x 18" |
| P37450 | 1.5" x 4.5" |
| P37451 | 1.5" x 7.13" |
| P37452 | 1.5" x 9.12" |
| P37453 | 1.5" x 9.63" |
| P37455 | 1.5" x 14.25" |
| P37456 | 1.5" x 18" |
| P37457 | 3.4" x 10.12" |
| P37391 | 3.45" x 16.88" |
| P37454 | 4.25" x 9.75" |
| P37392 | 4.25" x 10.12" |
| P37401 | 5" x 10.12" |
| P37402 | 5.75" x 10.12" |
| P37400 | 6.5" x 10.12" |
| P37399 | 6.75" x 10.12" |
| P37403 | 6.75" x 17.5" |
| P37393 | 8.12" x 8.56" |
| P37394 | 8.25" x 18" |
| P37397 | 9.5" x 9.5" |
| P37395 | 9.63" x 14.13" |
| P37396 | 9.63" x 18" |
| P37398 | 10.12" x 18" |
| P37404 | 13.13" x 18.25" |
| P37458 | Snaps for Pin Mats, 0.187", set of 4 |

# INSTRUMENT ACCESSORIES

## Bowls

### EMESIS BASINS

471100

| ITEM # | DESCRIPTION |
|---|---|
| 471100 | 8-1/8" x 4-3/8" (20.5 cm x 11 cm) |
| 471105 | 10" x 5-5/8" (25 cm x 14.5 cm) |

### MEDICINE CUP

471115

| ITEM # | DESCRIPTION |
|---|---|
| 471115 | 2 oz. (60 mL), 2" diameter x 2" deep (5.1 x 5.1 cm) |

### IODINE CUP

471120

| ITEM # | DESCRIPTION |
|---|---|
| 471120 | Holds 6 ounces (177 mL) |

### SPONGE BOWLS

471135

| ITEM # | DESCRIPTION |
|---|---|
| 471125 | 4-3/4" top diameter x 2" deep (12 x 5 cm), total capacity 12 oz. (360 mL) |
| 471130 | 5" top diameter x 2-1/4" deep (12.5 x 5.7 cm), total capacity 18 oz. (540 mL) |
| 471135 | 5-3/4" top diameter x 2-1/2" deep (14.5 x 6.5 cm), total capacity 30 oz. (900 mL) |
| 471140 | 6-3/8" top diameter x 2-3/4" deep (16 x 7 cm), total capacity 46 oz. (1380 mL) |

# INSTRUMENT ACCESSORIES

## Instrument Holders and Stringers

### THOMPSON THORACIC INSTRUMENT HOLDER

343395

This instrument table is easily attached to standard operating table and provides convenient space for instruments in use. This could eliminate the separate and less steady floor-mounted Mayo stand. Complete with Rail Clamps (343393).

| ITEM # | DESCRIPTION |
|---|---|
| 343395 | |

### RAIL CLAMPS

343393

| ITEM # | DESCRIPTION |
|---|---|
| 343393 | 1 pair |

# INSTRUMENT ACCESSORIES

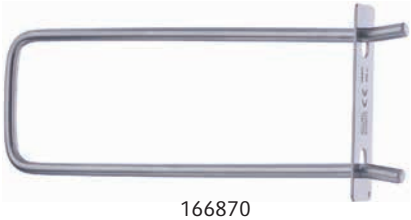
## Instrument Holders and Stringers

### INSTRUMENT STRINGERS

087531

087550

087561



166870

840200

840210

840221

| ITEM # | DESCRIPTION |
|---|---|
| 087531 | Posilok single link instrument holder, 8" x 2-3/4" |
| 087532 | Posilok single link instrument holder, 10" x 2-3/4" |
| 087533 | Posilok single link instrument holder, 12" x 2-3/4" |
| 087550 | Instrument stringer, 6" |
| 087552 | Instrument stringer, 10" |
| 087559 | E-Z lock double lock hinge bar, connects in middle, 8" x 2-3/4" |
| 087561 | E-Z lock double lock hinge bar, connects in middle, 12" x 2-3/4" |
| 166868 | Lahey instrument holder, 6" (15 cm) |
| 166870 | Lahey instrument holder, 8" (20.5 cm) |
| 166872 | Lahey instrument holder, 10" (25.5 cm) |
| 166874 | Lahey instrument holder, 12" (30.5 cm) |
| 166876 | Lahey instrument holder, 14" (35.5 cm) |
| 840200 | Worcester instrument holder, 12-5/8" x 4-1/2" |
| 840210 | Weinstein instrument holder, 8" x 2-1/2" |
| 840215 | Weinstein instrument holder, 10" x 2-1/2" |
| 840221 | Instrument holder, 6" |
| 840222 | Instrument holder, 12" |

# INSTRUMENT ACCESSORIES

## Instrument Holders and Stringers

### INSTRUMENT STRINGER

806122

| ITEM # | DESCRIPTION |
|---|---|
| 806122 | 2-3/4" x 8" (7 x 20.5 cm) |

### INSTRUMENT HOLDERS

166851

| ITEM # | DESCRIPTION |
|---|---|
| 166851 | Instrument holder with clasp lock, 8" (20.5 cm) |
| 166853 | Instrument holder with clasp lock, 10" (25.5 cm) |
| 166855 | Instrument holder with clasp lock, 12" (30.5 cm) |
| 166857 | Instrument holder with clasp lock, 14" (35.5 cm) |
| 166859 | Instrument holder with clasp lock, 16" (40.5 cm) |
| 166861 | Instrument holder with clasp lock, 18" (45.5 cm) |

### BUNT FORCEPS HOLDER

KM39670

| ITEM # | DESCRIPTION |
|---|---|
| KM39670 | |

# INSTRUMENT ACCESSORIES

## Instrument Holders and Stringers

### INSTRUMENT RACK

840220

| ITEM # | DESCRIPTION |
|---|---|
| 840220 | 3" (7.5 cm) posts |

### WECK®-RACKS

840100

Includes 6, 9 or 12 separator clips, 1 security rod, 1 retainer clip.

| ITEM # | DESCRIPTION |
|---|---|
| 840100 | 12-1/8" (31 cm) |
| 840105 | 15-1/8" (38.5 cm) |
| 840110 | 18-1/8" (46 cm) |

### WECK®-RACK RETAINER CLIPS

840116

Replacement retainer clip.

| ITEM # | DESCRIPTION |
|---|---|
| 840116 | 11" (28 cm) |
| 840117 | 14-3/8" (36.5 cm) |
| 840118 | 17" (43 cm) |

# INSTRUMENT ACCESSORIES

## Instrument Holders and Stringers

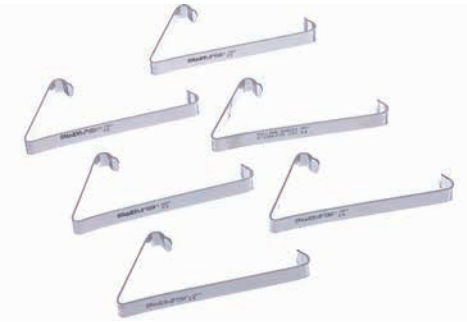
### WECK®-RACK SECURITY RODS

840111

Replacement security rod.

| ITEM # | DESCRIPTION |
|---|---|
| 840111 | 11-3/4" (30 cm) |
| 840112 | 14-3/4" (37.5 cm) |
| 840113 | 17-3/4" (45 cm) |

### WECK®-RACK SEPARATOR CLIPS



840114

Replacement separator clips.

| ITEM # | DESCRIPTION |
|---|---|
| 840114 | Package of 6 |

## Cleaners and Lubricants

### CANNULA CLEANERS

850500

Clean bronchoscopes, laryngoscopes, laparoscopes and suction tubes.

| ITEM # | DESCRIPTION |
|---|---|
| 850500 | 1/8", 50 ft. coil |
| 850502 | 3/16", 50 ft. coil |

# INSTRUMENT ACCESSORIES

## Cleaners and Lubricants

### INSTRUMENT CLEANING BRUSHES

KM39682

| ITEM # | DESCRIPTION |
|---|---|
| KM39682 | Wire, set of 3 |
| KM39684 | Nylon, set of 3 |

### SCRUB FILES

910110

For use with scrub brush 910100.

| ITEM # | DESCRIPTION |
|---|---|
| 910110 | For use with scrub brush 910100, 1 dozen |

### WECK® INSTRUMENT CLEANER

850103

Designed to remove protein on surgical instruments and glassware.

| ITEM # | DESCRIPTION |
|---|---|
| 850103 | 5 lbs. |

# INSTRUMENT ACCESSORIES

## Cleaners and Lubricants

### WECK® LIQUID DETERGENT

850110

Concentrate, ideal for ultrasonic cleaners.

| ITEM # | DESCRIPTION |
|---|---|
| 850110 | 1 gallon |

### WECK-LUBE™

850150

Concentrate. Inhibits rusting of instruments while lubricating.

| ITEM # | DESCRIPTION |
|---|---|
| 850150 | 1 gallon |

# INSTRUMENT ACCESSORIES

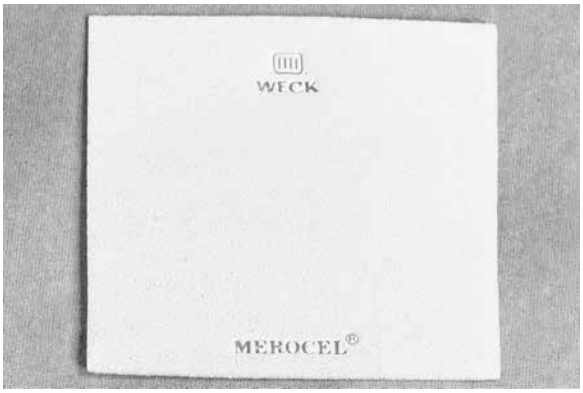
## Cleaners and Lubricants

### WEC-WASH™

850115

| ITEM # | DESCRIPTION |
|---|---|
| 850115 | 1/2 gallon |

### WECK® WIPE




200550

Used to clean instruments in the sterile field.

| ITEM # | DESCRIPTION |
|---|---|
| 200550 | 3-1/4" x 3-1/4" (8.5 cm x 8.5 cm), X-ray detectable, sterile, 20 per box, 1 per pouch |

# INSTRUMENT ACCESSORIES

## Cleaners and Lubricants

### WEC-KLEEN™

850102

Super concentrate instrument cleaner.

| ITEM # | DESCRIPTION |
|---|---|
| 850102 | Plastic tub of 2-1/2 lbs. |

### WEC-KREEM™

850155

Super concentrate instrument lubricant.

| ITEM # | DESCRIPTION |
|---|---|
| 850155 | 1/2 gallon |

# INSTRUMENT ACCESSORIES

## Miscellaneous

### MAGNETIC INSTRUMENT MATS

151350

Magna-Tronce is a flexible sheet of silicone with permanent magnets embedded in the sheet. The Magna-Tronce Mat is designed to keep delicate surgical instruments firmly and safely in place, even during the most critical operations. Embedded magnets hold surgical instruments in convenient positions, and eliminate most of the dropped instrument, re-sterilization problems. Flexible Magna-Tronce Mat may be clamped to drapes on any slanted or uneven surface. Grommets are provided at the corners so that the magnetic sheet may be tied or clamped in any position. Magna-Tronce Mat is capable of being autoclaved for sterilization. A film of silicone protects embedded magnets. 11-7/8" x 11-7/8" (30 cm x 30 cm)

| ITEM # | DESCRIPTION |
|---|---|
| 151350 | Magna-Tronce Mat, single |
| 151351 | Magna-Tronce Mat, set of 3 |

### SURG-I-BAND® TAPE

121384

Available in spools 244" x 1/4" (620 x 0.6 cm). Surg-i-Band® Tape is a registered trademark of Scanlan International, Inc.

| ITEM # | DESCRIPTION |
|---|---|
| 121380 | Surg-i-Band® Tape, Black |
| 121381 | Surg-i-Band® Tape, Red |
| 121382 | Surg-i-Band® Tape, Green |
| 121383 | Surg-i-Band® Tape, Yellow |
| 121384 | Surg-i-Band® Tape, Blue |
| 121385 | Surg-i-Band® Tape, White |
| 121386 | Surg-i-Band® Tape, Orange |
| 121387 | Surg-i-Band® Tape, Brown |
| 121388 | Surg-i-Band® Tape, Purple |
| 121389 | Surg-i-Band® Tape, Neon Orange |
| 121390 | Surg-i-Band® Tape, Gray |
| 121391 | Surg-i-Band® Tape, Lime Green |

# FLOOR GRADE INSTRUMENTS

## Forceps

### IN-EX ADSON DRESSING FORCEPS

101149

| ITEM # | DESCRIPTION |
|---|---|
| 101149 | Serrated, 4-3/4" (12 cm), 12 per box |

### IN-EX ADSON TISSUE FORCEPS

101150

| ITEM # | DESCRIPTION |
|---|---|
| 101150 | 1 x 2 teeth, 4-3/4" (12 cm), 12 per box |

### IN-EX THUMB FORCEPS

101148

| ITEM # | DESCRIPTION |
|---|---|
| 101147 | Serrated, 5-1/2" (14 cm), 12 per box |
| 101148 | 1 x 2, 5-1/2" (14 cm), 12 per box |

# FLOOR GRADE INSTRUMENTS

## Forceps

### IN-EX BACKHAUS TOWEL CLAMPS

101023

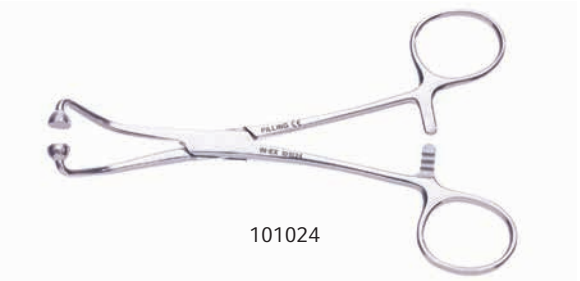
| ITEM # | DESCRIPTION |
|---|---|
| 101022 | 3-1/2" (9 cm), 12 per box |
| 101023 | 5-1/4" (13.5 cm), 12 per box |

### IN-EX EDNA TOWEL CLAMP

101028

| ITEM # | DESCRIPTION |
|---|---|
| 101028 | 5-3/8" (13.5 cm), 12 per box |

### IN-EX HOFF TOWEL CLAMP



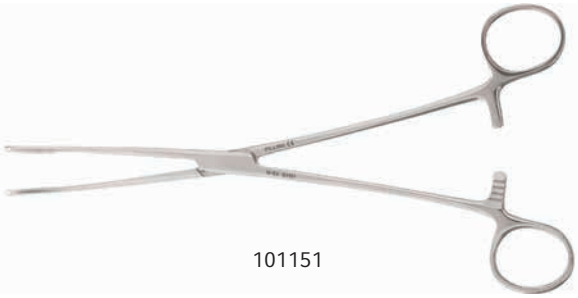
101024

| ITEM # | DESCRIPTION |
|---|---|
| 101024 | Non-perforating, 5-3/4" (14.5 cm), 12 per box |

# FLOOR GRADE INSTRUMENTS

## Forceps

### IN-EX SPONGE FORCEPS



101151

| ITEM # | DESCRIPTION |
|---|---|
| 101152 | Ballenger, serrated, 7-1/4" (18.5 cm), 12 per box |
| 101151 | Foerster, serrated, 9-3/4" (25 cm), 12 per box |

### IN-EX HALSTED MOSQUITO FORCEPS

101010

| ITEM # | DESCRIPTION |
|---|---|
| 101010 | Straight, 5" (12.5 cm), 12 per box |
| 101011 | Curved, 5" (12.5 cm), 12 per box |

### IN-EX CRILE FORCEPS

101016

| ITEM # | DESCRIPTION |
|---|---|
| 101016 | Straight, 5-1/2" (14 cm), 12 per box |
| 101017 | Curved, 5-1/2" (14 cm), 12 per box |

# FLOOR GRADE INSTRUMENTS

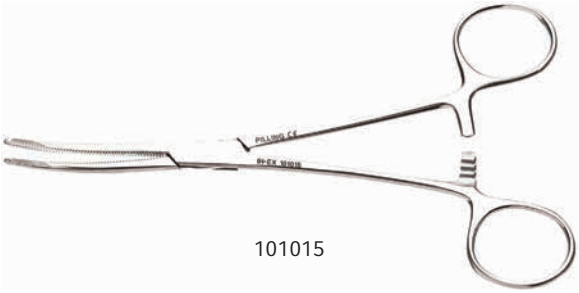
## Forceps

### IN-EX KELLY FORCEPS

101013

| ITEM # | DESCRIPTION |
|---|---|
| 101012 | Straight, 5-1/2" (14 cm), 12 per box |
| 101013 | Curved, 5-1/2" (14 cm), 12 per box |

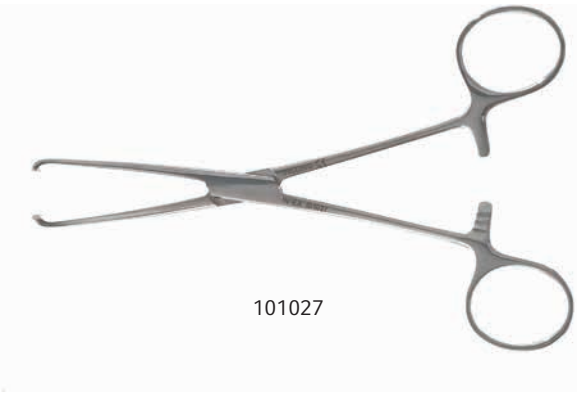
### IN-EX ROCHESTER-PEAN FORCEPS



101015

| ITEM # | DESCRIPTION |
|---|---|
| 101014 | Straight, 6-1/2" (16.5 cm), 12 per box |
| 101015 | Curved, 6-1/2" (16.5 cm), 12 per box |

### IN-EX ALLIS TISSUE FORCEPS



101027

| ITEM # | DESCRIPTION |
|---|---|
| 101027 | 4 x 5 teeth, 6-1/4" (16 cm), 12 per box |

# FLOOR GRADE INSTRUMENTS

## Forceps

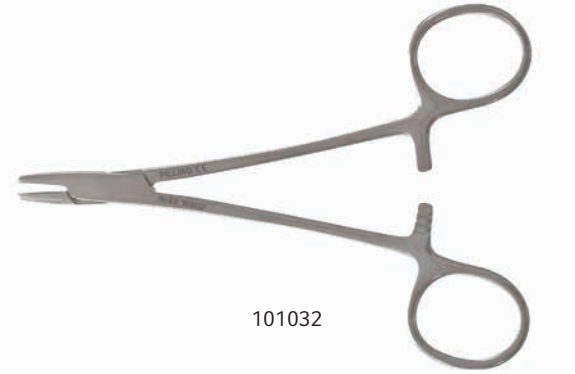
### IN-EX BOZEMAN UTERINE DRESSING FORCEPS

101033

| ITEM # | DESCRIPTION |
|---|---|
| 101033 | Straight, 10" (25.5 cm) |
| 101034 | Curved, 10-3/8" (26.5 cm) |

## Needle Holders

### IN-EX BAUMGARTNER NEEDLE HOLDER



101032

| ITEM # | DESCRIPTION |
|---|---|
| 101032 | 12.5 x 2.7 mm jaw, 5-1/2" (14 cm), 12 per box |

### IN-EX WEBSTER NEEDLE HOLDER

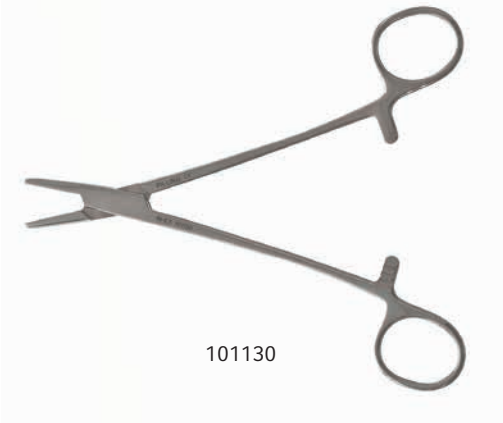
101031

| ITEM # | DESCRIPTION |
|---|---|
| 101031 | 15.5 x 1.7 mm smooth jaw, 5" (12.5 cm), 12 per box |

# FLOOR GRADE INSTRUMENTS

## Needle Holders

### IN-EX MAYO HEGAR NEEDLE HOLDERS



101130

| ITEM # | DESCRIPTION |
|---|---|
| 101130 | 20 x 2.8 mm jaw, 6-1/2" (16.5 cm), 12 per box |
| 101131 | 24 x 3 mm jaw, 8" (20.5 cm), 12 per box |

## Scissors

### IN-EX LISTER BANDAGE SCISSORS

101143

| ITEM # | DESCRIPTION |
|---|---|
| 101142 | 5-3/4" (14.5 cm), 12 per box |
| 101143 | 7-1/4" (18.5 cm), 12 per box |

### IN-EX LITTAUER SUTURE SCISSORS

101146

| ITEM # | DESCRIPTION |
|---|---|
| 101146 | 5-1/2" (14 cm), 12 per box |

# FLOOR GRADE INSTRUMENTS

## Scissors

### IN-EX WIRE SCISSORS

101039

| ITEM # | DESCRIPTION |
|---|---|
| 101039 | 4-3/4" (12 cm), 12 per box |

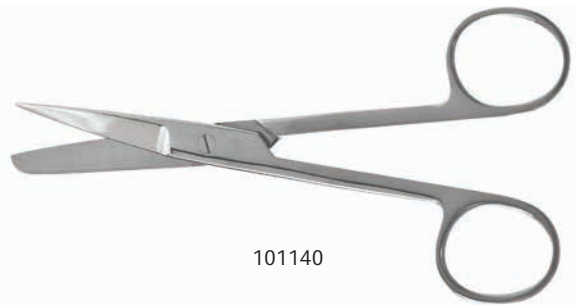
### IN-EX IRIS SCISSORS

101145

Sharp/Sharp.

| ITEM # | DESCRIPTION |
|---|---|
| 101144 | Straight, 4-1/2" (11.5 cm), 12 per box |
| 101145 | Curved, 4-1/2" (11.5 cm), 12 per box |

### IN-EX OPERATING SCISSORS



101140

| ITEM # | DESCRIPTION |
|---|---|
| 101140 | Straight, Sharp/Blunt, 5-1/2" (14 cm), 12 per box |
| 101141 | Straight, Sharp/Sharp, 5-1/2" (14 cm), 12 per box |

# FLOOR GRADE INSTRUMENTS

## Scissors

### IN-EX MAYO SCISSORS

101035

101036

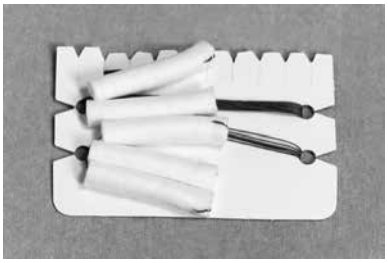
101038

| ITEM # | DESCRIPTION |
|---|---|
| 101035 | Straight, 5-1/2" (14 cm), 12 per box |
| 101036 | Curved, 5-1/2" (14 cm), 12 per box |
| 101037 | Straight, 6-3/4" (17 cm), 12 per box |
| 101038 | Curved, 6-3/4" (17 cm), 12 per box |

# SPECIALTY SPONGES

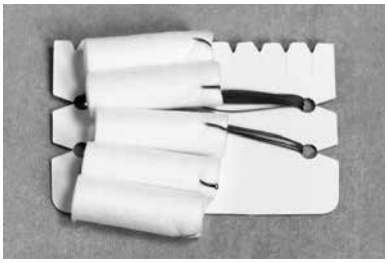
## Specialty Sponges

### CYLINDRICAL SPONGES

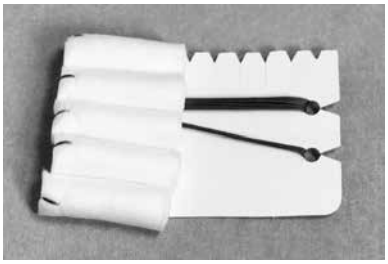


200400

200401



200402



200403

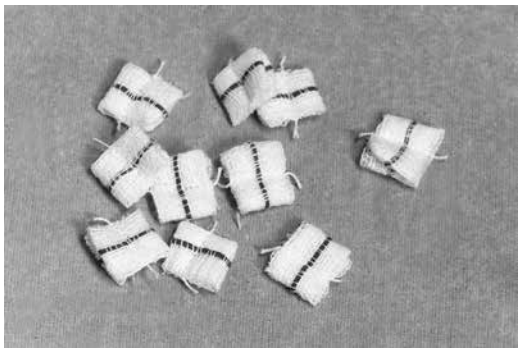
Cylindrical sponges are used during neuro, tonsil, adenoid and nasal surgical procedures for packing and applying medication following surgery and for control of hemorrhaging or drainage. They are similar to the "Rhode Island Sponge."

| ITEM # | DESCRIPTION |
|---|---|
| 200400 | 3/8" x 1-1/2" (9.53 x 38.1 mm)<br>Non X-ray detectable<br>Sterile, end strung, cotton roll<br>100 per box, 5 per accountability card |
| 200401 | 3/8" x 1-1/2" (9.53 x 38.1 mm)<br>Non X-ray detectable<br>Sterile, center strung, cotton roll<br>100 per box, 5 per accountability card |
| 200402 | 1/2" x 1-1/2" (12.7 mm x 38.1 mm)<br>Non X-ray detectable<br>Sterile, end strung, cotton roll<br>100 per box, 5 per accountability card |
| 200403 | 1/2" x 1-1/2" (12.7 x 38.1 mm)<br>Non X-ray detectable<br>Sterile, center strung, cotton roll<br>100 per box, 5 per accountability card |

# SPECIALTY SPONGES

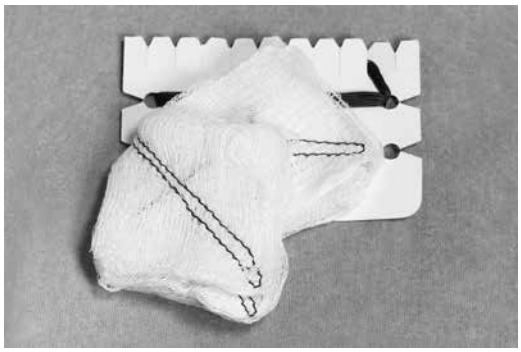
## Specialty Sponges

### GAUZE FLAT SPONGES



200220

200240



200250

Some flat gauze sponges are used for dissection and absorption, some for absorption only. Those larger sponges used for absorption can be used with sponge forceps.

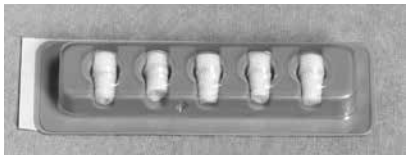
| ITEM # | DESCRIPTION |
|---|---|
| 200220 | "Dissectors"<br>1/2" x 1/2" (12.7 x 12.7 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 10 per package |
| 200240 | Bronchoscopic<br>1/4" x 3/4" (6.35 x 19 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton<br>200 per box, 10 per safety pin |
| 200250 | 2" x 2" (50.8 x 50.8 mm)<br>X-ray detectable<br>Sterile, strung, gauze<br>200 per box, 10 per accountability card |

# SPECIALTY SPONGES

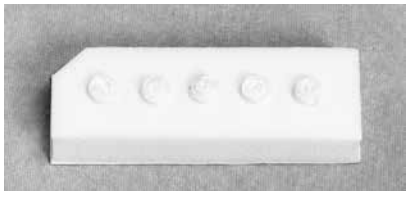
## Specialty Sponges

### "K" DISSECTOR SPONGES

200200



200202



200203

200211

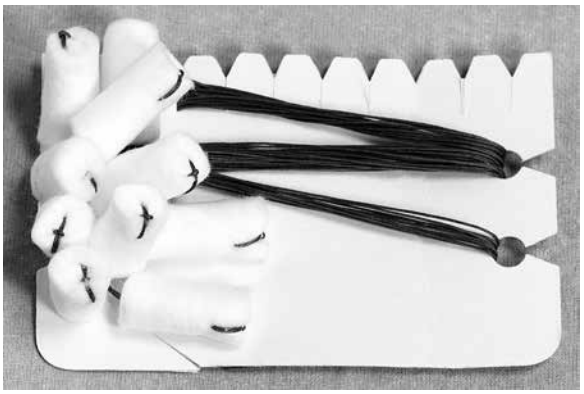
"K" Dissector sponges, named for Dr. Kittner, are held in the jaws of a clamp at the ends or sides of the "can" construction, to provide a stable, soft tip for dissection and absorption during delicate surgical procedures. They have a slightly tighter structure than peanut sponge. Pilling® Dissector Sponges have a tightly-woven chevron mesh for finer dissection, and feature an X-ray thread wound concentrically in layers for X-ray visibility in any direction.

| ITEM # | DESCRIPTION |
|---|---|
| 200200 | 1/4" x 9/16" (6.35 x 14.29 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 5 per tray |
| 200201 | 1/4" x 9/16" ( 6.35 x 14.29 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 10 per tray |
| 200202 | 1/4" x 9/16" (6.35 x 14.29 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 5 per plastic holder |
| 200203 | 1/4" x 9/16" (6.35 x 14.29 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 5 per foam holder |
| 200211 | 1/8" x 9/16" (3.18 x 14.29 mm)<br>X-ray detectable<br>Non-sterile, non-strung, cotton gauze<br>500 per box, 100 per bag |
| 200212 | 1/8" x 9/16" (3.18 x 14.29 mm)<br>X-ray detectable<br>Sterile, cotton gauze<br>Box of 40 packages, 5 per package |

# SPECIALTY SPONGES

## Specialty Sponges

### LAMINECTOMY WEDGE SPONGES

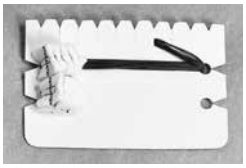


200161

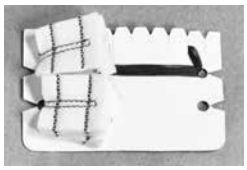
Laminectomy sponges are a type of neuro sponge used to soft tissue in laminectomies.

| ITEM # | DESCRIPTION |
|---|---|
| 200161 | 3/4" x 3/8" (19 x 9.53 mm)<br>Non X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |

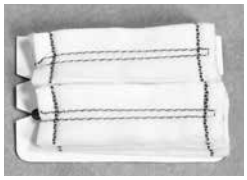
### NEURO SPONGES



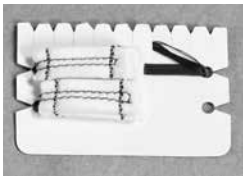
200100



200101



200102



200103

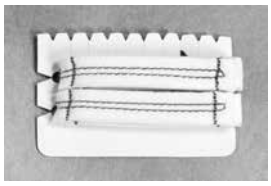
Neuro sponges are used during cranial and spine surgery to moisten the dura or to cushion against bone edges. They are also used to protect brain tissue under the dura or elsewhere during incision. Gardlok neuro sponges are made from the highest quality non-woven cotton, which is soft, conformable, as free of lint as possible, and highly retentive in comparison to other rayon "cottonoid" brands. For security, the X-ray detectable element is heat sealed and stitched into the sponge, and the sponges are double strung.

| ITEM # | DESCRIPTION |
|---|---|
| 200100 | Patties<br>1/2" x 1/2" (12.7 mm x 12.7 mm)<br>X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |
| 200101 | Patties<br>1" x 1" (25.4 mm x 25.4 mm)<br>X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |
| 200102 | Patties<br>1" x 3" (25.4 mm x 76.2 mm)<br>X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |
| 200103 | Patties<br>1/2" x 1-1/2" (12.7 mm x 38.1 mm)<br>X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |

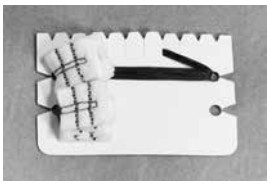
# SPECIALTY SPONGES

## Specialty Sponges

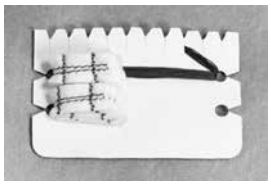
### NEURO SPONGES (CONTINUED)



200104

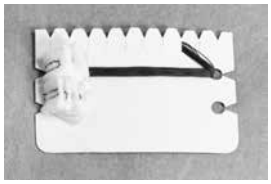


200105

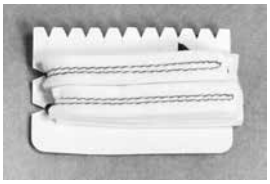


200106

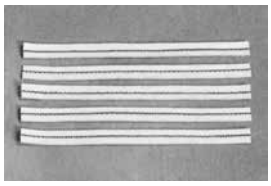
200108



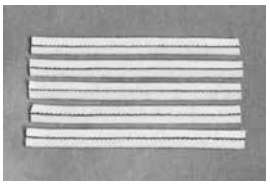
200110



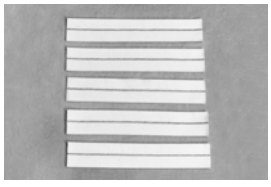
200112



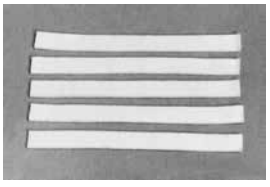
200120



200121



200123



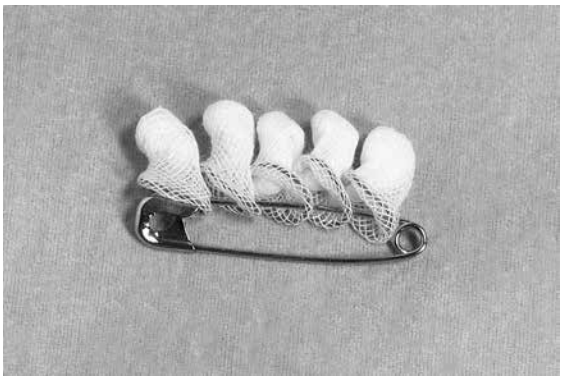
200131

| ITEM # | DESCRIPTION |
|---|---|
| 200104 | Patties<br>1/2" x 3" (12.7 mm x 76.2 mm)<br>X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |
| 200105 | Patties<br>3/4" x 3/4" (19.5 mm x 19.5 mm)<br>X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |
| 200106 | Patties<br>1/2" x 1" (12.7 mm x 25.4 mm)<br>X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |
| 200108 | Patties<br>3" x 3" (76.2 mm x 76.2 mm)<br>X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |
| 200110 | Patties<br>1/2" x 1/2" (12.7 mm x 12.7 mm)<br>Non X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |
| 200112 | Patties<br>1/2" x 3" (12.7 mm x 76.2 mm)<br>Non X-ray detectable<br>Sterile, double-strung, cotton<br>200 per box, 10 per accountability card |
| 200120 | Strips<br>3/8" x 6" (9.53 mm x 152.4 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton<br>100 per box, 10 per pouch |
| 200121 | Strips<br>1/2" x 6" (12.7 mm x 152.4 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton<br>100 per box, 10 per pouch |
| 200123 | Strips<br>1" x 6" (25.4 mm x 152.4 mm)<br>Non X-ray detectable<br>Sterile, non-strung, cotton<br>100 per box, 10 per pouch |
| 200131 | Strips<br>1/2" x 6" (12.7 mm x 152.4 mm)<br>Non X-ray detectable<br>Sterile, non-strung, cotton<br>100 per box, 10 pouch |

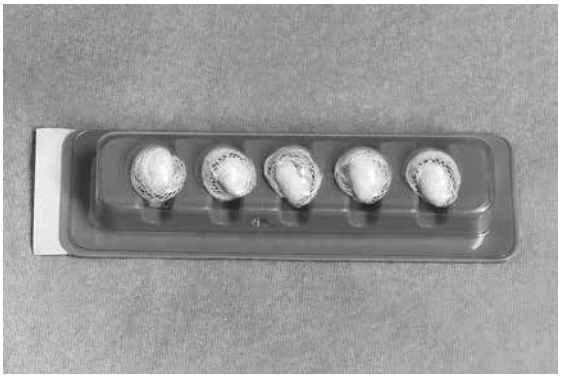
# SPECIALTY SPONGES

## Specialty Sponges

### PEANUT SPONGES



200214



200215

200217

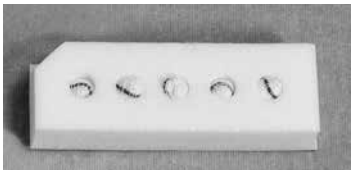
Peanut sponges, held at the end of a hemostat during delicate surgical procedures, facilitate tissue separation around vessels, or identify bleeders, with less chance of damage to those structures. Pilling® Surgical's Gardlok Peanut Sponges are made of USA cotton and feature a large gauze strand for better abrading in blunt dissection.

| ITEM # | DESCRIPTION |
|---|---|
| 200214 | 3/8" (9.53 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 5 per safety pin |
| 200215 | 3/8" (9.53 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 5 per plastic holder |
| 200217 | 3/8" (9.53 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 5 per foam holder |

# SPECIALTY SPONGES

## Specialty Sponges

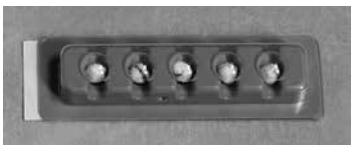
### ROSEBUD/CHERRY SPONGES



200218

200230

200231



200232

Smaller versions of peanut sponges, rosebud sponges are used for dissection and absorption where precise dissection is necessary during delicate surgical procedures such as thyroidectomies, colostomy closures, hepatic resections, laryngectomies and abdominal aortic and other vascular procedures. Cherries are very tightly-spun spherical sponges used for very gentle dissection and absorption during delicate surgical procedures. A center hole is incorporated to facilitate grip in a toothed forceps. Gardlok cherry sponges feature an X-ray detectable chip, rather than a tiny monofilament section, in the center of the sponge for enhanced visibility. Cherry sponge construction does not allow for the long monofilament incorporated in other Gardlok dissectors.

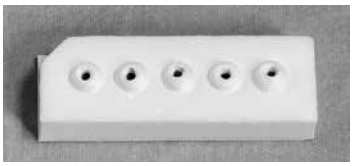
| ITEM # | DESCRIPTION |
|---|---|
| 200218 | Rosebud<br>1/4" (6.35 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 5 per foam holder |
| 200230 | Rosebud<br>1/4" (6.35 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 10 per tray |
| 200231 | Rosebud<br>1/2" (12.7 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton-gauze<br>200 per box, 10 per tray |
| 200232 | Rosebud<br>1/4" (6.35 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 5 per plastic holder |

# SPECIALTY SPONGES

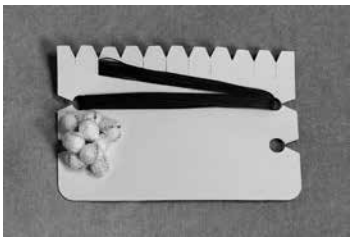
## Specialty Sponges

### ROSEBUD/CHERRY SPONGES (CONTINUED)

200233



200234



200235

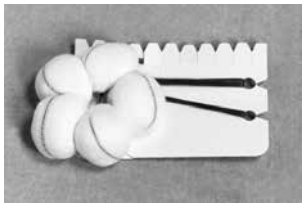
200236

| ITEM # | DESCRIPTION |
|---|---|
| 200233 | Rosebud<br>1/2" (12.7 mm)<br>X-ray detectable<br>Sterile, non-strung, cotton gauze<br>200 per box, 5 per plastic holder |
| 200234 | Cherry<br>3/8" (9.53 mm)<br>X-ray detectable<br>Sterile, non-strung, spun cotton<br>200 per box, 5 per foam holder |
| 200235 | Rosebud<br>1/4" (6.35 mm)<br>X-ray detectable<br>Sterile, strung, cotton gauze<br>200 per box, 10 per accountability card |
| 200236 | Rosebud<br>1/2" (12.7 mm)<br>X-ray detectable<br>Sterile, strung, cotton gauze<br>200 per box, 10 per accountability card |

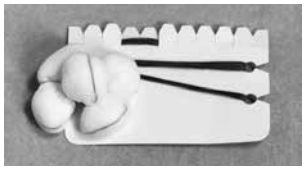
# SPECIALTY SPONGES

## Specialty Sponges

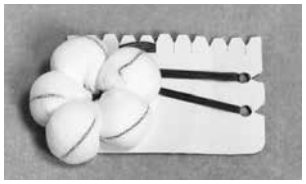
### TONSIL SPONGES



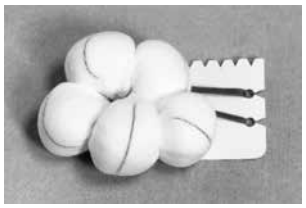
200322



200326



200327



200328

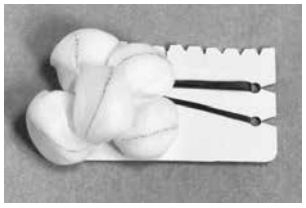
Tonsil sponges are used at the end of a forceps for absorption and pressure hemostatic control during tonsil and adenoid surgery. They can also be drawn into position and tied to a catheter for use after nasal surgical procedures for postnasal or sphenoid packing, applying medication following surgery, and for control of hemorrhaging or drainage. Pilling® Surgical Tonsil Sponges feature double stringing for secure retrieval after use, and are available in a wide variety of choices including gauze, cotton or gauze cotton-filled in three sizes. Other choices include strung or non-strung, X-ray and non X-ray detectable, sterile and non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 200322 | Large<br>X-ray detectable<br>Non-sterile, double-strung, cotton-filled, gauze-covered<br>1000 per box, 5 per accountability card |
| 200326 | Medium<br>X-ray detectable<br>Sterile, double-strung, cotton-filled, gauze-covered<br>500 per box, 5 per accountability card |
| 200327 | Large<br>X-ray detectable<br>Sterile, double-strung, cotton-filled, gauze-covered<br>500 per box, 5 per accountability card |
| 200328 | X-Large<br>X-ray detectable<br>Sterile, double-strung, cotton-filled, gauze-covered<br>500 per box, 5 per accountability card |

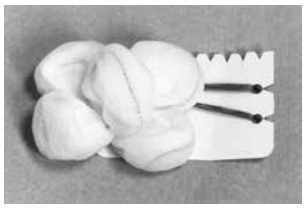
# SPECIALTY SPONGES

## Specialty Sponges

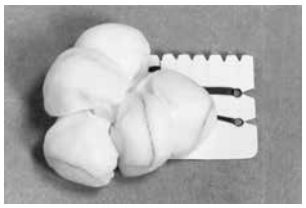
### TONSIL SPONGES (CONTINUED)



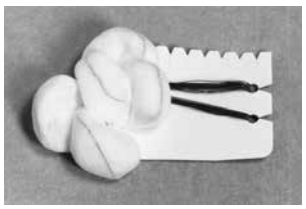
200333



200334



200335



200340

| ITEM # | DESCRIPTION |
|---|---|
| 200333 | Medium<br>X-ray detectable<br>Sterile, double-strung, gauze-filled, gauze covered<br>500 per box, 5 per accountability card |
| 200334 | Large<br>X-ray detectable<br>Sterile, double-strung, gauze-filled, gauze-covered<br>500 per box, 5 per accountability card |
| 200335 | X-Large<br>X-ray detectable<br>Sterile, double-strung, gauze-filled,<br>gauze-covered<br>500 per box, 5 per accountability card |
| 200340 | Medium.<br>X-ray detectable<br>Sterile, double-strung, gauze-filled, gauze-covered<br>100 per box, 5 per accountability card |

# WECK® SPECIALTY PRODUCTS

## "FISH HOOK" NEURO ELASTIC RETRACTORS

382805

| ITEM # | DESCRIPTION |
|---|---|
| 382800 | Durahook, 1/4" (6 mm) hook, sterile, single use. 6/pouch, 10 pouches/box |
| 382805 | Dermahook, 1/2" (12.5 mm) hook, sterile, single use. 6/pouch, 10 pouches/box |

## RANEY CLIP APPLYING FORCEPS

658500

| ITEM # | DESCRIPTION |
|---|---|
| 658500 | Reusable, 6" (15 cm) |

## RANEY NYLON CLIPS

658505

| ITEM # | DESCRIPTION |
|---|---|
| 658505 | Sterile, single use, 10/pouch, 20 pouches/box |

# CONTAINER SYSTEMS

## Pilling® Container Systems

### NON-PERFORATED CONTAINER BOTTOM

| ITEM # | DESCRIPTION |
|---|---|
| 920100 | Small 1/2, 285 x 280 x 135 mm |
| 930100 | Medium 3/4, 465 x 280 x 135 mm |
| 940100 | Large 1/1, 580 x 280 x 135 mm |

920100

930100

940100

### PERFORATED CONTAINER LID

Silver.

| ITEM # | DESCRIPTION |
|---|---|
| 920200 | Small 1/2, 285 x 280 mm |
| 930200 | Medium 3/4, 465 x 280 mm |
| 940200 | Large 1/1, 580 x 280 mm |

920200

930200

940200

# CONTAINER SYSTEMS

## Pilling® Container Systems

### PERFORATED TRAY WITH FEET

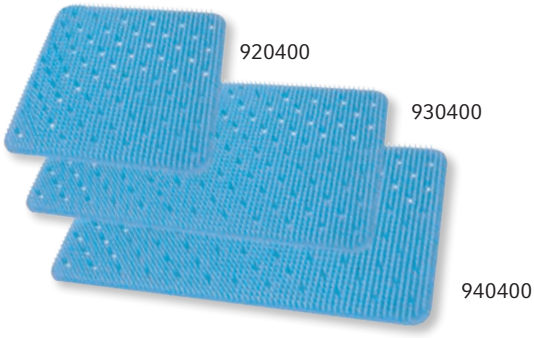
920300

| ITEM # | DESCRIPTION |
|---|---|
| 920300 | Small 1/2, 242 x 252 x 110 mm |
| 930300 | Medium 3/4, 405 x 252 x 110 mm |
| 930301 | Medium 3/4, 405 x 252 x 40 mm |
| 940300 | Large 1/1, 539 x 252 x 110 mm |
| 940301 | Large 1/1, 539 x 252 x 40 mm |

930300

940300

### PERFORATED SILICONE MAT



920400

930400

940400

| ITEM # | DESCRIPTION |
|---|---|
| 920400 | Small 1/2, 225 x 235 mm |
| 930400 | Medium 3/4, 370 x 235 mm |
| 940400 | Large 1/1, 500 x 235 mm |

# CONTAINER SYSTEMS

## Accessories

### CRADLES AND HOLDERS

970002

970003

| ITEM # | DESCRIPTION |
|---|---|
| 970002 | Cradle for Individual Silicone Holder (bag of 4) |
| 970003 | Cradle for 4 Silicone Holders (long) |
| 970010 | Silicone Holder 8 x 26 x 40 mm, Open |
| 970020 | Silicone Holder 8 x 26 x 40 mm, Closed |
| 970030 | Silicone Holder 8 x 26 x 40 mm, Closed Barbed |

970010

970020

970030

### METAL LABELS

| ITEM # | DESCRIPTION |
|---|---|
| 970600 | Metal ID Label, Silver |
| 970601 | Metal ID Label, Yellow |
| 970602 | Metal ID Label, Red |
| 970603 | Metal ID Label, Blue |
| 970604 | Metal ID Label, Green |
| 970605 | Metal ID Label, Black |
| 971000 | Metal ID Label, Custom Engrave, Silver* |
| 971001 | Metal ID Label, Custom Engrave, Yellow* |
| 971002 | Metal ID Label, Custom Engrave, Red* |
| 971003 | Metal ID Label, Custom Engrave, Blue* |
| 971004 | Metal ID Label, Custom Engrave, Green* |
| 971005 | Metal ID Label, Custom Engrave, Black* |

**14 characters per line, 2 line maximum*

# CONTAINER SYSTEMS

## Accessories

### FILTERS

970700

970701

| ITEM # | DESCRIPTION |
|---|---|
| 970700 | Filter Holder for S,M,L Paper Filter |
| 970701 | Paper Filters 100/pk for S,M,L Container |
| 970702 | Paper Filters 500/pk for S,M,L Container |

### ADDITIONAL ACCESSORIES

970705

979000

970040

| ITEM # | DESCRIPTION |
|---|---|
| 970705 | Paper Label w/Indicator 250/pk for S,M,L |
| 979000 | Plastic Security Seal 100/pk |
| 970040 | Extra Cradle Fixation Clips, 4 each |
| 970008 | Extra Tray Feet, 4 each |
| 971010 | Tray Tag Clips, Metal |

970008

971010

HORIZON™

# WECK® LIGATION SOLUTIONS

## Metal and polymer products to help you ligate with security and confidence

From humble beginnings in Edward Weck's Manhattan storefront in 1884, Weck® Branded products have been there for surgeons — step-by-step — since the earliest days of modern surgery.

In 1963, Weck® redefined the closure market with the introduction of the Hemoclip® Traditional Metal Ligating Clip. Over the last fifty years, the Weck® Brand has continued to refine the science of closure to produce a line of metal and polymer ligation solutions demanded by surgeons around the world.

Whether you prefer the classic feel of metal clips, or the modern flexibility of polymer, Teleflex® offers ligation products designed to suit your distinct preferences and procedural needs:

- **Hem-o-lok® Polymer Locking Ligation System –** provides cool ligation, lasting security, and the ability to place and remove clips as needed. Hem-o-lok® Clips are ideal for both open and laparoscopic cases.
- **Horizon™ and Hemoclip® Metal Ligation Systems –** satisfy your need for traditional metal ligating clips for use in cardiovascular and general surgical applications. Available in a range of sizes, surgeons have relied on Weck® Metal Clips for generations.

# WECK® LIGATION SOLUTIONS

## Weck® Hem-o-lok® Polymer Locking Ligation System

### CONFIDENCE YOU CAN FEEL

Confidence. That's what the Weck® Hem-o-lok® Polymer Locking Ligation System provides. Confidence created by a ligation system designed for clip security — secure in the applier, locked onto the patient vessel.

### SECURITY BY DESIGN

The Hem-o-lok® Closure System's unique design and flexible hinge keep the clip firmly seated in applier jaws. The clip's distinct tactile feedback confirms jaw seating and secure vessel placement.

### COOL LIGATION

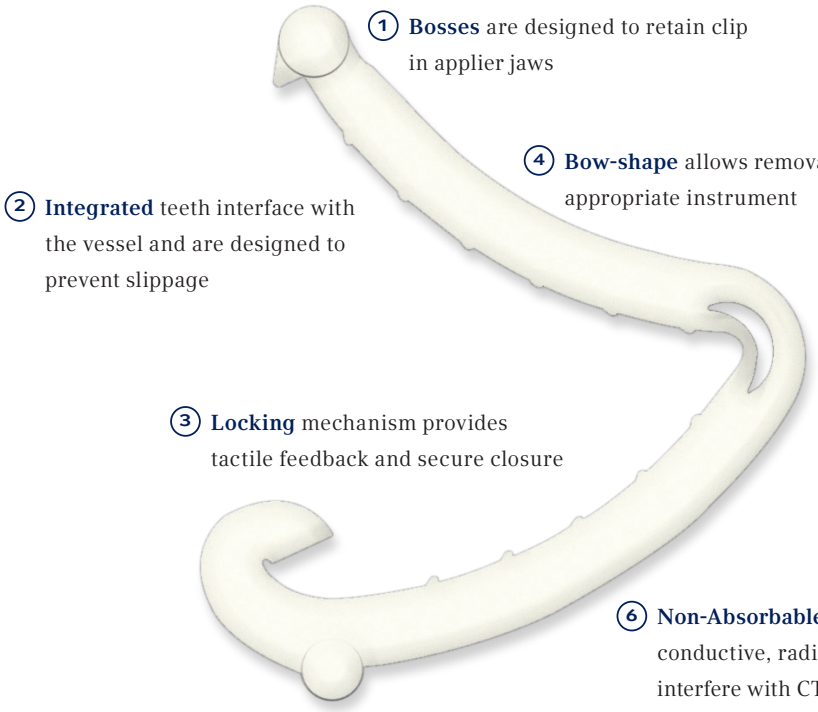
Since Hem-o-lok® is a Cool Ligation System, there's no chance of thermal spread to vital structures, a common concern of many surgeons when using energy-based ligation solutions.

### SIZE RANGES TO MEET YOUR NEEDS

The Hem-o-lok® System is available in a range of clip sizes: Medium, Medium-Large, Large and Extra-Large. The Hem-o-lok® System allows for ligation of 10 mm vessels through a 5 mm port or 16 mm vessels through a 10 mm port. Our broad range of applier lengths (including 45 cm endoscopic appliers for extended reach) allows surgeons to deliver clips with control and confidence.

## HEM-O-LOK®

### BEHIND THE CLIP



# WECK® LIGATION SOLUTIONS

## Weck® Hem-o-lok® Polymer Locking Ligation System

## MANUAL LOAD APPLIERS

### HEM-O-LOK® OPEN APPLIERS

- Open appliers available in Medium, Medium-Large, Large, Extra-Large
- Available in 8" and 11" lengths and curved or right-angle jaws
- Opens at box-lock for easy, thorough cleaning

544180

544179

544240

### HEM-O-LOK® ENDOSCOPIC APPLIERS

- Endo appliers available in Medium-Large, Large, Extra-Large
- Medium-Large appliers available on a 5 mm platform
- Available with 32 cm or extended-length 45 cm shafts
- One-piece and take-apart designs

544995T

544965

## AUTOMATIC APPLIER

### AUTO ENDO5® APPLIER

- 5 mm automatic closure system with 15 Medium-Large clips
- Medium-Large clips designed for 3-10 mm size vessels
- Clip designed for security – locks on to patient vessel

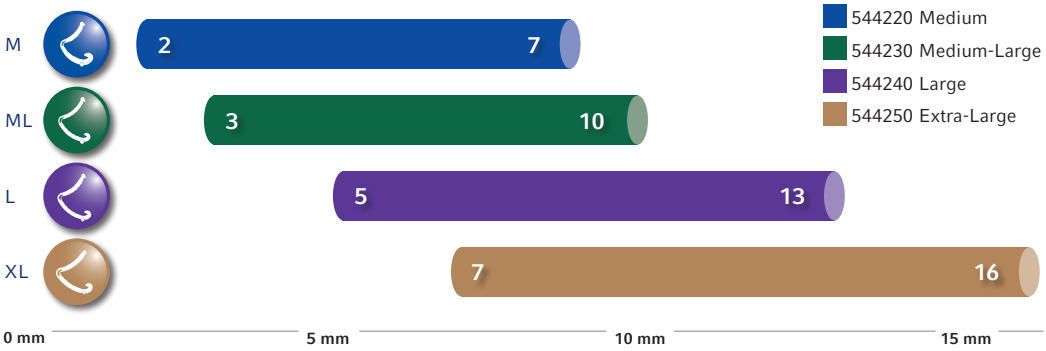
543965

*Hem-o-lok® Ligating Clips are not intended for use as a fallopian contraceptive tubal occlusion device.*
*Hem-o-lok® Ligating Clips are contraindicated for use in ligating the renal artery during laparoscopic donor nephrectomies.*

# WECK® LIGATION SOLUTIONS

## Weck® Hem-o-lok® Polymer Locking Ligation System

### VESSEL/TISSUE BUNDLE SIZE RANGE




**HEM-O-LOK® POLYMER LIGATING CLIPS**

- 544220 Medium
- 544230 Medium-Large
- 544240 Large
- 544250 Extra-Large

# WECK® LIGATION SOLUTIONS

## Weck® Hem-o-lok® Polymer Locking Ligation System

### ORDERING INFORMATION

#### WECK HEM-O-LOK® POLYMER LOCKING LIGATION SYSTEM

| CLIPS | OPEN MANUAL LOAD APPLIERS/REMOVERS | ENDOSCOPIC MANUAL LOAD APPLIERS/REMOVERS | AUTOMATIC APPLIERS |
|---|---|---|---|
| M<br>**544220**<br>Hem-o-lok® Medium Polymer Clips<br>6 clips/cartridge<br>14 cartridges per box, sterile | **544113** 8" Curved<br>**544114** 11" Right-Angle (70°)<br>**544115** 11" Curved<br>**544123** 11" Remover (for M, ML, L) | | |
| ML<br>**544230**<br>Hem-o-lok® Medium-Large Polymer Clips<br>6 clips/cartridge<br>14 cartridges per box, sterile | **544170** 8" Curved<br>**544171** 11" Curved<br>**544172** 11" Right-Angle (70°)<br>**544123** 11" Remover (for M, ML, L) | **Endo5® Applier ML, 5 mm diameter**<br>**544965** 32.5 cm applier<br>**544965L** 45 cm applier<br>**544965T** 34 cm applier, take-apart<br>**544121** 32 cm remover (for ML and L)<br>**544121L** 45 cm remover (for ML and L)<br>**544121T** 32 cm remover, take-apart (for ML and L) | **543965 Auto Endo5® Applier**<br>15 clips per applier, 3 appliers per box, sterile, disposable for endo surgery |
| L<br>**544240**<br>Hem-o-lok® Large Polymer Clips<br>6 clips/cartridge<br>14 cartridges per box, sterile | **544179** 11" Right-Angle (70°)<br>**544180** 8" Curved<br>**544181** 11" Curved<br>**544182** 10" Right-Angle (70°), narrow shaft<br>**544123** 11" Remover (for M, ML, L)<br>**544124** 11" Remover (for L, XL) | **Endo10™ Applier L**<br>**544995** 32 cm applier, 10 mm<br>**544995L** 45 cm applier, 10 mm<br>**544995T** 34 cm applier, 10 mm, take-apart<br>**544121** 32 cm remover, 5 mm (for ML and L)<br>**544121L** 45 cm remover, 5 mm (for ML and L)<br>**544121T** 32 cm remover, 5 mm, take-apart (for ML and L)<br>**544130** 32 cm remover, 10 mm (for L and XL)<br>**544130L** 45 cm remover, 10 mm (for L and XL)<br>**544130T** 33 cm remover, 10 mm take-apart (for L and XL) | |
| XL<br>**544250**<br>Hem-o-lok® Extra-Large Polymer Clips<br>6 clips/cartridge<br>14 cartridges per box, sterile | **544191** 11" Curved<br>**544192** 11" Right-Angle (70°)<br>**544124** 11" Remover (for L, XL) | **Endo10™ Applier XL, 10 mm diameter**<br>**544990** 32 cm applier<br>**544990L** 45 cm applier<br>**544990T** 34 cm applier, take-apart<br>**544130** 32 cm remover (for L and XL)<br>**544130L** 45 cm remover (for L and XL)<br>**544130T** 33 cm remover, take-apart (for L and XL) | |
| **STERILITY STORAGE TRAY** | | **544500** capacity: 3 endoscopic 32 cm appliers<br>**P37319** capacity: 2-3 endoscopic 45 cm appliers | |

*Hem-o-lok® Ligating Clips are not intended for use as a fallopian contraceptive tubal occlusion device.*
*Hem-o-lok® Ligating Clips are contraindicated for use in ligating the renal artery during laparoscopic donor nephrectomies.*

# WECK® LIGATION SOLUTIONS

## Weck® Hem-o-lok® Polymer Locking Ligation System

The Horizon™ System is the Weck® Premium Titanium Ligation Platform providing surgeons a strong, secure clip coupled with an efficient, convenient easy-load cartridge system.

### THE HORIZON™ CLIP

The preformed chevron shape of the Horizon™ Clip engulfs tissue with precise tip-to-tip closure. Heart-shaped wire is designed to give each clip a firm grip on vessels, while the triangulated cross-section of the clip leg maximizes surface-to-surface contact between clip and jaw, practically eliminating clip fallout.

### THE HORIZON™ CARTRIDGE

The design of the Horizon™ Cartridge creates a frictionless one-hand load. Horizon™ Cartridges are color-coded to match appliers and adhesive backing allows convenient placement of the cartridge to any sterile area.

*Clip images represent approximate, not exact, sizes.*

MICROCLIP™ | SMALL | MEDIUM | MEDIUM-LARGE | LARGE

# WECK® LIGATION SOLUTIONS

## Weck® Hem-o-lok® Polymer Locking Ligation System

### OPEN APPLIERS

- Available with curved (20°), angled (55°) or right-angled (70°) jaws
- Opens at box-lock for easy, thorough cleaning
- Available in a wide range of applier lengths, including 14"

### ENDOSCOPIC APPLIERS

- Medium, Medium-Large and Large
- Extended length available (45 cm shaft)
- Large, lightweight rotation knob allows one-finger, 360° rotation of applier shaft
- Flush ports for thorough cleaning

338110

### CLIP OPTIONS

- The Horizon™ Clip Cartridge provides incredibly easy and precise loading that can enhance surgical procedure efficiency
- Both 6- and 24-clip cartridges are available

002200

002204

### SPECIALTY APPLIER

- The Horizon™ 11" Multi-Angle Access Open Surgical Applier for small (wide slot) clip cartridges incorporates a 45° angled jaw (or curved jaw) for an optimal angle of access to the surgical target
- The Horizon™ Endosaphenous Vein Applier incorporates a 5 mm shaft diameter with a 7 mm angled jaw for ligation of vein branches

137117

238200

*Weck® Ligating Clips are not intended for use as a contraceptive tubal occlusion device.*
*Weck® Ligating Clips are contraindicated for use in ligating the renal artery during laparoscopic donor nephrectomies.*

# WECK® LIGATION SOLUTIONS

## Weck® Horizon™ Metal Ligation System

### ORDERING INFORMATION

#### WECK® HORIZON™ METAL LIGATION SYSTEM

☐ Micro ■ Small ■ Small-Wide ■ Medium ■ Medium-Large ■ Large

#### TITANIUM LIGATING CLIPS

| PRODUCT NUMBER | CLIP SIZE | CLIPS/CARTRIDGE | CARTRIDGES/BOX | CLIPS/BOX |
|---|---|---|---|---|
| 005200 | MicroClip™ | 6 | 30 | 180 |
| 001200 | Small | 6 | 30 | 180 |
| 001204 | Small | 24 | 25 | 600 |
| 001201 | Small-Wide | 6 | 30 | 180 |
| 001205 | Small-Wide | 24 | 25 | 600 |
| 002200 | Medium | 6 | 30 | 180 |
| 002204 | Medium | 24 | 25 | 600 |
| 003200 | Medium-Large | 6 | 20 | 120 |
| 003204 | Medium-Large | 24 | 15 | 360 |
| 004200 | Large | 6 | 20 | 120 |
| 004204 | Large | 24 | 15 | 360 |

# WECK® LIGATION SOLUTIONS

## Weck® Horizon™ Metal Ligation System

### WECK® HORIZON™ METAL LIGATION SYSTEM

☐ Micro ■ Small ■ Small-Wide ■ Medium ■ Medium-Large ■ Large

### OPEN SURGICAL APPLIERS

| PRODUCT # | APPLIER LENGTH | CLIP SIZE | JAW TYPE* |
|---|---|---|---|
| 537061 | 6" (15 cm) | MicroClip™ | Curved |
| 537081 | 8" (20 cm) | MicroClip™ | Curved |
| 137061 | 6" (15 cm) | Small | Curved |
| 137081 | 8" (20 cm) | Small | Curved |
| 137085 | 8" (20 cm) | Small | Angled |
| 137111 | 11" (28 cm) | Small | Curved |
| 137062 | 6" (15 cm) | Small-Wide | Curved |
| 137082 | 8" (20 cm) | Small-Wide | Curved |
| 137086 | 8" (20 cm) | Small-Wide | Angled |
| 137112 | 11" (28 cm) | Small-Wide | Curved |
| 237061 | 6" (15 cm) | Medium | Curved |
| 237081 | 8" (20 cm) | Medium | Curved |
| 237085 | 8" (20 cm) | Medium | Angled |
| 237111 | 11" (28 cm) | Medium | Curved |
| 237115 | 11" (28 cm) | Medium | Angled |
| 237117 | 11" (28 cm) | Medium | Right-Angled |
| 237141 | 14" (35.5 cm) | Medium | Curved |
| 237145 | 14" (35.5 cm) | Medium | Angled |
| 337081 | 8" (20 cm) | Medium-Large | Curved |
| 337085 | 8" (20 cm) | Medium-Large | Angled |
| 337111 | 11" (28 cm) | Medium-Large | Curved |
| 337115 | 11" (28 cm) | Medium-Large | Angled |
| 337117 | 11" (28 cm) | Medium-Large | Right-Angled |
| 337141 | 14" (35.5 cm) | Medium-Large | Curved |
| 337145 | 14" (35.5 cm) | Medium-Large | Angled |
| 437081 | 8" (20 cm) | Large | Curved |
| 437085 | 8" (20 cm) | Large | Angled |
| 437111 | 11" (28 cm) | Large | Curved |
| 437115 | 11" (28 cm) | Large | Angled |
| 437117 | 11" (28 cm) | Large | Right-Angled |
| 437141 | 14" (35.5 cm) | Large | Curved |
| 437145 | 14" (35.5 cm) | Large | Angled |

### ENDOSCOPIC LIGATING APPLIERS

| PRODUCT # | APPLIER LENGTH | DIAMETER | CLIP SIZE | JAW TYPE |
|---|---|---|---|---|
| 238110 | 12" (31 cm) | 10 mm | Medium | Endoscopic |
| 238170 | 18" (45 cm) | 10 mm | Medium | Endoscopic |
| 238200 | 13" (32 cm) | 5 mm Shaft, 7 mm Jaw | Medium | Endosaphenous |
| 338110 | 12" (21 cm) | 10 mm | Medium-Large | Endoscopic |
| 338170 | 18" (45 cm) | 10 mm | Medium-Large | Endoscopic |
| 438110 | 14" (36 cm) | 12 mm | Large | Endoscopic |
| 438170 | 18" (45 cm) | 12 mm | Large | Endoscopic |

### ENDOSCOPIC LIGATING APPLIERS – TAKE-APART

| PRODUCT # | APPLIER LENGTH | DIAMETER | CLIP SIZE | JAW TYPE |
|---|---|---|---|---|
| 238110T | 13" (32 cm) | 10 mm | Medium | Endoscopic |
| 338110T | 13" (32 cm) | 10 mm | Medium-Large | Endoscopic |

### SPECIALTY OPEN SURGICAL LIGATING APPLIERS

| PRODUCT # | APPLIER LENGTH | CLIP SIZE | JAW TYPE |
|---|---|---|---|
| 137117 | 11" (28 cm) | Small-Wide | 45° Angled |
| 137118 | 11" (28 cm) | Small-Wide | Curved |

### METAL CLIP REMOVERS (REMOVES ALL WECK METAL CLIPS)

| PRODUCT # | APPLIER LENGTH | STYLE |
|---|---|---|
| 523120 | 6.5" (16.5 cm) | Straight |
| 523121 | 10.5" (26.7 cm) | Bent Shaft, 30° Angle |

*Weck® Ligating Clips are not intended for use as a contraceptive tubal occlusion device. Weck® Ligating Clips are contraindicated for use in ligating the renal artery during laparoscopic donor nephrectomies.*
**Curved 20°, Angled 55°, Right-Angle 70°*

# WECK® LIGATION SOLUTIONS

## Weck® Horizon™ Metal Ligation System

### HEMOCLIP® TRADITIONAL

The Hemoclip® Traditional Metal Ligating Clips:

- Friction fit loading system
- Available in titanium, tantalum and stainless steel – the widest metal selection in the industry
- Cartridge base to assist loading

### HEMOCLIP® PLUS

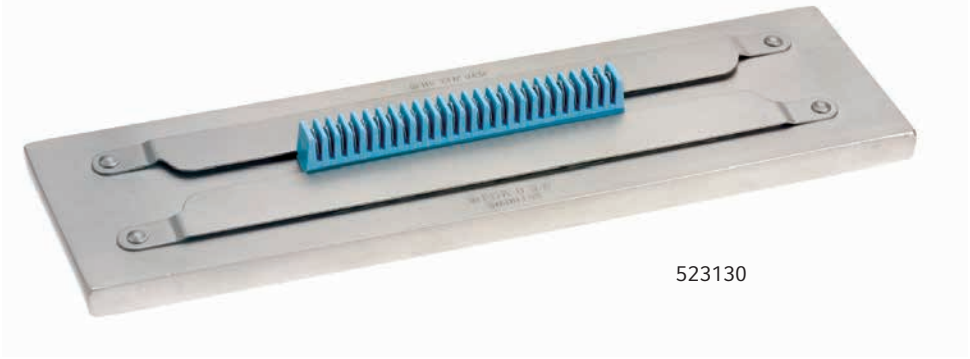
The Hemoclip® Plus System is an evolution of the classic metal Hemoclip®

Hemoclip® Plus Metal Ligating Clips:

- Features an easy-load cartridge system
- Clip loads from the cartridge with minimal pressure
- Available with adhesive or non-adhesive clip cartridges

### CLIP OPTIONS

- Chevron shaped clip for precise tip to tip closure
- Heart-shaped wire for tenacious grip on vessels
- Lateral transverse grooves for increased vessel contact



523130

### OPEN APPLIERS

- Available in a variety of lengths and tip angles
- Opens at box-lock for easy cleaning

- Curved tip

- Right angle tip

# WECK® LIGATION SOLUTIONS

## Weck® Horizon™ Metal Ligation System

*Weck® Ligating Clips are not intended for use as a contraceptive tubal occlusion device.*
*Weck® Ligating Clips are contraindicated for use in ligating the renal artery during laparoscopic donor nephrectomies.*

# WECK® LIGATION SOLUTIONS

## Weck® Horizon™ Metal Ligation System

### ORDERING INFORMATION

#### WECK® HEMOCLIP® TRADITIONAL CLIPS AND APPLIERS

Small | Medium | Medium-Large | Large

#### HEMOCLIP® TRADITIONAL-TITANIUM LIGATING CLIPS

| PRODUCT # | CLIP SIZE | CLIPS/ CARTRIDGE | CARTRIDGES/ BOX | CLIPS/BOX |
|---|---|---|---|---|
| 523735 | Small | 25 | 12 | 300 |
| 523835 | Small | 10 | 24 | 240 |
| 523700 | Medium | 25 | 10 | 250 |
| 523800 | Medium | 10 | 20 | 200 |
| 523760 | Medium-Large | 10 | 20 | 200 |
| 523860 | Medium-Large | 10 | 16 | 160 |
| 523770 | Large | 15 | 10 | 150 |
| 523870 | Large | 10 | 12 | 120 |

#### HEMOCLIP® TRADITIONAL-TANTALUM LIGATING CLIPS

| PRODUCT # | CLIP SIZE | CLIPS/ CARTRIDGE | CARTRIDGES/ BOX | CLIPS/BOX |
|---|---|---|---|---|
| 523135 | Small | 25 | 12 | 300 |
| 523335 | Small | 10 | 24 | 240 |
| 523100 | Medium | 25 | 10 | 250 |
| 523300 | Medium | 10 | 20 | 200 |
| 523160 | Medium-Large | 10 | 20 | 200 |
| 523360 | Medium-Large | 10 | 16 | 160 |
| 523170 | Large | 15 | 10 | 150 |
| 523370 | Large | 10 | 12 | 120 |

#### HEMOCLIP® TRADITIONAL-STAINLESS STEEL LIGATING CLIPS

| PRODUCT # | CLIP SIZE | CLIPS/ CARTRIDGE | CARTRIDGES/ BOX | CLIPS/BOX |
|---|---|---|---|---|
| 523435 | Small | 25 | 12 | 300 |
| 523635 | Small | 10 | 24 | 240 |
| 523400 | Medium | 25 | 10 | 250 |
| 523600 | Medium | 10 | 20 | 200 |
| 523460 | Medium-Large | 10 | 20 | 200 |
| 523660 | Medium-Large | 10 | 16 | 160 |
| 523470 | Large | 15 | 10 | 150 |
| 523670 | Large | 10 | 12 | 120 |

#### HEMOCLIP® TRADITIONAL LIGATING CLIP APPLIERS

| PRODUCT # | CLIP SIZE | APPLIER LENGTH | JAW TYPE |
|---|---|---|---|
| 523140 | Small | 6" (15 cm) | Curved |
| 523150 | Small | 8" (20 cm) | Curved |
| 523151 | Small | 11" (28 cm) | Curved |
| 523105 | Medium | 8" (20 cm) | Right Angled |
| 523106 | Medium | 11" (28 cm) | Right Angled |
| 523109 | Medium | 6" (15 cm) | Curved |
| 523110 | Medium | 8" (20 cm) | Curved |
| 523111 | Medium | 11" (28 cm) | Curved |
| 523165 | Medium-Large | 8" (20 cm) | Curved |
| 523166 | Medium-Large | 11" (28 cm) | Curved |
| 523167 | Medium-Large | 8" (20 cm) | Right Angled |
| 523168 | Medium-Large | 11" (28 cm) | Right Angled |
| 523175 | Large | 8" (20 cm) | Curved |
| 523177 | Large | 8" (20 cm) | Right Angled |
| 523178 | Large | 11" (28 cm) | Right Angled |
| 523180 | Large | 11" (28 cm) | Curved |

#### HEMOCLIP® TRADITIONAL LIGATING CLIP PRECISION APPLIERS

| PRODUCT # | CLIP SIZE | APPLIER LENGTH | JAW TYPE |
|---|---|---|---|
| 523540 | Small | 6" (15 cm) | Curved |
| 523550 | Small | 8" (20 cm) | Curved |
| 523551 | Small | 11" (28 cm) | Curved |

#### HEMOCLIP® LIGATING CLIP ACCESSORIES

| PRODUCT # | CLIP SIZE | APPLIER LENGTH | JAW TYPE |
|---|---|---|---|
| 523120 | Removing Forceps | 6" (15 cm) | Straight |
| 523121 | Removing Forceps | 10" (25.4 cm) | Angled Shanks |
| 523130 | Cartridge Base | 7" (17.78 cm) | |

# WECK® LIGATION SOLUTIONS

## Weck® Horizon™ Metal Ligation System

### WECK® HEMOCLIP® PLUS CLIPS AND APPLIERS

■ Small ■ Small-Strongpoint ■ Medium ■ Medium-Large ■ Large

### HEMOCLIP® PLUS TITANIUM LIGATING CLIPS

| PRODUCT # | CLIP SIZE | CLIPS/ CARTRIDGE | CARTRIDGES/ BOX | CLIPS/BOX |
|---|---|---|---|---|
| 533735 | Small w/tape | 25 | 12 | 300 |
| 533737 | Small | 25 | 12 | 300 |
| 533835 | Small w/tape | 10 | 18 | 180 |
| 533837 | Small | 10 | 18 | 180 |
| 534735 | Small-Strongpoint w/tape | 25 | 12 | 300 |
| 534737 | Small-Strongpoint | 25 | 12 | 300 |
| 534835 | Small-Strongpoint w/tape | 10 | 18 | 180 |
| 534837 | Small-Strongpoint | 10 | 18 | 180 |
| 533700 | Medium w/tape | 25 | 10 | 250 |
| 533702 | Medium | 25 | 10 | 250 |
| 533800 | Medium w/tape | 10 | 18 | 180 |
| 533802 | Medium | 10 | 18 | 180 |
| 533860 | Medium-Large w/tape | 10 | 12 | 120 |
| 533862 | Medium-Large | 10 | 12 | 120 |
| 533870 | Large w/tape | 10 | 12 | 120 |
| 533872 | Large | 10 | 12 | 120 |

### HEMOCLIP® PLUS LIGATING CLIP APPLIERS

| PRODUCT # | CLIP SIZE | APPLIER LENGTH | JAW TYPE |
|---|---|---|---|
| 533140 | Small | 6" (15 cm) | Curved |
| 533150 | Small | 8" (20 cm) | Curved |
| 533151 | Small | 11" (28 cm) | Curved |
| 533152 | Small | 8" (20 cm) | Right Angled |
| 534140 | Small-Strongpoint | 6" (15 cm) | Curved |
| 534150 | Small-Strongpoint | 8" (20 cm) | Curved |
| 533105 | Medium | 8" (20 cm) | Right Angled |
| 533106 | Medium | 11" (28 cm) | Right Angled |
| 533108 | Medium | 11" (28 cm) | Angled |
| 533109 | Medium | 6" (15 cm) | Curved |
| 533110 | Medium | 8" (20 cm) | Curved |
| 533111 | Medium | 11" (28 cm) | Curved |
| 533164 | Medium-Large | 11" (28 cm) | Angled |
| 533165 | Medium-Large | 8" (20 cm) | Curved |
| 533166 | Medium-Large | 11" (28 cm) | Curved |
| 533167 | Medium-Large | 8"(20 cm) | Right Angled |
| 533168 | Medium-Large | 11" (28 cm) | Right Angled |
| 114527 | Medium-Large | 13" (32 cm) | Endoscopic |
| 533175 | Large | 8" (20 cm) | Curved |
| 533177 | Large | 8" (20 cm) | Right Angled |
| 533178 | Large | 11" (28 cm) | Right Angled |
| 533180 | Large | 11" (28 cm) | Curved |
| 533181 | Large | 11" (28 cm) | Angled |

### HEMOCLIP® LIGATING CLIP ACCESSORIES

| PRODUCT # | CLIP SIZE | APPLIER LENGTH | JAW TYPE |
|---|---|---|---|
| 523120 | Removing Forceps | 6" (15 cm) | Straight |
| 523121 | Removing Forceps | 10" (25.4 cm) | Angled Shanks |
| 523130 | Cartridge Base | 7" (17.78 cm) | |

*Weck® Ligating Clips are not intended for use as a contraceptive tubal occlusion device.*
*Weck® Ligating Clips are contraindicated for use in ligating the renal artery during laparoscopic donor nephrectomies.*

# EAR, NOSE AND THROAT (ENT) INSTRUMENTS

## CHAPTER OVERVIEW

Today, the Pilling® Brand is recognized worldwide for excellence achieved in the area of Ear, Nose and Throat surgical instrumentation, which has established Teleflex® as a market leader in the Otolaryngology specialty with our rigid endoscopes.

A wide selection of unique designs, patterns and proprietary Pilling® ENT Instruments co-developed with leading surgeons are provided to customers across the world to help improve the standard of patient care.

Our ENT Pilling® Instruments meet your hospitals needs in the ENT specialty by offering high quality OR grade instruments made of 100% German and U.S. stainless steel. A full line of rigid endoscopes – laryngoscopes, bronchoscopes and esophagoscopes – is offered, along with many laryngeal, bronchial and esophageal instruments used during endoscopic surgical procedures. Biopsy forceps, grasping forceps, retrieval forceps, aspirating tubes and other related instruments have been designed specifically in length and diameter to work with Pilling® Scopes.

## PRODUCTS

Our full line of Pilling® ENT Scopes, Tracheostomy Tubes, Bougies and Dilators are made in the U.S.A. and includes the following:

- Laryngoscopes
- Bronchoscopes
- Esophagoscopes
- Tracheostomy Tubes
- Dilators
- Maloney and Hurst Bougies
- Related Instrumentation

## FEATURED PRODUCT

Pilling® Video Laryngoscope Systems Versatility. *Surgeon-inspired design. High quality resolution.*

When you want versatility, look to Pilling® Ossoff and Dedo® Laryngoscopes. Our dual channel designs allow the telescope, suction tube or light carrier to be positioned as the surgeon chooses.

Each video laryngoscope system includes a laryngoscope, telescope, suction tube and light carrier. Sterilization trays are optional.

522194

522226

522225P

# LARYNGOSCOPES

**NEW!**
Ossoff-Pilling® Video Laryngoscope
522194
*See pg. 409 for details.*

### PILLING® LARYNGOSCOPES

Offering one of the largest selections of laryngoscopes in the world today, Pilling® Scopes include designs by leading surgeons. All laryngoscopes have fiberoptic light carriers.

## LARYNGOSCOPE AND LASER LARYNGOSCOPE
## PATIENT SIZE LISTING

### NEONATE/INFANT
**LARYNGOSCOPES**
- 521500 Holinger
- 521550 Jackson
- 522002 Holinger

### CHILD/PEDIATRIC
**LARYNGOSCOPES**
- 521450 Tucker
- 521820 Jackson Direct
- 522004 Tucker-Anterior
- 522216 Jako III
- 522222 Pilling®-Dedo

### CHILD/PEDIATRIC
**LASER LARYNGOSCOPES**
- 522237 Ossoff-Karlan-Dedo

### CHILD/PEDIATRIC
**SUBGLOTTISCOPES**
- 522242 Healy Pediatric Subglottiscope

### ADOLESCENT
**LARYNGOSCOPES**
- 521455 Tucker Slide
- 521554 Jackson
- 522209 Jako-Cherry Type III
- 522224 Dedo

**LASER LARYNGOSCOPES**
- 522238 Ossoff-Karlan
- 522292 Pilling® Double-Action

### ADULT
**LARYNGOSCOPES**
- 521460 Tucker
- 521465 Tucker
- 521556 Jackson
- 521558 Jackson
- 521824 Jackson Direct
- 522010 Holinger
- 522012 Holinger
- 522040 Holinger
- 522030 Holinger
- 522032 Holinger
- 522045 Holinger
- 522206 Jako-Micro Type III
- 522225P Pilling®-Dedo
- 522229 Abramson-Dedo

**LASER LARYNGOSCOPES**
- 522290 Pilling®-Dedo
- 522291 Pilling®-Ossoff
- 522193 Pilling®-Ossoff Video
- 522228 Dedo Micro
- 522243 Dedo Extra Long
- 522231 Ossoff-Karlan-Dedo
- 522232 Ossoff-Karlan-Jako
- 522233 Ossoff-Karlan
- 522229 Abramson-Dedo

**SUBGLOTTISCOPES**
- 522244 Ossoff
- 522245 Ossoff

# LARYNGOSCOPES

## Teeth Guards

### TEETH GUARDS

502275

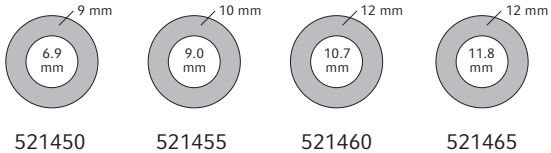
These nylon teeth guards were designed as protection for the patient's teeth against pressure that may be exerted during insertion and positioning of a laryngoscope.

| ITEM # | DESCRIPTION |
|---|---|
| 502275 | Adult size teeth guards, box of 24 pair |
| 502276 | Adult size teeth guards, box of 3 pair |

## Laryngoscopes/Monocular View

### TUCKER MID-LIGHTED SIDE SLIDE LARYNGOSCOPES

521465




521450 521455 521460 521465

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

A standard Jackson Slide Laryngoscope with a mid-line fiber optic light carrier and Tucker modification of a side slide. The side slide removal allows for easy introduction of the bronchoscope. The shortened light carrier facilitates the use of the instrument in the vallecula to minimize the shadow cast by the epiglottis when introducing a bronchoscope. Supplied with one light carrier. Cable sold separately (pg. 463).

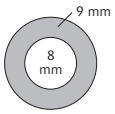
| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL I.D. | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 521450 | Child | 91 mm | 6.9 mm | 9.0 mm | 14.0 mm | 526510 |
| 521455 | Adolescent | 106 mm | 9.0 mm | 10.0 mm | 17.0 mm | 526512 |
| 521460 | Adult | 121 mm | 10.7 mm | 12.0 mm | 19.0 mm | 526515 |
| 521465 | Long Adult | 160 mm | 11.8 mm | 12.0 mm | 19.0 mm | 526516 |

# LARYNGOSCOPES

## Laryngoscopes/Monocular View

### HOLINGER INFANT (NEWBORN) SLIDE LARYNGOSCOPE

521500




521500

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE*

Supplied with a very small light carrier to permit maximum lumen. Cable sold separately (pg. 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL I.D. | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 521500 | Infant | 82 mm | 8.0 mm | 9.0 mm | 14.0 mm | 526204 |

# LARYNGOSCOPES

## Laryngoscopes/Monocular View

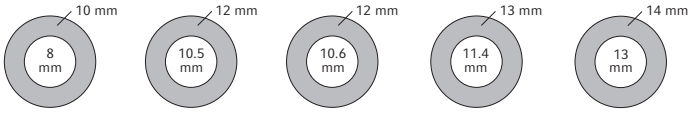
### JACKSON STANDARD FIBER OPTIC SLIDE LARYNGOSCOPES

521552

521554

The Jackson Standard Slide Laryngoscope is considered the standard scope and is used not only for introduction of a bronchoscope but also for operating in the larynx. Removable slide at bottom of scope. Supplied with one light carrier. Cable sold separately (pg. 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL I.D. | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 521550 | Infant | 95 mm | 8.0 mm | 10.0 mm | 16.0 mm | 526000 |
| 521552 | Child | 125 mm | 10.5 mm | 12.0 mm | 17.0 mm | 526006 |
| 521554 | Adolescent | 160 mm | 10.6 mm | 12.0 mm | 17.0 mm | 526018 |
| 521556 | Adol/Adult | 160 mm | 11.4 mm | 13.0 mm | 18.0 mm | 526018 |
| 521558 | Adult | 160 mm | 13.0 mm | 14.0 mm | 21.0 mm | 526018 |




521550 521552 521554 521556 521558

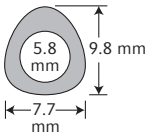
*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE*

# LARYNGOSCOPES

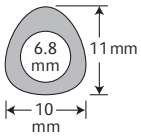
## Laryngoscopes/Monocular View

### JACKSON DIRECT OR ANTERIOR COMMISSURE LARYNGOSCOPES

521820




521820




521824

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE.**

The distal tip and arrangement of the light carrier in the Jackson Anterior Commissure Laryngoscope are constructed for best vision and avoidance of trauma, especially going through the glottis into the trachea without injury to the cords. The scope is long enough to also be used as a tracheascope in many cases. Supplied with one light carrier. Hook handle. Cable sold separately (pg. 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 521820 | Child | 133 mm | 5.8 mm | 7.7 x 9.8 mm | 13.6 mm | 526008 |
| 521824 | Adult | 173 mm | 6.8 mm | 10 x 11 mm | 16.0 mm | 526026 |

# LARYNGOSCOPES

## Laryngoscopes/Monocular View

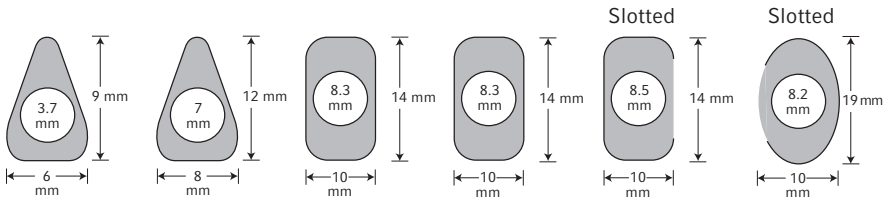
### HOLINGER ANTERIOR COMMISSURE LARYNGOSCOPES

522012

522040

The Holinger Anterior Commissure Laryngoscope incorporates the principle of the Yankauer post-nasal speculum. The distal end of the superior surface of the tube rises obliquely and flares laterally and the proximal portion drops obliquely. This increases the lumen and gives a larger field for work by elevating the tuberculum of the epiglottis. Supplied with one light carrier. Cable sold separately (pg. 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522002 | Infant | 97 mm | 3.7 mm | 6 x 9 mm | 9.8 mm | 526206 |
| 522004 | Child | 120 mm | 7.0 mm | 8 x 12 mm | 13.0 mm | 526210 |
| 522010 | Adult | 170 mm | 8.3 mm | 10 x 14 mm | 19.0 mm | 526028 |
| 522012 | Adult Extra-Long | 180 mm | 8.3 mm | 10 x 14 mm | 19.0 mm | 526038 |
| 522040 | Adult "Slotted" | 170 mm | 8.5 mm | 10 x 14 mm | 19.0 mm | 526028 |
| 522045 | Adult "Slotted" | 170 mm | 8.2 mm | 10 x 19 mm | 20.0 mm | 526212 |




522002 522004 522010 522012 522040 522045

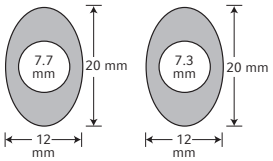
*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

# LARYNGOSCOPES

## Laryngoscopes/Monocular View

### HOLINGER "HOUR GLASS" ANTERIOR COMMISSURE LARYNGOSCOPES

522032




522030 522032

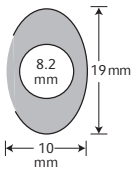
*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE.**

The Holinger "Hour Glass" Anterior Commissure Laryngoscope accentuates the flare tip and enlarged proximal opening of the original Holinger Laryngoscope. The center portion, which is markedly constricted, and the very small light carriers give a minimal external diameter for ease in introduction while providing maximum exposure of the vocal cords for endolaryngeal surgery. Supplied with one light carrier. Cable sold separately (pg. 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522030 | Adult | 171 mm | 7.7 mm | 12 x 20 mm | 20.2 mm | 526212 |
| 522032 | Adult Extra-Long | 181 mm | 7.3 mm | 12 x 20 mm | 20.4 mm | 526214 |

### HOLINGER "SLOTTED" ANTERIOR COMMISSURE LARYNGOSCOPE

522045




522045

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE.**

The Holinger "Slotted" Anterior Commissure Laryngoscope is a Holinger "Hour Glass" Laryngoscope that has been modified with an open slot on the working left side of the instrument. This modification allows greater latitude of forceps manipulation and may be useful in vocal cord injection procedures. Supplied with one light carrier.

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522045 | Adult "Slotted" | 170 mm | 8.2 mm | 10 x 19 mm | 20.0 mm | 526212 |

# LARYNGOSCOPES

## Micro-Laryngoscopes/Binocular View

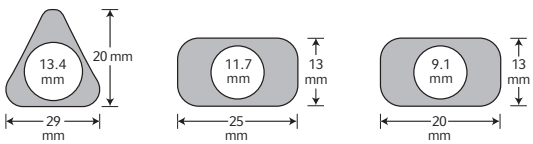
### PILLING® MICRO-LARYNGOSCOPES

Pilling® Micro-Laryngoscopes fulfill the need for maximum illumination and light intensity in microsurgery. The lighting systems on the micro-laryngoscopes provide more than adequate illumination for microsurgery and diagnosis when used under high microscopic magnification. These laryngoscopes were designed with direction from leading surgeons to meet their demanding requirements.

### JAKO MICRO-LARYNGOSCOPE TYPE III

522206

522209




522206 522209 522216

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

The Jako Micro-Laryngoscope Type I has been considered the standard scope for micro-laryngoscopy. However, Pilling®offers the Jako Micro-Laryngoscope Type III because of its superior design. It is identical in size and configuration to the Type I and Type II, but the Type III scope features an improved lighting system which diverts the fiberoptic cable out of the way of the surgeon's hands. Additionally, a bifurcated light carrier running down each side of the laryngoscope barrel provides bilateral illumination, which minimizes shadows from the instruments as they approach vocal cord lesions. Because of these additional benefits, Pilling® is pleased to offer the Jako Micro-Laryngoscope Type III . Supplied with one bifurcated light carrier. Cable sold separately (pg. 463).

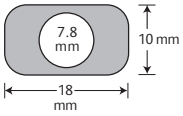
| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522206 | Adult | 178 mm | 13.4 mm | 29.0 x 20.0 mm | 34.0 mm | 526526 |
| 522209 | Adol. | 149 mm | 11.7 mm | 25.0 x 13.0 mm | 30.0 mm | 526527 |
| 522216 | Child | 120 mm | 9.1 mm | 20.0 x 13.0 mm | 25.0 mm | 526528 |

# LARYNGOSCOPES

## Micro-Laryngoscopes/Binocular View

### JAKO-CHERRY MICRO-LARYNGOSCOPE TYPE II (NEWBORN)

522220




522220

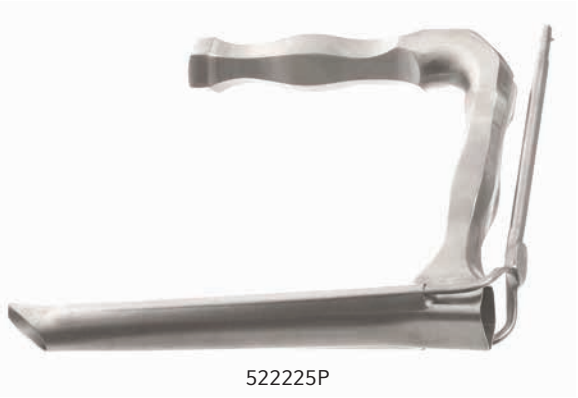
*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

The Jako-Cherry Micro-Laryngoscope Type II is identical in size and configuration to the Type I. However, the Type II scopes are supplied with two extra-large diameter light carriers permanently connected to 72" light transmission cables (pictured page 401). Micro-Laryngoscopes fulfill the need for maximum illumination and light intensity in microsurgery.

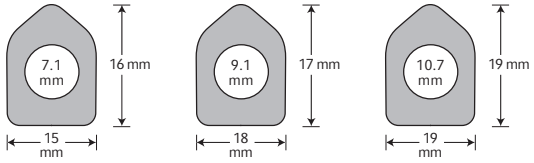
| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522220 | Newborn | 114 mm | 7.8 mm | 18 x 10 mm | 25.0 mm | 527825R*<br>527820L* |

** R indicates right light carrier*
*L indicates left light carrier*

### DEDO-PILLING® MICRO-LARYNGOSCOPE (OUR MOST POPULAR)



522225P




522222 522224 522225P

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

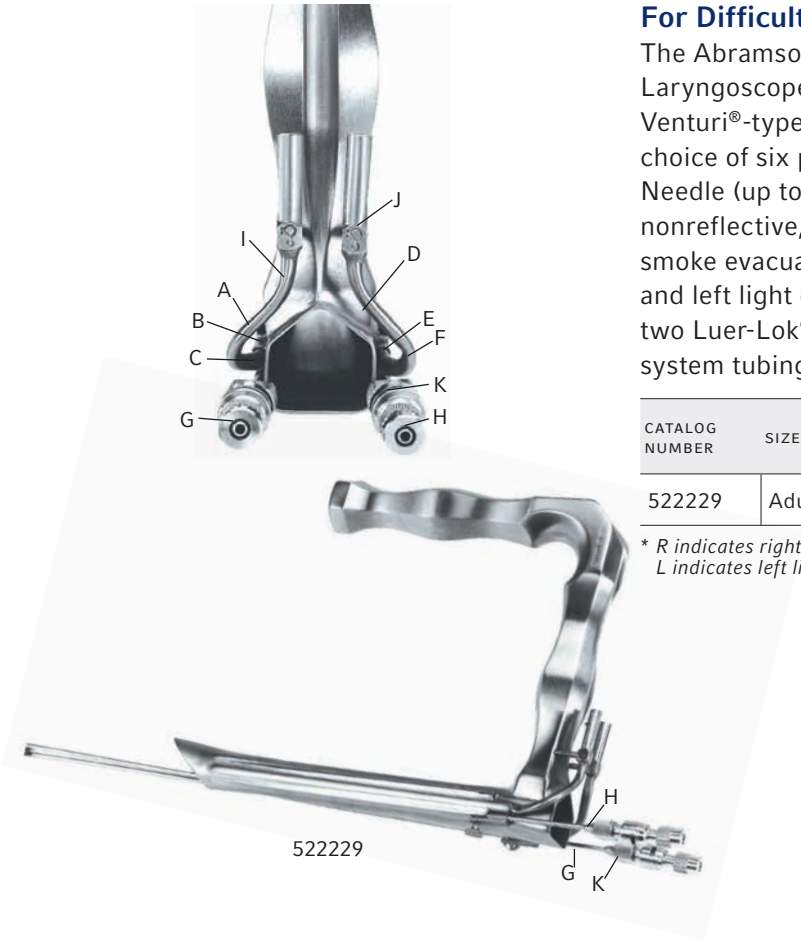
The Dedo-Pilling® Micro-Laryngoscopes have been designed to provide the ability to examine the vocal cords at the anterior commissure in the majority of patients, for example, patients with bull necks, short jaws or prominent upper teeth. The dimensions of the Dedo-Pilling® Micro-Laryngoscopes are narrow enough between the light carriers to permit moving the instrument off the incisors and down between the molars to permit visualization of the anterior commissure. The fiber optic light carriers are adjacent to the handle with a metal protected fiber optic bundle which runs in a groove in the handle. When used with the operating microscope equipped with a 400 mm lens, the Dedo-Pilling® Micro-Laryngoscope affords binocular vision for microendoscopy. Supplied with one bifurcated light carrier. Cable sold separately (pg. 463).

| ITEM # | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522222 | Child | 119 mm | 7.1 mm | 15.0 x 16.0 mm | 22.0 mm | 526524 |
| 522224 | Adol. | 145 mm | 9.1 mm | 18.0 x 17.0 mm | 25.0 mm | 526529 |
| 522225P | Adult | 178 mm | 10.7 mm | 19.0 x 19.0 mm | 27.0 mm | 526525 |

# LARYNGOSCOPES

## Micro-Laryngoscopes/Binocular View

### ABRAMSON-DEDO MICRO-LARYNGOSCOPE




522229

#### For Difficult Intubations

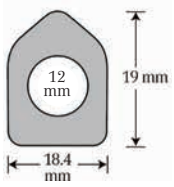
The Abramson modification of the Dedo-Pilling™ Micro-Laryngoscope was designed to increase the efficiency of Venturi®-type ventilation. It provides the physician with a choice of six positions for placement of the Venturi® Needle (up to 14 Ga.). The inside is finished to be nonreflective, and 14 Ga. blunt needles may be used for smoke evacuation. It comes supplied with a set of right and left light carriers, two 12" 14 Ga. blunt needles and two Luer-Lok® Adapters for use with Sanders system tubing.

| CATALOG NUMBER | SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522229 | Adult | 177 mm | 12 mm | 18.4 x 19 mm | 28.0 mm | 527586R* 527587L* |

** R indicates right light carrier*
*L indicates left light carrier*

**LEGEND**

| | |
|---|---|
| **A,C,D,F** | Channels for ventilating needle up to 14 gauge |
| **B, E** | Channels for light carriers or ventilating needles |
| **G, H** | Ventilating needles and adapters |
| **I, J** | Light carriers |
| **K** | Luer-Lok® Hubs to fit tubing adapter |



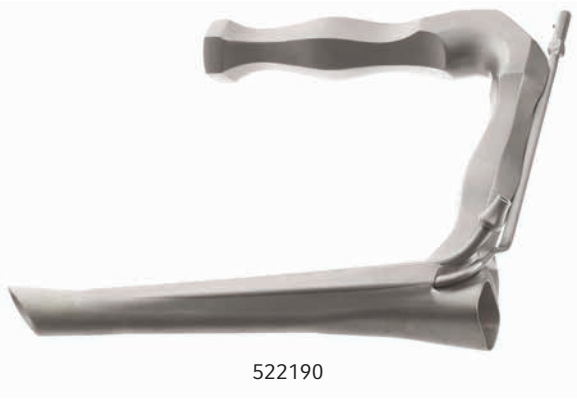

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

522229

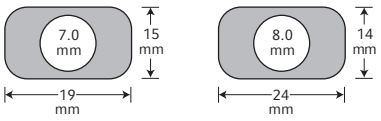
# LARYNGOSCOPES

## Micro-Laryngoscopes/Binocular View

### NEW OSSOFF-PILLING® MICRO-LARYNGOSCOPE



522190




522190 522191

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

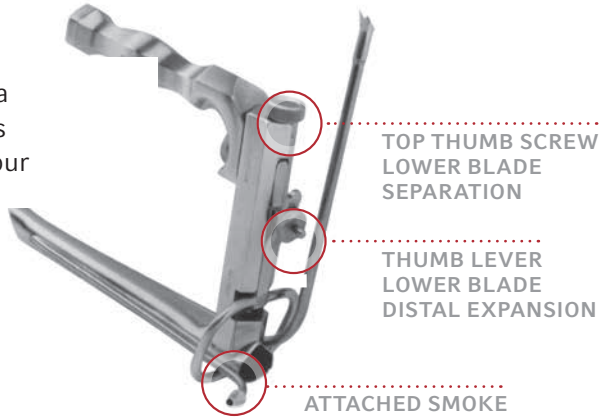
Available in two proximal widths. The 25.5 mm width can be introduced in most patients and is easily aligned with the microscope (400 mm objective). The 19 mm scope has the narrowest width capable of absorbing both microscope sight lines and can be used in most patients who previously could accept only the original Holinger scope.

- Holinger distal end, ease of introduction, excellent visualization.
- 19 or 25.5 mm proximal widths, increases patient selection for micro procedures.
- Standard adult handle, can be used with most suspension systems, B.U. suspension handle available as option.
- Single light carrier, external tube dimensions are kept to a minimum.
- Laser finish, laser safety.
- Supplied with one light carrier. Cable sold separately (pictured pg. 463).

| ITEM # | SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522190 | Adult | 168 mm | 7.0 mm | 19.0 x 15.0 mm | 22.0 mm | 527864 |
| 522191 | Adult | 168 mm | 8.0 mm | 24.0 x 14.0 mm | 27.0 mm | 527865 |

# PILLING® LASER LARYNGOSCOPES

The use of lasers for ablative surgery for tissue removal has become increasingly popular. To meet the demand, a complete line of Pilling® Laryngoscopes and Accessories are available for use in laser surgery procedures. All of our laser instruments have a non-reflective, dull finish to reduce the chance of the laser beam reflecting off the instrument.




### PILLING® BIVALVE LASER LARYNGOSCOPES

These special scopes are modified designs of the Pilling®-Dedo Anterior Commissure and Ossoff Posterior Commissure Micro and Laser Laryngoscopes.

- The Dedo Anterior Commissure Scopes provide minimal chance of teeth breakage, yet offers optimum microscopic visibility.
- The Ossoff Posterior Commissure Scopes provide the ability to lift the endotracheal tube and permit entrance and microscopic visibility beyond the vocal cords.
- These scopes provide increased visibility at the surgical site through expansion and distension of the split tubes.

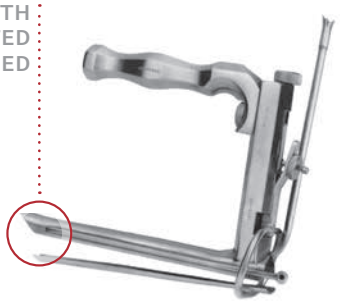
### PILLING®-DEDO DOUBLE-ACTION LASER LARYNGOSCOPES

- Lower blade separation provides an increased operative area for ease of instrumentation.
- Distal expansion of the lower blade allows maximum visibility of the cords and beyond.
- Non-reflective internal surface minimizes laser beam deflection.
- Removable handle reduces weight during insertion. This handle can be attached to the standard laryngoscope holder (502245), or Tobey Laryngoscope Holder (502248), or adapted for use with the Boston University System (502260).
- Smoke evacuation channel is permanently attached and extends distally for maximum removal of laser plume.
- One large fiberoptic light carrier is supplied with attached cable for optimum distal lighting.

*Both styles of bivalve Laser Laryngoscopes have O.D. measurements which can exceed the anatomical limits for their intended patient size.*
*A thumb operated lever enables the physician to tactilely gauge the degree of pressure exerted.*

DOUBLE-ACTION TYPE WITH LOWER BLADE SEPARATED

DOUBLE-ACTION TYPE WITH LOWER BLADE SEPARATED AND EXPANDED

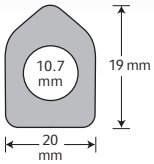


# LARYNGOSCOPES

## Laser Micro-Laryngoscopes

### DEDO LASER MICRO-LARYNGOSCOPE

522228




*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

522228

The Dedo Laser Micro-Laryngoscope was designed specifically for use with the $CO_2$ laser. It is supplied with two light carriers permanently attached to fiber optic cables (picture page 401) and features a non-reflective, dull interior finish. Its large oval light carriers provide maximum illumination and it contains an integral aspirating channel for automatic smoke and steam evacuation. The same narrow dimensions as the standard Dedo-Pilling® Micro-Laryngoscope allow its use in many cases in which larger micro-laryngoscopes are contraindicated.

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522228 | Adult | 177 mm | 10.7 mm | 20.0 x 19.0 mm | 32.0 mm | 527860 |

# LARYNGOSCOPES

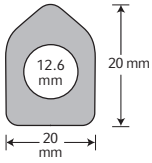
## Laser Micro-Laryngoscopes

### DEDO-PILLING® LASER LARYNGOSCOPE EXTRA-LONG

522243

Designed for the patient with a great distance between the teeth and vocal cords. Supplied with two light carriers permanently attached to fiber optic cables.

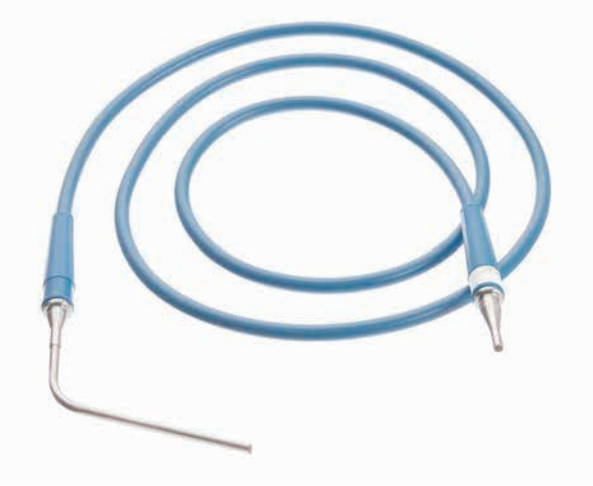
| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | REPLACE CARRIER |
|---|---|---|---|---|---|
| 522243 | Adult X-Long | 197 mm | 12.6 mm | 20.0 x 20.0 mm | 527860 |




*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

522243

### SINGLE ONE-PIECE FIBER OPTIC LIGHT CARRIERS/CABLES



527860

Light carriers are permanently attached to fiber optic cables which provide maximum illumination.

| LIGHT CARRIER/ CABLE # | SCOPE |
|---|---|
| 527800 | 522232 Ossoff-Karlan-Jako Laser Laryngoscope, adult |
| 527805 | 522232 Ossoff-Karlan-Jako Laser Laryngoscope, adult |
| 527820 | 522220 Jako-Cherry Laryngoscope Type II, newborn |
| 527825 | 522220 Jako-Cherry Laryngoscope Type II, newborn |
| 527830 | 522242 Healy-Jako Pediatric Subglottiscope |
| 527835 | 522242 Healy-Jako Pediatric Subglottiscope |
| 527850 | 522311 Improved Tucker Mediastinoscope, long |
| 527853 | 522306 Improved Tucker Mediastinoscope, short |
| 527860 | 522228 Dedo Laser Laryngoscope<br>522231 Ossoff-Karlan-Dedo Laser Laryngoscope<br>522233 Ossoff-Karlan Posterior Commissure<br>522243 Dedo Laser Laryngoscope, extra Long<br>522244 Ossoff Adult Subglottiscope, female<br>522245 Ossoff Adult Subglottiscope, male<br>522290 Pilling® Dedo DA Laryngoscope, adult<br>522291 Pilling®-Ossoff Double-Action Laryngoscope |
| 527862 | 522238 Ossoff-Karlan Adolescent Laser Laryngoscope |
| 527863 | 522237 Ossoff-Karlan Child Laser Laryngoscope<br>522292 Pilling® Dedo DA Adolescent Laryngoscope |

# LARYNGOSCOPES

## Laser Micro-Laryngoscopes

### OSSOFF-KARLAN-DEDO LASER MICRO-LARYNGOSCOPES

522231

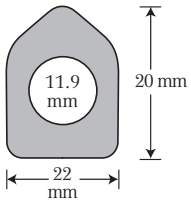
522237

522238

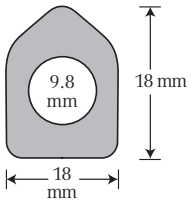
The Ossoff-Karlan-Dedo Laser Micro-Laryngoscopes are modifications of the Dedo and Jako Micro-Laryngoscopes with additions of special features for laser surgery. Supplied with two light carriers permanently attached to cables (picture page 401). Features:

- Bifurcated smoke evacuation channels.
- Non-reflective, dull interior finish.
- Large oval light carriers for maximum illumination.

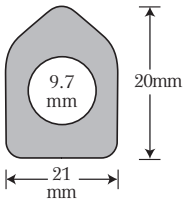
| ITEM # | SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522231 | Adult | 178 mm | 11.9 mm | 22.0 x 20.0 mm | 35.0 mm | 527860 |
| 522237 | Child | 130 mm | 9.8 mm | 18.0 x 18.0 mm | 30.0 mm | 527863 |
| 522238 | Adol. | 152 mm | 9.7 mm | 21.0 x 20.0 mm | 33.0 mm | 527862 |




522231




522237




522238

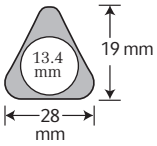
*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

# LARYNGOSCOPES

## Laser Micro-Laryngoscopes

### OSSOFF-KARLAN-JAKO LASER MICRO-LARYNGOSCOPE

522232




522232

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

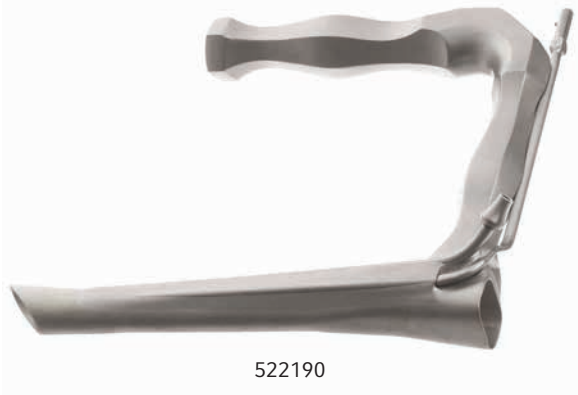
The Ossoff-Karlan-Jako Laser Micro-Laryngoscope is a modification of the Jako Micro-Laryngoscope with additions of special features for laser surgery. This interior commissure scope is a special design of Drs. Ossoff and Karlan. Supplied with two light carriers permanently attached to cables. Features:

- Bifurcated smoke evacuation channels.
- Non-reflective, dull interior finish.
- Large oval light carriers for photography.

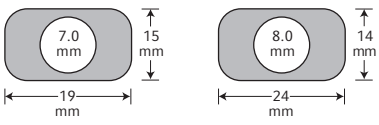
| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522232 | Adult | 178 mm | 13.4 mm | 28.0 x 19.0 mm | 38.0 mm | 527805R* 527800L* |

** R indicates right light carrier*
*L indicates left light carrier*

### NEW OSSOFF-PILLING® MICRO-LARYNGOSCOPE (LASER FINISH)



522190




522190 522191

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

Available in two proximal widths. The 25.5 mm width can be introduced in most patients and is easily aligned with the microscope (400 mm objective). The 19 mm scope has the narrowest width capable of absorbing both microscope sight lines and can be used in most patients who previously could accept only the original Holinger scope.

- Holinger distal end, ease of introduction, excellent visualization.
- 19 or 25.5 mm proximal widths, increases patient selection for micro procedures.
- Standard adult handle, can be used with most suspension systems, B.U. suspension handle available as option.
- Single light carrier, external tube dimensions are kept to a minimum.
- Laser finish, laser safe.
- Supplied with one light carrier. Cable sold separately (pg. 463).

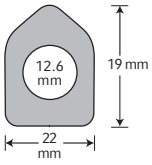
| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522190 | Adult | 168 mm | 7.0 mm | 19.0 x 15.0 mm | 22.0 mm | 527864 |
| 522191 | Adult | 168 mm | 8.0 mm | 24.0 x 14.0 mm | 27.0 mm | 527865 |

# LARYNGOSCOPES

## Laser Micro-Laryngoscopes

### OSSOFF-KARLAN POSTERIOR COMMISSURE MICRO-LARYNGOSCOPE

522233




*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

522233

This posterior commissure scope is a special design of Drs. Ossoff and Karlan. Supplied with two light carriers permanently attached to cables. Features:

- Bifurcated smoke evacuation channels.
- Non-reflective, dull interior finish.
- Large oval light carriers for maximum illumination.

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522233 | Adult | 177 mm | 12.6 mm | 22.0 x 19.0 mm | 35.0 mm | 527860 |

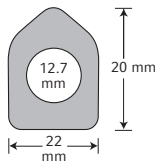
### PILLING® DEDO DOUBLE-ACTION ANTERIOR COMMISSURE LARYNGOSCOPES

522290

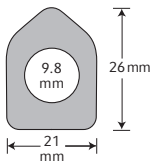
522292

Pilling® Bivalve Laser Laryngoscopes are modified designs of the Pilling®-Dedo Anterior Commissure and Ossoff Posterior Commissure Micro and Laser Laryngoscopes." Supplied with one light carrier permanently attached to fiber optic cable.

| ITEM # | SCOPE SIZE | OVERALL LENGTH | CLOSED MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | CLOSED MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522290 | Adult | 179 mm | 12.7 mm | 22.0 x 20.0 mm | 33.0 mm | 527860 |
| 522292 | Adol. | 136 mm | 9.8 mm | 21.0 x 26.0 mm | 32.0 mm | 527863 |




522290




522290

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

# LARYNGOSCOPES

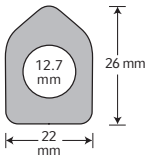
## Laser Micro-Laryngoscopes

### PILLING® OSSOFF DOUBLE-ACTION POSTERIOR COMMISSURE LARYNGOSCOPE

522291

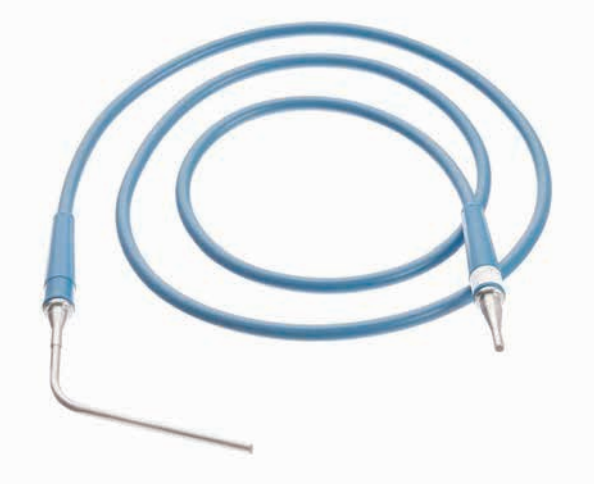
The Ossoff Posterior Commissure Scope provides the ability to lift the endotracheal tube and permit entrance and microscopic visibility beyond the vocal cords. This scope provides increased visibility at the surgical site through expansion and distension of the split tubes. Supplied with one light carrier permanently attached to fiber optic cable for maximum illumination.

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | REPLACE CARRIER | CLOSED MAX O.D. |
|---|---|---|---|---|---|---|
| 522291 | Adult | 178 mm | 12.7 mm | 22.0 x 26.0 mm | 527860 | 33.0 mm |




*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

522291



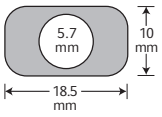
527860

# SUBGLOTTISCOPES

## Laser Subglottiscopes

### HEALY-JAKO PEDIATRIC SUBGLOTTISCOPE

522242




*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

522242

502600

502599

The Healy-Jako Subglottiscope was designed specifically for the pediatric patient. The small tapered 6 mm distal tip allows the subglottiscope to pass farther down the airway and give access to lesions below the level of the vocal cords, while still being able to utilize the operating microscope. Supplied with light carriers permanently attached to fiber optic cables. Features:

- Non-reflective, matte interior finish. This finish decreases the chance of the laser beam reflecting off the inside of the scope and burning unintended tissue. The subglottiscope is most useful when the carbon dioxide laser is used.
- Disconnect handle. Subglottiscope can be held by standard laryngoscope holder 502245 or Tobey 502248. When the handle is unscrewed, the subglottiscope can be easily inserted and manipulated.
- Large fiber optic light carriers. The large cables allow for maximum illumination and light intensity.
- Removable 14 Ga., 3-7/8" (10 cm) ventilating needle.
- Needle locking mechanism and tubing clip on the handle.
- Assures proper placement and hold of ventilating needle while keeping tubing out of the way.
- Includes 502599 Luer-Lok® Hub Adapter to Sanders tubing.

| ITEM # | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|
| 522242 | 155 mm | 5.7 mm | 18.5 x 10.0 mm | 29.0 mm | 527830R* 527835L* |
| 502600 | Replacement Ventilating Needle | | | | |
| 502599 | Replacement Luer-Lok® Adapter | | | | |

** R indicates right light carrier*
*L indicates left light carrier*

# SUBGLOTTISCOPES

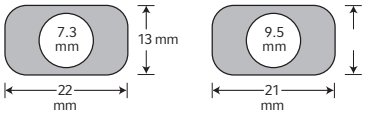
## Laser Subglottiscopes

### OSSOFF ADULT SUBGLOTTISCOPES

522244

522245

527860




522244 522245

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

Designed to view and access beyond the vocal cords for standard and laser procedures for subglottic stenosis and subglottic lesions.

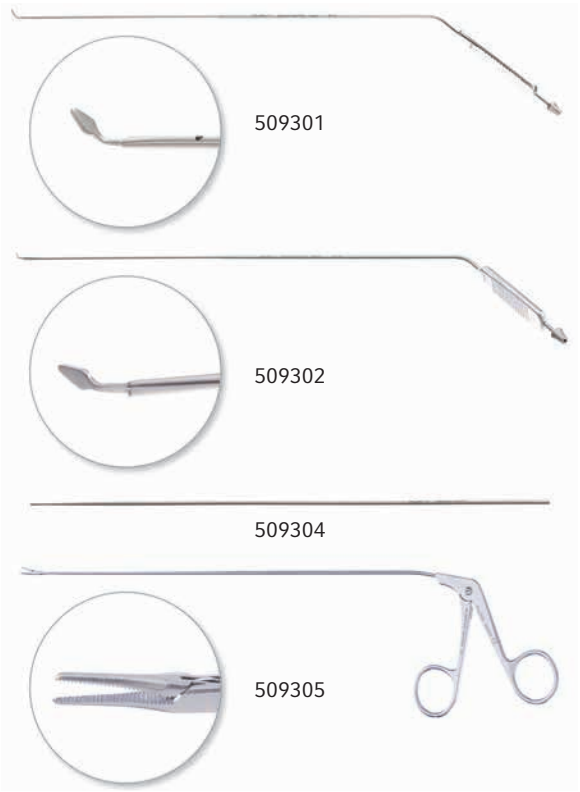
- Extended length with tapered tube (longer than standard laryngoscope).
- Wide proximal end.
- Matte finish inside lumen to reduce possible reflection of laser beam.
- Integral, distally-opened smoke evacuation channel.
- Removable 14 Ga., 3-7/8" (10 cm) ventilating needle.
- Needle locking mechanism and tubing clip on the handle.
- Single, one-piece design fiber optic light carrier/cable.
- Adult size laryngoscope handle.
- Includes 502599 Needle Luer-Lok® Adapter to Sanders Tubing.
- Passes easily through the vocal cords to reach the subglottic area.
- Provides binocular vision with use of a microscope with 350-400 lens.
- Less chance of burning unintended tissue.
- Allows for removal of laser plume rapidly.
- Allows for Venturi ventilation (order separately).
- Assures proper placement and hold of ventilating needle while keeping tubing out of the way.
- Provides optimum distally delivered light.
- Allows use of laryngoscope holder (502245) or Tobey Laryngoscope Holder (502248) for two-handed surgery.
- Adult subglottiscope requires instrumentation 28 cm or longer.

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. AT DISTAL TIP | MAX O.D. |
|---|---|---|---|---|---|---|
| 522244 | Adult Female | 230 mm | 7.3 mm | 22.0 x 13.0 mm | 11.0 mm | 32.0 mm |
| 522245 | Adult Male | 230 mm | 9.5 mm | 21.0 x 13.0 mm | 12.0 mm | 33.0 mm |
| 527860 | Replacement Light Carrier | | | | | |
| 502600 | Replacement Ventilating Needle | | | | | |
| 502599 | Replacement Luer-Lok® Adapter | | | | | |

# SUBGLOTTISCOPES

## Laser Subglottiscope Instrumentation

### MICROSUBGLOTTIC INSTRUMENTS



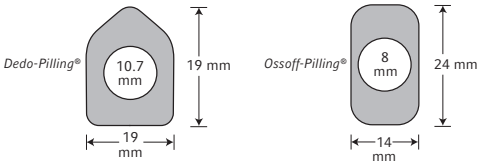

Designed for laser microsurgery of the entire subglottic space and upper cervical trachea, this instrumentation includes forceps, probe, mirror and platform (all 28 cm in length and laser finished).

| ITEM # | DESCRIPTION |
|---|---|
| 509301 | Operating platform, 3 mm |
| 509302 | Front surface mirror, 3 mm |
| 509304 | Straight probe |
| 509305 | Grasping forceps, straight |

# LARYNGOSCOPES

## Video Laryngoscopes

### NEW VIDEO LARYNGOSCOPE SYSTEMS




522194 522226

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**.

Pilling® has classic Ossoff and Dedo-design video laryngoscopes include dual channels for increased versatility. The dual channel design allows the surgeon to position the telescope, suction tube or light carrier wherever it is most comfortable and is thus helpful for the left-handed surgeon. The Video Laryngoscope System is an ideal resource for training and education since the telescope can be connected to most video systems for visualization of the surgical site. The 0 degree telescope (4 mm x 177 mm) features a forward view with a right-angle eyepiece to ensure that it is not in the surgeon's way. This Pilling® Telescope can be autoclaved. The telescope eyepiece will accept any standard C-mount video coupler. The fiber optic terminal of the light carrier accepts ACMI style cable connections. Each complete Video Laryngoscope System includes a laryngoscope, telescope, suction tube and light carrier. Sterilization trays are optional, see page 410.

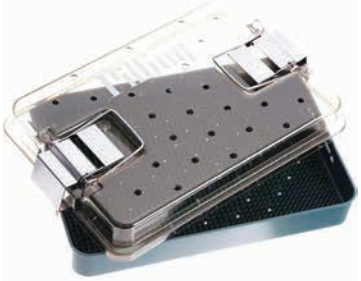
| ITEM # | DESCRIPTION |
|---|---|
| 522194 | Ossoff-Pilling® Dual Channel Video Laryngoscope System<br>Adult, 16.8 cm length<br>Minimal internal diameter: 8 mm<br>Nominal proximal dimensions: 24 x 14 mm |
| 522226 | Dedo-Pilling® Dual Channel Video Laryngoscope System<br>Adult, 17.3 cm length<br>Minimal internal diameter: 10.7 mm<br>Nominal proximal diameter: 19 x 19 mm |
| 527867 | Replacement Light Carrier for 522194 or 522226 |
| 522195 | Replacement Suction Tube for 522194 or 522226 |
| 524060 | Replacement Telescope for 522193, 522194 and 522226<br>4 mm x 177 mm, 0 degrees forward, with a 90 degree eyepiece.<br>This telescope can be autoclaved. |

# LARYNGOSCOPES

## Video Laryngoscopes

### STERILIZATION AND STORAGE TRAYS

508002



508004

Pilling® Trays are designed for microsurgical and other delicate instruments. These lightweight, durable trays are engineered for maximum protection and flexibility. The transparent lid will help you easily identify instruments. These trays can withstand repeated exposure to steam, ethylene oxide and cold sterilization methods.

| ITEM # | DESCRIPTION |
|---|---|
| 508002 | Telescope Tray<br>Includes silicone stabilizer bars to secure telescope during storage and sterilization<br>9-1/2" x 5-1/2" x 2-1/2" (24 x 14 x 6.5 cm) |
| 508004 | Video Laryngoscope Tray<br>Includes silicone finger mat. Tray size will accommodate laryngoscope and fiber-optic cable<br>12-1/2" x 8-3/4" x 3-1/4" (31.5 x 22 x 8 cm) |

# LARYNGOSCOPES

## Laryngoscope Holders

Pilling® Laryngoscope Holders enable the surgeon to have both hands free during Laryngoscopy, Micro-Laryngoscopy, and Laser Laryngoscopy procedures. These holders allow the surgeon to perform intricate procedures requiring both hands available for necessary instrumentation insertion through the laryngoscopes.

### BOSTON UNIVERSITY SUSPENSION SYSTEM

502260

This system is used to suspend the laryngoscope during micro and laser surgery of the larynx. *Laryngoscope and Strong Laryngoscope Handle Extension (502261) are not included.*

- Supports the laryngoscope for two-handed surgery.
- Is not affected by chest movement.
- Allows use of the Boyce-Jackson position.
- Allows repositioning of the table as necessary without readjustment of the suspension system.

| ITEM # | DESCRIPTION |
|---|---|
| 502260 | Includes Pilling® Table Clamp (163100) and Pivoting Extension Arm Assembly (502262) |
| 163100 | Clamp for Dedo Mayo Tray (502265) |
| 502261 | Strong Laryngoscope Handle Extension |

*Boston University Suspension System Scope Service to adapt handle for use with BU System. All laryngoscopes must be tapped for use with the BU System.*
*502261 Strong Laryngoscope Handle Extension - must be ordered along with scope for use with BU Suspension System.*
*Contact Teleflex® Customer Service to have your laryngoscope tapped.*

163100

502261

# LARYNGOSCOPES

## Laryngoscope Holders

### BOSTON UNIVERSITY SYSTEM PIVOTING EXTENSION ARM ASSEMBLY

502262

| ITEM # | DESCRIPTION |
|---|---|
| 502262 | BU Suspension Extention Arm, overall length 10" (25.5 cm) |

### BOSTON UNIVERSITY SYSTEM LARYNGOSCOPE HANDLE EXTENSION

502261

Adapts micro-laryngoscope for use with the Boston University Suspension System. Laryngoscopes already in use may be returned to Teleflex® Instrument Repair for the modification or a new instrument may be ordered with this extension. Contact your local surgical representative for more information.

| ITEM # | DESCRIPTION |
|---|---|
| 502261 | BU Suspenstion Handle, 2-1/2" (6.5 cm) |

### DEDO TABLE-MOUNTED MAYO TRAY

502265

The Dedo Table-Mounted Mayo Tray System is used to support the standard Pilling® Laryngoscope Holder (502248/502245). The tray can be positioned at any height, will swivel and can be extended. All parts are stainless steel and can be disassembled for cleaning and sterilizing. This system can be easily covered by a sterile Mayo cover.

| ITEM # | DESCRIPTION |
|---|---|
| 502265 | Complete system:<br>Tray<br>Detachable Sliding Bars and Clamps<br>Upright Rod<br>Pilling® Table Clamp (163100) |

# LARYNGOSCOPES

## Laryngoscope Holders

### NEW TOBEY LARYNGOSCOPE HOLDER (MOST POPULAR)

502248

The Tobey Laryngoscope Holder is the newest version of Pilling® Laryngoscope holders. It has a quick attach/release mechanism that provides a secure hold of your laryngoscope. The Tobey eliminates the twisting and turning necessary to lock the laryngoscope into the holder. It allows for fine adjustments using the size adjustment knob for different laryngoscope handles.

| ITEM # | DESCRIPTION |
|---|---|
| 502248 | Tobey Laryngoscope Holder |

### LARYNGOSCOPE HOLDER

502245

The external chest bar and rod easily attach to or detach from the handle of most laryngoscopes. Manually operated gear supplies leverage to the laryngoscope for exposure of the anterior commissure and allows the operator to have both hands free for instrumentation.

| ITEM # | DESCRIPTION |
|---|---|
| 502245 | Laryngoscope Holder, Improved Model (Laryngoscope is not included) |

### PILLING® TABLE CLAMP

163100

| ITEM # | DESCRIPTION |
|---|---|
| 163100 | Clamp for Dedo Mayo Tray 502265 |

# LARYNGOSCOPES

## Venturi Anesthesia Devices

### VENTURI ADAPTERS FOR BRONCHOSCOPES AND LARYNGOSCOPES

502562

502566

Flow and pressure characteristics vary greatly according to the design of the bronchoscope or laryngoscope and any new combination should be studied carefully before clinical use. *Note: The Sanders Venturi System can be used only with tapered scopes.*

| ITEM # | DESCRIPTION |
|---|---|
| 502562 | Albert-Sanders Venturi Adapter for laryngoscopes |
| 502566 | Sanders Venturi Adapter for Pilling® Bronchoscope 15 mm sidearm |

### TYGON TUBING WITH LUER-LOCK CONNECTOR

502574

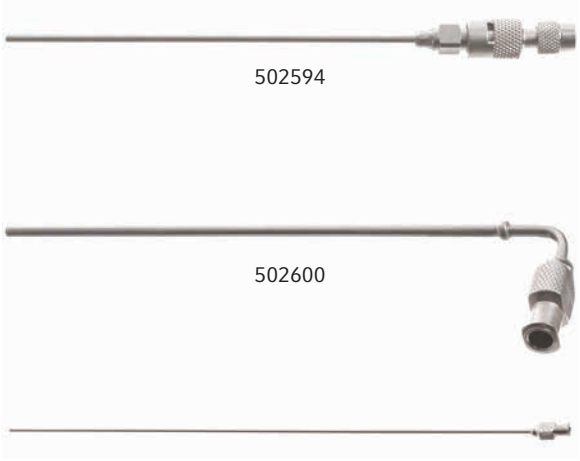
Used in conjunction with Luer-Lok® connector 502599 to fit into toggle valve. The bare end of the tubing connects to the Venturi Adapters For Bronchoscopes and Laryngoscopes, 502562 and 502566.

| ITEM # | DESCRIPTION |
|---|---|
| 502574 | Adapter is 4 mm O.D. x 2.5 mm I.D. |

# LARYNGOSCOPES

## Venturi Anesthesia Devices

### VENTURI VENTILATING NEEDLES



502594

502600

522241

| ITEM # | DESCRIPTION |
|---|---|
| 502594 | Replacement needles for 522229 Abramson-Dedo Micro-Laryngoscopes, 14 Ga., 5-3/8" (13.5 cm) |
| 502600 | Replacement needles for 522244 and 522245 Ossoff Adult Subglottiscopes, 522242 Healy-Jako Pediatric Subglottiscope and 522229 Abramson-Dedo Micro-Laryngoscope, 14 Ga. bent 90 degrees, 4" (10 cm) |
| 522241 | Replacement needles for 522229 Abramson-Dedo Micro-Laryngoscope, blunt, 14 Ga., 12" (30.5 cm) |

### REPLACEMENT LUER-LOK HUB ADAPTER

502599

| ITEM # | DESCRIPTION |
|---|---|
| 502599 | Needle Luer-Lok® to Sanders Tubing, 1-1/8" (3 cm) |

### REPLACEMENT CLIPS

522240

| ITEM # | DESCRIPTION |
|---|---|
| 522240 | For securing Venturi Ventilating Needles, 5/8" (1.5 cm) |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Forceps

### PILLING® LARYNGEAL INSTRUMENTATION FOR LARYNGOSCOPES AND MICRO-LARYNGOSCOPES

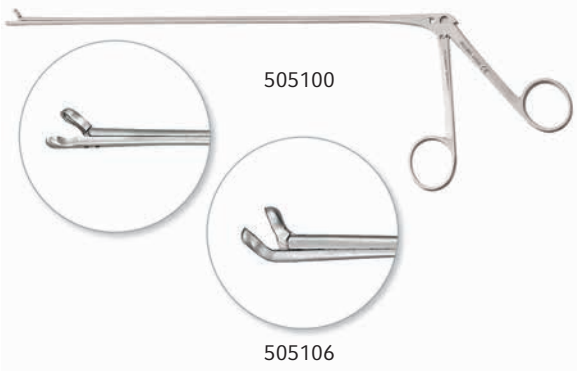
Pilling® Laryngeal Instruments are designed in conjunction with leading otolaryngology surgeons. These instruments can be utilized for both Laryngoscopy and Micro-Laryngoscopy. Surgeons continue to provide feedback for new designs and modifications as procedural changes occur.

### JACKSON CROSS ACTION FORCEPS

For anesthetizing the larynx by blocking the superior laryngeal nerves. Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 507375 | 24 cm length from proximal end of handle to curve |

### JACKSON LARYNGEAL CUP FORCEPS - STANDARD LIGHTWEIGHT 4 AND 6 MM CUPS



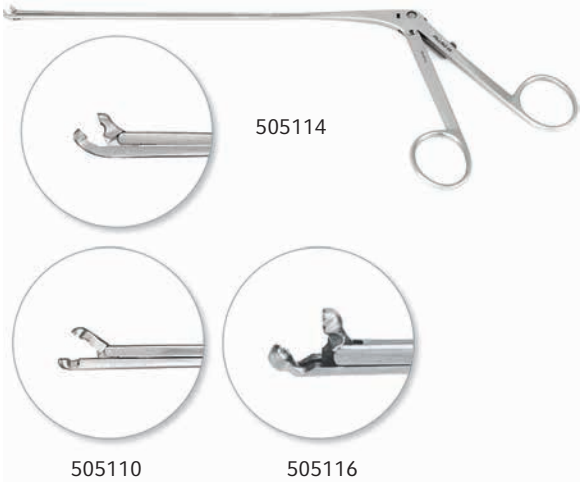

Jackson Forceps come in standard and extra-lightweight construction that provides durability and strength. The jaw size, shape and angle are specially calculated for use through Jackson scopes.

| ITEM # | DESCRIPTION |
|---|---|
| 505100 | Straight, 4 mm diameter jaw, working length 28 cm |
| 505102 | Straight, 6 mm diameter jaw, working length 28 cm |
| 505104 | Angled, 4 mm diameter jaw, working length 28 cm |
| 505106 | Angled, 6 mm diameter jaw, working length 28 cm |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Forceps

### JACKSON LARYNGEAL CUP FORCEPS - EXTRA-LIGHTWEIGHT 2 MM CUPS




Jackson Forceps come in standard and extra lightweight construction that provides durability and strength. The jaw size, shape and angle are specially calculated for use through Jackson scopes.

| ITEM # | DESCRIPTION |
|---|---|
| 505110 | Straight, 2 mm diameter jaw, working length 20 cm |
| 505112 | Straight, 2 mm diameter jaw, working length 28 cm |
| 505114 | Angled, 2 mm diameter jaw, working length 20 cm |
| 505116 | Angled, 2 mm diameter jaw, working length 28 cm |

### JACKSON TRIANGULAR PUNCH SPECIMEN AND TISSUE FORCEPS

Shear-type forceps remove a piece of tissue approximately 3.5 x 7 mm. Will pass through laryngoscope 10 mm or larger.

| ITEM # | DESCRIPTION |
|---|---|
| 505342 | Angled jaws, working length 11-1/8" (28.5 cm) |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Forceps

### LORE SUBGLOTTIC SPECIMEN AND TISSUE FORCEPS

505196

Jaws angled 90 degrees upward and open to the right or left. Working length 11-1/8" (28.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 505195 | Opens to right, 6 mm jaw |
| 505196 | Opens to left, 6 mm jaw |

### PATTERSON ELONGATED CUP BITING FORCEPS

505230

| ITEM # | DESCRIPTION |
|---|---|
| 505230 | Regular, 4 mm width jaw, working length 11-1/8" (28.5 cm) |

### NORRIS SPONGE HOLDING FORCEPS

506747

Bayonet-shaped, cross action forceps designed for use in mediastinoscopy. Straight distal portion of jaw is 16 cm long.

| ITEM # | DESCRIPTION |
|---|---|
| 506747 | 13-1/8" (33 cm) |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Suction Tubes

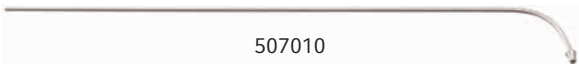
### INSULATED CAUTERY SUCTION TUBE

507045

With thumb-valve for controlled suction, 4 mm diameter, 12 Fr.

| ITEM # | DESCRIPTION |
|---|---|
| 507045 | Working length 8-5/8" (22 cm), supplied with a 10 ft. Bovie cord and plug (507046) |
| 507046 | 10 ft. Bovie cord and plug with connection to fit insulated suction cautery tube. Cord only. |

### JACKSON OPEN END ASPIRATING TUBE

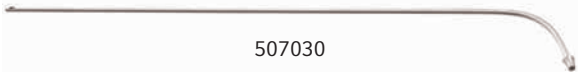


507010

Pilling® Aspirating Tubes, except in special designs, are constructed of stainless steel. They are measured in working length from distal tip to beginning of proximal curve or angle. Aspirating tubes should be 5 cm or 10 cm longer than the scope through which they are used.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | TUBE DIAMETER |
|---|---|---|---|
| 507010 | 20 cm | 5.0 mm or larger | 4 mm (12 Fr.) |

### JACKSON "VELVET-EYE" ASPIRATING TUBES



507030

These tubes have a smooth, oval-shaped opening on each side of the distal tip and a closed, blunt end.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | TUBE DIAMETER |
|---|---|---|---|
| 507030 | 20 cm | 5.0 mm or larger | 4 mm (12 Fr.) |

### STRONG SUCTION IRRIGATOR

506485

For washing dyed vocal cords with saline.

| ITEM # | DESCRIPTION |
|---|---|
| 506485 | 9" (23 cm) |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Feder-Ossoff

### FEDER-OSSOFF MICRO-LARYNGEAL GRASPING FORCEPS

Feder-Ossoff forceps include alligator grasping and cup biopsy jaws. All forceps have a matte laser finish and shafts that taper from 2 mm to 0.5 mm.

Double-action grasping forceps have aggressive serrated jaws for better holding and a suction channel with a Luer-Lok® proximal fitting for smoke evacuation and improved visibility during laser procedures 506856.

Grasping forceps have finely serrated jaws, 1.1 mm wide tapering to 0.6 mm, 4 mm long and a working length of 23 cm.

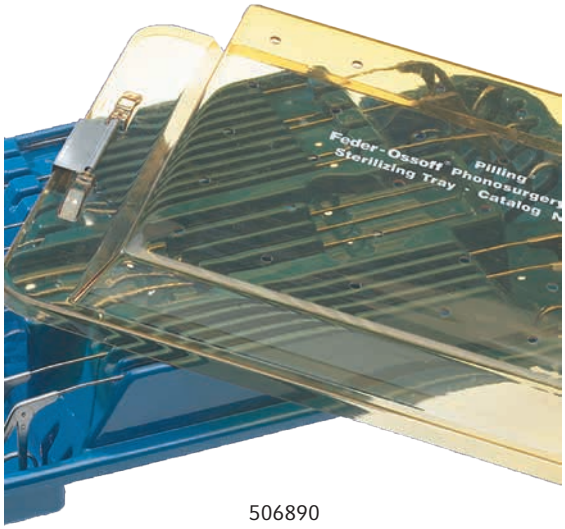
Delicate biopsy cup forceps have a 1 mm jaw with a working length of 23 cm.

| ITEM # | DESCRIPTION |
|---|---|
| 506856 | Grasping forceps, double action, straight, with suction |
| 506858 | Grasping forceps, angled up |
| 506860 | Grasping forceps, straight |
| 506862 | Cup biopsy, 1 mm, straight |
| 506864 | Cup biopsy, 1 mm, angled up |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Feder-Ossoff

### PILLING® FEDER-OSSOFF PHONOSURGERY SET




506890

Pilling® Feder-Ossoff Micro-laryngeal Precision Instruments from Teleflex® are designed for microlaryngeal procedures to retain, restore, or improve voice quality. Feder-Ossoff instruments are specially designed for phonosurgery/microflap surgery with Mayo blades on the scissors and angled handles with slender diameter shafts. Set includes twenty-seven instruments for use in delicate mucosal microflap dissection techniques.

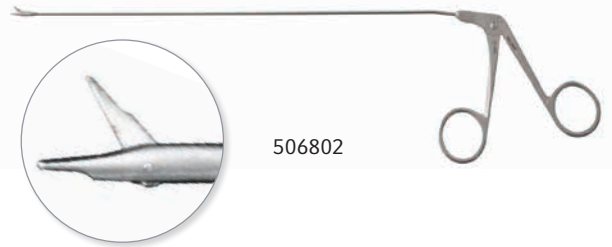
- Mayo blades on scissors
- Matte laser finish
- Angled handles and slender diameter shafts
- Universal ring handle for knives and probes
- 23-27 cm working length
- Durable storage and sterilization tray

| ITEM # | DESCRIPTION |
|---|---|
| 506802 | Feder-Ossoff Phonosurgery Set<br>Contains 27 Instruments, 506802-506890<br>(pages 422-424) |
| 506890 | Instrument Sterilization Tray<br>11-3/4" x 15-1/4" x 3" (38.5 x 30 x 7.5 cm)<br>at handles |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Feder-Ossoff

### FEDER-OSSOFF MICRO-LARYNGEAL SCISSORS



506802

506804

506806

506808

506810

506822

506812

506814

506816

506818

506820

506824

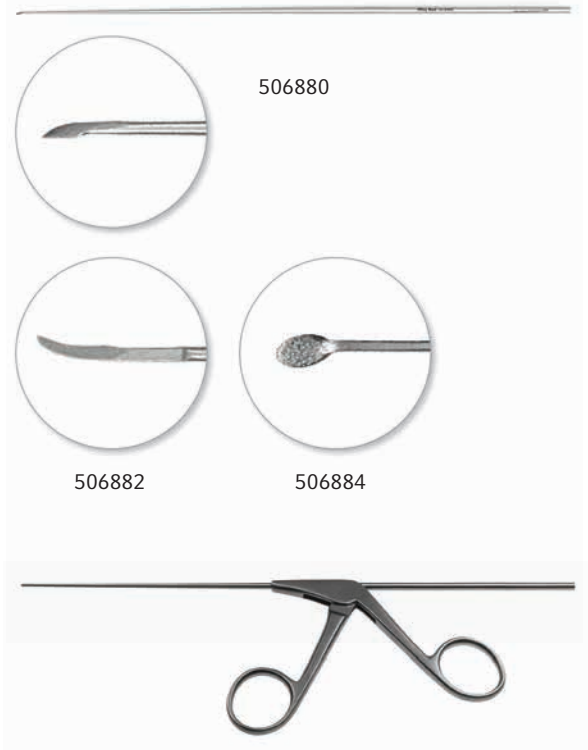
Scissors are designed with blunt or sharp tips and come in a variety of patterns to enable easier access and better exposure. All scissors have a 23 cm working length, a 2 mm diameter shaft, and a 5 degree bend at the handle for better exposure.

| ITEM # | DESCRIPTION |
|---|---|
| 506802 | Blunt, straight blades, vertical action |
| 506804 | Blunt, curved blades, horizontal action, open left |
| 506806 | Blunt, curved blades, horizontal action, open right |
| 506808 | Blunt, angled up, vertical action |
| 506810 | Blunt, angled down, vertical action |
| 506822 | Blunt, angled up, double action |
| | |
| 506812 | Sharp, straight blades, vertical action |
| 506814 | Sharp, curved blades, horizontal action, open left |
| 506816 | Sharp, curved blades, horizontal action, open right |
| 506818 | Sharp, angled up, vertical action |
| 506820 | Sharp, angled down, vertical action |
| 506824 | Sharp, double action |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Feder-Ossoff

### KNIVES AND KNIFE HANDLE



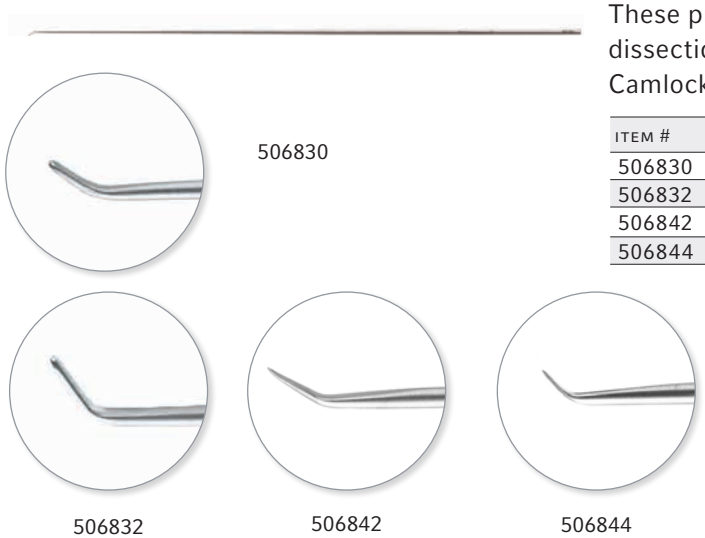

*Shown with probe inserted into handle. Knives and probes can be set to any angle or depth relative to the handle.*

All knives have 27 cm maximum working length and a 3.2 – 1 mm tapered shaft. Working length is measured from front portion of handle to tip of instrument.

| ITEM # | DESCRIPTION |
|---|---|
| 506880 | Straight sickle, 3 mm blade |
| 506882 | Curved sickle, 3 mm blade |
| 506884 | Phono circle knife, 3 mm blade |
| 506888 | Universal ring handled knife handle with camlock |

506888

### PROBE/ELEVATORS




These probe/elevators allow for sharp and blunt dissection and elevating of tissue. All probes fit into the Camlock Handle (506888). 27 cm working length.

| ITEM # | DESCRIPTION |
|---|---|
| 506830 | 30 degree angle, blunt |
| 506832 | 60 degree angle, blunt |
| 506842 | 30 degree angle, sharp |
| 506844 | 60 degree angle, sharp |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Feder-Ossoff

### SUCTIONS

506872

23 cm working length with thumb control, laser finish.

| ITEM # | DESCRIPTION |
|---|---|
| 506870 | 3 Fr. diameter |
| 506872 | 5 Fr. diameter |
| 506874 | 7 Fr. diameter |

### FEDER-OSSOFF PHONOSURGERY INSTRUMENT STERILIZING TRAY

506890

Has individual instrument housing. The tray is a durable construction, protecting the delicate instruments. This tray may be stacked for storage and withstands flash autoclaving. It also withstands temperature of multiple cycles of steam sterilization, ethylene oxide sterilization, gamma radiation, chemical cold sterilizing agents, disinfectants and germicides.

| ITEM # | DESCRIPTION |
|---|---|
| 506890 | Inside dimensions: 11-3/4" x 15-1/4" x 3" (30 x 38.5 x 7.5 cm) at handles |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Feder-Ossoff

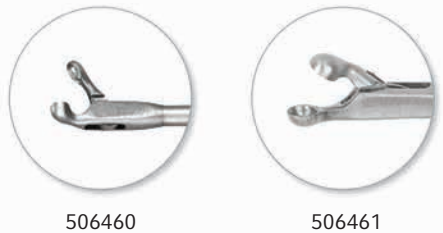
### MICRO-LARYNGEAL FORCEPS

The serrated triangular jaw allows for a larger surface area of tissue to be grasped within the 3 mm wide tips. These forceps have a 23 cm working length and a non-reflective finish for use with lasers. Jaws are uniquely angled and fenestrated to better grasp along the longitudinal surface of the respective chord, 2.75 mm wide triangular jaw, serrated jaw, 2 mm shaft. Fits adult laryngoscopes without interfering with microscope, 5 degree bend at the handle. Non-reflective finish; can be used in laser surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 506950 | Triangular fenestrated, serrated jaw forceps, right, working length 9-1/4" (23.5 cm) |
| 506952 | Triangular fenestrated, serrated jaw forceps, left, working length 9-1/4" (23.5 cm) |

## Micro-Laryngeal/Jako-Kleinsasser

### JAKO-KLEINSASSER MICRO-LARYNGEAL CUP FORCEPS (MOST COMMON & ESSENTIAL)



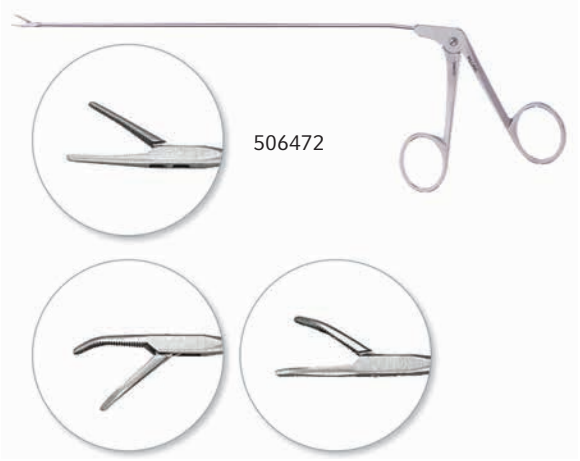
These Pilling® Micro-laryngeal Cup Forceps were designed specifically for everyday-use micro-surgery. They feature slender 2 mm diameter stems with miniature distal jaws in the shape of cup forceps and are made of dull finished stainless steel to reduce glare. Stems are angulated (5 degree bend at handle) for unobstructed vision and all have a 22 cm working length.

| ITEM # | DESCRIPTION |
|---|---|
| 506455 | Straight |
| 506460 | Angled left |
| 506461 | Angled right |
| 506462 | Angled up |
| 506463 | Oval, single action |
| 506465 | Straight oval |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Jako-Kleinsasser

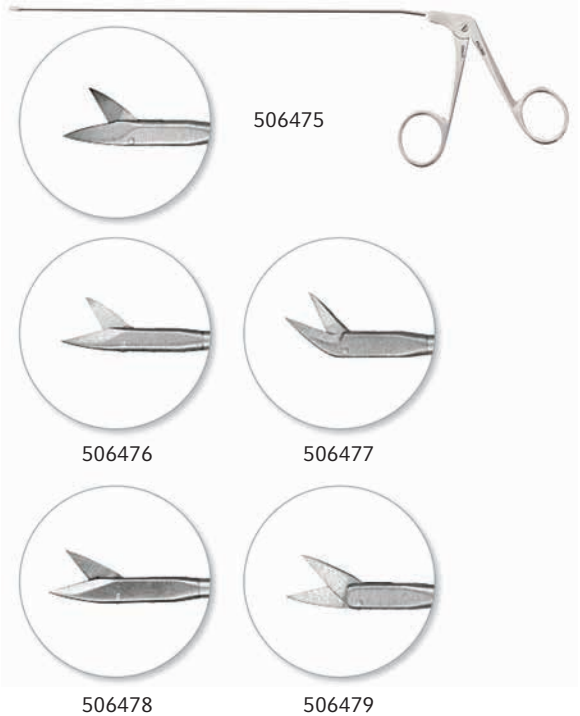
### JAKO-KLEINSASSER MICRO-LARYNGEAL GRASPING FORCEPS




These Pilling® Micro-laryngeal Grasping Forceps were designed specifically for everyday-use micro-surgery. They feature slender 2 mm diameter stems with miniature distal jaws in the shape of grasping forceps and are made of dull finished stainless steel to reduce glare. Stems are angulated (5 degree bend at handle) for unobstructed vision and all have a 22 cm working length.

| ITEM # | DESCRIPTION |
|---|---|
| 506470 | Curved left |
| 506471 | Curved right |
| 506472 | Straight, very fine serrated |

### JAKO-KLEINSASSER MICRO-LARYNGEAL SCISSORS




These Pilling® Micro-laryngeal Scissors were designed specifically for everyday-use micro-surgery. They feature slender 2 mm diameter stems with miniature distal jaws in the shape of scissors and are made of dull finished stainless steel to reduce glare. Stems are angulated (5 degree bend at handle) for unobstructed vision and all have a 22 cm working length.

| ITEM # | DESCRIPTION |
|---|---|
| 506475 | Curved left |
| 506476 | Curved right |
| 506477 | Angled up |
| 506478 | Straight, vertical |
| 506479 | Straight, horizontal |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Jako

### JACKSON LARYNGEAL SCISSORS

505605

| ITEM # | DESCRIPTION |
|---|---|
| 505605 | Straight, 7-7/8" (20 cm) long blades, working length 11-1/8" (28.5 cm) |

### JAKO COAGULATION PROBE

506672

Will fit standard Bovie Pencil Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 506672 | Working length 8-1/4" (21 cm) |

### JAKO FINE BALL TIP HOOK

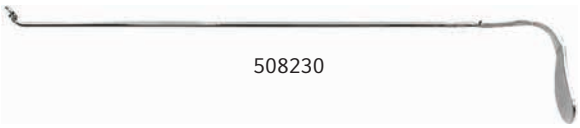
506679

| ITEM # | DESCRIPTION |
|---|---|
| 506679 | Right angle, 9" (23 cm) |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Jako

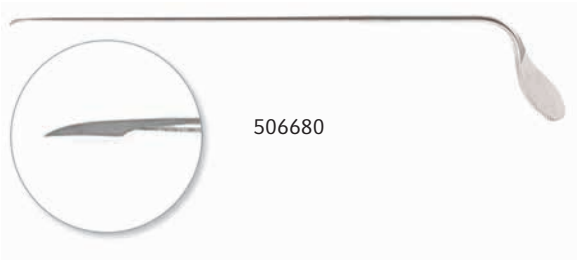
### JAKO MIRROR




For minor examination of the undersurface of the vocal cords.

| ITEM # | DESCRIPTION |
|---|---|
| 508230 | Working length 8-1/4" (21 cm) |

### JAKO SICKLE KNIFE

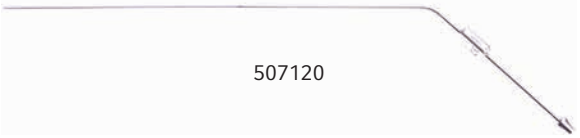



| ITEM # | DESCRIPTION |
|---|---|
| 506680 | 10-1/4" (26 cm) |

### JAKO LARYNGEAL NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 506490 | Working length 9-7/8" (25 cm) |

### JAKO FINE SUCTION TUBES



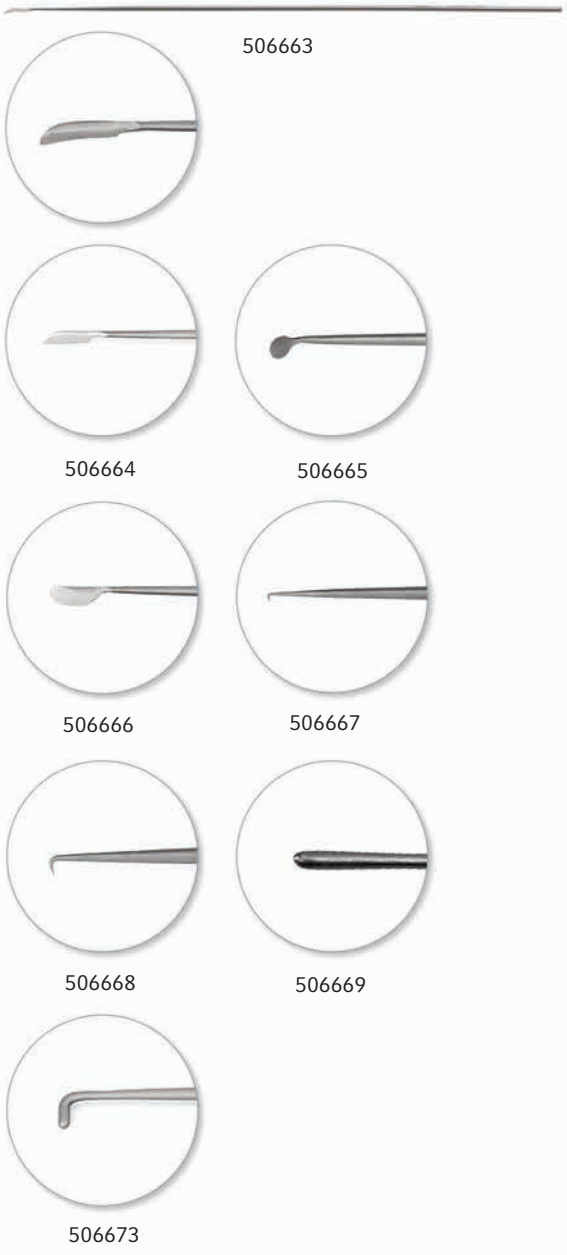

Specially designed with thumb control.

| ITEM # | DESCRIPTION |
|---|---|
| 507120 | No. 00, 5 Fr., 23 cm working length |
| 507121 | No. 0, 6 Fr., 23 cm working length |
| 507122 | No. 1, 7 Fr. 23 cm working length |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Micro-Laryngeal/Jako

### JAKO RIGID STEM INSTRUMENTS




Dull finish to reduce glare. May be used with 506888 Feder-Ossoff Universal Ring Handled Knife Handle (page 423). Working length 26 cm.

| ITEM # | DESCRIPTION |
|---|---|
| 506663 | Jako Sickle Knife, curved |
| 506664 | Jako Sickle Knife, straight |
| 506665 | Jako Circle Knife |
| 506666 | Jako Round Edge Knife |
| 506667 | Jako Sharp Hook, slight |
| 506668 | Jako Sharp Hook, acute |
| 506669 | Jako Probe, straight |
| 506673 | Jako Blunt Angled Probe |

*Shown with probe inserted into handle. Knives and probes can be set to any angle or depth relative to the handle.*

# INSTRUMENTATION FOR LARYNGOSCOPES

## Laser Instrumentation

### ANGLED LASER RETRACTORS

For protection of the anterior commissure and the evacuation of smoke and plume during laser surgery. Non-reflective finish on shaft. 23 cm working length.

| ITEM # | DESCRIPTION |
|---|---|
| 509004 | Adult, right, 8 mm diameter |
| 509005 | Adult, left, 8 mm diameter |
| 509006 | Pediatric, right, 4 mm diameter |
| 509007 | Pediatric, left, 4 mm diameter |

### LASER SPATULA RETRACTORS

For protection/retraction of the vocal cords and for the evacuation of smoke and plume during laser surgery. 23 cm working length. Non-reflective finish on shaft.

| ITEM # | DESCRIPTION |
|---|---|
| 509008 | Adult, right, 10 mm diameter |
| 509009 | Adult, left, 10 mm diameter |
| 509010 | Pediatric, right, 5mm diameter |

### LASER OPERATING PLATFORM - EBONIZED

The platform is inserted into the subglottic larynx above the level of the packed cottonoids. The platform helps to protect the cottonoids, endotracheal tube and cuff, and tissues of the subglottic larynx from any direct or reflected laser beam radiation. Shaft and tip are ebonized. 21 cm working length.

| ITEM # | DESCRIPTION |
|---|---|
| 509214 | 4 mm diameter platform |
| 509215 | 6 mm diameter platform |
| 509216 | 8 mm diameter platform |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Laser Instrumentation

### ASPIRATING TUBES

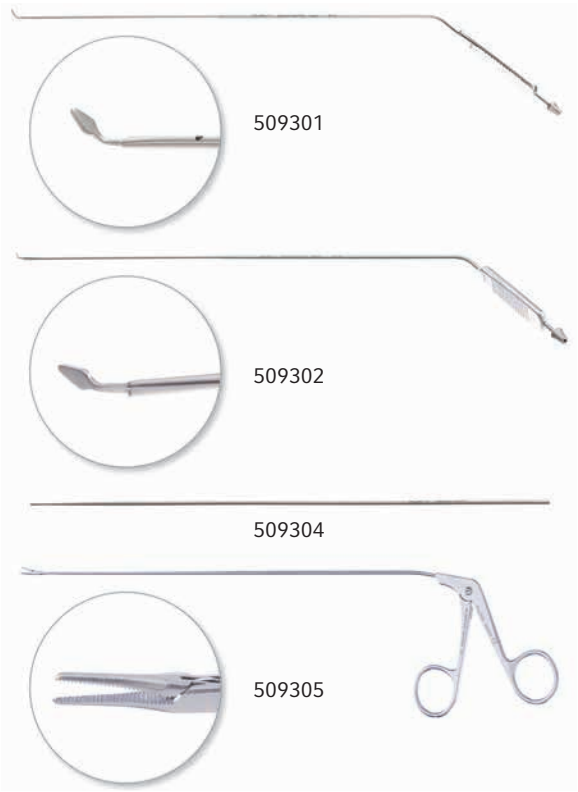
For removal of smoke and steam created during laser surgery. 3 mm diameter (9 Fr.).

| ITEM # | DESCRIPTION |
|---|---|
| 509012 | "Velvet-eye"-type, working length 7-7/8" (20 cm) |
| 509013 | Open end, working length 6" (15 cm) |
| 509014 | Clip for attaching aspirating tubes to laryngoscope up to 9 Fr. (3 mm) |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Laser Instrumentation

### MICROSUBGLOTTIC INSTRUMENTS



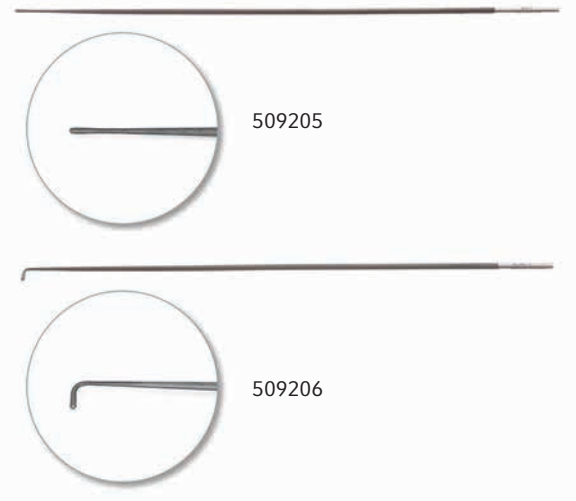

Designed for laser microsurgery of the entire subglottic space and upper cervical trachea, this instrumentation includes forceps, probe, mirror and platform (all 28 cm in length and laser finished).

| ITEM # | DESCRIPTION |
|---|---|
| 509301 | Operating platform, 3 mm |
| 509302 | Front surface mirror, 3 mm |
| 509304 | Straight probe |
| 509305 | Grasping forceps, straight |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Laser Instrumentation

### MICRO-LARYNGEAL PROBES - EBONIZED

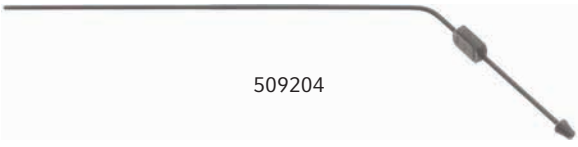



| ITEM # | DESCRIPTION |
|---|---|
| 509205 | Straight, ebonized, 10-1/4" (26 cm) |
| 509206 | Angled, ebonized, 10" (25.5 cm) |

### OSSOFF-KARLAN GRASPING FORCEPS - EBONIZED

| ITEM # | DESCRIPTION |
|---|---|
| 509201 | Curved left, ebonized, working length 8-1/4" (21 cm) |
| 509202 | Curved right, ebonized, working length 8-1/4" (21 cm) |
| 509203 | Straight, ebonized, working length 8-1/4" (21 cm) |

### OSSOFF-KARLAN MICRO SUCTION TUBE - EBONIZED




| ITEM # | DESCRIPTION |
|---|---|
| 509204 | 7 Fr., ebonized, working length 7-1/2" (19 cm) |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Laser Instrumentation

### OSSOFF-KARLAN VOCAL CORD ROLLER - EBONIZED

509207

This instrument was designed to facilitate greater direct exposure of the infraglottic surface of the true vocal cords.

| ITEM # | DESCRIPTION |
|---|---|
| 509207 | Ebonized, 8-1/4" (21 cm) |

## Miscellaneous

### HOLLINGER LARYNGEAL DISSECTOR



506707

| ITEM # | DESCRIPTION |
|---|---|
| 506707 | 12" (30.5 cm) |

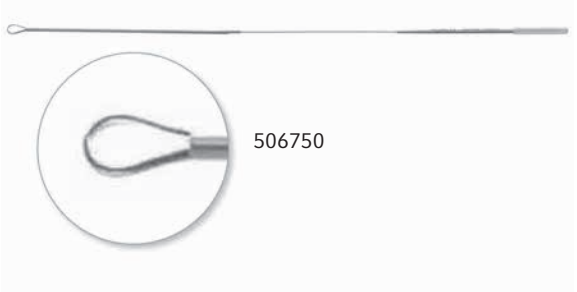
### HOLINGER KNIFE HANDLE

506705

For use with surgical blades no. 10, 11, 12 and 15.

| ITEM # | DESCRIPTION |
|---|---|
| 506705 | 11" (28 cm) |

### JACKSON STANDARD SPONGE CARRIER



506750

For use through laryngoscopes and bronchoscopes. Heavy construction weight. Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 506750 | Working length 11-3/4" (30 cm) |
| 506752 | Working length 15-3/4" (40 cm) |

### JAKO FINE SPONGE CARRIER

506751

To hold small piece of sponge rubber used to dye vocal cords for diagnostic purposes.

| ITEM # | DESCRIPTION |
|---|---|
| 506751 | Working length 10-1/4" (26 cm) |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Miscellaneous

### ABRAHAM LARYNGEAL SYRINGE CANNULA

507434

For use on Luer-Lok® syringes.

| ITEM # | DESCRIPTION |
|---|---|
| 507434 | Malleable, 5-7/8" (15 cm) |

### BONNIER CATHETER ADAPTER

507335

For attachment of catheters to Luer tip syringes.

| ITEM # | DESCRIPTION |
|---|---|
| 507335 | 1-3/8" (3.5 cm) |

### LUER-LOCK® CATHETER ADAPTER

507336

For attachment of catheters to Luer-Lok® syringes.

| ITEM # | DESCRIPTION |
|---|---|
| 507336 | 1-1/2" (4 cm) |

### CENTIMETER SUBTRACTION RULER

504075

For accurate calculation by subtraction of the depth to which a scope has been inserted.

| ITEM # | DESCRIPTION |
|---|---|
| 504075 | 30 cm |

# INSTRUMENTATION FOR LARYNGOSCOPES

## Miscellaneous

### LARYNGEAL MICRO ATOMIZER

507267S

507498S

Permits use of very small quantities of solution. Very fine particle size. Double valve in bulb permits sustained, very effective spray.

| ITEM # | DESCRIPTION |
|---|---|
| 507485S | Complete Micro Atomizer (Nos. 151 and 1-RD) |
| 507267S | Atomizer glass collection tube, small No. 151 |
| 507498S | Atomizer replacement rubber bulb, small No. 1-RD |

## Laryngeal Mirrors

### LARYNGEAL MIRRORS

508204

Extra thin, permanently mounted on handle. Shaft length is 6-3/4" (17 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 508200 | #000, 8 mm diameter |
| 508201 | #00, 10 mm diameter |
| 508202 | #0, 12 mm diameter |
| 508203 | #1, 16 mm diameter |
| 508204 | #2, 18 mm diameter |
| 508205 | #3, 20 mm diameter |
| 508206 | #4, 22 mm diameter |
| 508207 | #5, 24 mm diameter |
| 508208 | #6, 28 mm diameter |
| 508209 | #7, 30 mm diameter |

# PILLING® BRONCHOSCOPES

Pilling® Bronchoscopes are designed in conjunction with Dr. Paul Holinger and Dr. C.L. Jackson for ease in examination and performance of surgical procedures in the lung and bronchi. These instruments use fiberoptics to provide cool, constant illumination and nearly full lumen view. Each type of scope is designed with channels to ventilate the patient during the procedure.

## PILLING® ESOPHAGOSCOPE PATIENT SIZE LISTING

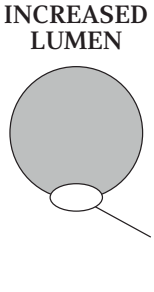
| ITEM # | PRODUCT NAME |
|---|---|
| **NEONATE/INFANT ESOPHAGOSCOPES** | |
| 523570 | Holinger |
| 523505 | Holinger Speculum |
| **CHILD/PEDIATRIC ESOPHAGOSCOPES** | |
| 523600P | Jackson |
| 523602 | Jackson |
| 523650P | Jesberg |
| 523652 | Jesberg |
| 523640 | Pillsbury-Jesberg |
| 523642 | Pillsbury-Jesberg |
| 523571 | Holinger |
| 523572 | Holinger |
| 523675 | Forbes |
| **ADOLESCENT ESOPHAGOSCOPES** | |
| 523654 | Jesberg |
| 523644 | Pillsbury-Jesberg |
| 523573 | Holinger |
| 523574 | Holinger |
| 523575 | Holinger |

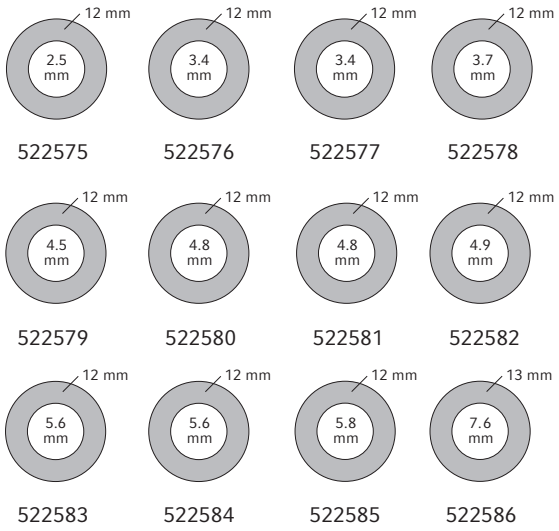
| ITEM # | PRODUCT NAME |
|---|---|
| **ADULT ESOPHAGOSCOPES** | |
| 523535 | Jackson |
| 523541 | Jackson |
| 523562 | Jackson |
| 523602 | Jackson |
| 523604 | Jackson |
| 523608 | Jackson |
| 523610P | Jackson |
| 523612 | Jackson |
| 523614 | Jackson |
| 523656 | Jesberg |
| 523658 | Jesberg |
| 523660P | Jesberg |
| 523646 | Pillsbury-Jesberg |
| 523648 | Pillsbury-Jesberg |
| 523649 | Pillsbury-Jesberg |
| 523577 | Holinger |
| 523579 | Holinger |
| 523581 | Holinger |
| 523582 | Holinger |
| 523677 | Forbes |

# BRONCHOSCOPES

## Holinger Design

### HOLINGER VENTILATING FIBEROPTIC BRONCHOSCOPE




*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

Designed by Dr. Paul Holinger, these fiberoptic bronchoscopes provide a nearly full view of the lumen with constant, cool illumination. Special features include:

- 15 mm sidearm for direct attachment of ventilation and anesthesia apparatus.
- Large fiber bundle for increased distal illumination.
- Oval fiber optic light carrier, which allows more viewing and instrumentation room in main tube.
- 15 mm diameter proximal end for attachment of accessories (window plug, Sanders Venturi, etc.).
- Smooth distal tip.
- Shortened proximal flare.
- Each Holinger Bronchoscope is supplied with one light carrier and one window plug (522595).
- Blue fiber optic cable sold separately (see page 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL I.D. | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522575 | 3 x 20 | 203 mm | 2.5 mm | 12.0 mm | 9.4 mm | 527500 |
| 522576 | 3.5 x 25 | 254 mm | 3.4 mm | 12.0 mm | 12.0 mm | 527505 |
| 522577 | 3.5 x 30 | 305 mm | 3.4 mm | 12.0 mm | 12.0 mm | 527510 |
| 522578 | 4 x 30 | 305 mm | 3.7 mm | 12.0 mm | 12.0 mm | 527510 |
| 522579 | 5 x 30 | 305 mm | 4.5 mm | 12.0 mm | 12.5 mm | 527510 |
| 522580 | 5 x 35 | 350 mm | 4.8 mm | 12.0 mm | 12.5 mm | 527515 |
| 522581 | 5 x 40 | 400 mm | 4.8 mm | 12.0 mm | 12.5 mm | 527520 |
| 522582 | 5 x 45 | 451 mm | 4.9 mm | 12.0 mm | 12.0 mm | 527525 |
| 522583 | 6 x 35 | 350 mm | 5.6 mm | 12.0 mm | 12.0 mm | 527555 |
| 522584 | 6 x 40 | 400 mm | 5.6 mm | 12.0 mm | 13.0 mm | 527560 |
| 522585 | 7 x 40 | 400 mm | 5.8 mm | 12.0 mm | 15.3 mm | 527560 |
| 522586 | 8 x 40 | 400 mm | 7.6 mm | 13.0 mm | 15.4 mm | 527580 |
| 522587 | 9 x 40 | 400 mm | 8.5 mm | 12.0 mm | 16.4 mm | 527580 |

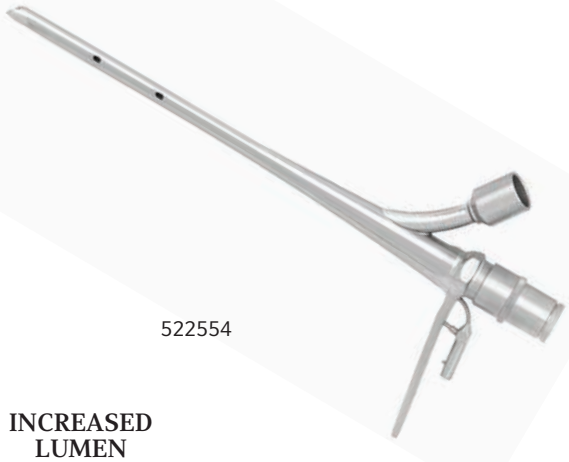
*Dimensions without window plug.*

# BRONCHOSCOPES

## Holinger Pediatric Design

### PILLING® IMPROVED HOLINGER VENTILATING FIBEROPTIC BRONCHOSCOPES

524022 Telescope 2.7 mm, 0°
524036 Telescope Guide 2.7 mm
522552 Improved Holinger Bronchoscope 3.5 x 20
505670 Flexible 1 mm Alligator Forceps



522554

Our most popular bronchoscope, the Holinger, has been modified for pediatric foreign body removal and features the following:

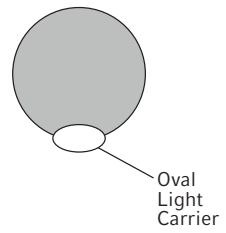
- Small distal tip. The original Holinger tip has been cut down to correspond with tube size, while still retaining smoothness.
- Built-in instrument channel for introduction of flexible forceps or disposable suction.
- Full lumen view. The oval fiberoptic light carrier has been raised slightly to provide a full lumen and give more room for instrumentation and a larger viewing area.
- 15 mm sidearm attachment allows direct attachment of ventilation and anesthesia apparatus.

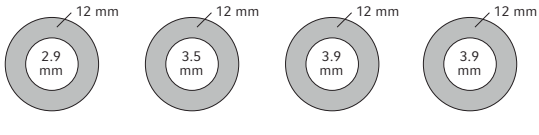
Each Pilling® Improved Holinger Bronchoscope is supplied with one light carrier, one window plug (522595) and instrument guide rubber cap. Blue fiber optic cable sold separately (see page 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL I.D. | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522550 | 3 x 20 | 203 mm | 2.9 mm | 12.0 mm | 9.0 mm | 527500 |
| 522552 | 3.5 x 20 | 203 mm | 3.5 mm | 12.0 mm | 12.0 mm | 527500 |
| 522554 | 4 x 20 | 203 mm | 3.9 mm | 12.0 mm | 12.0 mm | 527500 |
| 522556 | 4 x 25 | 254 mm | 3.9 mm | 12.0 mm | 11.0 mm | 527505 |

*Dimensions without window plug.*

NOTE: The light carrier can be removed from the Improved Holinger Bronchoscope and forceps introduced through the light carrier channel with the 2.7 mm telescope in place (telescope may have to be partially withdrawn in 522550 and 522552 scopes).



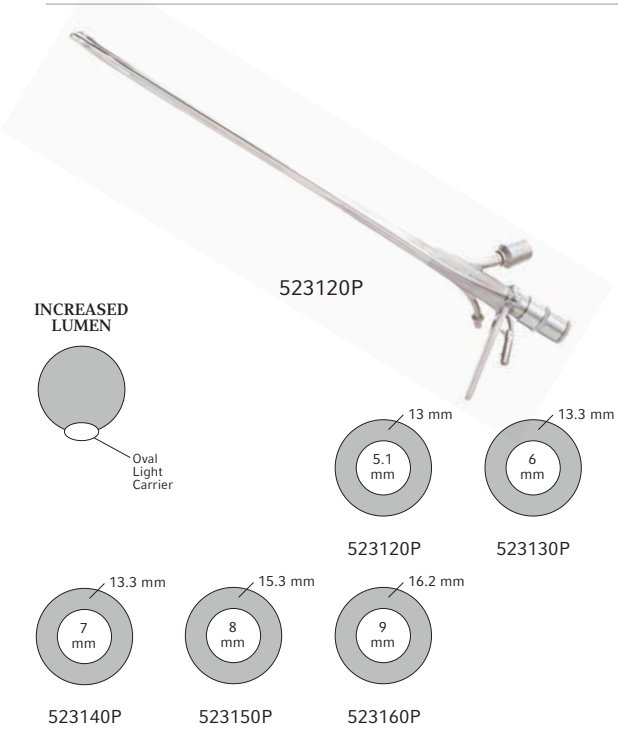

522550 522552 522554 522556

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

# BRONCHOSCOPES

## Laser Bronchoscopes

### PILLING® BRONCHOSCOPE SYSTEM




*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

- Pilling®, Holinger-type Bronchoscope with window plug.
- Standard 15 mm anesthesia ventilating arm.
- Dedicated, distally-delivered YAG or suction channel.
- Dedicated, distally-opened smoke evacuation channel.
- Enlarged, oval fiberoptic, distal light carrier. One supplied with each scope.
- Five sizes of $CO_2$ bronchoscopes available.
- Can be used with $CO_2$ laser.
- Side ports can be used for flexible instrumentation.
- Blue fiber optic cable sold separately (see page 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL I.D. | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 523120P | 5.0 x 30 | 300 mm | 5.1 mm | 13.0 mm | 13.0 mm | 527550 |
| 523130P | 6.0 x 35 | 350 mm | 6.0 mm | 13.3 mm | 13.3 mm | 523131 |
| 523140P | 7.0 x 40 | 400 mm | 7.0 mm | 13.3 mm | 13.3 mm | 527580 |
| 523150P | 8.0 x 40 | 400 mm | 8.0 mm | 15.3 mm | 15.3 mm | 527580 |
| 523160P | 9.0 x 40 | 400 mm | 9.0 mm | 16.2 mm | 16.2 mm | 527580 |
| 524042 | Replaceable rubber cap for Forceps/Suction Channel | | | | | |

### MOISTURE BARRIER FOR $CO_2$ COUPLER-MANIPULATOR

523210P

| ITEM # | DESCRIPTION |
|---|---|
| 523210P | To be used with the Pilling® $CO_2$ Coupler-Manipulator 523200P |

# BRONCHOSCOPES

## Bronchoscope Accessories

### BRONCHOSCOPE ADAPTER

522590

Converts older Jackson and Hollinger Bronchoscopes with 11 mm oxygen connector to standard 15 mm anesthesia and positive pressure connector.

| ITEM # | DESCRIPTION |
|---|---|
| 522590 | Bronchoscope Ventilating Adapter, 3/4" (2 cm) |

### FLUVOG SLIDE ATTACHMENT FOR PILLING® BRONCHOSCOPES

502540

For use on bronchoscopes with the 15 mm proximal extension. Provides "closed system" bronchoscopes with the use of instrumentation.

| ITEM # | DESCRIPTION |
|---|---|
| 502540 | Tapered fit for easy attachment or removal |

### BRONCHOSCOPE WINDOW PLUG REPLACEMENT LENS

522596

| ITEM # | DESCRIPTION |
|---|---|
| 522596 | Replacement kit for Bronchoscope window plug, consists of lens and two Teflon seals |

### WINDOW PLUG

522595

Fits 15 mm proximal extension of Holinger and Jackson Bronchoscopes and Esophagoscopes. Provides a "closed system" for anesthesia in bronchoscopy or inflation during esophagoscopy.

| ITEM # | DESCRIPTION |
|---|---|
| 522595 | Window plug, 1-1/8" (3 cm) |

# TELESCOPES AND ACCESSORIES

## TELESCOPE GUIDES

524037

Fits the proximal end of bronchoscopes and esophagoscopes to hold telescope in place. Not supplied with bronchoscopes or esophagoscopes.

| ITEM # | DESCRIPTION |
|---|---|
| 524036 | For 2.7 mm telescopes, fits 15 mm proximal end of bronchoscopes or esophagoscopes |
| 524037 | For 4.0 mm telescopes, fits 15 mm proximal end of bronchoscopes or Jackson Esophagoscope |
| 524038 | For 5.5 mm telescopes, fits 15 mm proximal end of bronchoscopes or esophagoscopes |

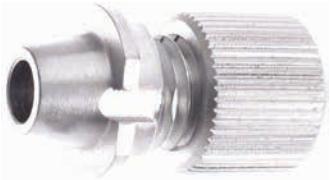
## REPLACEMENT TELESCOPE GUIDE SILICONE CAPS

524040

| ITEM # | DESCRIPTION |
|---|---|
| 524039 | For 2.7 mm telescope, 524036, 5 per pack |
| 524040 | For 4.0 mm telescope, 524037, 5 per pack |
| 524041 | For 5.5 mm telescope, 524038, 5 per pack |

# TELESCOPES AND ACCESSORIES

## TELESCOPE LOCKING DEVICE



524044

Designed to hold telescopes at a maximum desired depth against our telescope guide, or to lock telescope into a competitive telescope bridge system. The serrated knob is tightened to hold the telescope.

| ITEM # | DESCRIPTION |
|---|---|
| 524044 | Telescope locking device, 4.0 mm |
| 524045 | Telescope locking device, 5.5 mm |

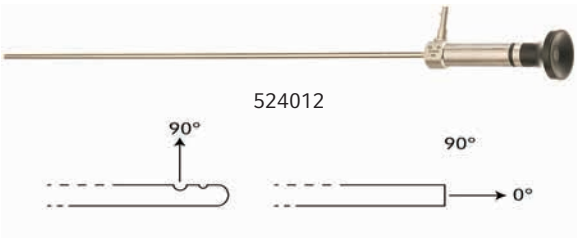
## REPLACEMENT GUIDE SILICONE CAPS

524042

For Improved Holinger Bronchoscopes. Use with flexible instruments.

| ITEM # | DESCRIPTION |
|---|---|
| 524042 | Guide silicone caps, 5 per pack, 1/2" (1.5 cm) |

## PILLING® TELESCOPES WITH FIBEROPTIC ILLUMINATION




524012

The rod lens design of Pilling® Telescopes provides excellent color retention, light transmission, resolution and reduced distortion. The modular construction permits quick repair. Pilling® Fiber optic Telescopes use the same cables as Pilling® Bronchoscopes and Esophagoscopes.

| ITEM # | DESCRIPTION |
|---|---|
| 524022 | 2.7 mm telescope, 0 degrees straight forward, 34 cm overall length |
| 524012 | 4.0 mm telescope, 0 degrees straight forward, 39 cm overall length |
| 524050 | 4.0 mm telescope, 0 degrees straight forward, 45 cm |
| 524010 | 5.5 mm telescope, 90 degrees lateral, 49 cm overall length |

# PILLING® RIGID ENDOSCOPE/ TELESCOPE COMPATIBILITY CHART

## Lengths of all Endoscopes

### BOXES WITH ENTRIES = ENDOSCOPE SIZES AVAILABLE

| SMALLEST DIAMETER OF ENDOSCOPE | 20 CM | 22 CM | 25 CM | 29 CM | 30 CM | 32 CM | 35 CM | 40 CM | 42 CM | 45 CM | 50 CM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.0 mm | | | | | B | | | | | | |
| 3.5 mm | | | B | | B | | | | | | |
| 4.0 mm | | | B | | B | | | | | | |
| 5.0 mm | | | | | B C | | C D (B) | D (C) | | (D) | |
| 6.0 mm | | | | | B C | B C | C D (B) | D F (C) | | F (D) | |
| 6.5 mm | | | | | | | C D (B) | | | | |
| 7.0 mm | | B | B | | B C | | | D F (C) | DF | F (D) | |
| 8.0 mm | | | | | | | | D F (C) | | F (D) | |
| 9.0 mm | | B | B | | B C | | | D F (C) | | F (D) | |
| 10.0 mm | | | | B C | B C | | | D F (C) | | | |
| 12.0 mm | | | | | | | C D (B) | | | F (D) | |

### KEY TO CHART

**Letters:** Represents compatible telescope sizes for that size endoscope. Similar diameter telescope letters have been grouped together, in increasing length order.

**(Letters):** While the telescope does not extend past the endoscope, a 0° telescope will provide an adequate view.

| | | | | | |
|---|---|---|---|---|---|
| B | 524022 | 0° | Straight Forward | 2.7 mm Telescope | 34 cm |
| C | 524012 | 0° | Straight Forward | 4.0 mm Telescope | 39 cm |
| D | 524050 | 0° | Straight Forward | 4.0 mm Telescope | 45 cm |
| F | 524010 | 90° | Lateral Rt. Angle | 5.5 mm Telescope | 49 cm |

### OPTIONAL ACCESSORIES AVAILABLE

The Telescope Locking Device is an optional accessory that slides onto the shaft of the Telescope and can be twist tightened at any place along the length of the shaft of the Telescope as a stop against the Telescope Guide. This will keep the Telescope inside the bronchoscope, permitting insertion under direct telescopic vision lessening the chance of breakage, perforation, or getting mucous or blood on the lens. The lock also fits into the twist locking system of the Storz Bronchoscope Bridge System, permitting the use of Pilling® Telescopes in these competitive Bronchoscopes.

| | |
|---|---|
| For 2.7 mm Telescope: | 524036 Telescope Guide |
| For 4.0 mm Telescope: | 524037 Telescope Guide<br>524044 Locking Device |
| For 5.5 mm Telescope: | 524038 Telescope Guide<br>524045 Locking Device |

# BRONCHOSCOPES

## Cleaning Brushes

### HOLMAN SCOPE BRUSHES

For loosening hardened secretions not freed by washing.

| ITEM # | DESCRIPTION |
|---|---|
| 508540 | Set of three: small, medium, large |
| 508541 | Brush for large scopes, 15 mm x 62 cm |
| 508542 | Brush for medium scopes, 11 mm x 56 cm |
| 508543 | Brush for small scopes, 9 mm x 49 cm |
| 508544 | Special extra-small brush for infant scopes, 6 mm x 46 cm |

508540

# PILLING® ESOPHAGOSCOPES

The Pilling® Esophagoscopes have been designed in conjunction with the innovators in esophageal surgery for examination, diagnostic procedures, and removal of foreign bodies in the esophagus. These fiberoptic scopes have been designed for ease of insertion. A variety of sizes and configurations are offered to meet the patient's specific needs.

**PILLING® ESOPHAGOSCOPE PATIENT SIZE LISTING**

| ITEM # | PRODUCT NAME |
|---|---|
| **NEONATE/INFANT ESOPHAGOSCOPES** | |
| 523570 | Holinger |
| 523505 | Holinger Speculum |
| **CHILD/PEDIATRIC ESOPHAGOSCOPES** | |
| 523600P | Jackson |
| 523602 | Jackson |
| 523650P | Jesberg |
| 523652 | Jesberg |
| 523640 | Pillsbury-Jesberg |
| 523642 | Pillsbury-Jesberg |
| 523571 | Holinger |
| 523572 | Holinger |
| 523675 | Forbes |
| **ADOLESCENT ESOPHAGOSCOPES** | |
| 523654 | Jesberg |
| 523644 | Pillsbury-Jesberg |
| 523573 | Holinger |
| 523574 | Holinger |
| 523575 | Holinger |

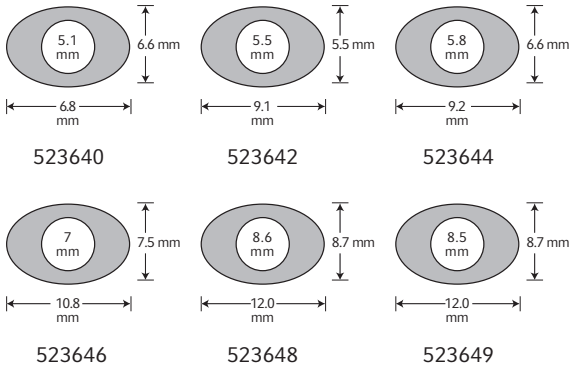
| ITEM # | PRODUCT NAME |
|---|---|
| **ADULT ESOPHAGOSCOPES** | |
| 523535 | Jackson |
| 523541 | Jackson |
| 523562 | Jackson |
| 523602 | Jackson |
| 523604 | Jackson |
| 523608 | Jackson |
| 523610P | Jackson |
| 523612 | Jackson |
| 523614 | Jackson |
| 523656 | Jesberg |
| 523658 | Jesberg |
| 523660P | Jesberg |
| 523646 | Pillsbury-Jesberg |
| 523648 | Pillsbury-Jesberg |
| 523649 | Pillsbury-Jesberg |
| 523577 | Holinger |
| 523579 | Holinger |
| 523581 | Holinger |
| 523582 | Holinger |
| 523677 | Forbes |

# ESOPHAGOSCOPES

## Pillsbury-Jesberg Design

### NEW PILLSBURY-JESBERG ESOPHAGOSCOPES

523648




523640 523642 523644

523646 523648 523649

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

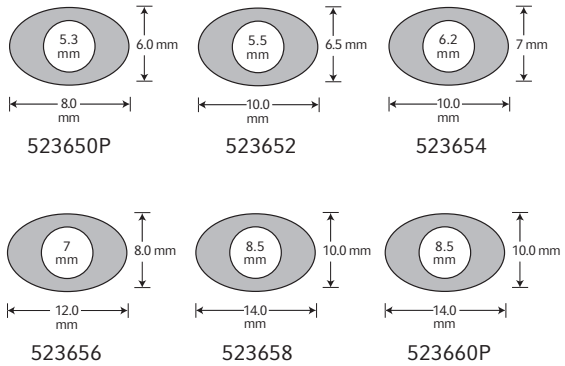
The Pillsbury-Jesberg Esophagoscopes were designed with the light carrier fully incorporated into the textured handle. With this improved design, there is built-in protection for the light carrier during normal handling. The barrel and tip of the scope follow the familiar Jesberg design, facilitating gentle insertion while maintaining usual technique. Supplied with one light carrier. Blue fiber optic cable sold separately (see page 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 523640 | 6 x 8 x 32 | 317 mm | 5.1 mm | 6.6 x 6.8 mm | 12.0 mm | 526640 |
| 523642 | 6.5 x 10 x 35 | 349 mm | 5.5 mm | 5.5 x 9.1 mm | 15.2 mm | 526642 |
| 523644 | 7 x 10 x 42 | 421 mm | 5.8 mm | 6.6 x 9.2 mm | 15.3 mm | 526644 |
| 523646 | 8 x 12 x 45 | 452 mm | 7.0 mm | 7.5 x 10.8 mm | 15.9 mm | 526646 |
| 523648 | 10 x 14 x 29 | 292 mm | 8.6 mm | 8.7 x 12.0 mm | 19.5 mm | 526648 |
| 523649 | 10 x 14 x 50 | 500 mm | 8.5 mm | 8.7 x 12.0 mm | 19.2 mm | 526649 |

## Jesberg Design

### JESBERG OVAL ESOPHAGOSCOPES

523650P




523650P 523652 523654

523656 523658 523660P

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

The oval tube used in the construction of this scope is thickened at its distal end to form a protective edge and finished to a smooth shape. Supplied with one light carrier. Blue fiber optic cable sold separately (see page 463).

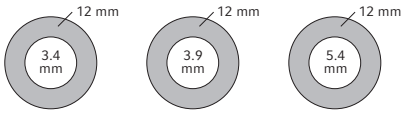
| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 523650P | 6 x 8 x 32 | 320 mm | 5.3 mm | 6.0 x 8.0 mm | 12.6 mm | 526268 |
| 523652 | 6.5 x 10 x 35 | 349 mm | 5.5 mm | 6.5 x 10.0 mm | 15.7 mm | 526270 |
| 523654 | 7 x 10 x 42 | 421 mm | 6.2 mm | 7.0 x 10.0 mm | 16.2 mm | 526276 |
| 523656 | 8 x 12 x 45 | 452 mm | 7.0 mm | 8.0 x 12.0 mm | 15.4 mm | 526278 |
| 523658 | 10 x 14 x 29 | 291 mm | 8.5 mm | 10.0 x 14.0 mm | 18.5 mm | 526264 |
| 523660P | 10 x 14 x 50 | 504 mm | 8.5 mm | 10.0 x 14.0 mm | 19.2 mm | 526282 |

# ESOPHAGOSCOPES

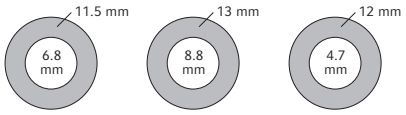
## Holinger Design

### HOLINGER FIBEROPTIC ESOPHAGOSCOPES

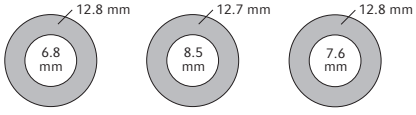
523570



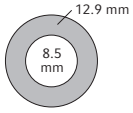

523570 523571 523572




523573 523574 523575




523577 523579 523581




523582

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

Designed by Dr. Paul Holinger, these fiberoptic esophagoscopes provide a nearly full view of the lumen with constant cool illumination. Special features of these esophagoscopes include:

- Large fiber bundle for increased distal illumination.
- Aspiration channel on the exterior of the scope to permit maximum lumen.
- Oval fiber optic light carrier to allow more viewing and instrumentation room in main tube.
- Smooth distal tip.
- 15 mm proximal end for attachment of accessories.
- Blue fiber optic cable sold separately (see page 463).

Holinger Fiberoptic Esophagoscopes are supplied with one light carrier and one window plug (522595).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL I.D. | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 523570 | 3.5 x 30 | 300 mm | 3.4 mm | 12.0 mm | 14.5 mm | 527510 |
| 523571 | 4 x 30 | 300 mm | 3.9 mm | 12.0 mm | 15.0 mm | 527510 |
| 523572 | 6 x 30 | 300 mm | 5.4 mm | 12.0 mm | 15.6 mm | 527550 |
| 523573 | 7 x 30 | 300 mm | 6.8 mm | 11.5 mm | 16.0 mm | 527550 |
| 523574 | 9 x 30 | 300 mm | 8.8 mm | 13.0 mm | 20.0 mm | 527575 |
| 523575 | 5 x 35 | 349 mm | 4.7 mm | 12.0 mm | 15.0 mm | 527515 |
| 523577 | 7 x 45 | 451 mm | 6.8 mm | 12.8 mm | 14.6 mm | 527565 |
| 523579 | 9 x 53 | 530 mm | 8.5 mm | 12.7 mm | 21.0 mm | 527585 |
| 523581 | 8 x 45 | 451 mm | 7.6 mm | 12.8 mm | 19.0 mm | 527583 |
| 523582 | 9 x 45 | 451 mm | 8.5 mm | 12.9 mm | 20.0 mm | 527583 |

*Dimensions are without window plug.*

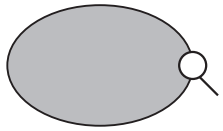
# ESOPHAGOSCOPES

## Jackson Design

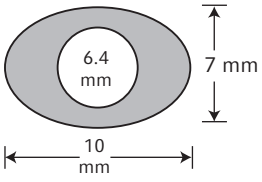
### JACKSON FIBER OPTIC OVAL ESOPHAGOSCOPES

523604

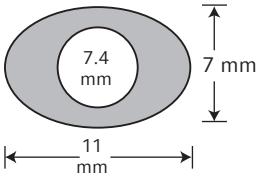
STANDARD LUMEN



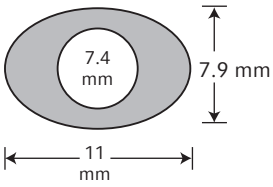
Round Light Carrier



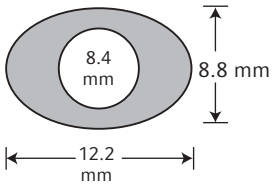

523600P



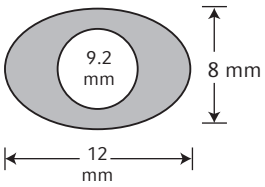

523602



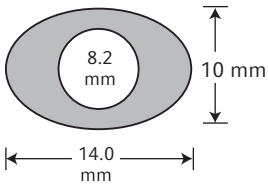

523604



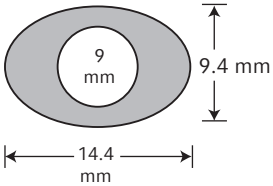

523606



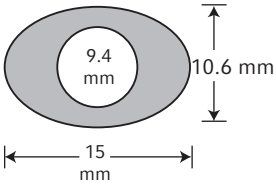

523608




523610P




523612




523614

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.), NOT TO SCALE.*

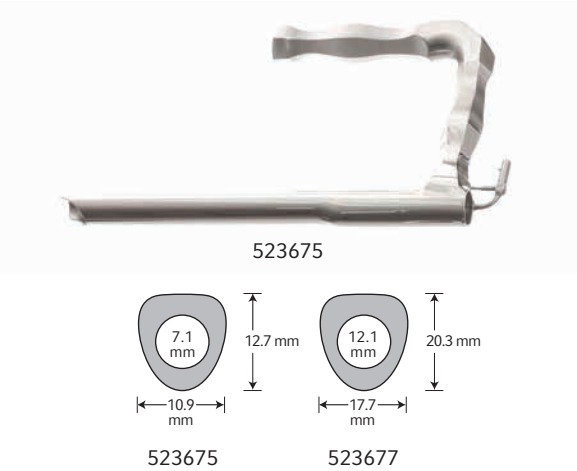
In the oval model, the distal end is slightly flared to form a blunt, smooth edge without increasing the bulk of the tip unnecessarily. The light carrier is placed on the right side of the tube so that the cord is directed away from the hand of the operator. Supplied with one light carrier. Blue fiber optic cable sold separately (see page 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 523600P | 7 x 10 x 25 | 251 mm | 6.4 mm | 7.0 x 10.0 mm | 14.2 mm | 526262 |
| 523602 | 8 x 12 x 50 | 502 mm | 7.4 mm | 7.0 x 11.0 mm | 15.5 mm | 526284 |
| 523604 | 9 x 13 x 25 | 251 mm | 7.4 mm | 7.9 x 11.0 mm | 16.6 mm | 526262 |
| 523606 | 10 x 14 x 30 | 302 mm | 8.4 mm | 8.8 x 12.2 mm | 18.0 mm | 526266 |
| 523608 | 10 x 14 x 40 | 401 mm | 9.2 mm | 8.0 x 12.0 mm | 17.8 mm | 526274 |
| 523610P | 10 x 14 x 50 | 502 mm | 8.2 mm | 10.0 x 14.0 mm | 17.5 mm | 526284 |
| 523612 | 12 x 16 x 50 | 502 mm | 9.0 mm | 9.4 x 14.4 mm | 18.8 mm | 526284 |
| 523614 | 12 x 18 x 35 | 350 mm | 9.4 mm | 10.6 x 15.0 mm | 20.7 mm | 526272 |

# ESOPHAGOSCOPES

## Specula

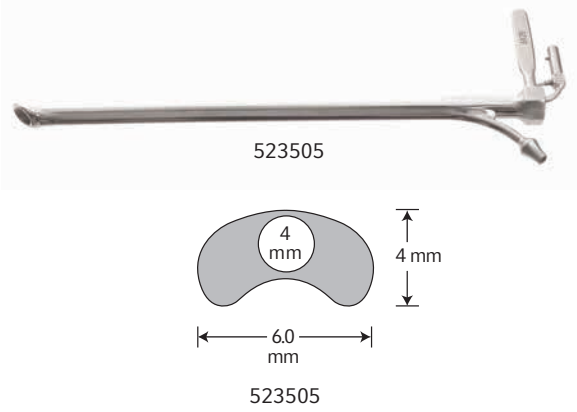
### FORBES ESOPHAGEAL SPECULA




These specula are used for the retrieval of foreign objects lodged in the cervical esophagus. The lumen of these instruments is slightly off the round and the tube tapers gradually to the distal end. The length of the bevel of the tip varies according to the size of the instrument. Particularly useful in the removal of coins. Supplied with one light carrier. Blue fiber optic cable sold separately (see page 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 523675 | Child | 161 mm | 7.1 mm | 10.9 x 12.7 mm | 14.4 mm | 526020 |
| 523677 | Adult | 222 mm | 12.1 mm | 17.7 x 20.3 mm | 23.0 mm | 526046 |

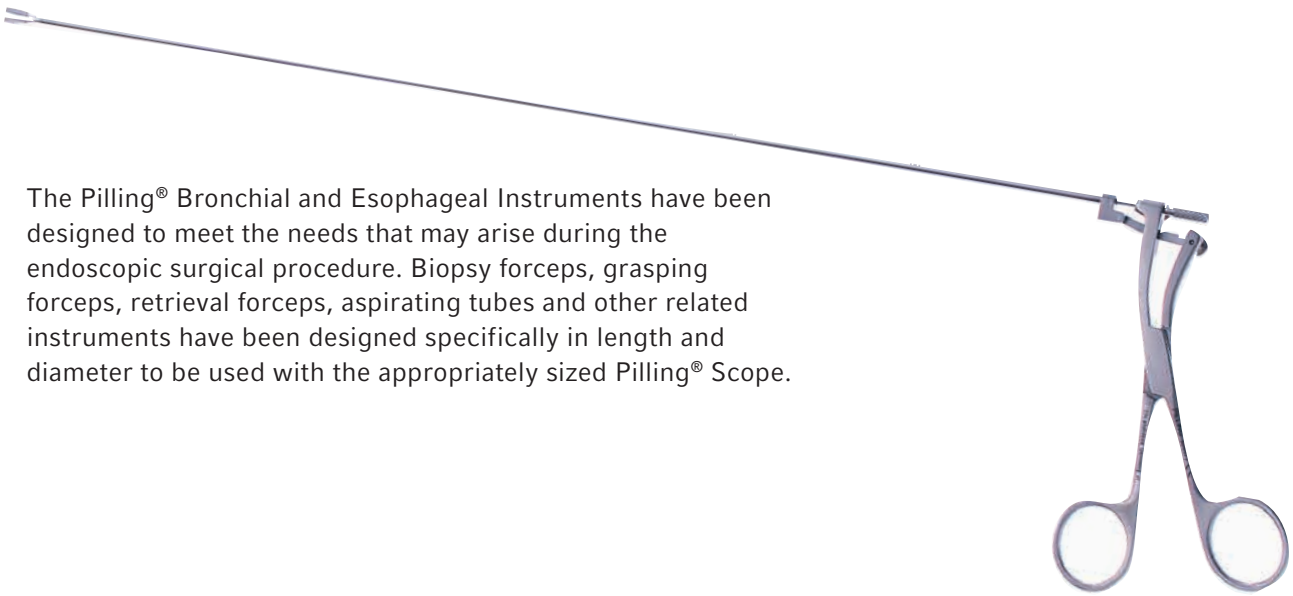
### HOLINGER INFANT ESOPHAGEAL SPECULUM




The Holinger Infant Esophageal Speculum was designed for esophageal foreign body problems in small children. The length is adequate to reach foreign objects lodged in the cervical esophagus without the disadvantage of excess length. Supplied with one light carrier. Blue fiber optic cable sold separately (see page 463).

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 523505 | 6 x 20 | 200 mm | 4.0 mm | 4.0 x 6.0 mm | 10.0 mm | 526218 |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES



The Pilling® Bronchial and Esophageal Instruments have been designed to meet the needs that may arise during the endoscopic surgical procedure. Biopsy forceps, grasping forceps, retrieval forceps, aspirating tubes and other related instruments have been designed specifically in length and diameter to be used with the appropriately sized Pilling® Scope.

## Biopsy Cup Forceps

### EXTRA-LIGHTWEIGHT CONSTRUCTION FORCEPS

Very light shafts with small cup biting jaws, straight or slightly angled.

| ITEM # | CUP DIAMETER | SHAPE | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|---|
| 505160 | 2 mm | Straight | 35 cm | 4.0 mm or larger |
| 505162 | 2 mm | Straight | 40 cm | 4.0 mm or larger |
| 505166 | 2 mm | Angular | 35 cm | 4.0 mm or larger |
| 505168 | 2 mm | Angular | 40 cm | 4.0 mm or larger |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Biopsy Cup Forceps

### HOLINGER CUP BITING SPECIMEN FORCEPS

505334

Cutting jaws with rounded tip and basket designed to prevent crushing of specimen. Cutting edges extend into box of instrument to permit clean, complete removal of specimen.

| ITEM # | CUP DIAMETER | SHAPE | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|---|
| 505334 | 5 mm | Straight | 60 cm | 7.0 mm or larger |

### JACKSON SQUARE PUNCH SPECIMEN FORCEPS

505313

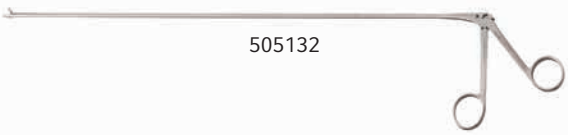
Basket built into lower blade to hold excised tissue.

| ITEM # | CUP DIAMETER | SHAPE | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|---|
| 505313 | 5 mm | Straight | 45 cm | 6.0 mm or larger |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Biopsy Cup Forceps

### SAM ROBERTS CUP BIOPSY FORCEPS - MOST POPULAR



505132

505113

505130

505123

505146

505148

Roberts Forceps have jaws specially shaped and angled for use through bronchoscopes and esophagoscopes of definite sizes.

| ITEM # | CUP DIAMETER | SHAPE | WORKING LENGTH | FOR USE THRU STD. BRONCH | FOR USE THRU ESOPHAGOSCOPES |
|---|---|---|---|---|---|
| 505113 | 2 mm | Straight | 50 cm | 4.5 mm | 3.5 mm |
| 505130 | 4 mm | Straight | 40 cm | 7.0 mm | 7.0 mm |
| 505132 | 4 mm | Straight | 50 cm | 7.0 mm | 7.0 mm |
| 505134 | 4 mm | Straight | 60 cm | 7.0 mm | 7.0 mm |
| 505136 | 6 mm | Straight | 40 cm | 9.0 mm | 9.0 mm |
| 505138 | 6 mm | Straight | 50 cm | 9.0 mm | 9.0 mm |
| 505140 | 6 mm | Straight | 60 cm | 9.0 mm | 9.0 mm |
| 505123 | 2 mm | Angular | 50 cm | 4.5 mm | 3.5 mm |
| 505142 | 4 mm | Angular | 40 cm | 8.0 mm | 8.0 mm |
| 505144 | 4 mm | Angular | 50 cm | 8.0 mm | 8.0 mm |
| 505146 | 4 mm | Angular | 60 cm | 8.0 mm | 8.0 mm |
| 505148 | 6 mm | Angular | 40 cm | 10.0 mm | 10.0 mm |
| 505150 | 6 mm | Angular | 50 cm | 10.0 mm | 10.0 mm |
| 505152 | 6 mm | Angular | 60 cm | 10.0 mm | 10.0 mm |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Grasping Forceps

### JACKSON ALLIGATOR GRASPING FORCEPS - DOUBLE-ACTION

Double articulating jaws are finely serrated and grooved. For use through bronchoscopes or esophagoscopes.

| ITEM # | JAW WIDTH X LENGTH | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|
| 505414 | 2.5 x 14 mm | 50 cm | 5.0 mm or larger |
| 505415 | 2.5 x 14 mm | 60 cm | 5.0 mm or larger |

### JACKSON ALLIGATOR GRASPING FORCEPS - LIGHT CONSTRUCTION

Finely serrated tapered jaws. For use through bronchoscopes or esophagoscopes.

| ITEM # | JAW WIDTH X LENGTH | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|
| 505420 | 1.5 x 17 mm | 30 cm | 5.0 mm or larger |
| 505422 | 1.5 x 17 mm | 40 cm | 5.0 mm or larger |

### JACKSON ALLIGATOR GRASPING FORCEPS - EXTRA DELICATE

For use through infant laryngoscopes and 3.5 mm bronchoscopes.

| ITEM # | JAW WIDTH X LENGTH | WORKING LENGTH |
|---|---|---|
| 505432 | 2.3 x 12 mm | 30 cm |
| 505433 | 2.3 x 12 mm | 35 cm |

### JACKSON ALLIGATOR GRASPING FORCEPS - STANDARD

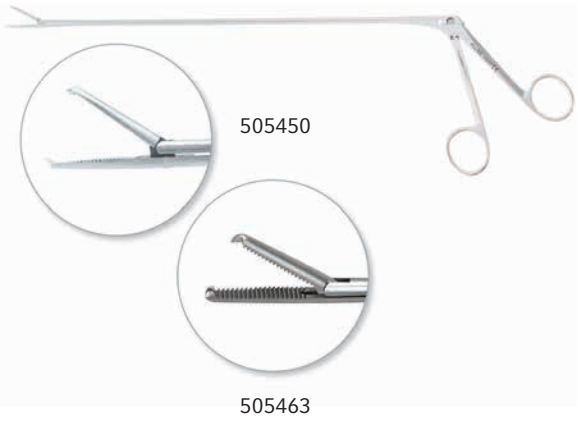
For use through bronchoscopes or esophagoscopes.

| ITEM # | JAW WIDTH X LENGTH | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|
| 505400 | 4 x 23 mm | 28 cm | 6.0 mm or larger |
| 505402 | 4 x 23 mm | 35 cm | 6.0 mm or larger |
| 505403 | 4 x 23 mm | 40 cm | 6.0 mm or larger |
| 505404 | 4 x 23 mm | 50 cm | 6.0 mm or larger |
| 505406 | 4 x 23 mm | 60 cm | 6.0 mm or larger |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Grasping Forceps

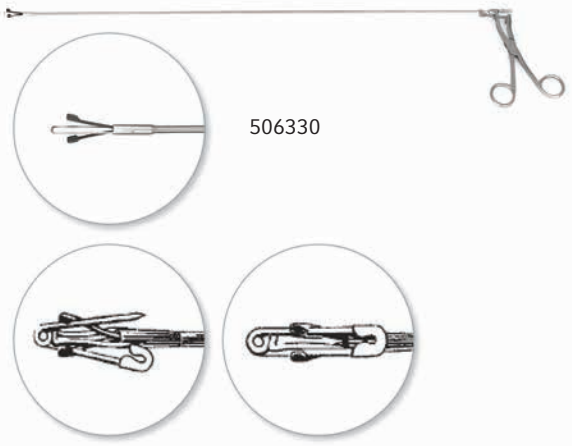
### JACKSON ROTATION FORCEPS




Serrated jaws terminate in sharp teeth. Standard forceps are sturdily constructed with large, strong teeth for use through bronchoscopes and esophagoscopes. Delicate forceps feature light construction with small, sharp teeth. Stainless Steel.

| ITEM # | DESCRIPTION | JAW WIDTH X LENGTH | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|---|
| 505462 | Delicate light | 2.4 x 10 mm | 30 cm | 3.5 mm or larger |
| 505463 | Delicate light | 2.4 x 10 mm | 35 cm | 3.5 mm or larger |
| 505450 | Standard | 4 x 20 mm | 28 cm | 3.5 mm or larger |
| 505455 | Standard | 4 x 20 mm | 50 cm | 7.0 mm or larger |
| 505456 | Standard | 4 x 20 mm | 60 cm | 7.0 mm or larger |

### CLERF-ARROWSMITH SAFETY PIN CLOSING FORCEPS




A notched brace pushes the loop of the pin away from the jaws which simultaneously grasps the limbs of the pin. This action results in approximation of the point and keeper.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | CONSTRUCTION WEIGHT |
|---|---|---|---|
| 506330 | 45 cm | 5.0 mm or larger | 7/8" - 1-1/2" |
| 506331 | 50 cm | 5.0 mm or larger | 7/8" - 1-1/2" |

### GORDON BEAD GRASPING FORCEPS

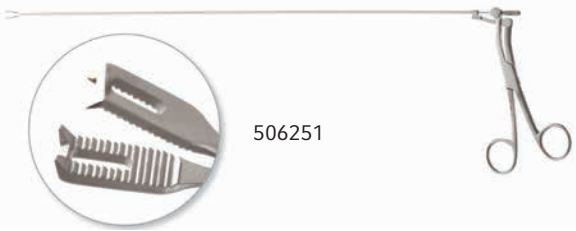
The four-bladed grasping unit is designed to completely surround a slippery, hard-surfaced, smooth object such as an oval bead or ball-bearing.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | CONSTRUCTION WEIGHT |
|---|---|---|---|
| 506150 | 45 cm | 5.0 mm or larger | Small |
| 506152 | 50 cm | 6.0 mm or larger | Large |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Grasping Forceps

### JACKSON DOUBLE PRONG GRASPING FORCEPS




Powerful, fenestrated, deeply serrated blades with distal points are especially valuable in grasping teeth and similar difficult objects.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | CONSTRUCTION WEIGHT |
|---|---|---|---|
| 506251 | 45 cm | 5.0 mm or larger | Medium |
| 506252 | 50 cm | 5.0 mm or larger | Medium |

### JACKSON DULL-POINTED RING ROTATION FORCEPS

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | CONSTRUCTION WEIGHT |
|---|---|---|---|
| 506220 | 35 cm | 3.5 mm or larger | Extra-Small |
| 506232 | 60 cm | 5.0 mm or larger | Large |

### JACKSON FENESTRATED MEAT GRASPING FORCEPS

Large, deeply serrated blades.

| ITEM # | (MM) LENGTH | FOR USE THRU SCOPES | CONSTRUCTION WEIGHT |
|---|---|---|---|
| 506075 | 50 cm | 7.0 mm or larger | Large |
| 506076 | 60 cm | 7.0 mm or larger | Large |

### JACKSON FENESTRATED PEANUT GRASPING FORCEPS

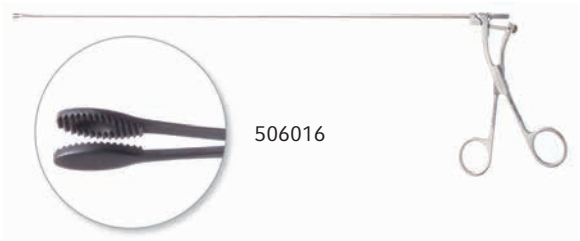
Jaws considerably lighter and smaller than meat grasping forceps.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | CONSTRUCTION WEIGHT |
|---|---|---|---|
| 506060 | 35 cm | 3.5 mm or larger | Extra-Small |
| 506063 | 35 cm | 4.0 mm or larger | Small |
| 506070 | 60 cm | 5.0 mm or larger | Medium |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Grasping Forceps

### JACKSON FORWARD GRASPING CUP FORCEPS



506016

These cannulated forceps are constructed entirely of stainless steel. The jaws are carefully shaped and set to provide a secure grip on the object to be removed. They are strong, durable and will sustain any degree of traction it is safe to exert. Serrated, cupped jaws in various sizes.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | CONSTRUCTION WEIGHT |
|---|---|---|---|
| 506000 | 35 cm | 3.0 mm or larger | Extra-Small |
| 506003 | 35 cm | 4.0 mm or larger | Small |
| 506004 | 40 cm | 4.0 mm or larger | Small |
| 506008 | 40 cm | 4.0 mm or larger | Medium |
| 506016 | 50 cm | 5.0 mm or larger | Large |
| 506017 | 60 cm | 5.0 mm or larger | Large |

### JACKSON FORCEPS PARTS KIT

508590

Contains various sizes of screws and pivot pins for Jackson cannulated-style forceps.

| ITEM # | DESCRIPTION |
|---|---|
| 508590 | 12 parts total |

### JESBERG FENESTRATED GRASPING FORCEPS

506053

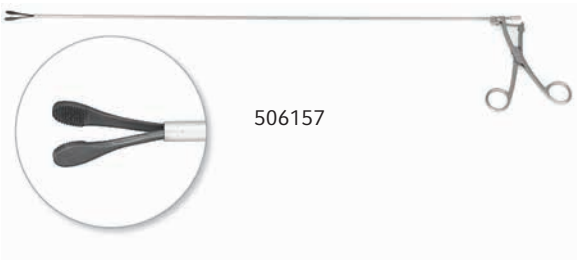
A multi-purpose forceps with fenestrated blades shaped to encircle an odd-shaped or globular object. Valuable as a forward grasping forceps for pebbles, beads, peanuts, meat, head presented tacks and nails. Light construction weight.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | CONSTRUCTION WEIGHT |
|---|---|---|---|
| 506053 | 50 cm | 4.0 mm or larger | Light |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Grasping Forceps

### TUCKER BEAD GRASPING FORCEPS



506157

Forceps have stiff, expanding springs and jaws designed to grasp over and beyond the greatest circumference of the bead. Blades are concave and back-serrated at the tip for secure grasp.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | CONSTRUCTION WEIGHT |
|---|---|---|---|
| 506155 | 40 cm | 4.0 mm or larger | Small |
| 506157 | 50 cm | 5.0 mm or larger | Medium |

### KAHLER GRASPING FORCEPS

505515

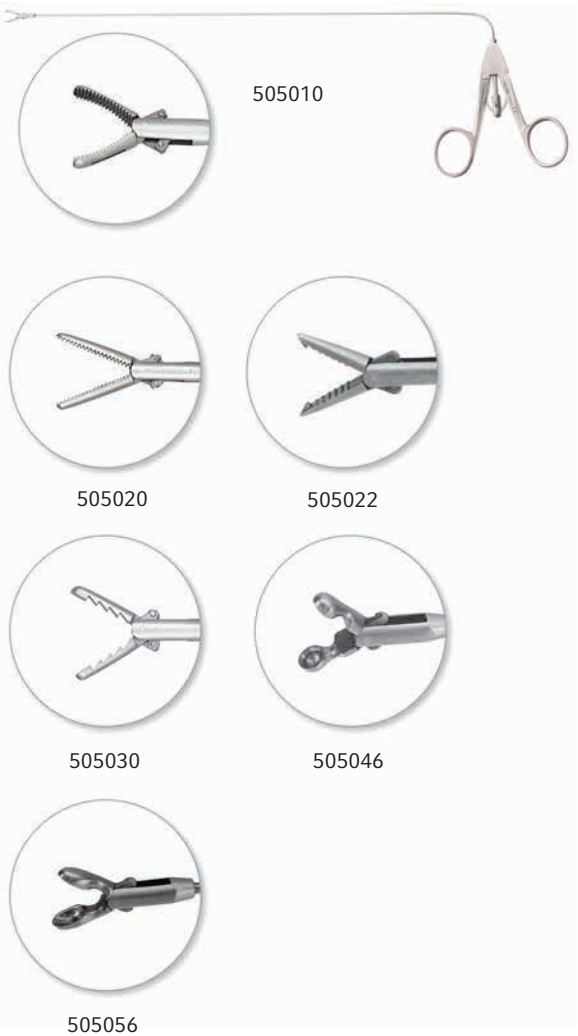
Jaws contain a series of teeth that provide a very secure grip on most foreign bodies.

| ITEM # | JAW WIDTH X LENGTH | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|
| 505515 | 4 x 13 mm | 60 cm | 6.0 mm or larger |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Grasping Forceps

### PILLING® DELICATE CENTER-ACTION BRONCHOSCOPIC FORCEPS



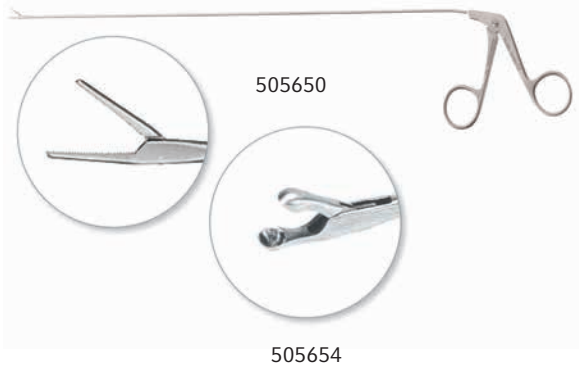

The slender stem allows far greater visibility. Center-action handle and double-action jaws eliminate tendency of distal end to pull away from object and rise. Stem does not bend under pressure from handles. Stainless steel construction.

| ITEM # | DESCRIPTION | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|
| 505005 | Fenestrated, cupped grasping | 38 cm | 3.5 mm or larger |
| 505010 | Fenestrated, cupped grasping | 38 cm | 4.0 mm or larger |
| 505014 | Fenestrated, cupped grasping | 50 cm | 4.0 mm or larger |
| 505016 | Alligator grasping | 38 cm | 4.0 mm or larger |
| 505018 | Alligator grasping | 45 cm | 4.0 mm or larger |
| 505020 | Alligator grasping | 50 cm | 4.0 mm or larger |
| 505022 | Rotation, 1 x 2 teeth | 38 cm | 4.0 mm or larger |
| 505028 | Kahler grasping | 38 cm | 4.0 mm or larger |
| 505030 | Kahler grasping | 45 cm | 4.0 mm or larger |
| 505032 | Kahler grasping | 50 cm | 4.0 mm or larger |
| 505046 | Circular cup biopsy forceps | 38 cm | 5.0 mm or larger |
| 505048 | Circular cup biopsy forceps | 45 cm | 5.0 mm or larger |
| 505050 | Circular cup biopsy forceps | 50 cm | 5.0 mm or larger |
| 505056 | Oval cup biopsy forceps | 50 cm | 5.0 mm or larger |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Forceps for Pediatric and Laser scopes

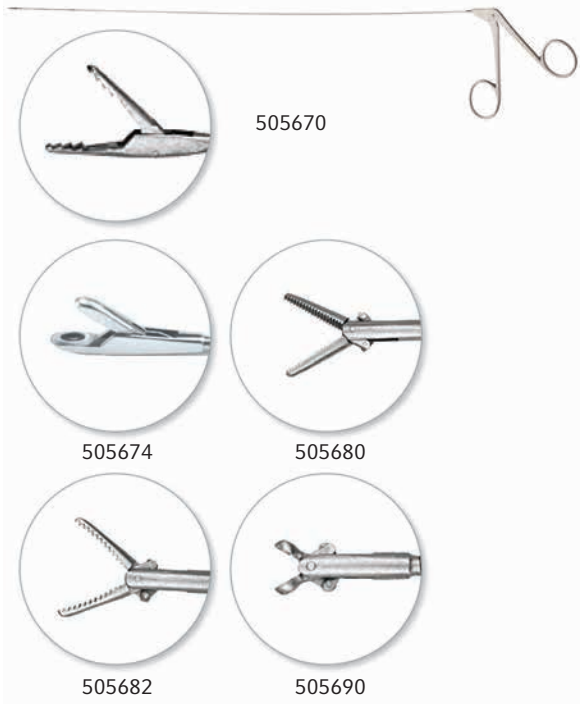
### PEDIATRIC BRONCHOSCOPIC INSTRUMENTS




These miniature grasping and biopsy forceps and scissors with 2 mm stems have been designed to pass through the smaller pediatric bronchoscopes. The stems are slightly angled at the handle, affording unobstructed vision. Straight forward, 35 cm working length, will pass through a 3 mm or larger scope, 5 degree bend at handle.

| ITEM # | DESCRIPTION | SHAPE | WORKING LENGTH | FOR USE THRU SCOPES |
|---|---|---|---|---|
| 505650 | Grasping forceps | Straight forward | 36 cm | 3.0 mm or larger |
| 505654 | Biopsy forceps | Straight cup | 36 cm | 3.5 mm or larger |
| 505662 | Biopsy forceps | Oval cup | 37 cm | 3.5 mm or larger |

### PILLING® FLEXIBLE ENDOSCOPIC FORCEPS




The Pilling® Flexible Forceps were designed for use with Pilling® Laser and Standard Bronchoscopes. They easily pass through the instrument/fiber channel for the purpose of biopsy, foreign body retrieval and removal of char from laser ablation. These forceps are available in 1 mm and 2 mm sizes.

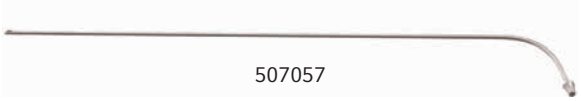
| ITEM # | OVERALL LENGTH | DESCRIPTION | FOR USE THRU SCOPES |
|---|---|---|---|
| 505670 | 36.5 cm | 1 mm alligator grasping | 3.5 x 20<br>4.0 x 25 |
| 505674 | 36.5 cm | 1 mm oval cup biopsy | 3.5 x 20<br>4.0 x 25 |
| 505680 | 40 cm | 1.5 mm alligator grasping, flexible | 5.0 x 30<br>6.0 x 35 |
| 505682 | 40 cm | 2 mm fenestrated grasping, flexible | 5.0 x 30<br>6.0 x 35 |
| 505686 | 50 cm | 2 mm alligator grasping, flexible | 7.0 x 40<br>8.0 x 40<br>9.0 x 40 |
| 505690 | 50 cm | 2 mm circular cup biopsy | 7.0 x 40<br>8.0 x 40<br>9.0 x 40 |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Suction Tubes

### HOLINGER ASPIRATING TUBES

Holinger Tubes have an open distal tip as well as two opposing side openings. This allows for complete, rapid aspiration without clogging. These tubes are available in a standard model without thumb-valve and the thumb-valve control model.



507057

507060

Standard Model

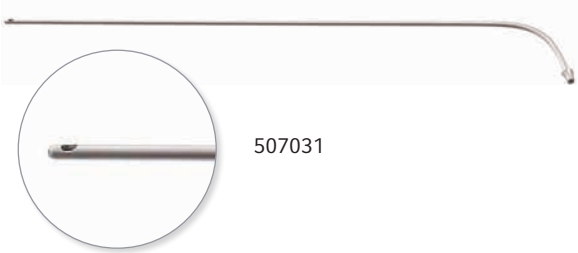
| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | TUBE DIAMETER |
|---|---|---|---|
| 507050 | 45 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507051 | 50 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507052 | 60 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507055 | 25 cm | 4.0 mm or larger | 3 mm (9 Fr.) |
| 507057 | 35 cm | 4.0 mm or larger | 3 mm (9 Fr.) |

Thumb Valve Control Model

| ITEM # | WORKING LENGTH | TUBE DIAMETER |
|---|---|---|
| 507060 | 20 cm | 3 mm (9 Fr.) |
| 507065 | 35 cm | 4 mm (12 Fr.) |

*For use through infant laryngoscopes for tracheal aspiration.*

### JACKSON "VELVET-EYE" ASPIRATING TUBES



507031

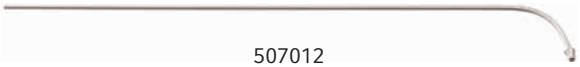
These tubes have a smooth, oval-shaped opening on each side of the distal tip and a closed, blunt end.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | TUBE DIAMETER |
|---|---|---|---|
| 507030 | 20 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507031 | 35 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507032 | 40 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507033 | 45 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507034 | 50 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507035 | 60 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507040 | 35 cm | 4.0 mm or larger | 3 mm (9 Fr.) |
| 507041 | 40 cm | 4.0 mm or larger | 4 mm (12 Fr.) |

# INSTRUMENTATION FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

## Suction Tubes

### JACKSON OPEN END ASPIRATING TUBE



507012

Pilling® Aspirating Tubes, except in special designs, are constructed of stainless steel. They are measured in working length from distal tip to beginning of proximal curve or angle. Aspirating tubes should be 5 cm or 10 cm longer than the instructions through which they are used.

| ITEM # | WORKING LENGTH | FOR USE THRU SCOPES | TUBE DIAMETER |
|---|---|---|---|
| 507010 | 20 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507011 | 35 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507012 | 40 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507013 | 45 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507014 | 50 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507015 | 60 cm | 5.0 mm or larger | 4 mm (12 Fr.) |
| 507020 | 35 cm | 3.0 mm or larger | 2.0 mm (6 Fr.) |
| 507023 | 35 cm | 3.5 mm or larger | 2.6 mm (8 Fr.) |
| 507027 | 35 cm | 4.0 mm or larger | 3.0 mm (9 Fr.) |
| 507028 | 40 cm | 4.0 mm or larger | 3.0 mm (9 Fr.) |

### FULLY INSULATED SUCTION TUBE

507048

| ITEM # | DESCRIPTION |
|---|---|
| 507048 | With thumb-valve, 12 Fr. tip, working length 19-5/8" (50 cm). Supplied w/10 ft. Bovie cord and plug (507046) |

### BOVIE CORD FOR SUCTION TUBE

507046

| ITEM # | DESCRIPTION |
|---|---|
| 507046 | Replacement Bovie cord and plug for 507048, 10 ft. |

# FIBER OPTIC CABLES

## PILLING® BLUE FIBER OPTIC CABLES

P358PRA

A358PRA

O358PRA

S358PRA

For use with Pilling® Laryngoscopes, Bronchoscopes and Esophagoscopes.

| ITEM # | DESCRIPTION |
|---|---|
| P358PRA | Pilling® Illuminator end, 3.5 mm bundle, 8 ft. length, Pilling® Rotating Instrument End |
| P356PRA | Pilling® Illuminator end, 3.5 mm bundle, 6 ft. length, Pilling® Rotating Instrument End |
| A358PRA | ACMI illuminator end, 3.5 mm bundle, 8 ft. length, Pilling® Rotating Instrument End (formally A358PR) |
| O358PRA | Olympus illuminator end, 3.5 mm bundle, 8 ft. length, Pilling® Rotating Instrument End |
| S358PRA | Storz illuminator end, 3.5 mm bundle, 8 ft. length, Pilling® Rotating Instrument End |
| W358PRA | Wolf illuminator end, 3.5 mm bundle, 8 ft. length, Pilling® Rotating Instrument End |
| A358AFA | ACMI illuminator end, 3.5 mm bundle, 8 ft. length, ACMI Female Instrument End |
| W358PXA | Bifurcated cable, Wolf illuminator end, 3.5 mm bundle, 8 ft. length, Pilling® Rotating Instrument End |
| W356PXA | Bifurcated cable, Wolf illuminator end, 3.5 mm bundle, 6 ft. length, Pilling® Rotating Instrument End |

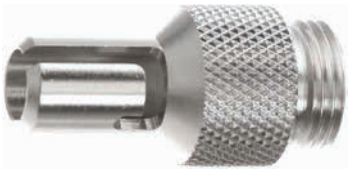
A358AFA

W358PXA

W356PXA

# FIBER OPTIC CABLES

## PILLING® ROTATING TIP FIBER OPTIC CABLE ADAPTER



50613AC

| ITEM # | DESCRIPTION |
|---|---|
| 50613AC | Pilling® Rotating End Fitting adapts to Pilling® Single Cables with catalog numbers ending in "PRA" (formerly 521166) |

## FIBER OPTIC INSTRUMENT CABLE END ADAPTERS

50614AC

50615AC

These adapters are to be used with standard Pilling® Fiber Optic Cables P358PRA or P356PRA.

| ITEM # | DESCRIPTION |
|---|---|
| 50614AC | ACMI to Pilling®, adapts to Pilling® Single Cables with catalog numbers ending in "PRA" (formerly 521165) |
| 50615AC | Wolf to Pilling®, adapts to Pilling® Single Cables with catalog numbers ending in "PRA" (formerly 521170) |

## ACMI ILLUMINATOR END ADAPTER FOR TYPE II CABLES

50616AC

This adapter attaches to fiber optic cables with a larger Pilling® End Fitting on one end and a light carrier permanently attached to the cable on the other end.

| ITEM # | DESCRIPTION |
|---|---|
| 50616AC | Adapts to the following:<br>527850 Light Carrier Cable for Improved Tucker Mediastinscope, long (522311)<br>527853 Light Carrier Cable for Improved Tucker Mediastinscope, short (522306)<br>527860 Light Carrier Cable for Ossoff Adult Subglottiscopes (522244, 522245)<br>527862 Light Carrier Cable for Ossoff-Karlan-Dedo Laser Micro-Laryngoscope, adol (522238)<br>527863 Light Carrier Cable for Ossoff-Karlan-Dedo Laser Micro-Laryngoscope, child (522237) |

# BOUGIES/DILATORS

## Esophageal Bougies

### PILLING® BOUGIES/DILATORS

The comprehensive line of Pilling® Laryngeal and Esophogeal Dilators and Bougies include designs by Drs. Jackson, Tucker and Maloney.

### MALONEY-STYLE & HURST-STYLE BOUGIES (MADE OF SILICONE, MERCURY FREE)

The advantages of our exclusive new esophageal bougies start with what they don't have. Namely, mercury. Mercury is toxic and requires special handling and waste disposal procedures. But our patented tungsten gel-filling is completely non-toxic.
What's more, these bougies can be sterilized via steam; unlike mercury-filled bougies, they won't rupture during steam sterilization.
In addition, the silicone casing is non-slip when dry and slippery when wet. So it gives you a good grip, yet allows for easier, less traumatic insertion.

- Patented tungsten gel-filling is completely non-toxic, making it safer for patients and staff, and far less cost of disposal.
- Calibration marks, along with radio-opaque material in the flexible tip of the Maloney style, make it easy to determine the exact depth of insertion.
- Date stamp and three-year guarantee.

### HURST TUNGSTEN-FILLED ESOPHAGEAL BOUGIES

507606

These tungsten-filled bougies have rounded distal tips. The closure on the proximal end is drilled through from side-to-side so a finger cord may be used. 29-1/2" (75 cm) approximate overall length.

| ITEM # | DESCRIPTION |
|---|---|
| 507595 | 20 Fr. |
| 507596 | 22 Fr. |
| 507597 | 24 Fr. |
| 507598 | 26 Fr. |
| 507599 | 28 Fr. |
| 507600 | 30 Fr. |
| 507601 | 32 Fr. |
| 507602 | 34 Fr. |
| 507603 | 36 Fr. |
| 507604 | 38 Fr. |
| 507605 | 40 Fr. |

| ITEM # | DESCRIPTION |
|---|---|
| 507606 | 42 Fr. |
| 507607 | 44 Fr. |
| 507608 | 46 Fr. |
| 507609 | 48 Fr. |
| 507610 | 50 Fr. |
| 507611 | 52 Fr. |
| 507612 | 54 Fr. |
| 507613 | 56 Fr. |
| 507614 | 58 Fr. |
| 507615 | 60 Fr. |

# BOUGIES/DILATORS

## Esophageal Bougies

### MALONEY TAPERED TUNGSTEN-FILLED ESOPHAGEAL BOUGIES

507942

This tungsten-filled bougie provides a single style of dilator for treating cardiospasm, esophagitis, stenosis and other esophageal diseases. The small, flexible tip is easily introduced through the cricopharynx area, cardioesophageal junction or stenosis. Once the tip is through the involved area, the tapered end allows the single bougie to dilate this portion of the esophagus to its maximum limit. Overall length is approximately 29-1/2" (75 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 507920 | 20 Fr. |
| 507922 | 22 Fr. |
| 507924 | 24 Fr. |
| 507926 | 26 Fr. |
| 507928 | 28 Fr. |
| 507930 | 30 Fr. |
| 507932 | 32 Fr. |
| 507934 | 34 Fr. |
| 507936 | 36 Fr. |
| 507938 | 38 Fr. |
| 507940 | 40 Fr. |

| ITEM # | DESCRIPTION |
|---|---|
| 507942 | 42 Fr. |
| 507944 | 44 Fr. |
| 507946 | 46 Fr. |
| 507948 | 48 Fr. |
| 507950 | 50 Fr. |
| 507952 | 52 Fr. |
| 507954 | 54 Fr. |
| 507956 | 56 Fr. |
| 507958 | 58 Fr. |
| 507960 | 60 Fr. |

### BOUGIE STERILIZATION TRAY

508000

Stainless steel. Separately holds twelve (12) individual bougies (Maloney or Hurst). Two tiers with upper tier having hinged handle, perforated trays and lid. Holding pins hold bougie cap to keep bougie straight and in corrugated channels.

| ITEM # | DESCRIPTION |
|---|---|
| 508000 | 31-5/8" x 11" (80.5 x 28 cm) |

# BOUGIES/DILATORS

## Esophageal Dilators

### JACKSON ESOPHAGEAL DILATORS

507820

The Pilling® Jackson Esophageal Dilator have proved popular and effective among surgeons. Now available in a durable silicone material. This configuration is the safest of all forms of dilators because of the thin, flexible stem that enables accurate ocular guidance of the dilator into the lumen of the stricture. A small size (12 Fr.) is often useful to make sure of a lumen ahead at the cricopharyngeal and hiatal levels during esophagoscopy as well as in cases of stenosis. The steel stem also permits the use of the tiniest filiform sizes. Overall length ranges from 25" (63.5 cm) for the 8 - 12 Fr. to 26-1/2" (67.5 cm) for the 20 - 42 Fr.

| ITEM # | DESCRIPTION |
|---|---|
| 507807 | Dilator Set, includes one of each size listed, nineteen dilators, 8 Fr. - 42 Fr. |
| 507808 | 8 Fr. |
| 507809 | 9 Fr. |
| 507810 | 10 Fr. |
| 507812 | 12 Fr. |
| 507814 | 14 Fr. |
| 507816 | 16 Fr. |
| 507818 | 18 Fr. |
| 507820 | 20 Fr. |
| 507822 | 22 Fr. |
| 507824 | 24 Fr. |
| 507826 | 26 Fr. |
| 507828 | 28 Fr. |
| 507830 | 30 Fr. |
| 507832 | 32 Fr. |
| 507834 | 34 Fr. |
| 507836 | 36 Fr. |
| 507838 | 38 Fr. |
| 507840 | 40 Fr. |
| 507842 | 42 Fr. |

### TUCKER LUMEN FINDERS

507876

Short, flexible, soft rubber tip affixed to 25-1/2" (65 cm) stem with removable handle extension. 30-3/4" (78 cm) overall length.

| ITEM # | DESCRIPTION |
|---|---|
| 507875 | 14 Fr. |
| 507876 | 16 Fr. |
| 507877 | 18 Fr. |

# BOUGIES/DILATORS

## Laryngeal Dilators

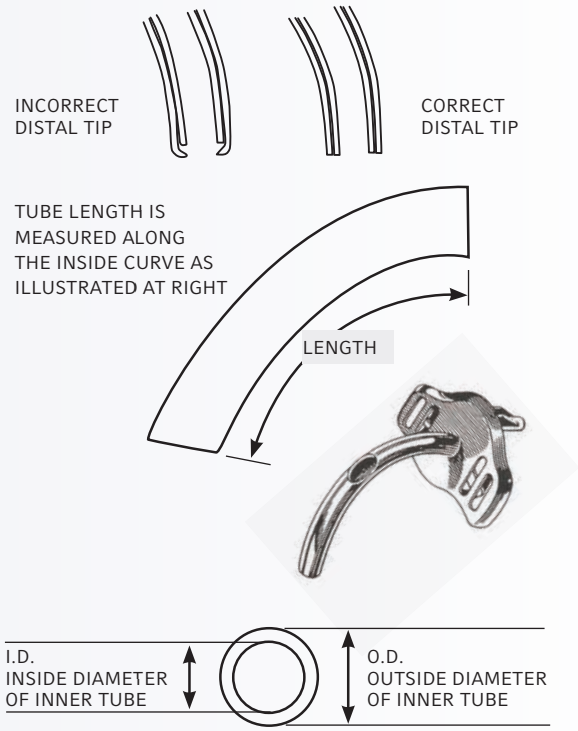
### JACKSON LARYNGEAL DILATORS

Rigid, metallic, triangular-shaped dilators for direct laryngoscopic treatment of laryngeal stenosis. Eighteen graduated sizes for consecutive use corresponding approximately to the French sizes listed below.
11-3/4" (30 cm) length from tip to angle.

| ITEM # | DESCRIPTION |
|---|---|
| 507500 | 10 Fr. |
| 507501 | 12 Fr. |
| 507502 | 14 Fr. |
| 507503 | 16 Fr. |
| 507504 | 18 Fr. |
| 507505 | 20 Fr. |
| 507506 | 22 Fr. |
| 507507 | 24 Fr. |
| 507508 | 26 Fr. |
| 507509 | 28 Fr. |
| 507510 | 30 Fr. |
| 507511 | 32 Fr. |
| 507512 | 34 Fr. |
| 507513 | 36 Fr. |
| 507514 | 38 Fr. |
| 507515 | 40 Fr. |
| 507516 | 42 Fr. |
| 507517 | 44 Fr. |

# PILLING® TRACHEOSTOMY AND LARYNGECTOMY TUBES

Pilling® Tracheostomy and Laryngectomy Tubes are known for their innovation in the sterling silver and stainless steel products. Choose from the largest variety of tube available in standard sizes. In addition, special models and cuts are made to order. Pilling® Insertion Instruments, Speaking Valves and Decannulation Stoppers are also available.







***Sterling silver and stainless steel trachea tube care and cleaning warning:***
*Do not soak, wash or expose the tubes to peroxide or enzyme cleaners, or sodium hydroxide. These chemical agents will cause the silver tubes to discolor, stain, tarnish and weaken the solder connection joints. These chemical agents will cause stainless steel to pit and stain.*

### TRACHEOSTOMY AND LARYNGECTOMY TUBES

Most Pilling® Tracheostomy and Laryngectomy Tubes are completely interchangeable within a size and style. For example, all parts of any #6 Jackson Original Model Tube will fit each other. This interchangeability of parts greatly reduces a major cost: cost of time in sorting, fitting and assembling tubes.

Specifications from the tube designer are rigidly followed. Locking mechanisms are well designed and operate properly.

The inner and outer tubes fit closely to provide maximum airway. The distal edge of the inner tube is flush with, and fits very closely to, that of the outer tube to allow for correct and complete cleaning.

Stainless steel and sterling silver are used in the construction of Pilling® Tubes. Plating is not used because it wears off due to galvanic action between the plating and the base metal.

Pilling® Tubes are offered in the largest variety available from any single source; special models and sizes are available.

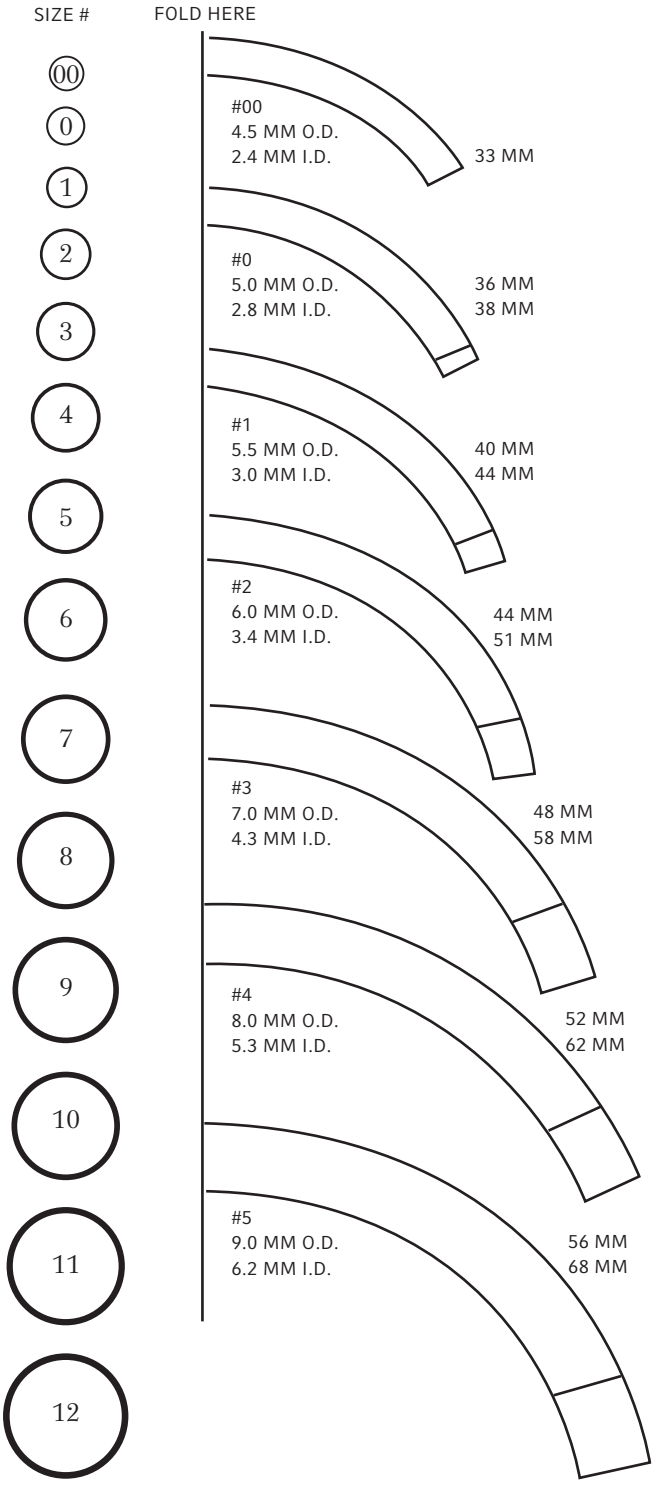
### FENESTRATED TRACHEOSTOMY TUBES

Any Pilling® Tracheostomy Tube may be fenestrated upon request. The standard fenestration is located at a point, measured from the neck plate, equal to one-third of the length of the tube. Special fenestrated tubes can be made to order. The size and position of special fenestrations must be specified by the prescribing physician.

### TRACHEOSTOMY AND LARYNGECTOMY TUBE DIMENSIONS

The dimensions of Pilling® Tracheostomy and Laryngectomy Tubes are given in a numerical size, an outside tube diameter, and an inside tube diameter. The outside diameter (O.D.) is the mm diameter of the outer tube, while the inside diameter (I.D.) is the mm diameter of the inner tube distal end.

# PILLING® JACKSON TRACHEOSTOMY TUBES

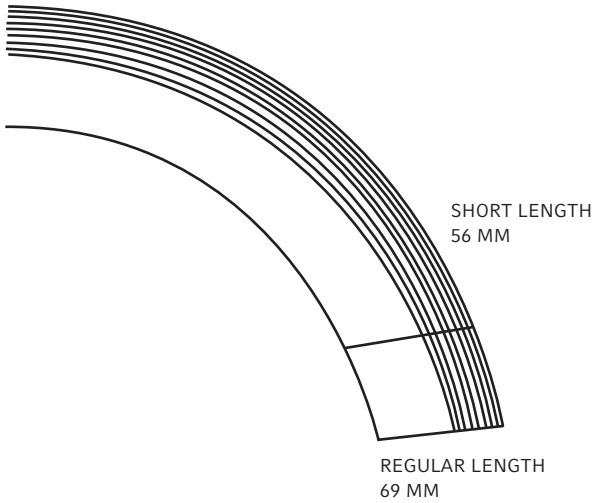



| | | |
|---|---|---|
| #6 | 10.0 MM O.D. | 7.2 MM I.D. |
| #7 | 11.0 MM O.D. | 8.3 MM I.D. |
| #8 | 12.0 MM O.D. | 9.2 MM I.D. |
| #9 | 13.0 MM O.D. | 9.9 MM I.D. |
| #10 | 14.0 MM O.D. | 10.6 MM I.D. |
| #11 | 15.3 MM O.D. | 12.3 MM I.D. |
| #12 | 16.3 MM O.D. | 12.7 MM I.D. |

## Stainless steel. Sterling silver.

### SIZE AND SHAPE SPECIFICATIONS

To measure a tube, fold page on line where indicated and lay the tube on the outline with plate over the page edge. Dimensions shown are tube diameter in mm and Fr. size, and the length in mm around the inside curve. The shorter of the length indicated
(48 mm on #3) applies to Jackson Short Length Tubes. The longer size (58 mm on #3) applies to Jackson Regular Length Tubes. The shape diagrams are quite accurate and are shown to aid in ordering special length tubes as well as standard lengths.




NOTE
FIRST LINE ON LENGTH CURVE = SHORT
FULL LENGTH CURVE = REGULAR
16 MM PAST FULL LENGTH LINE = EXTRA-LONG

# TRACHEOSTOMY TUBES

## Jackson Improved Design

### JACKSON IMPROVED TRACHEOSTOMY TUBES - REGULAR LENGTH

518030



* Fenestrated Jackson Tube

Stainless steel. Interchangeable. The improved model with a rotating lock provides quick, easy removal of the inner tube. A set consists of an outer tube, inner tube and an obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518010 | 1 | 5.5 | 3.0 | 44.0 |
| 518015 | 2 | 6.0 | 3.4 | 51.0 |
| 518020 | 3 | 7.0 | 4.3 | 58.0 |
| 518025 | 4 | 8.0 | 5.5 | 62.0 |
| 518029* | 4 | 8.0 | 5.5 | 62.0 |
| 518030 | 5 | 9.0 | 6.2 | 68.0 |
| 518034* | 5 | 9.0 | 6.2 | 68.0 |
| 518035 | 6 | 10.0 | 7.2 | 69.0 |
| 518039* | 6 | 10.0 | 7.2 | 69.0 |
| 518040 | 7 | 11.0 | 8.1 | 69.0 |
| 518044* | 7 | 11.0 | 8.1 | 69.0 |
| 518045 | 8 | 12.0 | 9.2 | 69.0 |
| 518049 | 8 | 12.0 | 9.2 | 69.0 |
| 518050 | 9 | 13.0 | 9.9 | 69.0 |
| 518055 | 10 | 14.0 | 10.6 | 69.0 |

** These Jackson Tubes are fenestrated to facilitate speech. The fenestration is located at a point measured from the neckplate equal to 1/3 of the length of the tube on both the inner and outer tubes.*

# TRACHEOSTOMY TUBES

## Jackson Improved Design

### JACKSON EXTRA-LONG TRACHEOSTOMY TUBES WITH ROTATING LOCK

518904

Stainless steel. The Jackson Extra-Long Tracheostomy Tubes are 16 mm longer than standard Jackson tubes. They are not interchangeable and are made in sizes 5 through 9 only in stainless steel. Size and shape may be chosen using the Jackson Tracheostomy Tubes diagram located at the beginning of this section. The length of the outer arc is 16 mm longer than the regular length. A set consists of an outer tube, inner tube and an obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518900 | 5 | 9.0 | 6.2 | 84 |
| 518902 | 6 | 10.0 | 7.2 | 85 |
| 518904 | 7 | 11.0 | 8.3 | 85 |
| 518906 | 8 | 12.0 | 9.2 | 85 |
| 518908 | 9 | 13.0 | 9.9 | 85 |

# TRACHEOSTOMY TUBES

## Jackson Improved Design

### JACKSON IMPROVED TRACHEOSTOMY TUBES - SHORT LENGTH

518225

Stainless steel. Interchangeable. These tubes follow the regular Jackson curve and supply the need for tubes of lengths between the regular Jackson and the short Luer Tube. A set consists of an outer tube, inner tube and an obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518215 | 3 | 7.0 | 4.3 | 48.0 |
| 518220 | 4 | 8.0 | 5.5 | 52.0 |
| 518225 | 5 | 9.0 | 6.2 | 56.0 |
| 518230 | 6 | 10.0 | 7.2 | 56.0 |
| 518235 | 7 | 11.0 | 8.1 | 56.0 |
| 518240 | 8 | 12.0 | 9.2 | 56.0 |
| 518245 | 9 | 13.0 | 9.9 | 56.0 |
| 518250 | 10 | 14.0 | 10.6 | 56.0 |

### JACKSON IMPROVED TRACHEOSTOMY TUBES WITH 15 MM ADAPTER - REGULAR LENGTH

518431

Stainless steel. Interchangeable. For use with positive pressure and anesthesia units. Adapters are permanently attached and not available as parts. A set consists of an outer tube, an inner tube and obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518426 | 4 | 8.0 | 5.5 | 62.0 |
| 518431 | 5 | 9.0 | 6.2 | 68.0 |
| 518436 | 6 | 10.0 | 7.2 | 69.0 |
| 518441 | 7 | 11.0 | 8.1 | 69.0 |
| 518446 | 8 | 12.0 | 9.2 | 69.0 |

# TRACHEOSTOMY TUBES

## Jackson Improved Design

### JACKSON IMPROVED TRACHEOSTOMY TUBES WITH 15 MM ADAPTER - SHORT LENGTH

518625

Stainless steel. Interchangeable. For use with positive pressure and anesthesia units. Adapters are permanently attached and not available as parts. A set consists of an outer tube, an inner tube and obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518620 | 4 | 8.0 | 5.5 | 52.0 |
| 518625 | 5 | 9.0 | 6.2 | 56.0 |
| 518630 | 6 | 10.0 | 7.2 | 56.0 |
| 518635 | 7 | 11.0 | 8.1 | 56.0 |
| 518640 | 8 | 12.0 | 9.2 | 56.0 |
| 518456 | 10 | 14.0 | 10.6 | 69.0 |

### JACKSON IMPROVED TRACHEOSTOMY TUBES MADE IN STERLING SILVER

511125

Sterling silver. Interchangeable. An improved model with a rotating lock to provide quick and easy removal of the inner tube. The unobstructed surface of the neckplate eliminates snagging of gauze wipes and lessened bulk can be more easily hidden beneath patients' clothing. The inert properties of sterling silver construction reduce the allergic reaction to stainless steel. A set consists of an outer tube, inner tube and an obturator. These sterling silver Jackson tubes may be used with Tucker Valved Inner Tubes.

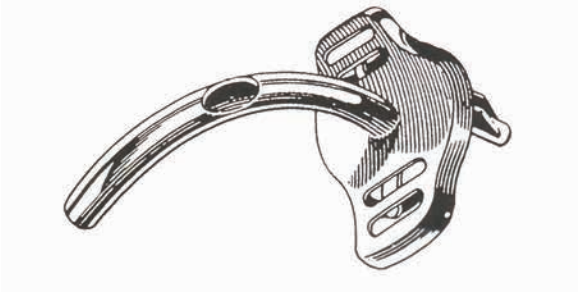
| ITEM # | DESCRIPTION | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|---|
| 511125 | Jackson Rotating Lock #4, inner and outer tubes, obturator | 4 | 8.0 | 5.3 | 62.0 |
| 511130P | Jackson Rotating Lock #5, inner and outer tubes, obturator | 5 | 9.0 | 6.1 | 68.0 |
| 511134P | Tucker Valve inner tube only to fit #5 Jackson Improved Tube | 5 | - | 6.1 | 71.0 |
| 511135P | Jackson Rotating Lock #6, inner and outer tubes, obturator | 6 | 10.0 | 7.1 | 69.0 |
| 511139P | Tucker Valve inner tube only to fit #6 Jackson Improved Tube | 6 | - | 7.1 | 72.0 |
| 511140 | Jackson Rotating Lock #7, inner and outer tubes, obturator | 7 | 11.0 | 8.1 | 69.0 |
| 511144 | Tucker Valve inner tube only to fit #7 Jackson Improved Tube | 7 | - | 8.1 | 72.0 |
| 511145P | Jackson Rotating Lock #8, inner and outer tubes, obturator | 8 | 12.0 | 9.1 | 69.0 |
| 511149 | Tucker Valve inner tube only to fit #8 Jackson Improved Tube | 8 | - | 9.1 | 72.0 |

# TRACHEOSTOMY TUBES

## Jackson Improved Design – Shikani Valve Compatible

### JACKSON IMPROVED STYLE TRACHEA TUBES FOR USE WITH SHIKANI SPEAKING VALVE

Shikani French Speaking Valve shown attached to Jackson Trachea Tube.



* Fenestrated Jackson Tube

Product codes with an "A" on the end are designed to accept the Shikani-French Speaking Valve. Complete tube consists of inner tube, outer tube and obturator (pictured: outer tube with inner tube insert, obturator). Valve sold separately.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518025A | 4 | 8.0 | 5.5 | 62.0 |
| 518029A* | 4 | 8.0 | 5.5 | 62.0 |
| 518030A | 5 | 9.0 | 6.2 | 68.0 |
| 518034A* | 5 | 9.0 | 6.2 | 68.0 |
| 518035A | 6 | 10.0 | 7.2 | 69.0 |
| 518039A* | 6 | 10.0 | 7.2 | 69.0 |
| 518040A | 7 | 11.0 | 8.1 | 69.0 |

** These Jackson tubes are fenestrated to facilitate speech. The fenestration is located at a point measured from the neckplate equal to 1/3 of the length of the tube on both the inner and outer tubes.*

# TRACHEOSTOMY TUBES

## Jackson Improved Design – Shikani Valve Compatible

### SHIKANI-FRENCH SPEAKING VALVE AND INNER TUBE COMBINATION

518027

Patients using standard Pilling® Jackson Trachea Tubes can now realize the benefits provided by the Shikani-French Speaking Valve. By replacing the inner trachea tube with one of the tubes listed below, patients can attach the snap-on Shikani Valve. Each inner tube is provided with two speaking valves.

| IF YOU ARE USING THIS STANDARD JACKSON TRACHEA TUBE ... | | NON-FENESTRATED JACKSON IMPROVED INNER TUBE ONLY WITH 2 SHIKANI VALVES | SIZE | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|---|
| 518025 | ORDER | 518027 | 4 | 5.5 | 62.0 |
| 518030 | ORDER | 518032 | 5 | 6.2 | 71.0 |
| 518035 | ORDER | 518037 | 6 | 7.2 | 72.0 |
| 518040 | ORDER | 518042 | 7 | 8.1 | 72.0 |

# TRACHEOSTOMY TUBES

## Jackson Improved Design – Shikani Valve Compatible

### SHIKANI-FRENCH TRACHEOSTOMY SPEAKING VALVE

518085

A lower airway resistance speaking valve.
The Shikani-French Speaking Valve attaches to the standard 15 mm hubs found on plastic and metal tracheostomy tubes. Certain patients may benefit from this unique ball valve design which provides less resistance to airflow at very low flow rates when compared to the membrane valves used on other brands of tracheostomy speaking tubes. The Shikani-French Speaking Valve requires less effort to move air through the valve at low inspiration pressures. Competitive valves are normally in a closed position and require greater inspiratory pressures to initially open the valve and allow airflow. An additional advantage of the Shikani-French Speaking Valve is its low profile, which makes it easy to conceal under clothing.

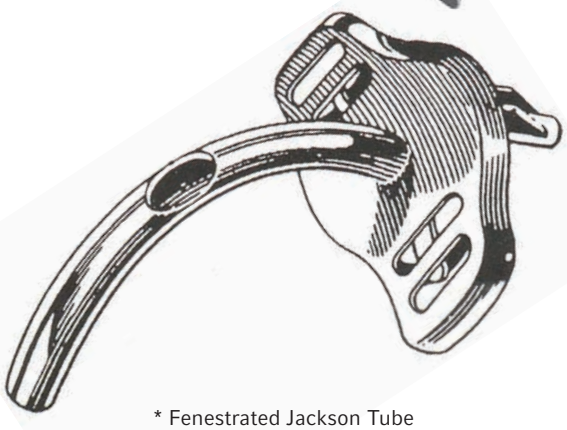
| ITEM # | DESCRIPTION |
|---|---|
| 518085 | Shikani-French Speaking Valve for use with Jackson Improved Stainless Steel Tracheostomy Tubes (package of 2) |

# TRACHEOSTOMY TUBES

## Jackson Original Design

### JACKSON ORIGINAL TRACHEOSTOMY TUBES - REGULAR LENGTH

518120



* Fenestrated Jackson Tube

Stainless steel. Interchangeable. These tubes have the neck plate of the original Jackson design with a small swivel lock holding the inner tube in place. A set consists of an outer tube, inner tube and an obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518100 | 00 | 4.5 | 2.4 | 33.0 |
| 518115 | 2 | 6.0 | 3.4 | 51.0 |
| 518120 | 3 | 7.0 | 4.3 | 58.0 |
| 518125 | 4 | 8.0 | 5.5 | 62.0 |
| 518129* | 4 | 8.0 | 5.5 | 62.0 |
| 518130 | 5 | 9.0 | 6.2 | 68.0 |
| 518134* | 5 | 9.0 | 6.2 | 68.0 |
| 518135 | 6 | 10.0 | 7.2 | 69.0 |
| 518139* | 6 | 10.0 | 7.2 | 69.0 |
| 518140 | 7 | 11.0 | 8.1 | 69.0 |
| 518144* | 7 | 11.0 | 8.1 | 69.0 |
| 518145 | 8 | 12.0 | 9.2 | 69.0 |
| 518149* | 8 | 12.0 | 9.2 | 69.0 |
| 518150 | 9 | 13.0 | 9.9 | 69.0 |
| 518155 | 10 | 14.0 | 10.6 | 69.0 |

** These Jackson tubes are fenestrated to facilitate speech. The fenestration is located at a point measured from the neckplate equal to 1/3 of the length of the tube on both the inner and outer tubes.*

# TRACHEOSTOMY TUBES

## Jackson Original Design

### JACKSON ORIGINAL TRACHEOSTOMY TUBES - SHORT LENGTH

518315

These tubes follow the original Jackson curve and supply the need for tubes of lengths between regular Jackson and the short Luer tube. A set consists of an outer tube, inner tube and an obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518315 | 3 | 7.0 | 4.3 | 48.0 |
| 518320 | 4 | 8.0 | 5.5 | 52.0 |
| 518325 | 5 | 9.0 | 6.2 | 56.0 |
| 518330 | 6 | 10.0 | 7.2 | 56.0 |
| 518335 | 7 | 11.0 | 8.1 | 56.0 |
| 518340 | 8 | 12.0 | 9.2 | 56.0 |

# TRACHEOSTOMY TUBES

## Jackson Original Design

### JACKSON ORIGINAL TRACHEOSTOMY TUBES WITH 15 MM ADAPTER - REGULAR LENGTH

518521

Stainless steel. Interchangeable. For use with positive pressure and anesthesia units. Adapters are permanently attached and not available as parts. A set consists of an outer tube, inner tube and an obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518521 | 3 | 7.0 | 4.3 | 58.0 |
| 518526 | 4 | 8.0 | 5.5 | 62.0 |
| 518531 | 5 | 9.0 | 6.2 | 68.0 |
| 518536 | 6 | 10.0 | 7.2 | 69.0 |
| 518541 | 7 | 11.0 | 8.1 | 69.0 |
| 518546 | 8 | 12.0 | 9.2 | 69.0 |
| 518556 | 10 | 14.0 | 10.6 | 69.0 |

### JACKSON ORIGINAL TRACHEOSTOMY TUBES WITH 15 MM ADAPTER - SHORT LENGTH

518730

Stainless steel. Interchangeable. For use with positive pressure and anesthesia units. Adapters are permanently attached and not available as parts. A set consists of an outer tube, inner tube and an obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 518720 | 4 | 8.0 | 5.5 | 52.0 |
| 518730 | 6 | 10.0 | 7.2 | 56.0 |

# TRACHEOSTOMY TUBES

## Tucker Design

### TUCKER TRACHEA TUBES AND VALVES

511734

511735

TUCKER VALVE

**Tucker Tracheostomy Tubes**
Sterling silver. Interchangeable. Acutely curved to a full 90 degree arc. The neckplate, with small swivel lock, is of a distinctive design for identification purposes. A set consists of an outer tube, inner tube and an obturator. Tucker-valved inner tubes (see below) are accessories.

**Tucker Speaker Valve**
The Tucker Valve is built into an inner tube and allows for normal speech without covering the tube with a finger. The valve opens on inhalation through the tube. On exhalation, the valve leaflet closes, forcing air up through the upper airway. Tucker-valved inner tubes are available for regular length Jackson and Tucker Tubes as a standard item in sizes 4 through 9 in Tucker Tubes, and 4 through 8 in Jackson Tubes. Other sizes and styles are made on special order. The Tucker Valve is for use with sterling silver tubes only. Tucker Valve Inner Tubes are not supplied as part of the regular trachea tube and must be ordered separately. An obturator is supplied with the inner and outer tube sets.

| ITEM # | DESCRIPTION | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 511725 | Size 4, inner and outer tubes, obturator | 8.0 | 5.3 | 55.0 |
| 511729 | Tucker valve inner tube to fit #4 Tucker tube | - | 5.3 | 58.0 |
| 511730 | Size 5, inner and outer tubes, obturator | 9.0 | 6.1 | 60.0 |
| 511734 | Tucker valve inner tube to fit #5 Tucker tube | - | 6.1 | 63.0 |
| 511735 | Size 6, inner and outer tubes, obturator | 10.0 | 7.2 | 60.0 |
| 511739 | Tucker valve inner tube to fit #6 Tucker tube | - | 7.2 | 63.0 |
| 511740 | Size 7, inner and outer tubes, obturator | 11.0 | 8.1 | 60.0 |
| 511744 | Tucker Valve Inner Tube to fit #7 Tucker Tube | - | 8.1 | 63.0 |
| 511745 | Size 8, inner and outer tubes, obturator | 12.0 | 9.1 | 60.0 |
| 511749 | Tucker Valve Inner Tube to fit #8 Tucker Tube | - | 9.1 | 63.0 |

# TRACHEOSTOMY TUBES

## Mayo Design

### MAYO CLINIC TUBE

511945

The Mayo Clinic Tube has a Holinger-Style Neckplate on a Jackson Stainless Steel tube.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 511930 | 5 | 9.0 | 6.2 | 56.0 |
| 511940 | 6 | 10.0 | 7.2 | 56.0 |
| 511945 | 6 | 10.0 | 7.2 | 69.0 |
| 511955 | 7 | 11.0 | 8.1 | 69.0 |

## Holinger Design

### HOLINGER TRACHEOSTOMY TUBE

512205

Sterling silver. Interchangeable. The tube is attached to the plate-shield at an acute downward angle of 65 degrees rather than the usual 90 degree tube-to-plate alignment. The dimensions of the neckplate are in proportion to the tube size. Corners are rounded; there are no rough projections. Funnel-shaped opening provides for easy insertion of aspirating catheters. A set consists of an outer tube, inner tube and an obturator. Available in size 6. Additional sizes available by special order.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 512205 | 6 | 10.0 | 7.1 | 63.0 |

# TRACHEOSTOMY TUBES

## Luer Design

### LUER TRACHEOSTOMY TUBE

511635

Sterling silver. Interchangeable. This short model tube is more acutely curved than Jackson types and has the original style neckplate. A set consists of an outer tube, inner tube and an obturator. All are 42 mm long. Available in size 6. Additional sizes available by special order.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 511635 | 6 | 10.0 | 7.1 | 42.0 |

# TRACHEOSTOMY TUBES

## Air-Lon® Design

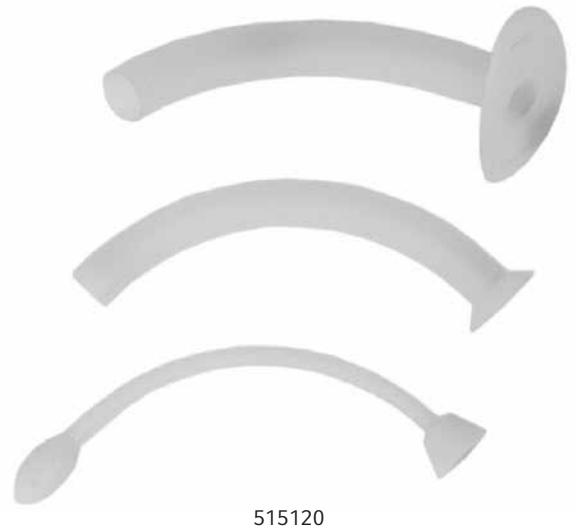
### AIR-LON® TRACHEA TUBE INHALATION SETS

515116

Air-Lon® Tracheal Inhalation Cannula Set, nylon, includes an outer cannula, obturator and an inner cannula with a permanently attached 15 mm male adapter; sizes 4, 6, 7 and 8.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) INNER LENGTH | (MM) OUTER LENGTH |
|---|---|---|---|---|---|
| 515106 | 4 | 8.0 | 5.0 | 62 | 76 |
| 515116 | 6 | 10.0 | 8.0 | 72 | 89 |
| 515121 | 7 | 11.0 | 9.0 | 76 | 95 |
| 515126 | 8 | 12.0 | 10.0 | 81 | 102 |

### AIR-LON® TRACHEA TUBES



515120

Air-Lon® Trachea Tube, nylon, 90 degree arc; sizes 4 through 8.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) INNER LENGTH | (MM) OUTER LENGTH |
|---|---|---|---|---|---|
| 515105 | 4 | 8.0 | 5.0 | 62 | 76 |
| 515110 | 5 | 9.4 | 7.0 | 65 | 83 |
| 515115 | 6 | 10.0 | 8.0 | 72 | 89 |
| 515120 | 7 | 11.0 | 9.0 | 76 | 95 |
| 515125 | 8 | 12.0 | 10.0 | 81 | 102 |

# TRACHEOSTOMY TUBES

## Laryngectomy Style Tubes

### HOLINGER LARYNGECTOMY TUBES

516270

Sterling silver. The cannula is attached to the plate at an acute downward angle of approximately 65 degrees. The shield is shaped carefully to be flat and with no projections to catch gauze. Rotating lock mechanism. A set consists of outer tube, inner tube and an obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 516270 | 7 | 12.0 | 9.0 | 50.0 |
| 516275 | 8 | 13.6 | 10.0 | 50.0 |
| 516280 | 9 | 14.0 | 10.6 | 50.0 |
| 516285 | 10 | 14.3 | 11.2 | 50.0 |

### JACKSON LARYNGECTOMY TUBES

519005

Stainless steel. Interchangeable. These tubes have the standard Jackson curve with an improved neckplate. The rotating lock provides a protrusion-free surface for ease in wiping. Flattened shape allows neckplate to be hidden more easily beneath clothing. A set consists of outer tube, inner tube and an obturator.

| ITEM # | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 519000 | 6 | 10.0 | 7.2 | 55.0 |
| 519005 | 7 | 12.0 | 9.1 | 55.0 |
| 519010 | 8 | 13.6 | 10.0 | 55.0 |
| 519015 | 9 | 14.0 | 10.7 | 55.0 |
| 519020 | 10 | 14.5 | 11.1 | 55.0 |
| 519025 | 11 | 15.4 | 12.3 | 55.0 |
| 519030 | 12 | 16.4 | 12.7 | 55.0 |

# TRACHEOSTOMY TUBES

## Laryngectomy Style Tubes

### MARTIN LARYNGECTOMY TUBES - REGULAR AND EXTENSION

516390

Sterling silver. The Martin Cannula is short length and is attached to the neckplate shield at an acute downward angle. These tubes are available as a regular set consisting of outer tube, inner tube, and an obturator. Martin Tubes are also available with the dressing extension cannula, a 2.5 mm extension projecting proximally to extend out past thick, bulky dressings. The Martin Extension set consists of outer tube, standard inner tube, special extension inner tube and obturator.

Regular Sets

| COMPLETE TUBE | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 516390 | 10 | 14.0 | 10.6 | 62.0 |
| 516400 | 12 | 16.3 | 12.7 | 71.0 |

Extension Set

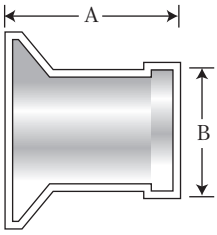
| COMPLETE TUBE | SIZE | (MM) O.D. | (MM) I.D. | (MM) LENGTH |
|---|---|---|---|---|
| 516430 | 6 | 16.3 | 12.7 | 72.0 |

# TRACHEOSTOMY TUBES

## Trach Buttons

### NORRIS TRACHEOSTOMY BUTTONS

512780




Useful in preventing contracture of the tracheal stoma. Machined of white PTFE.

| ITEM # | (MM) I.D. | (MM) A | (MM) B |
|---|---|---|---|
| 512780 | 8.3 | 19 | 11 |
| 512782 | 9.1 | 19 | 12 |
| 512784 | 10.3 | 19 | 13 |

# TRACHEOSTOMY TUBES

## Decannulation Stoppers

### DECANNULATION STOPPERS

1037806

1037816

1037826

1037836

A variety of colored, tapered plastic plugs with attached cords for insertion into the inner cannula of a trachea tube to obstruct, or partially obstruct, the lumen during decannulation. Available in four styles. Full-size plugs often used as catheter plugs.

| ITEM # | SIZE | COLOR | CLOSURE |
|---|---|---|---|
| 1037800 | 0 | Yellow | 1/4 |
| 1037801 | 1 | Yellow | 1/4 |
| 1037802 | 2 | Yellow | 1/4 |
| 1037803 | 3 | Yellow | 1/4 |
| 1037804 | 4 | Yellow | 1/4 |
| 1037805 | 5 | Yellow | 1/4 |
| 1037806 | 6 | Yellow | 1/4 |
| 1037807 | 7 | Yellow | 1/4 |
| 1037808 | 8 | Yellow | 1/4 |
| 1037809 | 9 | Yellow | 1/4 |
| 1037810 | 0 | Green | 1/2 |
| 1037811 | 1 | Green | 1/2 |
| 1037812 | 2 | Green | 1/2 |
| 1037813 | 3 | Green | 1/2 |
| 1037814 | 4 | Green | 1/2 |
| 1037815 | 5 | Green | 1/2 |
| 1037816 | 6 | Green | 1/2 |
| 1037817 | 7 | Green | 1/2 |
| 1037818 | 8 | Green | 1/2 |
| 1037819 | 9 | Green | 1/2 |
| 1037820 | 0 | Purple | 3/4 |
| 1037821 | 1 | Purple | 3/4 |
| 1037822 | 2 | Purple | 3/4 |
| 1037823 | 3 | Purple | 3/4 |
| 1037824 | 4 | Purple | 3/4 |
| 1037825 | 5 | Purple | 3/4 |
| 1037826 | 6 | Purple | 3/4 |
| 1037827 | 7 | Purple | 3/4 |
| 1037828 | 8 | Purple | 3/4 |
| 1037829 | 9 | Purple | 3/4 |
| 1037830 | 0 | White | Full |
| 1037831 | 1 | White | Full |
| 1037832 | 2 | White | Full |
| 1037833 | 3 | White | Full |
| 1037834 | 4 | White | Full |
| 1037835 | 5 | White | Full |
| 1037836 | 6 | White | Full |
| 1037837 | 7 | White | Full |
| 1037838 | 8 | White | Full |
| 1037839 | 9 | White | Full |

# TRACHEOSTOMY TUBES

## Tracheal Dilators

### JACKSON-TROUSSEAU TRACHEAL DILATORS

514376

2-blade design.

| ITEM # | DESCRIPTION |
|---|---|
| 514375 | Infant, tip width 4.0 mm, tip length 25.5 mm, 5-1/2" (14 cm) |
| 514376 | Child, tip width 4.4 mm, tip length 17.5 mm, 5-1/2" (14 cm) |
| 514377 | Adult, tip width 5.2 mm, tip length 25.5 mm, 5-1/2" (14 cm) |

### LABORDE TRACHEAL DILATOR

514380

3-blade design.

| ITEM # | DESCRIPTION |
|---|---|
| 514380 | 5-1/2" (14 cm) |

# TRACHEOSTOMY TUBES

## Miscellaneous

### NEWS TRACHEA RETRACTOR

070114

| ITEM # | DESCRIPTION |
|---|---|
| 070114 | Sharp, 10 mm hook, 5-7/8" (15 cm) |

### LUKENS THYMUS RETRACTOR

514412

| ITEM # | DESCRIPTION |
|---|---|
| 514412 | Blade 3/8" wide x 1/4" deep (9 x 6 mm),<br>Overall length 6-7/8" (17.5 cm) |

### JACKSON TRACHEAL TENACULUM

514413

| ITEM # | DESCRIPTION |
|---|---|
| 514413 | Hook depth 1/4" (0.5 cm), 5-1/4" (13.5 cm) |

### JACKSON TRACHEAL RETRACTOR, DOUBLE ENDED

514414

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 514414 | Double-pronged, 1" wide x 1/4" deep<br>(2.5 cm x 0.5 cm) blade, 6-7/8" (17.5 cm) |

# TRACHEOSTOMY TUBES

## Miscellaneous

### JACKSON TRACHEA RETRACTOR

070116

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 070116 | 2 prongs, 7" (18 cm) |

### BERNAY FINGER RAKE TRACHEAL RETRACTORS

514433

514438

| ITEM # | DESCRIPTION |
|---|---|
| 514430 | 1 prong, sharp, 6-5/8" (17 cm) |
| 514431 | 2 prongs, sharp, 6-5/8" (17 cm) |
| 514433 | 3 prongs, sharp, 6-5/8" (17 cm) |
| 514435 | 1 prong, blunt, 6-5/8" (17 cm) |
| 514436 | 2 prongs, blunt, 6-5/8" (17 cm) |
| 514437 | 3 prongs, blunt, 6-5/8" (17 cm) |
| 514438 | 4 prongs, blunt, 6-5/8" (17 cm) |

# TRACHEOSTOMY TUBES

## Cleaning Brushes

### HOLMAN TRACHEA TUBE BRUSHES

508545

For loosening hardened secretions not freed by washing.

| ITEM # | DESCRIPTION |
|---|---|
| 508545 | Set of three: small, medium, large |
| 508546 | Trachea tube brush, small 6.5 mm x 14.5 cm |
| 508547 | Trachea tube brush, medium 8 mm x 15 cm |
| 508548 | Trachea tube brush, large 9 mm x 20 cm |

### HOLMAN SCOPE BRUSHES - FOR BRONCHOSCOPES AND ESOPHAGOSCOPES

508540

For loosening hardened secretions not freed by washing.

| ITEM # | DESCRIPTION |
|---|---|
| 508540 | Set of three: small, medium, large |
| 508541 | Brush for large scopes, 15 mm x 62 cm |
| 508542 | Brush for medium scopes, 11 mm x 56 cm |
| 508543 | Brush for small scopes, 9 mm x 49 cm |
| 508544 | Special extra small brush for infant scopes, 6 mm x 46 cm |

# EAR INSTRUMENTS

## Curettes

### BILLEAU EAR LOOPS

| ITEM # | DESCRIPTION |
|---|---|
| 411230 | Small, #1, 6-1/2" (16.5 cm) |
| 411231 | Medium, #2, 6-1/2" (16.5 cm) |
| 411232 | Large, #3, 6-5/8" (17 cm) |

### BUCK EAR CURETTES

Blunt, 6-1/2" (16.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 411200 | Size 00 |
| 411201 | Size 0 |
| 411202 | Size 1 |
| 411203 | Size 2 |
| 411204 | Size 3 |

### DAY EAR HOOK

| ITEM # | DESCRIPTION |
|---|---|
| 411241 | Small, #2, 6-3/4" (17 cm) |

# EAR INSTRUMENTS

## Curettes

### HOUSE CURETTES

7" (17.7 cm), Blade A 1.8 mm, Blade B 1.5 mm.

| ITEM # | DESCRIPTION |
|---|---|
| 020300 | Strongly angled |
| 020302 | Lightly angled |

## Elevators

### HOUSE RETRACTOR

Double-ended.

| ITEM # | DESCRIPTION |
|---|---|
| 029350 | Blade A 20 x 7 mm, blade B 24 x 9.5 mm, 6" (15 cm) |

## Forceps

### ALLIGATOR FORCEPS

Serrated jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 020120 | 6 mm, shaft 3-1/8" (8 cm) |
| 020121 | 4.5 mm, shaft 3-1/8" (8 cm) |

# EAR INSTRUMENTS

## Forceps

### HARTMANN ALLIGATOR FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| KM55164 | Serrated, 12 mm jaw, 6-1/2" (16.5 cm) |

### HOUSE ALLIGATOR FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 020100 | Serrated, 8 mm jaws, shaft 3-1/8" (8 cm) |

### HARTMANN EAR DRESSING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 411520 | Serrated, 2.5 x 7 mm jaws, 5-1/8" (13 cm) |
| KM55188 | Delicate, serrated, 2.2 mm x 7 mm jaws, 5" (12.5 cm) |

### MICROMINIATURE ALLIGATOR FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 020571 | Straight, serrated, ebonized, shaft 3-1/8" (8 cm) |

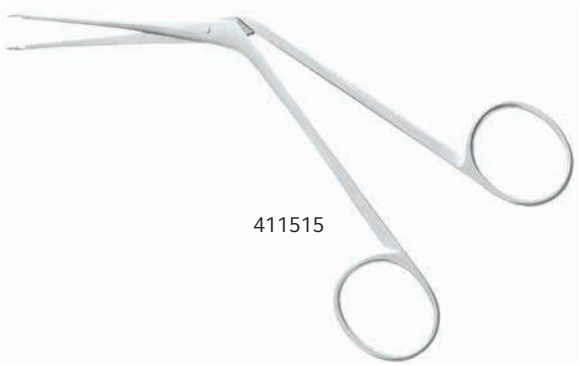
# EAR INSTRUMENTS

## Forceps

### HOUSE STRUT FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 020130 | Smooth jaws, 5 mm, 3-1/8" (8 cm) |

### TOBEY EAR FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 411515 | Serrated, 2 x 3 mm jaws, working length 2" (5 cm) |

### NOYES EAR FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 411525 | Serrated, 2 x 10 mm jaws, 3-1/2" (9 cm) |

# EAR INSTRUMENTS

## Forceps

### HARTMANN-HERZFELD CUP FORCEPS

Straight.

| ITEM # | DESCRIPTION |
|---|---|
| 411535 | 2 mm cups, shaft length 3-3/8" (9 cm) |
| 411540 | 3 mm cups, shaft length 3-3/8" (9 cm) |

### ROUND CUP FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 020165 | 0.75 mm cup jaws, shaft 3-1/8" (8 cm) |

### OVAL SPOON FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 020155 | Straight, 1 mm cup, 3-1/8" (8 cm) |

# EAR INSTRUMENTS

## Forceps

### WILDE EAR FORCEPS

KM57176

| ITEM # | DESCRIPTION |
|---|---|
| KM57176 | Angular, delicate, serrated, 4-1/8" (10.5 cm) |

## Scissors

### BELLUCCI ALLIGATOR SCISSORS

020210

| ITEM # | DESCRIPTION |
|---|---|
| 020210 | Curved right, 5 mm blades, shaft 3-3/8" (8.5 cm) |
| 020211 | Curved left, 5 mm blades, shaft 3-3/8" (8.5 cm) |

# EAR INSTRUMENTS

## Scissors

### HOUSE BELLUCCI MINI ALLIGATOR SCISSORS

020204

| ITEM # | DESCRIPTION |
|---|---|
| 020204 | Straight, sharp, 4.5 mm blades, 3-1/8" (8 cm) |

## Specula

### BOUCHERON EAR SPECULUM

025101

Round.

| ITEM # | DESCRIPTION |
|---|---|
| 025100 | Complete set of four |
| 025101 | Size 1, diameter 3 mm |
| 025102 | Size 2, diameter 3.5 mm |
| 025103 | Size 3, diameter 4.5 mm |
| 025104 | Size 4, diameter 5 mm |

# EAR INSTRUMENTS

## Specula

### FARRIER OVAL SPECULUM

025163

Oval.

| ITEM # | DESCRIPTION |
|---|---|
| 025160 | Size 3 x 4 mm |
| 025162 | Size 4 x 5 mm |
| 025163 | Size 4.5 x 5.5 mm |
| 025164 | Size 5 x 6 mm |
| 025165 | Size 5.5 x 6.5 mm |
| 025166 | Size 6 x 7 mm |
| 025167 | Size 6.5 x 7.5 mm |
| 025168 | Size 7 x 8 mm |
| 025169 | Size 7.5 x 8.5 mm |

### HARTMANN EAR SPECULUM

411140

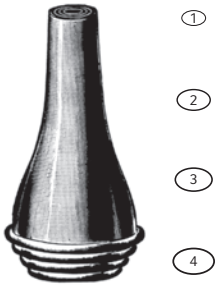
Round and oval.

| ITEM # | DESCRIPTION |
|---|---|
| 411140 | Round, chrome plated, set of four |
| 411145 | Oval, chrome plated, set of four |

# EAR INSTRUMENTS

## Specula

### GRUBER EAR SPECULUM




KM56172

Oval. Adult, chrome.

| ITEM # | DESCRIPTION |
|---|---|
| KM56168 | # 1, 4 x 5 mm |
| KM56170 | # 2, 5 x 6 mm |
| KM56172 | # 3, 6 x 7 mm |
| KM56174 | # 4, 7 x 8 mm |

### ENDAURAL EAR SPECULUM

029480

| ITEM # | DESCRIPTION |
|---|---|
| 029480 | 26 mm blade, strongly curved shaft, 5-5/8" (14.5 cm) |

## Miscellaneous

### EAR KNIFE BLADES



411304

| ITEM # | DESCRIPTION |
|---|---|
| 411304 | Refill blades for ear knife handle, 3-5/16" (8.5 cm). Six disposable blades per pack. |

### FARRELL (LATHBURY) APPLICATOR

411165

| ITEM # | DESCRIPTION |
|---|---|
| 411165 | Twisted end, 6-1/4" (16 cm) |
| 411166 | Triangular end, 6-3/8" (16 cm) |

# EAR INSTRUMENTS

## Miscellaneous

### MYRINGOTOMY KNIFE

026510

| ITEM # | DESCRIPTION |
|---|---|
| 026510 | Straight, 7 x 2 x 0.5 mm blade, 6-1/2" (16.5 cm) |

### GROSS SPOON AND HOOK

KM56104

| ITEM # | DESCRIPTION |
|---|---|
| KM56104 | 3.5 mm diameter spoon, 4 mm right angle hook, 4-3/4" (12 cm) |

### TUNING FORKS

KM56284

KM56334

Aluminum alloy.

| ITEM # | DESCRIPTION |
|---|---|
| KM56284 | C-128 |
| KM56312 | C-256 |
| KM56318 | C-512 |
| KM56330 | C-1024 |
| KM56334 | C-2048 |

# NASAL INSTRUMENTS

## Elevators

### BOIES NASAL ELEVATOR

053115

| ITEM # | DESCRIPTION |
|---|---|
| 053115 | Straight, 9.5 mm tip, 7-3/4" (19.5 cm) |

### GOLDMAN SEPTUM DISPLACER

441730

| ITEM # | DESCRIPTION |
|---|---|
| 441730 | 6.5 mm wide, 8" (20.5 cm) |

### COTTLE DOUBLE-ENDED ELEVATOR

053135

| ITEM # | DESCRIPTION |
|---|---|
| 053135 | Blade A 5 mm, blade B 3 mm, graduated in 10 mm increments, 8-7/8" (22.5 cm) |

### FREER DOUBLE ENDED ELEVATORS

036500

Curved, sharp and blunt blades. Weck® Pattern, bright finish. 7-1/2" (19 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 036500 | Narrow, 4.5 mm |
| 036501 | Wide, 6.5 mm |

### FREER DOUBLE ENDED ELEVATOR

355194

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 355194 | Blades are sharp and blunt, 4.5 mm wide, 7" (18 cm) |

# NASAL INSTRUMENTS

## Elevators

### FREER DOUBLE ENDED ELEVATOR

KM57614

| ITEM # | DESCRIPTION |
|---|---|
| KM57614 | Curved, sharp and blunt blades, 5 mm wide, 7-1/2" (19 cm) |

### GILLIES ZYGOMA ELEVATOR

441740

| ITEM # | DESCRIPTION |
|---|---|
| 441740 | 1/4" (6 mm) blade, angled, 9" (23 cm) |

### JOSEPH PERIOSTEAL ELEVATOR

053120

| ITEM # | DESCRIPTION |
|---|---|
| 053120 | Curved, 4 mm blade, 6-3/4" (17 cm) |

### MCKENTY ELEVATOR

053102

| ITEM # | DESCRIPTION |
|---|---|
| 053102 | Curved, 5 mm blade, 5" (12.5 cm) |

### KLEINERT KUTZ ELEVATOR AND DISSECTOR

KM57615

| ITEM # | DESCRIPTION |
|---|---|
| KM57615 | 2 mm x 3 mm sharp ends, 7-5/8" (19.5 cm) |

### ALLERDYCE ELEVATOR AND DISSECTOR

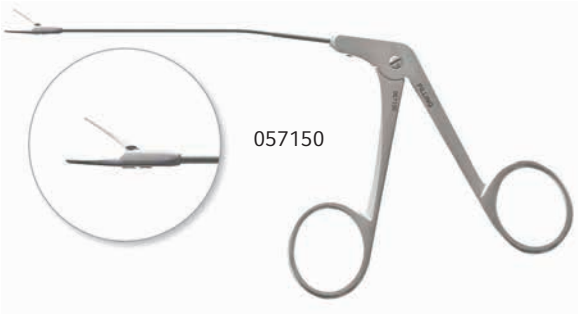
KM57616

| ITEM # | DESCRIPTION |
|---|---|
| KM57616 | 8 mm semi-sharp and 8 mm blunt ends, 7-1/2" (19 cm) |

# NASAL INSTRUMENTS

## Forceps

### ALLIGATOR NASAL FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 057150 | Serrated 10 x 1 mm jaw, shaft 7" (18 cm) |

### NOYES NASAL ALLIGATOR FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 431325 | Straight, serrated, 8 x 2 mm jaw, shaft 5-1/2" (14 cm) |

### BLAKESLEY NASAL FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 031430 | Serrated, 13.5 x 7 mm jaw, shaft 7-1/2" (19 cm) |

# NASAL INSTRUMENTS

## Forceps

### TAKAHASHI FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 431360 | 2.5 mm wide, 4-7/8" (12.5 cm) |
| 431362 | 4 mm wide, 4-7/8" (12.5 cm) |

### WILDE (BLAKESLEY) NASAL FORCEPS

Fenestrated cup, pointed tip.

| ITEM # | DESCRIPTION |
|---|---|
| 431366 | Medium, 10.5 x 4 mm jaw, 4-7/8" (12.5 cm) |

### RUBIN SEPTAL MORSELIZER

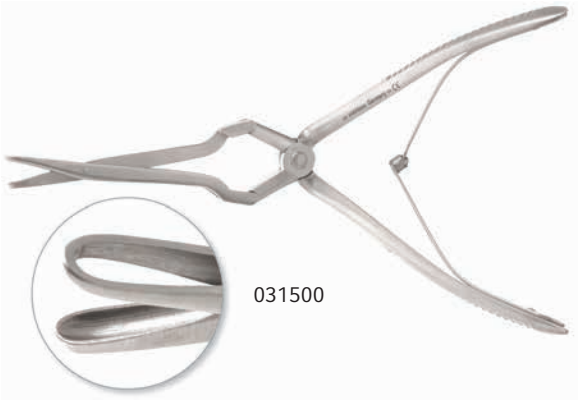
056650

| ITEM # | DESCRIPTION |
|---|---|
| 056650 | Double-action serrated jaw, 15 x 4 mm, 8-1/4" (21 cm) |

# NASAL INSTRUMENTS

## Forceps

### JANSEN-MIDDLETON NASAL RONGEURS



031500

| ITEM # | DESCRIPTION |
|---|---|
| 031500 | Thru cutting cup 13 x 4 mm, shaft 3-1/2" (9 cm) |
| 031502 | Thru cutting cup 14 x 5 mm, shaft 3-7/8" (10 cm) |
| 031505 | Spoon shaped biting cup 15 x 5 mm, shaft 3-5/16" (8.5 cm) |

### ASCH SEPTUM FORCEPS

443610

| ITEM # | DESCRIPTION |
|---|---|
| 443610 | Angled, 28 mm tip, 9-1/8" (23 cm) |

### COTTLE COLUMELLA FORCEPS

443480

| ITEM # | DESCRIPTION |
|---|---|
| 443480 | 12 mm tip width, 4-3/8" (11 cm) |

# NASAL INSTRUMENTS

## Knives

### BALLENGER KNIVES

036111

Swivel knife.

| ITEM # | DESCRIPTION |
|---|---|
| 036110 | Straight 3 mm blade, 8" (20.5 cm) |
| 036111 | Straight 4 mm blade, 7-1/2" (19 cm) |

### COTTLE KNIFE GUIDE AND RETRACTOR

050190

| ITEM # | DESCRIPTION |
|---|---|
| 050190 | Delicate, knife guide 4 mm, retractor 14.5 mm, 7-3/4" (19.5 cm) |

### COTTLE NASAL KNIFE

050120

| ITEM # | DESCRIPTION |
|---|---|
| 050120 | Straight 32 x 5 mm blade, 5-5/8" (14.5 cm) |

### FREER D MODEL SEPTUM KNIFE

036100

| ITEM # | DESCRIPTION |
|---|---|
| 036100 | 8 mm blade, 6-1/2" (16.5cm) |

## Osteotomes

### ANDERSON-NIEVERT OSTEOTOMES

051191

Curved, 8" (20.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 051190 | Right |
| 051191 | Left |
| 051195 | Straight |

### COTTLE OSTEOTOMES

051152

Rounded corners, 7-1/4" (18.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 051150 | 4 mm |
| 051152 | 6 mm |
| 051155 | 9 mm |
| 051158 | 12 mm |

# NASAL INSTRUMENTS

## Osteotomes

### MINI OSTEOTOMES

441208

Curved, 5" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 441207 | 4 mm |
| 441208 | 6 mm |

### LAMBOTTE-STYLE OSTEOTOMES

051086

5" (12.5 cm), flat thin blade.

| ITEM # | DESCRIPTION |
|---|---|
| 051082 | 2 mm |
| 051084 | 4 mm |
| 051086 | 6 mm |
| 051088 | 8 mm |
| 051090 | 10 mm |
| 051092 | 12 mm |
| 051095 | 15 mm |

### HEX-HANDLE OSTEOTOMES

051104

6" (15.2 cm), flat thin blade.

| ITEM # | DESCRIPTION |
|---|---|
| 051102 | 2 mm |
| 051103 | 3 mm |
| 051104 | 4 mm |
| 051105 | 5 mm |
| 051106 | 6 mm |
| 051107 | 7 mm |
| 051109 | 9 mm |
| 051110 | 10 mm |

## Raspatories

### AUFRICHT RASP

052162

| ITEM # | DESCRIPTION |
|---|---|
| 052162 | Curved, up-cutting blade, 25 x 9 mm, 8" (20.5 cm) |

# NASAL INSTRUMENTS

## Raspatories

### AUFRICHT-GLABELLA RASP

| ITEM # | DESCRIPTION |
|---|---|
| 052165 | Up and down-cutting, curved blade, 9 x 30 mm, 7-1/2" (19 cm) |

### CONVERSE RASP

| ITEM # | DESCRIPTION |
|---|---|
| 052180 | Double ended, fine and course serrations, 7-1/8" (18 cm) |

### COTTLE RASP

| ITEM # | DESCRIPTION |
|---|---|
| 052130 | Straight, down-cutting blade, 36 x 9 mm, 8-1/4" (21 cm) |

### JOSEPH RASP

| ITEM # | DESCRIPTION |
|---|---|
| 441530 | Fine serrations, 6 -7/8" (15.5 cm) |

# NASAL INSTRUMENTS

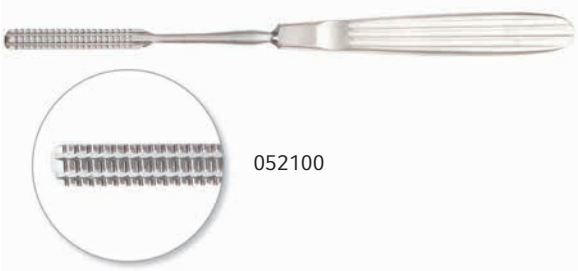
## Raspatories

### KLEINERT-KUTZ RASP

441555

| ITEM # | DESCRIPTION |
|---|---|
| 441555 | 4-sided tips, 7.5 mm wide, 8-5/8" (22 cm) |

### MALTZ RASP



052100

| ITEM # | DESCRIPTION |
|---|---|
| 052100 | Straight, down-cutting blade, 37 x 6 mm, 7-1/8" (18 cm) |

### WIENER ANTRUM RASP

037101

| ITEM # | DESCRIPTION |
|---|---|
| 037101 | Medium, 4 mm trocar point, 7-7/8" (20 cm) |

# NASAL INSTRUMENTS

## Scissors

### BECKER SEPTUM SCISSORS

431425

| ITEM # | DESCRIPTION |
|---|---|
| 431425 | 3/4" (2 cm) serrated blades, 7" (18 cm) |

### CAPLAN NASAL SCISSORS

031750

| ITEM # | DESCRIPTION |
|---|---|
| 031750 | 20 mm serrated blades angled 45 degrees, 7" (18 cm) |

### FOMAN NASAL SCISSORS

056400

| ITEM # | DESCRIPTION |
|---|---|
| 056400 | 40 mm angled, straight, smooth blades, 5-1/2" (14 cm) |

# NASAL INSTRUMENTS

## Scissors

### FOMON LOWER LATERAL SCISSORS

056360

| ITEM # | DESCRIPTION |
|---|---|
| 056360 | 25 mm strongly curved blades, 5-1/4" (13.5 cm) |

### KNIGHT NASAL SCISSORS

031800

| ITEM # | DESCRIPTION |
|---|---|
| 031800 | 42 mm blades angled 30 degrees, 6-1/4" (16 cm) |

### RHINOPLASTY FLAT TIP SCISSORS

056302

| ITEM # | DESCRIPTION |
|---|---|
| 056302 | 35 mm curved blades, flat dissecting tips, 5-3/8" (13.5 cm) |

# NASAL INSTRUMENTS

## Sinus Instruments

### FESS SINOSCOPY FORCEPS

431433

| ITEM # | DESCRIPTION |
|---|---|
| 431433 | Serrated, 5-3/4" (14.5 cm) |

### THRU-CUT FORCEPS

431437

| ITEM # | DESCRIPTION |
|---|---|
| 431437 | Serrated upper jaw, 5-3/4" (14.5 cm) |

### BACKBITER FORCEPS

431440

| ITEM # | DESCRIPTION |
|---|---|
| 431440 | Straight, jaw 1.5 x 6 mm, 7" (18 cm) |

# NASAL INSTRUMENTS

## Sinus Instruments

### SIDE BITER FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 431445 | Right-side downward cut, 3 mm tip, 5-1/8" (13 cm) |
| 431446 | Left-side downward cut, 3 mm tip, 5-1/8" (13 cm) |

### KERRISON THRU-CUT RONGEURS

| ITEM # | DESCRIPTION |
|---|---|
| 431451 | Curved 30 degrees, 7-7/8" (20 cm) |
| 431452 | Curved 70 degrees, rotating, working length 5-5/8" (14.5 cm) |
| 431461 | Straight, rotating, working length 4-3/4" (12 cm) |
| 431462 | Angled 30 degrees, 8" (20.5 cm) |
| 431463 | Angled 45 degrees, 7-3/4" (19.5 cm) |

### FRONTAL SINUS THRU-CUT FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 431480 | 3.5 mm tip, 8-5/8" (22 cm), 5-1/8" (13 cm) |

# NASAL INSTRUMENTS

## Sinus Instruments

### FRONTAL SINUS FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 431481 | 5-1/8" (13 cm) |

### SINUS SEEKERS

| ITEM # | DESCRIPTION |
|---|---|
| 431710 | Maxillary Seeker. 1.5 mm and 1.8 mm ball tips, 8-1/8" (20.5 cm). |
| 431711 | Frontal Seeker. 1.8 mm ball tip and 0.9 mm tip, 7-7/8" (20 cm). |

### FRONTAL SINUS CURETTES

| ITEM # | DESCRIPTION |
|---|---|
| 431728 | Angled, 45 degrees, 2.8 mm tip, 7-1/2" (19 cm) |
| 431729 | Angled, 45 degrees, 3.5 mm tip, 7-5/8" (19.5 cm) |
| 431732 | Angled, 90 degrees, 2.8 mm tip, 7-1/2" (19 cm) |
| 431733 | Angled, 90 degrees, 3.5 mm tip, 7-5/8" (19.5 cm) |

### ETHMOID PUNCH

| ITEM # | DESCRIPTION |
|---|---|
| 432007 | Angled, 45 degrees, fenestrated, with 3 mm oval cup |

# NASAL INSTRUMENTS

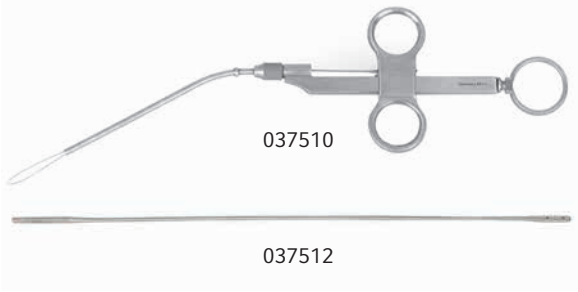
## Snares

### BRUENING BAYONET NASAL SNARE

037500

| ITEM # | DESCRIPTION |
|---|---|
| 037500 | 9" (23 cm) |

### KRAUSE NASAL SNARES



037510

037512

| ITEM # | DESCRIPTION |
|---|---|
| 037510 | 10" (25.5 cm) |
| 037512 | Stylet only |

### NASAL SNARE WIRES

070704

4-3/8" (11 cm) precut. 144 per package.

| ITEM # | DESCRIPTION |
|---|---|
| 070701 | 4 Ga., nose |
| 070702 | 5 Ga., nose |
| 070704 | 7 Ga., throat |
| 070705 | 8 Ga., throat |
| 070706 | 9 Ga., throat |

# NASAL INSTRUMENTS

## Specula

### TIECK INFANT NASAL SPECULUM

030100

| ITEM # | DESCRIPTION |
|---|---|
| 030100 | 18 mm blade, spread 28 mm, 5-1/2" (14 cm) |

### SONNENSCHEIN CHILD NASAL SPECULUM

030180

| ITEM # | DESCRIPTION |
|---|---|
| 030180 | Small, 27 mm blade, spread 28 mm, angled 80 degrees, 6" (15 cm) |

### KILLIAN NASAL SPECULUMS

030303

Removable spring. 5-1/8" (13 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 030301 | Size 1, 45 mm blade |
| 030302 | Size 2, 55 mm blade |
| 030303 | Size 3, 65 mm blade |
| 030304 | Size 4, 80 mm blade |

# NASAL INSTRUMENTS

## Specula

### COTTLE SEPTUM SPECULUM

431130

| ITEM # | DESCRIPTION |
|---|---|
| 431130 | 5 cm blade, with locking screw, 5-1/2" (14 cm) |

### VIENNA NASAL SPECULUMS

431111

| ITEM # | DESCRIPTION |
|---|---|
| 431110 | Small, #1, 28 mm blade, 5-1/4" (13.5 cm) |
| 431111 | Medium, #2, 30 mm blade, 5-3/8" (13.5 cm) |
| 431112 | Large, #3, 33 mm blade, 5-3/8" (13.5 cm) |

### PECK-VIENNA NASAL SPECULUM

431120

| ITEM # | DESCRIPTION |
|---|---|
| 431120 | 29 mm blade, 5-3/8" (13.5 cm) |

# NASAL INSTRUMENTS

## Miscellaneous

### AUFRICHT NASAL RETRACTOR

054720

| ITEM # | DESCRIPTION |
|---|---|
| 054720 | Small blade, 40 x 8 mm, angled shaft, 6-3/4" (17 cm) |

### CUTTING BLOCK



411331

| ITEM # | DESCRIPTION |
|---|---|
| 411331 | Made of POM (polyoxymethylene), 3" x 1-1/2" x 3/8" (7.5 x 4 x 1 cm) |

# MOUTH AND THROAT INSTRUMENTS

## Adenotomes/Tonselectomes

### ADENOTOME BLADES

070522

Use with LaForce and Shambaugh Adenotomes.
Slanted catch knob.

| ITEM # | DESCRIPTION |
|---|---|
| 070521 | No. 1, small, 55 x 12.5 mm |
| 070522 | No. 2, medium, 55 x 16 mm |
| 070523 | No. 3, large, 55 x 19 mm |

### LA FORCE ADENOTOMES

070502

9" (23 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 070501 | No. 1, small, blade 25 x 16 mm |
| 070502 | No. 2, medium, blade 26 x 19 mm |
| 070503 | No. 3, large, blade 30 x 22 mm |

### SHAMBAUGH REVERSE CURVE ADENOTOMES

070511

8-5/8" (22 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 070511 | No. 1, small, blade 25 x 16 mm |
| 070512 | No. 2, medium, blade 26 x 19 mm |

### WECK DANIELS BLADES

070605

| ITEM # | DESCRIPTION |
|---|---|
| 070604 | No. 1, for 070600 (page 522) |
| 070605 | No. 2, for 070601 |

# MOUTH AND THROAT INSTRUMENTS

## Adenotomes/Tonselectomes

### WECK DANIELS TONSILLECTOME

070600

4-1/2" (11.5 cm) fluted handle, overall 7-1/8" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 070600 | No. 1, 18 mm blade, 17 mm fenestration |

## Curettes

### BARNHILL ADENOID CURETTES

461352

| ITEM # | DESCRIPTION |
|---|---|
| 461350 | # 0, 8-1/2" (21.5 cm) |
| 461351 | # 1, 8-1/2" (21.5 cm) |
| 461352 | # 2, 8-1/2" (21.5 cm) |
| 461353 | # 3, 8-1/2" (21.5 cm) |
| 461354 | # 4, 8 5/8" (22 cm) |

### SHAMBAUGH ADENOID CURETTES

072122

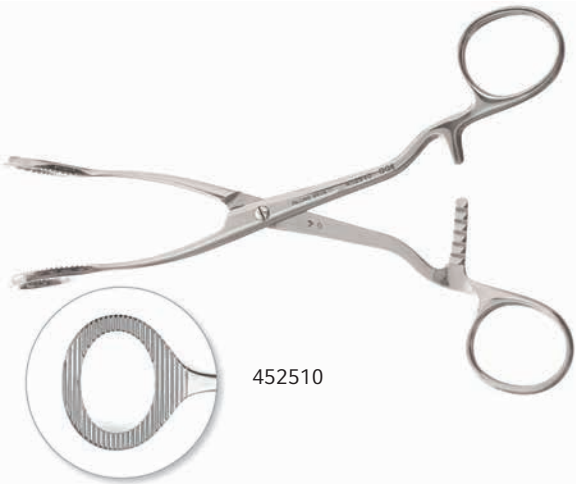
Reverse curve.

| ITEM # | DESCRIPTION |
|---|---|
| 072120 | Size 0, 11 x 13 mm, 8-1/4" (21 cm) |
| 072122 | Size 2, 15 x 18 mm, 8-1/4" (21 cm) |
| 072124 | Size 4, 19 X 22 mm, 8-1/4" (21 cm) |

# MOUTH AND THROAT INSTRUMENTS

## Forceps

### COLLINS TONGUE SEIZING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 452510 | Straight, 6-3/4" (17 cm) |

### COLVER COAKLEY TONSIL FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 461600 | Straight, 7-1/2" (19 cm) |
| 461605 | Curved, 7-1/2" (19 cm) |

### MAGILL CATHETER FORCEPS

Catheter introducing forceps with cross serration.

| ITEM # | DESCRIPTION |
|---|---|
| 452550 | Adult, 9-1/4" (23.5 cm) |
| 452551 | Child, 7-1/8" (18 cm) |

# MOUTH AND THROAT INSTRUMENTS

## Forceps

### WHITE TONSIL FORCEPS

461615

Curved.

| ITEM # | DESCRIPTION |
|---|---|
| 461610 | 7-1/8" (18 cm) |
| 461615 | 9-1/2" (24 cm) |

## Laryngeal Mirrors

### LARYNGEAL MIRRORS

508204

Extra thin, permanently mounted on handle.
Shaft length is 6-3/4" (17 cm). 8" overall length.

| ITEM # | DESCRIPTION |
|---|---|
| 508200 | #000, 8 mm diameter |
| 508201 | #00, 10 mm diameter |
| 508202 | #0, 12 mm diameter |
| 508203 | #1, 16 mm diameter |
| 508204 | #2, 18 mm diameter |
| 508205 | #3, 20 mm diameter |
| 508206 | #4, 22 mm diameter |
| 508207 | #5, 24 mm diameter |
| 508208 | #6, 28 mm diameter |
| 508209 | #7, 30 mm diameter |

## Mouth Gags

### DAVIS & MCIVOR LEFT TONGUE BLADES

070342

6" (15 cm), for use with right bite Davis Mouth Gags.

| ITEM # | DESCRIPTION |
|---|---|
| 070340 | Blade Size 2, 2-7/16" x 15/16" (62 x 24 mm) |
| 070342 | Blade Size 3, 3" x 1-1/16" (76 x 27 mm) |
| 070344 | Blade Size 4, 3-9/16" x 1-5/16" (90 x 34 mm) |

# MOUTH AND THROAT INSTRUMENTS

## Mouth Gags

### DAVIS & MCIVOR RIGHT TONGUE BLADES

070332

6" (15 cm), for use with left bite Davis Mouth Gags.

| ITEM # | DESCRIPTION |
|---|---|
| 070330 | Blade Size 2, 2-7/16" x 15/16" (62 x 24 mm) |
| 070332 | Blade Size 3, 3" x 1-1/16" (76 x 27 mm) |
| 070334 | Blade Size 4, 3-9/16" x 1-5/16" (90 x 34 mm) |

### DAVIS MOUTH GAG BLADE, SIZE 2

070312

Without either tubes, fits Davis Mouth Gags only.

| ITEM # | DESCRIPTION |
|---|---|
| 070312 | Size 2, 70 x 24 mm blade |

# MOUTH AND THROAT INSTRUMENTS

## Mouth Gags

### DAVIS MOUTH GAGS

070300

070303

Double bite with silicone liner.

| ITEM # | DESCRIPTION |
|---|---|
| 070300 | Adult, right bite, 15 x 13 mm block, 80 mm spread, 6-1/8" (15.5 cm) |
| 070301 | Adult, left bite, 15 x 13 mm block, 80 mm spread, 6-1/8" (15.5 cm) |
| 070302 | Child, right bite, 15 x 9 mm block, 70 mm spread, 5-1/2" (14 cm) |
| 070303 | Child, left bite, 15 x 9 mm block, 70 mm spread, 5-1/2" (14 cm) |
| 070305 | One dozen replacement silicone liners for both Adult and Child |

070305

### DINGMAN MOUTH GAG

070450

| ITEM # | DESCRIPTION |
|---|---|
| 070450 | Set, frame with 3 blades (64 x 25 mm, 70 x 29 mm, 62 x 30 mm), 5-3/4" (14.5 cm) |

# MOUTH AND THROAT INSTRUMENTS

## Mouth Gags

### JENNINGS MOUTH GAG

070202

| ITEM # | DESCRIPTION |
|---|---|
| 070202 | Adult, working length 6" (15 cm), spread 66 mm, 7-3/4" (19.5 cm) |

### MCIVOR MOUTH GAG

461125

| ITEM # | DESCRIPTION |
|---|---|
| 461125 | Set, frame with 3 blades (# 2.5, # 3, # 4), each 5-3/8" (13.5 cm) |
| 461126 | Frame only |
| 461128 | Blade # 3, 5-3/8" (13.5 cm) |

461126

# MOUTH AND THROAT INSTRUMENTS

## Mouth Gags

### SLUDER-JANSEN MOUTH GAG

070232

| ITEM # | DESCRIPTION |
|---|---|
| 070232 | Curved, 28 x 13 mm blade, 5-1/8" (13 cm) |

### DENHARDT MOUTH GAG

070222

| ITEM # | DESCRIPTION |
|---|---|
| 070222 | Serrated, lead bit block 10 x 16 mm, 4-7/8" (12.5 cm) |

## Retractors

### ANDREWS TONGUE DEPRESSOR

070107

| ITEM # | DESCRIPTION |
|---|---|
| 070107 | Deeply serrated, 21 x 48 mm blade, 30 degree angle, 4-1/2" (11.5 cm) |

# MOUTH AND THROAT INSTRUMENTS

## Retractors

### WIEDER TONGUE DEPRESSORS

070100

Fenestrated, serrated.

| ITEM # | DESCRIPTION |
|---|---|
| 070100 | Small blade, 41 x 36 mm, 5-9/16" (14 cm) |
| 070101 | Large blade, 43 x 43 mm, 6" (15 cm) |

### HURD DISSECTOR AND PILLAR RETRACTORS

073502

9" (23 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 073500 | Small dissector 27 x 7 mm, retractor 11 mm |
| 073502 | Large dissector 27 x 9 mm, retractor 13 mm |

### LOTHROP UVULA RETRACTOR

070140

| ITEM # | DESCRIPTION |
|---|---|
| 070140 | Grooved 36 x 19 mm blade with 5 mm deep lip, 5-3/8" (13.5 cm) |

# MOUTH AND THROAT INSTRUMENTS

## Scissors

### BOETTCHER TONSIL SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 074120 | Slightly curved, 42 mm blades, 7-1/4" (18.5 cm) |

### DEAN TONSIL SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 074140 | 32 mm serrated blades, angled on flat, curved shanks, 6-3/4" (17 cm) |

### YANKAUER TONSIL SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 074115 | Slightly curved, serrated, 42 mm blades, 7-1/8" (18 cm) |

# MOUTH AND THROAT INSTRUMENTS

## Snares

### EVE TONSIL SNARES

070651

070652

| ITEM # | DESCRIPTION |
|---|---|
| 070651 | Standard, 11-1/4" (28.5 cm) |
| 070652 | Ratcheted, 11-3/8" (29 cm) |

### NEIVERT-EVE TONSIL SNARE

070660

| ITEM # | DESCRIPTION |
|---|---|
| 070660 | 10-3/8" (26.5 cm) |

### LEWIS TONSIL SNARE

070665

| ITEM # | DESCRIPTION |
|---|---|
| 070665 | 10-1/4" (26 cm) |

# MOUTH AND THROAT INSTRUMENTS

## Snares

### SAGE TONSIL SNARE

070635

| ITEM # | DESCRIPTION |
|---|---|
| 070635 | Ratcheted, working length 8-5/8" (22 cm) |

### TYDING TONSIL SNARE

070640

| ITEM # | DESCRIPTION |
|---|---|
| 070640 | Straight tip, 10" (25.5 cm) |

### THROAT SNARE WIRES

070704

4-3/8" (11 cm) precut. 144 per package.

| ITEM # | DESCRIPTION |
|---|---|
| 070701 | 4 Ga., nose |
| 070702 | 5 Ga., nose |
| 070704 | 7 Ga., throat |
| 070705 | 8 Ga., throat |
| 070706 | 9 Ga., throat |

# MOUTH AND THROAT INSTRUMENTS

## Miscellaneous

### FISHER TONSIL KNIFE AND DISSECTOR

073370

| ITEM # | DESCRIPTION |
|---|---|
| 073370 | 17 x 7 mm serrated outer blade, 8-5/8" (22 cm) |

### HOLINGER KNIFE HANDLE

506705

For use with surgical blades no. 10, 11, 12 and 15.

| ITEM # | DESCRIPTION |
|---|---|
| 506705 | 11" (28 cm) |

### MELTZER ADENOID PUNCH

461661

With basket.

| ITEM # | DESCRIPTION |
|---|---|
| 461660 | # 1, 5 mm, working length 5-1/2" (14 cm) |
| 461661 | # 2, 7 mm, working length 5-1/2" (14 cm) |

# SCOPE AND LIGHT CARRIERS

## Identification Index

### SCOPES

| SCOPE NUMBER | SCOPE DESCRIPTION | LIGHT CARRIER NUMBER* | LIGHT CARRIER DESCRIPTION | NEW LC MARK | LC STAMP | OLD BR SERIES |
|---|---|---|---|---|---|---|
| 501500 | Laryn Holinger Infant | 526204-R* | LC Fiber optic 8PH | 8PH | 8PH | BR 145 |
| 501550 | Laryn CLJ Infant | 526000 | LC Fiber optic 9 | 9 | 8PH | BR 145 |
| 501552 | Laryn CLJ Child | 526006 | LC Fiber optic 12 | 12 | 12 | BR 105 |
| 501554 | Laryn CLJ Adolescent | 526018 | LC Fiber optic 16 | 16 | 16 | BR 110 |
| 501556 | Laryn CLJ Adol-Adult | 526018 | LC Fiber optic 16 | 16 | 16 | BR 115 |
| 501558 | Laryn CLJ Adult | 526018 | LC Fiber optic 16 | 16 | 16 | BR 120 |
| 501560 | Laryn CLJ Adult XL | 526018 | LC Fiber optic 16 | 16 | 16 | BR 125 |
| 501580 | Andrews Otoscope | 526004 | LC Fiber optic 11 | | 11 | |
| 501648 | Laryn CLJ Newborn | 526202 | LC Fiber optic 8C | | 8C | BR 100A |
| 501650 | Laryn CLJ Infant | 526002 | LC Fiber optic 9C | | 9C | BR 101 |
| 501652 | Laryn CLJ Child | 526010 | Custom | | 12C | BR 106 |
| 501654 | Laryn CLJ Adolescent | 526022 | LC Fiber optic 16C | 16C | 16C | BR 111 |
| 501656 | Laryn CLJ Adol-Adult | 526022 | LC Fiber optic 16C | 16C | 16C | BR 116 |
| 501658 | Laryn CLJ Adult | 526022 | LC Fiber optic 16C | 16C | 16C | BR 121 |
| 501660 | Laryn CLJ Adult XL | 526022 | LC Fiber optic 16C | 16C | 16C | BR 126 |
| 501810 | Laryn CLJ AC Child | 526012 | Custom | | 12AC | BR 171 |
| 501814 | Laryn CLJ AC Adult | 526032 | LC Fiber optic 17SC | 17SC | 17SC | BR 176 |
| 501820 | Laryn CLJ AC Child | 526008 | LC Fiber optic 12A | 12A | 12A | BR 170 |
| 501824 | Laryn CLJ AC Adult | 526026 | LC Fiber optic 17 | 17 | 17 | BR 175 |
| 501830 | Tracheascope CLJ | 526044 | LC Fiber optic 20C | | 20C | BR 240 |
| 502002 | Laryn Holinger AC Infant | 526206 | LC Fiber optic 9PH | 9PH | 9PH | BR 205 |
| 502004 | Laryn Holinger AC Child | 526210 | LC Fiber optic 12PH | 12PH | 12PH | BR 207 |
| 502010 | Laryn Holinger AC Adult 17 | 526028 | LC Fiber optic 17H | 17H | 17H | BR 200 |
| 502012 | Laryn Holinger AC Adult 18 Twin | 526038 | LC Fiber optic 18H | 18H | 18H | BR 209 |
| 502020 | Laryn Holinger AC Adult 17 Twin | 526028-2* | LC Fiber optic 17H | 17H | 17H | BR 208 |
| 502022 | Laryn Holinger AC Adult 18 Twin | 526038-2* | LC Fiber optic 18H | 18H | 18H | BR 209 |
| 502030 | Laryn Holinger HG Adult 17 | 526212 | LC Fiber optic 17HG | 17HG | 17HG | BR 201 |
| 502031 | Laryn Holinger HG Adult 17 Twin | 526212-2* | LC Fiber optic 17HG | 17HG | 17HG | |
| 502032 | Laryn Holinger XL HG Adult 18 | 526214 | LC Fiber optic 18HG | 18HG | 18HG | |
| 502033 | Laryn Holinger XL HG Ad 18 Twin | 526214-2* | LC Fiber optic 18HG | 18HG | 18HG | |
| 502040 | Laryn Holinger Adult Slot | 526028 | LC Fiber optic 17H | 17H | 17H | BR 204 |
| 502045 | Laryn Holinger HG Adult Slot | 526212 | LC Fiber optic 17HG | 17HG | 17HG | |
| 502060 | Laryn Broyles | 526026-2* | LC Fiber optic 17 | 17 | 17 | BR 230 |
| 502080 | Laryn Tucker Newborn | 526200 | LC Fiber optic 7GT | 7GT | 7GT | BR 210 |
| 502082 | Laryn Tucker Child | 526208 | LC Fiber optic 12GT | | 12GT | BR 212 |
| 502084 | Laryn Tucker Adolescent | 526220 | LC Fiber optic 21GT | 21GT | 21GT | BR 215 |
| 502086 | Laryn Tucker Adult | 526222 | LC Fiber optic 20T | | 20T | BR 217 |
| 502090 | Laryn Tucker Reverse Bevel | 526220 | LC Fiber optic 21GT | 21GT | 21GT | BR 217A |
| 502100 | Laryn Atkins-Tucker | 526220 | LC Fiber optic 21GT | 21GT | 21GT | BR 232 |
| 502108 | Laryngostat CLJ Child | 526007 | LC Fiber optic 12B | | 12 | BR 220 |
| 502109 | Laryngostat CLJ Adult | 526026 | LC Fiber optic 17 | 17 | 17 | BR 225 |
| 502110 | Laryngostat Priest Adult | 526030 | LC Fiber optic 17P | 17P | 17P | BR 227 |
| 502200 | Laryn Roberts Adult | 526024-2* | LC Fiber optic 16SR | | 16SR | BR 245 |
| 502203 | Laryn Roberts Child | 526014-2* | Custom | | 12SR | BR 245A |
| 502300 | Mediast Scope Carlen Short | 526350 | LC FO Carlen Short | S | S | |
| 502301 | Mediast Scope Carlen Long | 526351 | LC FO Carlen Long | L | L | |
| 502302 | Mediast Scope Carlen Extra Long | 526352 | LC FO Carlen Extra Long | XL | XL | |
| 502500 | Bronch CLJ 3 x 20 | 526218 | LC Fiber optic 20PH | 20PH | 20PH | |
| 502502 | Bronch CLJ 3.5 x 25 | 526226 | LC Fiber optic 25PH | 25 | 25PH | |
| 502504 | Bronch CLJ 3.5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | |

*LEFT/RIGHT SPECIFIC LIGHT CARRIERS: L, R, 2

# SCOPE AND LIGHT CARRIERS

## Identification Index

### SCOPES

| SCOPE NUMBER | SCOPE DESCRIPTION | LIGHT CARRIER NUMBER* | LIGHT CARRIER DESCRIPTION | NEW LC MARK | LC STAMP | OLD BR SERIES |
|---|---|---|---|---|---|---|
| 502506 | Bronch CLJ 4 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | |
| 502508 | Bronch CLJ 5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | |
| 502510 | Bronch CLJ 6 x 35 | 526054 | LC Fiber optic 35 | 35 | 35 | |
| 502512 | Bronch CLJ 7 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | |
| 502514 | Bronch CLJ 8 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | |
| 502516 | Bronch CLJ 9 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | |
| 502525 | Bronch CLJ Aspirating 7 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | |
| 502527 | Bronch CLJ Aspirating 9 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | |
| 502532 | Bronch CLJ Full Lumen 5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | |
| 502534 | Bronch CLJ Full Lumen 6 x 35 | 526054 | LC Fiber optic 35 | 35 | 35 | BR 1021 |
| 502536 | Bronch CLJ Full Lumen 7 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 1036 |
| 502538 | Bronch CLJ Full Lumen 8 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 1041 |
| 502550 | Bronch Overholt 7 x 30 | 526048 | LC Fiber optic 30 | 30 | Regular 30 | |
| 502600 | Bronch Old Holinger 3 x 20 | 526218 | LC Fiber optic 20PH | 20PH | 20PH | BR 900 |
| 502602 | Bronch Old Holinger 3.5 x 25 | 526226 | LC Fiber optic 25PH | 25 | 25PH | BR 905 |
| 502604 | Bronch Old Holinger 3.5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | BR 910 |
| 502606 | Bronch Old Holinger 4 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | BR 915 |
| 502608 | Bronch Old Holinger 5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | BR 920 |
| 502620 | Bronch Jesberg 3 x 25 | 526159 | LC Fiber optic 25SJ | | 30PH | BR1170A |
| 502622 | Bronch Jesberg 3.5 x 30 | 526166 | LC Fiber optic 30SJ | | 30SJ | BR1175A |
| 502624 | Bronch Jesberg 4 x 30 | 526166 | LC Fiber optic 30SJ | | 30SJ | BR1185A |
| 502626 | Bronch Jesberg 5 x 30 | 526166 | LC Fiber optic 30SJ | | 30SJ | BR1190A |
| 502630 | Bronch Jesberg 3 x 20 | 526150 | LC Fiber optic 16SJ | | 16SJ | BR 1170 |
| 502632 | Bronch Jesberg 3.5 x 26 | 526160 | Custom | | 16SJ | BR 1175 |
| 502634 | Bronch Jesberg 4 x 26 | 526160 | Custom | | 26SJ | BR 1180 |
| 502636 | Bronch Jesberg 5 x 30 | 526166 | LC Fiber optic 30SJ | | 30SJ | BR 1190 |
| 502640 | Bronch Rieker 3 x 20 | 526152 | Custom | | 20RI | BR 1330 |
| 502641 | Bronch Rieker 3.5 x 25 | 526158 | LC Fiber optic 25RI | | 25RI | BR 1331 |
| 502642 | Bronch Rieker 4 x 30 | 526164 | LC Fiber optic 30RI | | 30RI | BR 1332 |
| 502643 | Bronch Rieker 5 x 30 | 526164 | LC Fiber optic 30RI | | 30RI | BR 1333 |
| 502644 | Bronch Rieker 6 x 35 | 526054 | LC Fiber optic 35 | 35 | Regular 35 | BR 1334 |
| 502645 | Bronch Rieker 7 x 40 | 526060 | LC Fiber optic 40 | 40 | Regular 40 | BR 1335 |
| 502646 | Bronch Rieker 8 x 40 | 526060 | LC Fiber optic 40 | 40 | Regular 40 | BR 1336 |
| 502647 | Bronch Rieker 9 x 40 | 526060 | LC Fiber optic 40 | 40 | Regular 40 | BR 1337 |
| 502650 | Bronch Negus Suckling SM | | Custom | | | |
| 502651 | Bronch Negus Suckling | | Custom | | | |
| 502652 | Bronch Negus Infant | | Custom | | | |
| 502653 | Bronch Negus Child Aspirating | 526292 | LC Fiber optic 30N | | 30N | |
| 502654 | Bronch Negus Child | 526292 | LC Fiber optic 30N | | 30N | |
| 502655 | Bronch Negus Adult Aspirating | 526294 | LC Fiber optic 40N | | 40N | |
| 502656 | Bronch Negus Adol SM | 526294 | LC Fiber optic 40N | | 40N | |
| 502657 | Bronch Negus Adol | 526294 | LC Fiber optic 40N | | 40N | |
| 502658 | Bronch Negus Adult SM | 526294 | LC Fiber optic 40N | | 40N | |
| 502659 | Bronch Negus Adult | 526294 | LC Fiber optic 40N | | 40N | |
| 502750 | Bronch Albert Slotted 4 x 35 | 526054 | LC Fiber optic 35 | 35 | 35 | BR 990 |
| 502752 | Bronch Albert Slotted 5 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 992 |
| 502754 | Bronch Albert Slotted 6 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 994 |
| 502756 | Bronch Albert Slotted 7 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 996 |
| 502758 | Bronch Albert Slotted 8 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 998 |
| 502765 | Bronch Kernan Coagulating 7 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 1300 |

*LEFT/RIGHT SPECIFIC LIGHT CARRIERS: L, R, 2

# SCOPE AND LIGHT CARRIERS

## Identification Index

### SCOPES

| SCOPE NUMBER | SCOPE DESCRIPTION | LIGHT CARRIER NUMBER* | LIGHT CARRIER DESCRIPTION | NEW LC MARK | LC STAMP | OLD BR SERIES |
|---|---|---|---|---|---|---|
| 502767 | Bronch Kernan Coagulating 8 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 1310 |
| 502800 | Bronch CLJ Staple 4 x 6 x 35 | 526054 | LC Fiber optic 35 | 35 | 35 | BR 1275 |
| 502802 | Bronch CLJ Staple 4 x 8 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 1285 |
| 502804 | Bronch CLJ Staple 4 x 12 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 1290 |
| 502808 | Bronch CLJ Expanding Staple | 526060 | LC Fiber optic 40 | 40 | 40 | BR 1295 |
| 502815 | Bronch CLJ Costophrenic 2 x 35 | | Custom | | | BR 1215 |
| 502817 | Bronch CLJ Costophrenic 3 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 1235 |
| 502819 | Bronch CLJ Costophrenic 4 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 1240 |
| 503500 | Esoph Holinger 5 x 35 | 526226 | LC Fiber optic 25PH | 25 | 25PH | BR 394 |
| 503502 | Esoph Holinger 3.5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | BR 395 |
| 503505 | Esoph Holinger 6 x 20 | 526218 | LC Fiber optic 20PH | 20PH | 20PH | BR 397 |
| 503525 | Esoph CLJ Standard 5 x 35 | 526238 | LC Fiber optic 35PH | 35PH | 35PH | BR 456 |
| 503527 | Esoph CLJ Standard 6 x 35 | 526054 | LC Fiber optic 35 | 35 | 35 | BR 466 |
| 503533 | Esoph CLJ Standard 8 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 496 |
| 503539 | Esoph CLJ Standard 9 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 511 |
| 503541 | Esoph CLJ Standard 9 x 50 | 526070 | LC Fiber optic 50 | 50 | 50 | BR 516 |
| 503550 | Esoph CLJ Full Lumen 4 x 35 | 526238 | LC Fiber optic 35PH | 35PH | 35PH | BR 551 |
| 503552 | Esoph CLJ Full Lumen 5 x 35 | 526238 | LC Fiber optic 35PH | 35PH | 35PH | BR 556 |
| 503554 | Esoph CLJ Full Lumen 6 x 35 | 526054 | LC Fiber optic 35 | 35 | 35 | BR 566 |
| 503556 | Esoph CLJ Full Lumen 7 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 576 |
| 503558 | Esoph CLJ Full Lumen 8 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 591 |
| 503560 | Esoph CLJ Full Lumen 9 x 30 | 526048 | LC Fiber optic Reg. 30 | 30 | 30 | BR 596 |
| 503562 | Esoph CLJ Full Lumen 9 x 45 | 526068 | LC Fiber optic Reg. 45 | 45 | Reg 45 | BR 601 |
| 503564 | Esoph CLJ Full Lumen 9 x 50 | 526070 | LC Fiber optic 50 | 50 | 50 | BR 604 |
| 503600P | Esoph CLJ 7 x 10 x 25 | 526262 | LC Fiber optic 25R | 25R | 25R | BR 530 |
| 503602 | Esoph CLJ 8 x 12 x 50 | 526284 | LC Fiber optic 50R | 50R | 50R | BR 540 |
| 503604 | Esoph CLJ 9 x 13 x 25 | 526262 | LC Fiber optic 25R | 25R | 25R | BR 532 |
| 503606 | Esoph CLJ 10 x 14 x 30 | 526266 | LC Fiber optic 30R | 30R | 30R | BR 534 |
| 503608 | Esoph CLJ 10 x 14 x 40 | 526274 | LC Fiber optic 40R | 40R | 40R | BR 538 |
| 503610P | Esoph CLJ 10 x 14 x 50 | 526284 | LC Fiber optic 50R | 50R | 50R | BR 542 |
| 503612 | Esoph CLJ 12 x 16 x 50 | 526284 | LC Fiber optic 50R | 50R | 50R | BR 544 |
| 503614 | Esoph CLJ 12 x 18 x 35 | 526272 | LC Fiber optic 35R | 35R | 35R | BR 536 |
| 503625 | Esoph J Roberts 7 x 10 x 22 | 526260 | LC Fiber optic 22R | 22R | 22R | BR 324 |
| 503627 | Esoph J Roberts 9 x 13 x 22 | 526260 | LC Fiber optic 22R | 22R | 22R | BR 325 |
| 503629 | Esoph J Roberts 10 x 14 x 30 | 526266 | LC Fiber optic 30R | 30R | 30R | BR 335 |
| 503631 | Esoph J Roberts 10 x 14 x 40 | 526274 | LC Fiber optic 40R | 40R | 40R | BR 340 |
| 503633 | Esoph J Roberts 12 x 16 x 45 | 526280 | LC Fiber optic 45R | 45R | 45R | BR 347 |
| 503635 | Esoph J Roberts 12 x 16 x 50 | 526284 | LC Fiber optic 50R | 50R | 50R | BR 350 |
| 503650 | Esoph S Jesberg 6 x 8 x 32 | 526268 | LC Fiber optic 32J | 32J | 32J | BR 375 |
| 503652 | Esoph S Jesberg 6.5 x 10 x 35 | 526270 | LC Fiber optic 35J | 35J | 35J | BR 377 |
| 503654 | Esoph S Jesberg 7 x 10 x 42 | 526276 | LC Fiber optic 42J | 42J | 42J | BR 379 |
| 503656 | Esoph S Jesberg 8 x 12 x 45 | 526278 | LC Fiber optic 45J | 45J | 45J | BR 381 |
| 503658 | Esoph S Jesberg 10 x 14 x 29 | 526264 | LC Fiber optic 29J | 29J | 29J | BR 383 |
| 503660P | Esoph S Jesberg 10 x 14 x 50 | 526282 | LC Fiber optic 50J | 50J | 50J | BR 385 |
| 503675 | Esoph Forbes Child | 526020 | LC Fiber optic 16A | 16A | 16A | BR 360 |
| 503676 | Esoph Forbes Adolescent | 526042 | LC Fiber optic 19 | 19 | 19 | BR 365 |
| 503677 | Esoph Forbes Adult | 526046 | LC Fiber optic 22 | 22 | 22 | BR 370 |
| 521450 | Laryn Tucker Side Slide Child | 526510 | LC FO for 521450 | 7S | | |
| 521455 | Laryn Tucker Side Slide Adol | 526512 | LC for Tucker Adol 521455 | 8S | | |

*LEFT/RIGHT SPECIFIC LIGHT CARRIERS: L, R, 2

# SCOPE AND LIGHT CARRIERS

## Identification Index

### SCOPES

| SCOPE NUMBER | SCOPE DESCRIPTION | LIGHT CARRIER NUMBER* | LIGHT CARRIER DESCRIPTION | NEW LC MARK | LC STAMP | OLD BR SERIES |
|---|---|---|---|---|---|---|
| 521460 | Laryn Tucker Side Slide Adult | 526515 | LC FO for Tuck Adult 521460 | 9S | | |
| 521465 | Laryn Tuck Side Slide Long Adult | 526516 | LC FO for Tuck Adult 521465 | 13S | | |
| 521500 | Laryn Holinger Infant | 526204 | LC Fiber optic 8PH | 8PH | 8PH | BR 145 |
| 521550 | FO Laryn CLJ Infant | 526000 | LC Fiber optic 9 | 9 | 9 | BR 100 |
| 521552 | FO Laryn CLJ Child | 526006 | LC Fiber optic 12 | 12 | 12 | BR 105 |
| 521554 | FO Laryn CLJ Adolescent | 526018 | LC Fiber optic 16 | 16 | 16 | BR 110 |
| 521556 | FO Laryn CLJ Adol-Adult | 526018 | LC Fiber optic 16 | 16 | 16 | BR 115 |
| 521558 | FO Laryn CLJ Adult | 526018 | LC Fiber optic 16 | 16 | 16 | BR 120 |
| 521820 | FO Laryn CLJ AC Child | 526008 | LC Fiber optic 12A | 12A | 12A | BR 170 |
| 521824 | FO Laryn CLJ AC Adult | 526026 | LC Fiber optic 17 | 17 | 17 | BR 175 |
| 522000 | Tuck-Holin AC Laryn Infant Slotted | 526203 | LC for 522000 | 6S | | |
| 522001 | Tuck-Holin AC Laryn Child Slotted | 526201 | LC Fiber optic for 522001 | 9S2 | | |
| 522002 | Laryn Holinger AC Infant | 526206 | LC Fiber optic 9PH | 9PH | | |
| 522004 | Laryn Holinger AC Child | 526210 | LC Fiber optic 12PH | 12PH | | |
| 522010 | Laryn Holinger AC Adult 17 | 526028 | LC Fiber optic 17H | 17H | | |
| 522012 | Laryn Holinger AC Adult 18 | 526038 | LC Fiber optic 18H | 18H | 18H | BR 203 |
| 522020 | Laryn Holinger AC Adult 17 Twin | 526028-2* | LC Fiber optic 17H | 17H | 17H | BR 208 |
| 522022 | Laryn Holinger AC Adult 18 Twin | 526038 | LC Fiber optic 18H | 18H | 18H | BR 209 |
| 522030 | Laryn Holinger HG Adult 17 | 526212 | LC Fiber optic 17HG | 17HG | 17HG | BR 201 |
| 522032 | Laryn Holinger XL HG Adult 18 | 526214 | LC Fiber optic 18HG | 18HG | 18HG | |
| 522034 | Laryn Holinger HG Adult 17 | 526500 | LC FO Oval 17HG | 17 | 17OV | |
| 522035 | Laryn Holinger XL HG Adult 18 | 526505 | LC FO Oval 18HG | 18 | 18OV | |
| 522040 | Laryn Holinger AC Adult Slotted 17 HG Oval | 526028 | LC Fiber optic 17H | 17H | 17H | BR 204 |
| 522045 | Laryn Holinger HG Adult Slotted 17 HG Oval | 526212 | LC Fiber optic 17HG | 17HG | 17HG | |
| 522190 | Laryn Ossoff-Pilling® | 527864 | LC Fiber optic 522190 | 19 | | |
| 522191 | Laryn Ossoff-Pilling® | 527865 | LC Fiber optic 522191 | 25L | | |
| 522193 | Laryn Ossoff-Pilling® | 527866 | LC Fiber optic 522193 | 25R2 | | |
| 522194 | Dual channel Video Laryn Ossoff-Pilling® Adult | 527867 | LC FO for Ossoff-Pilling® Adult | N/A | | |
| 522200P | Laryn Jako Type 1 FO Adult | 526365 | LC Jako I Right | JR | J | |
| 522200P | Laryn Jako Type 1 FO Adult | 526366 | LC FO Jako I Left | JL | J | |
| 522202 | Laryn Holinger AC Infant | 526206 | LC Fiber optic 9PH | 9PH | 9PH | BR 205 |
| 522204 | Laryn Holinger AC Child | 526210 | LC Fiber optic 12PH | 12PH | 12PH | BR 207 |
| 522205 | Laryn Jako Type 2 FO Adult | 527805 | LCC Jako Adult II Right | (no mark) | | |
| 522205 | Laryn Jako Type 2 FO Adult | 527800 | LCC Jako Adult II Left | (no mark) | | |
| 522206 | Laryn Jako Type 3 FO Adult | 526526 | LC FO for Jako Adult III 522206 | 14Y | | |
| 522207 | Laryn Jako-Cherry 1 FO Adol | 526375 | LC Jako Cherry I Adol Right | 12JR | 12J | |
| 522207 | Laryn Jako-Cherry 1 FO Adol | 526376 | LC Jako Cherry I Adol Left | 12JL | 12J | |
| 522208 | Laryn Jako-Cherry 2 FO Adol | 527815 | LCC Jako Cherry Adol II Right | (no mark) | | |
| 522208 | Laryn Jako-Cherry 2 FO Adol | 527810 | LCC Jako Cherry Adol II Left | (no mark) | | |
| 522209 | Laryn Jako-Cherry 3 FO Adol | 526527 | LC FO for Jako Adol III 522209 | 9Y2 | | |
| 522210 | Laryn Jako-Cherry 1 FO Child | 526370 | LC Jako Cherry I Child Right | 9JR | 9J | |
| 522210 | Laryn Jako-Cherry 1 FO Child | 526371 | LC Jako Cherry I Child Left | 9JL | 9J | |
| 522215 | Laryn Jako-Cherry 2 FO Child | 527825 | LCC Jako Cherry Child II Right | (no mark) | | |
| 522215 | Laryn Jako-Cherry 2 FO Child | 527820 | LCC Jako Cherry Child II Left | (no mark) | | |
| 522216 | Laryn Jako-Cherry 3 FO Child | 526528 | LC FO for Jako Child III 522216 | 8Y | | |
| 522220 | Laryn Jako-Cherry 2 FO Newborn | 527825 | LCC Jako Cherry Child II Right | (no mark) | | |
| 522220 | Laryn Jako-Cherry 2 FO Newborn | 527820 | LCC Jako Cherry Child II Left | (no mark) | | |

*LEFT/RIGHT SPECIFIC LIGHT CARRIERS: L, R, 2

# SCOPE AND LIGHT CARRIERS

## Identification Index

### SCOPES

| SCOPE NUMBER | SCOPE DESCRIPTION | LIGHT CARRIER NUMBER* | LIGHT CARRIER DESCRIPTION | NEW LC MARK | LC STAMP | OLD BR SERIES |
|---|---|---|---|---|---|---|
| 522222 | Microlaryn Dedo Child | 526524 | LC FO for Child Dedo 522222 | 9Y | | |
| 522224 | Microlaryn Dedo Adolescent | 526529 | LC FO for Dedo Adol 522224 | 11Y | | |
| 522225P | Microlaryn Dedo Adult | 526525 | LC FO for Adult Dedo 522225 | 15Y | | |
| 522226 | Dual channel Video Laryn Dedo-Pilling® Adult | 527867 | LC FO for Dedo-Pilling® Adult | N/A | | |
| 522227 | Microlaryn Dedo Type 2 Photo | 527860 | LCC for Ossoff Adult | (no mark) | | |
| 522228 | Dedo Laser Microlaryngoscope | 527860 | LCC for Ossoff Dedo Adult | (no mark) | | |
| 522229 | Abramson-Dedo Microlaryngoscope | 527586 | LC for Abramson Dedo Right | 14R | | |
| 522229 | Abramson-Dedo Microlaryngoscope | 527587 | LC for Abramson Dedo Left | 14L | | |
| 522230 | Laryn Tucker AC Side Slotted | 526520 | LC Tucker Scope 522230 | 8S2 | | |
| 522231 | Laryn Ossoff-Karlan Dedo Laser | 527860 | LCC Ossoff Dedo Adult | (no mark) | | |
| 522232 | Laryn Ossoff-Karlan Jako Laser | 527805 | LCC Jako Adult II Right | (no mark) | | |
| 522232 | Laryn Ossoff-Karlan Jako Laser | 527800 | LCC Jako Adult II Left | (no mark) | | |
| 522233 | Ossoff Commissure Laryngoscope | 527860 | LCC Ossoff Dedo Adult | (no mark) | | |
| 522234 | 522231 With Strong Extension | 527860 | LCC Ossoff Dedo Adult | (no mark) | | |
| 522235 | 522232 With Strong Extension | 527860 | LCC Ossoff Dedo Adult | (no mark) | | |
| 522236 | 522233 With Strong Extension | 527860 | LCC Ossoff Dedo Adult | (no mark) | | |
| 522237 | Ossoff-Karlan Child Laser Laryn | 527863 | LCC for Ossoff Child | (no mark) | | |
| 522238 | Ossoff-Karlan Adol Laser Laryn | 527862-2* | LCC for Ossoff Adolescent | (no mark) | | |
| 522242 | Healy-Jako Subglottiscope | 527830-R* | LCC Healy-Jako Subglot Right | (no mark) | | |
| 522242 | Healy-Jako Subglottiscope | 527835-L* | LCC Healy-Jako Subglot Left | (no mark) | | |
| 522243 | Dedo Laser Laryng Extra Long | 527860-2* | LCC FO Ossoff Dedo Adult | (no mark) | | |
| 522244 | Ossoff Adult Subglottiscope Female | 527860 | LCC FO Ossoff Dedo Adult | (no mark) | | |
| 522245 | Ossoff Adult Subglottiscope Male | 527860 | LCC FO Ossoff Dedo Adult | (no mark) | | |
| 522250 | Microlaryn Tucker-Jako Adult | 527850 | LCC Tucker Jako | (no mark) | | |
| 522255 | Microlaryn Tucker-Jako Adol | 527853 | LCC Tucker Jako Med | (no mark) | | |
| 522260 | Microlaryn Tucker-Jako Child | 527855 | LCC Tucker Jako Short | | | |
| 522261 | 522200 With Strong Extension | 526365-R* | LC FO Jako I Reg Right | JR | J | |
| 522261 | 522200 With Strong Extension | 526366-L* | LC FO Jako I Reg Left | JL | J | |
| 522262 | 522205 With Strong Extension | 527800-L* | LCC Jako Adult II Left | (no mark) | | |
| 522262 | 522205 With Strong Extension | 527805-R* | LCC Jako Adult II Right | (no mark) | | |
| 522263 | 522206 With Strong Extension | 526526 | LC FO for Jako Adult III 522206 | 14Y | | |
| 522264 | 522207 With Strong Extension | 526375-R* | LC FO Jako Cherry I Adol Right | 12JR | 12J | |
| 522264 | 522207 With Strong Extension | 526376-L* | LC FO Jako Cherry I Adol Left | 12JL | 12J | |
| 522265 | 522208 With Strong Extension | 527810-L* | LCC Jako Cherry Adol II Left | (no mark) | | |
| 522265 | 522208 With Strong Extension | 527815-R* | LCC Jako Cherry Adol II Right | (no mark) | | |
| 522266 | 522209 With Strong Extension | 526527 | LC FO for Jako Adol III 522209 | 9Y2 | | |
| 522267 | 522210 With Strong Extension | 526370-R* | LC FO Jako Cherry I Child Right | 9JR | 9J | |
| 522267 | 522210 With Strong Extension | 526371-L* | LC FO Jako Cherry I Child Left | 9JL | 9J | |
| 522268 | 522215 With Strong Extension | 527820-L* | LCC Jako Cherry Child II Left | (no mark) | | |
| 522268 | 522215 With Strong Extension | 527825-R* | LCC Jako Cherry Child II Right | (no mark) | | |

*LEFT/RIGHT SPECIFIC LIGHT CARRIERS: L, R, 2

# SCOPE AND LIGHT CARRIERS

## Identification Index

### SCOPES

| SCOPE NUMBER | SCOPE DESCRIPTION | LIGHT CARRIER NUMBER* | LIGHT CARRIER DESCRIPTION | NEW LC MARK | LC STAMP | OLD BR SERIES |
|---|---|---|---|---|---|---|
| 522269 | 522216 With Strong Extension | 526528 | LC FO for Jako Child III 522216 | 8Y | | |
| 522270 | 522220 With Strong Extension | 527820-L* | LCC Jako Cherry Child II Left | (no mark) | | |
| 522270 | 522220 With Strong Extension | 527825-R* | LCC Jako Cherry Child II Right | (no mark) | | |
| 522271 | 522222 With Strong Extension | 526524 | LC FO for Child Dedo 522222 | 9Y | | |
| 522272 | 522225 With Strong Extension | 526525 | LC FO for Adult Dedo 522225 | 15Y | | |
| 522273 | 522227 With Strong Extension | 527860-2* | LCC Ossoff Dedo Adult | (no mark) | | |
| 522274 | 522230 With Strong Extension | 526520 | LC FO for Tucker 522230 | 8S2 | | |
| 522275 | 522250 With Strong Extension | 527850 | L Cabl-Car Tucker Jako | (no mark) | | |
| 522276 | 522255 With Strong Extension | 527853 | L Cabl-Car TUC Jako Med | (no mark) | | |
| 522280 | Ossoff Neonatal Subglottiscope | 526210 | LC Fiberoptic 12PH | 12PH | 12PH | |
| 522290 | Pilling® Dedo Dbl Action AC Adult | 527860 | LCC Ossoff Dedo Adult | (no mark) | | |
| 522291 | Pilling® Ossoff Dbl Act Post Com | 527860 | LCC Ossoff Dedo Adult | (no mark) | | |
| 522292 | Pilling® Dedo Dbl Action AC Adol | 527863 | LCC for Ossoff Child | (no mark) | | |
| 522293 | Pilling® Dedo Dbl Action AC Child | 527863 | LCC Ossoff, PIL Dedo Child | (no mark) | | |
| 522294 | Pilling® Feder Sgl Act Ant Com Adult | 527860 | LCC Ossoff, Dedo, Feder Adult | (no mark) | | |
| 522295 | Pilling® Feder Single Act Post Adult | 527860 | LCC Ossoff, Dedo Adult | (no mark) | | |
| 522296 | Pilling® Feder Single Act AC Adol | 527863 | LCC for Ossoff Child | (no mark) | | |
| 522297 | Pilling® Feder Single Act AC Child | 527863 | LCC Ossoff, Pilling® Dedo, Feder Child | (no mark) | | |
| 522300P | Mediast Scope Carlen Short | 526350 | LC FO Carlen Short | S | S | |
| 522301 | Mediast Scope Carlen Long | 526351 | LC FO Carlen Long | L | L | |
| 522302 | Mediast Scope Carlen Extra Long | 526352 | LC FO Carlen Extra Long | XL | XL | |
| 522305P | Mediast Scope Tucker Short | 526361-R* | LC FO Tucker Short Right | 12BR | 12B | |
| 522305P | Mediast Scope Tucker Short | 526360-L* | LC FO Tucker Short Left | 12BL | 12B | |
| 522306 | Mediast Scope Tucker Imp Short | 527853 | LCC FO Tucker Jako Med | (no mark) | | |
| 522310P | Mediast Scope Tucker Long | 526363-R* | LC FO Tucker Long Right | 16R | 16 | |
| 522310P | Mediast Scope Tucker Long | 526362-L* | LC FO Tucker Long Left | 16L | 16 | |
| 522311 | Mediast Scope Tucker Imp Long | 527850 | LCC FO Tucker Jako | (no mark) | | |
| 522401 | Tucker Tracheascope 3 x 18 | 527521 | LC FO 18CM Small Oval | | 18 | |
| 522402 | Tucker Tracheascope 4 x 18 | 527521 | LC FO 18CM Small Oval | | 18 | |
| 522403 | Tucker Tracheascope 5 x 18 | 527521 | LC FO 18CM Small Oval | | 18 | |
| 522404 | Fearon Tracheascope 3 x 20 | 527500 | LC Hol Oval 20 SM | 20 | 20 | |
| 522408 | Fearon Tracheascope 3 x 20 | 527500 | LC Hol Oval 20 SM | 20 | 20 | |
| 522412 | Fearon Tracheascope 5 x 20 | 527500 | LC Hol Oval 20 SM | 20 | 20 | |
| 522500 | Bronch CLJ FO 3 x 20 | 526218 | LC Fiber optic 20PH | 20PH | 20PH | |
| 522502 | Bronch CLJ FO 3.5 x 25 | 526226 | LC Fiber optic 25PH | 25 | 25PH | |
| 522504 | Bronch CLJ FO 3.5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | |
| 522506 | Bronch CLJ FO 4 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | |
| 522508 | Bronch CLJ FO 5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | |
| 522510 | Bronch CLJ FO 6 x 35 | 526054 | LC Fiber optic 35 | 35 | 35 | |
| 522512 | Bronch CLJ FO 7 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | |
| 522514 | Bronch CLJ FO 8 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | |
| 522516 | Bronch CLJ FO 9 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | |
| 522525 | Bronch CLJ Aspirating 7 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 1076 |
| 522527 | Bronch CLJ Aspirating 8 x 40 | 526060 | LC Fiber optic 40 | 40 | 40 | BR 1081 |
| 522550 | Pilling® Imp Holing Bronch 3 x 20 | 527500 | LC FO for Hol Oval 20 SM | 20 | 20 | |

*LEFT/RIGHT SPECIFIC LIGHT CARRIERS: L, R, 2

# SCOPE AND LIGHT CARRIERS

## Identification Index

### SCOPES

| SCOPE NUMBER | SCOPE DESCRIPTION | LIGHT CARRIER NUMBER* | LIGHT CARRIER DESCRIPTION | NEW LC MARK | LC STAMP | OLD BR SERIES |
|---|---|---|---|---|---|---|
| 522552 | Pilling® Imp Holing Bronch 3.5 x 20 | 527500 | LC FO for Hol Oval 20 SM | 20 | 20 | |
| 522554 | Pilling® Imp Holing Bronch 4 x 20 | 527500 | LC FO for Hol Oval 20 SM | 20 | 20 | |
| 522556 | Pilling® Imp Holing Bronch 4 x 25 | 527505 | LC FO for Hol Oval 25 SM | 25HB | 25 | |
| 522558 | Pilling® Imp Holing Bronch 5 x 30 | 527510 | LC FO for Hol Oval 30 SM | 30HB | 30 | |
| 522575 | Bronch Holinger FO 3 x 20 | 527500 | LC FO for Hol Oval 20 SM | 20 | 20 | |
| 522576 | Bronch Holinger FO 3.5 x 25 | 527505 | LC FO for Hol Oval 25 SM | 25HB | 25 | |
| 522577 | Bronch Holinger FO 3.5 x 30 | 527510 | LC FO for Hol Oval 30 SM | 30HB | 30 | |
| 522578 | Bronch Holinger FO 4 x 30 | 527510 | LC FO for Hol Oval 30 SM | 30HB | 30 | |
| 522579 | Bronch Holinger FO 5 x 30 | 527510 | LC FO for Hol Oval 30 SM | 30HB | 30 | |
| 522580 | Bronch Holinger FO 5 x 35 | 527515 | LC FO for Hol Oval 35 SM | 35H | 35 | |
| 522581 | Bronch Holinger FO 5 x 40 | 527520 | LC FO for Hol Oval 40 SM | 40H | 40 | |
| 522582 | Bronch Holinger FO 5 x 45 | 527525 | LC FO for Hol Oval 45 SM | 45HB | 45 | |
| 522583 | Bronch Holinger FO 6 x 35 | 527555 | LC FO for Hol Oval 35 Med | 35H2 | 35 | |
| 522584 | Bronch Holinger FO 6 x 40 | 527560 | LC FO for Hol Oval 40 Med | 40H2 | 40 | |
| 522585 | Bronch Holinger FO 7 x 40 | 527560 | LC FO for Hol Oval 40 Med | 40H2 | 40 | |
| 522586 | Bronch Holinger FO 8 x 40 | 527580 | LC FO for Hol Oval 40 LG | 40H3 | 40 | |
| 522587 | Bronch Holinger FO 9 x 40 | 527580 | LC FO for Hol Oval 40 LG | 40H3 | 40 | |
| 522600 | Bronch Old Holinger 3 x 20 | 526218 | LC Fiber optic 20PH | 20PH | 20PH | BR 900 |
| 522602 | Bronch Old Holinger 3.5 x 20 | 526226 | LC Fiber optic 25PH | 25 | 25PH | BR 905 |
| 522604 | Bronch Old Holinger 3.5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | BR 910 |
| 522606 | Bronch Old Holinger 4 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | BR 915 |
| 522608 | Bronch Old Holinger 5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | BR 920 |
| 523100P | Laser Bronchoscope 3.5 x 20 | 523101P | LC FO Oval Med 20 | | 20 | |
| 523110P | Laser Bronchoscope 4 x 25 | 523111P | LC FO Oval Med 25 | 25 | 25 | |
| 523120P | Laser Bronchoscope 5 x 30 | 527575 | LC FO for Hol Oval 30 Med | 30LB | 30 | |
| 523130P | Laser Bronchoscope 6 x 35 | 523131 | LC FO for Hol Oval 35 LG | 35LB | 35 | |
| 523140P | Laser Bronchoscope 7 x 40 | 527580 | LC FO for Hol Oval 40 LG | 40H3 | 40 | |
| 523150P | Laser Bronchoscope 8 x 40 | 527580 | LC FO for Hol Oval 40 LG | 40H3 | 40 | |
| 523160P | Laser Bronchoscope 9 x 40 | 527580 | LC FO for Hol Oval 40 LG | 40H3 | 40 | |
| 523170 | YAG Laser Bronch 3.5 x 20 | 523101P | LC FO Oval Medium 20 | | 20 | |
| 523172 | YAG Laser Bronch 4 x 25 | 523111P | LC FO Oval Medium 25 | 25 | 25 | |
| 523174 | YAG Laser Bronch 5 x 30 | 527575 | LC FO for Hol Oval 30 LG | 30LB | 30 | |
| 523176 | YAG Laser Bronch 6 x 35 | 523131 | LC FO for Hol Oval 35 LG | 35LB | 35 | |
| 523178P | YAG Laser Bronch 7 x 40 | 527580 | LC FO for Hol Oval 40 LG | 40H3 | 40 | |
| 523180P | YAG Laser Bronch 8 x 40 | 527580 | LC FO for Hol Oval 40 LG | 40H3 | 40 | |
| 523182 | YAG Laser Bronch 9 x 40 | 527580 | LC FO for Hol Oval 40 LG | 40H3 | 40 | |
| 523500P | Esoph Holinger FO 5 x 35 | 526226 | LC Fiber optic 25PH | 25 | 25PH | BR 394 |
| 523502 | Esoph Holinger FO 3.5 x 30 | 526230 | LC Fiber optic 30PH | 30PH | 30PH | BR 395 |
| 523505 | Esoph Holinger FO 6 x 20 | 526218 | LC Fiber optic 20PH | 20PH | 20PH | BR 397 |
| 523525 | Esoph CLJ Standard FO 5 x 35 | 526238 | LC Fiber optic 35PH | 35PH | 35PH | BR 456 |
| 523527 | Esoph CLJ Standard FO 6 x 35 | 526054 | LC Fiber optic 35 | 35 | 35 | BR 466 |
| 523529 | Esoph CLJ Standard FO 7 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 481 |
| 523533 | Esoph CLJ Standard FO 8 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 496 |
| 523535 | Esoph CLJ Standard FO 8 x 50 | 526070 | LC Fiber optic 50 | 50 | 50 | BR 501 |
| 523537 | Esoph CLJ Standard FO 9 x 30 | 526048 | LC Fiber optic 30 | 30 | 30 | BR 506 |
| 523539 | Esoph CLJ Standard FO 9 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 511 |
| 523541 | Esoph CLJ Standard FO 9 x 50 | 526070 | LC Fiber optic 50 | 50 | 50 | BR 516 |
| 523550 | Esoph CLJ Full Lumen FO 4 x 35 | 526238 | LC Fiber optic 35PH | 35PH | 35PH | BR 551 |
| 523552 | Esoph CLJ Full Lumen FO 5 x 35 | 526238 | LC Fiber optic 35PH | 35PH | 35PH | BR 556 |
| 523554 | Esoph CLJ Full Lumen FO 6 x 35 | 526054 | LC Fiber optic 35 | 35 | 35 | BR 566 |
| 523556 | Esoph CLJ Full Lumen FO 7 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 576 |

*LEFT/RIGHT SPECIFIC LIGHT CARRIERS: L, R, 2

# SCOPE AND LIGHT CARRIERS

## Identification Index

### SCOPES

| SCOPE NUMBER | SCOPE DESCRIPTION | LIGHT CARRIER NUMBER* | LIGHT CARRIER DESCRIPTION | NEW LC MARK | LC STAMP | OLD BR SERIES |
|---|---|---|---|---|---|---|
| 523558 | Esoph CLJ Full Lumen FO 8 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 591 |
| 523560 | Esoph CLJ Full Lumen FO 9 x 30 | 526048 | LC Fiber optic 30 | 30 | 30 | BR 596 |
| 523560 | Esoph CLJ Full Lumen FO 9 x 30 | 526048 | LC Fiber optic 30 | 30 | 30 | BR 596 |
| 523562 | Esoph CLJ Full Lumen FO 9 x 45 | 526068 | LC Fiber optic 45 | 45 | 45 | BR 601 |
| 523564 | Esoph CLJ Full Lumen FO 9 x 50 | 526070 | LC Fiber optic 50 | 50 | 50 | BR 604 |
| 523570 | Esoph Holinger FO 3.5 x 30 | 527510 | LC FO for Hol Oval 30 SM | 30HB | 30 | |
| 523571 | Esoph Holinger FO 4 x 30 | 527510 | LC FO for Hol Oval 30 SM | 30HB | 30 | |
| 523572 | Esoph Holinger FO 6 x 30 | 527550 | LC FO for Hol Oval 30 Med | 30EH | 30 | |
| 523573 | Esoph Holinger FO 7 x 30 | 527550 | LC FO for Hol Oval 30 Med | 30EH | 30 | |
| 523574 | Esoph Holinger FO 9 x 30 | 527575 | LC FO for Hol Oval 30 LG | 30LB | 30 | |
| 523575 | Esoph Holinger FO 5 x 35 | 527515 | LC FO for Hol Oval 35 SM | 35H | 35 | |
| 523576 | Esoph Holinger FO 6 x 45 | 527565 | LC FO for Hol Oval 45 Med | 45H2 | 45 | |
| 523577 | Esoph Holinger FO 7 x 45 | 527565 | LC FO for Hol Oval 45 Med | 45H2 | 45 | |
| 523578 | Esoph Holinger FO 8 x 53 | 527585 | LC FO for Hol Oval 53 LG | 53 | 53 | |
| 523579 | Esoph Holinger FO 9 x 53 | 527585 | LC FO for Hol Oval 53 LG | 53 | 53 | |
| 523580 | Esoph Holinger FO 10 x 53 | 527585 | LC FO for Hol Oval 53 LG | 53 | 53 | |
| 523581 | Esoph Holinger FO 8 x 45 | 527583 | LC FO for Hol Oval 45 LG | 45H3 | 45 | |
| 523582 | Esoph Holinger FO 9 x 45 | 527583 | LC FO for Hol Oval 45 LG | 45H3 | 45 | |
| 523600P | Esoph CLJ 7 x 10 x 25 | 526262 | LC Fiber optic 25R | 25R | 25R | BR 530 |
| 523602 | Esoph CLJ 8 x 12 x 50 | 526284 | LC Fiber optic 50R | 50R | 50R | BR 540 |
| 523604 | Esoph CLJ 9 x 3 x 25 | 526262 | LC Fiber optic 25R | 25R | 25R | BR 532 |
| 523606 | Esoph CLJ 10 x 14 x 30 | 526266 | LC Fiber optic 30R | 30R | 30R | BR 534 |
| 523608 | Esoph CLJ 10 x 14 x 40 | 526274 | LC Fiber optic 40R | 40R | 40R | BR 538 |
| 523610P | Esoph CLJ 10 x 14 x 50 | 526284 | LC Fiber optic 50R | 50R | 50R | BR 542 |
| 523612 | Esoph CLJ 12 x 16 x 50 | 526284 | LC Fiber optic 50R | 50R | 50R | BR 544 |
| 523614 | Esoph CLJ 12 x 18 x 35 | 526272 | LC Fiber optic 35R | 35R | 35R | BR 536 |
| 523625 | Esoph J Roberts 7 x 10 x 22 | 526260 | LC Fiber optic 22R | 22R | 22R | BR 324 |
| 523627 | Esoph J Roberts 9 x 13 x 22 | 526260 | LC Fiber optic 22R | 22R | 22R | BR 325 |
| 523629 | Esoph J Roberts 10 x 14 x 30 | 526266 | LC Fiber optic 30R | 30R | 30R | BR 335 |
| 523631 | Esoph J Roberts 10 x 14 x 40 | 526274 | LC Fiber optic 40R | 40R | 40R | BR 340 |
| 523633 | Esoph J Roberts 12 x 16 x 45 | 526280 | LC Fiber optic 45R | 45R | 45R | BR 347 |
| 523635 | Esoph J Roberts 12 x 16 x 50 | 526284 | LC Fiber optic 50R | 50R | 50R | BR 350 |
| 523640 | Pillsbury-Jesberg Esoph 6 x 8 x 32 | 526640 | LC Pills-Jesberg 523640 | 32 | 32 | |
| 523642 | Pillsbury-Jesberg Esoph 6.5 x 10 x 35 | 526642 | LC Pills-Jesberg 523642 | 35PJ | 35 | |
| 523644 | Pillsbury-Jesberg Esoph 7 x 10 x 42 | 526644 | LC Pills-Jesberg 523644 | 42 | 42 | |
| 523646 | Pillsbury-Jesberg Esoph 8 x 2 x 45 | 526646 | LC Pills-Jesberg 523646 | 45PJ | 45 | |
| 523648 | Pillsbury-Jesberg Esoph 10 x 14 x 29 | 526648 | LC Pills-Jesberg 523648 | 29 | 29 | |
| 523649 | Pillsbury-Jesberg Esoph 10 x 14 x 50 | 526649 | LC Pills-Jesberg 523649 | 50PJ | 50 | |
| 523650P | Esoph S Jesberg FO 6 x 8 x 32 | 526268 | LC Fiber optic 32J | 32J | 32J | BR 375 |
| 523652 | Esoph S Jesberg FO 6.5 x 10 x 35 | 526270 | LC Fiber optic 35J | 35J | 35J | BR 377 |
| 523654 | Esoph S Jesberg FO 7 x 10 x 42 | 526276 | LC Fiber optic 42J | 42J | 42J | BR 379 |
| 523656 | Esoph S Jesberg FO 8 x 12 x 45 | 526278 | LC Fiber optic 45J | 45J | 45J | BR 381 |
| 523658 | Esoph S Jesberg FO 10 x 14 x 29 | 526264 | LC Fiber optic 29J | 29J | 29J | BR 383 |
| 523660P | Esoph S Jesberg FO 10 x 14 x 50 | 526282 | LC Fiber optic 50J | 50J | 50J | BR 385 |
| 523675 | Esoph Forbes Child | 526020 | LC Fiber optic 16A | 16A | 16A | BR 360 |
| 523676 | Esoph Forbes Adolescent | 526042 | LC Fiber optic 19 | 19 | 19 | BR 365 |
| 523677 | Esoph Forbes Adult | 526046 | LC Fiber optic 22 | 22 | 22 | BR 370 |
| 527664 | Henderson Mitchell Dilating Esoph | 526068 | LC Fiber optic 45 | 45 | 45 | |
| 528700 | Bellina Specula Small | 528710-2* | LC for Bellina Specula | | | |
| 528701 | Bellina Specula Medium | 528710-2* | LC for Bellina Specula | | | |
| 528702 | Bellina Specula Large | 528710-2* | LC for Bellina Specula | | | |

*LEFT/RIGHT SPECIFIC LIGHT CARRIERS: L, R, 2

# CARDIAC, VASCULAR AND THORACIC (CVT) INSTRUMENTS

## CHAPTER OVERVIEW

The Pilling® Brand is recognized worldwide for excellence achieved in the area of Cardiac, Vascular and Thoracic (CVT) surgical instrumentation. Proprietary Pilling® CVT Instruments were co-developed with leading surgeons to help improve the standard of patient care and offer a wide selection of unique designs and patterns.

Pilling® CVT Surgical Instruments are high-quality OR grade instruments made of German and US Stainless Steel. Specialty instruments include retractors for IMA takedown and cardiac procedures as well as hand-held instruments used in Mediastinoscopy and Thoracoscopy procedures.

## PRODUCTS

Our full line of Pilling® CVT Instruments includes:

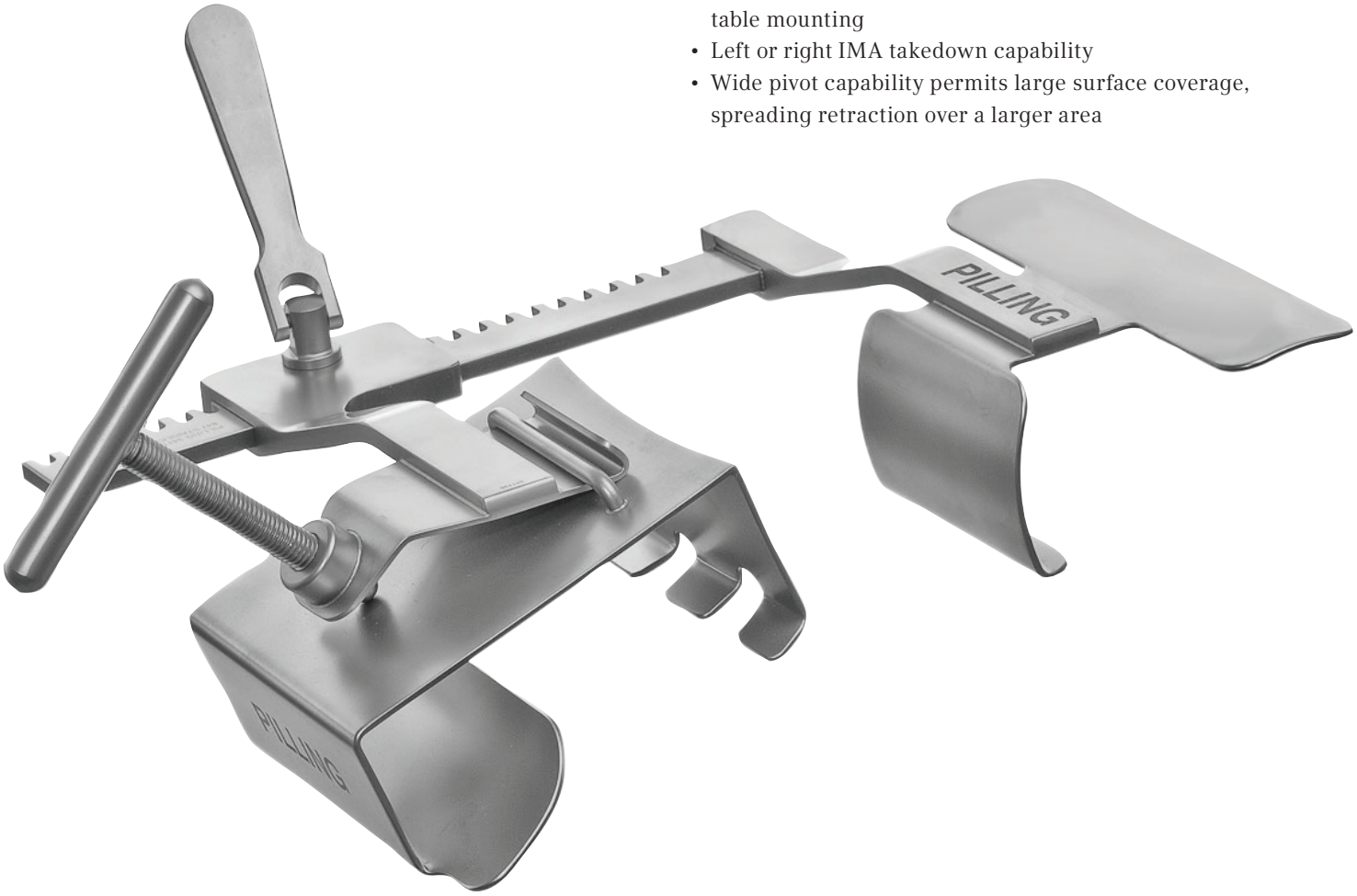
- Retractors: IMA, Sternal and Rib Spreaders
- Technique® Needle Holders, Forceps and Scissors
- Mediastinoscopy Instruments
- Thoracic Instruments
- Instrumentation for Video-Assisted Thoracoscopy
- Vascular Instruments
- And many more

## FEATURED PRODUCT

Pilling® IMA Retractor

*Surgeon Control by Design*

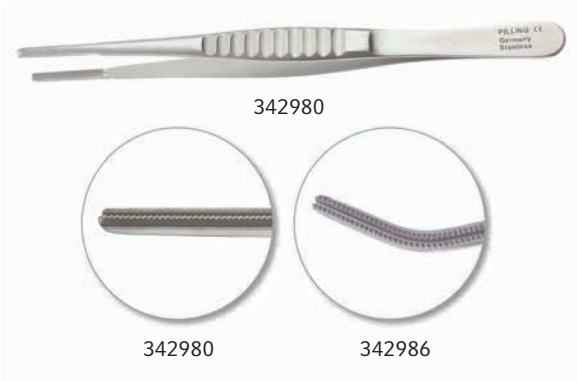
- Three-point retraction system spreads and lifts simultaneously for providing better visualization
- Patient-mounted design eliminates cumbersome table mounting
- Left or right IMA takedown capability
- Wide pivot capability permits large surface coverage, spreading retraction over a larger area



# CVT FORCEPS AND CLAMPS

## Tissue Forceps

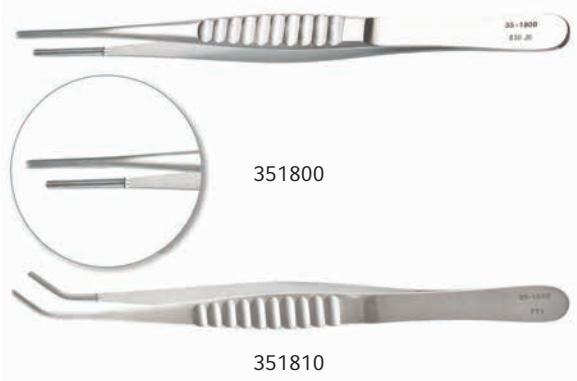
### DEBAKEY® THORACIC TISSUE FORCEPS




The row of 1 by 2 DeBakey®-type Serrations on the tips are designed to be large and strong enough to handle relatively large masses of tissue. Because of the groove construction and light spring tension, they may be used to hold and handle suture material as well. These forceps are of heavier design than the DeBakey® Vascular Tissue Forceps (351800 through 351814). The distal portion is tapered to a 3 mm DeBakey®-type Tip.

| ITEM # | DESCRIPTION |
|---|---|
| 342980 | Straight, 3 mm tip, 6-1/8" (15.5 cm) |
| 342981 | Straight, 3 mm tip, 7-3/4" (19.5 cm) |
| 342982 | Straight, 3 mm tip, 9-1/2" (24 cm) |
| 342984 | Straight, 3 mm tip, 12" (30.5 cm) |
| 342986 | Angled, 3 mm tip, 12" (30.5 cm) |

### DEBAKEY® VASCULAR TISSUE FORCEPS



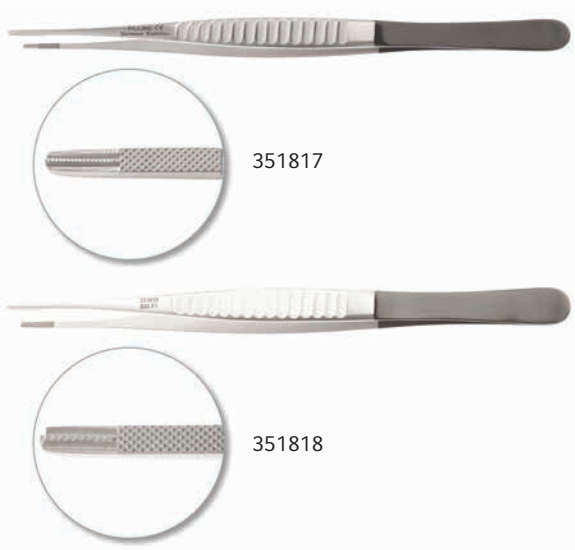

Standard. The distal 2 cm of these forceps is a narrow DeBakey®-type Tip with a width of 2 mm. The body of the instrument is constructed especially to prevent feathering and all pins and projections have been omitted to help eliminate suture catchers. Jaws are very well fitted for handling tiny vessels as well as the smallest suture material.

| ITEM # | DESCRIPTION |
|---|---|
| 351800 | Straight, 2 mm tip, 6" (15 cm) |
| 351802 | Straight, 2 mm tip, 7-3/4" (19.5 cm) |
| 351804 | Straight, 2 mm tip, 9-1/2" (24 cm) |
| 351808 | Straight, 2 mm tip, 12" (30.5 cm) |
| 351810 | Angled, 2 mm tip, 6" (15 cm) |
| 351812 | Angled, 2 mm tip, 7-3/4" (19.5 cm) |
| 351814 | Angled, 2 mm tip, 9-1/2" (24 cm) |

# CVT FORCEPS AND CLAMPS

## Tissue Forceps

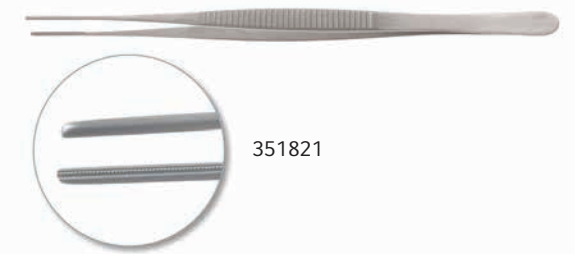
### DEBAKEY® CARBIDE FORCEPS




DeBakey®-type Jaws at distal tip. Tungsten carbide insert behind the jaw for secure needle pulling actions.

| ITEM # | DESCRIPTION |
|---|---|
| 351815 | Regular forceps, 6" (15 cm), TC |
| 351817 | Regular forceps, 7-3/4" (19.5 cm), TC |
| 351819 | Regular forceps, 9-1/2" (24 cm), TC |
| 351818 | Delicate forceps, 7-3/4" (19.5 cm), TC |
| 351824 | Delicate forceps, 9-1/2" (24 cm), TC |

### DEBAKEY® ULTRALIGHT FORCEPS



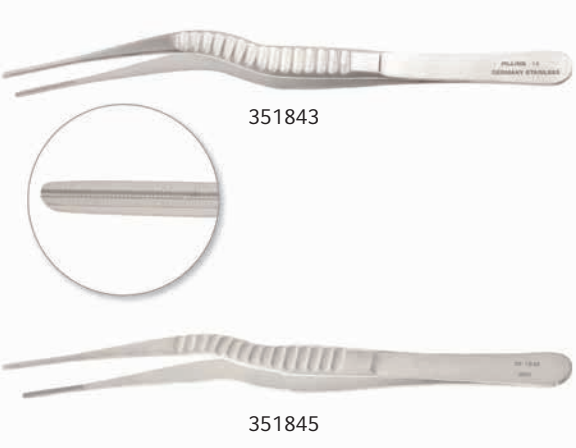

Approximately one-half the weight of standard DeBakey® Forceps, similar to that of titanium but at a much lower price. Ebonized stainless steel to reduce glare. Reduced tension minimizes fatigue and allows better control of delicate tissues.

| ITEM # | DESCRIPTION |
|---|---|
| 351820 | 1.5 mm tip, 6" (15 cm) |
| 351821 | 1.5 mm tip, 7-3/4" (19.5 cm) |

# CVT FORCEPS AND CLAMPS

## Tissue Forceps

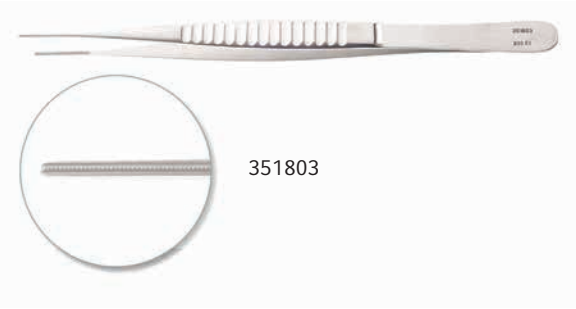
### VASCULAR DEBAKEY® BAYONET TISSUE FORCEPS




DeBakey®-type Jaws with a bayonet shape. Angled handles for difficult access and increased visibility.

| ITEM # | DESCRIPTION |
|---|---|
| 351843 | Standard, 2.0 mm tip, 7-3/4" (19.5 cm) |
| 351845 | Fine, 1.3 mm tip, 7-3/4" (19.5 cm) |

### DEBAKEY® DIETHRICH DELICATE VASCULAR TISSUE FORCEPS




Designed for micro-vascular and coronary artery surgery. The distal portion is tapered to a 1 mm extra-fine DeBakey®-type Tip.

| ITEM # | DESCRIPTION |
|---|---|
| 351801 | Straight, 1 mm tip, delicate, 1 mm tip, 6" (15 cm) |
| 351803 | Straight, 1 mm tip, delicate, 1 mm tip, 7-3/4" (19.5 cm) |
| 351806 | Straight, 1 mm tip, delicate, 1 mm tip, 9-1/2" (24 cm) |

### DEBAKEY® DIETHRICH DIAMA-GRIP TISSUE FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 351803DG | Straight, 1.3 mm tip, 7-3/4" (20 cm) |

# CVT FORCEPS AND CLAMPS

## Tissue Forceps

### COOLEY JAW VASCULAR TISSUE FORCEPS

356000

Narrow double row of fine serrations on each jaw. For delicate handling of tiny vessels and fragile tissue.

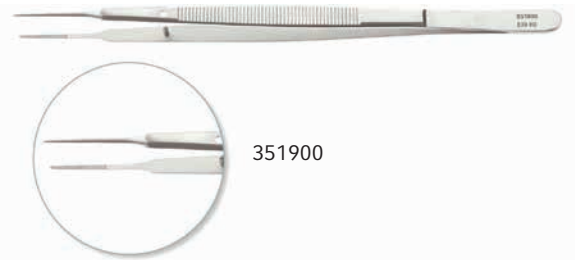
| ITEM # | DESCRIPTION |
|---|---|
| 356000 | 6-1/4" (16 cm) |
| 356002 | 8" (21 cm) |
| 356003 | 9-1/2" (24 cm) |

### CORONARY ULTRA FINE TISSUE FORCEPS

351838

| ITEM # | DESCRIPTION |
|---|---|
| 351837 | 7" (18 cm) |
| 351838 | 8" (21 cm) |
| 351839 | 9" (23 cm) |

### GERALD DRESSING FORCEPS



351900

These are full-size dressing forceps with only the distal portion narrowed to provide light, delicate tips that maintain alignment.

| ITEM # | DESCRIPTION |
|---|---|
| 351900 | Serrated, 7" (18 cm) |
| 351902 | Serrated, 9-3/4" (25 cm) |

### GERALD DRESSING FORCEPS

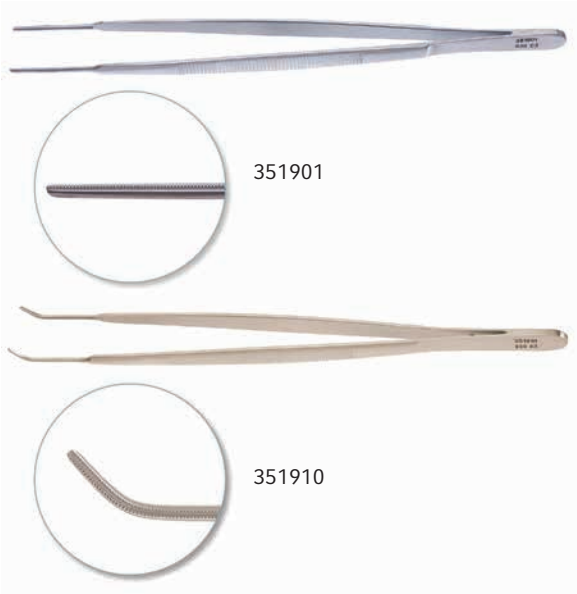
466225

| ITEM # | DESCRIPTION |
|---|---|
| 466225 | Straight, serrated, 1.1 mm tip, 6-7/8" (17.5 cm), TC |

# CVT FORCEPS AND CLAMPS

## Tissue Forceps

### GERALD DEBAKEY® TISSUE FORCEPS




Delicate, tapered DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 351901 | 7" (18 cm) |
| 351908 | 8" (20.5 cm) |
| 351909 | 9-1/2" (24 cm) |
| 351910 | Angled, 6-7/8" (17.5 cm) |

### GERALD TISSUE FORCEPS

351905

These are full-size tissue forceps with only the distal portion narrowed to provide light, delicate tips that maintain alignment.

| ITEM # | DESCRIPTION |
|---|---|
| 351905 | 1 x 2 teeth, 7" (18 cm) |
| 351907 | 1 x 2 teeth, 9-3/4" (25 cm) |

# CVT FORCEPS AND CLAMPS

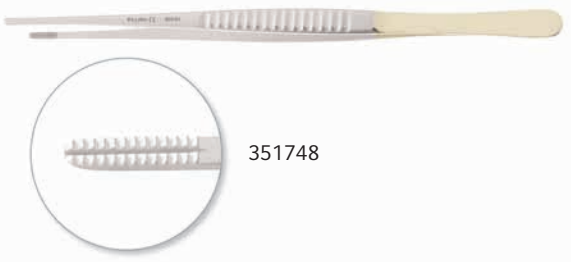
## Tissue Forceps

### GERALD DIAMA-GRIP DRESSING FORCEPS

351901DG

| ITEM # | DESCRIPTION |
|---|---|
| 351901DG | Straight, 1.1 mm tip, 7" (18 cm) |

### CARDIAC VALVE FORCEPS



351748

| ITEM # | DESCRIPTION |
|---|---|
| 351748 | 9-1/2" (25 cm) |

### WHEELER TECHNIQUE® PLAQUE AND VESSEL FORCEPS

351827

Very powerful grip at tips.

| ITEM # | DESCRIPTION |
|---|---|
| 351825 | DeBakey®-type Jaw, 1.6 mm, 5-1/2" (14 cm) |
| 351827 | DeBakey®-type Jaw, 1.6 mm, 7-1/8" (18 cm) |
| 351829 | DeBakey®-type Jaw, 1.6 mm, 8-3/4" (22 cm) |

### NELSON TISSUE FORCEPS

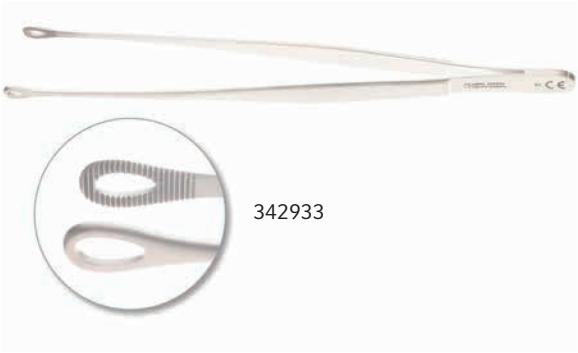
342950

| ITEM # | DESCRIPTION |
|---|---|
| 342950 | 6 x 7 sharp, fine teeth, 9" (23 cm) |

# CVT FORCEPS AND CLAMPS

## Tissue Forceps

### SINGLEY TISSUE FORCEPS




Serrated ring end 8.5 mm wide. Medium-heavy construction.

| ITEM # | DESCRIPTION |
|---|---|
| 342933 | 9" (23 cm) |

### TUTTLE THORACIC TISSUE FORCEPS

Light construction. Ring tips 6.8 mm wide.

| ITEM # | DESCRIPTION |
|---|---|
| 342935 | 9" (23 cm) |

## Micro Forceps

### MICRO GRASPING FORCEPS

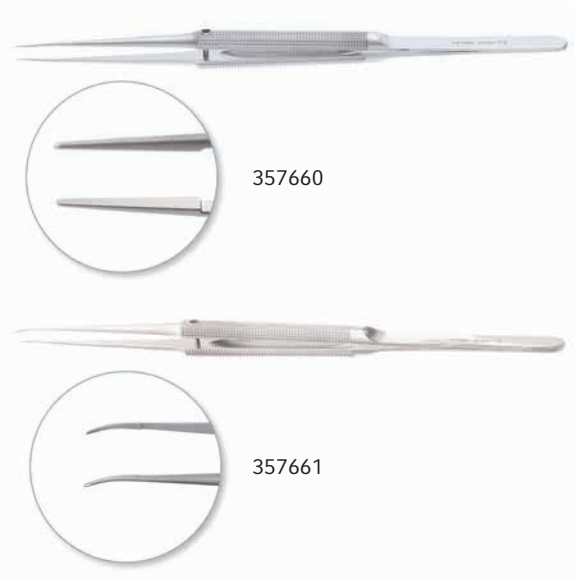
8 mm round handle. 0.5 mm wide tips have fine cross-hatch serrations for secure yet delicate grip.

| ITEM # | DESCRIPTION |
|---|---|
| 357681 | Straight, 7-7/8" (20 cm) |

# CVT FORCEPS AND CLAMPS

## Micro Forceps

### MICRO TYING FORCEPS




Round handle, 8 mm diameter.

| ITEM # | DESCRIPTION |
|---|---|
| 357658 | Straight 0.5 mm wide tip with platform, 6" (15 cm) |
| 357659 | Curved 0.5 mm wide tip with platform, 6" (15 cm) |
| 357660 | Straight 0.5 mm wide tip with platform, 7-1/8" (18 cm) |
| 357661 | Curved 0.5 mm wide tip with platform, 7-1/8" (18 cm) |

### TEW TYING FORCEPS

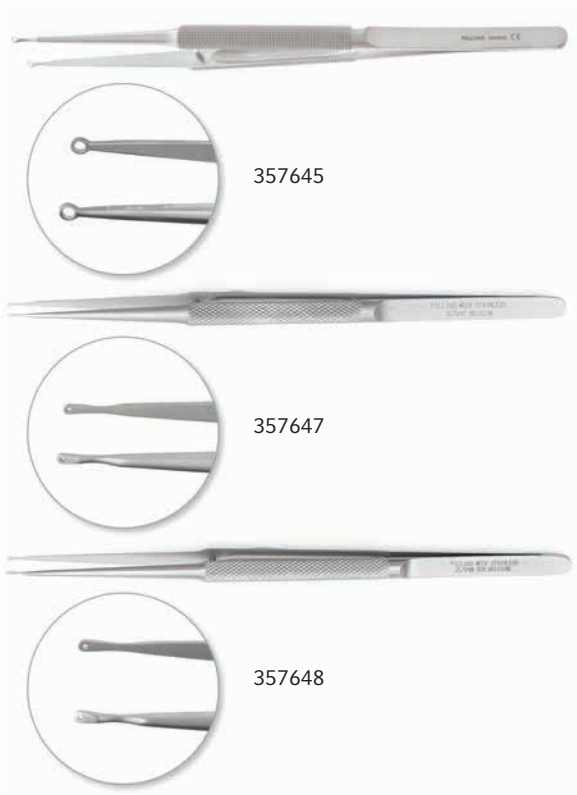
Straight jaw with longitudinal serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 394430 | Straight, 0.6 mm tip, 7-1/8" (18 cm) |
| 394431 | Straight, 1 mm tip, 7-1/8" (18 cm) |

# CVT FORCEPS AND CLAMPS

## Micro Forceps

### MICRO RING TIP FORCEPS




The 0.5 mm ring tip forceps are designed for the mammary/coronary arteries and other 1-3 mm sized vessels (e.g., tibial arteries in the lower leg). The 1.5 mm ring tip forceps are designed for larger vessels such as the saphenous vein, femoral arteries, etc. The ring tip forceps allows for a more secure grip on the tissue, yet it still has a very fine tip. The sizing 1.5 mm and 0.5 mm pertains to the size of the hole in the tip.

| ITEM # | DESCRIPTION |
|---|---|
| 357645 | Saphenous/aorta, 1.5 mm ring tip forceps, 7" (18 cm) |
| 357647 | Mammary/coronary, 0.5 mm ring tip forceps, 7" (18 cm) |
| 357648 | Mammary/coronary, 0.5 mm ring tip forceps, 7-3/4" (20 cm) |

### MICRO DIAMA-GRIP RING FORCEPS

Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 357647DG | Small ring tip, 1 mm, 7" (18 cm) |
| 357648DG | Small ring tip, 1.2 mm, 8" (21 cm) |
| 357645DG | Large ring tip, 1.5 mm, 7" (18 cm) |

# CVT FORCEPS AND CLAMPS

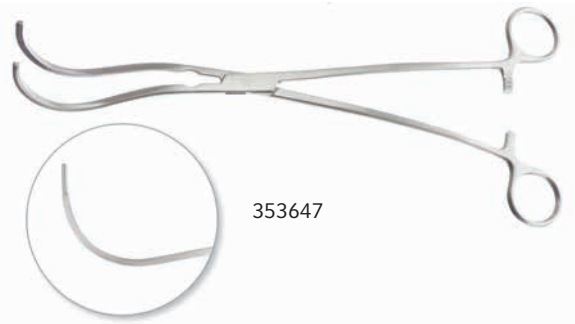
## Micro Forceps

### DENIS MICRO RING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 358007 | Straight, smooth, 1 mm tip, Diama-Grip jaws, 8-1/4" (21 cm) |

## Ligature Carriers

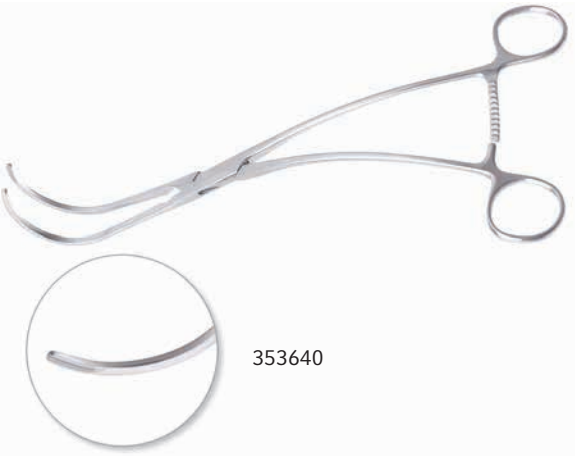
### DARLING TAPE PASSING CLAMP "AORTA GO AROUND"




Specifically designed for passing ligature or tapes around the intrarenal abdominal aorta. Slightly angled, curved jaw with short segment of DeBakey®-type Teeth.

| ITEM # | DESCRIPTION |
|---|---|
| 353647 | Curved, DeBakey® Jaw, 2" (5 cm) tip length, curved shaft, 11-3/4" (29.5 cm) |

### DEBAKEY® MODIFIED SEMB LIGATURE CARRIER



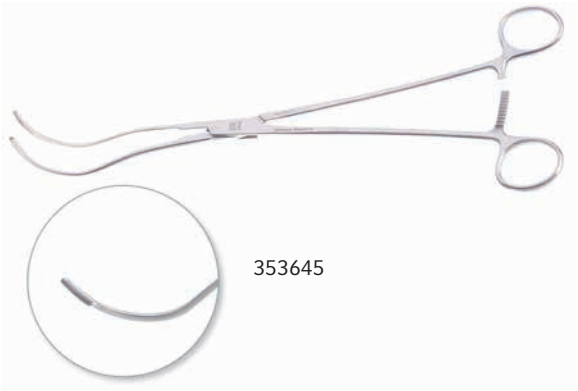

The distal 1.5 mm of the jaws are a DeBakey®-type Design to securely hold a ligature or umbilical tape for passage around the aorta. Jaws curve on 2.5 cm radius.

| ITEM # | DESCRIPTION |
|---|---|
| 353640 | 10-3/8" (26.5 cm) |

# CVT FORCEPS AND CLAMPS

## Ligature Carriers

### FAVALARO-SEMB LIGATURE CARRIERS




Jaws are constructed so that only the distal DeBakey®-type surfaces approximate. The smooth portion of the jaws remain open to prevent inadvertent clamping of the aortic wall.

| ITEM # | DESCRIPTION |
|---|---|
| 353645 | Half curved, 11-1/4" (28.5 cm) |
| 353646 | Full curved, 10-7/8" (27.5 cm) |

### SEMB DISSECTING FORCEPS

For dissecting and breaking adhesions.

| ITEM # | DESCRIPTION |
|---|---|
| 342710 | Slight curve, 10-1/4" (26 cm) |

### SEMB LIGATURE FORCEPS

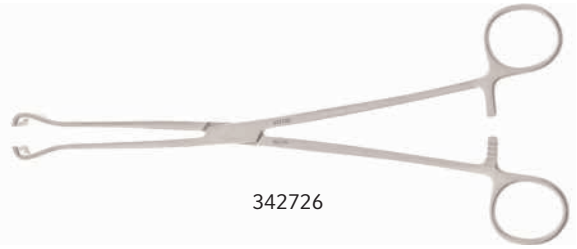
Acute curve. Tips perforated for use as a ligature carrier.

| ITEM # | DESCRIPTION |
|---|---|
| 342711 | 9-3/4" (25 cm) |

# CVT FORCEPS AND CLAMPS

## Bronchus and Lung Clamps

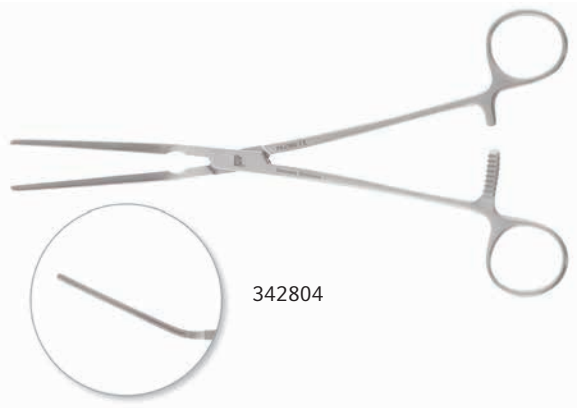
### BABCOCK TISSUE FORCEPS



342726

| ITEM # | DESCRIPTION |
|---|---|
| 183010 | 6-1/4" (16 cm) |
| 183020 | 7-7/8" (20 cm) |
| 342725 | Serrated, 3/8" (9.5 mm) jaw, 9-1/2" (24 cm) |
| 342726 | Serrated, 1/2" (12.5 mm) jaw, 9-1/2" (24 cm) |

### BRONCHUS CLAMP

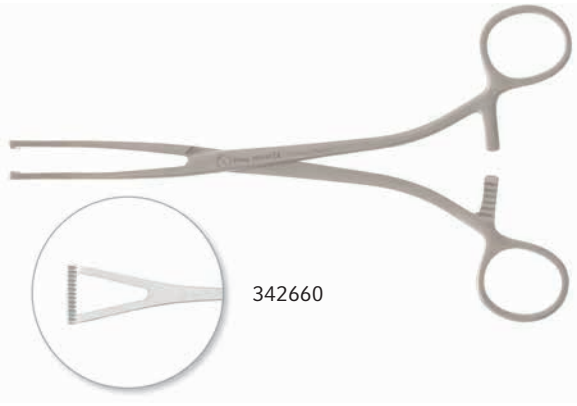


342804

25 degree angled DeBakey®-type Jaws are 5.5 cm long beyond angle.

| ITEM # | DESCRIPTION |
|---|---|
| 342804 | 9" (23 cm) |

### COLLIN LUNG TISSUE FORCEPS



342660

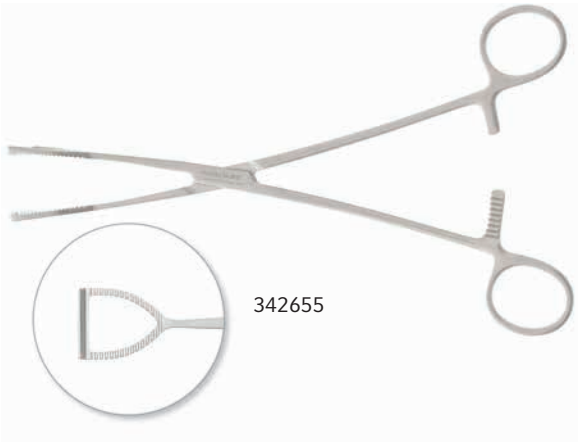
Light, screw lock box design. Teeth across entire distal edge.

| ITEM # | DESCRIPTION |
|---|---|
| 342660 | 5/8" (16 mm) jaw, 8" (20.5 cm) |
| 342662 | 1-1/8" (28.5 mm) jaw, 8" (20.5 cm) |
| 342664 | 1-1/8" (28.5 mm) jaw, 9" (23 cm) |

# CVT FORCEPS AND CLAMPS

## Bronchus and Lung Clamps

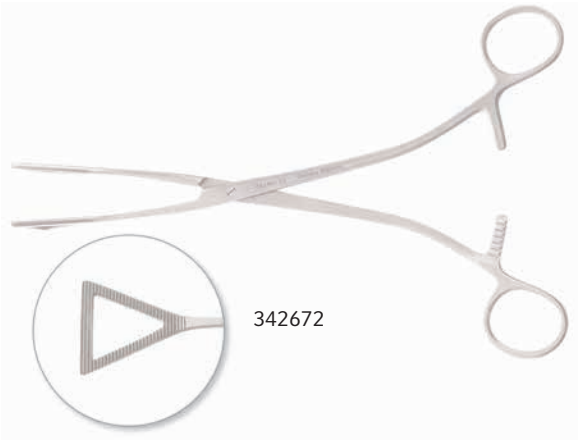
### DEBAKEY® LUNG GRASPING FORCEPS




DeBakey®-type Distal Sections on specially shaped fenestrated jaws provide a soft but secure hold with minimum tissue damage. Distal edge of jaws is 2.5 cm wide.

| ITEM # | DESCRIPTION |
|---|---|
| 342655 | 9" (23 cm) |

### DUVAL LUNG TISSUE FORCEPS



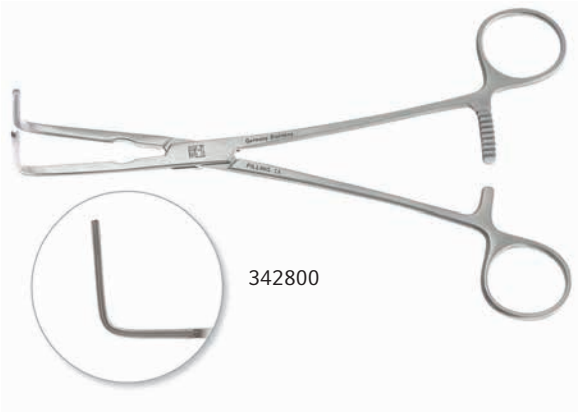

Light, screw lock box design. DeBakey®-type, serrated Jaws. Jaw width 1" (2.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 342670 | 8" (21 cm) |
| 342672 | 9" (23 cm) |

# CVT FORCEPS AND CLAMPS

## Bronchus and Lung Clamps

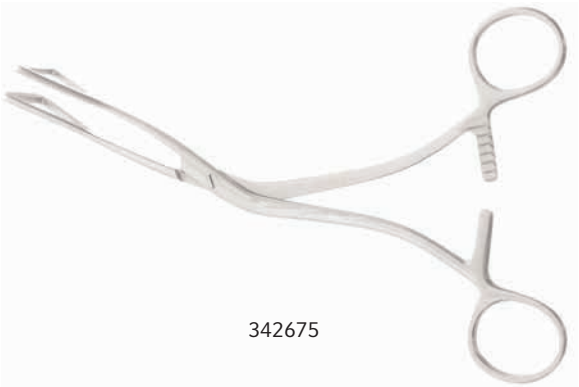
### LEES BRONCHUS CLAMPS




Also serves as a general purpose vascular clamp. DeBakey®-type Jaw is 4 cm long beyond angle.

| ITEM # | DESCRIPTION |
|---|---|
| 342800 | Right angle, 8-1/8" (20.5 cm) |
| 342802 | Angled, 10" (25.5 cm) |

### LOVELACE LUNG TISSUE FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 342675 | Angled to side, 1" (2.5 cm) DeBakey®-type Jaw, 7-1/2" (19 cm) |

### REVUELTA-GARCIA ALLIS CURVED CLAMPS

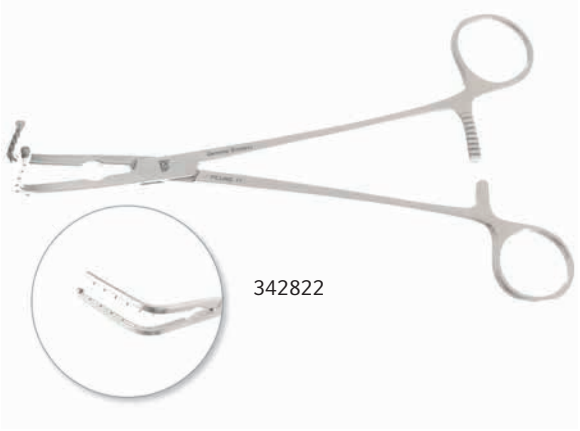
Half curved, DeBakey® Jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 351743 | 10-1/8" (25.5 cm) |
| 351744 | 10-7/8" (27.5 cm) |

# CVT FORCEPS AND CLAMPS

## Bronchus and Lung Clamps

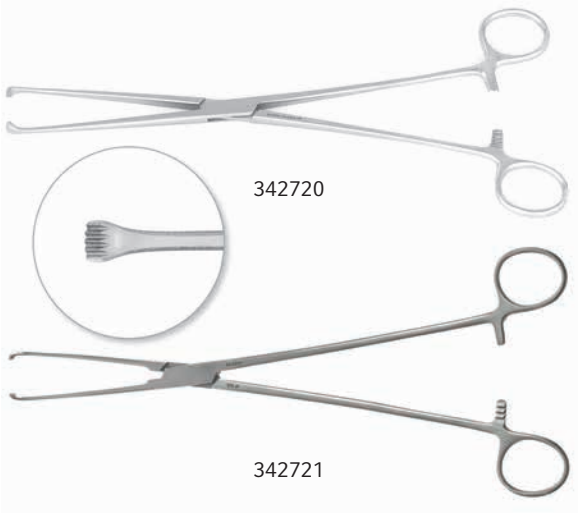
### SAROT BRONCHUS CLAMPS




Teeth ensure a non-slipping hold on bronchus. Clamps are made in left and right models so that spiked blade will never be passed beneath the bronchus, thus avoiding trauma. Adult size 9-1/4" (23.4 cm) length to angle, 3.3 cm jaw length.

| ITEM # | DESCRIPTION |
|---|---|
| 342822 | Right |
| 342823 | Left |

### WILLAUER-ALLIS TISSUE FORCEPS




Extra long, springy, Allis-type forceps with 5 x 6 teeth. Dull, non-glare finish, stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 342720 | 10" (25.5 cm) |
| 342721 | 11-1/4" (28.5 cm) |

# CVT FORCEPS AND CLAMPS

## Chest Drain Pulling Clamp

### CHEST DRAIN PULLING CLAMP

Pointed Rochester-Pean-type hemostat with three spikes in the jaw for tunneling, grasping and pulling chest drains.

| ITEM # | DESCRIPTION |
|---|---|
| 343590 | 8-5/8" (22 cm) |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Bulldog® Clamps

### DEBAKEY® CROSS ACTION BULLDOG® CLAMPS

353050

353052

353054

353062

These DeBakey®-type Jaw Clamps are used for temporary occlusion of major peripheral arteries. They are made in several sizes to facilitate their application under varying circumstances. They present a relatively smooth surface with particular attention to the elimination of suture-catching projections.

| ITEM # | DESCRIPTION |
|---|---|
| 353050 | Straight, 3/4" (2 cm) tip length, 3-1/8" (8 cm) |
| 353052 | Straight, 1-1/8" (3 cm) tip length, 3-1/2" (9 cm) |
| 353054 | Straight, 2" (5 cm) tip length, 4-1/4" (11 cm) |
| 353056 | Straight, 2-5/8" (6.8 cm) tip length, 4-7/8" (12.5 cm) |
| 353060 | Curved, 5/8" (1.5 cm) tip length, 2-7/8" (7.5 cm) |
| 353062 | Curved, 1" (2.5 cm) tip length, 3-1/4" (8 cm) |
| 353064 | Curved, 1-5/8" (4 cm) tip length, 3-7/8" (10 cm) |
| 353066 | Curved, 2-1/8" (5.5 cm) tip length, 4-1/4" (11 cm) |

353066

# BULLDOG® AND MICRO VESSEL CLAMPS

## Bulldog® Clamps

### DIETHRICH BULLDOG® CLAMPS

353150

353151

353152

353153

Low tension clamps for coronary arteries.

| ITEM # | DESCRIPTION |
|---|---|
| 353150 | Straight, 3/8" (9.5 mm) jaw |
| 353151 | Straight, 1/2" (12 mm) jaw |
| 353152 | Straight, 3/4" (20 mm) jaw |
| 353153 | Angled, 5/16" (8 mm) jaw |
| 353154 | Angled, 1/2" (12 mm) jaw |
| 353155 | Angled, 3/4" (20 mm) jaw |

353154

353155

### EFFLER-GROVES SPECIAL LIGHTWEIGHT BULLDOG® CLAMP

355819

Delicate model for clamping the mammary artery.

| ITEM # | DESCRIPTION |
|---|---|
| 355819 | 2-3/4" (7 cm) |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Bulldog® Clamps

### GLOVER STYLE BULLDOG® CLAMPS

353100

353102

353105

353112

With DeBakey®-type Jaws. These clamps are designed to permit regulation of the tension by means of an adjusting screw. The largest sizes are made specifically for temporary occlusion of large arteries such as the carotid, subclavian and iliac.

| ITEM # | DESCRIPTION |
|---|---|
| 353100 | Straight, 3/4" (2 cm) jaw, 2-1/4" (5.5 cm) |
| 353102 | Straight, 1-1/4" (3.5 cm) jaw, 2-3/4" (7 cm) |
| 353105 | Straight, 1-5/8" (4 cm) jaw, 3-1/2" (9 cm) |
| 353110 | Curved, 5/8" (1.5 cm) jaw, 2" (5 cm) |
| 353112 | Curved, 1" (2.5 cm) jaw, 2-1/2" (6 cm) |
| 353115 | Curved, 1-3/8" (3.5 cm) jaw, 3-1/8" (8 cm) |
| 353120 | Angled, 1-1/4" (3.5 cm) jaw, 1-7/8" (5 cm) |

353120

# BULLDOG® AND MICRO VESSEL CLAMPS

## Bulldog® Clamps

### HESS ANGULAR MOSQUITO TIP SERREFINE

353025

The pointed, serrated tips greatly facilitate cannulation of very small blood vessels where exposure is limited. The weak spring avoids crushing the vasculature.

| ITEM # | DESCRIPTION |
|---|---|
| 353025 | 2-1/8" (5.5cm) |

### JACOBSON BULLDOG® CLAMPS

353131

353132

| ITEM # | DESCRIPTION |
|---|---|
| 353131 | Straight, 1-7/8" (5 cm) |
| 353132 | Curved, 1-5/8" (4.5 cm) |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Bulldog® Clamps

### JOHNS HOPKINS (BLALOCK) BULLDOG® CLAMPS

353001

353002

353003

| ITEM # | DESCRIPTION |
|---|---|
| 353001 | Straight, 1-1/2" (4 cm) |
| 353002 | Straight, 1-7/8" (5 cm) |
| 353003 | Straight, 2-1/4" (5.5 cm) |
| 353011 | Curved, 1-1/2" (4 cm) |
| 353012 | Curved, 1-7/8" (5 cm) |
| 353014 | Curved, 2-1/2" (6.5 cm) |
| 353016 | Curved, 3" (7.5 cm) |

353012

353014

### SANTULLI ANGULAR MODEL BULLDOG® CLAMP

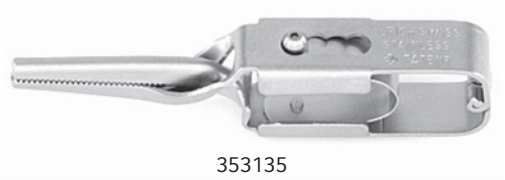
353070

| ITEM # | DESCRIPTION |
|---|---|
| 353070 | Angled, DeBakey® Jaw length 1-5/8" (4 cm) |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Bulldog® Clamps

### SENNING FEATHERWEIGHT BULLDOG® CLAMPS



353135

353136

353137

353138

Very lightweight at 2 grams. Available in four tensions. Tension may be readjusted if necessary. Parallel jaws consist of double, opposing, finely serrated rows. 1-3/4" (4.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 353135 | No. 1, Strong |
| 353136 | No. 2, Medium Strong |
| 353137 | No. 3, Medium Light |
| 353138 | No. 4, Light |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Bulldog® Clamps

### WOOD BULLDOG® CLAMPS

353123

353125

353124

353126

Strong closing pressure.

| ITEM # | DESCRIPTION |
|---|---|
| 353123 | Straight, 3/8" (8 mm) jaw, 1-3/4" (4.5 cm) |
| 353125 | Straight, 1/2" (12 mm) jaw, 1-7/8" (5 cm) |
| 353127 | Straight, 3/4" (19 mm) jaw, 2" (5 cm) |
| 353124 | Angled, 3/8" (8 mm) jaw, 1-5/8" (4 cm) |
| 353126 | Angled, 1/2" (12 mm) jaw, 1-3/4" (4.5 cm) |
| 353128 | Angled, 3/4" (19 mm) jaw, 1-7/8" (5 cm) |

353128

### WYLIE LUMBAR BULLDOG® CLAMP

353075

Jaw is more gently curved than the standard DeBakey® Bulldog® Jaw. Designed for placement posterior to the aorta for occlusion of lumbar arteries.

| ITEM # | DESCRIPTION |
|---|---|
| 353075 | 7/8" (2 cm) jaw, 3" (7.5 cm) |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Micro Vessel Clamps

### BRACHIAL LARGE VESSEL CLIPS

065110

24 mm blade, 2.5 mm wide at tip. Overall length 1.61" (4 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 065110 | Straight |
| 065111 | Tapered |

### BULLDOG® CLAMP APPLYING FORCEPS

353035

This long clamp makes fast application and removal of any Bulldog® Clamp an easy task, even in the most inaccessible spot.

| ITEM # | DESCRIPTION |
|---|---|
| 353035 | 9-1/2" (24 cm) |

### KLEINERT-KUTZ MICRO VESSEL CLIPS

065105

065145

| ITEM # | DESCRIPTION |
|---|---|
| 065100 | Straight blade, 1 x 3 mm, 0.34" (8.5 mm) |
| 065105 | Straight blade, 1 x 5 mm, 0.40" (10 mm) |
| 065125 | Angled blade, 1 x 6 mm |
| 065145 | Curved blade, 1 x 5 mm |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Micro Vessel Clamps

### TEMPORARY OCCLUSION CLIPS

065108

| ITEM # | DESCRIPTION |
|---|---|
| 065108 | 7 x 2 mm blade |
| 065109 | 12 x 2 mm blade |

### LOUISVILLE MICRO VESSEL APPROXIMATOR WITH CLIPS

065172

With suture staying frame.

| ITEM # | DESCRIPTION |
|---|---|
| 065172 | 1.5 x 8 mm blades, 1/2" (12.5 mm) bar |
| 065173 | 1 x 5 mm blades, 7/16" (11 mm) bar |

### KLEINERT-KUTZ MICRO CLIP APPLYING FORCEPS

065155

| ITEM # | DESCRIPTION |
|---|---|
| 065155 | 2-1/2" (6.5 cm) |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Micro Vessel Clamps

### RIZZUTI ANGLED MICRO CLIP APPLYING FORCEPS

065175

Applier opens approximator simultaneously or individually.

| ITEM # | DESCRIPTION |
|---|---|
| 065175 | 5-1/2" (14 cm) |

### SCHWARTZ MICRO-BULLDOG® CLAMPS

353041

353042

353043

For temporary occlusion of minor vessels. 1" (2.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 353041 | Straight |
| 353042 | Slight curve |
| 353043 | Acute curve |

### SCHWARTZ CLAMP HOLDING FORCEPS

353040

| ITEM # | DESCRIPTION |
|---|---|
| 353040 | 7-1/2" (19 cm) |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Micro Vessel Clamps

### RENAL PERFUSION CLAMPS

353140

353142

- Designed to reduce risk of intimal damage.
- Eliminates necessity for artery cannulation.
- Minimizes disadvantages of en bloc perfusion and preservation.

| ITEM # | DESCRIPTION |
|---|---|
| 353140 | 10 mm x 15 mm DeBakey®-type Jaw (Pediatric, single renal artery) |
| 353142 | 10 mm x 25 mm DeBakey®-type Jaw (Adult, multiple renal arteries) |

# BULLDOG® AND MICRO VESSEL CLAMPS

## Micro Vessel Clamps

### MICRO-ANEURYSM BULLDOG® CLIPS AND APPLIERS

357580

357581

357582

357583

Closing force is approximately 170 grams.
Recommended for single use only.

| ITEM # | DESCRIPTION |
|---|---|
| 357580 | Straight, 7 mm |
| 357581 | Straight, 8 mm |
| 357582 | Angled, 9 mm |
| 357583 | Slight curve, 9 mm |
| 357586 | Applying forceps for Micro-Aneurysm Clips, 7-1/2" (19 cm) |

*Caution: These clips should be compressed only when properly seated in the appropriate applying forceps, never with the fingers. If compression of a clip is started but the clip is not used, it must be discarded and a new clip used.*

357586

# BULLDOG® AND MICRO VESSEL CLAMPS

## Micro Vessel Clamps

### MINI-ANEURYSM BULLDOG® CLIPS AND APPLIERS

357590

357591

357592

357593

Closing force is approximately 170 grams.
Recommended for single use only.

| ITEM # | DESCRIPTION |
|---|---|
| 357590 | Straight, 4 mm |
| 357591 | Straight, 6 mm |
| 357592 | Curved, 7 mm |
| 357593 | Applying forceps for Mini-Aneurysm Clips, 8-1/4" (21 cm) |

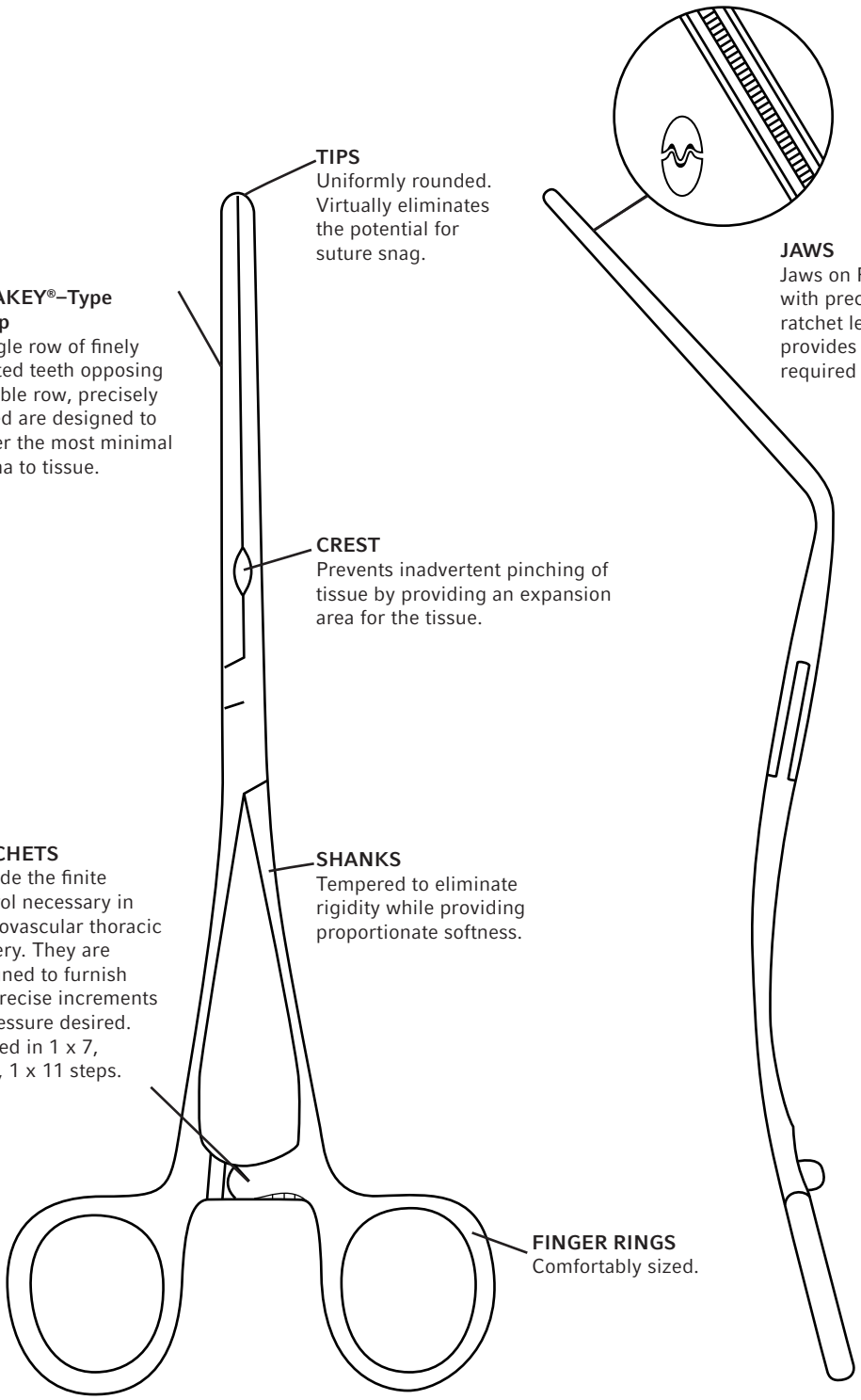
*Caution: These clips should be compressed only when properly seated in the appropriate applying forceps, never with the fingers. If compression of a clip is started but the clip is not used, it must be discarded and a new clip used.*

### MICRO CLIP STERILIZING TRAY

065199

| ITEM # | DESCRIPTION |
|---|---|
| 065199 | 1-3/4" x 2-3/4" x 1/2" (4.5 x 7 x 1.5 cm) |

# PILLING® VASCULAR CLAMPS



**TIPS**
Uniformly rounded. Virtually eliminates the potential for suture snag.

**JAWS**
Jaws on Pilling® Clamps are set with precision. Coordination of ratchet length and jaw setting provides the precise amount of required compression.

**DEBAKEY®–Type Clamp**
A single row of finely serrated teeth opposing a double row, precisely crafted are designed to deliver the most minimal trauma to tissue.

**CREST**
Prevents inadvertent pinching of tissue by providing an expansion area for the tissue.

**RATCHETS**
Provide the finite control necessary in cardiovascular thoracic surgery. They are designed to furnish the precise increments of pressure desired. Offered in 1 x 7, 1 x 9, 1 x 11 steps.

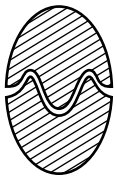
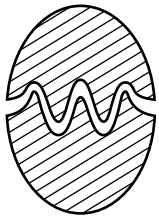
**SHANKS**
Tempered to eliminate rigidity while providing proportionate softness.

**FINGER RINGS**
Comfortably sized.

# PILLING® VASCULAR CLAMPS

## Types of jaws used in Pilling® Cardiovascular Clamps

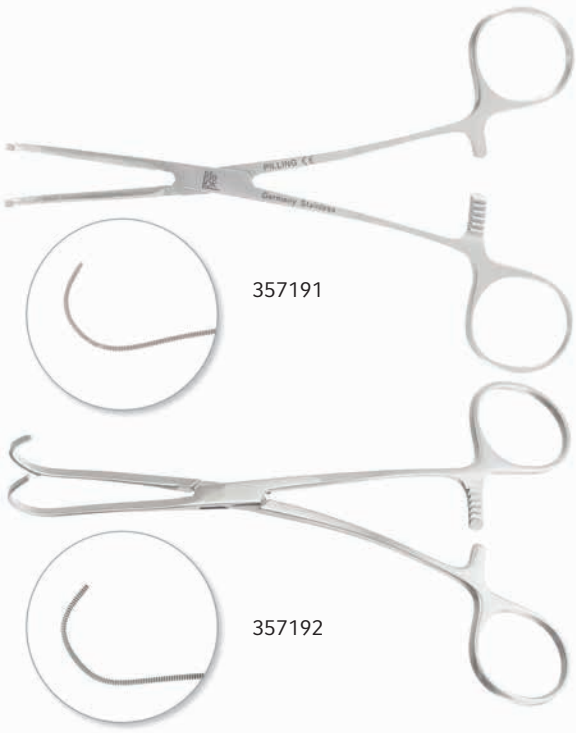
JAW CROSS SECTIONS

| Relative Size | Enlargement | |
|---|---|---|
| DeBakey® – type |  | A single row of serrated teeth opposing a double row. The most commonly used jaw design, (and most imitated). Proven through many years' use at hospitals throughout the world on adult peripheral vascular, aortic occlusion and partial occlusion clamps. |
| Small DeBakey® – type | | A small version of the DeBakey®–type Jaws used on most bulldogs, vascular tissue forceps and numerous pediatric clamps. |
| Extra Fine DeBakey® – type | | The smallest size DeBakey®–type Jaws used on many new pediatric and adult peripheral vascular clamps, bulldogs and forceps. |
| DeBakey® – type 2 x 3 |  | Double row of serrated teeth opposing a triple row. This modified version of the DeBakey® – type Serration, having a broader clamping surface, is used on large clamps for aortic cross clamping and on diseased and calcified arteries. Clamps with the 2 x 3 serration are also used frequently in general surgery as bowel clamps. |
| Cooley | | Two opposing rows of atraumatic teeth. Designed especially for surgery on infants and children as the jaws grasp vessels firmly. Also available on a limited group of adult vascular clamps. |
|  Pediatric, 1 mm | | Narrow, single row of opposing teeth. Designed for neonatal vascular surgery, these clamps have also proven of value in adult surgery of the carotid femoral and popliteal arteries and for creating A.V. Fistulas. |

# VASCULAR CLAMPS

## Pediatric Clamps, 1 mm Jaw

### CASTANEDA PEDIATRIC CLAMPS



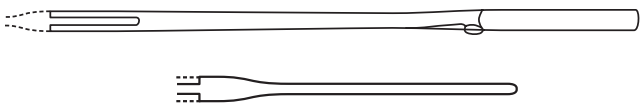

Versatile, multipurpose clamps designed for neonatal use. Long, slightly curved handles, 1 x 6 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 357191 | Long, small jaw, 1 mm thick, 9/16" (1.5 cm), spring handle, 1 x 6 ratchets, 6" (15 cm) |
| 357192 | Long, large jaw, 1 mm thick, 3/4" (2 cm), spring handle, 1 x 6 ratchets, 6" (15 cm) |

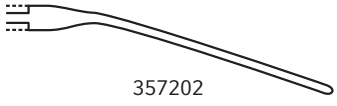
### PILLING® LONG 1 MM PEDIATRIC CLAMPS

To determine the overall length of our vascular clamps, measure the handle type and the jaw type and add measurements together to obtain the overall size. Blades are scribed from the tips in 5 cm graduations.

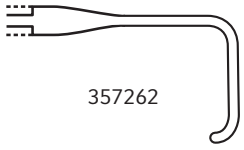
| ITEM # | DESCRIPTION |
|---|---|
| 357200 | Straight handles, 6-1/8" (15.5 cm) |
| 357202 | Straight handles, 6-1/8" (15.5 cm) |
| 357262 | Angled handles, 5-5/8" (14.5 cm) |
| 357270 | Angled handles, 5-7/8" (15 cm) |



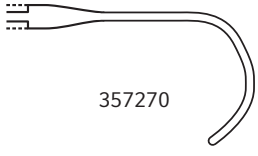
357200



357202



357262



357270

# VASCULAR CLAMPS

## Pediatric Clamps, 1 mm Jaw

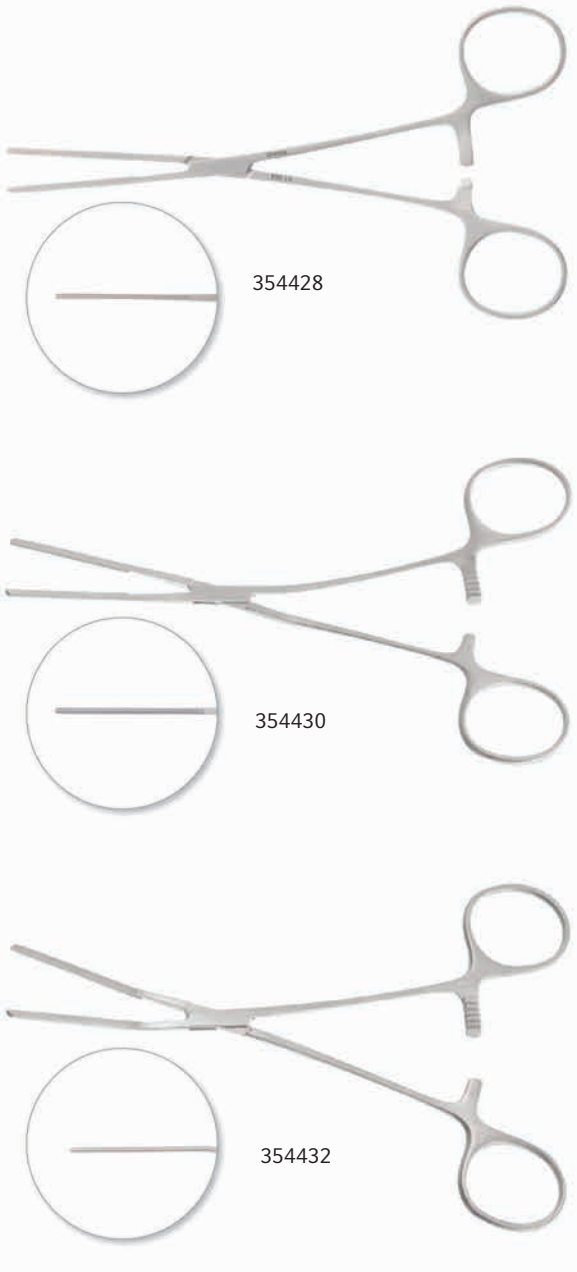
### PILLING® SHORT 1 MM PEDIATRIC CLAMPS

| ITEM # | DESCRIPTION |
|---|---|
| 357100 | Straight handles, 4-5/8" (12 cm) |
| 357102 | Straight handles, 4-1/2" (11.5 cm) |
| 357106 | Straight handles, 4" (10.5 cm) |
| 357110 | Straight handles, 4-1/2" (11.5 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

### DEBAKEY® COARCTATION CLAMPS



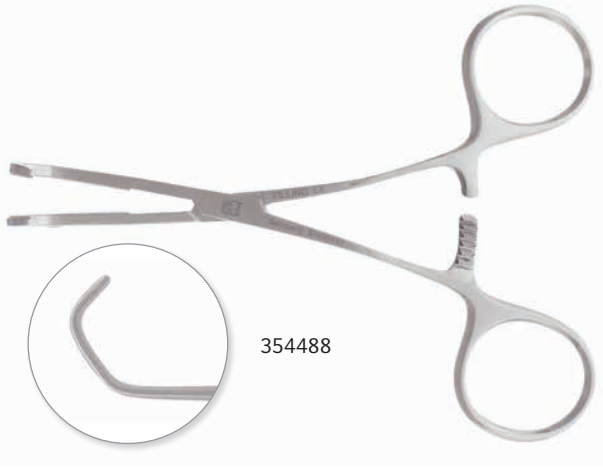

| ITEM # | DESCRIPTION |
|---|---|
| 354428 | Straight, 6-3/8" (16 cm) |
| 354430 | Angled shank, 6-1/4" (16 cm) |
| 354432 | Jaw angled 15 degrees, 6-1/2" (16.5 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

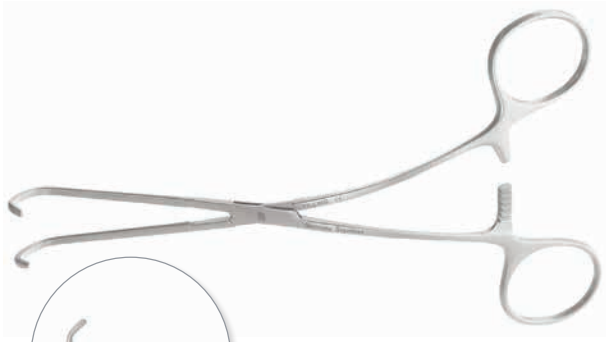
### DEBAKEY® PARTIAL OCCLUSION CLAMPS

| ITEM # | DESCRIPTION |
|---|---|
| 354488 | Small, 4-3/8" (11 cm) |
| 354490 | Medium, 4-3/8" (11 cm) |
| 354494 | Large, 6-1/4" (16 cm) |
| 354496 | Small, extra-long, 6-5/8" (17 cm) |



354488

354490



354494

354496

# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

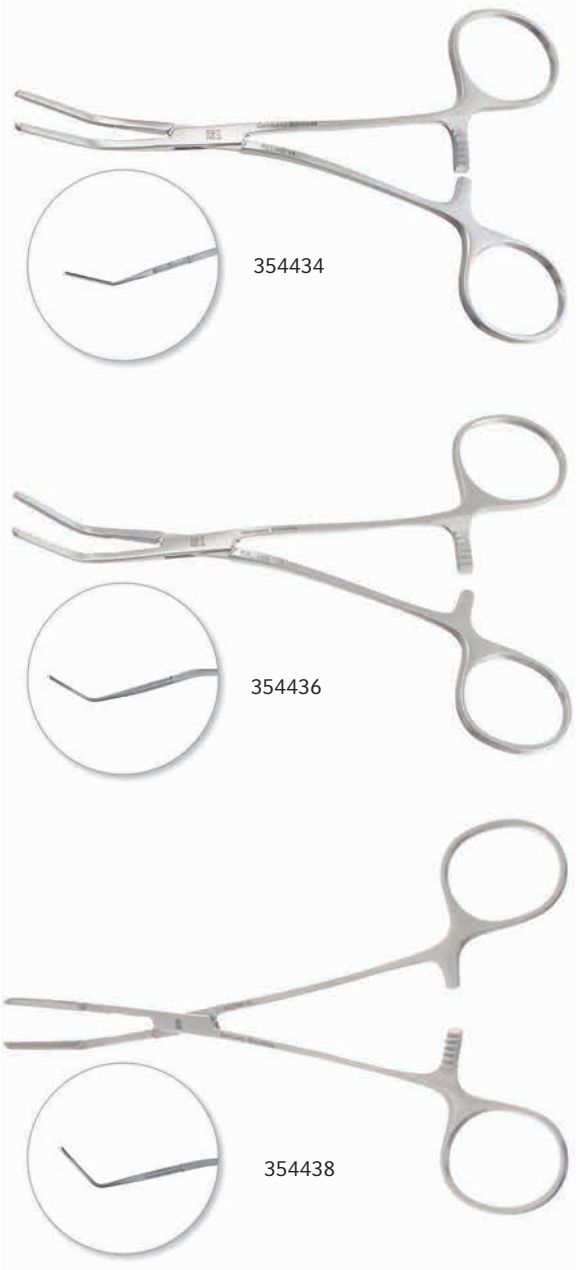
### DEBAKEY® SPOON CLAMPS

| ITEM # | DESCRIPTION |
|---|---|
| 354420 | Small spoon, 6-1/4" (16 cm) |
| 354422 | Small spoon, angled, 5-3/4" (14.5 cm) |
| 354424 | Large spoon, 6-1/8" (15.5 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

### DEBAKEY® MULTIPURPOSE VASCULAR CLAMPS




| ITEM # | DESCRIPTION |
|---|---|
| 354434 | Angled 30 degrees, jaw length 20 mm, 5-3/4" (14.5 cm) |
| 354436 | Angled 45 degrees, jaw length 20 mm, 5-1/2" (14 cm) |
| 354438 | Angled 60 degrees, jaw length 20 mm, 5-3/8" (13.5 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

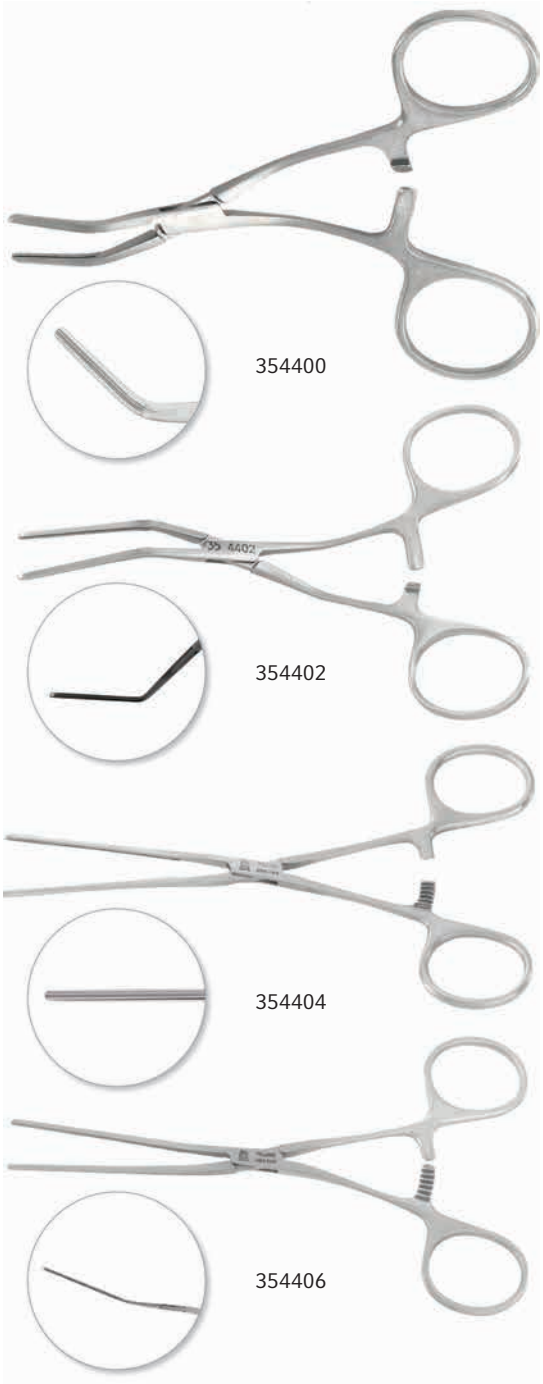
### DEBAKEY® MULTIPURPOSE VASCULAR CLAMPS LONG

| ITEM # | DESCRIPTION |
|---|---|
| 354442 | Angled 30 degrees, 6-1/2" (16.5 cm) |
| 354444 | Angled 45 degrees, 6-1/8" (15.5 cm) |
| 354446 | Angled 60 degrees, 5-3/4" (14.5 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

### DEBAKEY® PEDIATRIC AND ADULT VASCULAR CLAMPS

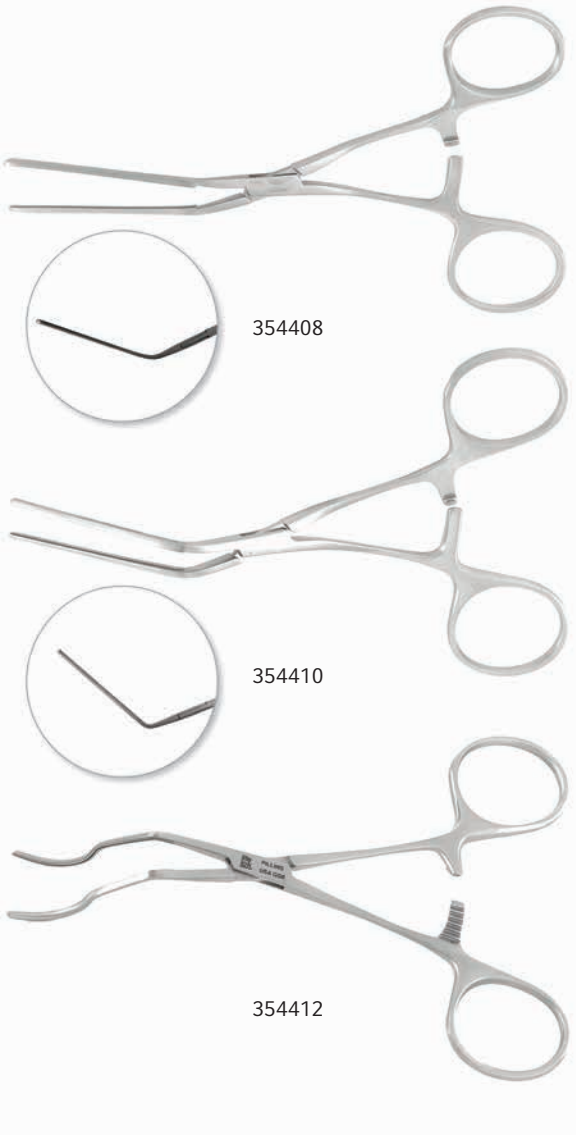



| ITEM # | DESCRIPTION |
|---|---|
| 354400 | Small, angled 45 degrees, 5/8" (1.5 cm) jaw, 3-7/8" (10 cm) |
| 354402 | Medium, angled 45 degrees, 4-1/8" (10.5 cm) |
| 354404 | Large, straight, 5-1/2" (14 cm) |
| 354406 | Angled 15 degrees, 5-1/4" (13.5 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

### DEBAKEY® PEDIATRIC AND ADULT VASCULAR CLAMPS

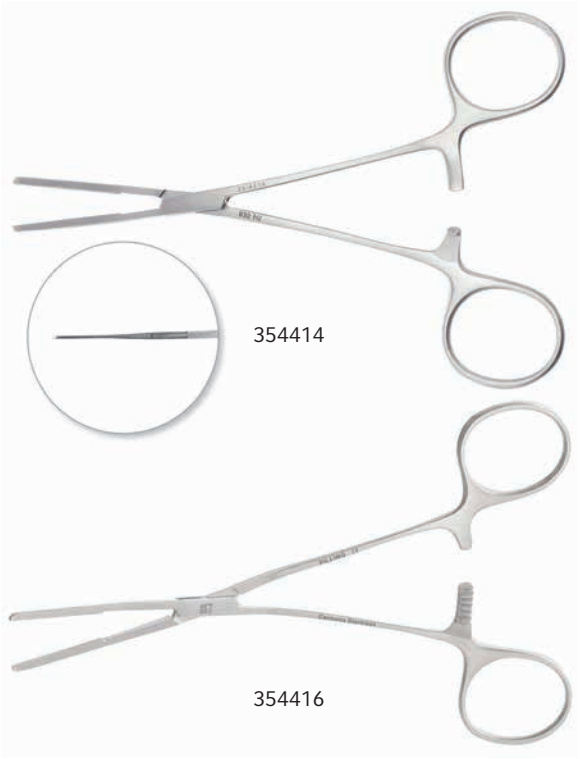



| ITEM # | DESCRIPTION |
|---|---|
| 354408 | Angled 45 degrees, 1-3/8" (3.5 cm) jaw, 4-7/8" (12.5 cm) |
| 354410 | Angled 60 degrees, 1-5/8" (4 cm) jaw, 4-3/8" (11 cm) |
| 354412 | Angled 90 degrees, 1-7/8" (4.8 cm) tip length, 3-3/4" (9.5 cm) |

# VASCULAR CLAMPS

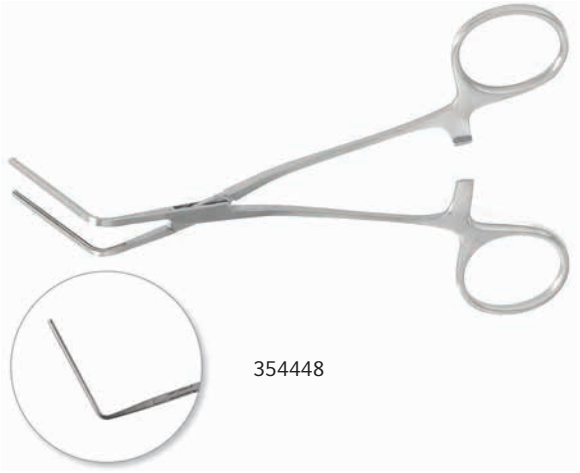
## Pediatric Clamps, 1.5 mm Jaw

### DEBAKEY® PATENT DUCTUS CLAMPS




| ITEM # | DESCRIPTION |
|---|---|
| 354414 | Straight, 1.7 mm tip width, 6" (15 cm) |
| 354416 | Angled 20 degrees, 1.7 mm tip width, 6" (15 cm) |

### DEBAKEY® PEDIATRIC AND ADULT VASCULAR CLAMPS




| ITEM # | DESCRIPTION |
|---|---|
| 354448 | Large, angled 90 degrees, 5-1/4" (13 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

### DEBORAH-CASTANEDA PARTIAL OCCLUSION CLAMPS

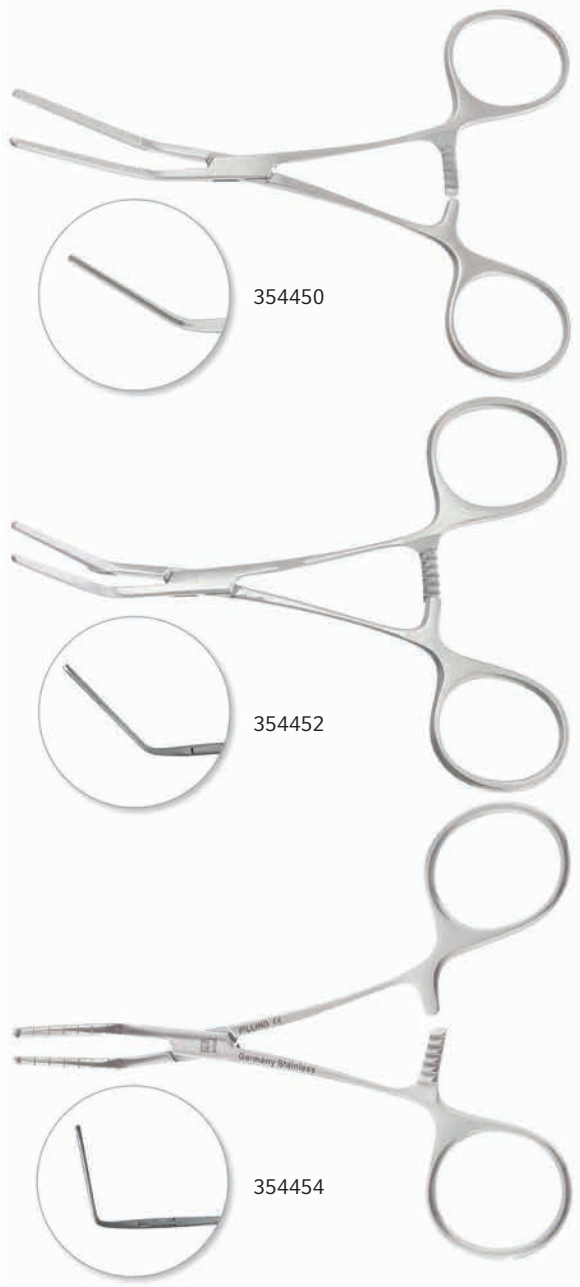
Jaw blades calibrated at 5 mm intervals.

| ITEM # | DESCRIPTION |
|---|---|
| 354456 | Small, 25 mm jaw, 4-1/2" (11.5 cm) |
| 354458 | Medium, 18 mm jaw, 5-5/8" (14 cm) |
| 354460 | Large, 21 mm jaw, 5-3/4" (14.5 cm) |
| 354462 | Extra-large, 26 mm jaw, 5-7/8" (15 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

### DEBORAH-CASTANEDA PERIPHERAL VASCULAR CLAMPS




Jaw blades calibrated at 5 mm intervals.

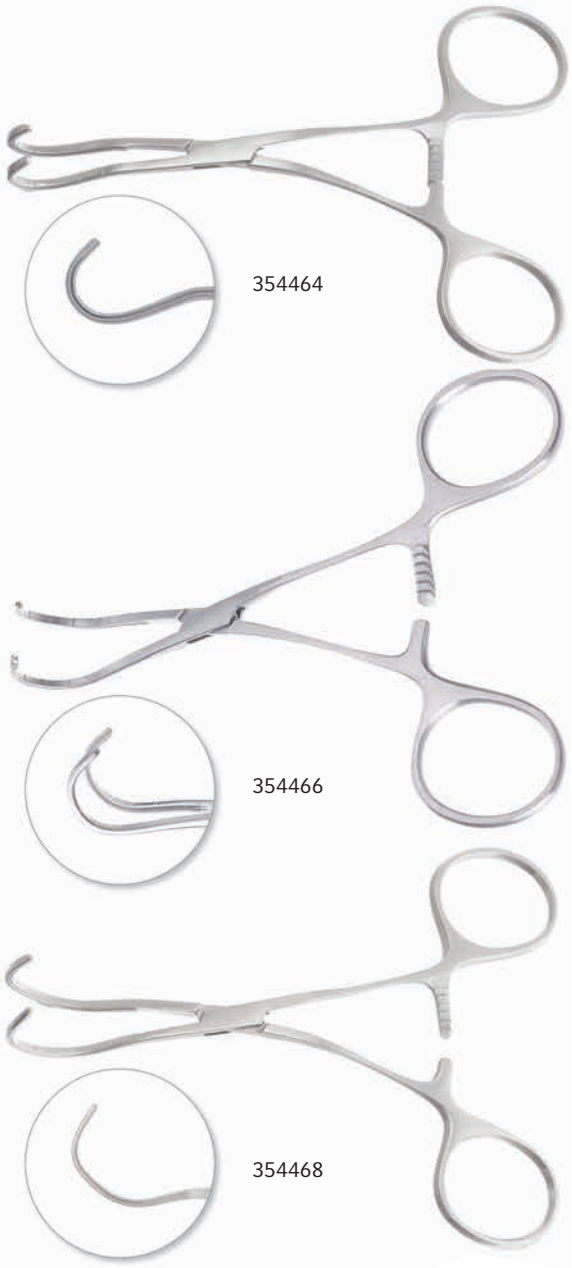
| ITEM # | DESCRIPTION |
|---|---|
| 354450 | Angled 30 degrees, 30 mm jaw, 4-3/4" (12 cm) |
| 354452 | Angled 50 degrees, 30 mm jaw, 4-5/8" (11.5 cm) |
| 354454 | Angled 90 degrees, 30 mm jaw, 3-3/4" (9.5 cm) |

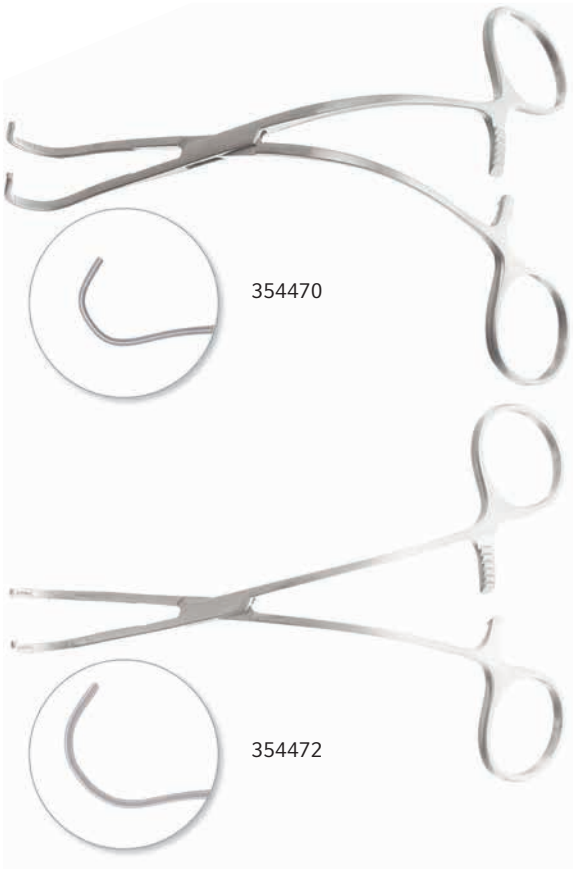
# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

### DERRA PARTIAL OCCLUSION CLAMPS

| ITEM # | DESCRIPTION |
|---|---|
| 354464 | Short, small, 10 mm jaw, 4-3/8" (11 cm) |
| 354466 | Short, medium, 16 mm jaw, 4-3/8" (11 cm) |
| 354468 | Short, large, 28 mm jaw, 4-5/8" (11.5 cm) |
| 354470 | Small, curved handle, 17 mm jaw, 4-3/8" (11 cm) |
| 354472 | Medium, curved handle, 22 mm jaw, 4-3/4" (12 cm) |

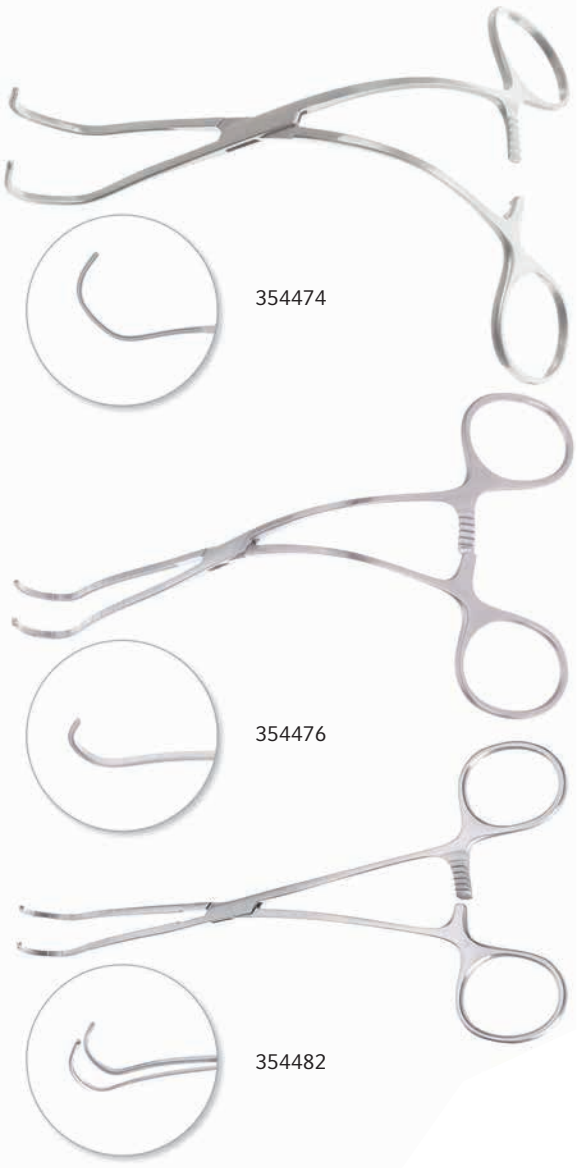


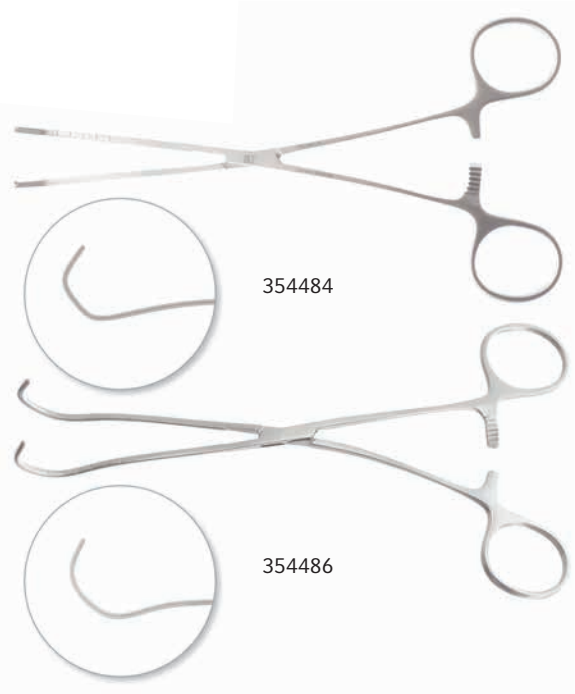
# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

### DERRA PARTIAL OCCLUSION CLAMPS



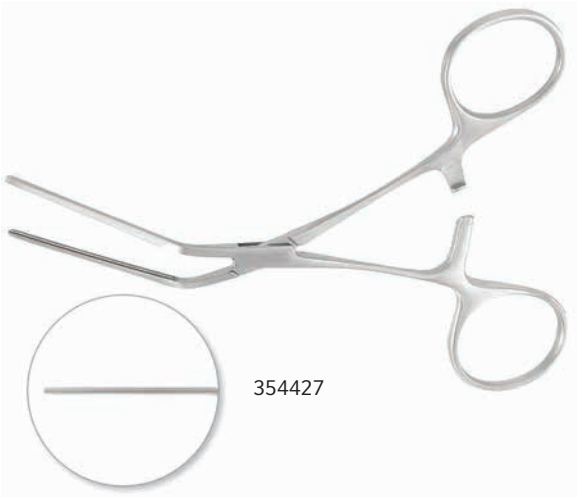

| ITEM # | DESCRIPTION |
|---|---|
| 354474 | Large, curved handle, 25 mm jaw, 4-1/2" (11.5 cm) |
| 354476 | Deep, small, curved handle, 17 mm jaw, 5-5/8" (14 cm) |
| 354482 | Deep, small, extra-long, 18 mm jaw, 7" (18 cm) |
| 354484 | Deep, medium, extra-long, 22 mm jaw, 7" (18 cm) |
| 354486 | Deep, large, extra-long, 25 mm jaw, 7-1/4" (18.5 cm) |



# VASCULAR CLAMPS

## Pediatric Clamps, 1.5 mm Jaw

### REPLOGIE PEDIATRIC AORTA CROSS CLAMP

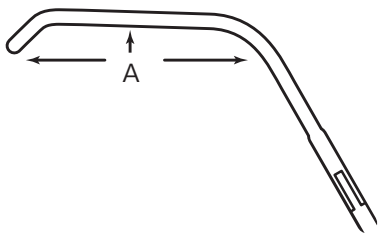



| ITEM # | DESCRIPTION |
|---|---|
| 354427 | Angled 60 degrees, 48 mm jaw, 4-5/8" (12 cm) |

## Pediatric Clamps, 2 mm Jaw

### BECK MINIATURE PEDIATRIC AORTIC CLAMP

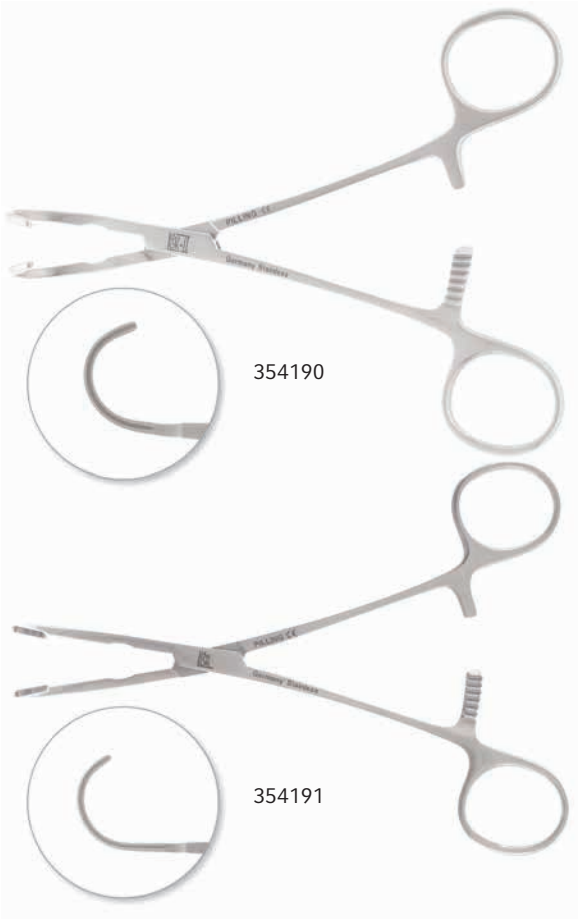
| ITEM # | DESCRIPTION |
|---|---|
| 354750 | Jaw length (A) 1" (2.5 cm), (A) depth 1/4" (5 cm), overall length 7" (18 cm) |



# VASCULAR CLAMPS

## Pediatric Clamps, 2 mm Jaw

### BECK-TYPE VESSEL CLAMPS



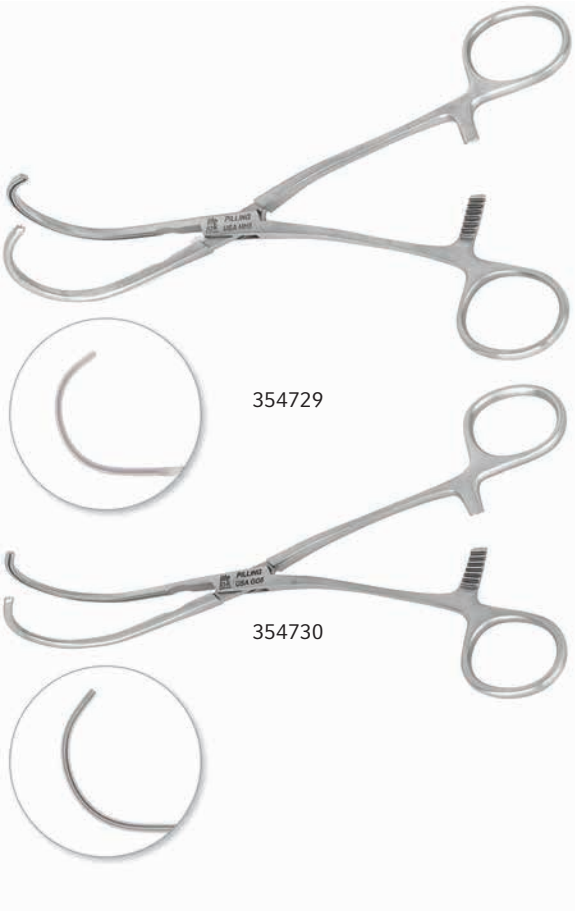

Small, acutely curved DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 354190 | Small, 21 mm jaw, 6" (15 cm) |
| 354191 | Large, 32 mm jaw, 6-1/2" (16.5 cm) |

# VASCULAR CLAMPS

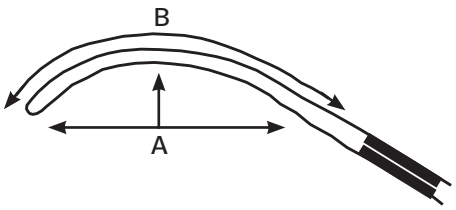
## Pediatric Clamps, 2 mm Jaw

### DEBAKEY® ACUTELY CURVED CLAMPS

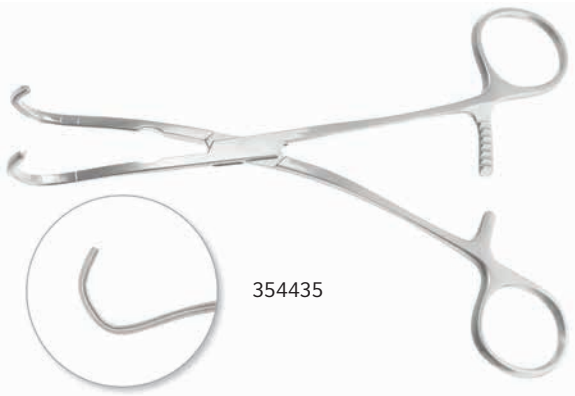



Jaws curve on 1-3/4" (4.5 cm) radius, entire length of jaws contain DeBakey®-type Serrations.

| ITEM # | DESCRIPTION |
|---|---|
| 354729 | 6-3/4" (17 cm) |
| 354730 | Jaws are larger than 354729<br>Length (B) 2-3/4"(7 cm)<br>Length (A) 1-3/4" (4.5 cm)<br>Depth (A) 3/4" (2 cm)<br>Overall length 6-7/8" (17.5 cm) |




### DEBAKEY® MINIATURE ANASTAMOSIS CLAMP

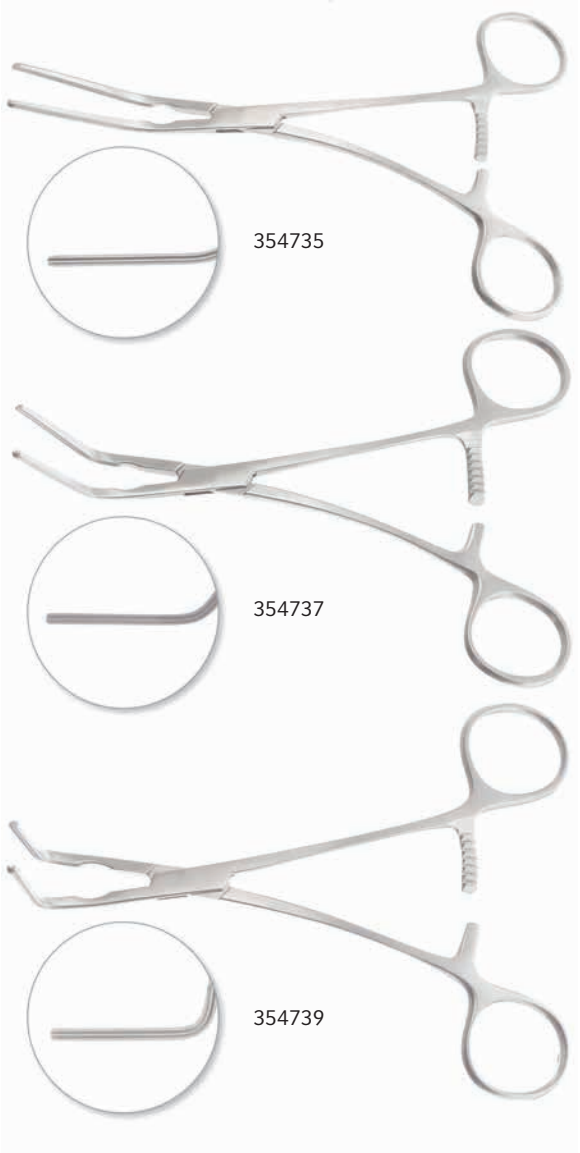



| ITEM # | DESCRIPTION |
|---|---|
| 354435 | Small jaw, 6-1/2" (16.5 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, 2 mm Jaw

### DEBAKEY® PEDIATRIC MULTIPURPOSE CLAMPS



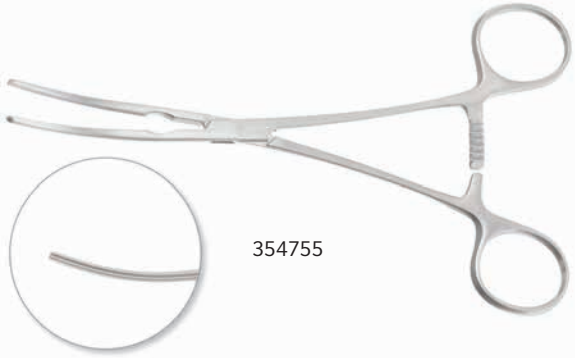

DeBakey®-type Jaw, spring handle, 1 x 7 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 354735 | Angled 30 degrees, jaw 3/4" (19 mm) long past angle, 6-3/4" (17 cm) |
| 354737 | Angled 60 degrees, jaw 1-1/4" (32 mm) long past angle, 6-1/4" (16 cm) |
| 354739 | Angled 90 degrees, jaw 1-1/2" (37 mm) long past angle, 6" (15 cm) |

# VASCULAR CLAMPS

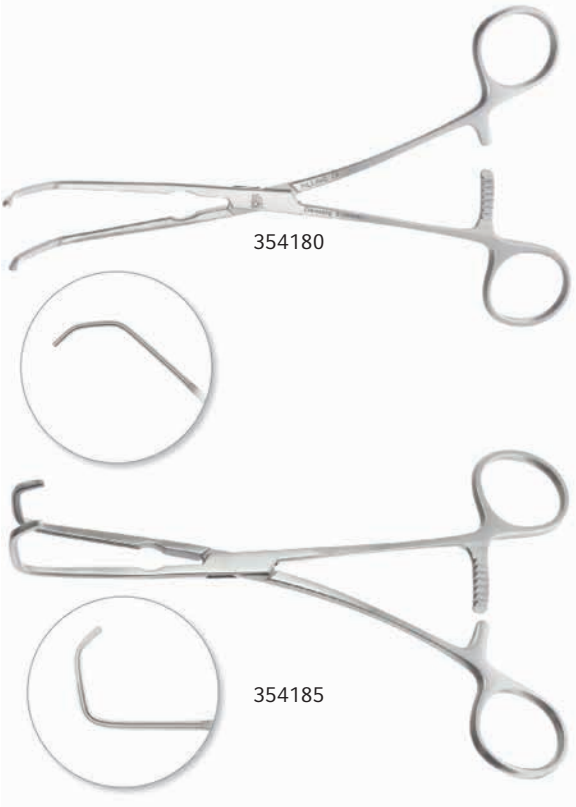
## Pediatric Clamps, 2 mm Jaw

### GLOVER CURVED MINIATURE PEDIATRIC CLAMP



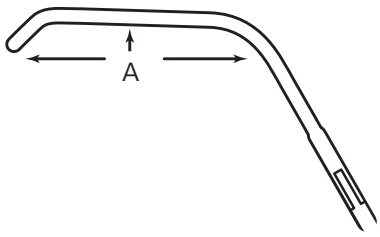

| ITEM # | DESCRIPTION |
|---|---|
| 354755 | Slightly curved jaws 1/2" (1.2 cm) long, 7-1/8" (18 cm) |

### MINIATURE SATINSKY REYNOLDS CLAMPS




Reynolds-type clamps, baby size. These miniature models of the Satinsky Clamp have DeBakey®-type Jaws and are made in two jaw angles.

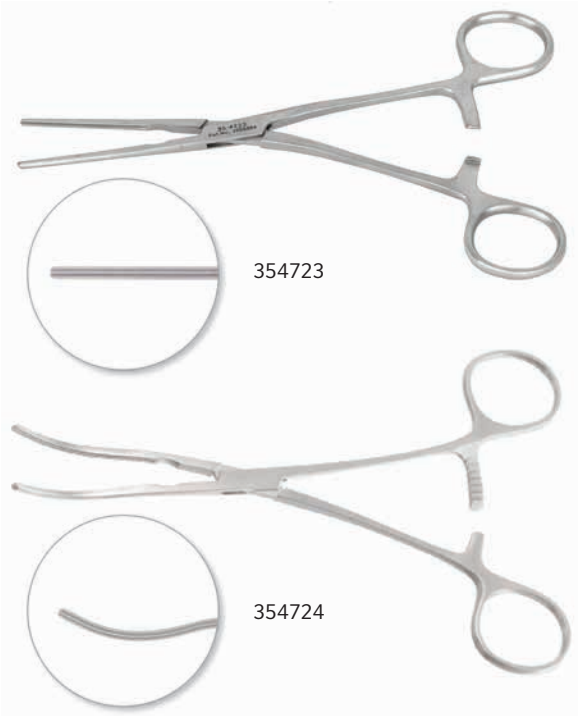
| ITEM # | DESCRIPTION |
|---|---|
| 354180 | Angled 50 degrees, small jaw, (A) length 1" (2.5 cm), (A) depth 1/4" (6 mm), 7-1/4" (18.5 cm) |
| 354185 | Angled 85 degrees, small jaw, (A) length 1-1/4" (3 cm), (A) depth 1/4" (6 mm), 6-3/4" (17 cm) |



# VASCULAR CLAMPS

## Pediatric Clamps, 2 mm Jaw

### PILLING® MINIATURE PEDIATRIC CLAMPS



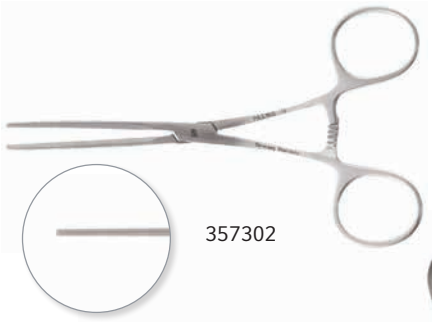

Pilling® Miniatures are all the same general size (approximately 4-1/4" (11 cm) to center of box lock) and weight. They are considerably lighter than "standard adult" instruments of the same model. The jaws are approximately 2 mm wide with medium size DeBakey®-type Serration.

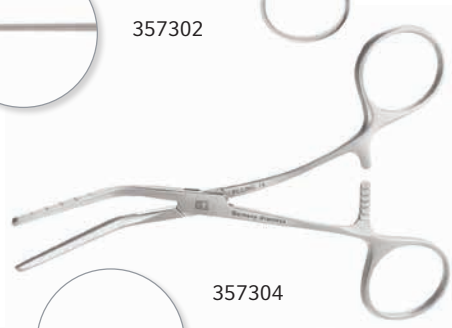
| ITEM # | DESCRIPTION |
|---|---|
| 354720 | Patent Ductus, straight, 2" (5 cm) jaws, 6-3/4" (17 cm) |
| 354721 | Patent Ductus, straight, 1-7/8" (4.5 cm) jaws, 6-3/8" (16 cm) |
| 354722 | Coarctation, straight, 2-1/2" (6 cm) jaws, 7-1/8" (18 cm) |
| 354723 | Coarctation, angled, 2-3/8" (6 cm) jaws, 7" (17.5 cm) |
| 354724 | Spoon shape, 1-3/4" (4.5 cm) jaws, 7-1/8" (18 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, Cooley-Type Jaw

### COOLEY CLAMPS FOR PEDIATRIC CARDIOVASCULAR SURGERY


357302


357304

357306

357308

357310

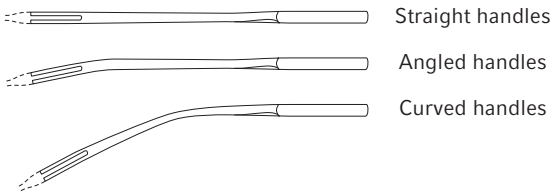
These clamps are designed especially for surgery in infants and small children. They have specially set ratchets to permit gradual application and release of the clamps.

**Cooley-type Jaws.** A double row of fine atraumatic teeth are arranged in opposing rows to grasp the vessel. The teardrop shape of the jaws allows for maximum length of divided vessel for suturing (as patent ductus arteriosus).

**Calibrations.** Jaws are engraved at 5 mm intervals to facilitate accurate measurements. The calibration is on the outer sides of the jaws on cross clamps and on the anterior surface of partial occlusion clamps.

The Cooley Clamps are all of the same general size and weight. Tension is carefully calculated to be in proportion to jaw length, shape and intended use. Length is approximately 4-1/4" (10.8 cm) to center of box lock. Constructed of dull, non-glare finished stainless steel. Shafts or arms of Cooley Clamps are of three different shapes — straight, angled or curved as shown in diagram.

Jaw shapes are varied as shown, and are calibrated starting from distal tip toward box lock or from center point of jaw, proceeding in both directions.




Spring handle, 1 x 6 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 357302 | Straight jaw, angled shanks, 5-1/8" (13 cm) |
| 357304 | Angled jaw, curved shanks, 5" (12.5 cm) |
| 357306 | Curved 3/4" (19 mm) jaw, straight shanks, 4-5/8" (11.5 cm) |
| 357308 | Partial occlusion jaw, curved shanks, 4-5/8" (11.5 cm) |
| 357310 | Carotid jaw, curved shanks, 4-3/4" (12 cm) |

# VASCULAR CLAMPS

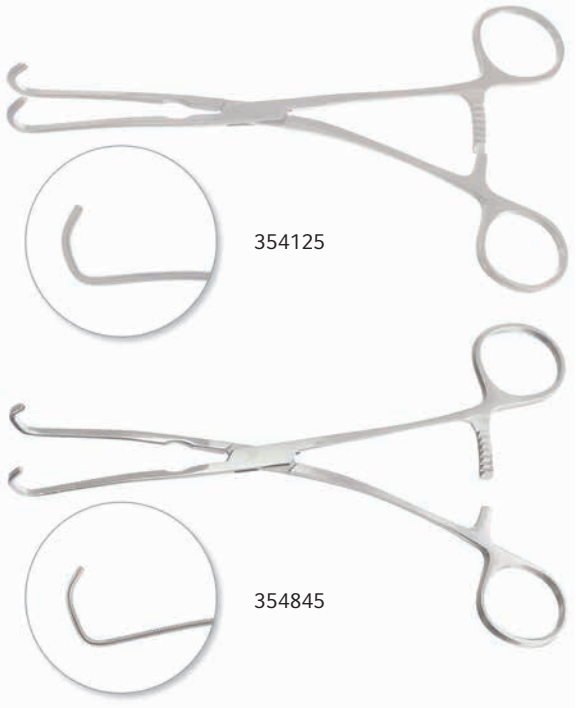
## Pediatric Clamps, Cooley-Type Jaw

### BECK-TYPE VESSEL CLAMP

Small, acutely curved jaws calibrated on anterior surface from center point outward.

| ITEM # | DESCRIPTION |
|---|---|
| 354810 | Straight handles, 1" (2.5 cm) jaw, 6-1/8" (15.5 cm) |

### COOLEY ANASTOMOSIS CLAMPS




Jaws are calibrated on the anterior surface from center point outward. This miniature vascular clamp is designed for partial occlusion of a major vessel (aorta, inferior vena cava, carotid artery, etc.) where total occlusion may be undesirable. Calibrations at 5 mm intervals on the jaws are useful in aortico-pulmonary anastomosis in infants and children with tricuspid atresia or tetralogy of Fallot. Lightweight, calibrated jaws 3/4" (2 cm) with Cooley serration.

| ITEM # | DESCRIPTION |
|---|---|
| 354125 | Spring handle, 1 x 7 ratchets, 7-1/8" (18 cm) |
| 354845 | 1.5 mm extra fine DeBakey®-type Jaws, spring handle, 1 x 7 ratchets, 7-1/8" (18 cm) |

# VASCULAR CLAMPS

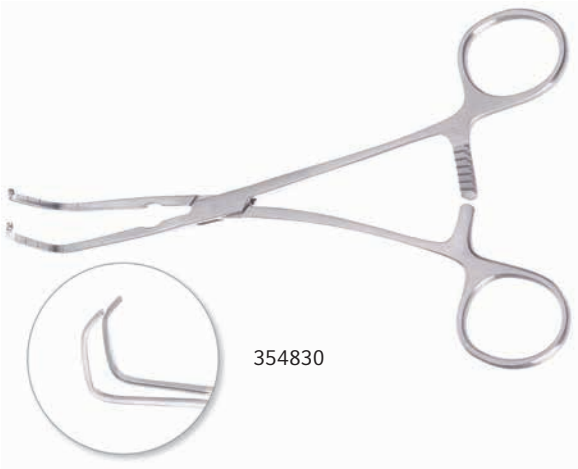
## Pediatric Clamps, Cooley-Type Jaw

### COOLEY CLAMPS

Acutely curved clamps. Jaws calibrated on anterior surface from center point outward. Angled shafts.

| ITEM # | DESCRIPTION |
|---|---|
| 354826 | Medium clamp, full length Cooley jaw serrations, 1-1/2" (3.8 cm), 6-5/8" (17 cm) |
| 354827 | Large clamp, full length Cooley jaw serrations, 1-3/4" (4.5 cm), 6-3/4" (17 cm) |

### COOLEY CLAMPS FOR PEDIATRIC AND INFANT CARDIOVASCULAR SURGERY



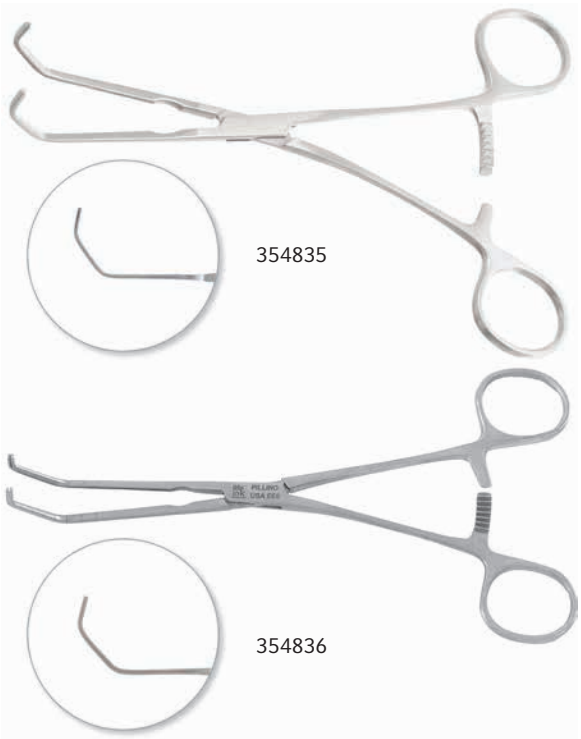

Double angle jaws calibrated on anterior surface from center point outward. Angled shafts.

| ITEM # | DESCRIPTION |
|---|---|
| 354830 | Angled 90 degrees, small jaws, 6-3/4" (17 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, Cooley-Type Jaw

### COOLEY PEDIATRIC CARDIOVASCULAR CLAMPS

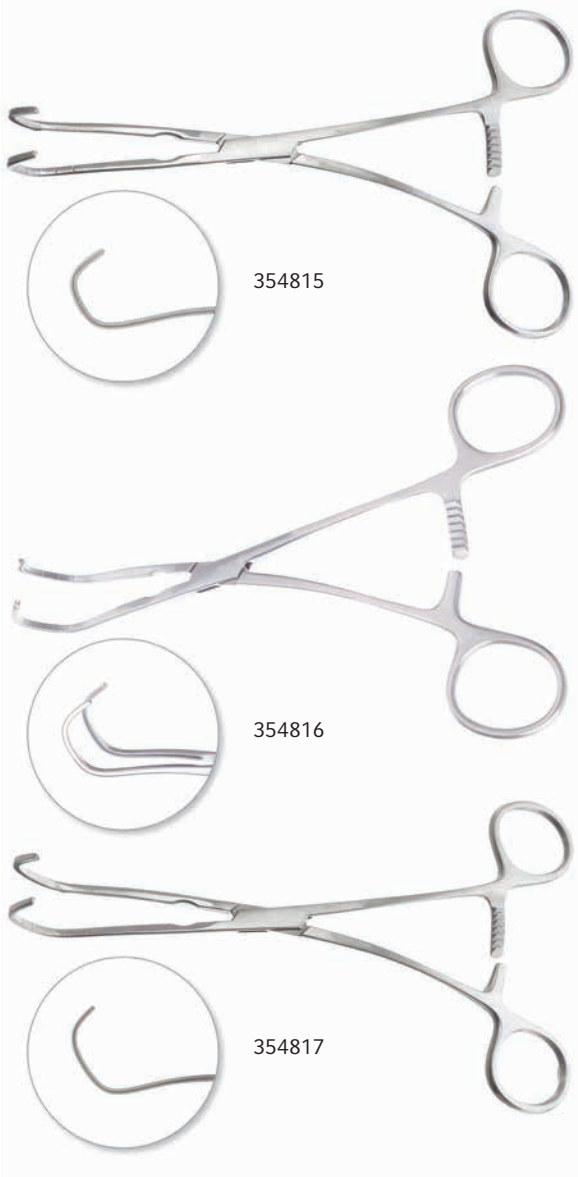



| ITEM # | DESCRIPTION |
|---|---|
| 354835 | Angled shafts, small, double angled 60 degree calibrated jaw, 7-1/8" (18 cm) |
| 354836 | Angled shafts, large, double angled 60 degree calibrated jaw, 7-1/8" (18 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, Cooley-Type Jaw

### COOLEY PEDIATRIC DERRA CLAMPS



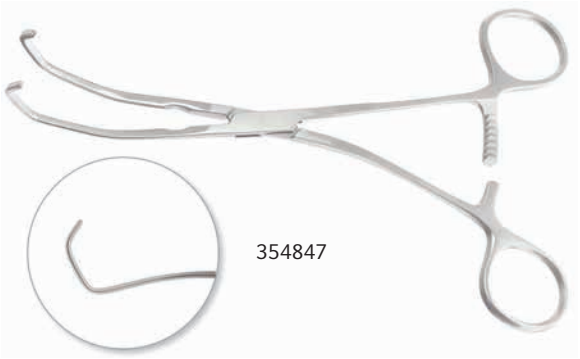

Slightly curved shaft, spring handle, 1 x 7 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 354815 | Small, calibrated 3/4" (2 cm) jaw, 7" (18 cm) |
| 354816 | Medium, calibrated 1-1/8" (3 cm) jaw, 7" (18 cm) |
| 354817 | Large, calibrated 1-1/8" (3 cm) jaw, 7-1/8" (18 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, Cooley-Type Jaw

### COOLEY PEDIATRIC MODIFIED ANASTOMOSIS CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 354847 | 30 degree side angle, calibrated 5/8" (1.5 cm) jaw, spring handle, 1 x 7 ratchets, 7-1/8" (18 cm) |

### COOLEY PEDIATRIC MULTIPURPOSE CLAMPS

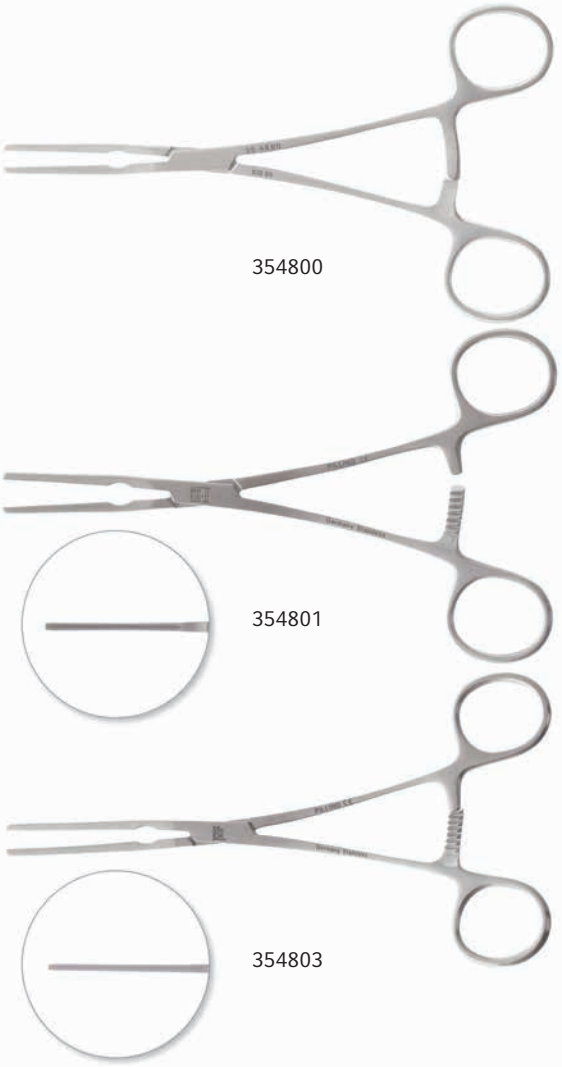
Long, angled shanks, spring handle, 1 x 7 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 354805 | 30 degree angled, calibrated 3/4" (2 cm) jaw, 6-3/4" (17 cm) |
| 354806 | 60 degree angled, calibrated 1-1/4" (3.5 cm) jaw, 6-1/2" (16.5 cm) |
| 354807 | 90 degree angled, calibrated 1-1/2" (4 cm) jaw, 5-3/4" (14.5 cm) |

# VASCULAR CLAMPS

## Pediatric Clamps, Cooley-Type Jaw

### COOLEY PEDIATRIC PATENT DUCTUS CLAMPS




Spring handle, 1 x 7 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 354800 | Straight, calibrated jaw, straight shanks, 6-3/4" (17 cm) |
| 354801 | Straight, calibrated jaw, angled shanks, 6-1/2" (16.5 cm) |
| 354802 | Straight, calibrated jaw, straight shanks, 7" (18 cm) |
| 354803 | Straight, calibrated jaw, angled shanks, 7" (18 cm) |
| 354804 | Curved, calibrated jaw, straight shanks, 7-1/4" (18.5 cm) |

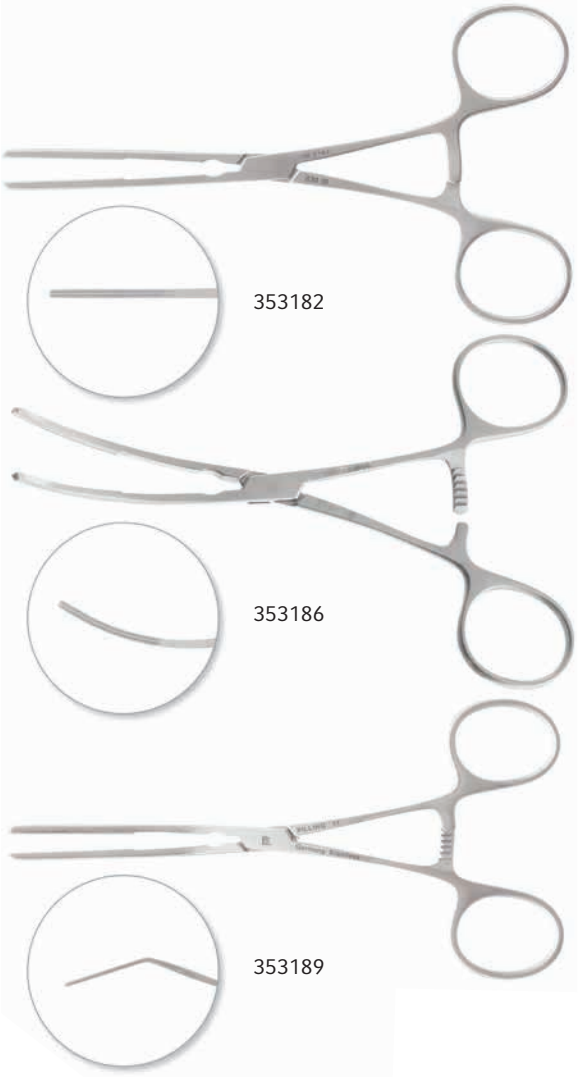
### COOLEY PEDIATRIC PATENT DUCTUS CLAMPS

| ITEM # | DESCRIPTION |
|---|---|
| 354808 | Spoon-shaped, 5 mm calibrated jaws, straight handles, 7-1/8" (18 cm) |

# VASCULAR CLAMPS

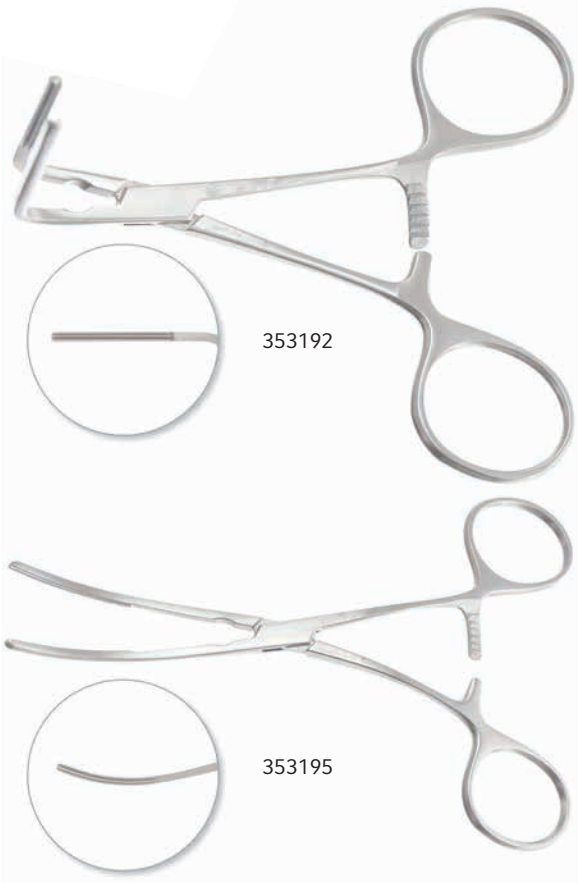
## Ring Handled Bulldog® Clamps

### DEBAKEY® RING HANDLE BULLDOG® CLAMPS




These short, sturdy clamps are intended for use in place of the longer sizes of "squeeze handle" bulldogs. They measure only 2-3/4" (7 cm) from the center point of the box lock to the end of the ring handles, averaging approximately 4-3/4" (12 cm) to 5-1/8" (13 cm) overall length depending on shape. Narrow DeBakey®-type Jaws and spring handles provide firm, non-traumatizing grip.

| ITEM # | DESCRIPTION |
|---|---|
| 353182 | Straight, 2-1/4" (5.5 cm) jaw, 5-3/8" (13.5 cm) |
| 353186 | Curved, 2-3/8" (6 cm) jaw, 5-3/8" (13.5 cm) |
| 353189 | Angled 45 degrees, jaws 1-3/16" (3 cm) past angle, curved shafts, 5-3/8" (13.5 cm) |
| 353192 | Angled 90 degrees, jaws 1-3/4" (4.5 cm) past angle, straight shafts, 4-1/8" (10.5 cm) |
| 353195 | "S"-shaped, curved, 2-1/2" (6.5 cm) jaws, long and curved shafts, 5-1/8" (13 cm) |



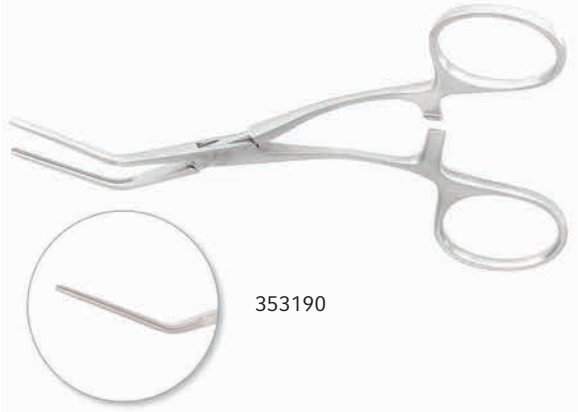
# VASCULAR CLAMPS

## Ring Handled Bulldog® Clamps

### GREGORY MINIATURE VASCULAR CLAMPS

353183

353187



353190

Very delicate, small vessel occlusion clamps, with DeBakey®-type Jaws 1.5 mm wide and LIFE-LOK® Box Lock.

| ITEM # | DESCRIPTION |
|---|---|
| 353183 | Straight, extra light, 4-3/4" (12 cm) |
| 353187 | Curved, extra light, 4-1/8" (10.5 cm) |
| 353190 | Angled 45 degrees, extra light, 4-3/8" (11 cm) |

# VASCULAR CLAMPS

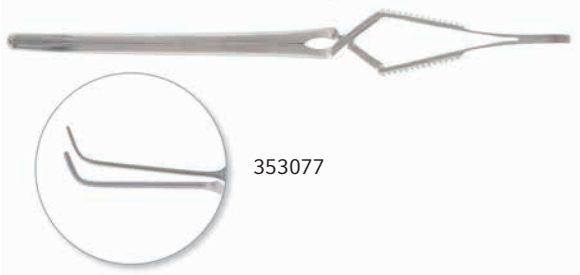
## Carotid Clamps

### CALMAN CAROTID BULLDOG® CLAMPS

Ring-tipped Bulldog® Clamps designed to lay out of the way while holding the shunt in place during carotid endarterectomy. For use with Javid Shunts.

| ITEM # | DESCRIPTION |
|---|---|
| 353080 | Straight, with small ring, for use on the internal carotid artery superiorly holding the shunt in place, 5 mm ring, 3-1/2" (9 cm) |
| 353085 | Angled, with large ring, for use on the common carotid artery inferiorly, 8 mm ring, 3-3/4" (9.5 cm) |

### GREGORY INTERNAL CAROTID "SOFT" BULLDOG® CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 353077 | 5/8" (15 mm) distal tip, DeBakey®-type Jaw, 4-1/2" (11.5 cm) |

### GREGORY CAROTID ANGLED BULLDOG® CLAMP

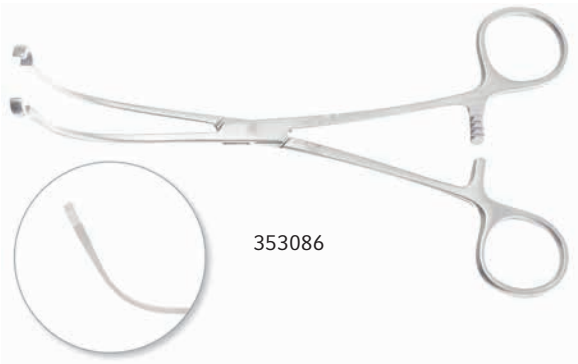
353078

| ITEM # | DESCRIPTION |
|---|---|
| 353078 | 1/2" (12 mm) distal tip, DeBakey®-type Jaw, 4-1/2" (11.5 cm) |

# VASCULAR CLAMPS

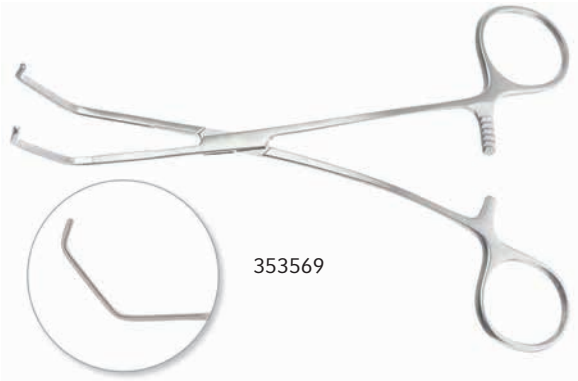
## Carotid Clamps

### JAVID CAROTID SHUNT CLAMPS




| ITEM # | DESCRIPTION |
|---|---|
| 353086 | Large 6.0 mm ring, 7-3/8" (18.5 cm) |
| 353087 | Small 3.5 mm ring, 6-7/8" (17.5 cm) |

### WYLIE CAROTID CLOSURE CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 353569 | DeBakey®-type Jaw with 1.7 mm wide tip, 6-1/8" (15.5 cm) |

### WYLIE CAROTID DISSECTING CLAMP

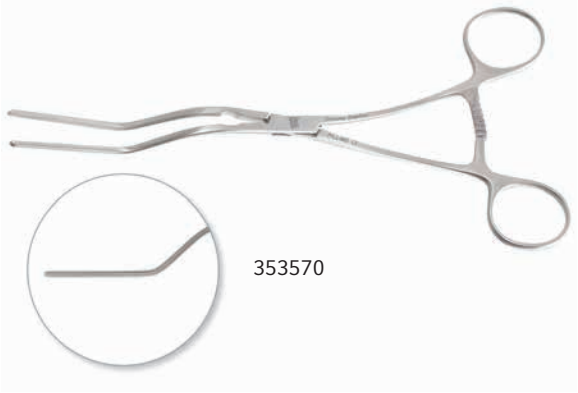
The endarterectomy dissection plane is developed just at the level of maximum disease. Once the plane has been developed to the depth of the artery, a special sharply curved clamp is used to continue the dissection to the opposite side of the arteriotomy. The Wylie Carotid Dissecting Clamp was designed for this purpose and may be preferred to a standard right angle clamp.

| ITEM # | DESCRIPTION |
|---|---|
| 355196 | 5-7/8" (15 cm) |

# VASCULAR CLAMPS

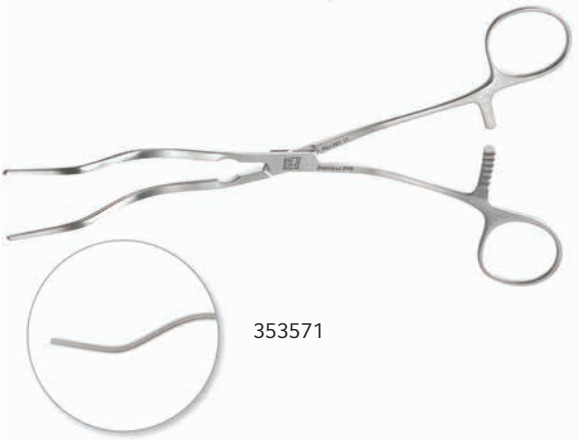
## Carotid Clamps

### WYLIE EXTERNAL CAROTID CLAMP



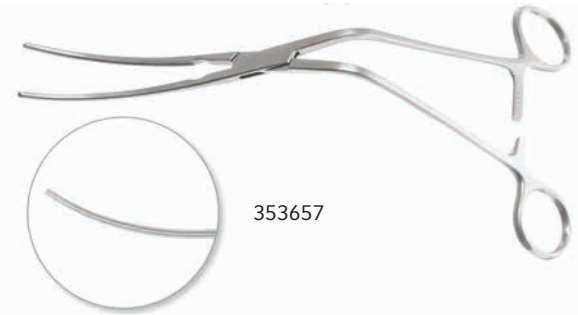

| ITEM # | DESCRIPTION |
|---|---|
| 353570 | DeBakey®-type Jaw, spring handle, 1 x 7 ratchets, 8" (20.5 cm) |

### WYLIE INTERNAL CAROTID CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 353571 | DeBakey®-type Jaw, spring handle, 1 x 7 ratchets, 8-1/4" (21 cm) |

### WYLIE HYPOGASTRIC CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 353657 | DeBakey®-type Jaw, 9-5/8" (24.5 cm) |

# VASCULAR CLAMPS

## Carotid Clamps

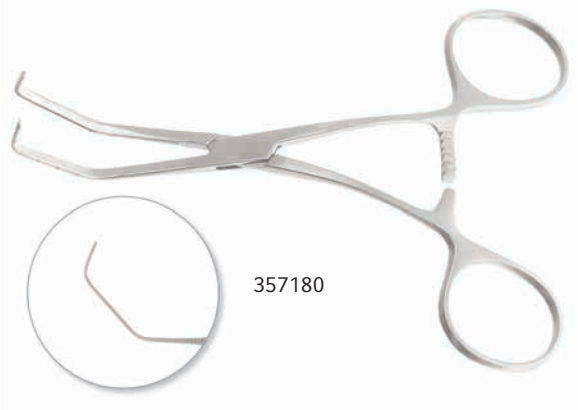
### DOERING CAROTID END POINT MICRO RONGEUR FORCEPS

Spring handled rongeur forceps with a 2.5 mm cup to nip end point plaque during carotid endarterectomy.

| ITEM # | DESCRIPTION |
|---|---|
| 355198 | 7-1/4" (18.5 cm) |

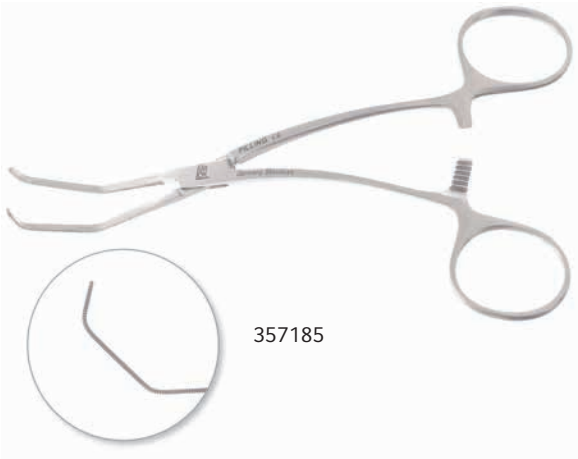
## Carotid Clamps, 1 mm Jaw

### CALMAN CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 357180 | Angled handles, jaw 1" (2.5 cm) long and 1 mm thick, spring handle, 1 x 6 ratchets, 4-1/2" (11.5 cm) |

### EXAMPLE CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 357185 | Angled handles, jaw 1" (2.5 cm) long and 1 mm thick, spring handle, 1 x 6 ratchets, 5-5/8" (14 cm) |

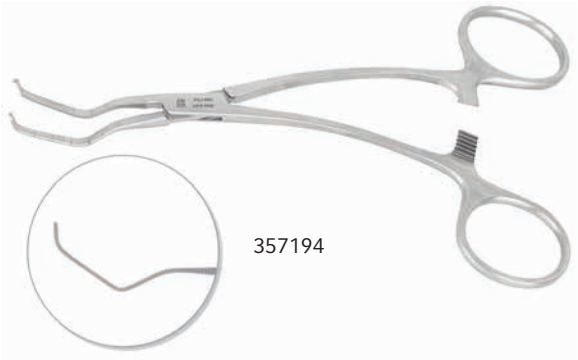
# VASCULAR CLAMPS

## Carotid Clamps, 1 mm Jaw

### KARTCHNER INTERNAL CAROTID CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| 357197 | Slightly curved handles, long jaw, 1 mm thick, spring handles, 1 x 6 ratchets, 6-3/8" (16.5 cm) |

### THOMPSON CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 357194 | Slightly curved handles, long jaw, 1 mm thick, spring handle, 1 x 6 ratchets, 6-1/8" (15.5 cm) |

# VASCULAR CLAMPS

## Carotid Clamps, 1.5 mm Jaw

### KARTCHNER INTERNAL CAROTID CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| 357198 | Jaw length 10 mm, 6-1/4" (16 cm) |

### THOMPSON CAROTID CLOSURE CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| 357195 | Jaw length 22 mm, 5-3/4" (14.5 cm) |

# VASCULAR CLAMPS

## Renal Clamps

### CLEVELAND CLINIC RENAL CLAMPS

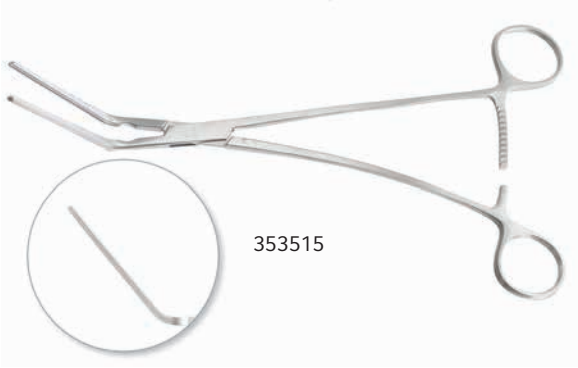
Specifically designed to access renal arteries. Jaws angled left and right. DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 353531 | Left large, 9-5/8" (24.5 cm) |
| 353532 | Right large, 9-5/8" (24.5 cm) |
| 353533 | Left baby renal clamp, extra-fine, 1.7 mm jaws, 6-1/2" (16.5 cm) |
| 353534 | Right baby renal clamp, extra-fine, 1.7 mm jaws, 6-1/2" (16.5 cm) |

# VASCULAR CLAMPS

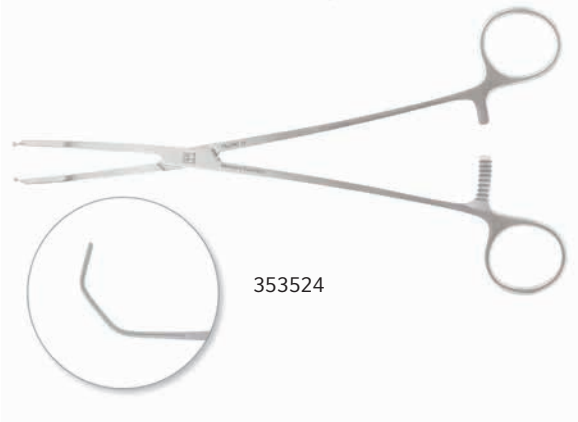
## Renal Clamps

### DEBAKEY® RENAL ARTERY CLAMP



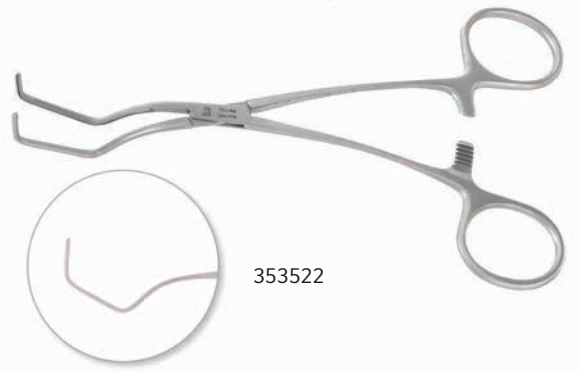

| ITEM # | DESCRIPTION |
|---|---|
| 353515 | DeBakey®-type Jaw, long, curved spring handle, 1 x 9 ratchets, 10-1/8" (25.5 cm) |

### STONEY SPLENO-RENAL SHUNT CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 353524 | Long, extra-fine DeBakey®-type Jaw, spring handle, 1 x 9 ratchets, 9-1/4" (23.5 cm) |

### WIRTHLIN SPLENO-RENAL SHUNT CLAMP

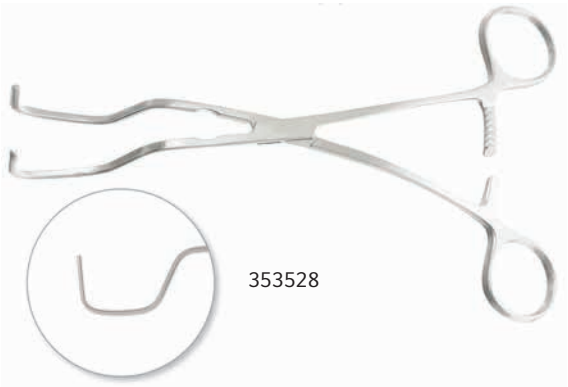



| ITEM # | DESCRIPTION |
|---|---|
| 353522 | Long, DeBakey®-type Jaw, spring handle, 1 x 6 ratchets, 6-1/2" (16.5 cm) |

# VASCULAR CLAMPS

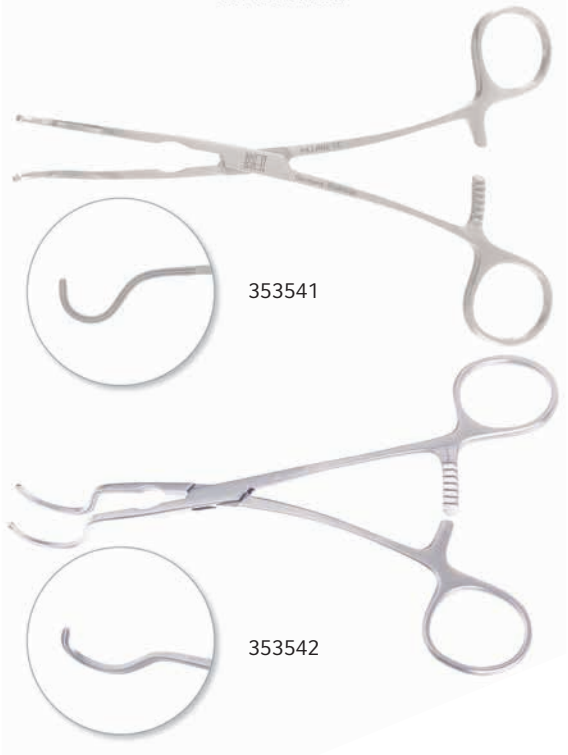
## Femoral-Popliteal Clamps

### DALE FEMORAL-POPLITEAL ANASTOMOSIS CLAMP



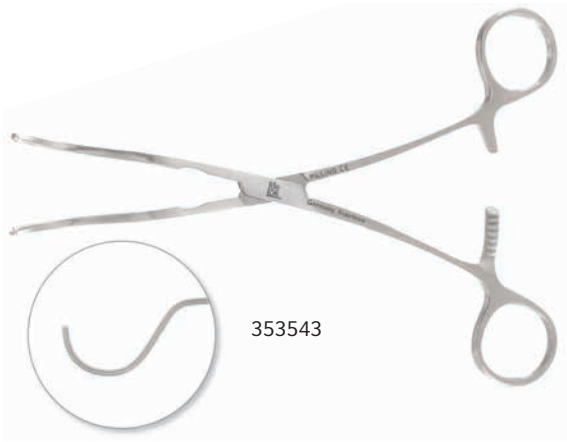

| ITEM # | DESCRIPTION |
|---|---|
| 353528 | DeBakey®-type Jaw, spring handle, 1 x 7 ratchets, 7-3/8" (19 cm) |

### DALE FEMORAL-POPLITEAL CLAMPS




Spring handle, 1 x 7 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 353541 | Small, 7" (17.5 cm) |
| 353542 | Medium, 7-1/8" (18 cm) |
| 353543 | Large, 7-1/4" (18.5 cm) |



# VASCULAR CLAMPS

## Femoral-Popliteal Clamps

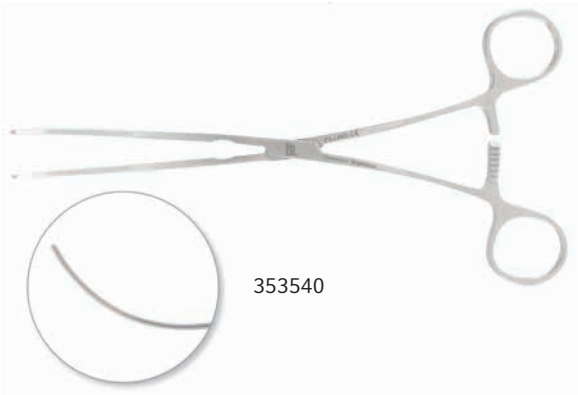
### DEMOS TIBIAL ARTERY CLAMP

Specially angled in the plane of the handle, this clamp reduces the tendency to twist or distort a vessel in procedures requiring distal popliteal or tibial occlusion.

| ITEM # | DESCRIPTION |
|---|---|
| 353568 | Straight, DeBakey®-type Jaw, 2-3/8" (6 cm) tip length, 2.1 mm tip width, angled shaft, 6-3/4" (17 cm) |

## Peripheral Vascular Clamps

### DEBAKEY® "S" SHAPED PERIPHERAL VASCULAR CLAMP

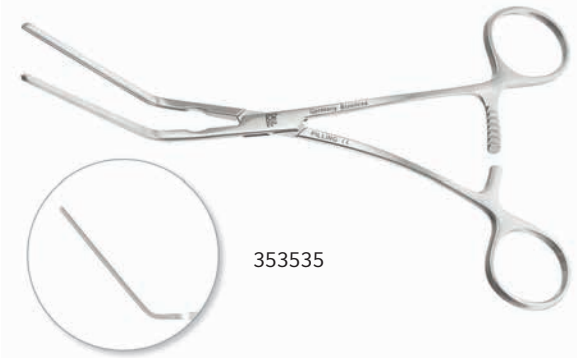



| ITEM # | DESCRIPTION |
|---|---|
| 353540 | Spring handles, 1 x 7 ratchets, 7-7/8" (20 cm) |

# VASCULAR CLAMPS

## Peripheral Vascular Clamps

### DEBAKEY® ANGLED PERIPHERAL VASCULAR CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 353535 | Long, angled DeBakey®-type Jaw, spring handles, 1 x 7 ratchets, 7-1/8" (18 cm) |

### DEBAKEY® AORTIC EXCLUSION CLAMP

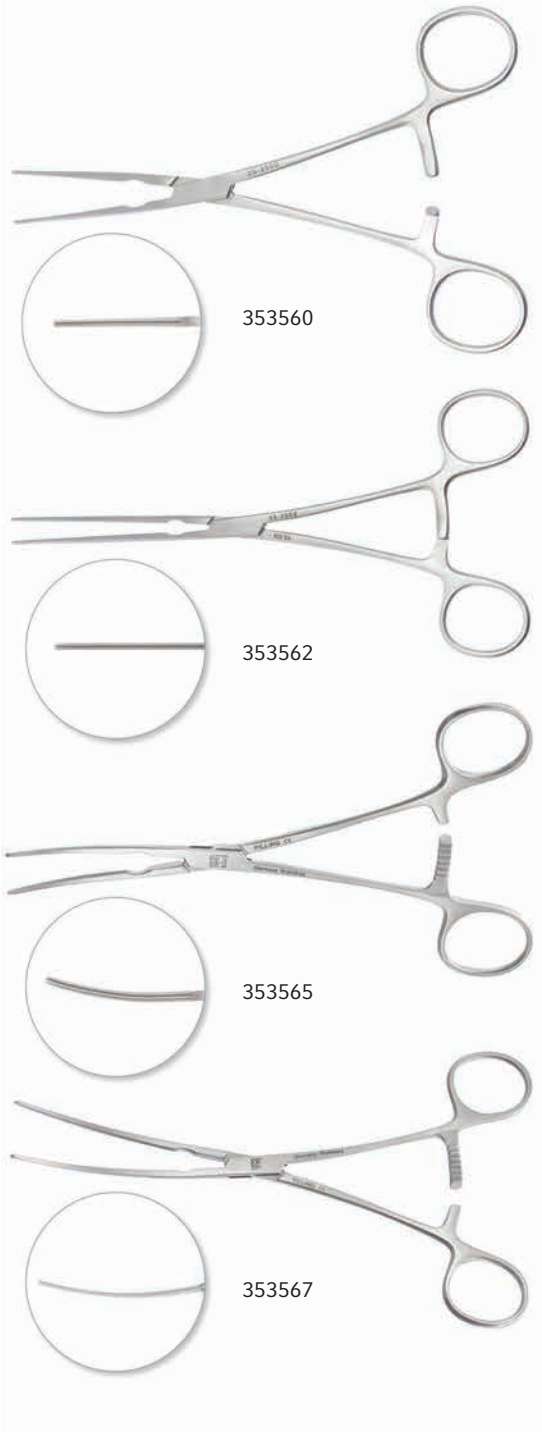
Very light construction. Jaws and shafts curved to form an acute "S" shape. Spring handles.

| ITEM # | DESCRIPTION |
|---|---|
| 353545 | DeBakey®-type Curved Jaws, 7-1/8" (18 cm) |

# VASCULAR CLAMPS

## Peripheral Vascular Clamps

### DEBAKEY® BAINBRIDGE VASCULAR CLAMPS



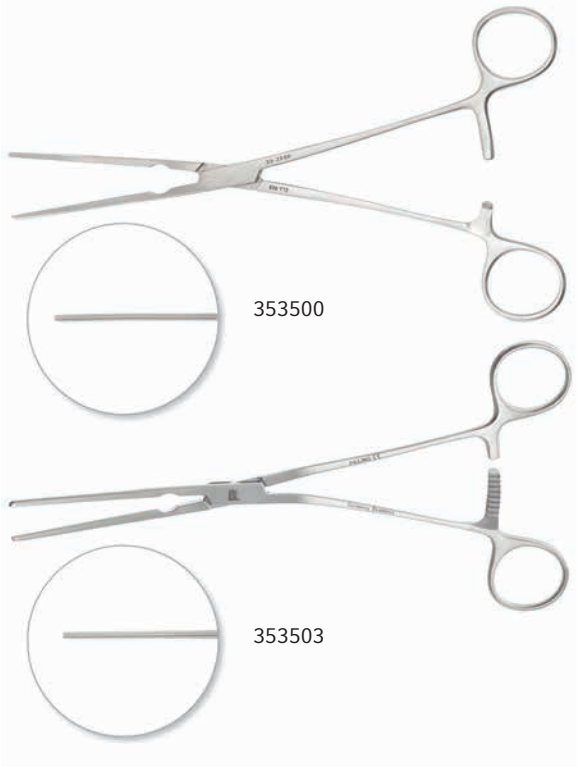

Light, delicate construction throughout with narrow, DeBakey®-type Jaws. Very useful as peripheral vascular clamps.

| ITEM # | DESCRIPTION |
|---|---|
| 353560 | Straight, 4 cm jaws, overall length 7" (18 cm) |
| 353562 | Straight, 6 cm jaws, overall length 7-7/8" (20 cm) |
| 353565 | Curved, 4 cm jaws, overall length 7" (18 cm) |
| 353567 | Curved, 6 cm jaws, overall length 7-3/4" (19.5 cm) |

# VASCULAR CLAMPS

## Peripheral Vascular Clamps

### DEBAKEY® COARCTATION CLAMPS




These are multipurpose clamps, full length but lightweight, with DeBakey®-type Jaws and spring handles. In addition to their use as Coarctation or Patent Ductus clamps, they are particularly useful for temporarily occluding renal arteries during cardiopulmonary by-pass. The special DeBakey®-type Jaws are only 2.5 mm wide. Spring handles minimize trauma to vessels during temporary occlusion of arteries. Spring handle, 1 x 9 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 353500 | Long, straight, 3-1/8" (8 cm) jaw, 9" (23 cm) |
| 353503 | Long, angled, 3" (7.5 cm) jaw, 8-3/4" (22 cm) |

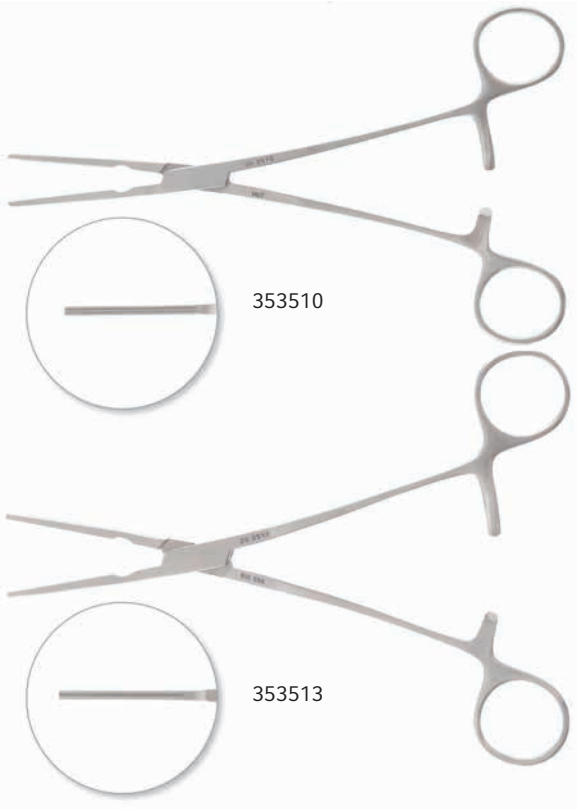
### DEBAKEY® CURVED PERIPHERAL VASCULAR CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| 353550 | Long, DeBakey®-type Jaw, spring handle, 1 x 7 ratchets, 6-3/4" (17 cm) |

# VASCULAR CLAMPS

## Peripheral Vascular Clamps

### DEBAKEY® PATENT DUCTUS CLAMPS




Long, DeBakey®-type Jaw, spring handle, 1 x 9 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 353510 | Straight, 2-1/4" (5.5 cm) jaw, 8-1/4" (21 cm) |
| 353513 | Angled, 2-3/8" (6 cm) jaw, 8-1/8" (20.5 cm) |

# VASCULAR CLAMPS

## Peripheral Vascular Clamps

### DERRA MINIATURE ANASTOMOSIS CLAMPS

Long, DeBakey®-type Jaw, spring handle, 1 x 7 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 354135 | Small, 3/4" (2 cm) jaw, 6-7/8" (17.5 cm) |
| 354136 | Medium, 1-1/8" (3 cm) jaw, 7" (18 cm) |
| 354137 | Large, 1-1/4" (3 cm) jaw, 7-1/8" (18 cm) |

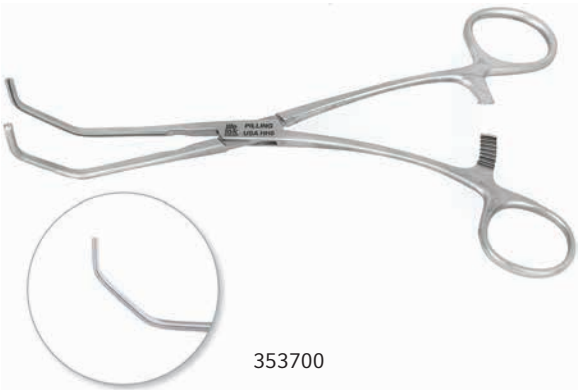
# VASCULAR CLAMPS

## Peripheral Vascular Clamps

### DIETHRICH CAVAL OCCLUSION CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| 353536 | 9-3/4" (25 cm) |

### DIETHRICH CORONARY ARTERY CLAMP



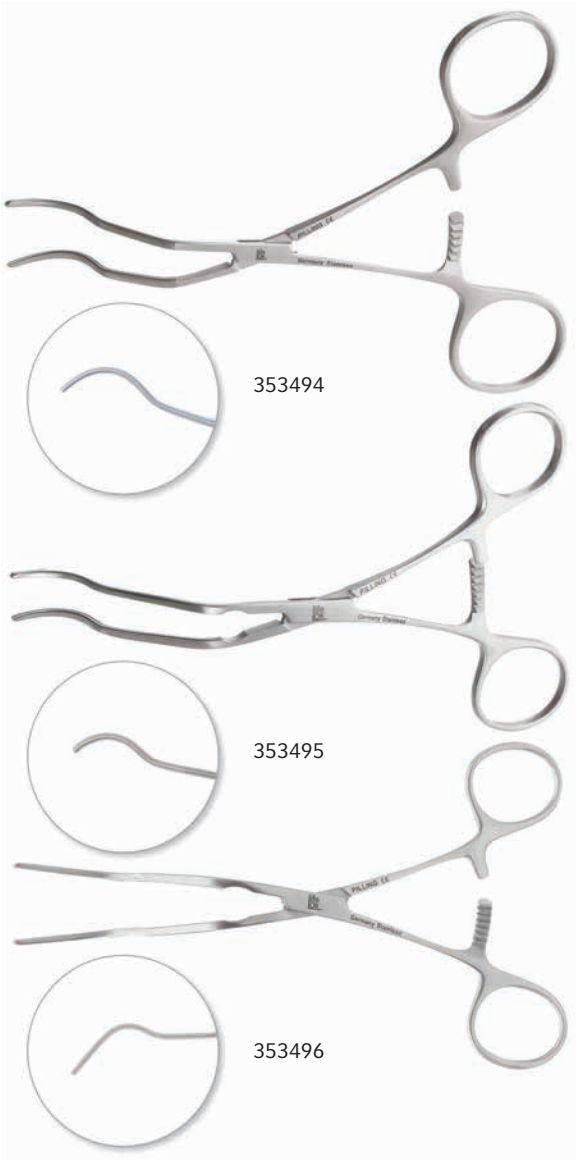

A delicate clamp with handles designed for partial occlusion in coronary artery surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 353700 | Angled, DeBakey®-type Jaws, 1-1/4" (3 cm), 7-1/8" (18 cm) |

# VASCULAR CLAMPS

## Peripheral Vascular Clamps

### GREGORY PROFUNDA CLAMPS



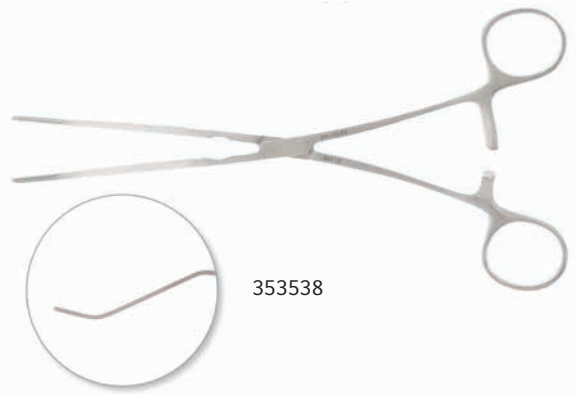

DeBakey®-type Jaw, 1 x 6 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 353494 | Small, 2-1/4" (6 cm) extra-fine jaw, 4-3/4" (12 cm) |
| 353495 | Medium, 3-1/4" (8.5 cm) regular jaw, 6-1/8" (15.5 cm) |
| 353496 | Large, 4" (10 cm) jaw, 7" (18 cm) |

# VASCULAR CLAMPS

## Peripheral Vascular Clamps

### HENLY SUBCLAVIAN ARTERY CLAMP

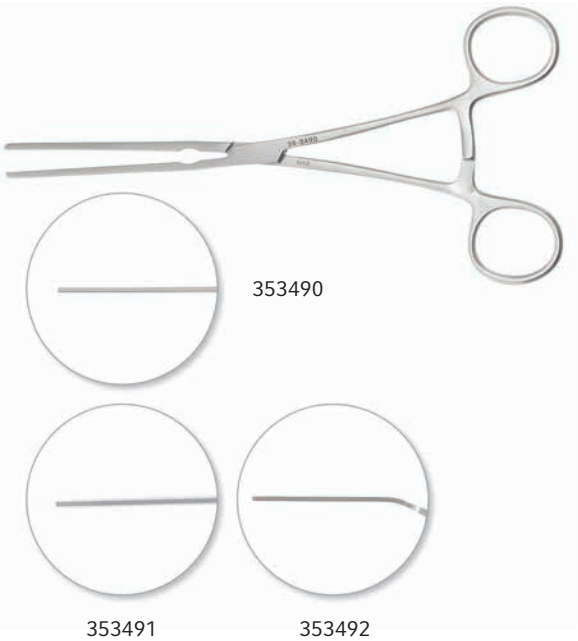


353538

Double angled DeBakey®-type Jaws specially designed to allow clamping an artery of medium size from beneath the artery, allowing an unobstructed working area anteriorly. It is extremely useful for occlusion of the subclavian artery exposed through a supraclavicular incision or for occlusion of the femoral artery exposed through a groin incision.

| ITEM # | DESCRIPTION |
|---|---|
| 353538 | 8-3/8" (21 cm) |

### LELAND JONES CLAMPS



353490

353491 353492

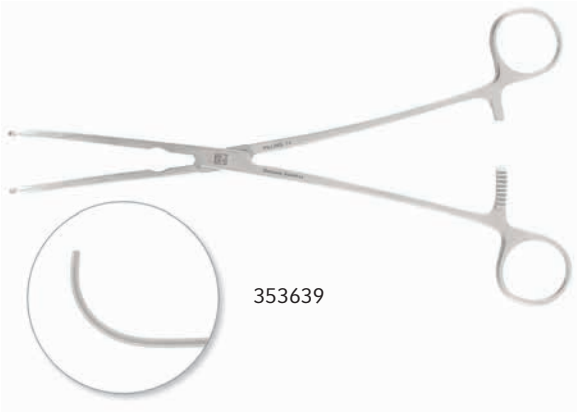
Delicate jaws, 2.4 mm wide. DeBakey®-type Serrations. LIFE-LOK® Box Lock. Versatile clamps which have been found useful in small bowel procedures.

| ITEM # | DESCRIPTION |
|---|---|
| 353490 | Straight, 8-1/8" (20.5 cm) |
| 353491 | Angled 15 degrees, 8-1/8" (20.5 cm) |
| 353492 | Angled 30 degrees, 8" (20.5 cm) |

# VASCULAR CLAMPS

## Peripheral Vascular Clamps

### MITCHEL-ADAM MULTIPURPOSE CLAMP




A delicate vascular clamp 25 cm long with curved shanks. Designed as a multi-purpose clamp for vascular surgery. DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 353639 | 9-7/8" (25 cm) |

## Cooley Vascular Clamps

### COOLEY CAROTID, SUBCLAVIAN AND RENAL CLAMP

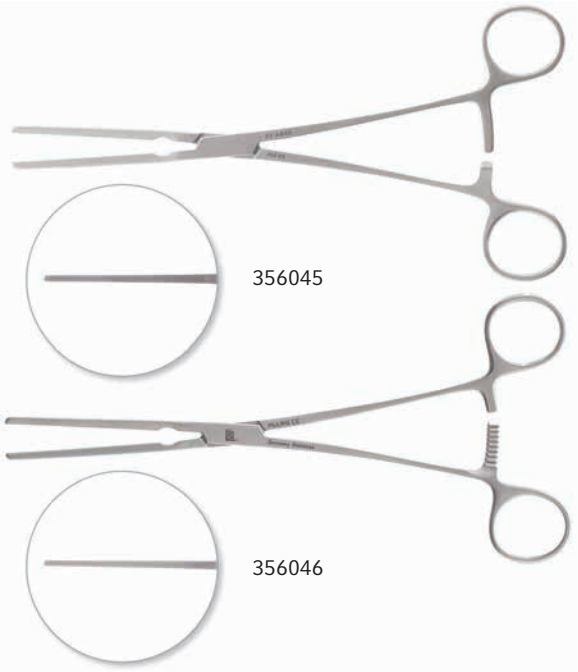
Long, slender clamp with jaws calibrated on outer sides from distal tip. Curved shafts, angled tips.

| ITEM # | DESCRIPTION |
|---|---|
| 354839 | Carotid, jaw length 5/8" (15 mm), 7-3/4" (19.5 cm) |

# VASCULAR CLAMPS

## Cooley Vascular Clamps

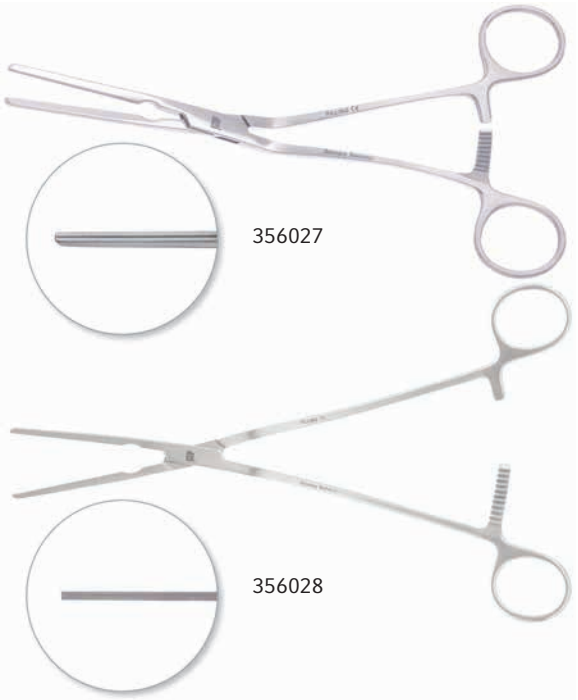
### COOLEY COARCTATION CLAMPS




Standard length.

| ITEM # | DESCRIPTION |
|---|---|
| 356045 | Straight, jaw section 2-7/8" (7.5 cm) long, 8-3/4" (22.5 cm) |
| 356046 | Angled, jaw section 2-3/8" (6 cm) long, 8-7/8" (22.5 cm) |

### COOLEY ILIAC CLAMPS



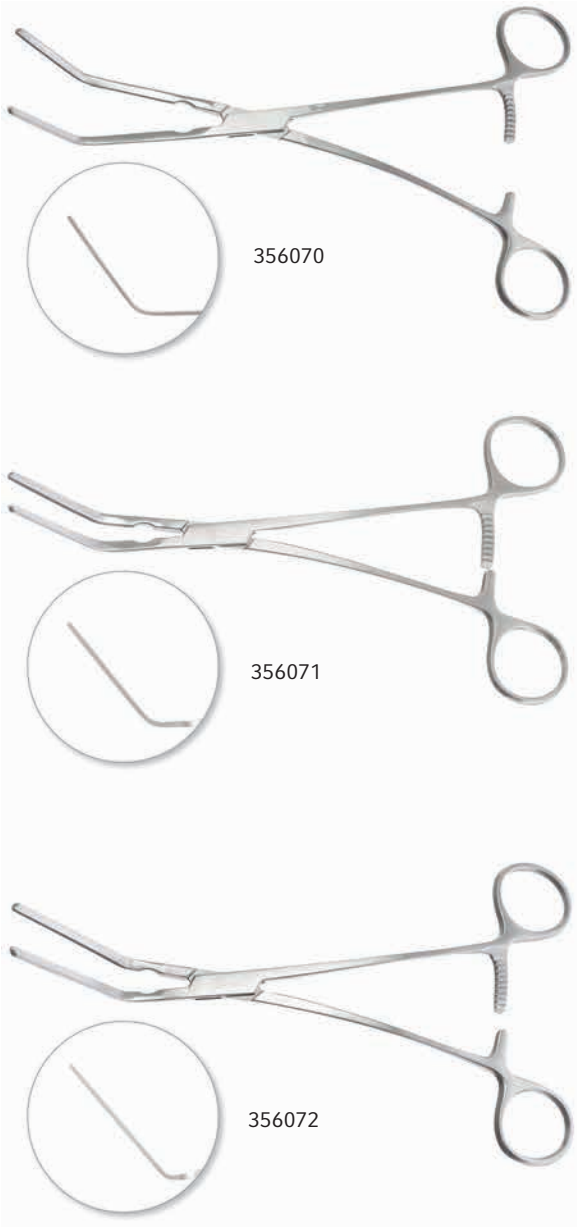

Angled jaws. Unusually long jaws contain Cooley-type serrations only on the distal portion.

| ITEM # | DESCRIPTION |
|---|---|
| 356027 | Light model, 8-1/4" (21 cm) |
| 356028 | 9-3/4" (25 cm) |

# VASCULAR CLAMPS

## Cooley Vascular Clamps

### COOLEY JAW MULTIPURPOSE CLAMPS



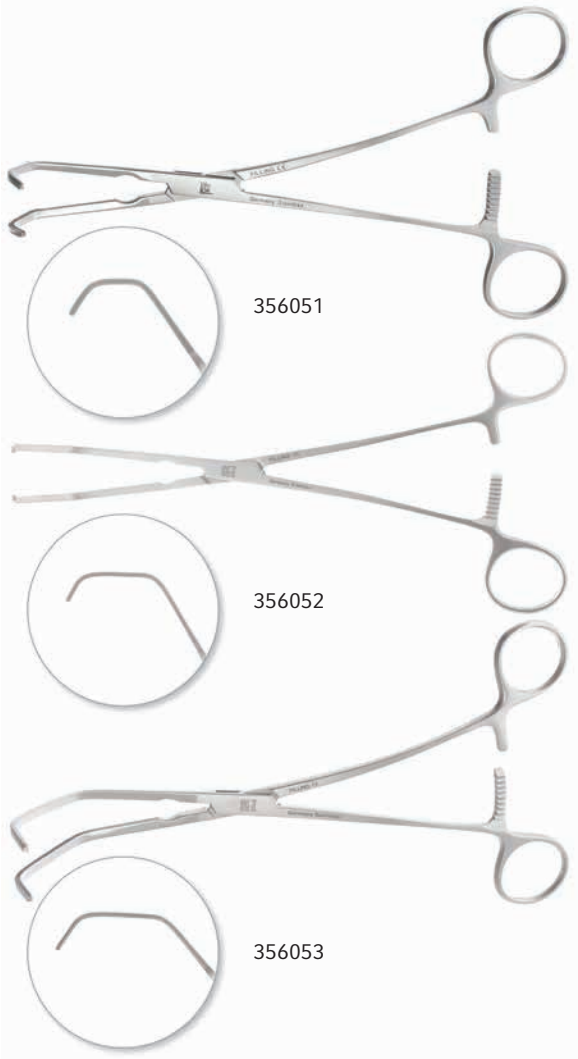

60 degree angled jaws with curved shafts.

| ITEM # | DESCRIPTION |
|---|---|
| 356070 | No. 1, jaw length 1-1/2" (4 cm), 9-1/8" (23 cm) |
| 356071 | No. 2, jaw length 2-1/8" (5.5 cm), 8-1/2" (21.5 cm) |
| 356072 | No. 3, jaw length 2-1/2" (6.5 cm), 8-1/2" (21.5 cm) |

# VASCULAR CLAMPS

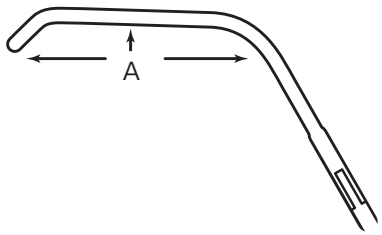
## Cooley Vascular Clamps

### COOLEY PARTIAL-OCCLUSION CLAMPS




Full adult size with Cooley 2 x 2 jaws, varying in length and jaw size. All have long distal sections adding to their value as partial tangential occlusion clamps.

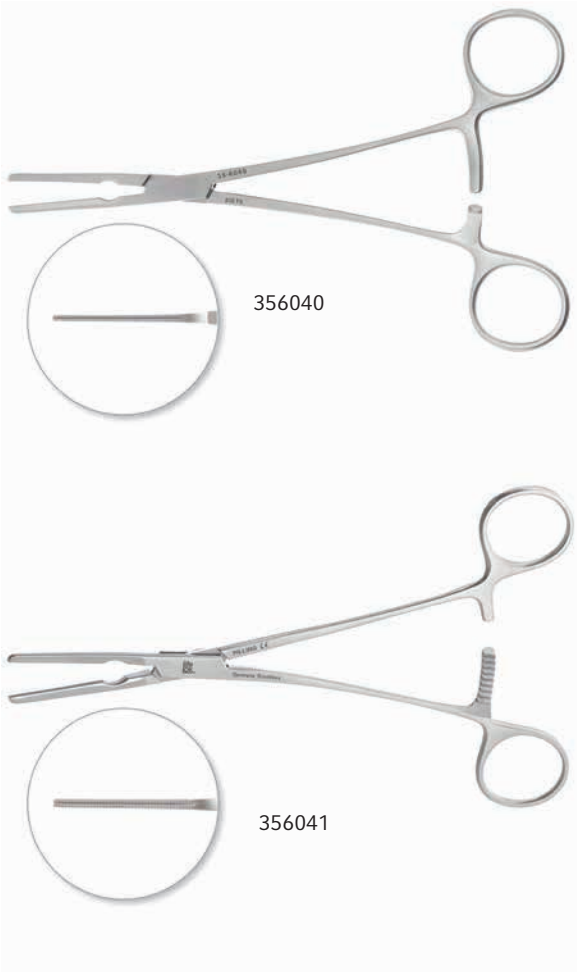
| ITEM # | DESCRIPTION |
|---|---|
| 356051 | No. 1, (A) length 1" (2.5 cm), overall 8-1/8" (20.5 cm) |
| 356052 | No. 2, (A) length 1-1/2" (4 cm), overall 8-7/8" (22.5 cm) |
| 356053 | No. 3, (A) length 1-7/8" (5 cm), overall 8-7/8" (22.5 cm) |



# VASCULAR CLAMPS

## Cooley Vascular Clamps

### COOLEY PATENT-DUCTUS CLAMPS




| ITEM # | DESCRIPTION |
|---|---|
| 356040 | Straight, 8" (20.5 cm) |
| 356041 | Angled, 7-7/8" (20 cm) |

# VASCULAR CLAMPS

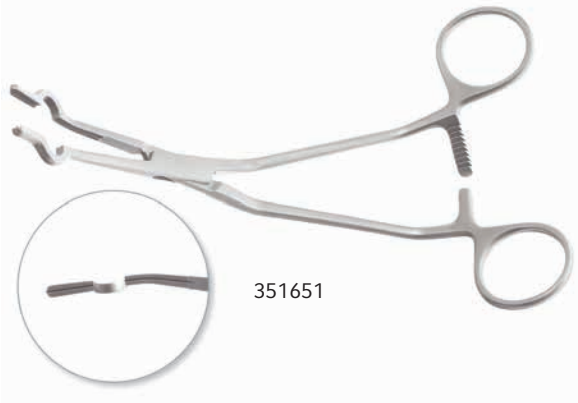
## Cooley Vascular Clamps

### COOLEY PERIPHERAL VASCULAR CLAMPS

Useful for temporarily occluding the femoral, popliteal, subclavian and carotid arteries during performances of thromboend arterectomy or application of by-pass procedures. Relatively lightweight Cooley Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 356025 | Angled, 7-1/2" (19 cm) |
| 356031 | Curved, 6-3/4" (17 cm) |

### COOLEY VENA CAVA CLAMPS




Occludes the vena cava and allows bloodflow through the cannula or catheter.

| ITEM # | DESCRIPTION |
|---|---|
| 351645 | Child size, 24 Fr. Ring tip width, 6-1/8" (15.5 cm) |
| 351646 | Child size, 26 Fr. Ring tip width, 7-1/4" (18.5 cm) |
| 351650 | Adult size, 28 Fr. Ring tip width, 7-1/4" (18.5 cm) |
| 351651 | Adult size, 30 Fr. Ring tip width, 7-1/4" (18.5 cm) |
| 351652 | Adult size, 32 Fr. Ring tip width, 7-1/4" (18.5 cm) |
| 351654 | Adult size, 34 Fr. Ring tip width, 7-1/4" (18.5 cm) |
| 351653 | Adult size, 36 Fr. Ring tip width, 7-1/4" (18.5 cm) |

# AORTIC VASCULAR CLAMPS

Many Pilling® Vascular Clamps feature the DeBakey®–type Non-Traumatic Jaws and LIFE-LOK® Mortise Box Lock.

Ratchets on Pilling® Vascular Clamps provide the precision control needed for arterial clamping. Ratchets are designed with steps (1 x 7, 1 x 9, 1 x 11) to furnish the specific amounts of desired pressure. Jaws are precision-set by hand.

Coordination of ratchet length and jaw setting provides the accurate amount of required compression.

Many styles of DeBakey®–type Clamps are available with spring handles. With this construction feature, a portion of the shaft is flattened or otherwise altered and specially tempered to eliminate rigidity and provide a softness proportionate with the overall size and purpose of the instrument. The intention is to minimize trauma to vessels with the soft spring handles but hold securely with DeBakey®–type Jaws.

## HISTORY AND ACHIEVEMENTS

Since 1814, Pilling® has designed and manufactured high-quality surgical instruments. As one of the oldest surgical instrument companies in the world, we have continued our tradition of craftsmanship and innovation.

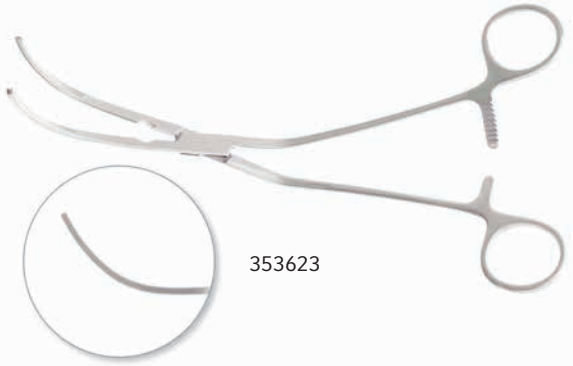
## THE PILLING® BRAND ADVANTAGE

Every cardiovascular instrument that we produce is set and checked by hand, then checked again to assure that it has the essential "feel" that is desired by surgeons. The Pilling® Brand has gained international acclaim for providing exceptional surgical tools. Working closely with the world's top specialists, we continue to customize instrumentation to meet their exacting individual requirements. We have designed over 500 vascular clamps.

# VASCULAR CLAMPS

## Aortic Vascular Clamps

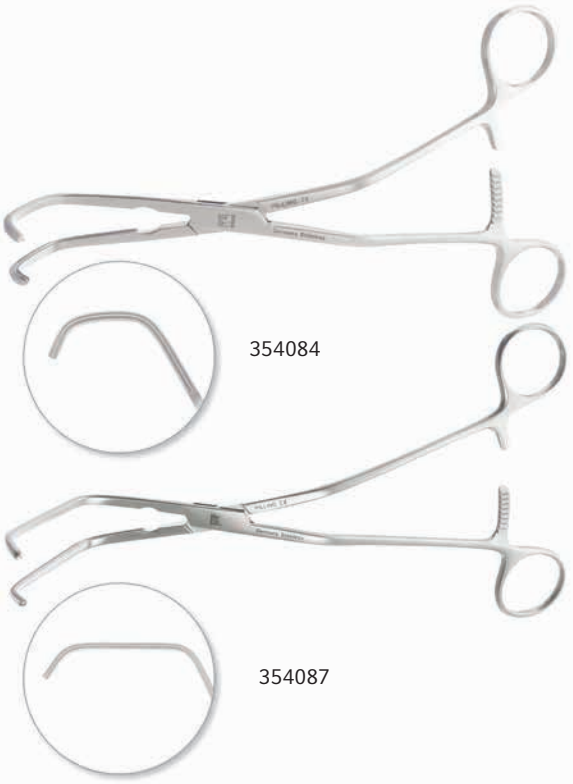
### BAHNSON AORTA CLAMP




To occlude the aorta during a median sternotomy in the adult. Angle of handle puts it out of the way.

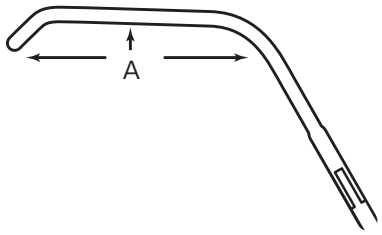
| ITEM # | DESCRIPTION |
|---|---|
| 353623 | Curved, DeBakey® Jaw, 2-3/4" (7 cm), 9" (23 cm) |

### BAILEY AORTA CLAMPS




Designed for exclusion of a portion of the vessel, these clamps are medium-weight and have DeBakey®-type Jaws.

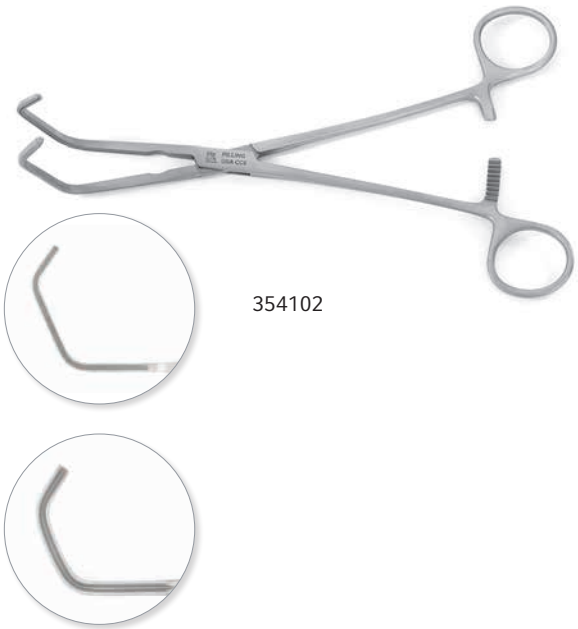
| ITEM # | DESCRIPTION |
|---|---|
| 354084 | Angled shafts, extra-small size jaw, (A) length 1-1/8" (3 cm), 8" (20.5 cm) |
| 354087 | Angled shafts, large size jaw, (A) length 2-1/8" (5.5 cm), 9-3/4" (25 cm) |



# VASCULAR CLAMPS

## Aortic Vascular Clamps

### BECK-TYPE AORTA CLAMPS

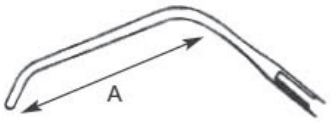


354102

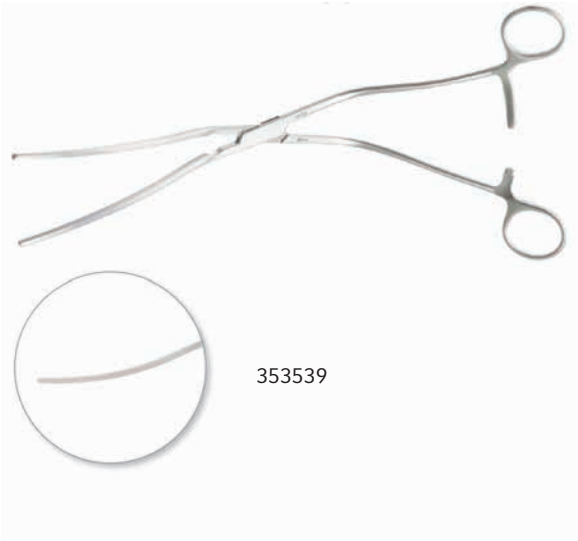
354100

DeBakey®-type Jaws, acutely angled at approximately 65 degrees. Straight shafts.

| ITEM # | DESCRIPTION |
|---|---|
| 354100 | Angled, DeBakey® Jaw, 1-1/4" (3 cm) tip length (A), 8-1/8" (20.5 cm) |
| 354102 | Angled, DeBakey® Jaw, 2" (5 cm) tip length (A), 8-5/8" (22 cm) |




### CHERRY SUPRACELIAC CLAMP



353539

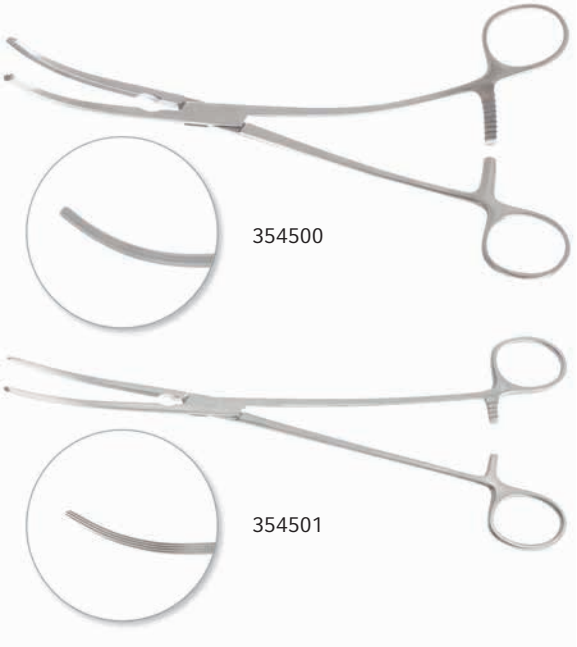
Used in thoracic and abdominal aortic aneurysm repairs, renal vascular procedures, mesenteric artery revascularization. For deep access to aorta superior to the celiac artery. Jaw length and curve combine with angled handle to provide optimum cross clamping capability and reduced operative field obstruction.

| ITEM # | DESCRIPTION |
|---|---|
| 353539 | Curved, 2 x 3 DeBakey®-type Jaw, 50 degree handle, LIFE-LOK® Box Lock, 12-1/4" (31 cm) |

# VASCULAR CLAMPS

## Aortic Vascular Clamps

### CRAFOORD COARCTATION VASCULAR CLAMPS

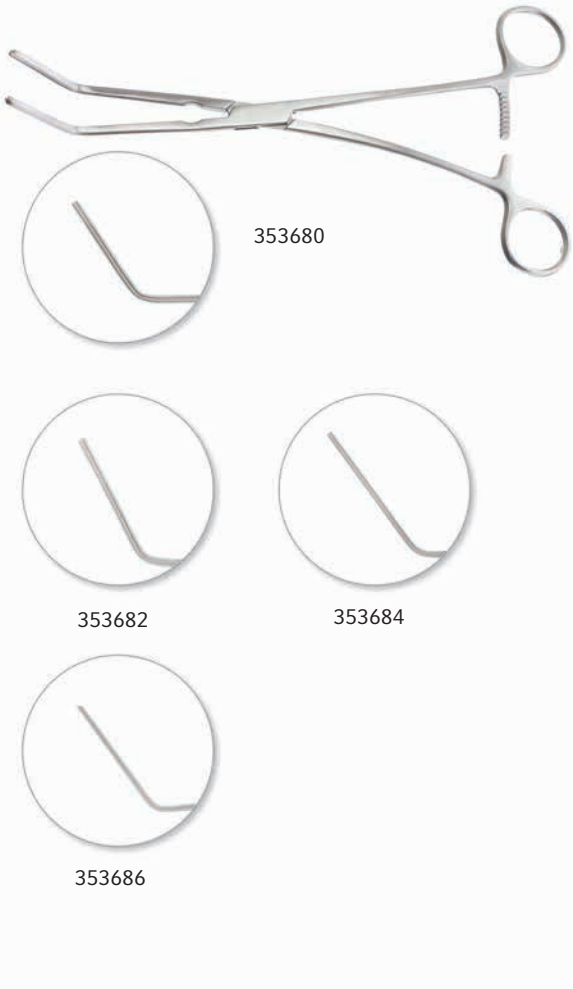



| ITEM # | DESCRIPTION |
|---|---|
| 354500 | Slightly curved, 3-3/8" (8.5 cm) DeBakey®-type Jaw, 1 x 9 ratchets, 9-5/8" (24.5 cm) |
| 354501 | Slightly curved, with original, longitudinal jaws, 9-5/8" (24.5 cm) |

# VASCULAR CLAMPS

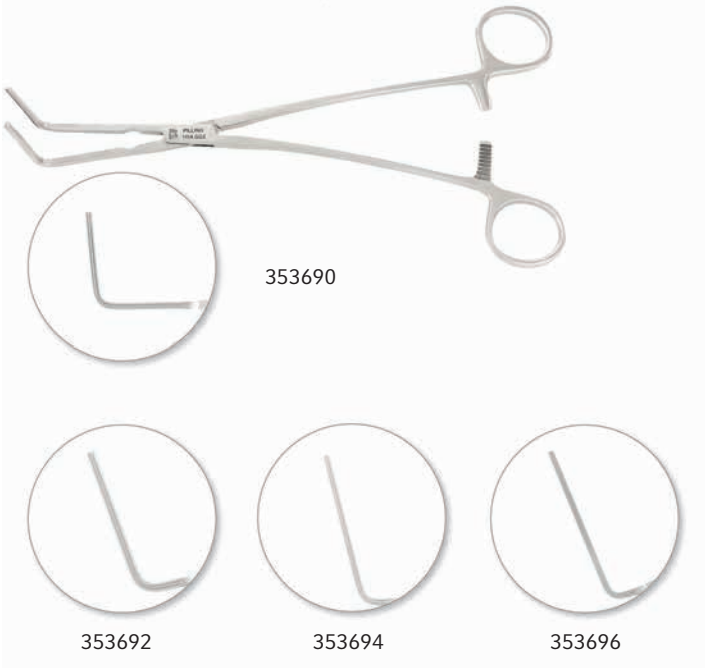
## Aortic Vascular Clamps

### DEBAKEY® MULTI-PURPOSE ANGLED CLAMPS




After considerable use and experimentation with a wide variety of standard pattern clamps, this assortment of matched design DeBakey® Clamps has been assembled. They are of various lengths with curved shafts. The DeBakey®-type Jaws are angulated at 60 or 90 degrees. In addition to their function as aortic clamps, they are available for use as bronchus and gastric clamps in general surgery.

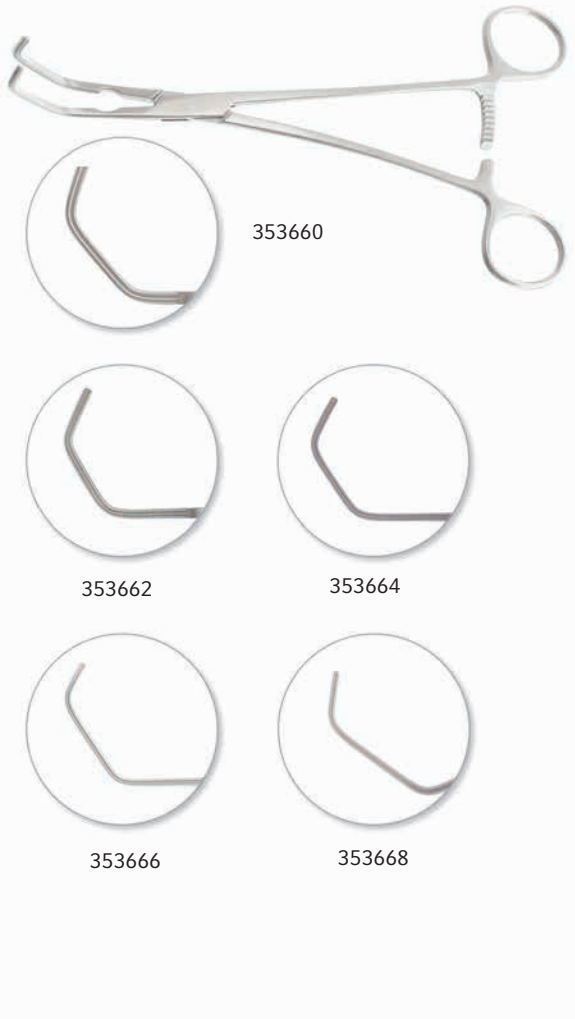
| ITEM # | DESCRIPTION |
|---|---|
| 353680 | No. 1, 60 degree angle, 1-1/4" (3.5 cm) jaw, 1 x 9 ratchets, 9-1/2" (24 cm) |
| 353682 | No. 2, 60 degree angle, 1-3/4" (4.5 cm) jaw, 1 x 9 ratchets, 8-5/8" (22 cm) |
| 353684 | No. 3, 60 degree angle, 2" (5 cm) jaw, 1 x 9 ratchets, 9-7/8" (25 cm) |
| 353686 | No. 4, 60 degree angle, 3-1/2" (8.9 cm) jaw, 1 x 11 ratchets, 11-5/8" (29.5 cm) |
| 353690 | No. 1, 90 degree angle, 1-3/4" (4.5 cm) jaw, 9-1/2" (24 cm) |
| 353692 | No. 2, 90 degree angle, 2-1/4" (5.5 cm) jaw, 7-1/4" (18.5 cm) |
| 353694 | No. 3, 90 degree angle, 2-3/4" (7 cm) jaw, 9" (23 cm) |
| 353696 | No. 4, 90 degree angle, 4-1/8" (10.5 cm) jaw, 10-1/4" (26 cm) |



# VASCULAR CLAMPS

## Aortic Vascular Clamps

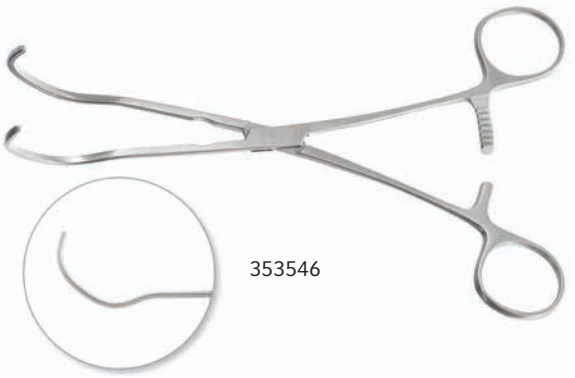
### DEBAKEY® TANGENTIAL OCCLUSION CLAMPS




Since most of the double-angle clamps now available are considered too shallow in the jaw section due to short distal tip section, this deep-jaw selection of DeBakey®-type Clamps was designed. The set consists of five instruments varying in length and jaw size. All have unusually long distal sections adding to their value as partial tangential occlusion clamps. Dull, non-glare finished stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 353660 | No. 1, 1-3/8" (3.5 cm) jaw, 1 x 9 ratchets, 7-3/4" (19.5 cm) |
| 353662 | No. 2, 1-7/8" (5 cm) jaw, 1 x 11 ratchets, 10" (25.5 cm) |
| 353664 | No. 3, 2" (5 cm) jaw, 1 x 11 ratchets, 10-3/8" (26.5 cm) |
| 353666 | No. 4, 2-3/8" (6 cm) jaw, 1 x 11 ratchets, 10" (25.5 cm) |
| 353668 | No. 5, 3-1/8" (8 cm) jaw, 1 x 11 ratchets, 10-1/8" (25.5 cm) |
| 353670 | Complete set of 5 clamps |

### FAVALORO PROXIMAL ANASTOMOSIS CLAMP

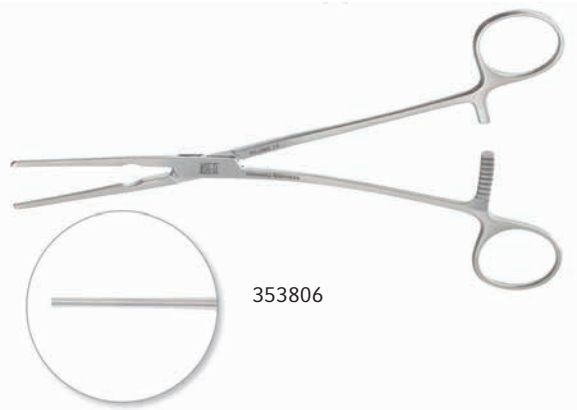



| ITEM # | DESCRIPTION |
|---|---|
| 353546 | Curved, 1-1/4" (3.5 cm) DeBakey®-type Jaws, 8" (20 cm) |

# VASCULAR CLAMPS

## Aortic Vascular Clamps

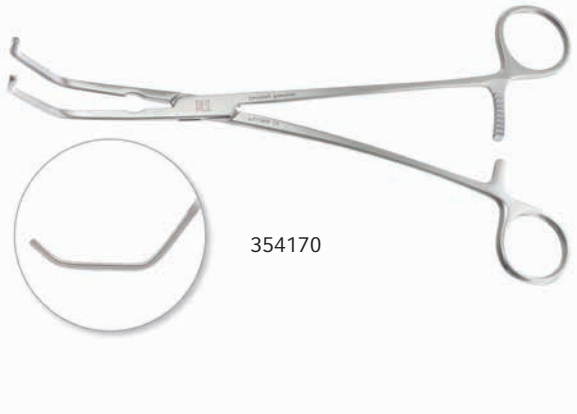
### GERBODE PATENT DUCTUS CLAMP




The Glover Patent Ductus Clamps on page 636 have been redesigned with extra narrow 1" (2.5 cm) DeBakey®-type Jaws to provide for maximum length of cut vessel for more convenient suturing.

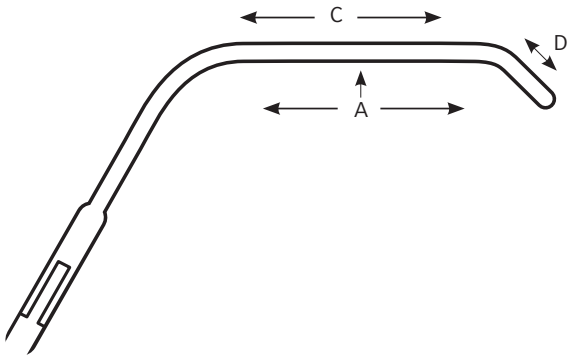
| ITEM # | DESCRIPTION |
|---|---|
| 353806 | Angled, 8" (20.5 cm) |

### GLOVER ATRIAL APPENDAGE CLAMP




DeBakey®-type Jaws. Specially designed for holding the atrial appendage at any level without crushing.

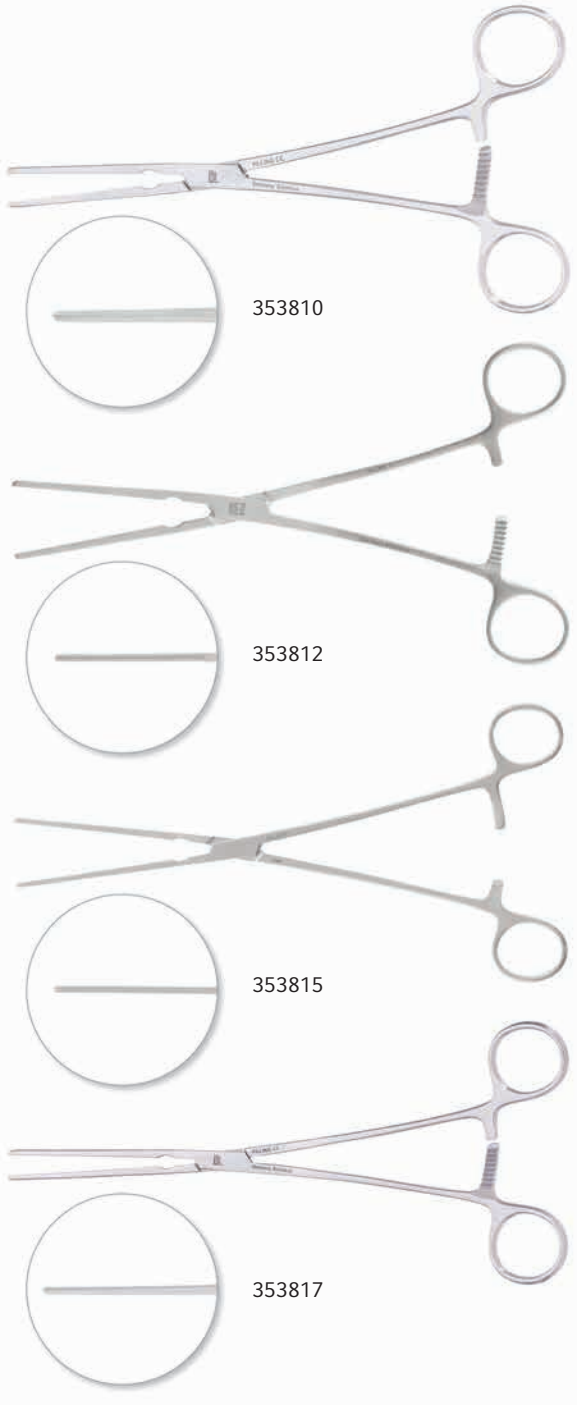
| ITEM # | DESCRIPTION |
|---|---|
| 354170 | Jaw (A) length 1-11/16" (43 mm), (A) depth 1/4" (7 mm), (C) 1-1/8" (30 mm), (D) 1/2" (13 mm), 9-1/2" (24 cm) |



# VASCULAR CLAMPS

## Aortic Vascular Clamps

### GLOVER COARCTATION CLAMPS



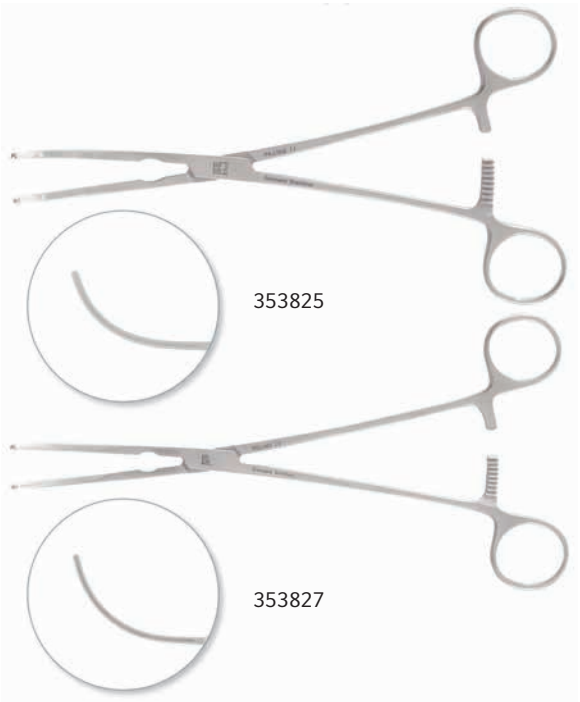

DeBakey®-type Jaw, 1 x 9 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 353810 | Straight, 3-1/8" (8 cm) jaw, 9" (23 cm) |
| 353812 | Angled, 3-1/8" (8 cm) jaw, 8-7/8" (22.5 cm) |
| 353815 | Extra-long, straight, 3-3/4" (9.5 cm) jaw, 10-5/8" (27 cm) |
| 353817 | Extra-long, angled, 3-5/8" (9 cm) tip length, 10-3/8" (26.5 cm) |

# VASCULAR CLAMPS

## Aortic Vascular Clamps

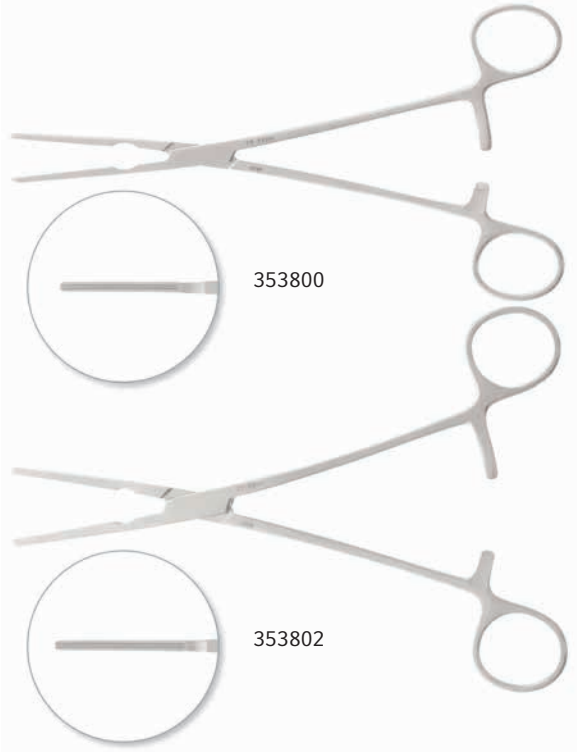
### GLOVER CURVED CLAMPS




Curved DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 353825 | Standard size, 1-1/4" (3 cm) jaw, 8-1/2" (21.5 cm) |
| 353827 | Extra-long, 1-3/4" (4.5 cm) jaw, 9-7/8" (25 cm) |

### GLOVER PATENT DUCTUS CLAMPS



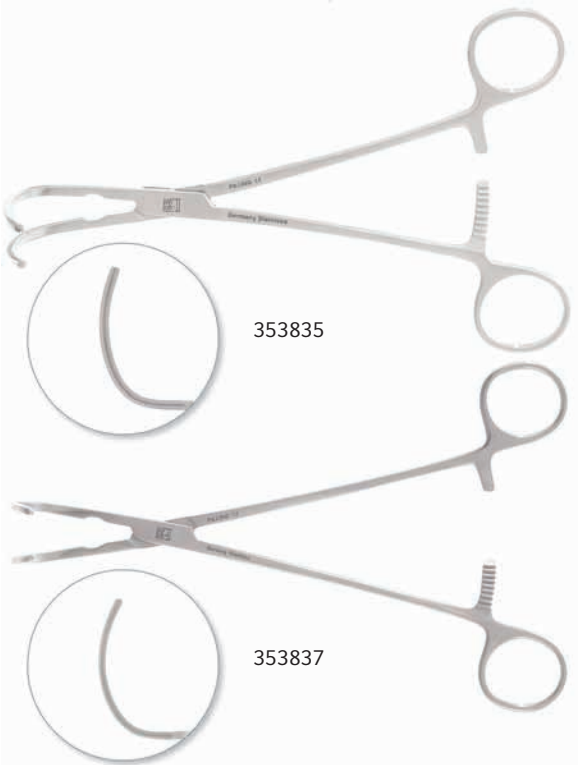

DeBakey®-type Jaws, 1 x 9 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 353800 | Straight, 2-1/4" (5.8 cm) jaw, 8-1/8" (20.5 cm) |
| 353802 | Angled, 3/4" (1.9 cm) jaw, 8-1/4" (21 cm) |

# VASCULAR CLAMPS

## Aortic Vascular Clamps

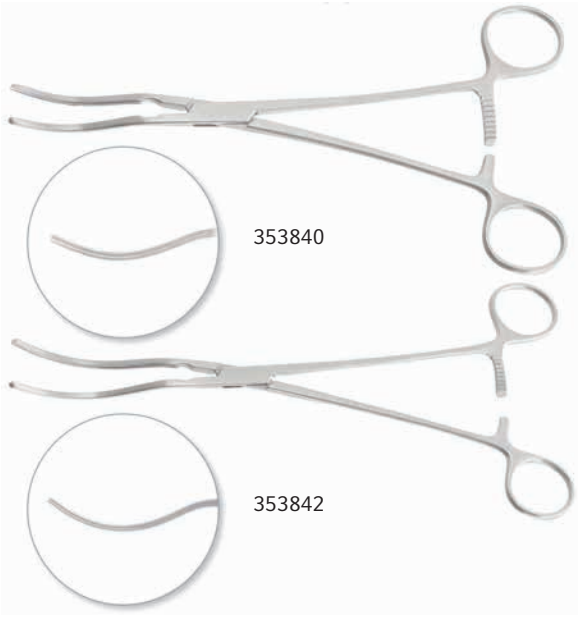
### GLOVER RIGHT ANGLE CURVED CLAMPS




Curved DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 353835 | 1-7/8" (4.8 cm) jaw, 7-5/8" (19.5 cm) |
| 353837 | 2-3/8" (6 cm) jaw, 8-7/8" (22.5 cm) |

### GLOVER SPOON SHAPED CLAMPS



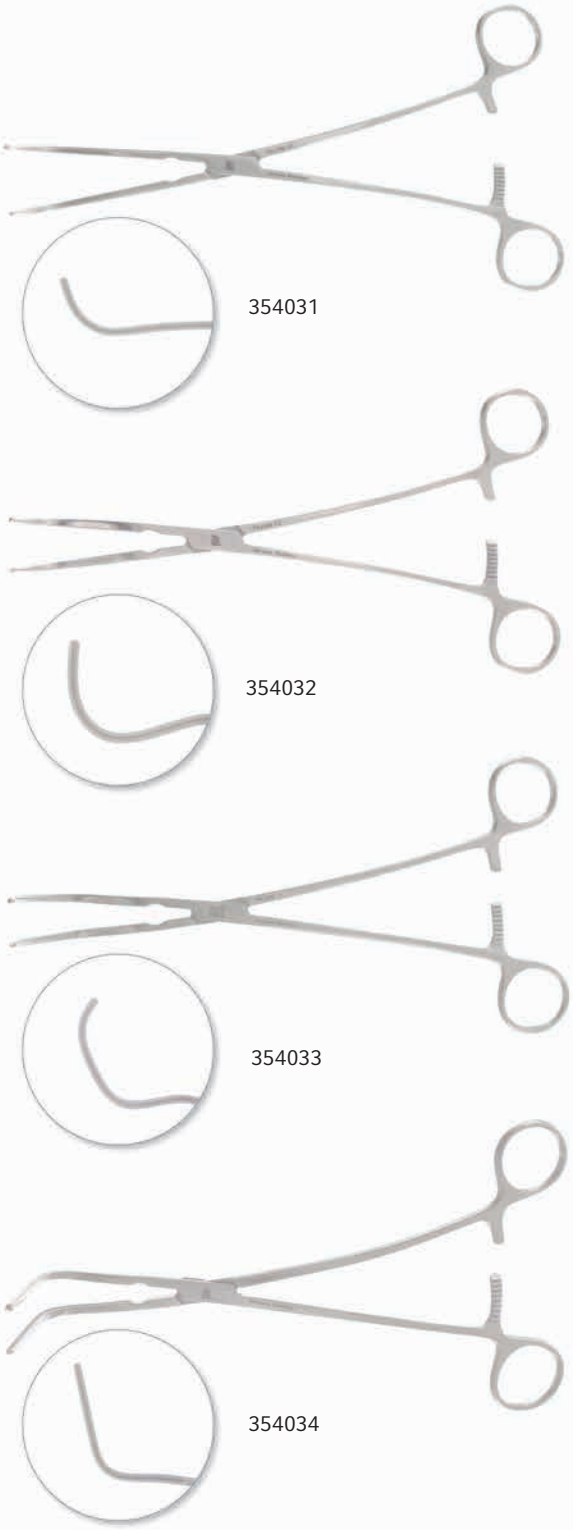

Curved DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 353840 | Standard size, 2-3/4" (7 cm) jaw, 8-5/8" (22 cm) |
| 353842 | Extra-long, 3-7/8" (10 cm) jaw, 10-1/2" (27 cm) |

# VASCULAR CLAMPS

## Aortic Vascular Clamps

### HARKEN CLAMPS




A matched set of four clamps identical in length and weight but with varying DeBakey®-type Jaw shapes.

| ITEM # | DESCRIPTION |
|---|---|
| 354031 | No. 1 curve, 10-1/2" (26.5 cm) |
| 354032 | No. 2 curve, 10-1/8" (25.5 cm) |
| 354033 | No. 3 curve, 10" (25.5 cm) |
| 354034 | No. 4 curve, 9-5/8" (24.5 cm) |

# VASCULAR CLAMPS

## Aortic Vascular Clamps

### HUFNAGEL AORTA CLAMPS

For the ascending aorta. Used to occlude the thoracic aorta in operations on the aortic root and the aortic valve. The curvature of the clamp allows it to be used with the midline sternotomy and to rest out of the operative field. DeBakey®-type Jaws.

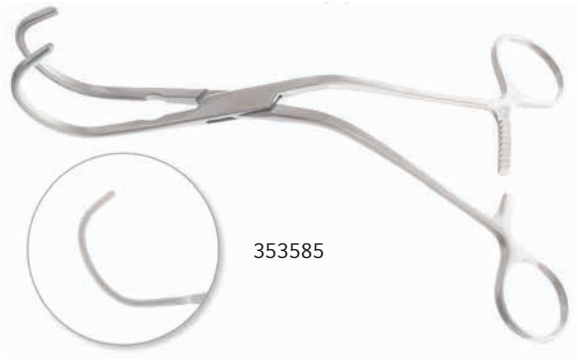
| ITEM # | DESCRIPTION |
|---|---|
| 353620 | Curved, 3-1/8" (8 cm) jaws, 9-5/8" (24.5 cm) |
| 353622 | Straight, 3-1/8" (8 cm) jaws, 9-5/8" (24.5 cm) |

# AORTIC VASCULAR CLAMPS

## Kay and Lambert-Kay Anastomosis Clamps

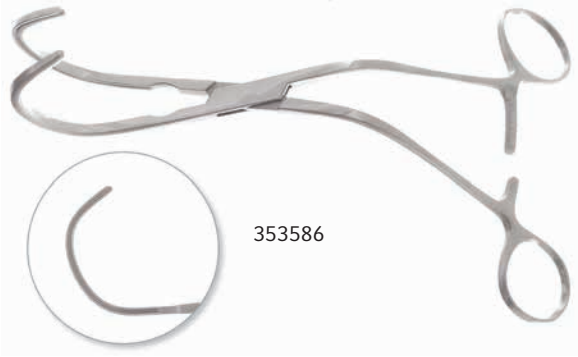
Three clamps designed primarily as side-biting clamps for ascending aorta to be used in lateral anastomosis in saphenous vein coronary artery by-pass procedures. Both clamps may also be applied for partial exclusion of other segments of aorta, large and small bowel. DeBakey®-type Jaws, 1 x 9 ratchets.

### KAY-LAMBERT AORTIC ANASTOMOSIS CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 353585 | 1-3/4" (4.5 cm) jaw, 8-1/8" (20.5 cm) |

### LAMBERT-KAY AORTIC ANASTOMOSIS CLAMP

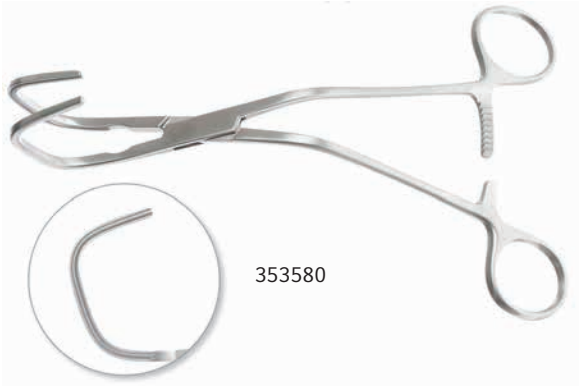



| ITEM # | DESCRIPTION |
|---|---|
| 353586 | Large, 2" (5 cm) tip length, 8-1/8" (20.5 cm) |

# VASCULAR CLAMPS

## Aortic Vascular Clamps

### KAY AORTIC ANASTOMOSIS CLAMP

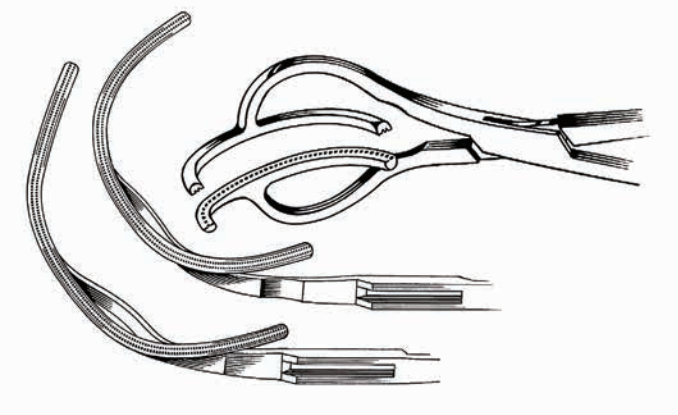



| ITEM # | DESCRIPTION |
|---|---|
| 353580 | 1-1/2" (4 cm) jaw, 7-5/8" (19.5 cm) |

### LEMOLE-STRONG AORTA CLAMPS

DeBakey®-type Jaw, 1 x 9 ratchets.

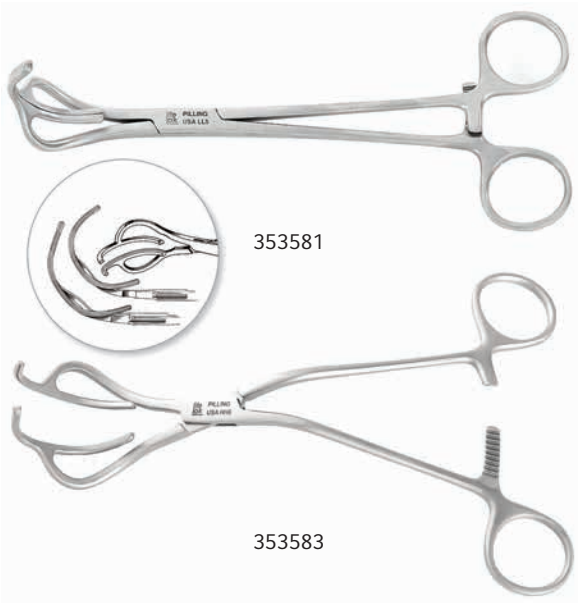
| ITEM # | DESCRIPTION |
|---|---|
| 353582 | Straight shanks, 7-7/8" (20 cm) |
| 353584 | Angled shanks, 8" (20.5 cm) |



# VASCULAR CLAMPS

## Aortic Vascular Clamps

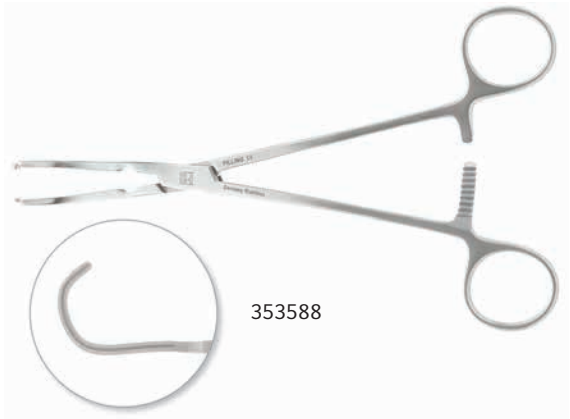
### STRONG AORTA CLAMPS




Unique design provides uniform pressure across entire jaw surface. 1 x 9 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 353581 | Straight shanks, 8" (20 cm) |
| 353583 | Angled shanks, 8-1/8" (20.5 cm) |

### MITCHELL AORTOMY CLAMP

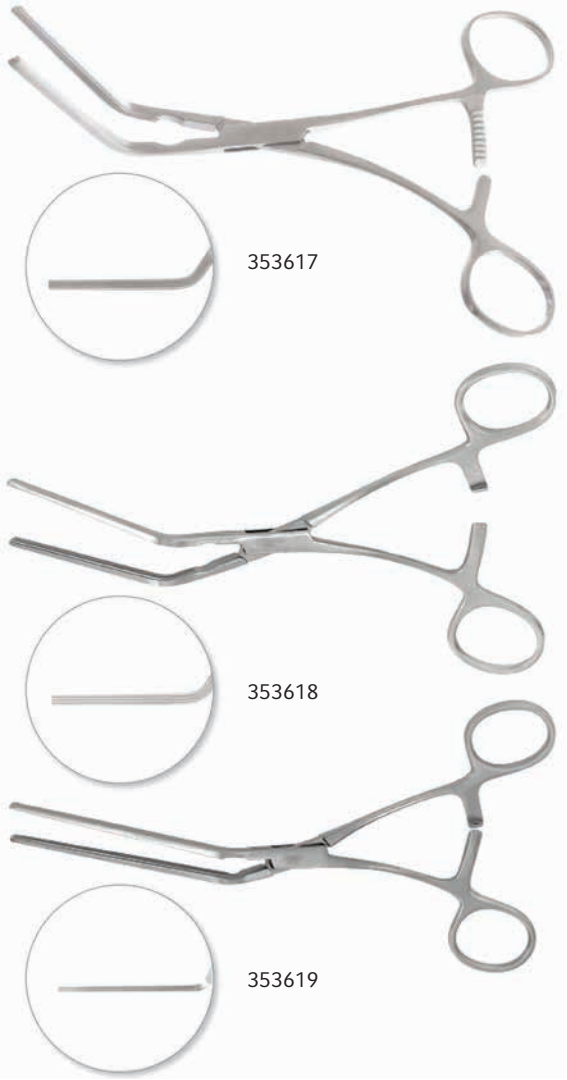



| ITEM # | DESCRIPTION |
|---|---|
| 353588 | DeBakey®-type Jaws, 1 x 9 ratchets, 8" (20.5 cm) |

# VASCULAR CLAMPS

## Aortic Vascular Clamps

### MORRIS ASCENDING AORTA CLAMPS



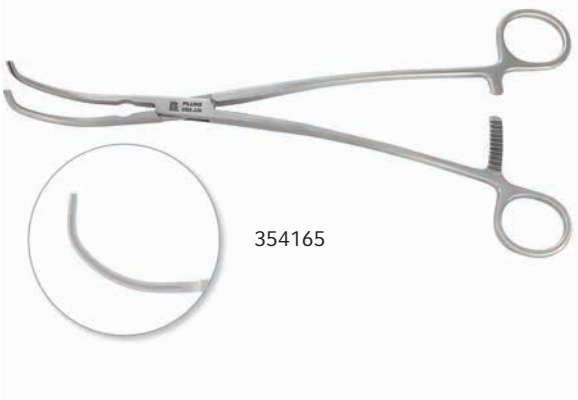

2 x 3 DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 353617 | Jaws 2-1/2" (6.5 cm) from angle, 8-1/8" (20.5 cm) |
| 353618 | Jaws 2-1/2" (6.5 cm) from angle, 9-1/2" (24 cm) |
| 353619 | Jaws 3-3/4" (9.5 cm) from angle, 9-1/2" (24 cm) |

# VASCULAR CLAMPS

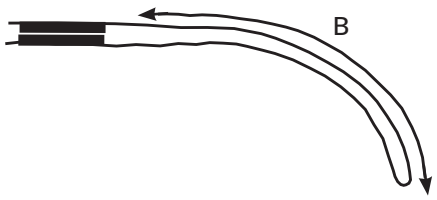
## Aortic Vascular Clamps

### O'NEILL DOUBLE CURVED CLAMP




This is a multipurpose instrument, actually a modification of the DeBakey®-type Satinsky. The jaw angles have been replaced by curves. Useful as a vena cava clamp and atrial appendage clamp, also for cross clamping or partially occluding vessels.

| ITEM # | DESCRIPTION |
|---|---|
| 354165 | (B) 3-1/8" (80 mm), 10-1/2" (26.5 cm) |



# VASCULAR CLAMPS

## Aortic Vascular Clamps

### SATINSKY CLAMPS

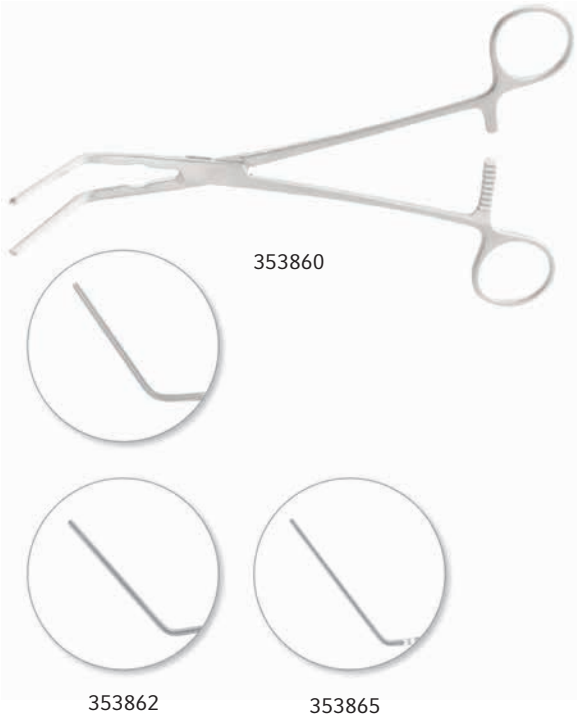
These instruments, originally designed for secure non-crushing grip in clamping the vena cava, have proven to be the most popular and versatile of all cardiac clamps. They are now provided in a variety of jaw types and sizes as listed. DeBakey®-type Jaws, 1 x 11 ratchets. Dull, non-glare finished stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 354000 | Large, 2" (5 cm) jaw, 10-1/4" (26 cm) |
| 354002 | Medium, 1-1/2" (4 cm) jaw, 10" (25.5 cm) |
| 354004 | Small, 1-1/4" (3 cm) jaw, 9-3/4" (25 cm) |
| 354005 | Set of 3 (354000, 354002, 354004) |
| 354010 | Same as Large Satinsky Clamp (354000) except with original criss-cross serrated jaw |

# VASCULAR CLAMPS

## Aortic Vascular Clamps

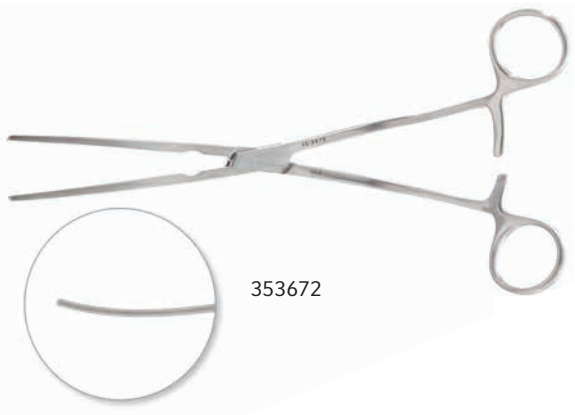
### SCHUMAKER ANGULAR AORTA CLAMPS




DeBakey®-type Jaws are angled at 60 degrees. These clamps are also used extensively in gastric surgery. Dull, non-glare finished stainless steel.

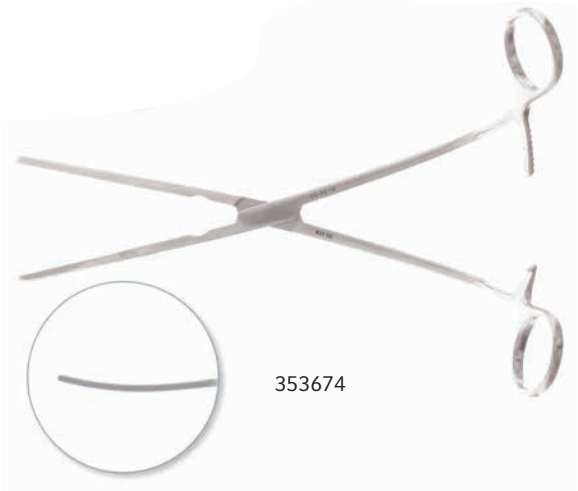
| ITEM # | DESCRIPTION |
|---|---|
| 353860 | Standard model, jaws 1-1/8" (5.5 cm) past angle, 8-1/2" (21.5 cm) |
| 353862 | Standard model, jaws 2-3/4" (7 cm) past angle, 8-7/8" (22.5 cm) |
| 353865 | Heavy model, jaws 3-15/16" (10 cm) past angle, jaw width 4 mm, 11-1/4" (28.5 cm) |

### STONEY DEEP AORTA CLAMPS




Features severely angled handles to lie across the xiphoid portion of the sternum.

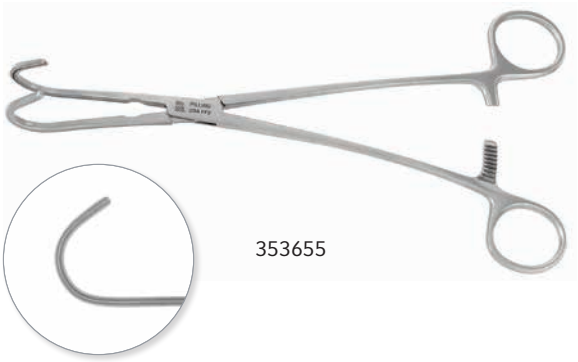
| ITEM # | DESCRIPTION |
|---|---|
| 353672 | 6-7/8" (17.5 cm) |
| 353674 | 9" (23 cm) |



# VASCULAR CLAMPS

## Aortic Vascular Clamps

### WYLIE "J" AORTIC CLAMPS

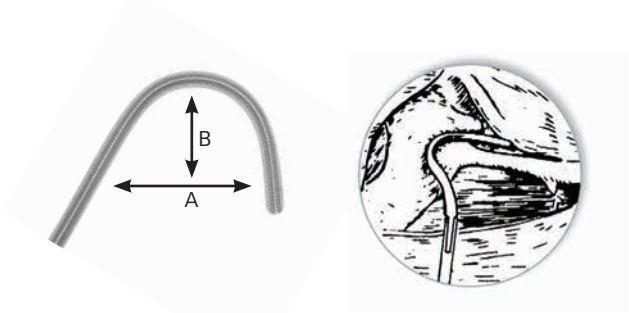


353655

353656

DeBakey®-type Jaws very acutely curved. Width at (A) 1-1/4" (3.5 cm), depth at (B) 1" (2.5 cm).

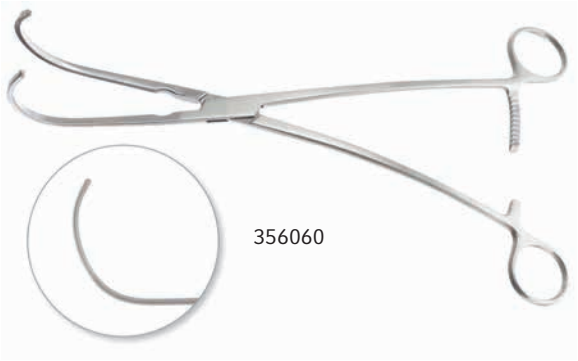
| ITEM # | DESCRIPTION |
|---|---|
| 353655 | Model No. 1, 9-5/8" (24.5 cm) |
| 353656 | Model No. 2, 9-1/4" (23.5 cm) |



# VASCULAR CLAMPS

## Aortic Aneurysm Clamps

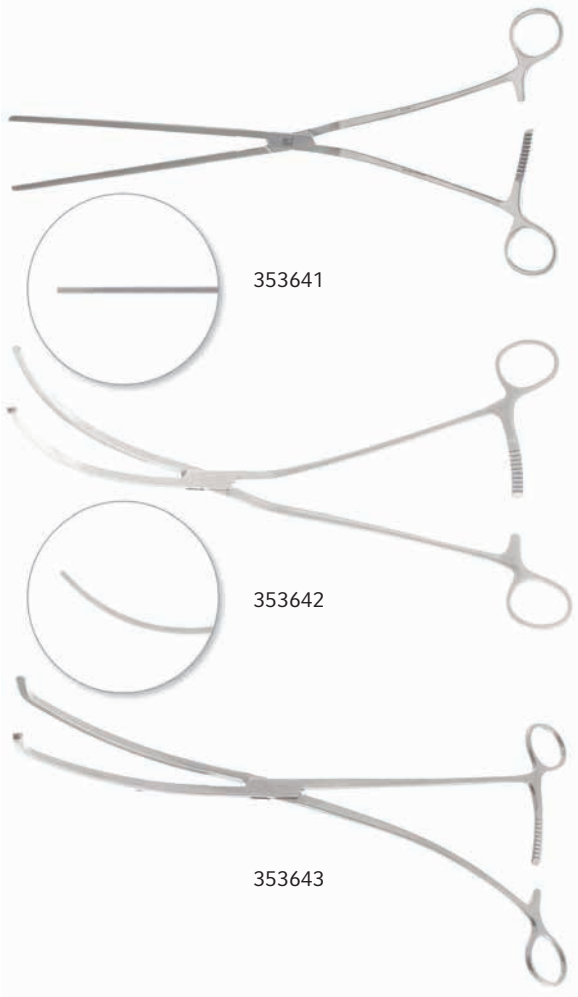
### COOLEY AORTA CLAMP




For temporary occlusion of the abdominal and thoracic aorta during resection and graft replacement. Original Cooley Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 356060 | Jaw length 2" (5 cm), 11-1/4" (28.5 cm) |

### CRAWFORD THORACO-ABDOMINAL ANEURYSM CLAMPS

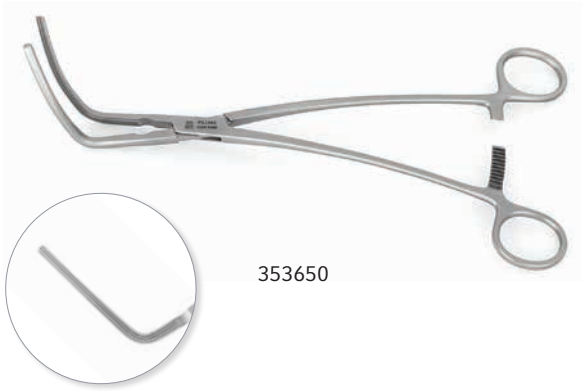



| ITEM # | DESCRIPTION |
|---|---|
| 353641 | Straight jaw, 6-3/8" (16 cm), 13-1/2" (34 cm) |
| 353642 | Curved jaw, angled handle, 12-7/8" (32.5 cm) |
| 353643 | "S" curve, angled tip, 13-5/8" (34.5 cm) |

# VASCULAR CLAMPS

## Aortic Aneurysm Clamps

### DEBAKEY® AORTA CLAMP



353650

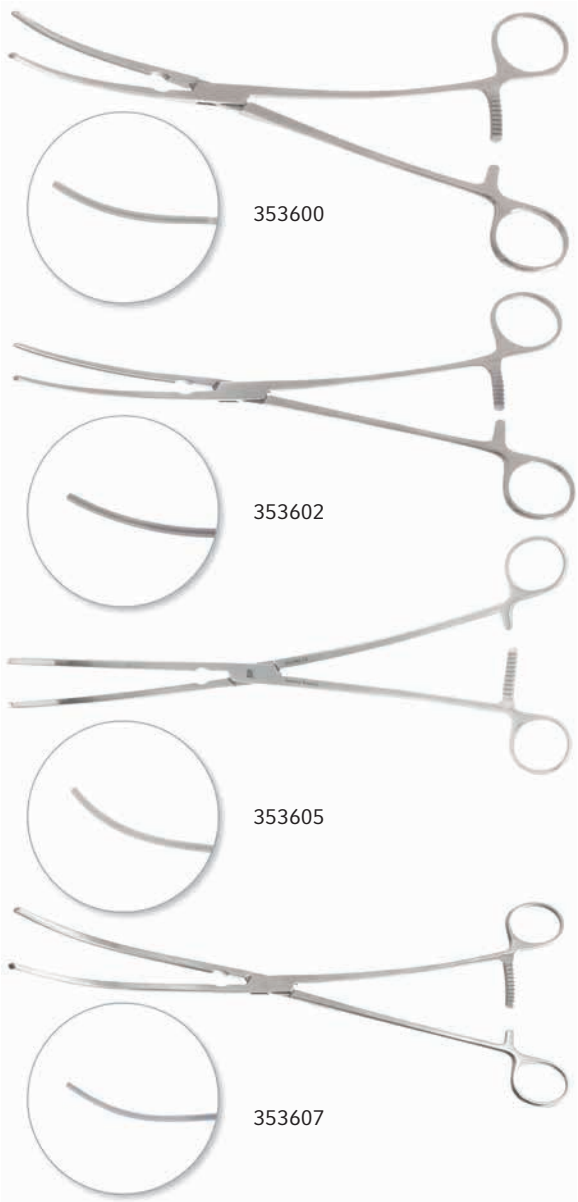
Jaws angled on flat and spoon-shaped. This clamp with DeBakey®-type Jaws may be used for both the abdominal aorta and the thoracic aorta for temporary occlusion during performance of resection and graft replacement. The specially angled jaw permits convenient application of the clamp in such a manner as to maintain the handles of the clamp away from the field of operation.

| ITEM # | DESCRIPTION |
|---|---|
| 353650 | Angled on flat and spoon-shaped, 2-1/2" (6.5 cm) jaw, 1 x 11 ratchets, 10-1/4" (26 cm) |

# VASCULAR CLAMPS

## Aortic Aneurysm Clamps

### DEBAKEY® AORTIC ANEURYSM CLAMPS



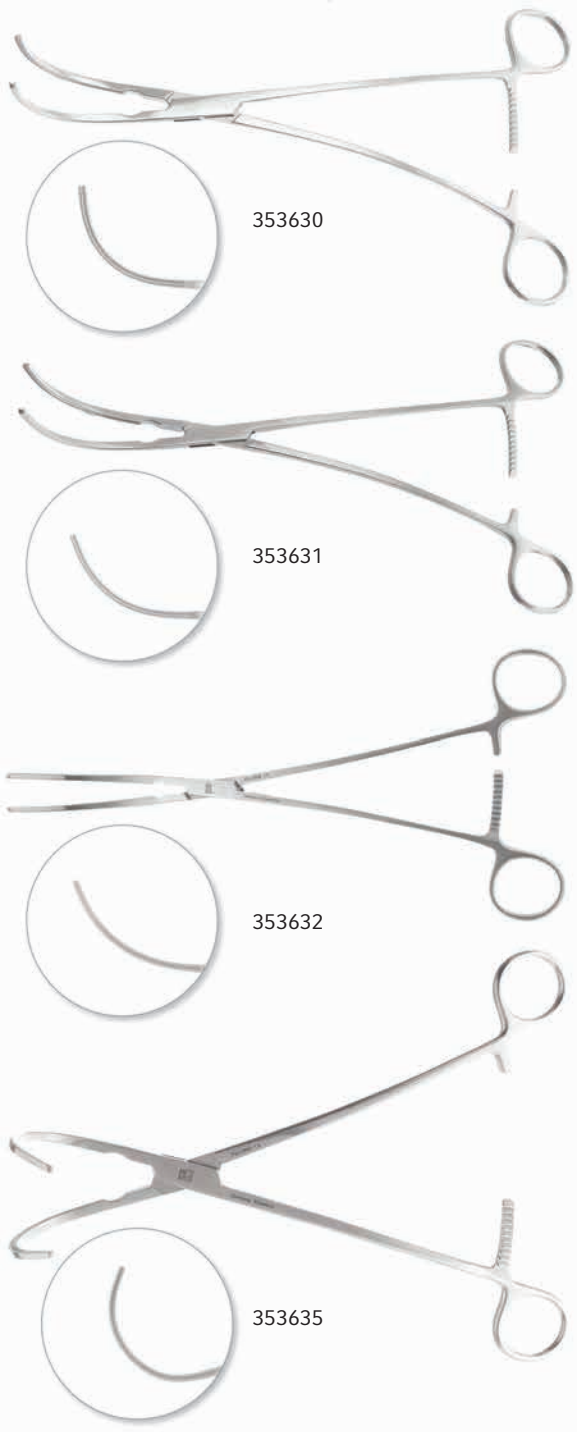

DeBakey®-type Jaws. For occlusion of the neck of sacciform aneurysms of the aorta in tangential excision of such aneurysms and subsequent aortography. Also for temporary occlusion of the aorta in resection of fusiform aneurysms of the aorta and restoration of continuity by aortic grafts.

| ITEM # | DESCRIPTION |
|---|---|
| 353600 | 3-3/4" (9.5 cm) jaw, 1 x 9 ratchets, 10-3/8" (26.5 cm) |
| 353602 | 4" (10 cm) jaw, 1 x 9 ratchets, 10-7/8" (27.5 cm) |
| 353605 | 4-7/8" (12.5 cm) jaw, 1 x 11 ratchets, 12-1/2" (32 cm) |
| 353607 | 5-3/4" (14.5 cm) jaw, 1 x 11 ratchets, 13-1/4" (33.5 cm) |

# VASCULAR CLAMPS

## Aortic Aneurysm Clamps

### DEBAKEY® CURVED CLAMPS




These matched instruments are useful in a wide variety of situations but were originally designed to temporarily occlude the iliac artery just distal to the aorta in resection of aneurysms of the abdominal aorta involving bifurcation. DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 353630 | Acutely curved, 1-1/4" (3.5 cm) jaw, spring handle, 1 x 11 ratchets, 9-5/8" (24.5 cm) |
| 353631 | Medium curved, Bahnson type, 1-1/4" (3 cm) jaw, spring handle, 1 x 9 ratchets, 10-1/8" (25.5 cm) |
| 353632 | Slightly curved, Bahnson type, 1-1/4" (3 cm) jaw, spring handle, 1 x 9 ratchets, 10-3/8" (26 cm) |
| 353635 | Extra-large, acutely curved, 2-1/2" (6.5 cm) jaw, 1 x 11 ratchets, 10-3/8" (26 cm) |

# VASCULAR CLAMPS

## Aortic Aneurysm Clamps

### DEBAKEY® FULL CURVED AORTIC ANEURYSM CLAMPS

DeBakey®-type Jaws. More acutely curved in both jaw and handle sections than aortic clamps 353600 to 353607. For occlusion of the neck of sacciform aneurysms of the aorta in tangential excision of such aneurysms and subsequent aortography. Also for temporary occlusion of the aorta in resection of fusiform aneurysms of the aorta in resection and restoration of continuity by aortic grafts.

| ITEM # | DESCRIPTION |
|---|---|
| 353625 | 2-1/8" (5.5 cm) jaw, 9-1/2" (24 cm) |
| 353626 | 11-1/8" (28.5 cm) |
| 353627 | 2-1/4" (5.5 cm) jaw, 12-1/2" (31.5 cm) |

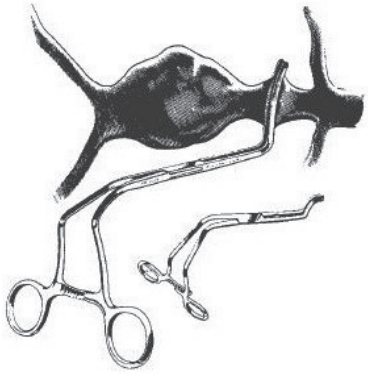
# VASCULAR CLAMPS

## Aortic Aneurysm Clamps

### GRANT ABDOMINAL AORTIC ANEURYSM CLAMPS, "TEXAS TWISTER"

Unique design allows lateral cross clamping of aorta. On thin patients the multi-angled handle can be conveniently placed over left wound margin. In the heavy or obese patient, handles can be tucked under abdominal wall. Wide, secure, 2 x 3 DeBakey-type Jaws, 1 x 11 ratchets for gradual declamping and graft flushing.

| ITEM # | DESCRIPTION |
|---|---|
| 353651 | Curved, 2-5/8" (6.5 cm) jaw, 7-7/8" (20 cm) |
| 353653 | Short, 2-1/8" (5.5 cm) jaw, 9-1/4" (23.5 cm) |



### HOWARD-DEBAKEY® AORTIC ANEURYSM CLAMPS

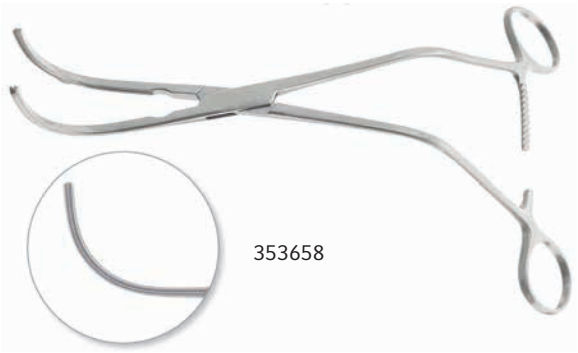
Reverse curve shafts, 1 x 9 ratchets, DeBakey®-type Jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 353609 | 1 x 2, 4-1/8" (10.5 cm) jaws, 10-3/4" (27.5 cm) |
| 353610 | 2 x 3, 4" (10.5 cm) jaws, 12-1/2" (32 cm) |

# VASCULAR CLAMPS

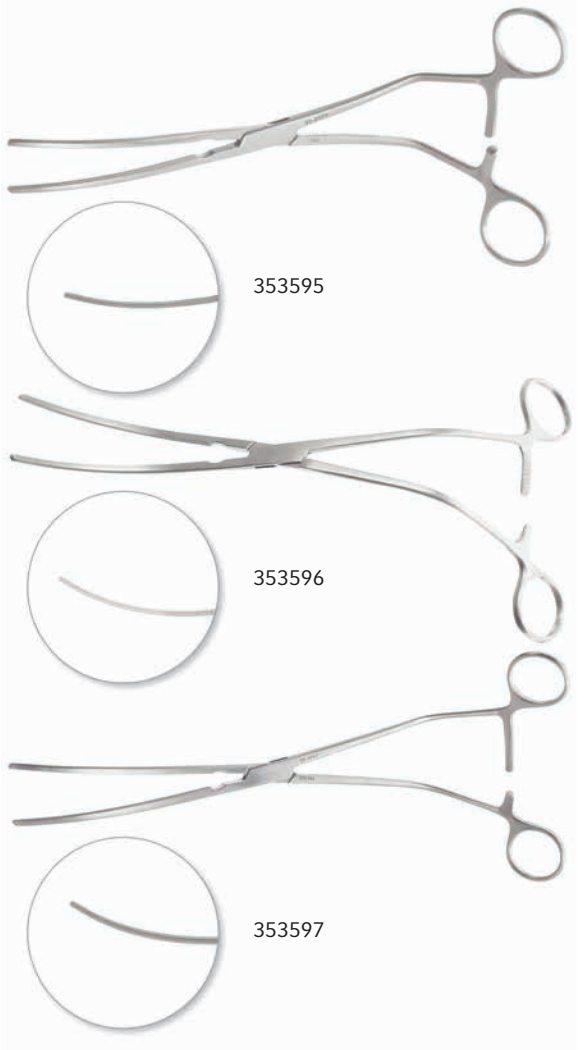
## Aortic Aneurysm Clamps

### WYLIE ABDOMINAL AORTA CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 353658 | DeBakey®-type Jaws, 8-1/2" (21.5 cm) |

### ZANGER ABDOMINAL AORTA CLAMPS




Acutely curved handle, 1 x 9 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 353595 | 8-1/8" (20.5 cm) |
| 353596 | 9-3/4" (25 cm) |
| 353597 | 11-1/4" (28.5 cm) |

# VASCULAR CLAMPS

## Aortic Aneurysm Clamps

### PILLING RATCHET LOCK

354320

| ITEM # | DESCRIPTION |
|---|---|
| 354320 | Slips on the ratchets of most standard size cardiac clamps. Prevents ratchet from accidentally becoming disengaged and from springing open. |

## Aortic Compressor

### CONN AORTIC COMPRESSOR

351715

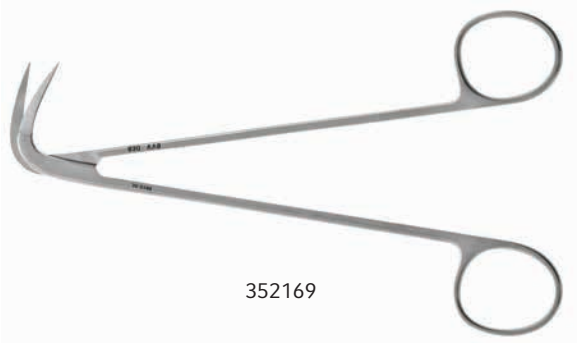
A simple device used to gain initial control of the proximal circulation in suspected or known rupture of abdominal aortic aneurysms. Designed to allow surgeon additional time to dissect and cross clamp aorta.

| ITEM # | DESCRIPTION |
|---|---|
| 351715 | Compressor head 3-1/8" (8 cm) wide, overall length 15-1/2" (39.5 cm) |

# SCISSORS

## Potts-Style Scissors

### BEALL CIRCUMFLEX ARTERY SCISSORS



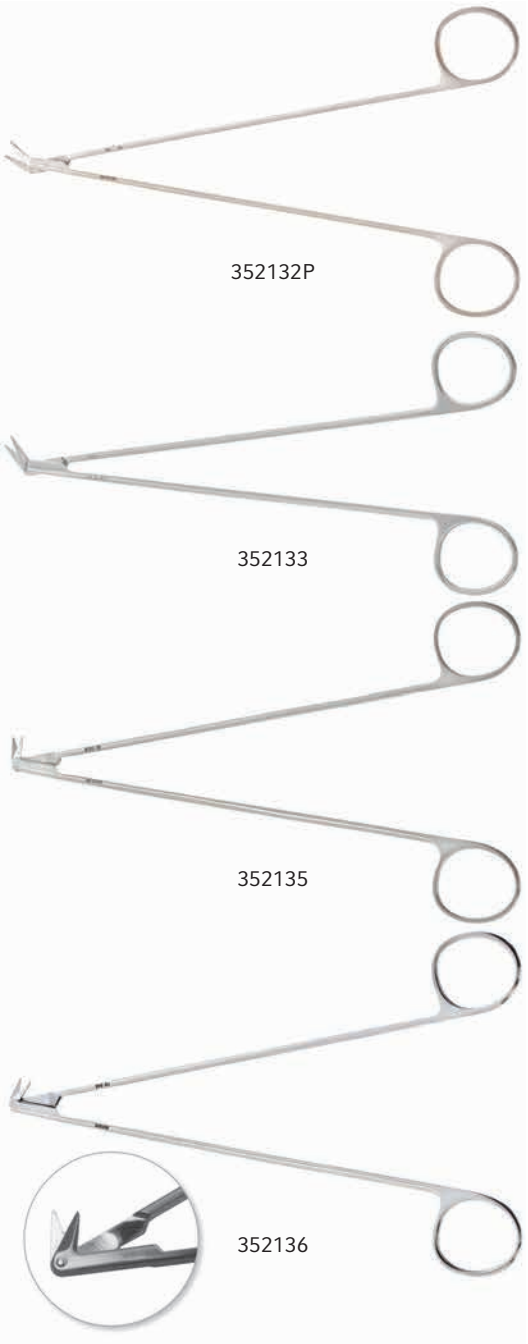
352169

| ITEM # | DESCRIPTION |
|---|---|
| 352169 | Angled 110 degrees, delicate, 15 mm blades, 6" (15 cm) |

# SCISSORS

## Potts-Style Scissors

### BEALL MICRO CORONARY SCISSORS



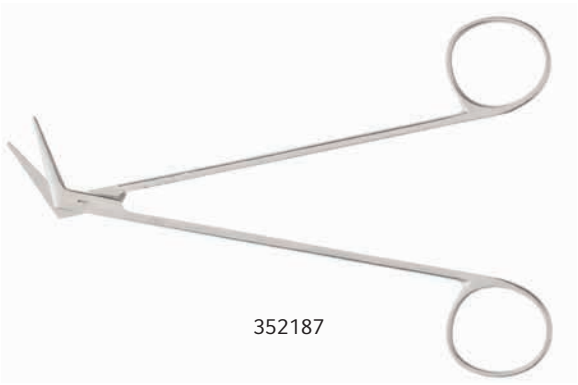

Delicately tapered shanks, thin narrow blades with micro blunt tips. Available in five angles. The 8-10 mm length blade is approximately 1/2 the length of common coronary artery scissors. This allows the surgeon to prepare smaller, more precise arteriotomy on the host coronary artery as an IMA grafting.

| ITEM # | DESCRIPTION |
|---|---|
| 352132P | Angled 25 degrees, 8 mm blades, 7" (18 cm) |
| 352133 | Angled 45 degrees, 10 mm blades, 7" (18 cm) |
| 352134 | Angled 60 degrees, 10 mm blades, 6-7/8" (17.5 cm) |
| 352135 | Angled 90 degrees, 8 mm blades, 6-3/4" (17 cm) |
| 352136 | Angled 120 degrees, 10 mm blades, 6-3/4" (17 cm) |

# SCISSORS

## Potts-Style Scissors

### DEBAKEY® POTTS SCISSORS



352187

| ITEM # | DESCRIPTION |
|---|---|
| 352187 | Angled 60 degrees, 25 mm blades, 6-1/4" (16 cm) |

# SCISSORS

## Potts-Style Scissors

### DEBAKEY® VASCULAR SCISSORS

Angled to the side. A lightweight, round pattern scissors with blunted tip blades. Supplied in 3 angles.

| ITEM # | DESCRIPTION |
|---|---|
| 352173 | 45 degrees, 25 mm blades, 6-1/2" (16.5 cm), TC |
| 352174 | 60 degrees, 25 mm blades, 6-1/4" (16 cm), TC |
| 352177 | 60 degrees, 25 mm blades, 8-5/8" (22 cm), TC |
| 352185 | 25 degrees, 25 mm blades, 6-5/8" (17 cm) |
| 352191 | 45 degrees, 25 mm blades, 8-7/8" (22.5 cm) |
| 352196 | 45 degrees, 25 mm blades, 11-1/8" (28 cm) |
| 352197 | 60 degrees, 32 mm blades, 10-7/8" (27.5 cm) |

# SCISSORS

## Potts-Style Scissors

### DEBAKEY®-POTTS SCISSORS

Angled to side. A delicate modification of the Potts Scissors supplied in various angles for use in coronary artery surgery.

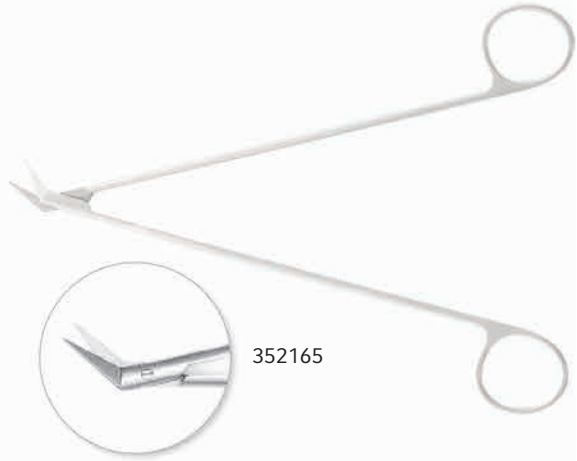
| ITEM # | DESCRIPTION |
|---|---|
| 352151 | Angled 20 degrees, 23 mm blades, 6-5/8" (17 cm) |
| 352153 | Angled 45 degrees, 20 mm blades, 6-1/2" (16.5 cm) |
| 352155 | Angled 60 degrees, 23 mm blades, 6-1/4" (16 cm) |

# SCISSORS

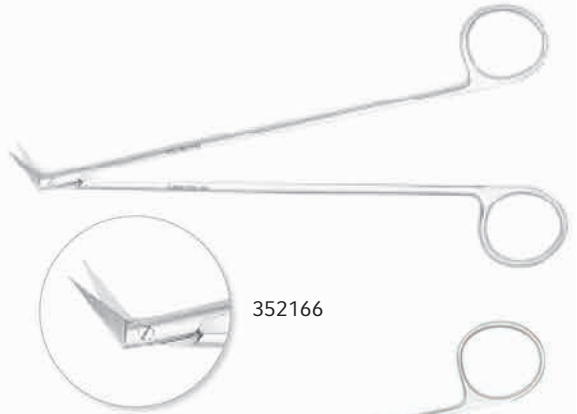
## Potts-Style Scissors

### PILLING® CORONARY POTTS SCISSORS

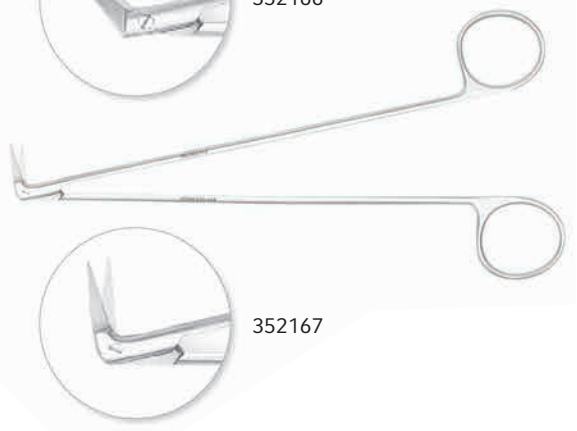
352164



352165



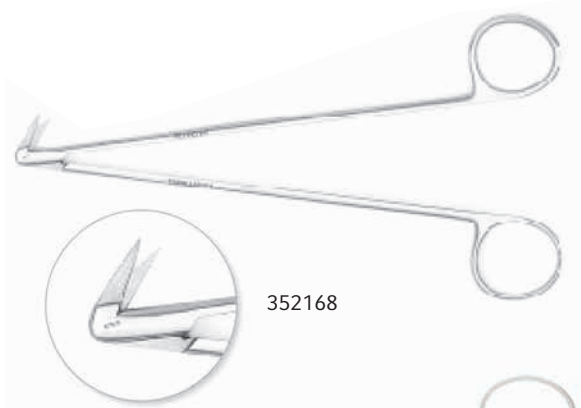
352166



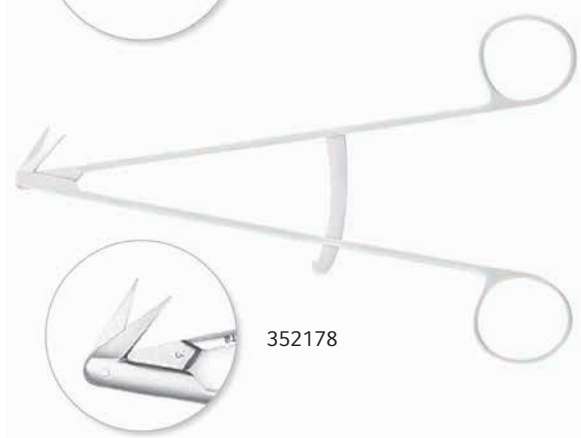
352167

Designed for extending and tailoring coronary arteriotomies. Thin, narrow blades with microscopically blunt tips. Delicately tapered shanks. Available in 5 angles–25, 45 and 60 degrees for L.A.D., and 90 and 120 degrees for less accessible sites on right and left circumflex.

| ITEM # | DESCRIPTION |
|---|---|
| 352164 | Angled 25 degrees, 16 mm blades, 7-1/8" (18 cm) |
| 352165 | Angled 45 degrees, 16 mm blades, 7" (18 cm) |
| 352166 | Angled 60 degrees, 16 mm blades, 7" (18 cm) |
| 352167 | Angled 90 degrees, 15 mm blades, 6-3/4" (17 cm) |
| 352168 | Angled 120 degrees, 20 mm blades, 6-3/4" (17 cm) |
| 352178 | Angled 120 degrees, 13 mm blades, 7" (18 cm) |



352168

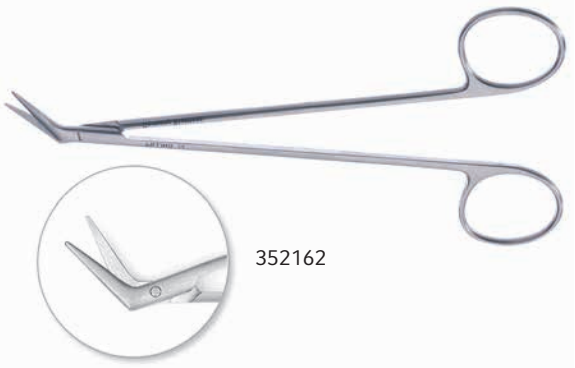


352178

# SCISSORS

## Potts-Style Scissors

### DIETHRICH DELICATE ANGLED CORONARY SCISSORS




| ITEM # | DESCRIPTION |
|---|---|
| 352162 | Angled 45 degrees, 15 mm blades, 6-1/4" (16 cm) |

### DIETHRICH-POTTS VASCULAR SCISSORS

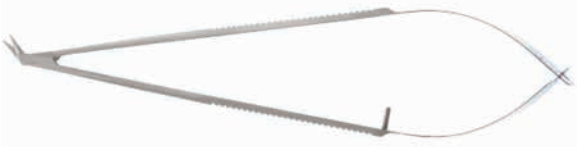
Short blades, semi-sharp tips.

| ITEM # | DESCRIPTION |
|---|---|
| 352146 | Angled 25 degrees, 15 mm blades, 5-1/2" (14 cm) |
| 352147 | Angled 45 degrees, 15 mm blades, 5-3/8" (13.5 cm) |
| 352148 | Angled 60 degrees, 5-1/4" (13.5 cm) |
| 352149 | Angled 90 degrees, 15 mm blades, 5" (12.5 cm) |

# SCISSORS

## Potts-Style Scissors

### MICRO VASCULAR SCISSORS



357690

357691

| ITEM # | DESCRIPTION |
|---|---|
| 357690 | Angled 45 degrees, 7 mm blades, 6-1/2" (16.5 cm) |
| 357691 | Angled 120 degrees, 7 mm blades, 6-1/2" (16.5 cm) |

### POTTS SCISSORS

352140

| ITEM # | DESCRIPTION |
|---|---|
| 352140 | Angled 60 degrees, 25 mm blades, 3-3/4" (9.5 cm) |

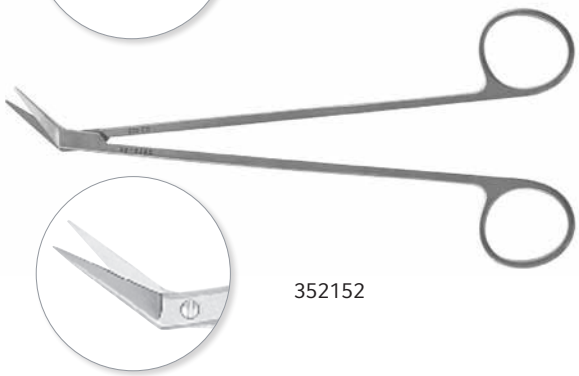
# SCISSORS

## Potts-Style Scissors

### POTTS SMITH SCISSORS

352150

352170

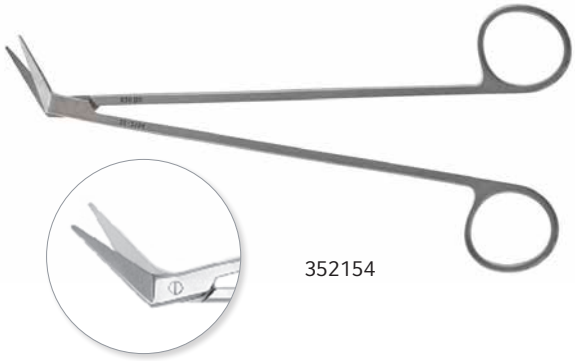


352152

Angled to side. Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 352150 | Angled 25 degrees, 25 mm blades, 7-1/2" (19 cm) |
| 352170 | Angled 25 degrees, 19 mm blades, 7-1/2" (19 cm), TC |
| 352152 | Angled 45 degrees, 23 mm blades, 7-1/4" 18.5 cm) |
| 352171 | Angled 45 degrees, 19 mm blades, 7-1/4" (18.5 cm), TC |
| 352154 | Angled 60 degrees, 23 mm blades, 7" (18 cm) |

352171

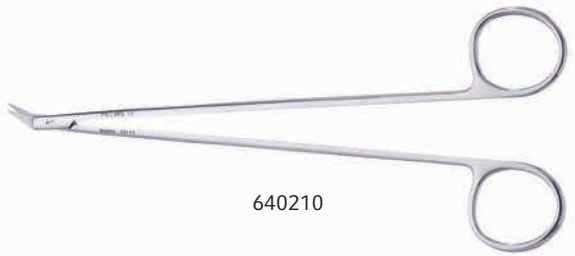


352154

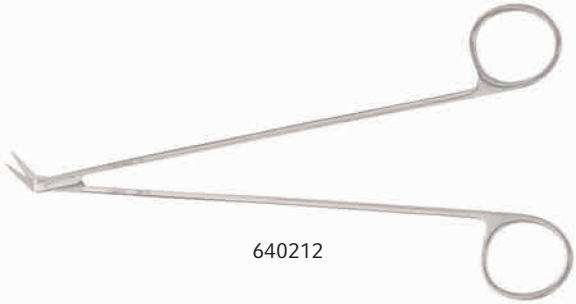
# SCISSORS

## Potts-Style Scissors

### POTTS SMITH VASCULAR SCISSORS

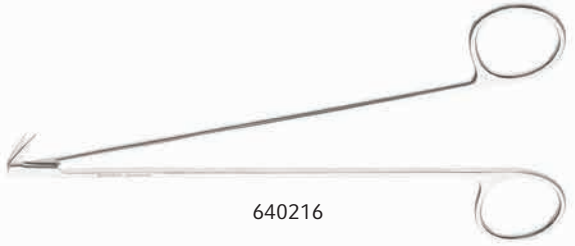


640210



640212

640214



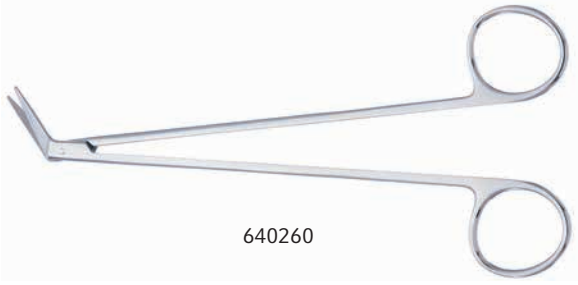
640216

Standard, angled blades. Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 640210 | Angled 25 degrees, 7" (18 cm) |
| 640212 | Angled 45 degrees, 7" (18 cm) |
| 640214 | Angled 60 degrees, 7" (18 cm) |
| 640216 | Angled 130 degrees, 6-3/4" (17 cm) |
| 640225 | Angled 25 degrees, 18 mm blades, 7-1/2" (19 cm) |
| 640245 | Angled 45 degrees, 18 mm blades, 7-1/4" (18.5 cm) |
| 640260 | Angled 60 degrees, 22 mm blades, 7" (18 cm) |

640225

640245

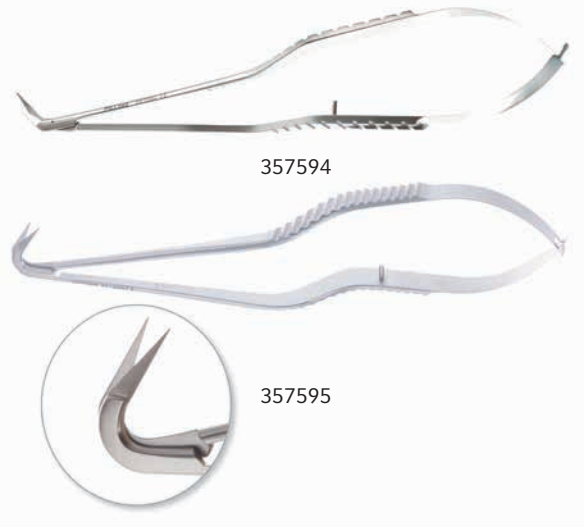


640260

# SCISSORS

## Potts-Style Scissors

### YASARGIL VASCULAR SCISSORS

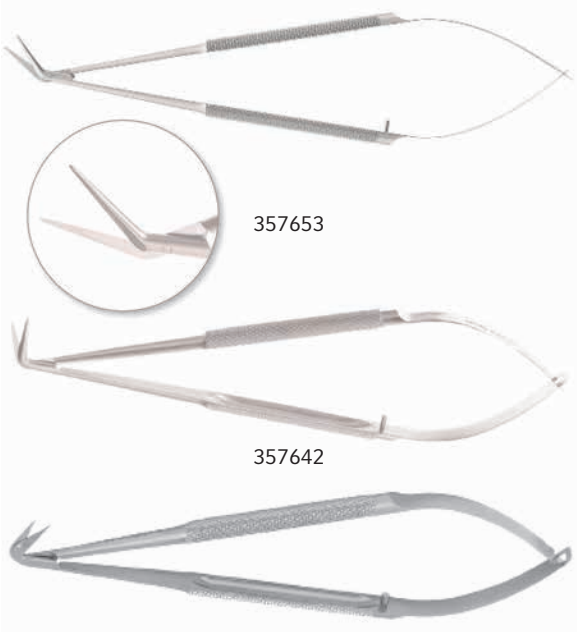


357594

357595

| ITEM # | DESCRIPTION |
|---|---|
| 357594 | Bayonet, angled 45 degrees, 10 mm blades, 7-1/2" (19 cm) |
| 357595 | Bayonet, reverse angled 125 degrees, 12 mm blades, 7-1/4" (18.5 cm) |
| 357622 | Straight, 12 mm blades, 7" (18 cm) |

### YOU-POTTS VASCULAR SCISSORS



357653

357642

357643

Narrow, thin blade and round spring handles designed for a more precise and controlled arteriotomy.

| ITEM # | DESCRIPTION |
|---|---|
| 357653 | Angled 45 degrees, 12 mm blades, 7-3/8" (18.5 cm) |
| 357642 | Angled 90 degrees, 14 mm blades, 7" (18 cm) |
| 357643 | Angled 120 degrees, 12 mm blades, 7" (18 cm). Designed for the circumflex artery. |

# SCISSORS

## Vascular and Cardiac Scissors

### BAKST CARDIAC SCISSORS

352232

A finely balanced dissecting scissors that can be used interchangeably in all endothoracic dissections. Blades curved to side.

| ITEM # | DESCRIPTION |
|---|---|
| 352232 | Curved, 7" (18 cm) |

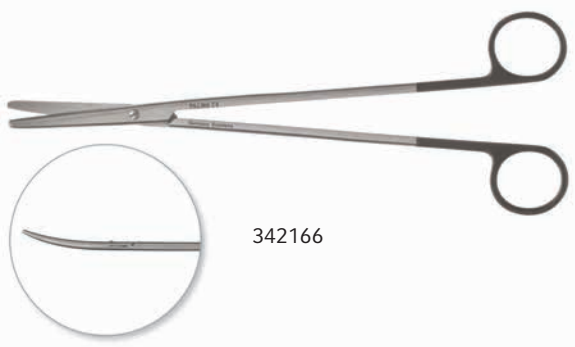
### DEBAKEY® ENDARTERECTOMY SCISSORS

352180

A specially made, round pattern scissors with blades that taper to blunt tips, tempered for proper rigidity and sharpness despite their light weight. Blades curved to side.

| ITEM # | DESCRIPTION |
|---|---|
| 352180 | Slightly curved, 7" (18 cm) |
| 352181 | Acutely curved, 6-7/8" (17.5 cm) |
| 352183 | Slightly curved, 7" (18 cm), TC |
| 352184 | Acutely curved, 7" (18 cm), TC |

### DEBAKEY® SCISSORS



342166

Sturdy Metzenbaum-type scissors. Black rings for quick identification.

| ITEM # | DESCRIPTION |
|---|---|
| 342160 | Curved, 5-3/4" (14.5 cm), TC |
| 342162 | Curved, 7" (18 cm), TC |
| 342166 | Curved, 9-1/8" (23 cm), TC |
| 342167 | Curved, 10-1/4" (26 cm), TC |
| 342168 | Curved, 11-1/4" (28.5 cm), TC |
| 342169 | Curved, 12" (30.5 cm), TC |

# SCISSORS

## Vascular and Cardiac Scissors

### DEBAKEY® VALVE SCISSORS

Heavy construction.

| ITEM # | DESCRIPTION |
|---|---|
| 352199 | Acutely curved, 7-3/4" (19.5 cm) |

### DEBAKEY®-METZENBAUM DISSECTING SCISSORS

Curved blades. These scissors are proportionately matched in weight.

| ITEM # | DESCRIPTION |
|---|---|
| 342200 | Curved, 5-7/8" (15 cm) |
| 342201 | Curved, 7" (18 cm) |
| 342202 | Curved, 8-1/8" (20.5 cm) |
| 342203 | Curved, 9-1/8" (23 cm) |
| 342204 | Curved, 10-1/4" (26 cm) |
| 342206 | Curved, 12-1/4" (31 cm) |

### FERGUSON LONG DISSECTING SCISSORS

Metzenbaum-type blades. Strong but delicate scissors with rounded tips useful in any deep dissection.

| ITEM # | DESCRIPTION |
|---|---|
| 342275 | 10-1/4" (26 cm) |

# SCISSORS

## Vascular and Cardiac Scissors

### HAIMOVICI SCISSORS

A delicate, acutely curved scissors.

| ITEM # | DESCRIPTION |
|---|---|
| 352297 | 5-1/4" (13.5 cm) |
| 352298 | 10" (25.5 cm) |

### JAMISON-METZENBAUM TENOTOMY SCISSORS

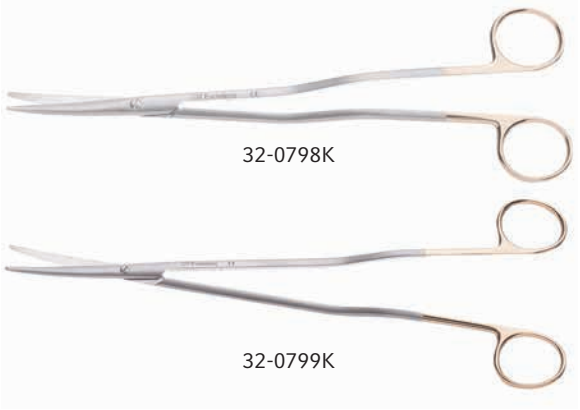
The standard Metzenbaum-style Curved Blades have specially narrowed tenotomy-type distal tips.

| ITEM # | DESCRIPTION |
|---|---|
| 342220 | 6" (15 cm) |
| 342221 | 7" (18 cm) |
| 342222 | 8" (20.5 cm) |
| 342223 | 9" (23 cm) |

# SCISSORS

## Vascular and Cardiac Scissors

### OFFSET METZENBAUM SCISSORS




| ITEM # | DESCRIPTION |
|---|---|
| 32-0798K | 9" (23 cm) |
| 32-0799K | 11" (28 cm) |

### POTTS SMITH DISSECTING SCISSORS

Curved, 48 mm blades.

| ITEM # | DESCRIPTION |
|---|---|
| 640200 | Curved, 7-1/2" (19 cm) |
| 640205 | Curved, 9-1/8" (23 cm) |

### POTTS TENOTOMY SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 640280 | Curved, 29 mm blades, 6" (15 cm) |

# SCISSORS

## Vascular and Cardiac Scissors

### REVUELTA-GARCIA VALVE SCISSORS

351745

| ITEM # | DESCRIPTION |
|---|---|
| 351745 | Angled shanks, 10-7/8" (27.5 cm) |

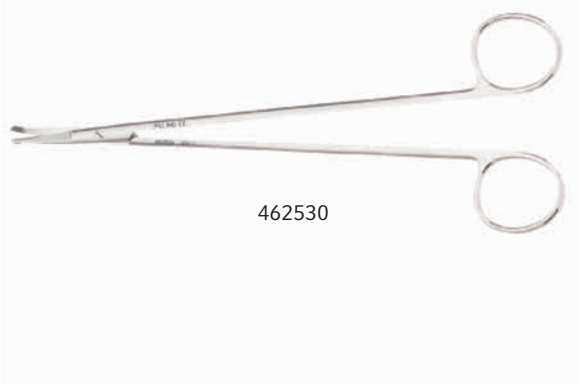
### SATINSKY SCISSORS

352295

For excision of a portion of the inferior vena cava prior to anastomosis with other vessels.

| ITEM # | DESCRIPTION |
|---|---|
| 352295 | 9-3/4" (25 cm) |

### STRULLY PROBED TIP SCISSORS



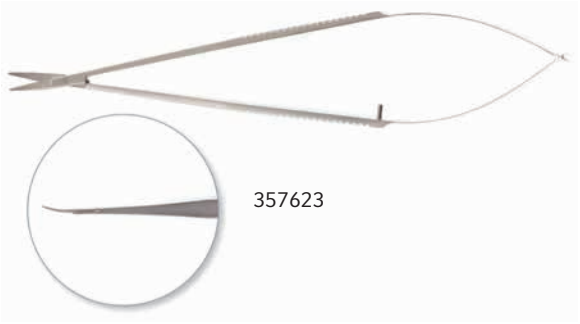
462530

| ITEM # | DESCRIPTION |
|---|---|
| 462530 | Curved, 25 mm blades, 8" (20.5 cm) |

# SCISSORS

## Vascular and Cardiac Scissors

### JACOBSON VASCULAR SCISSORS




| ITEM # | DESCRIPTION |
|---|---|
| 357623 | Curved, 12 mm blades, 7" (18 cm) |

### MICRO VASCULAR ANASTOMOSIS SCISSORS

Round handle, 8 mm diameter.

| ITEM # | DESCRIPTION |
|---|---|
| 357651 | Straight, 12 mm blades, 7-3/8" (19 cm) |
| 357652 | Curved, 12 mm blades, 7-1/4" (18.5 cm) |

### NEUROFEEL MICRO SCISSORS

Bayonet with flat handle. Delicate, 5 mm micro blades.

| ITEM # | DESCRIPTION |
|---|---|
| 395115 | Curved blade, 7-1/4" (18.5 cm) |
| 395128 | Straight blade, 8-1/4" (21 cm) |

# SCISSORS

## Vascular and Cardiac Scissors

### MCCLURE IRIS SCISSORS

Angled on flat for increased control and visibility.

| ITEM # | DESCRIPTION |
|---|---|
| 352144 | Angled on flat, 12 mm blades, 4-1/2" (11.5 cm) |

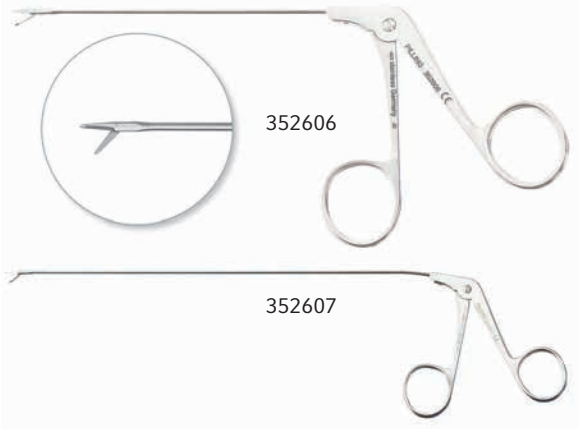
### CASTROVIEJO SCISSORS

Spring handle for maximum control.

| ITEM # | DESCRIPTION |
|---|---|
| 352145 | Angled 45 degrees, 9 mm blades, 4-1/8" (10.5 cm) |

## Venous Valve

### VENOUS VALVE SCISSORS




| ITEM # | DESCRIPTION |
|---|---|
| 352606 | 4" (10 cm) scissors has ball tip to help minimize damage to the intima of the vein |
| 352607 | 9-1/4" (23.5 cm) |

# CVT NEEDLE HOLDERS

## Pilling® Technique® Design

Teleflex® takes great pride in presenting our line of finely-crafted Pilling® Technique® Instruments. Technique® Instruments offer the balance, precision and craftsmanship you demand, assuring high quality instrument performance. All are easily identified by our signature black handle design.

### BAILEY CARDIAC TECHNIQUE® NEEDLE HOLDER

354931

Very light construction throughout with fine, tapered tips. Jaws are lightly scored for use with smallest size needles and sutures. Tungsten Carbide.

| ITEM # | DESCRIPTION |
|---|---|
| 354931 | 17 x 2 mm jaw, 7" (18 cm), TC |

### DEBAKEY TECHNIQUE® NEEDLE HOLDERS

354900

Carefully designed with light, short Tungsten Carbide jaws. Constructed in weight proportional to total length. May be purchased individually or as matched set of four.

| ITEM # | DESCRIPTION |
|---|---|
| 354900 | No. 1. Length, 18.2 x 2 mm jaw, 7" (18 cm), TC |
| 354902 | No. 2. Length, 21.5 x 1.8 mm jaw, 9-1/4" (23.5 cm), TC |
| 354904 | No. 3. Length, 21.5 x 2.3 mm jaw, 10-1/2" (26.5 cm), TC |
| 354906 | No. 4. Length, 19 x 2.6 mm jaw, 11-3/4" (30 cm), TC |
| 354908 | Matched set of four |

# CVT NEEDLE HOLDERS

## Pilling® Technique® Design

### GERBODE TECHNIQUE® NEEDLE HOLDER

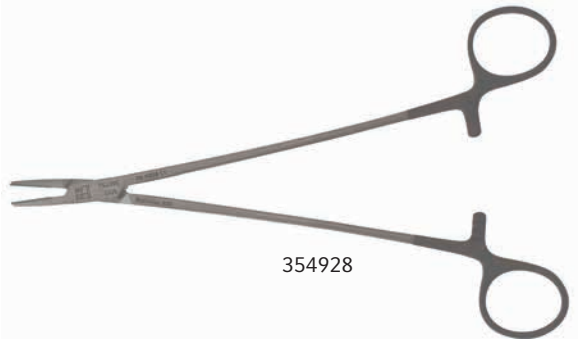
Medium-light construction. A strong full sized needle holder with jaws tapered to 2 mm width for holding fine needles.

| ITEM # | DESCRIPTION |
|---|---|
| 343000 | 16.5 x 2 mm jaw, 10-1/2" (26.5 cm), TC |

### HOWELL CORONARY TECHNIQUE® NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 354920 | 14 x 1.6 mm jaw, 7-1/4" (18.5 cm), TC |

### HOWELL VALVE TECHNIQUE® NEEDLE HOLDER

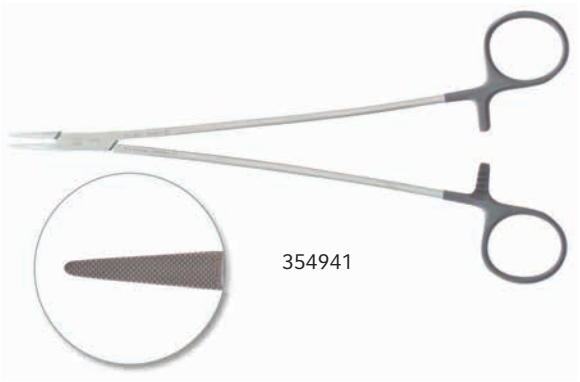



| ITEM # | DESCRIPTION |
|---|---|
| 354928 | 19 x 2 mm jaw, 8" (20.5 cm), TC |

# CVT NEEDLE HOLDERS

## Pilling® Technique® Design

### JAMISON TECHNIQUE® NEEDLE HOLDER




Long, slender needle holder. Jaws are lightly serrated.

| ITEM # | DESCRIPTION |
|---|---|
| 354941 | 19.8 x 1.8 mm jaw, 9" (23 cm), TC |

### PILLING® EXTRA LIGHT TECHNIQUE® NEEDLE HOLDERS

Thinner shanks and box locks than Pilling® Thin Needle Holders (opposite page) for reduced weight and more “feel.”

| ITEM # | DESCRIPTION |
|---|---|
| 354981 | 17 x 1.8 mm jaw, 6" (15 cm), TC |
| 354982 | 17.5 x 1.6 mm jaw, 7" (18 cm), TC |

# CVT NEEDLE HOLDERS

## Pilling® Technique® Design

### PILLING® INTRACARDIAC TECHNIQUE® NEEDLE HOLDERS

| ITEM # | DESCRIPTION |
|---|---|
| 354985 | 17 x 1.8 mm jaw, 7" (18 cm), TC |
| 354986 | 11.5 x 1.6 mm jaw, 8" (20.5 cm), TC |
| 354987 | 20.5 x 2 mm jaw, 9-1/4" (23.5 cm), TC |
| 354988 | 20.5 x 2 mm jaw, 10-1/4" (26 cm), TC |

### PILLING® THIN VASCULAR AND CORONARY TECHNIQUE® NEEDLE HOLDERS

Delicately proportioned, slender needle holders.

| ITEM # | DESCRIPTION |
|---|---|
| 354958 | 20.5 x 1.8 mm jaw, 9" (23 cm), TC |
| 354959 | 20.5 x 2.2 mm jaw, 10-1/4" (26 cm), TC |
| 354960 | 16 x 1.8 mm jaw, 6" (15 cm), TC |
| 354961 | 16 x 1.7 mm jaw, 7" (18 cm), TC |
| 354962 | 20 x 1.8 mm jaw, 8-1/4" (21 cm), TC |

# CVT NEEDLE HOLDERS

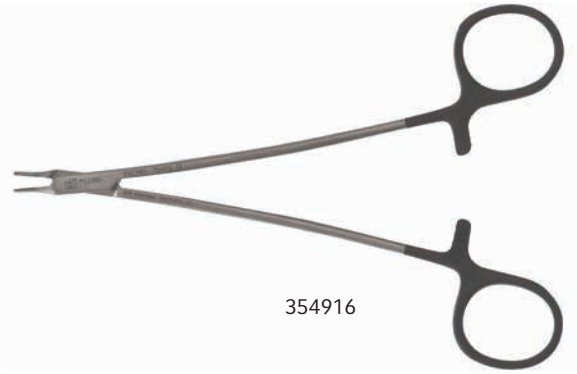
## Pilling® Technique® Design

### RYDER EXTRA FINE TECHNIQUE® NEEDLE HOLDERS

Pilling® Pattern, satin finish. Sculptured 1 mm wide jaws designed for the finest vascular, plastic and nerve suture needles. Lightweight throughout (average weight 1 oz).

| ITEM # | DESCRIPTION |
|---|---|
| 354990 | 11.5 x 1.3 mm jaw, 5-1/4" (13.5 cm), TC |
| 354992 | 12.5 x 1.2 mm jaw, 6" (15 cm), TC |
| 354994 | 14.3 x 1.2 mm jaw, 7" (18 cm), TC |
| 354996 | 14.5 x 1.2 mm jaw, 8" (20.5 cm), TC |
| 354998 | 15 x 1.3 mm jaw, 9" (23 cm), TC |

### W.M. LEMMON TECHNIQUE® NEEDLE HOLDERS




Delicate, very lightly serrated, 4 mm tapering to 1.5 - 2 mm tips, 13 mm long. The medium size was designed specifically for repair of the femoral arteriotomy site with fine sutures following completion of the by-pass.

| ITEM # | DESCRIPTION |
|---|---|
| 354915 | Delicate, 15.5 x 2.3 mm jaw, 5-3/4" (14.5 cm), TC |
| 354916 | 14.5 x 1.5 mm jaw, 6-3/4" (17 cm), TC |
| 354917 | 15.5 x 2.3 mm jaw, 7-1/2" (19 cm), TC |

# CVT NEEDLE HOLDERS

## Pilling® Technique® Design

### GREGORY TECHNIQUE® SUTURE "STAY" CLAMPS

Smooth jaw hemostats for tagging sutures. May be used with or without rubber shodding.

| ITEM # | DESCRIPTION |
|---|---|
| 351830 | Straight, 3-7/8" (10 cm), TC |
| 351831 | Curved, 3-7/8" (10 cm), TC |

### GIANNINI TECHNIQUE® NEEDLE HOLDER

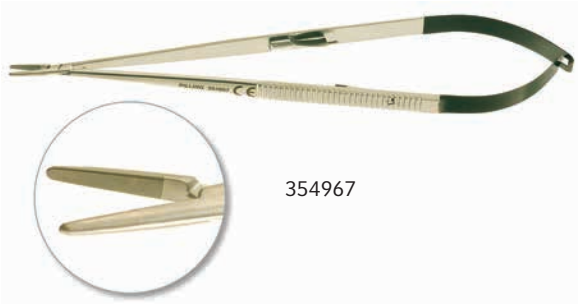
Flat handles.

| ITEM # | DESCRIPTION |
|---|---|
| 354971 | Straight, 17.5 x 1.8 mm jaw, 10-1/4" (26 cm), TC |

# CVT NEEDLE HOLDERS

## Pilling® Technique® Design

### MICRO SURGERY TECHNIQUE® NEEDLE HOLDERS



354967

Flat handle, smooth jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 354966 | Straight, 13 x 1.4 mm jaw, 7" (18 cm), TC |
| 354967 | Straight, 13 x 1.4 mm jaw, 8" (20.5 cm), TC |

### CASTROVIEJO TECHNIQUE® NEEDLE HOLDERS

354964

| ITEM # | DESCRIPTION |
|---|---|
| 354964 | Straight, 13 x 1.4 mm jaw, 7-1/4" (18.5 cm), TC |
| 354965 | Straight, 13 x 1.4 mm jaw, 8" (20.5 cm), TC |

### SPENCER CORONARY TECHNIQUE® NEEDLE HOLDER

354969

| ITEM # | DESCRIPTION |
|---|---|
| 354969 | Straight, smooth, 12 x 1.2 mm jaw, 0.9 mm tip, 7" (18 cm), TC |

# CVT NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### CASTROVIEJO MICRO NEEDLE HOLDERS

355558DG

Fine, straight, with round handle and lock. 1 mm Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 355558DG | 9" (23 cm) |
| 355559DG | 10" (25.5 cm) |
| 355560DG | 12" (30.5 cm) |

### CASTROVIEJO MICRO NEEDLE HOLDERS

357676DG

Round handle with Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 357656DG | Straight, with lock, 1.2 mm, 7" (18 cm) |
| 357676DG | Straight, with lock, 1.2 mm, 8" (20.5 cm) |
| 357677DG | Curved, without lock, 1 mm, 8" (20.5 cm) |

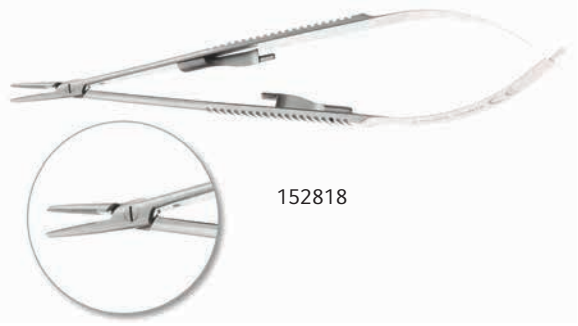
### CASTROVIEJO NEEDLE HOLDERS

354964DG

Straight, with flat handle and lock. Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 354972 | Straight, 11.5 x 0.8 mm Diama-grip jaw, 6" (15 cm) |
| 354973 | Curved, 11.5 x 1 mm Diama-grip jaw, 6" (15 cm) |
| 354974 | Straight, 0.8 mm wide Diama-grip jaw, 7-1/4" (18.5 cm) |
| 354964DG | Straight, 1.8 mm jaw, 7-1/4" (18.5 cm) |
| 354965DG | Straight, 8" (20.5 cm) |
| 354975 | Straight, 0.7 mm wide Diama-grip jaw, 8-1/4" (21 cm) |

### CASTROVIEJO NEEDLE HOLDERS



152818

| ITEM # | DESCRIPTION |
|---|---|
| 152818 | Straight, 11 x 1.4 mm jaw, 6" (15 cm), TC |
| 152819 | Curved, 12 x 1.4 mm jaw, 5-3/4" (14.5 cm), TC |

# CVT NEEDLE HOLDERS

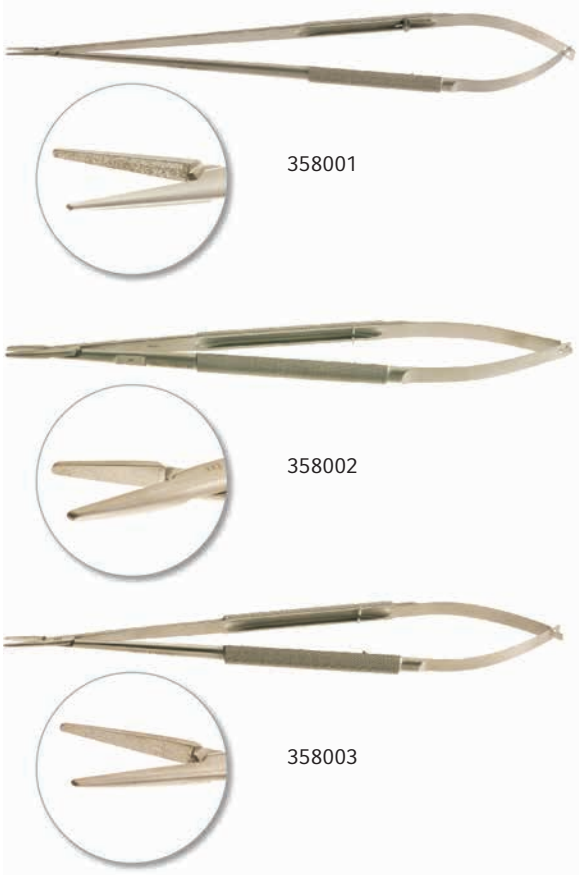
## Castro-Type Micro Needle Holders

### JACOBSON MICRO NEEDLE HOLDER

357603DG

| ITEM # | DESCRIPTION |
|---|---|
| 357603DG | Straight with flat handle, lock, 18 x 1.3 mm Diama-Grip jaw, 8-1/2" (21.5 cm) |

### JACOBSON MICRO NEEDLE HOLDERS



358001

358002

358003

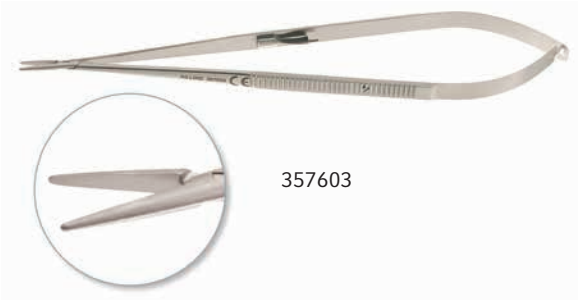
Straight, round handle with lock. Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 358001 | 11 x 0.8 mm jaw, 9" (23 cm) |
| 358002 | 1.8 mm jaw, 9" (23 cm) |
| 358003 | 16 x 0.9 mm jaw, 8-1/4" (21 cm) |

# CVT NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### JACOBSON MICRO-SURGICAL NEEDLE HOLDERS



357603

Smooth, straight, stainless steel jaws with Castroviejo-type Lock and flat handles. Lock can be removed if not required.

| ITEM # | DESCRIPTION |
|---|---|
| 357601 | 13 x 1.3 mm jaw, 7" (18 cm) |
| 357603 | 13.5 x 1.2 mm jaw, 8-1/2" (21.5 cm) |

### MICRO SURGERY NEEDLE HOLDERS

152825

Flat handle, smooth jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 152825 | Straight, 12.5 x 1.4 mm jaw, 6" (15 cm), TC |
| 152827 | Curved, 13 x 1.4 mm jaw, 6" (15 cm), TC |

### MICRO VASCULAR ROUND HANDLE NEEDLE HOLDERS

357656

357657

Stainless steel jaws, round handles. Smooth jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 357667 | Straight, 7-3/8" (18.5 cm), TC |
| 357672 | Straight, 0.6 mm smooth jaw, 8-1/8" (20.5 cm) |
| 357674 | Straight, 0.6 mm smooth jaw, 9" (23 cm) |
| 357675 | Curved, 0.6 mm smooth jaw, 9" (23 cm) |
| 357676 | Straight, 8" (20.5 cm), TC |
| 357677 | Straight, 1 mm jaw, 8" (20.5 cm), TC |
| 357654 | Straight, without lock, 1.15 mm jaw, 7-3/8" (18.5 cm) |
| 357655 | Curved, without lock, 7-3/8" (18.5 cm) |
| 357656 | Straight, with lock, 1.2 mm jaw, 7-1/2" (19 cm) |
| 357657 | Curved, with lock, 0.6 mm jaw, 7-3/8" (18.5 cm) |

# CVT NEEDLE HOLDERS

## Castro-Type Micro Needle Holders

### DIGITATE-HEIFETZ NEEDLE HOLDERS

066204

| ITEM # | DESCRIPTION |
|---|---|
| 066200 | Straight, 0.4 mm smooth jaw, 5-3/4" (14.5 cm) |
| 066204 | Curved, 0.6 mm smooth jaw, 5-3/4" (14.5 cm) |

## Wire Twisters

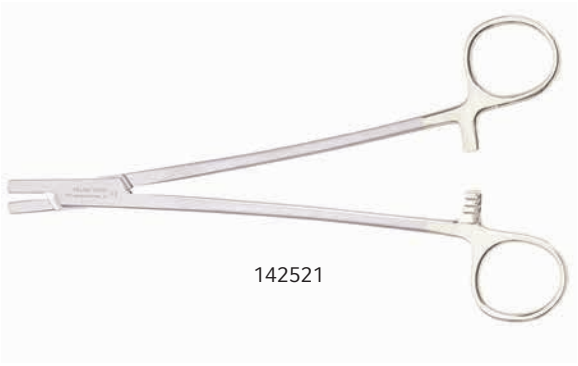
### BERRY STERNAL "BIG UGLY" TECHNIQUE® NEEDLE HOLDER

343030

A large, heavy-duty needle holder with 6 mm-wide jaws designed to securely hold the large needles used to close sternotomies. LIFE-LOK® Box Lock.

| ITEM # | DESCRIPTION |
|---|---|
| 343030 | 28 x 6 mm jaw, 7-3/4" (19.5 cm), TC |

### BAUMGARTEN WIRE TWISTER



142521

Heavy, square jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 142521 | 18 x 5 mm heavy, square jaws, 8-1/8" (20.5 cm), TC |

# CVT NEEDLE HOLDERS

## Wire Twisters

### RUBIO TECHNIQUE® WIRE TWISTER

351349

| ITEM # | DESCRIPTION |
|---|---|
| 351349 | 12 x 4.5 mm jaw, 5" (12.5 cm), TC |

### WIRE TWISTING FORCEPS

351348

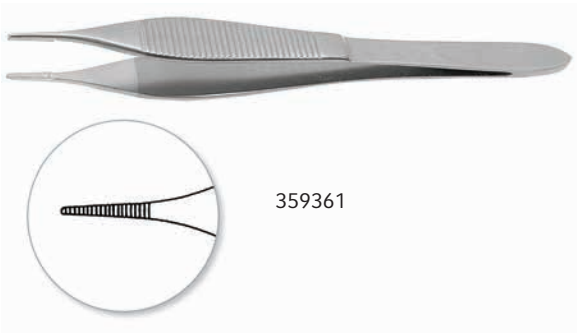
For twisting ends of wire when securing pump tubing to fittings.

| ITEM # | DESCRIPTION |
|---|---|
| 351348 | 5-3/8" (13.5 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Tissue and Dressing Forceps

### ADSON TITANIUM DRESSING FORCEPS

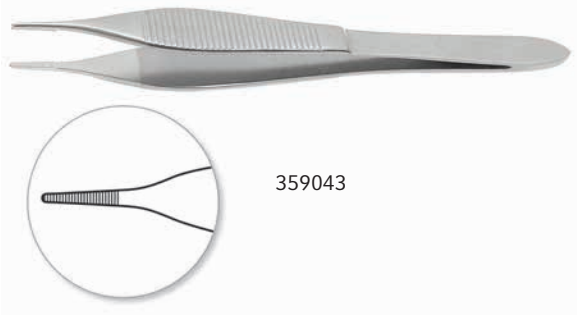


359361

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359361 | Serrated tip, 4-3/4" (12 cm) |

### ADSON TITANIUM TISSUE FORCEPS



359043

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359043 | Serrated tip, 4-3/4" (12 cm), TC |

### ADSON-BROWN TITANIUM TISSUE FORCEPS

359359

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359359 | 9 x 9 teeth, 4-3/4" (12 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Tissue and Dressing Forceps

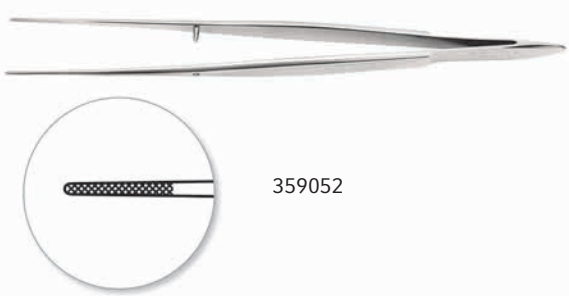
### BARRAYA TITANIUM TISSUE FORCEPS

359053

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359053 | 2 x 3 Teeth, 7-3/4" (20 cm) |

### CUSHING TITANIUM DRESSING FORCEPS

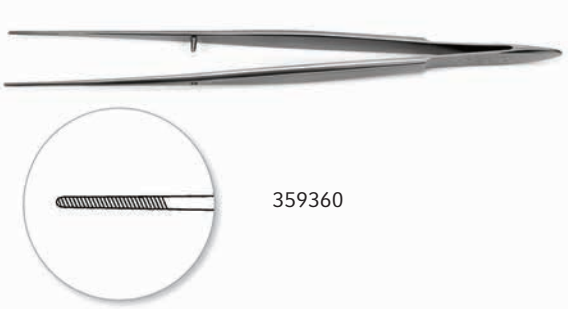


359052

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359052 | Serrated, 7-1/8" (18 cm), TC |

### CUSHING TITANIUM TISSUE FORCEPS



359360

Flat handle.

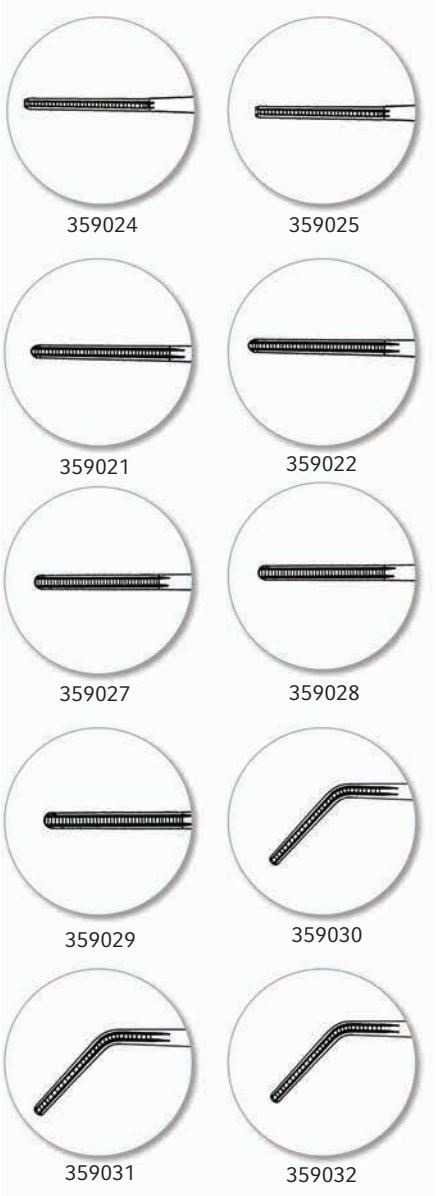
| ITEM # | DESCRIPTION |
|---|---|
| 359360 | Serrated, 7-7/8" (20 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Tissue and Dressing Forceps

### DEBAKEY® TITANIUM TISSUE FORCEPS

359029



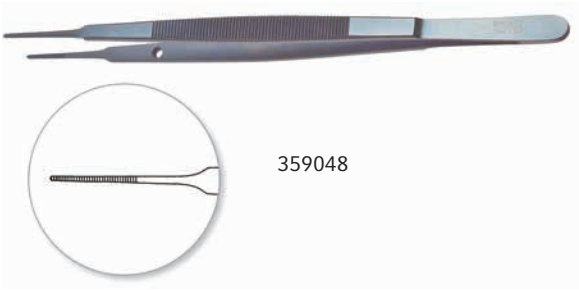

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359024 | Straight, 1.5 mm jaw width, 6" (15 cm) |
| 359025 | Straight, 1.5 mm jaw width, 7-5/8" (19.5 cm) |
| 359021 | Straight, 2.5 mm jaw width, 6" (15 cm) |
| 359022 | Straight, 2.5 mm jaw width, 7-5/8" (19.5 cm) |
| 359027 | Straight, 3 mm jaw width, 6" (15 cm) |
| 359028 | Straight, 3 mm jaw width, 7-5/8" (19.5 cm) |
| 359029 | Straight, 3 mm jaw width, 9-1/2" (24 cm) |
| 359030 | Angled, 2.5 mm jaw width, 5-7/8" (15 cm) |
| 359031 | Angled, 2.5 mm jaw width, 7-1/2" (19 cm) |
| 359032 | Angled, 2.5 mm jaw width, 9-1/4" (23.5 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Tissue and Dressing Forceps

### GERALD TITANIUM DRESSING FORCEPS

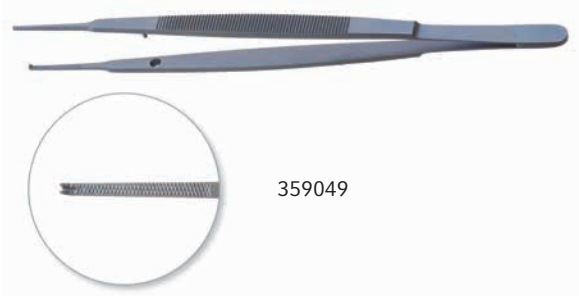


359048

Flat handle. Serrated tip.

| ITEM # | DESCRIPTION |
|---|---|
| 359048 | 6 7/8" (18 cm) |

### GERALD TITANIUM TISSUE FORCEPS

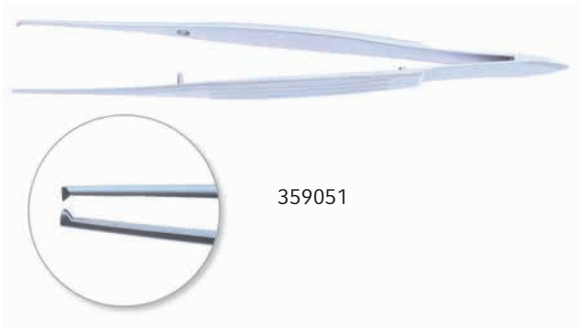


359049

Flat handle. Serrated tip.

| ITEM # | DESCRIPTION |
|---|---|
| 359049 | 1 x 2 Teeth, 6-7/8" (18 cm) |

### GILLES TITANIUM TISSUE FORCEPS



359051

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359051 | 1 x 2 Teeth, 5-7/8" (15 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Tissue and Dressing Forceps

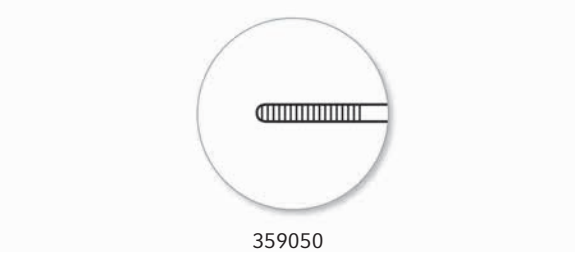
### GUILMET TITANIUM DRESSING FORCEPS

359054

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359054 | Serrated tip, 7-7/8" (20 cm) |

### MCINDOE TITANIUM TISSUE FORCEPS



359050

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359050 | Serrated tip, 5-7/8" (15 cm) |

## Micro Forceps

### DENIS TITANIUM MICRO FORCEPS

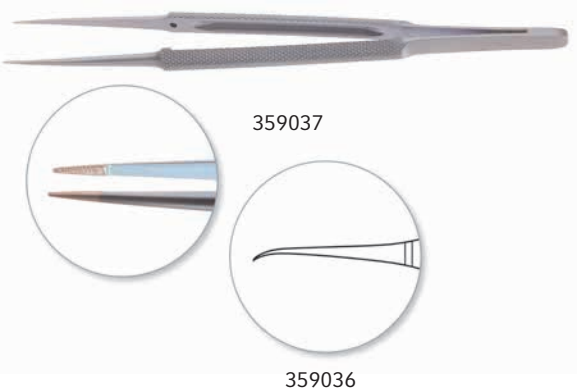
359407

| ITEM # | DESCRIPTION |
|---|---|
| 359407 | Straight, 0.4 mm tip, Diama-Grip jaws, 8-1/4" (21 cm) |

# TITANIUM INSTRUMENTS
# FORCEPS AND CLAMPS

## Micro Forceps

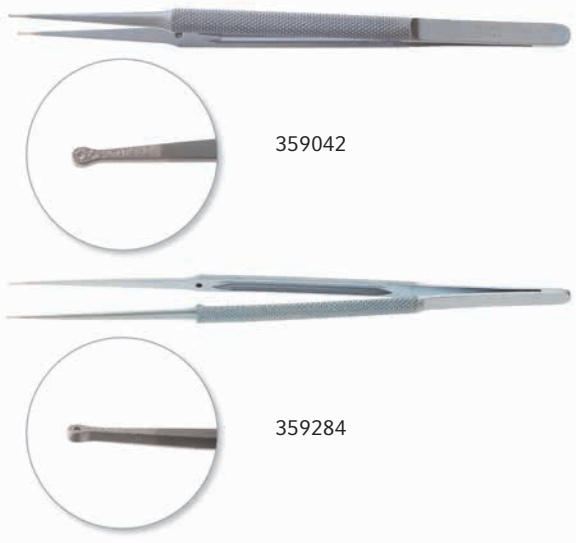
### MICRO TITANIUM DIAMA-GRIP TYING FORCEPS




Round handle. Diama-Grip on tip.

| ITEM # | DESCRIPTION |
|---|---|
| 359033 | Straight, 3-3/4" (9.5 cm) |
| 359034 | Curved, 3-3/4" (9.5 cm) |
| 359037 | Straight, 7-1/8" (18 cm) |
| 359036 | Curved, 7-1/8" (18 cm) |

### MICRO TITANIUM DIAMA-GRIP TYING FORCEPS




Straight with round handle. Diama-Grip ring tip.

| ITEM # | DESCRIPTION |
|---|---|
| 359042 | I.D. 0.4 mm, O.D. 1 mm, 7-1/8" (18 cm) |
| 359283 | I.D. 1 mm, O.D. 2 mm, 8-3/4" (22 cm) |
| 359284 | I.D. 0.4 mm, O.D. 1 mm, 8-3/4" (22 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Hemostatic Forceps

### CRILE TITANIUM HEMOSTATIC FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 359307 | Curved, serrated jaw, 5-5/8" (15 cm) |

### HALSTED TITANIUM HEMOSTATIC FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 359296 | Curved, serrated jaws, 4-3/4" (12.5 cm) |
| 359299 | Delicate curved, serrated jaws, 4-3/4" (12.5 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Pediatric Vascular Clamps

### CASTANEDA TITANIUM VASCULAR CLAMPING FORCEPS

Clamping Forceps (10 g).

| ITEM # | DESCRIPTION |
|---|---|
| 359201 | Straight jaw, 5-1/8" (13 cm) |
| 359206 | Curved jaw, 4-3/4" (12 cm) |
| 359208 | Curved jaw, 6-1/2" (17 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

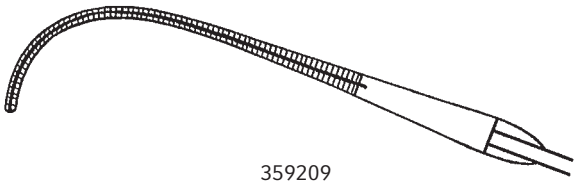
## Pediatric Vascular Clamps

### CASTANEDA TITANIUM VASCULAR CLAMPING FORCEPS

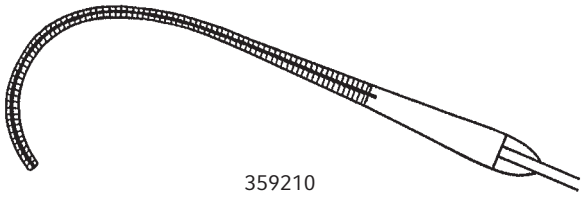
359213

Clamping Forceps (15 g).

| ITEM # | DESCRIPTION |
|---|---|
| 359209 | Curved jaw, 6-1/2" (17 cm) |
| 359210 | Curved jaw, 6-3/8" (17 cm) |
| 359211 | Straight jaw, 6-5/8" (17 cm) |
| 359212 | 30 degree angled jaw, 6-1/4" (16 cm) |
| 359213 | 50 degree angled jaw, 6" (15 cm) |
| 359214 | 70 degree angled jaw, 5-7/8" (15 cm) |
| 359215 | 90 degree angled jaw, 5-1/2" (14 cm) |

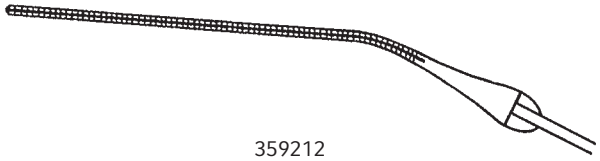


359209

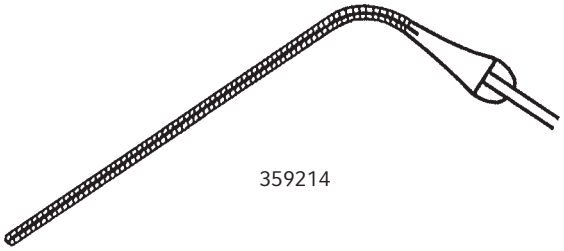


359210

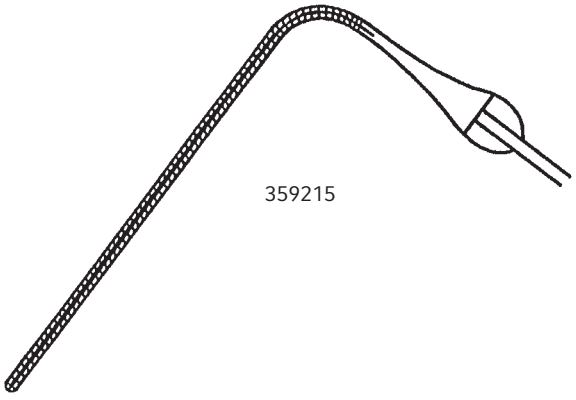
359211



359212



359214

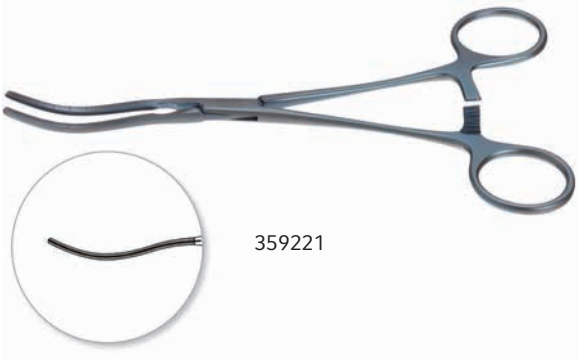


359215

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Pediatric Vascular Clamps

### COOLEY TITANIUM PEDIATRIC CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 359221 | Spoon-shaped for coarctation, 7-1/4" (18.5 cm) |

### DEBAKEY® TITANIUM PEDIATRIC CLAMPS

| ITEM # | DESCRIPTION |
|---|---|
| 359354 | Straight jaws, 4-3/8" (11 cm) |
| 359355 | 60 degree angled jaws, 4" (10.5 cm) |
| 359356 | Anastomosis clamp with 9.5 mm angled operational jaw length, 3-7/8" (10 cm) |
| 359357 | Anastomosis clamp with 6 mm curved operational jaw length, 3-7/8" (9.5 cm) |
| 359358 | Anastomosis clamp with 16 mm operational jaw length, 4-1/8" (10.5 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Pediatric Vascular Clamps

### DERRA TITANIUM ANASTAMOSIS CLAMPS

| ITEM # | DESCRIPTION |
|---|---|
| 359236 | Curved jaws, 6-11/16" (17 cm) |
| 359237 | Curved jaws, 6-13/16" (17.5 cm) |

## Vascular Clamps

### CRAFOORD TITANIUM CLAMPING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 359325 | Curved, serrated jaws, 9-1/2" (24 cm) |

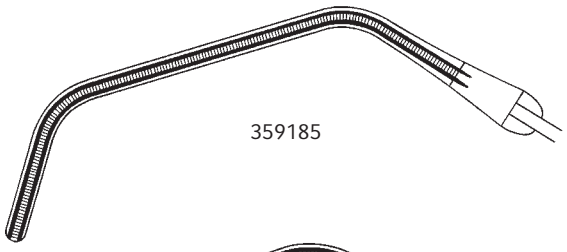
# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Vascular Clamps

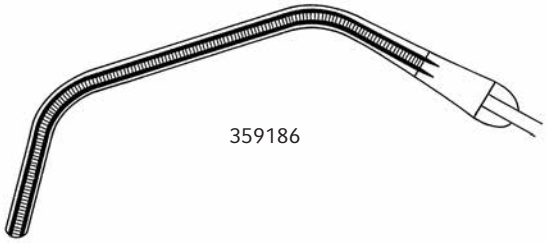
### DEBAKEY® TITANIUM VASCULAR CLAMPS

359162

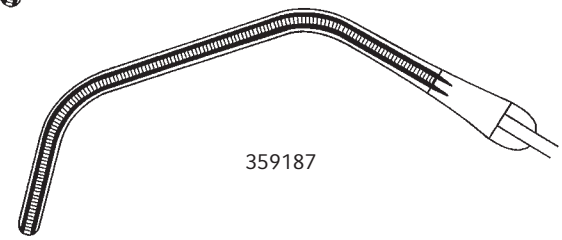
| ITEM # | DESCRIPTION |
|---|---|
| 359161 | Aorta clamp, curved jaw, 11-1/8" (28.5 cm) |
| 359162 | Aorta clamp, curved jaw, 11-3/4" (30 cm) |
| 359163 | Aorta clamp, curved jaw, 12-5/8" (32 cm) |
| 359185 | Occlusion clamp with 50 mm operational jaw length, 10-3/4" (27 cm) |
| 359186 | Occlusion clamp with 40 mm operational jaw length, 10" (25 cm) |
| 359187 | Occlusion clamp with 30 mm operational jaw length, 10" (25 cm) |
| 359188 | Occlusion clamp with 25 mm operational jaw length, 9-1/2" (24 cm) |



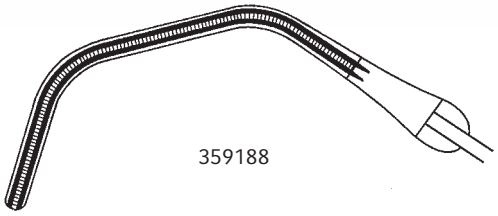
359185



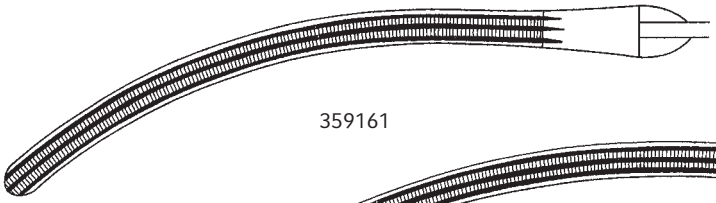
359186



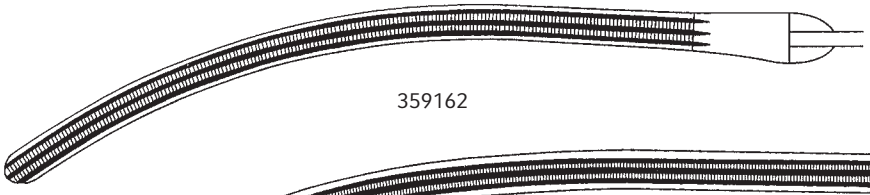
359187



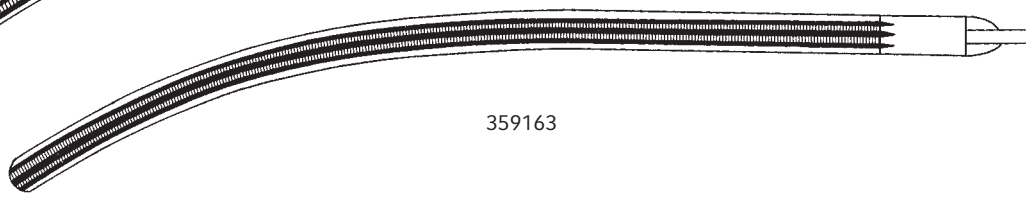
359188



359161



359162



359163

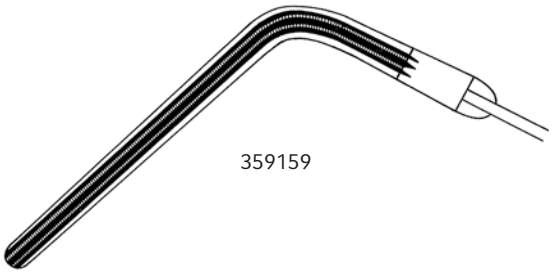
# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Vascular Clamps

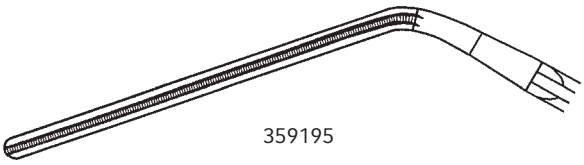
### DEBAKEY® TITANIUM VASCULAR CLAMPS

359159

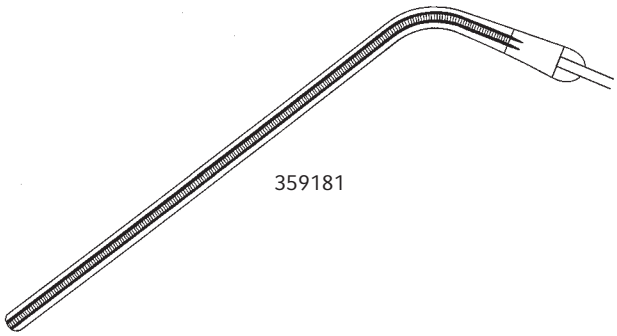
| ITEM # | DESCRIPTION |
|---|---|
| 359159 | 70 degree angled jaw, 10-1/4" (26 cm) |
| 359195 | 45 degree angled jaw, 10-1/2" (26.5 cm) |
| 359181 | 60 degree angled jaw, 11-3/4" (30 cm) |
| 359183 | 60 degree angled jaw, 9-3/8" (23.5 cm) |
| 359184 | 60 degree angled jaw, 8-1/2" (21.5 cm) |



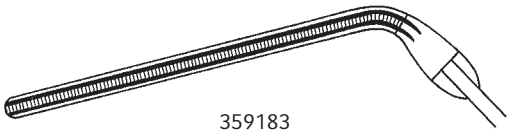
359159



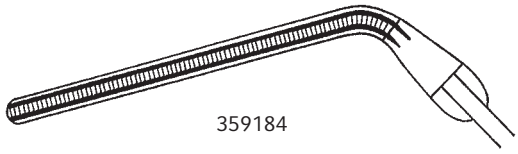
359195



359181

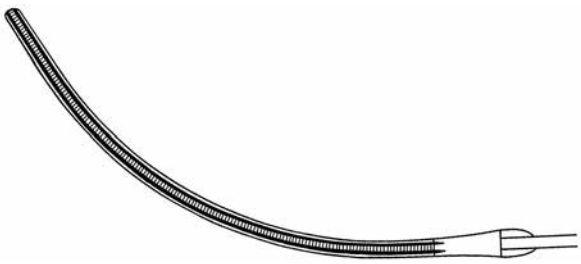


359183



359184

### DEBAKEY® TITANIUM VASCULAR CLAMPS



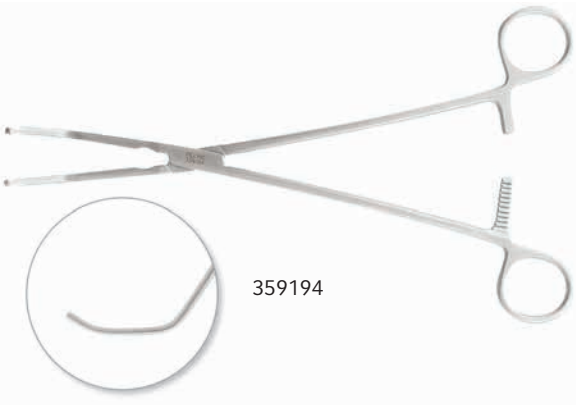
359173

| ITEM # | DESCRIPTION |
|---|---|
| 359173 | Curved jaw, 7-7/8" (20 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

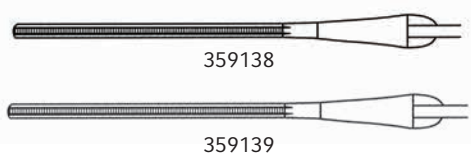
## Vascular Clamps

### GLOVER TITANIUM AURICULAR CLAMP




| ITEM # | DESCRIPTION |
|---|---|
| 359194 | Auricular handles with 30 mm operational jaw length, 10" (25 cm) |

### GLOVER TITANIUM COARCTATION VASCULAR CLAMPS




| ITEM # | DESCRIPTION |
|---|---|
| 359138 | Straight handles, DeBakey® Jaws, 8-5/8" (22 cm) |
| 359139 | Angled handles, DeBakey® Jaws, 8-5/8" (22 cm) |

### HEISS TITANIUM CLAMPING FORCEPS

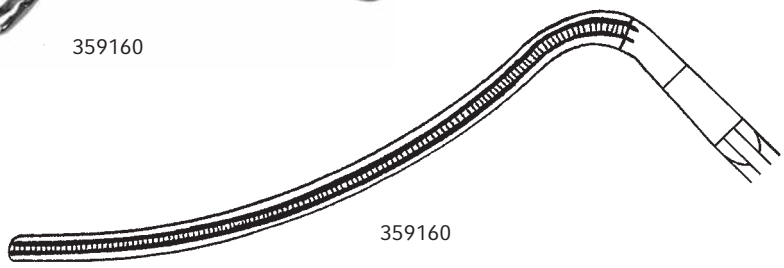
| ITEM # | DESCRIPTION |
|---|---|
| 359314 | Angled handles, DeBakey® Jaws, 8-5/8" (22 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

## Vascular Clamps

### HUFNAGEL TITANIUM VASCULAR CLAMP

359160



359160

| ITEM # | DESCRIPTION |
|---|---|
| 359160 | Curved DeBakey® Jaw, 8-5/8" (22 cm) |

### KAY TITANIUM VASCULAR CLAMP

359152

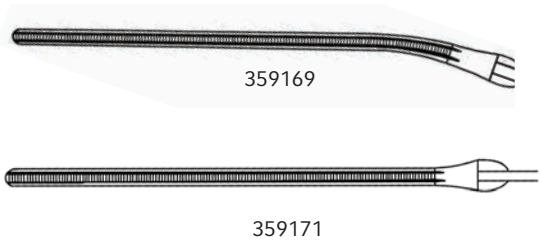
| ITEM # | DESCRIPTION |
|---|---|
| 359152 | Curved DeBakey® Jaws, 7-7/8" (20 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

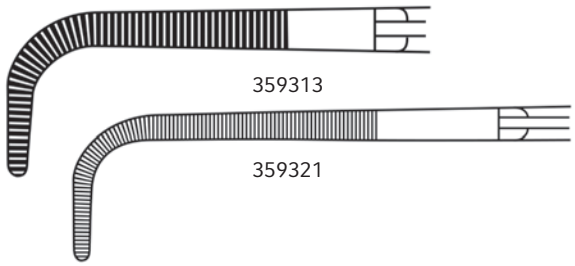
## Vascular Clamps

### LELAND-JONES TITANIUM VASCULAR CLAMPS

| ITEM # | DESCRIPTION |
|---|---|
| 359169 | 30 degree-angled DeBakey® Jaws, 7-1/2" (19 cm) |
| 359170 | 15 degree-angled DeBakey® Jaws, 7-7/8" (20 cm) |
| 359171 | Straight, DeBakey® Jaw, 8-1/4" (21 cm) |




### O'SHAUGHNESSY TITANIUM CLAMPING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 359313 | Strong curve, serrated jaw, 8-1/4" (21 cm) |
| 359321 | Strong curve, serrated jaw, 9-5/8" (24.5 cm) |

# TITANIUM INSTRUMENTS FORCEPS AND CLAMPS

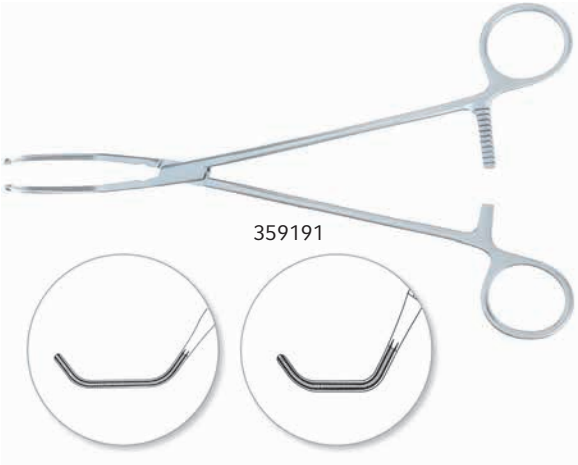
## Vascular Clamps

### RENAL ARTERY TITANIUM VASCULAR CLAMP

359238

| ITEM # | DESCRIPTION |
|---|---|
| 359238 | Curved jaws, 7-1/2" (19 cm) |

### SATINSKY TITANIUM VASCULAR CLAMPS



359191

359191 359193

| ITEM # | DESCRIPTION |
|---|---|
| 359191 | Vena cava clamp with 30 mm operational DeBakey® Jaw length, 9-5/8" (24.5 cm) |
| 359193 | Vena cava clamp with 20 mm operational DeBakey® Jaw length, 9-1/2" (24 cm) |

# TITANIUM INSTRUMENTS
# FORCEPS AND CLAMPS

## Bulldog® Clamps

### DEBAKEY® TITANIUM BULLDOG® CLAMPS

359124

359127

359131

| ITEM # | DESCRIPTION |
|---|---|
| 359122 | Straight, 3" (7.5 cm) |
| 359123 | Straight, 3-3/8" (8.5 cm) |
| 359124 | Straight, 3-7/8" (10 cm) |
| 359127 | Curved, 3-1/4" (8.5 cm) |
| 359128 | Curved, 3-7/8" (10 cm) |
| 359131 | Angled 45 degrees, 4-3/4" (12 cm) |

# TITANIUM INSTRUMENTS SCISSORS

## Micro Scissors

### MICRO TITANIUM SCISSORS

359006

With flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359003 | Curved, 6-1/4" (16 cm) |
| 359006 | Straight, delicate, 6-1/4" (16 cm) |
| 359250 | Curved, serrated, 8-1/4" (21 cm) |
| 359253 | Straight, 9" (23 cm) |

359003

359006

359250

359253

# TITANIUM INSTRUMENTS
# SCISSORS

## Micro Scissors

### MICRO TITANIUM SCISSORS

359262

With round handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359259 | Straight, 6-1/4" (16 cm) |
| 359260 | Curved, 6-1/4" (16 cm) |
| 359261 | Straight, serrated, 6-1/4" (16 cm) |
| 359262 | Curved, serrated, 6-1/4" (16 cm) |
| 359263 | Straight, delicate, 6-1/4" (16 cm) |
| 359264 | Curved, delicate, 6-1/4" (16 cm) |
| 359265 | Straight, 7-1/8" (18 cm) |
| 359266 | Curved, 7-1/8" (18 cm) |
| 359267 | Straight, serrated, 7-1/8" (18 cm) |
| 359268 | Curved, serrated, 7-1/8" (18 cm) |
| 359269 | Straight, delicate, 7-1/8" (18 cm) |
| 359270 | Curved, delicate, 7-1/8" (18 cm) |
| 359271 | Straight, 8-1/4" (21 cm) |
| 359272 | Curved, 8-1/4" (21 cm) |
| 359273 | Straight, serrated, 8-1/4" (21 cm) |
| 359274 | Curved, serrated, 8-1/4" (21 cm) |
| 359275 | Straight, delicate, 8-1/4" (21 cm) |
| 359276 | Curved, delicate, 8-1/4" (21 cm) |
| 359277 | Straight, 9" (23 cm) |
| 359278 | Curved, 9" (23 cm) |
| 359279 | Straight, serrated, 9" (23 cm) |
| 359280 | Curved, serrated, 9" (23 cm) |
| 359281 | Straight, delicate, 9" (23 cm) |
| 359282 | Curved, delicate, 9" (23 cm) |

359259 359260 359261 359262

359263 359264 359265 359266

359267 359268 359269 359270

359271 359272 359273 359274

359275 359276 359277 359278

359279 359280 359281 359282

# TITANIUM INSTRUMENTS SCISSORS

## Potts-Style Scissors

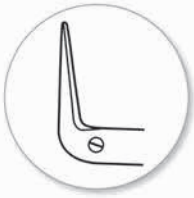
### POTTS MICRO TITANIUM SCISSORS

359020

359016

359017

359018



359019

359020

With flat handle, 16 mm blades.

| ITEM # | DESCRIPTION |
|---|---|
| 359016 | Angled 25 degrees, 7-1/4" (18.5 cm) |
| 359017 | Angled 45 degrees, 7-1/4" (18.5 cm) |
| 359018 | Angled 60 degrees, 7-1/4" (18.5 cm) |
| 359019 | Angled 90 degrees, 6-3/4" (17.0 cm) |
| 359020 | Angled 130 degrees, 6-3/4" (17.0 cm) |

# TITANIUM INSTRUMENTS
# NEEDLE HOLDERS

## Round Handle Micro Needle Holders

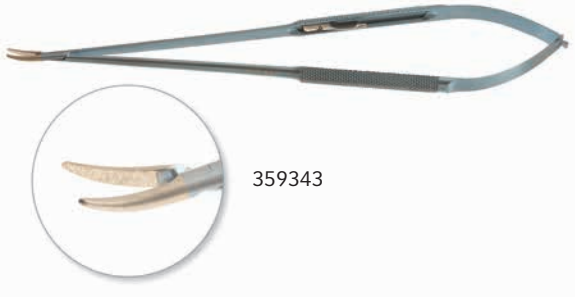
### JACOBSON MICRO TITANIUM NEEDLE HOLDERS

359401

Straight, round handle with lock. Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 359402 | Heavyweight, 2 mm jaw, 9" (23 cm) |
| 359401 | 12 x 1 mm jaw, 9" (23 cm) |
| 359403 | 16 mm jaw, 8-1/4" (21 cm) |

### JACOBSON TITANIUM CASTROVIEJO NEEDLE HOLDERS

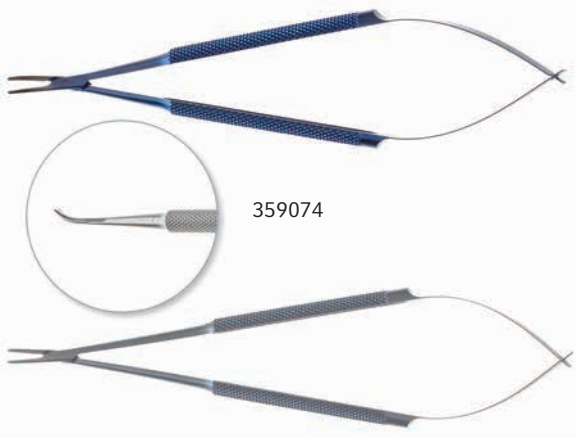


359343

Round handle with lock. Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 359071 | Straight, 1.8 mm jaw, 8-1/4" (21 cm) |
| 359343 | Curved, 1.1 mm jaw, 9" (23 cm) |

### MICRO TITANIUM CASTROVIEJO NEEDLE HOLDERS



359074

359075

Round handle, Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 359069 | Straight, with lock, 1 mm jaw, 7-1/8" (18 cm) |
| 359073 | Straight, 1 mm jaw, 6-1/4" (16 cm) |
| 359074 | Curved, 1 mm jaw, 6-1/4" (16 cm) |
| 359075 | Straight, 1 mm jaw, 7-1/8" (18 cm) |
| 359340 | Straight, 1.1 mm jaw, 9" (23 cm) |
| 359342 | Curved, 1.1 mm jaw, 9" (23 cm) |

# TITANIUM INSTRUMENTS
# NEEDLE HOLDERS

## Round Handle Micro Needle Holders

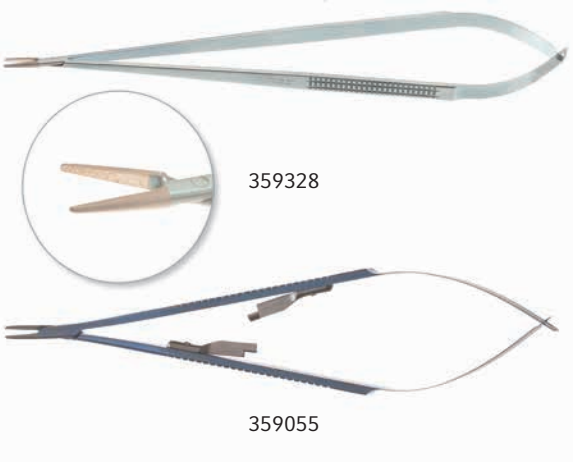
### MICRO TITANIUM CASTROVIEJO NEEDLE HOLDERS

Straight, round handle, serrated jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 359344 | 1 mm jaw, 6-1/4" (16 cm), TC |
| 359345 | With lock, 1 mm jaw, 6" (16 cm), TC |
| 359346 | 7-1/8" (18 cm), TC |
| 359347 | With lock, 8.8 x 1.3 mm jaw, 7-1/8" (18 cm), TC |
| 359349 | 1.5 mm jaw, 8-1/4" (21 cm), TC |
| 359350 | With lock, 1.4 mm jaw, 8-1/4" (21 cm), TC |
| 359352 | With lock, 1.5 mm jaw, 9" (23 cm), TC |

## Flat Handle Micro Needle Holders

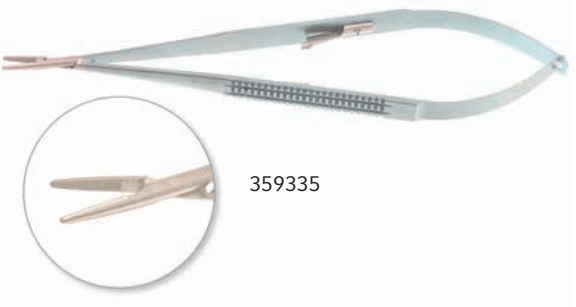
### MICRO TITANIUM CASTROVIEJO NEEDLE HOLDERS




Diama-Grip jaws with flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| 359061 | Straight, 9 x 1 mm jaw, 6-1/4" (16 cm) |
| 359063 | Straight, 9 x 1 mm jaw, 7-1/8" (18 cm) |
| 359328 | Straight, 9 x 1 mm jaw, 9" (23 cm) |
| 359062 | Curved, 8 x 1 mm jaw, 6-1/4" (16 cm) |
| 359059 | Straight with lock, 9 x 1 mm jaw, 8-1/4" (21 cm) |
| 359329 | Straight with lock, 9 x 1 mm jaw, 9" (23 cm) |
| 359055 | Straight with lock, 9 x 1 mm jaw, 6-1/4" (16 cm) |
| 359058 | Curved with lock, 8 x 1 mm jaw, 7-1/8" (18 cm) |

### MICRO TITANIUM CASTROVIEJO NEEDLE HOLDERS TC



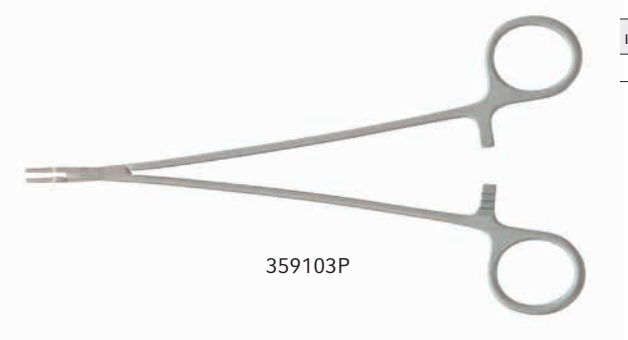

Straight, serrated with flat handle and lock.

| ITEM # | DESCRIPTION |
|---|---|
| 359335 | Straight with lock, 9 x 1 mm jaw, 7-1/8" (18 cm), TC |
| 359339 | Straight with lock, 8 x 1.4 mm jaw, 9" (23 cm), TC |

# TITANIUM INSTRUMENTS
# NEEDLE HOLDERS

## Ring Handle Needle Holders

### DEBAKEY® TITANIUM NEEDLE HOLDER



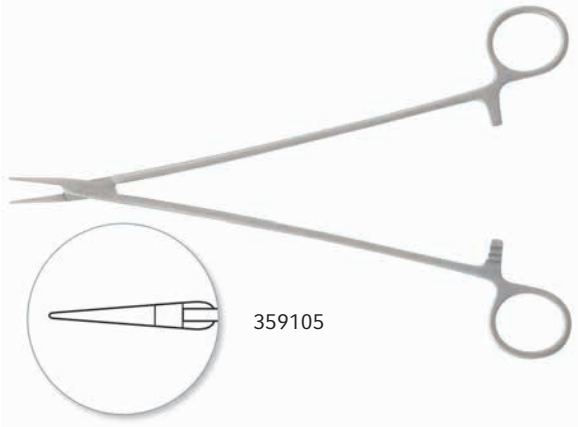

| ITEM # | DESCRIPTION |
|---|---|
| 359103P | 1.5 mm Diama-Grip jaw, 8" (20 cm) |

### DEBAKEY® TITANIUM RING HANDLE NEEDLE HOLDERS

4000 teeth per square inch.

| ITEM # | DESCRIPTION |
|---|---|
| 359381 | 1.5 mm jaw, 6-1/4" (16 cm), TC |
| 359099 | 16 x 1.4 mm jaw, 8" (20.5 cm), TC |

### DEBAKEY® TITANIUM RING HANDLE NEEDLE HOLDERS




Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 359102 | 1.6 mm jaw, 7" (18.5 cm) |
| 359104 | 1.5 mm jaw, 8-5/8" (22 cm) |
| 359105 | 1.6 mm jaw, 10" (25.5 cm) |

# TITANIUM INSTRUMENTS NEEDLE HOLDERS

## Ring Handle Needle Holders

### DERF TITANIUM RING HANDLE NEEDLE HOLDER

4000 teeth per square inch.

| ITEM # | DESCRIPTION |
|---|---|
| 359083 | 1.6 mm jaw, 4-1/2" (11.5 cm), TC |

### HALSEY TITANIUM RING HANDLE NEEDLE HOLDER

For suture sizes 4-0 to 6-0, 4000 teeth per square inch.

| ITEM # | DESCRIPTION |
|---|---|
| 359085 | 15 x 1.5 mm jaw, 5" (12.5 cm), TC |

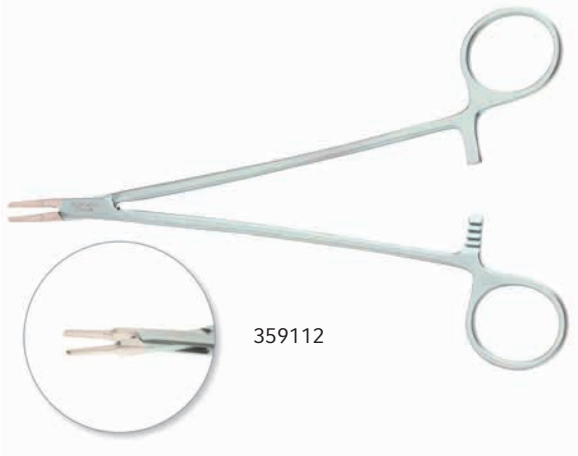
# TITANIUM INSTRUMENTS
# NEEDLE HOLDERS

## Ring Handle Needle Holders

### INTRACARDIAC TITANIUM RING HANDLE NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 359113P | 1.8 mm jaw, 10" (25 cm), Diama-Grip |

### INTRACARDIAC TITANIUM RING HANDLE NEEDLE HOLDERS




Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 359110 | 21 x 2 mm jaw, 7" (18.5 cm) |
| 359111 | 24 x 2 mm jaw, 8" (20.5 cm) |
| 359112 | 24 x 2 mm jaw, 8-5/8" (22 cm) |

### MAYO HEGAR TITANIUM RING HANDLE NEEDLE HOLDERS

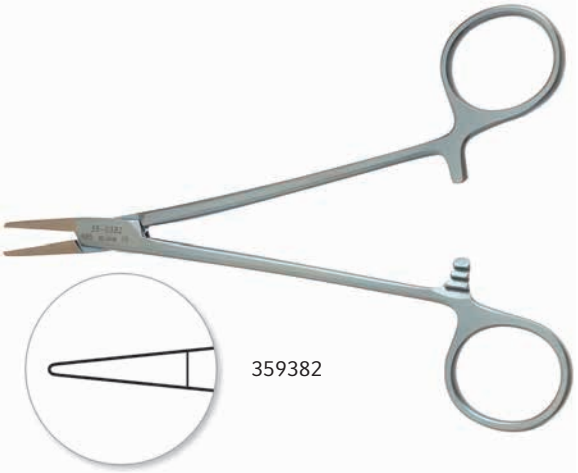
1800 teeth per square inch.

| ITEM # | DESCRIPTION |
|---|---|
| 359080 | 16 x 1.8 mm jaw, 7-1/8" (18 cm), TC |
| 359082 | 16 x 1.8 mm jaw, 8-3/4" (22 cm), TC |

# TITANIUM INSTRUMENTS NEEDLE HOLDERS

## Ring Handle Needle Holders

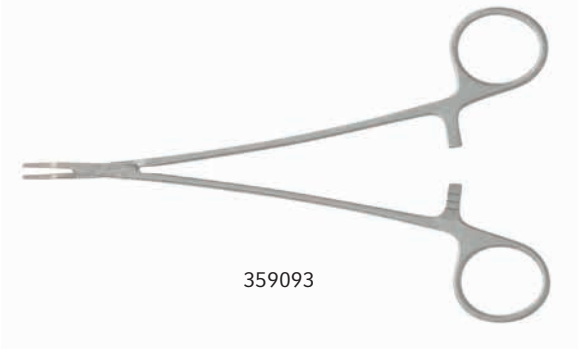
### MICROVASCULAR TITANIUM RING HANDLE NEEDLE HOLDERS




Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 359382 | 1.8 mm jaw, 6" (16 cm) |
| 359118 | 1.8 mm jaw, 7-1/4" (18.5 cm) |
| 359119 | 1.8 mm jaw, 8" (20.5 cm) |

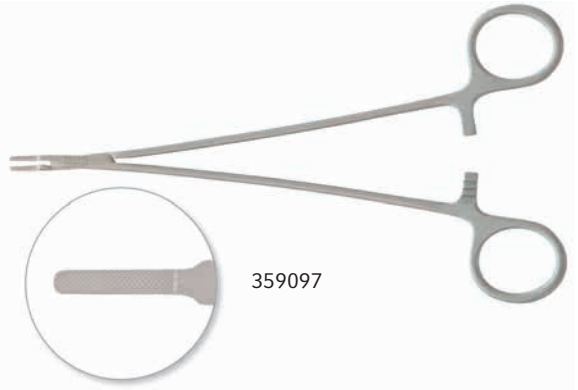
### RYDER TITANIUM RING HANDLE NEEDLE HOLDERS




Diama-Grip jaws.

| ITEM # | DESCRIPTION |
|---|---|
| 359092 | 10 x 1.4 mm jaw, 6" (16 cm) |
| 359093 | 10 x 1.4 mm jaw, 6-3/4" (17 cm) |

### RYDER TITANIUM RING HANDLE NEEDLE HOLDERS




7000 teeth per square inch.

| ITEM # | DESCRIPTION |
|---|---|
| 359097 | 8 x 1.6 mm jaw, 8" (19.5 cm), TC |

# TITANIUM INSTRUMENTS

## Retractors

### FINOCHIETTO TITANIUM STERNAL RETRACTOR

359383

| ITEM # | DESCRIPTION |
|---|---|
| 359383 | Arm length 52 mm |

### PEDIATRIC TITANIUM STERNAL SPREADER

359353

| ITEM # | DESCRIPTION |
|---|---|
| 359353 | 2 pairs of blades, spread 2" (5 cm), arm length 52 mm |

# RIB INSTRUMENTS

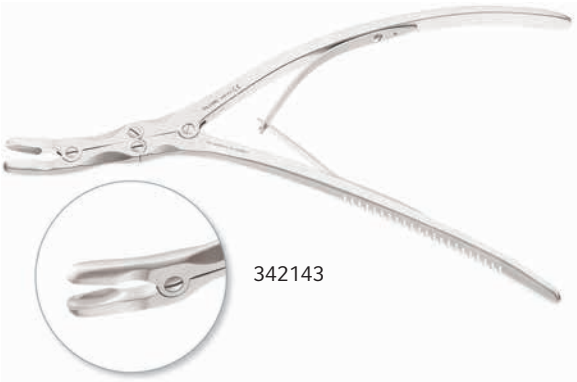
## Rongeurs

### DALE FIRST RIB RONGEUR

342142

| ITEM # | DESCRIPTION |
|---|---|
| 342142 | 3 x 15 mm jaw, 14-1/2" (37 cm) |

### URSCHEL-LEKSELL RONGEUR



342143

Strong, double action rongeur.

| ITEM # | DESCRIPTION |
|---|---|
| 342143 | 8.5 x 15 mm jaw, 12-1/4" (31 cm) |

### PILLING® RUSKIN RONGEUR

341836

| ITEM # | DESCRIPTION |
|---|---|
| 341836 | 4 mm bite, 6-1/8" (15.5 cm) |

# RIB INSTRUMENTS

## Rongeurs

### PILLING® STILLE-LUER DUCKBILL RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| 341803 | Angled, 5 mm wide jaw, 9" (23 cm) |

### SAUERBRUCH RONGEURS

Double action. Square bite, straight jaws, 11-3/4" (30 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 342102 | 13 mm |
| 342105P | 17 mm |
| 342107 | 20 mm |

### URSCHEL FIRST RIB RONGEUR

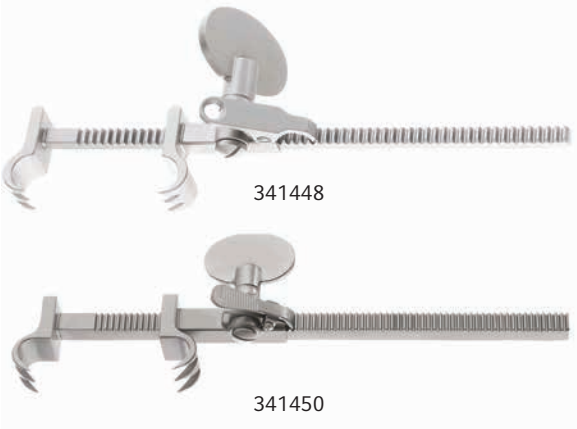
A specially designed, long, extra-heavy, pituitary-type rongeur to achieve complete removal of the neck and head of the first rib.

| ITEM # | DESCRIPTION |
|---|---|
| 342141 | 5 x 12 mm jaw, working length 9" (23 cm) |

# RIB INSTRUMENTS

## Approximators

### BAILEY RIB APPROXIMATOR RETRACTORS



341448

341450

Rib approximation is brought about by engaging jaws around ribs and turning large thumb screw. Automatic ratchet holds blades in place. Dull, non-glare finish stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 341448 | Small size |
| 341450 | Regular, adult size |

### BAILEY-GIBBON RIB APPROXIMATOR RETRACTOR

341460

| ITEM # | DESCRIPTION |
|---|---|
| 341460 | Same as Bailey except for lengthening of arms holding the blades. This raises body of the retractor up, away from the ribs. Dull, non-glare finish stainless steel. |

## Raspatories and Periosteal Elevators

### ALEXANDER PERIOSTEOTOME

343145

Double-end, stainless steel blades. Cross-serrated handle.

| ITEM # | DESCRIPTION |
|---|---|
| 343145 | Standard model, 8-1/4" (21 cm) |

# RIB INSTRUMENTS

## Raspatories and Periosteal Elevators

### CUSHING BLUNT ELEVATOR

358344

| ITEM # | DESCRIPTION |
|---|---|
| 358344 | 6 mm blunt blade, 7-1/4" (18.5 cm) |

### DOYEN RASPATORIES

343148

343153

Made in infant, child and adult sizes and in right and left side models. Stainless steel blades.

| ITEM # | DESCRIPTION |
|---|---|
| 343148 | Infant size, right side, 5-7/8" (15 cm) |
| 343149 | Infant size, left side, 5-7/8" (15 cm) |
| 343152 | Adult size, right side, 6-3/4" (17 cm) |
| 343153 | Adult size, left side, 6-1/2" (16.5 cm) |

### FREER DOUBLE END ELEVATOR

355194

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 355194 | Sharp and blunt, 7" (18 cm) |

# RIB INSTRUMENTS

## Rib Shears / Sternum Cutters

### BETHUNE RIB CUTTER

341950

Double-curved shafts. For all ribs including first rib.

| ITEM # | DESCRIPTION |
|---|---|
| 341950 | 13-3/4" (35 cm) |

### CORYLLOS-BETHUNE RIB SHEARS

341960

With recessed points to protect brachial plexus.

| ITEM # | DESCRIPTION |
|---|---|
| 341960 | Right, 13-3/4" (35 cm) |
| 341961 | Left, 13-3/4" (35 cm) |

### ROOS FIRST RIB SHEAR

341985

A right angle rib shear designed for posterior resection of the first rib through the axillary approach. By proper placement of the shear far posteriorly on the first rib, the remaining stump will be so short that it will not require revision with rongeurs. This adds greatly to the procedure by avoiding possible injury to the brachial plexus.

| ITEM # | DESCRIPTION |
|---|---|
| 341985 | 12-1/2" (32 cm) |

# RIB INSTRUMENTS

## Rib Shears / Sternum Cutters

### STILLE PATTERN RIB SHEARS

341980

| ITEM # | DESCRIPTION |
|---|---|
| 341980 | 10-1/4" (26 cm) |

### LEBSCHE STERNUM KNIFE

342020

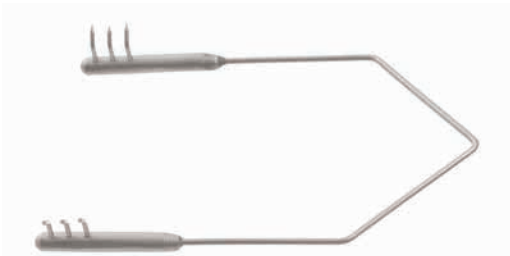
For splitting the sternum down the midline.
Cross serrated section is hit with mallet to provide cutting force.

| ITEM # | DESCRIPTION |
|---|---|
| 342020 | 9-7/8" (25 cm) |

# CVT RETRACTORS

## Epicardial

### PARSONNET EPICARDIAL RETRACTOR



342025

Designed to retract the epicardial fat during coronary by-pass procedures. Miniature spring style retractor. For low profile epicardial tissue retraction at coronary anastomosis site.

| ITEM # | DESCRIPTION |
|---|---|
| 342025 | 3 x 3-pronged, 1-1/16" (27 mm) spread, 1-7/8" (4.5 cm) long |

## IMA

### CHAUX MULTIPURPOSE STERNAL IMA RETRACTOR

341150

The Chaux Sternal Retractor is a unique instrument that can be used not only for routine midline sternotomy, but also for exposure and dissection of the left or right internal thoracic artery. In addition, accessory interchangeable parts consisting of a full set of mitral retracting blades are available to allow self-retaining retraction during valve surgery.

- Four sternal blades with individual and independent dual movement.
- Sliding sternal blade assemblies allow finite positioning of sternal blades on the horizontal planes of side arms.
- For upward elevation required during IMA dissection, both side arms can be rotated and locked at 30 degrees or 60 degrees along its axis.
- All components of retractor remain in sterile field.

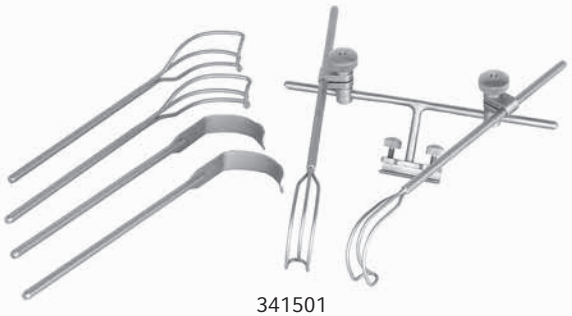
| ITEM # | DESCRIPTION |
|---|---|
| 341150 | Spread 8" (20.5 cm)<br>Blades 1-1/8" wide x 1-7/16" deep (2.5 x 3.5 cm),<br>Arm length 12" (30.5 cm) |

# CVT RETRACTORS

## IMA

### CHAUX STERNAL IMA-MITRAL VALVE RETRACTOR

341155



341501

341520

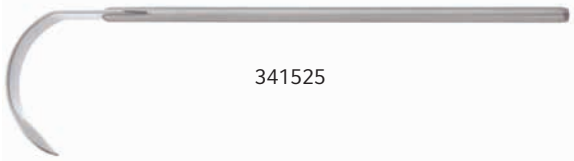
Three retractors in one, can be used as a sternal/IMA and valve retractor. Includes four sternal blades with individual and independent dual movement. Sliding sternal blade assemblies allow movement on horizontal planes of side arms to provide proper position adjustment according to length of sternum. Both side arms can be rotated and locked at 30 degrees or 60 degrees along its axis for flexibility in positioning the retractor for IMA exposure. All components of the retractor remain in the sterile field. The valve retractor fits directly onto arms of the sternal blade assembly and provides self-retaining valve retraction. The Chaux Sternal IMA Valve Retractor when used for valve surgery consists of the basic Chaux Retractor with the addition of a Lemole-Pilling® Valve Retractor Set (341501) and Valve Sternal Blade Assembly (341149).

| ITEM # | DESCRIPTION |
|---|---|
| 341155 | Chaux Sternal/IMA Valve Retractor Set<br>Spread: 9-1/8" (23.cm) Blade measure:<br>1-1/8" (2.5 cm) wide x 1-1/4" (3 cm) deep |
| 341501 | Lemole-Pilling® Valve Retractor Set #1<br>Set #1 fits Cooley and Chaux Sternal Retractors |
| 341520 | Universal Clamp for Lemole |
| 341522 | Cooley Atrial Retractor, small, 9-1/2" (24 cm) |
| 341523 | Cooley Atrial Retractor, medium, 9-1/2" (24 cm) |
| 341524 | Cooley Atrial Retractor, large, 9-1/2" (24 cm) |
| 341525 | Malleable Atrial Retractor, 8-3/4" (22 cm) |
| 341147 | Lemole-Pilling® Valve Retractor (341501)<br>and Valve Sternal Blade Assembly (341149)<br>(Part of 341155) |

341522

341523

341524



341525

# CVT RETRACTORS

## IMA

### CHAUX DEEP BLADE ASSEMBLY

341148

| ITEM # | DESCRIPTION |
|---|---|
| 341148 | 1-3/4" (4.5 cm) |

### VALVE STERNAL BLADE ASSEMBLY

341149

341154 341156

| ITEM # | DESCRIPTION |
|---|---|
| 341149 | (Part of 341155) |
| 341154 | Chaux Sternal Assembly Thumb Screw |
| 341156 | Chaux Sternal Arm Take-up Screw |

# CVT RETRACTORS

## IMA

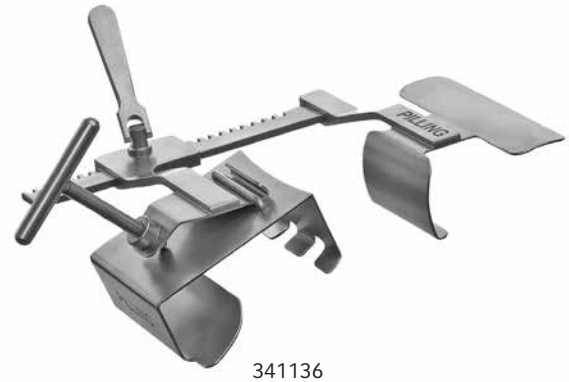
### COUËTIL IMA STERNAL RETRACTOR

341139

All components remain in the sterile field, giving you exposure and set up control.

| ITEM # | DESCRIPTION |
|---|---|
| 341139 | Ratcheted blades slide freely on retractor arm |

### PILLING® IMA RETRACTOR




341136

All components remain in the sterile field, giving you exposure and set up control.

| ITEM # | DESCRIPTION |
|---|---|
| 341136 | Replaces 341134 Pilling® Bugge IMA Retractor |

### OCHSNER-FAVALORO IMPROVED RETRACTOR SET WITH POLY CLAMPS

341120

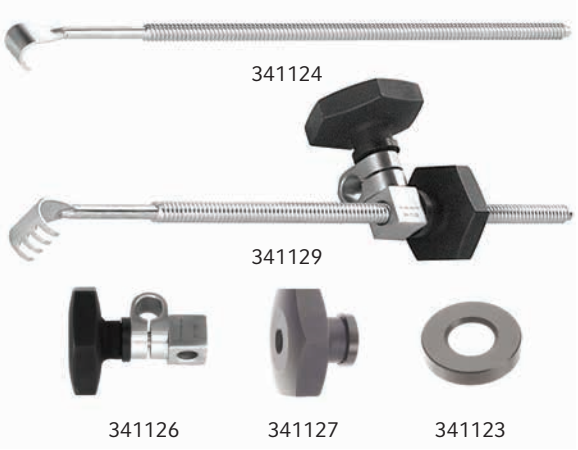
Designed for sternal retraction during internal mammary artery dissection. Rake retractors have screw-type handles for easier adjustment and blunt tips to prevent injury to the sternum. Supplied with two Gomez/Poly-tract Poly Clamp Rail Clamps (Item# 166000) for ease of assembly over sterile drapes.

| ITEM # | DESCRIPTION |
|---|---|
| 341120 | Consists of: 2 each retractor uprights, 1 each crossbar, 2 each screw-type rake assemblies and 2 each 166000 Gomez/Poly-tract Poly Clamp Rail Clamps |

# CVT RETRACTORS

## IMA

### OCHSNER-FAVALORO RETRACTOR PARTS




| ITEM # | DESCRIPTION |
|---|---|
| 341123 | Captive Washer for Knob |
| 341124 | Micro Adjustable Rake and Arm |
| 341126 | Knob and Clamp Assembly |
| 341127 | Micro Adjust Knob |
| 341129 | Rake Assembly for Ochsner-Favaloro Self-Retaining Retractors 341120 and 341128 |

### OCHSNER-FAVALORO RETRACTOR SET

341128

The Favaloro Retractor modified with screw-type handles for ease of adjustment of retraction, longer arms for ease of assembly and blunt tips to help prevent injury to the sternum.

| ITEM # | DESCRIPTION |
|---|---|
| 341128 | Supplied with one pair of rail clamps for most standard OR tables. |

# CVT RETRACTORS

## IMA

### RAIL CLAMPS

343393

To facilitate transfer of the retractor to opposite side of the table, we suggest an additional pair of rail clamps.

| ITEM # | DESCRIPTION |
|---|---|
| 343393 | One pair |

### CHEANVECHAI RAKE ASSEMBLY

341131

| ITEM # | DESCRIPTION |
|---|---|
| 341131 | May be used with any existing Pilling®-made Favaloro-type cross bars and uprights (included with the Strong Retractor) |

### CHEANVECHAI-FAVALORO SWIVEL RAKE ASSEMBLY

341133

| ITEM # | DESCRIPTION |
|---|---|
| 341133 | Same as 341131 except rakes swivel |

# CVT RETRACTORS

## IMA

### STRONG T-BAR RETRACTOR SYSTEM

341100

Single post, table-mounted IMA Retractor with Cheanvechai Adjustable Rakes. (Shown with optional Retractor Light Beam, 163701).

| ITEM # | DESCRIPTION |
|---|---|
| 341100 | Retractor System |

### STRONG T-BAR UNILATERAL SYSTEM COMPONENTS

341131

341114

| ITEM # | DESCRIPTION |
|---|---|
| 341112 | Strong support bar, table upright diameter 5/8" (1.5 cm) |
| 341113 | Strong T-Bar |
| 341131 | Cheanvechai-Favaloro Rake Assembly |
| 341114 | Rail Clamp for Strong T-Bar, 5/8" (1.5 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### PREEMIE RETRACTOR

341312

The smallest Pilling® Chest Retractor. For premature infants less than 2 kg body weight.

| ITEM # | DESCRIPTION |
|---|---|
| 341312 | Spread 1-9/16" (4.0 cm)<br>Fixed blades 5/16" deep x 1/4" wide (8 x 6.5 mm)<br>Arm length 1" (2.5 cm) |

### DAVIS-FINOCHIETTO INFANT RETRACTOR

341290

Miniature size for use in infants. Especially valuable in surgery for tracheoesophageal fistula. Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 341290 | Spread 2-3/4" (7 cm)<br>Blades 1/2" deep x 5/8" wide (1.3 x 1.5 cm)<br>Arm length 2-1/16" (5 cm) |

### FINOCHIETTO RIB RETRACTOR

341302

Infant size, for newborn and tiny infants. Aluminum construction.

| ITEM # | DESCRIPTION |
|---|---|
| 341302 | Spread 2-3/4" (7 cm)<br>Blades 1/2" deep x 5/8" wide (1.3 x 1.5 cm)<br>Arm length 2-1/4" (6 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### WILCOX PEDIATRIC CARDIAC RETRACTOR

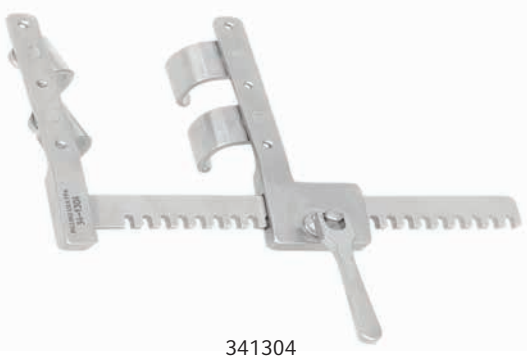
341315

A miniature model of the Finochietto. Light construction, stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 341315 | Spread 2-3/4" (7 cm)<br>Blades 7/8" deep x 7/8" wide (2.2 x 2.1 cm) |

### AMATO NEONATAL STERNAL RETRACTORS

341303



341304

Specially designed infant sternal retractors to reduce post-operative sternal deformity by dispensing pressure over greater surface area. Selection of 3 sizes available for proper fit.

| ITEM # | DESCRIPTION |
|---|---|
| 341303 | Amato Retractor, 4 blade, small<br>Swivel blades 3/8" wide x 3/8" deep (1 x 1 cm) |
| 341304 | Amato Retractor, 4 blade, medium<br>Maximum spread 2-3/4" (7 cm)<br>Swivel blades 1/2" wide x 1/2" deep (1.5 x 1.5 cm) |
| 341305 | Amato Retractor, 6 blade, large<br>Spread 2-1/2" (6.5 cm)<br>Swivel blades 1/2" wide x 1/2" deep (1.5 x 1.5 cm) |

341305

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### DEBAKEY® CHILD RETRACTOR

341317

Lightweight aluminum arms and blades are dull finished to eliminate glare and curved to follow body contour. Rack is stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 341317 | Spread 3-3/4" (9.5 cm)<br>Blades 1-1/8" deep x 1-1/8" wide (3 x 3 cm)<br>Arm length 3-1/8" (8 cm) |

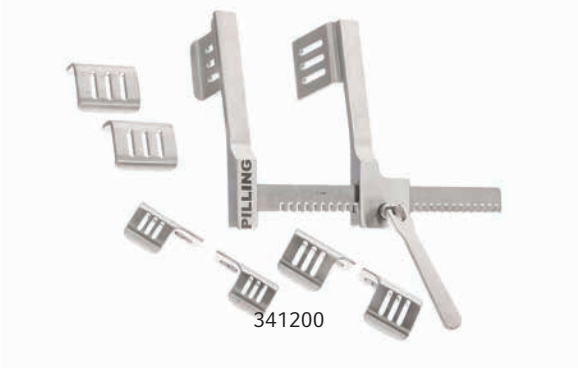
### BURFORD-FINOCHIETTO INFANT-CHILD RETRACTOR

341250

Stainless steel. This retractor is equipped with interchangeable blades, an important feature that eliminates the need for more than one spreader. Smaller-scaled and lighter weight than the adult size, it provides a 5-7/8" (15 cm) spread.

| ITEM # | DESCRIPTION |
|---|---|
| 341250 | Infant-Child<br>Spread 5-7/8" (15 cm)<br>Supplied with four pairs of stainless side blades:<br>1" deep x 15/16" wide (2.5 x 2.4 cm)<br>1-1/4" deep x 1-5/16" wide (3.2 x 3.3 cm)<br>1-1/4" deep x 1-3/4" wide (3.2 x 4.4 cm)<br>1-7/8" deep x 1-3/4" wide (4.9 x 4.4 cm)<br>Arm length 4-1/4" (10.8 cm) |

### GERBODE-BURFORD CHILD RETRACTOR




341200

Stainless steel. Has same projection-free construction as adult models but is proportionally reduced to child size.

| ITEM # | DESCRIPTION |
|---|---|
| 341200 | Child<br>Spread 5-15/16" (15 cm)<br>Supplied with four pairs of side blades:<br>3/4" deep x 1" wide (1.9 x 2.5 cm)<br>1-1/16" deep x 1-1/4" wide (2.7 x 3.2 cm)<br>1-1/16" deep x 1-3/4" wide (2.7 x 4.4 cm)<br>1-7/8" deep x 1-3/4" wide (4.8 x 4.4 cm)<br>Arm length 4-1/2" (11.5 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### HAIGHT BABY RETRACTOR

341296

Light construction. Spreader arms held apart by "ratchet" mechanism.

| ITEM # | DESCRIPTION |
|---|---|
| 341296 | Large<br>Spread 4-3/4" (12 cm)<br>Blades 1-3/8" deep x 1-1/8" wide (3.4 x 3 cm) |

### REPLOGLE INFANT STERNAL RETRACTOR

341205

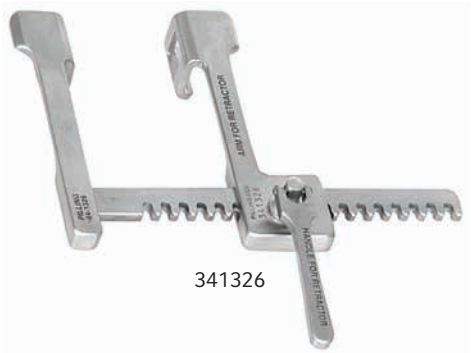
Gently curved arms fit the natural contour of the infant sternum. Each blade swivels 45 degrees. 5-7/8" (15 cm) length arms place ratchet bar out of surgical field.

| ITEM # | DESCRIPTION |
|---|---|
| 341205 | Spread 2-15/16" (7.5 cm)<br>Blades 5/8" deep x 1/2" wide (1.6 x 1.3 cm)<br>Arm length 5-7/8" (15 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### FINOCHIETTO RETRACTORS




341326

341328

The original model. Shafts curved to follow body contour. Dull, non-glare finished stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 341326 | Newborn size<br>Spread 1-7/8" (4.9 cm)<br>Blades 5/8" deep (1.5 cm)<br>Straight arms |
| 341328 | Child size<br>Spread 5-1/8" (13 cm)<br>Blades 1-1/2" deep x 1-3/4" wide (3.8 x 4.4 cm)<br>Arm length 5-1/4" (13.3 cm), curved arms |
| 341330 | Adult size<br>Spread 7-1/2" (19 cm)<br>Blades 2-1/8" deep x 2-5/8" wide (5.4 x 6.7 cm)<br>Curved arms |
| 341332 | Adult size, large<br>Spread 7-1/2" (19 cm)<br>Blades 2-7/8" deep x 2-5/8" wide (7.3 x 6.7 cm)<br>Curved arms |

341330

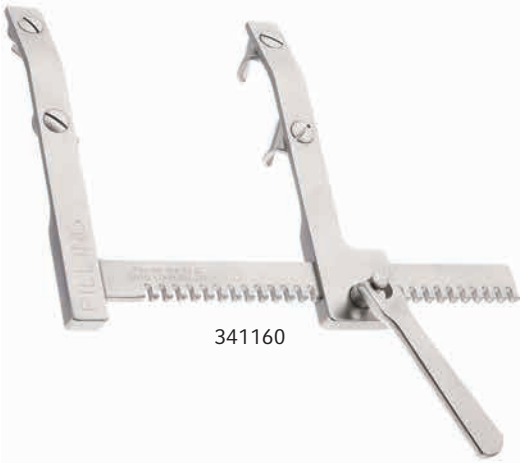
341332

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### MORSE STERNAL RETRACTORS WITH DOUBLE BLADES

341158



341160

341162

For sternal-splitting incisions. The double blades help prevent the narrow split sternal halves from breaking in their mid-portion.

| ITEM # | DESCRIPTION |
|---|---|
| 341158 | Child, age 2-5<br>Spread 3-7/8" (10 cm)<br>Blades 3/8" deep x 5/8" wide (1.1 x 1.5 cm) |
| 341160 | Child<br>Spread 6" (15.2 cm)<br>Blades 5/8" deep x 13/16" wide (1.6 x 2.1 cm)<br>Arm length 5" (12.7 cm) |
| 341162 | Adult<br>Spread 8" (20.3 cm)<br>Blades 15/16" deep x 1-1/8" wide (2.4 x 2.9 cm)<br>Arm length 6" (15.2 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### FAVALORO-MORSE STERNAL RETRACTORS

341163

| ITEM # | DESCRIPTION |
|---|---|
| 341163 | Spread 8" (20.3 cm)<br>Blades 1-1/2" deep x 1-1/8" wide (3.8 x 2.8 cm)<br>Arm length 6" (15.2 cm) |
| 341164 | Spread 8" (20.3 cm)<br>Blades 1-1/2" deep x 1-1/8" wide (3.8 x 2.8 cm)<br>Arm length 8-1/16" (20.5 cm) |

### COOLEY STERNUM RETRACTORS

341194

341195

| ITEM # | DESCRIPTION |
|---|---|
| 341194 | Adult<br>Spread 6-1/2" (16.5 cm)<br>Short blades 1-1/4" deep x 2-1/4" wide<br>(3.2 x 5.7 cm)<br>Arm length 5-3/4" (14.6 cm) |
| 341195 | Adult<br>Spread 6-5/16" (16 cm)<br>Long, concave blades 1-1/4" deep x 4" wide<br>(3 x 10 cm)<br>Arm length 6-1/2" (16.5 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### DEBAKEY® CHEST RETRACTORS

341175

341177

341178

A group of three sizes, each supplied with 2 sets of curved aluminum blades designed for use with ribs or sternum. Blades attach by a simple slide arrangement without suture catching obstructions.

| ITEM # | DESCRIPTION |
|---|---|
| 341175 | Adult<br>Spread 6-1/2" (16.5 cm)<br>Blades 1-1/4" deep x 2-1/4" wide (3.2 x 5.7 cm) and 1-3/16" deep x 2-1/4" wide (3 x 5.7 cm) |
| 341177 | Adolescent<br>Spread 5-1/2" (14 cm)<br>Blades 1-1/4" deep x 1-1/8" wide (3.2 x 3 cm) and 1-3/4" deep x 1-1/8" wide (4.4 x 3 cm) |
| 341178 | Child<br>Spread 3-7/8" (10 cm)<br>Blades 1-1/4" deep x 1-1/8" wide (3.2 x 3 cm) and 1-1/2" deep x 1-1/8" wide (3.9 x 3 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### KUYPER-MURPHY STERNAL RETRACTORS

341397

341398

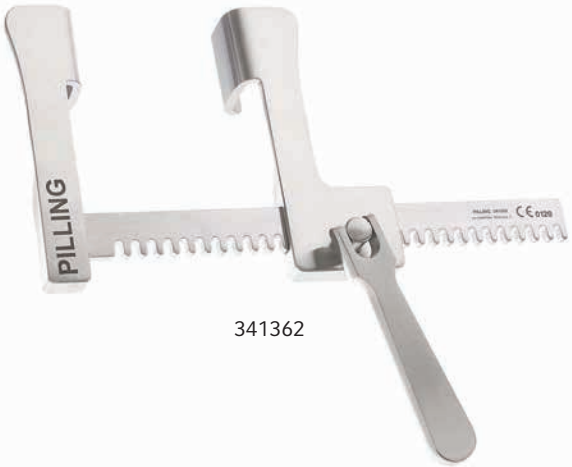
Straight arms. Concave blades.

| ITEM # | DESCRIPTION |
|---|---|
| 341397 | Small<br>Spread 4-1/2" (11.5 cm)<br>Blades 1-1/8" deep x 3-1/2" wide (3 x 9 cm) |
| 341398 | Medium<br>Spread 6-5/16" (16 cm)<br>Blades 1-3/16" deep x 3-1/2" wide (3 x 8.9 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### RIENHOFF RETRACTORS




341362

341366

Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 341362 | Spread 5-7/8" (15 cm)<br>Blades 1-1/8" deep x 1-1/4" wide (3 x 3.3 cm) |
| 341366 | Spread 5-1/2" (14 cm)<br>Blades 2" deep x 1-3/4" wide (5 x 4.4 cm)<br>Arm height 4-5/8" (11.7 cm) |

### TUFFIER RETRACTOR

341390

Scored blades.

| ITEM # | DESCRIPTION |
|---|---|
| 341390 | Spread 5-7/8" (15 cm)<br>Blades 2-3/16" deep x 1-7/8" wide (5.6 x 4.8 cm)<br>Arm length 4-1/2" (11.4 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### BONCHEK-CARPENTIER STERNAL/ATRIAL VALVE RETRACTOR

341198

- Cooley-type Sternal Blades* with shorter outward curve designed for easier insertion.
- Allows critical adjustment of the retractor blades to apply traction to the atrial wall.
- Both models are supplied with four atrial valve retracting blades, two narrow and two wide.

* For ATRIAL VALVE RETRACTING BLADES call Teleflex® Toll Free: 866.246.6990, Phone: 919.544.8000, Intl: 919.433.8088.

| ITEM # | DESCRIPTION |
|---|---|
| 341198 | Modified Carpentier-Type Sternal/Atrial Retractor<br>Spread 6-7/8" (17.5 cm)<br>Sternal blades 3-15/16" wide x 1-1/4" deep (10 x 3.2 cm) |

### BURFORD ADULT RETRACTOR

341225

Stainless steel. Shanks are curved to fit body contour and blades are detachable. Blades have protruding points to help prevent spreader from moving during operation. Two pairs of blades are supplied.

| ITEM # | DESCRIPTION |
|---|---|
| 341225 | Spread 7-1/2" (19 cm)<br>Arm length 8" (20.5 cm) |

### BURFORD ALUMINUM ADULT RETRACTOR

341227

Two pairs of blades are supplied.

| ITEM # | DESCRIPTION |
|---|---|
| 341227 | Spread 6-7/8" (17.5 cm)<br>Small blades 1-7/8" deep x 2-3/8" wide (4.7 x 6.1 cm)<br>Large blades 2-1/2" deep x 2-3/8" wide (6.5 x 6.1 cm)<br>Arm length 7-11/16" (19.4 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

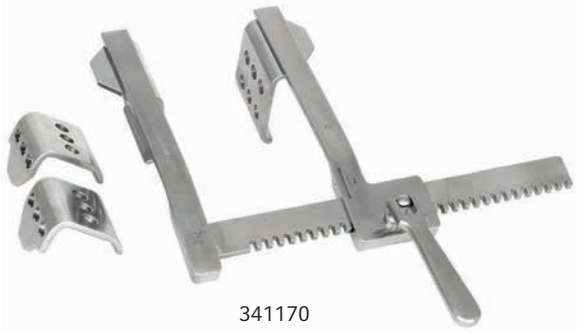
### FARRELL RUBIO RETRACTOR

341224

Two sets of interchangeable blades.

| ITEM # | DESCRIPTION |
|---|---|
| 341224 | Adult<br>Spread 7-1/2" (19 cm)<br>Blades 1-5/8" deep x 2-5/8" wide (4.1 x 6.7 cm) and<br>2-1/2" deep x 2-5/8" wide (6.3 x 6.7 cm)<br>Arms curved 50 degrees |

### GERBODE-BURFORD ADULT RETRACTOR



341170

Stainless steel. The lugs and springs holding the detachable blades in place are located on the underside of the spreader arms. This presents a smooth projection-free upper surface which will not catch sutures. Shanks are curved to fit body contour and blades are detachable. Two pairs of blades are supplied.

| ITEM # | DESCRIPTION |
|---|---|
| 341170 | Adult<br>Spread 7-1/2" (19 cm)<br>2-1/8" deep x 2-5/8" wide (5.5 x 6.7 cm) and<br>2-7/8" deep x 2-5/8" wide (7.3 x 6.7 cm)<br>Arm length 7-1/4" (18.4 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### GERBODE STERNAL RETRACTORS

341180

341181

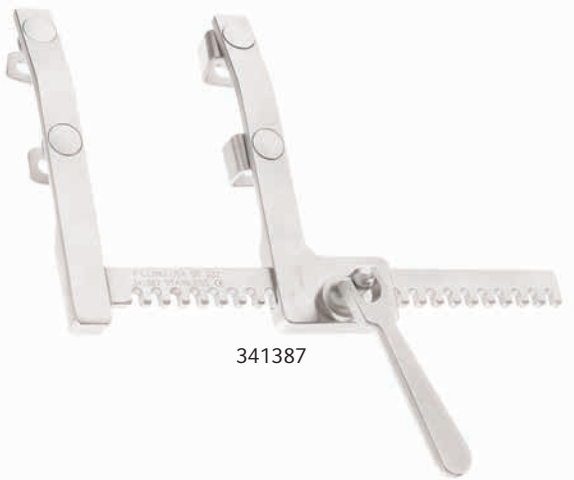
Designed to provide retraction on a broad segment of sternum, thus preventing pressure on soft tissues. Sternal fracture from the retractor is less likely to occur. The blades are of simple, smooth construction without protuberances to catch sutures. Blades are designed to place pressure on sternum but not on overlying soft tissue.

| ITEM # | DESCRIPTION |
|---|---|
| 341180 | Standard spread<br>Spread 5-7/8" (15 cm)<br>Blades 1-3/16" deep x 3-15/16" wide (3 x 10 cm) |
| 341181 | Wide spread<br>Spread 7-3/4" (19.5 cm)<br>Blades 1-3/16" deep x 3-15/16" wide (3 x 10 cm) |

# CVT RETRACTORS

## Sternal Retractors/Rib Spreaders

### TRANSPLANT DONOR STERNAL RETRACTORS



341387

341389

Each Morse-Style Sternal Retractor blade has a prominent lip and a large spike to secure retractor in donor's sternum for maximum spread without slippage.

| ITEM # | DESCRIPTION |
|---|---|
| 341387 | Infant/Child<br>Spread 4-3/8" (11 cm)<br>Spiked blades 5/8" deep x 1/2" wide (1.4 x 1.3 cm) |
| 341389 | Adult<br>Spread 7-1/2" (19 cm)<br>Spiked blades 1-1/4" deep x 1" wide (3.2 x 2.5 cm) |

### HEITMILLER MINI THORACOTOMY RETRACTOR

341310

This retractor provides excellent exposure for video-assisted thoracoscopy, open lung biopsies, transaxillary incisions, and mid-CAB procedures in which mini-thoracotomy incisions are used. With its small "footprint," it also is ideal for mobilizing lung adhesions during redo thoracotomies.

| ITEM # | DESCRIPTION |
|---|---|
| 341310 | Spread 3-1/8" (7.9 cm)<br>Blades 5/8" wide (1.6 cm) |

# CVT RETRACTORS

## Pilling® Sternal Retractor and Rib Spreader Dimensions

All dimensions are in centimeters. All dimensions are approximate.

| AGE | CAT. NO. | BLADE STYLE | MINIMUM SPREAD | BLADE DEPTH | BLADE WIDTH | ARM LENGTH |
|---|---|---|---|---|---|---|
| PREEMIE | | | | | | |
| Preemie | 341312 | Rib, Single, Fixed | 4.0 | 0.8 | 0.65 | 2.5 |
| NEWBORN | | | | | | |
| Finochietto | 341326 | Rib, Single, Fixed | 4.9 | 1.5 | 1.5 | 5.5 |
| Amato | 341303 | Sternal, 4 Swivel Blades | 7.0 | 1.0 | 1.0 | 4.0 |
| INFANT TO YOUNG CHILDREN | | | | | | |
| Aluminum Finochietto | 341302 | Rib, Single, Fixed | 7.0 | 1.3 | 1.5 | 5.5 |
| Amato Medium | 341304 | Sternal, 4 Swivel Blades | 7.0 | 1.4 | 1.3 | 5.9 |
| Amato Large | 341305 | Sternal, 6 Swivel Blades | 7.0 | 1.4 | 1.3 | 9.0 |
| Davis-Finochietto | 341290 | Rib, Single, Fixed | 7.0 | 1.3 | 1.5 | 5.0 |
| DeBakey®-Finochietto | 341315 | Rib, Single, Fixed | 7.0 | 2.2 | 2.1 | 6.0 |
| Replogle | 341205 | Sternal, 4 Swivel Blades | 7.5 | 1.6 | 1.3 | 15.0 |
| Aluminum DeBakey® | 341317 | Rib, Single, Fixed | 9.5 | 3.0 | 3.0 | 8.0 |
| Morse | 341158 | Sternal, 4 Swivel Blades | 10.0 | 1.1 | 1.5 | 9.0 |
| Transplant Donor | 341387 | Sternal, 4 Swivel, Spiked | 11.0 | 1.4 | 1.3 | 9.5 |
| Haight Large | 341296 | Rib, Single, Fixed | 12.1 | 3.4 | 3.0 | 9.0 |
| OLDER CHILD 6-10 YEARS | | | | | | |
| DeBakey® | 341178 | Rib, Single, Interchangeable | 10.0 | 3.2 | 3.0 | 8.0 |
| Burford-Finochietto | 341250 | Rib, Single, Interchangeable | 15.0 | 2.5 | 2.4 | 10.8 |
| Morse | 341160 | Sternal, 4 Swivel Blades | 15.2 | 1.6 | 2.1 | 12.7 |
| ADOLESCENT | | | | | | |
| Kuyper-Murphy Small | 341397 | Sternal, Fixed | 11.5 | 3.0 | 9.0 | 13.5 |
| Finochietto | 341328 | Rib, Single, Fixed | 13.0 | 3.8 | 4.4 | 13.3 |
| MIXED | | | | | | |
| Gerbode-Burford | 341200 | Rib, Single, 4 Interchangeable Blades | 15.0 | 1.9 | 2.5 | 11.5 |
| SMALL ADULT | | | | | | |
| Rienhoff | 341366 | Rib, Single, Fixed | 14.0 | 5.0 | 4.4 | 11.7 |
| DeBakey® | 341177 | Rib/Sternal, Interchangeable | 14.0 | 3.2 | 3.0 | 13.0 |
| Rienhoff Medium | 341362 | Rib, Single, Fixed | 15.0 | 3.0 | 3.3 | 9.0 |
| Tuffier | 341390 | Rib, Single, Fixed | 15.0 | 5.6 | 4.8 | 11.4 |
| Kuyper-Murphy Medium | 341398 | Sternal, Fixed | 16.0 | 3.0 | 8.9 | 16.0 |

# CVT RETRACTORS

## Pilling® Sternal Retractor and Rib Spreader Dimensions

All dimensions are in centimeters. All dimensions are approximate.

| AGE | CAT. NO. | BLADE STYLE | MINIMUM SPREAD | BLADE DEPTH | BLADE WIDTH | ARM LENGTH |
|---|---|---|---|---|---|---|
| ADULT | | | | | | |
| Gerbode | 341180 | Sternal, Fixed | 15.0 | 3.0 | 10.0 | 23.0 |
| Cooley | 341194 | Sternal, Fixed | 16.5 | 3.2 | 5.7 | 14.6 |
| Aluminum Burford | 341227 | Rib, Single, Interchangeable | 17.5 | 4.7 | 6.1 | 19.4 |
| DeBakey® | 341175 | Rib/Sternal, Interchangeable | 18.5 | 3.2 | 5.7 | 18.0 |
| Finochietto | 341330 | Rib, Single, Fixed | 19.0 | 5.4 | 6.7 | 15.0 |
| Burford | 341225 | Rib, Single, Interchangeable | 19.0 | 5.4 | 6.2 | 19.5 |
| Gerbode-Burford | 341170 | Rib, Single, Interchangeable | 19.0 | 5.5 | 6.7 | 18.4 |
| Farrell Rubio | 341224 | Rib/Sternal, Interchangeable | 19.0 | 4.1 | 6.7 | 17.0 |
| Adult Transplant Donor | 341389 | Sternal, Fixed, Spiked | 19.0 | 3.2 | 2.5 | 15.0 |
| Morse | 341162 | Sternal, 4 Swivel Blades | 20.3 | 2.4 | 2.9 | 15.2 |
| Favaloro-Morse | 341163 | Sternal, 4 Swivel Blades | 20.3 | 3.8 | 2.8 | 15.2 |
| Chaux | 341150 | Sternal/IMA, 4 Swivel Blade | 20.3 | 3.7 | 2.7 | 20.0 |
| Chaux-Lemole | 341155 | Sternal/IMA, 4 Swivel Blade, Valve Retractors | 23.2 | 3.0 | 2.7 | 20.0 |
| LARGE ADULT | | | | | | |
| Cooley Extra-Large | 341195 | Sternal, Fixed | 16.0 | 3.2 | 10.2 | 16.5 |
| Bonchek-Carpentier | 341198 | Sternal, Fixed | 18.5 | 3.2 | 10.0 | 16.0 |
| Finochietto Large | 341332 | Rib, Single, Fixed | 19.0 | 7.3 | 6.7 | 18.0 |
| Gerbode | 341181 | Sternal, Fixed | 19.5 | 3.0 | 10.0 | 23.0 |
| Favaloro-Morse | 341164 | Sternal, 4 Swivel Blades | 20.3 | 3.8 | 2.9 | 20.3 |

# CVT RETRACTORS

## Sternal Closure

### PILLING®-WOLVEK STERNAL APPROXIMATION AND FIXATION SYSTEM

342000

342002

342004

342006

142550

The Wolvek System with its unique suture locking device affords positive, secure sternal approximation and elimination of the problems associated with twisted wire.

Low Profile Stainless Steel Locking Plate:

- Eliminates need for twisting wire.
- More secure closure, at least twice the tensile strength of twisted wire.
- Greater patient comfort.
- Eliminates chance of wire breakage associated with twisting action.
- Less chance of skin perforation.

Sternal Approximator:

- Allows constant tension to be applied as each wire is tightened and locked.
- Provides rigid fixation which will lessen the motion between the edges of the sternum, hasten healing and provide more patient comfort.

Complete P-W Approximator and Fixation System includes 1 Approximator, 1 Locking Plate Crimper, 1 Wire Cutter, Stainless Steel Storage and Sterilizing Case and 1 box 342006.

| ITEM # | DESCRIPTION |
|---|---|
| 342000 | Complete Pilling®-Wolvek Approximator and Fixation System Includes: 1 Approximator, 1 Locking Plate Crimper, 1 Wire Cutter, Stainless Steel Storage and Sterilizing Case and 1 box 342006 (Locking Plates). |
| 342002 | Sternal Approximator |
| 342004 | Locking Plate Crimper |
| 342006 | Locking Plates (suture not included) 8 plates per package (10 packages per box). Only the following sternal sutures and needles should be used with locking plates.<br>Deknatel® Product No. 29-7271M4<br>Ethicon Product No. M650<br>The suture wire supplied by these manufacturers is manufactured from type 316L stainless steel as are the locking plates. Suture wire of unknown origin or type may not be metallurgically compatible with the locking plates. |
| 142550 | Pilling® Stainless Steel Wire Cutter, 6-7/8" (17.5 cm) |
| 343030 | Berry Sternal Needle Holder, 7-3/4" (19.5 cm), TC |
| 342008 | Stainless Steel Storage and Sterilization Case for System, 15" x 10-1/2" x 2" |

# CVT RETRACTORS

## Sternal Closure

### KIRKLIN STERNAL AWLS

342043

342044

For use in wiring the sternum. Wrench included.

| ITEM # | DESCRIPTION |
|---|---|
| 342043 | Working length 2" (5 cm), 7-1/8" (18 cm) |
| 342044 | Needle only for Kirklin awl, 2-3/4" (7 cm) |

### SWEET MODIFIED STERNAL PUNCH

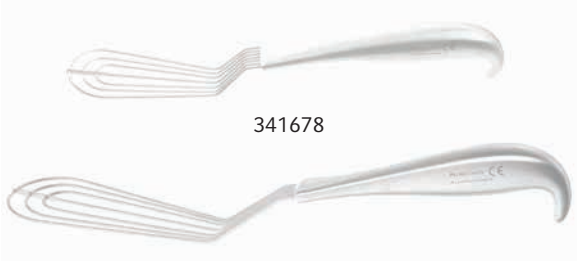
342040

Perforating blade is hook-shaped to bring suture material back through hole. Dull, non-glare finished stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 342040 | 10" (25.5 cm) |

## Hand-Held

### ALLISON LUNG RETRACTORS



341678

341679

Wire, spatula-shaped blade.

| ITEM # | DESCRIPTION |
|---|---|
| 341678 | Child size, 10-1/4" (26 cm) |
| 341679 | Adult Size, 12-3/8" (31.5 cm) |

# CVT RETRACTORS

## Hand-Held

### CUSHING DECOMPRESSION RETRACTOR

481220

| ITEM # | DESCRIPTION |
|---|---|
| 481220 | 21 x 10 mm blade, 8-1/8" (20.5 cm) |

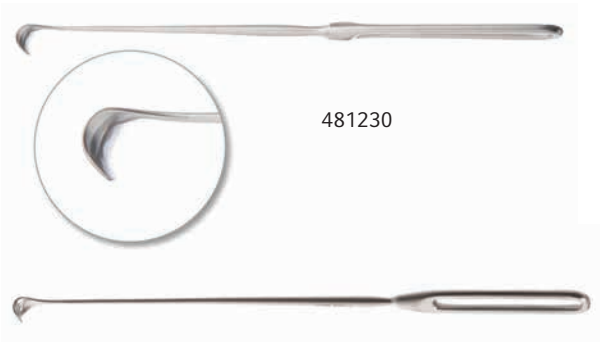
### CUSHING NERVE AND VEIN RETRACTOR

164865

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 164865 | 12 mm wide blade, 8-1/2" (21.5 cm) |

### CUSHING NERVE AND VEIN RETRACTORS



481230

481231

Weck® Pattern, bright finish.

| ITEM # | DESCRIPTION |
|---|---|
| 481230 | 16 x 15 mm blade, 8-5/8" (22 cm) |
| 481231 | 14.5 x 15 mm blade, 12-3/4" (32.5 cm) |

# CVT RETRACTORS

## Hand-Held

### DAVIDSON SCAPULA RETRACTORS

| ITEM # | DESCRIPTION |
|---|---|
| 341650 | Small size, blade 2" (5 cm) wide, 7-3/4" (19.5 cm) |
| 341651 | Large size, blade 3-1/2" (9 cm) wide, 7-3/4" (19.5 cm) |

### HAIGHT RETRACTORS

Malleable "T"-shaped blades. For abdominal and intra-thoracic surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 341690 | 3" wide x 11-1/2" long (7.5 x 29 cm) |
| 341692 | 3-1/2" wide x 11-3/4" long (9 x 30 cm) |
| 341694 | 4" wide x 12" long (10 x 30.5 cm) |
| 341696 | 4-3/4" wide x 12-3/4" long (12 x 32.5 cm) |
| 341698 | 5-1/2" wide x 13-1/2" long (14 x 34.5 cm) |

# CVT RETRACTORS

## Hand-Held

### ROOS BRACHIAL PLEXUS ROOT RETRACTOR

341992

Designed to protect the T-1 cervical root from trauma by the rib shears or other instruments during posterior resection of the first rib. 14-1/4" (36 cm) length, 10" (25.5 cm) working length.

| ITEM # | DESCRIPTION |
|---|---|
| 341992 | Angled, 13.5 mm wide blade |

### WYLIE RENAL VEIN RETRACTORS

341795

341797

Designed for the retraction of the left renal vein during procedures on the abdominal aorta or renal arteries. Gently curved distal tip for atraumatic control. Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 341795 | Short, 1" wide x 3-3/4" deep (2.5 x 9.5 cm) blade, 11-3/4" (30 cm) |
| 341797 | Long, 1" wide x 6-7/8" deep (2.5 x 17.5 cm) blade, 12-3/4" (32.5 cm) |

# CVT RETRACTORS

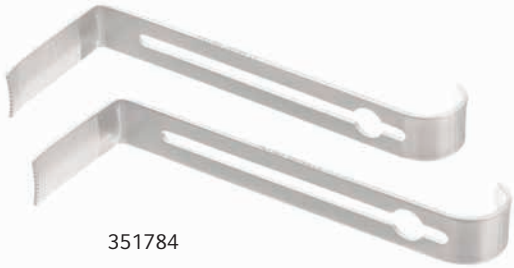
## Henly-Type Retractors

### PILLING® MULTIPURPOSE RETRACTORS

351666
351667
351668

351669
351670
351671

351675



351784

A versatile, self-retaining Henly-type retractor designed for use in the following surgical specialties: peripheral vascular surgery in the carotid, subclavian, femoral, popliteal and tibial regions. Spinal surgery in the cervical and lumbar regions. Orthopedic surgery in shoulder and hip procedures. General surgery for inguinal hernia, appendectomy and many minor procedures.

| ITEM # | DESCRIPTION |
|---|---|
| 351666 | Side blade 1-1/8" x 7/8" (3 x 2 cm) for 351675 |
| 351667 | Side blade 2-1/8" x 7/8" (5.5 x 2 cm) for 351675 |
| 351668 | Side blade 3-1/8" x 7/8" (8 x 2 cm) for 351675 |
| 351669 | Center blade, 7/8" x 5/8" (2 x 1.5 cm) for 351675 |
| 351670 | Center blade, 1-1/8" x 5/8" (3 x 1.5 cm) for 351675 |
| 351671 | Center blade, 1-1/4" x 5/8" (3 x 1.5 cm) for 351675 |
| 351672 | Center blade, 2" x 5/8" (5 x 1.5 cm) for 351675 |
| 351673 | Center blade, 2-1/2" x 5/8" (6.5 x 1.5 cm) for 351675 |
| 351675 | Pilling® Multipurpose Retractor, complete with:<br>• 1 Frame<br>• 3 Center Blades in sizes 3/4" (1.9 cm) 1" (2.5 cm), and 1-1/4" (3.1 cm) deep x 5/8" (1.6 cm) wide<br>• 3 pair of Side Blades 1" (2.5 cm), 2" (5.1 cm), and 3" (7.5 cm) deep x 7/8" (2.2 cm) wide<br>• Self-retaining, with interchangeable center and side blades. Ball-snap attachment of side blades. Swivel side blades, rotate 360 degrees. |
| 351784 | Two Extra-Long Center Blades<br>Sizes 1-1/2" (3.8 cm) and 1-3/4" (4.5 cm) deep x 5/8" (1.6 cm) wide<br>Fits all Henly and Multipurpose Retractors |

# CVT RETRACTORS

## Henly-Type Retractors

### IMPROVED HENLY RETRACTORS

351679

351680

With interchangeable center blades and side blades.

| ITEM # | DESCRIPTION |
|---|---|
| 351679 | Henly Retractor with straight arms, side blades slide onto arms, complete with blades |
| 351680 | Henly Retractor with arms spread outward.<br>Both are complete with:<br>1 Frame<br>3 Center Blades in size 3/4" (2.2 cm), 1" (2.5 cm), 1-1/4" (3.2 cm) deep x 5/8" (16 mm) wide<br>1 Pair Side Blades, blunt prongs, 7/8" (2.2 cm) wide by 2" (5.1 cm) deep<br>1 Pair Side Blades, blunt prongs, 7/8" (2.2 cm) wide by 3" (7.6 cm) deep |

### IMPROVED HENLY RETRACTOR SIDE BLADES

341676

Shallow, medium and deep interchangeable sliding side blades.

| ITEM # | DESCRIPTION |
|---|---|
| 351676 | 1 pair, 1" x 7/8" (2.5 x 2 cm) |
| 351677 | 1 pair, 2" x 7/8" (5 x 2 cm) |
| 351678 | 1 pair, 3" x 7/8" (7.5 x 2 cm) |

# CVT RETRACTORS

## Henly-Type Retractors

### MAINI SIDE BLADE FOR IMPROVED HENLY RETRACTOR

351661

| ITEM # | DESCRIPTION |
|---|---|
| 351661 | 2-3/4 x 2" (7 X 5 cm), slide-on |

### MAINI RICHARDSON DOUBLE ENDED CENTER BLADE FOR HENLY RETRACTOR

351664

| ITEM # | DESCRIPTION |
|---|---|
| 351664 | Blade ends are 31 mm and 40 mm wide |

### ORIGINAL HENLY POPLITEAL RETRACTOR

351779

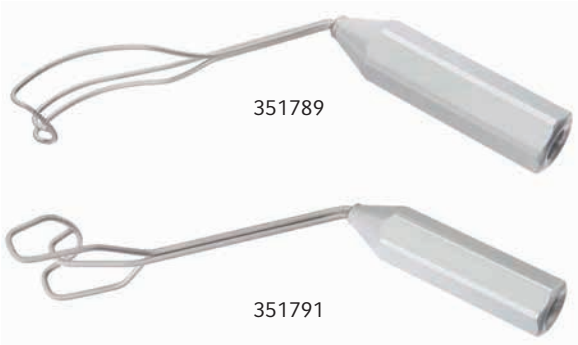
A modification of the Weitlaner Retractor with provisions for attachment of a third retractor blade for improved exposure in either the popliteal or carotid positions. Supplied with 3 center blades. The retraction surfaces of the center blades are grooved for soft tissue retraction.

| ITEM # | DESCRIPTION |
|---|---|
| 351779 | 4 x 3 prongs, center blades: 5/8" wide x 3/4" deep (1.5 x 2 cm), 5/8" wide x 1" deep (1.5 x 2.5 cm), 5/8" wide x 1-1/4" deep (1.5 x 3 cm), overall length 6-3/8" (16 cm) |

# VALVE INSTRUMENTS

## Valve Retractors

### COOLEY MITRAL VALVE RETRACTORS



351789

351791

Designed to provide optimum exposure of the mitral valve particularly for complete valve replacement. The wire frame blades are shaped to help solve exposure problems in the approach from a right or left thoracotomy and are therefore available as Right and Left Retractors.

| ITEM # | DESCRIPTION |
|---|---|
| 351788 | Right, small blade width 7/8" (2 cm), depth 1/2" (1.5 cm), overall length 7-1/4" (18.5 cm) |
| 351789 | Right, medium blade width 1-3/8" (3.5 cm), depth 3/4" (2 cm), overall length 7-1/2" (19 cm) |
| 351790 | Right, large blade width 1-7/8" (4.5 cm), depth 1-3/8" (3.5 cm), overall length 7-3/8" (19 cm) |
| 351791 | Left blade width 1-7/8" (4.5 cm), depth 3/8" (1 cm), overall length 8-7/8" (22.5 cm) |

### PEDIATRIC UNIVERSAL CLAMPS

341531

| ITEM # | DESCRIPTION |
|---|---|
| 341531 | Set of 2 |

### CRAWFORD AORTIC RETRACTORS

351774

To retract aortic incision exposing aortic valve in replacement operation. Incision is made about an inch beyond the heart, about halfway around the circumference of the aorta. This retractor retracts the lower lip, exposing the valve.

| ITEM # | DESCRIPTION |
|---|---|
| 351773 | Small, blade 15 mm wide x 20 mm deep, 7-3/8" (18.5 cm) |
| 351774 | Large, blade 22 mm wide x 20 mm deep, 7-7/8" (20 cm) |

# VALVE INSTRUMENTS

## Valve Retractors

### DESMARRE VALVE RETRACTORS

351769

Lightweight blades of various sizes constructed of Beryllium Copper. Shafts are semi-malleable. Length 7-1/4" (18.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 351767 | Width 4 mm |
| 351768 | Width 6 mm |
| 351769 | Width 8 mm |
| 351770 | Width 10 mm |
| 351771 | Width 12 mm |
| 351772 | Width 15 mm |

### MORSE VALVE RETRACTOR

351780

Cushing-shaped blades 12 mm deep.

| ITEM # | DESCRIPTION |
|---|---|
| 351780 | Blade 1-5/8" (42 mm) wide, 8-1/2" (21.5 cm) |

### REVUELTA GARCIA VALVE LEAFLET RETRACTOR

351747

| ITEM # | DESCRIPTION |
|---|---|
| 351747 | 8" (20.5 cm) working length |

# VALVE INSTRUMENTS

## Valve Retractors

### LEMOLE-PILLING® VALVE RETRACTOR

341506

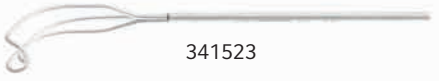
341511

341512

341513

341520

341522



341523

Provides self-retaining valve retraction. Fits directly onto arms of many types of sternal retractors. The T-Frame cross bar attaches to the sternal retractor by means of a “C” clamp. 8" (20.3 cm) T-Frame cross bar allows for addition of valve retractor blades without removing previously placed blades, using universal clamps. Set includes 6 valve retracting blades and 2 universal clamps. Various size blades available for any size atrium.

| ITEM # | DESCRIPTION | |
|---|---|---|
| 341501 | Lemole-Pilling® Valve Retractor<br>Set #1 Fits Cooley and Chaux Sternal Retractors | |
| 341502 | Lemole-Pilling® Valve Retractor<br>Set #2 Fits Morse-style Retractors | |
| 341503 | Lemole-Pilling® Valve Retractor<br>Set #3 Fits Ankeney Retractor | |
| 341506 | Lemole-Pilling® Valve Retractor<br>Set #1 with Cooley Retractor (341195) | |
| 341511 | Lemole-Pilling® T-Frame #1 only | |
| 341512 | Lemole-Pilling® T-Frame #2 only | |
| 341513 | Lemole-Pilling® T-Frame #3 only | |
| COMPLETE SET INCLUDES | | QTY. |
| 341520 | Universal Clamp for Lemole | 2 |
| 341522 | Cooley Atrial Retractor, small,<br>9-1/2" (24 cm) | 2 |
| 341523 | Cooley Atrial Retractor, medium,<br>9-1/2" (24 cm) | 1 |
| 341524 | Cooley Atrial Retractor, large,<br>9-1/2" (24 cm) | 1 |
| 341525 | Malleable Atrial Retractor, 8-3/4" (22 cm) | 2 |
| 341511,<br>341512, or<br>341513 | T-Frame only for type #1, #2 and #3 | 1 |

# VALVE INSTRUMENTS

## Valve Retractors

### CHAUX-LEMOLE BI-ANGLE T-FRAME

341514

Bi-Angle T-Frame, for additional third point atrial retraction during mitral valve surgery, fits Cooley-style and Chaux Retractors.

| ITEM # | DESCRIPTION |
|---|---|
| 341514 | Arm tip maximum diameter 0.252", overall width 9-7/8" (25 cm) |

### LEMOLE SELF RETAINING ATRIAL RETRACTOR

351783

Designed to eliminate the need for an assistant when retracting the left atrium during mitral valve repair or replacement. Will attach to most standard chest retractors.

| ITEM # | DESCRIPTION |
|---|---|
| 351783 | 10-1/2" (26.5 cm) |

# VALVE INSTRUMENTS

## Valve Retractors

### LEMOLE SIDE ARM EXTENSION

341515

| ITEM # | DESCRIPTION |
|---|---|
| 341515 | For third point atrial retraction during mitral valve surgery, fits Cooley-style and Chaux Retractors. |

### ABLAZA-BLANCO CARDIAC VALVE RETRACTOR

351763

Notched to prevent slippage in use.

| ITEM # | DESCRIPTION |
|---|---|
| 351763 | Angulated, blade 9/16" (1.5 cm) wide, 13" (33 cm) |

### BLANCO VALVE INSTRUMENTS

351750

351752

351754

351755

Long, slender shaft retractors with small, thin blades specially made for use on heart valves. The “spreader” is a fenestrated retractor designed to allow the insertion of the scissors blades. All have a finger rest on a knurled handle. Working length of shaft is 7-1/16" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 351750 | Blanco Retractor, blade 5 mm wide x 7 mm deep, 11-1/2" (29 cm) |
| 351752 | Blanco Retractor, blade 7 mm wide x 7 mm deep, 11" (28 cm) |
| 351754 | Blanco Retractor, Cushing type, blade 12 mm wide x 7 mm deep, 11" (28 cm) |
| 351755 | Blanco Valve Spreader, blade 9 mm wide x 10 mm deep, 11-1/2" (29 cm) |

# VALVE INSTRUMENTS

## Suture Rings

### CRAWFORD SUTURE RING

352598

Affords a convenient method of retaining sutures in mitral and aortic valve replacement.

| ITEM # | DESCRIPTION |
|---|---|
| 352598 | Diameter 10" (25.5 cm) |

### GRUNWALD SUTURE GUIDE HOLDER

342015

The Grunwald Suture Guide Holder, when used with the Gabbay-Frater™ Suture Guides (page 1164), affords a convenient method of keeping numerous sutures properly aligned during cardiac valve replacement procedures. The holder can be positioned directly over the sternotomy retractor. Three spring clips on the underside of the holder secure it to the surgical drapes. Three sterile, disposable Gabbay-Frater™ Suture Guides may be placed on the retaining posts of the holder either before or after placement of the holder over the sternotomy. The Grunwald Holder provides a flat, constant, and secure surface for the suture guides and speeds placement by eliminating the need for using numerous towel clips that can also tend to clutter the operative field. The Grunwald Suture Guide Holder is made of stainless steel and may be steam autoclaved.

| ITEM # | DESCRIPTION |
|---|---|
| 342015 | 13-1/4" (33.5 cm) |

# VALVE INSTRUMENTS

## Aortic Valve Rongeurs

### BAILEY AORTIC VALVE RONGEURS

These instruments were designed for the removal of calcified material from the stenotic aortic valve. They have also proven useful in peripheral vascular surgery for trimming stenotic arteries and plaque removal. They are in six styles but all have the same 3.5 mm wide-bite. Working length 5-1/8" (13 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 352800 | Straight biting |
| 352802 | Slight downward angle (25 degrees) |
| 352804 | Acute downward angle (70 degrees) |
| 352806 | Right downward angle (90 degrees) |
| 352808 | Angled to left side (45 degrees) |
| 352810 | Angled to right side (45 degrees) |

# VALVE INSTRUMENTS

## Valve Hooks

### CARDIAC VALVE HOOK, CALIBRATED

351749

| ITEM # | DESCRIPTION |
|---|---|
| 351749 | 9-3/4" (24.5 cm), 10 mm hook |

### COARCTATION HOOK

355175

Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| 355175 | Right angle bend, blunt tip, 7 mm hook, 10-1/8" (25.5 cm) |

### DEBAKEY® VALVE HOOKS

351785

Slender shaft, sharp pointed hooks used to aid in manipulation of valves in replacement operations.

| ITEM # | DESCRIPTION |
|---|---|
| 351785 | 3/8" (8.5 mm) hook, 12-1/2" (31.5 cm) |

# VALVE INSTRUMENTS

## Valve Hooks

### MICRO VASCULAR NERVE HOOK

357532

| ITEM # | DESCRIPTION |
|---|---|
| 357532 | Micro hook, small, 7-1/4" (18.5 cm) |

### SISSON NERVE HOOK

060120

| ITEM # | DESCRIPTION |
|---|---|
| 060120 | 90 degree angled, blunt, 6 mm hook, 6-1/8" (15.5 cm) |

### REVUELTA-GARCIA VALVE MIRROR

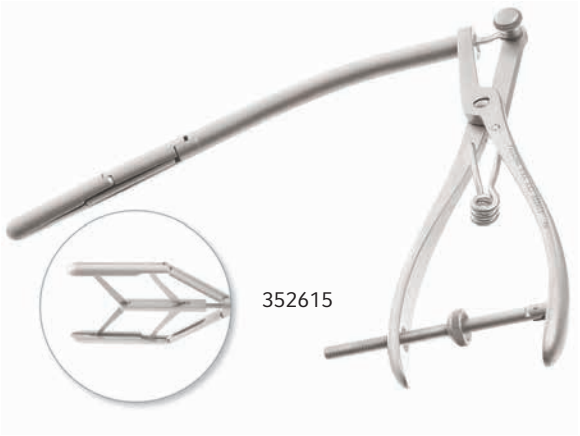
351737

| ITEM # | DESCRIPTION |
|---|---|
| 351737 | 9" (23 cm) |

# VALVE INSTRUMENTS

## Valve Dilators

### GERBODE VALVE DILATOR




For retrograde fracture of the mitral valve through a small incision in the apex of the left ventricle. It has a regulating screw so that the mitral valve can be gradually fractured. May also be used for fracture of the aortic and pulmonary valves.

| ITEM # | DESCRIPTION |
|---|---|
| 352615 | Blades adjustable, opening to 1-3/4" (4.5 cm) wide |

### TUBBS VALVE DILATOR

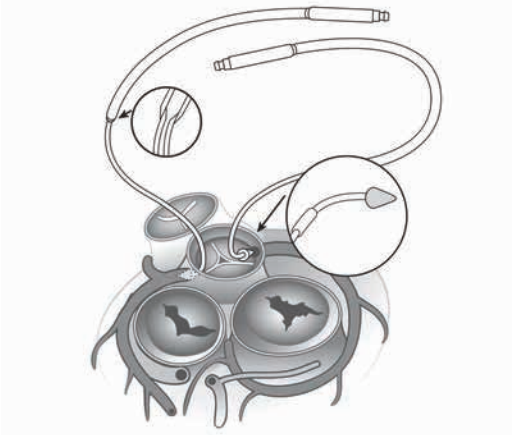
| ITEM # | DESCRIPTION |
|---|---|
| 352630 | Maxiumum blade opening 1-3/4" (4.5 cm) wide |

# VALVE INSTRUMENTS

## Coronary Perfusion Catheters

### JEHLE STERILE CORONARY CATHETERS

351476



Designed for aortic valve surgery and any cardiac or thoracic surgery requiring cardioplegia infusion directly into the coronary ostium or vein by-pass graft. Catheter is secured in the coronary ostium of the graft lumen due to the compression/expansion of the foam cuff, eliminating the need to suture catheter in position.

- Soft, tapered polyurethane foam cuff on distal end of catheter.
- Malleable, twisted stainless steel wire incorporated into distal end of catheter.
- Flexible silicone tubing.
- Pre-packaged sterile, for single use only.

| ITEM # | QUANTITY | OVERALL LENGTH | CUFF SIZE DIAMETER | CATHETER DIAMETER (ID/OD) |
|---|---|---|---|---|
| 351470 | Box of 5 | 20-1/4" (51.5 cm) | 9/32" (7.1 mm) | 1.14/2.54 mm |
| 351472 | Box of 5 | 20-1/4" (51.5 cm) | 11/32" (8.7 mm) | 1.14/2.54 mm |
| 351474 | Box of 5 | 20-1/4" (51.5 cm) | 13/32" (10.3 mm) | 1.73/3.45 mm |
| 351476 | Box of 5 | 20-1/4" (51.5 cm) | 15/32" (11.9 mm) | 1.73/3.45 mm |

### NICHOLAS-JEHLE STERILE MULTI-HEADED PERFUSION CATHETER

351490

Incorporates all four Jehle catheter/cuff sizes on one common catheter.

| ITEM # | DESCRIPTION |
|---|---|
| 351490 | Box of 5 |

# AORTIC PUNCHES

## Providing surgeons with the precise performance they demand during CABG surgery

## Teleflex® Premium Diamond Edge Aortic Punch

### FREE-FLOAT CUTTING ACTION TECHNOLOGY

By allowing the diamond edge blade to "float" around the punch core during operation, alignment is maintained and mechanical jamming is prevented. One punch can be used to create multiple punches in a single procedure.

### DUAL-CUTTING ACTION

Two diamond-sharp cutting surfaces lift and cleanly cut through all layers of tough tissue. The smooth cutting action reduces trauma while the tapered distal portion increases visibility around the anastamotic site.

## PREMIUM DIAMOND-EDGE AORTIC PUNCH, FULL LENGTH

DP-48K

| ITEM # | DESCRIPTION | SIZE | QUANTITY |
|---|---|---|---|
| DP-28K | Full Length Sterile (7-3/4" Handle) | 2.8 mm | 6 |
| DP-36K | Full Length Sterile (7-3/4" Handle) | 3.6 mm | 6 |
| DP-40K | Full Length Sterile (7-3/4" Handle) | 4.0 mm | 6 |
| DP-44K | Full Length Sterile (7-3/4" Handle) | 4.4 mm | 6 |
| DP-48K | Full Length Sterile (7-3/4" Handle) | 4.8 mm | 6 |
| DP-52K | Full Length Sterile (7-3/4" Handle) | 5.2 mm | 6 |
| DP-56K | Full Length Sterile (7-3/4" Handle) | 5.6 mm | 6 |
| DP-60K | Full Length Sterile (7-3/4" Handle) | 6.0 mm | 6 |

## PREMIUM DIAMOND-EDGE AORTIC PUNCH, MID-LENGTH

MDP-48K

| ITEM # | DESCRIPTION | SIZE | QUANTITY |
|---|---|---|---|
| MDP-28K | Mid-Length Sterile (6-3/4" Handle) | 2.8 mm | 6 |
| MDP-36K | Mid-Length Sterile (6-3/4" Handle) | 3.6 mm | 6 |
| MDP-40K | Mid-Length Sterile (6-3/4" Handle) | 4.0 mm | 6 |
| MDP-44K | Mid-Length Sterile (6-3/4" Handle) | 4.4 mm | 6 |
| MDP-48K | Mid-Length Sterile (6-3/4" Handle) | 4.8 mm | 6 |
| MDP-52K | Mid-Length Sterile (6-3/4" Handle) | 5.2 mm | 6 |
| MDP-56K | Mid-Length Sterile (6-3/4" Handle) | 5.6 mm | 6 |
| MDP-60K | Mid-Length Sterile (6-3/4" Handle) | 6.0 mm | 6 |

# AORTIC PUNCHES

## Reusable Punches

### WYLIE CALCIFIED ARTERIAL PUNCH

| ITEM # | DESCRIPTION |
|---|---|
| 352825 | Punches 1.3 mm hole, 8" (20.5 cm) |

# HEPARIN CANNULAE

## HEPARIN CANNULA WITH LUER-LOK

351560

351573

351574

351575

351576

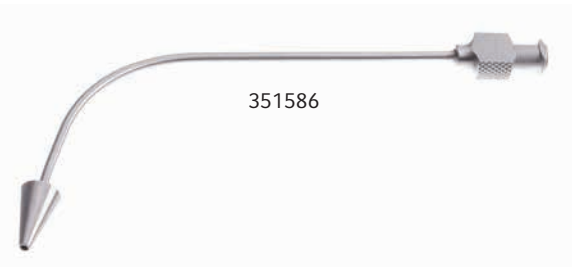
A complete line of stainless steel, reusable heparin cannulae. A selection of sizes, shapes and lengths provides for a variety of uses in flushing, irrigation and injection.

Applications include peripheral vascular, cardiac, general, orthopedic, urology and neuro surgery.

| ITEM # | DESCRIPTION |
|---|---|
| 351560 | Stoney Heparin Injector 1-7/8" (4.5 cm) |
| 351573 | Zanger Heparin Cannula, malleable, 4 mm tip, 2-1/2" (6.5 cm) |
| 351574 | Horsely Heparin Cannula, 2-3/8" (6 cm) |
| 351575 | DeBakey® Heparin Cannula, malleable, 3 mm tip, 2-1/2" (6.5 cm) |
| 351576 | DeBakey® Heparin Cannula, malleable, 3.7 mm tip, 2-7/8" (7.5 cm) |
| 351577 | DeBakey® Heparin Cannula, malleable, 4 mm tip, 6" (15 cm) |
| 351578 | 23 gauge tip, 2-1/8" (5.5 cm) |
| 351586 | Garrett Heparin Injector, malleable, 5/16" (8 mm) tip, working length 3" (7.5 cm) |
| 351587 | Garrett Heparin Injector, malleable, 1/2" (12 mm) tip, working length 3" (7.5 cm) |
| 351593 | Samson Heparin Injector, malleable, small 7 mm tip, 3-3/8" (8.5 cm) |
| 351594 | Samson Heparin Injector, malleable, medium 9 mm tip, 3-3/8" (8.5 cm) |

351577

351578



351586

351587

351593

351594

# SUCTION TUBES

## ANDREWS INFANT SUCTION TUBE

162310

6 mm diameter tip, permanently attached.

| ITEM # | DESCRIPTION |
|---|---|
| 162310 | 9-1/4" (23.5 cm) |

## ANDREWS PYNCHON SUCTION TUBE

536220

| ITEM # | DESCRIPTION |
|---|---|
| 536220 | Curved, 6 mm tip, 3 mm diameter removable shaft, 9-5/8" (24.5 cm) |

## MORSE-ANDREWS SUCTION TUBE

351505

Short length, small 3 mm outside diameter tube, terminating in 6 mm diameter tip which has one distal and four side openings. Handle is ebonized.

| ITEM # | DESCRIPTION |
|---|---|
| 351505 | 10-1/4" (26 cm) |

## COOLEY SUMP SUCTION TUBE

351547

Long, removable perforated outer tube with internal extension provides for fluid removal by sump-drain principle. Entire tube removable from handle for cleaning and rotatable for convenience.

| ITEM # | DESCRIPTION |
|---|---|
| 351547 | Curved, 9 mm tip, 12-7/8" (32.5 cm) |

# SUCTION TUBES

## DEBAKEY® SUCTION TUBES

351500

351501

351502

Small diameter, curved tubes with finger valve control.

| ITEM # | DESCRIPTION |
|---|---|
| 351500 | 9.5 mm tip, 11-3/8" (29 cm) |
| 351501 | DeBakey® Suction Tube Tip for 351500, 3/8" (9.5 mm) |
| 351502 | 3 mm diameter tip, 12-1/4" (31 cm) |

## DEBAKEY®-ADSON CORONARY SUCTION TUBES

351506

Distal opening with four side openings 3 mm long, 4 mm diameter.

| ITEM # | DESCRIPTION |
|---|---|
| 351504 | 6-1/8" (15.5 cm) |
| 351506 | 8-1/8" (20.5 cm) |

## BONNIER CATHETER ADAPTER

507335

For attachment of catheters to Luer Tip Syringes.

| ITEM # | DESCRIPTION |
|---|---|
| 507335 | Large lumen |

# SUCTION TUBES

## LUER-LOCK CATHETER ADAPTER

507336

For attachment of catheters to Luer-Lok® Syringes.

| ITEM # | DESCRIPTION |
|---|---|
| 507336 | Small lumen, 1-1/2" (4 cm) |

## ABRAMS PLEURAL BIOPSY NEEDLE

343295

Inner cannula acts as a guillotine to cut and retain specimen. Luer-lok® Syringe Fitting.

| ITEM # | DESCRIPTION |
|---|---|
| 343295 | Needle, with trocar point, 13 gauge needle, 5-3/8" (13.5 cm) |

# VASCULAR DILATORS

## Amato Design

### AMATO PEDIATRIC DILATORS SET

352705

During the repair of complex congenital heart disease, the surgeon is required in many instances to locate orifices, trace the course of abnormal vessels, and perform various maneuvers of dilation and measurement of annulus or lumen diameters. In infants and children, the heart is usually confined within a small mediastinal space precluding the use of conventional instruments presently available.

| ITEM # | DESCRIPTION |
|---|---|
| 352705 | Complete set of 10 with case. Tip lengths size 6-20 mm, handle and shaft lengths 6-1/2" (16.5 cm) |

## Cooley Design

### COOLEY DILATORS

355315

5" (12.5 cm) long, aluminum handle.

| ITEM # | DESCRIPTION |
|---|---|
| 355315 | Set of 6, malleable aluminum shafts |
| 355309 | 0.5 mm |
| 355310 | 1.0 mm |
| 355311 | 1.5 mm |
| 355312 | 2.0 mm |
| 355313 | 2.5 mm |
| 355314 | 3.0 mm |

# VASCULAR DILATORS

## DeBakey® Design

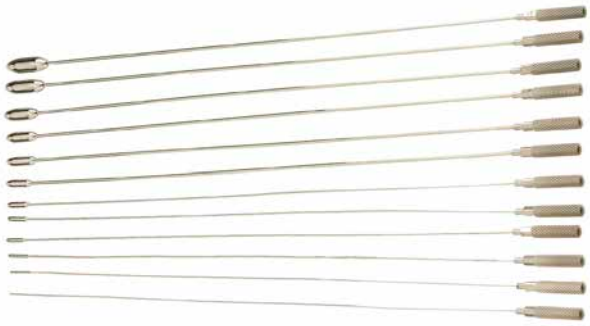
### DEBAKEY® VASCULAR DILATORS

355287

Sets of dilators in graduated sizes, 1, 1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 9 and 10 mm. Supplied in 7-1/2" (19 cm) and 15" (38 cm) length.

| ITEM # | DESCRIPTION |
|---|---|
| 355285 | Set of 12, 7-1/2" (19 cm), in autoclavable stainless steel case |
| 355287 | Set of 12, 7-1/2" (19 cm), without case |
| 355288 | Coronary Set of 5, consists of 1.0 mm, 1.5 mm, 2.0 mm, 2.5 mm, and 3.0 mm, with a length of 7-1/2" (19 cm) without case |
| 355286 | Case for 355287 |
| 355295 | 1.0 mm, 7-1/2" (19 cm) long |
| 355296 | 1.5 mm, 7-1/2" (19 cm) long |
| 355297 | 2.0 mm, 7-1/2" (19 cm) long |
| 355298 | 2.5 mm, 7-1/2" (19 cm) long |
| 355299 | 3.0 mm, 7-1/2" (19 cm) long |
| 355300 | 4.0 mm, 7-1/2" (19 cm) long |
| 355301 | 5.0 mm, 7-1/2" (19 cm) long |
| 355302 | 6.0 mm, 7-1/2" (19 cm) long |
| 355303 | 7.0 mm, 7-1/2" (19 cm) long |
| 355304 | 8.0 mm, 7-1/2" (19 cm) long |
| 355305 | 9.0 mm, 7-1/2" (19 cm) long |
| 355306 | 10.0 mm, 7-1/2" (19 cm) long |
| 355290 | Coronary Set of 12, 15" (38 cm), in autoclavable stainless steel case, individual sizes of 15" dilators are available upon request. |
| 355292 | Set of 12, 15" (38 cm), without case |
| 355291 | Case for 355292 |

355286



355292

355291

# VASCULAR DILATORS

## Garrett Design

### GARRETT VASCULAR DILATORS

355089

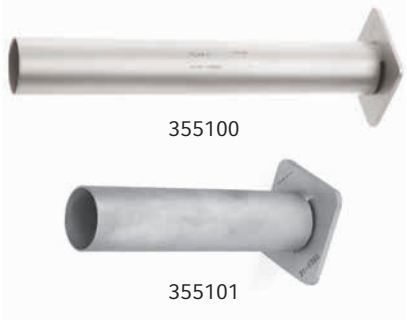
355090

| ITEM # | DESCRIPTION |
|---|---|
| 355089 | Set of nine short dilators (1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5 and 5 mm), 5-1/2" (14 cm) long in stainless steel storage cylinder |
| 355080 | Short 1 mm |
| 355081 | Short 1.5 mm |
| 355082 | Short 2.0 mm |
| 355083 | Short 2.5 mm |
| 355084 | Short 3.0 mm |
| 355085 | Short 3.5 mm |
| 355086 | Short 4.0 mm |
| 355087 | Short 4.5 mm |
| 355088 | Short 5.0 mm |
| 355090 | Set of nine long dilators (1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5 and 5 mm), 8-1/4" (20.9 cm) long in stainless steel storage cylinder |
| 355091 | Long 1.0 mm |
| 355092 | Long 1.5 mm |
| 355093 | Long 2.0 mm |
| 355094 | Long 2.5 mm |
| 355095 | Long 3.0 mm |
| 355096 | Long 3.5 mm |
| 355097 | Long 4.0 mm |
| 355098 | Long 4.5 mm |
| 355099 | Long 5.0 mm |

# VASCULAR DILATORS

## Garrett Design

### GARRETT DILATOR HOLDERS



355100

355101

| ITEM # | DESCRIPTION |
|---|---|
| 355100 | 8-1/8" (20.5 cm) |
| 355101 | 5-1/8" (13 cm) |

## Hiebert Design

### HIEBERT DOUBLE-ENDED VASCULAR DILATORS

355277

A half and full size dilating olive per dilator, saves time passing instruments back and forth. Malleable shafts. 6" (15.2 cm) overall length.

| ITEM # | DESCRIPTION |
|---|---|
| 355275 | 0.5 mm x 1 mm |
| 355276 | 1.5 mm x 2 mm |
| 355277 | 2.5 mm x 3 mm |
| 355278 | 3.5 mm x 4 mm |

# VALVULOTOMES

## Antegrade Cut

### VALVULOTOME ANTEGRADE CUT

352605

| ITEM # | DESCRIPTION |
|---|---|
| 352605 | 5-7/8" (15 cm) |

## Mills-Type

### MILLS VALVULOTOME

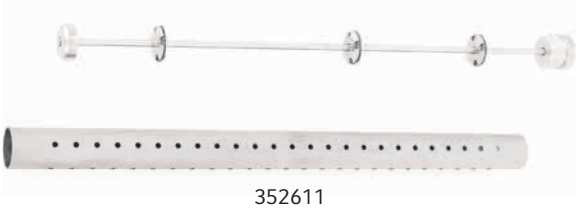
352610

For CABG vein grafts.

| ITEM # | DESCRIPTION |
|---|---|
| 352610 | Blade 2 mm long, 11-3/4" (30 cm) |

## In-Situ

### IN-SITU VENOUS VALVULOTOME STERILIZING CASE



352611

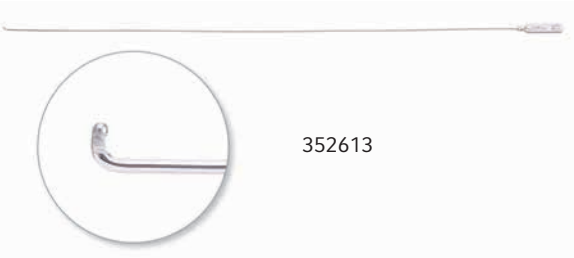
A sturdy, stainless steel sterilizing case that holds up to four valvulotomes.

| ITEM # | DESCRIPTION |
|---|---|
| 352611 | Holds 4 In-Situ Valvulotomes, 14-5/8" (37 cm) |

# VALVULOTOMES

## In-Situ

### IN-SITU VENOUS VALVULOTOME



352613

Standard size blade inserted in an antegrade direction and withdrawn retrograde to incise valve cups.

| ITEM # | DESCRIPTION |
|---|---|
| 352612 | Blade 2 mm long, 9" (23 cm) |
| 352614 | Blade 2 mm long, 9-7/8" (25 cm) |
| 352613 | Blade 2 mm long, 11-3/4" (30 cm) |

## Bush

### THE BUSH™ RETROGRADE VALVULOTOME

352692

THE BUSH™ Valvulotome provides a precise cutting instrument for the simultaneous cutting of both venous valve cusps in the greater saphenous vein during in-situ bypass surgery. The recessed “shark-tooth” blades penetrate the valve tissue, to cut the leaflets and reduce the possibility of traumatizing the vein wall intima and tributary branches. The surgeon can select from 2, 3 or 4 mm head sizes.

Dome-shaped head with 2 recessed opposing “shark-tooth’’ blades pierce valve tissue cutting both leaflets in one pass. The self-centering cutting head and dilating olive achieve proper cutting head alignment. Three head sizes in 2 different lengths provides a selection to fit most surgical needs. The control wire is a mono-filament stainless steel wire.

| ITEM # | DESCRIPTION |
|---|---|
| 352680 | Set of 3 (2, 3, 4 mm heads, 1 each), 15-3/4" (40 cm) |
| 352681 | 2 mm head, 15-3/4" (40 cm) |
| 352682 | 3 mm head, 15-3/4" (40 cm) |
| 352683 | 4 mm head, 15-3/4" (40 cm) |
| 352690 | Set of 3 (2, 3, 4 mm heads, 1 each), 37-3/8" (95 cm) |
| 352691 | 2 mm head, 37-3/8" (95 cm) |
| 352692 | 3 mm head, 37-3/8" (95 cm) |
| 352693 | 4 mm head, 37-3/8" (95 cm) |

# MEDIASTINOSCOPY

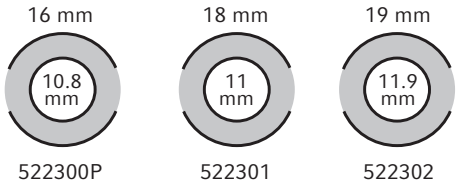
## Mediastinoscopes

### CARLENS MEDIASTINOSCOPES

522301

The Carlens Mediastinoscopes come in short, long and extra-long lengths. The short model is suitable for inspection of the mediastinum above the bifurcation, while the long and extra-long models are designed for the region of the carina. Supplied with one light carrier.

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN. I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522300P | Short | 116 mm | 10.8 mm | 16.0 mm | 18.4 mm | 526350 |
| 522301 | Long | 162 mm | 11.0 mm | 18.0 mm | 22.3 mm | 526351 |
| 522302 | Extra-Long | 191 mm | 11.9 mm | 19.0 mm | 22.3 mm | 526352 |



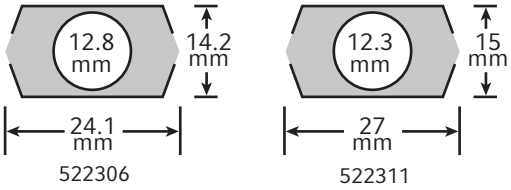

*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**

### IMPROVED TUCKER MEDIASTINOSCOPE

522311

The Improved Tucker Mediastinoscope has the highest light output of any mediastinoscope and is suited for use in conjunction with the operating microscope. Scope is supplied with an extra-large diameter fiber optic light carrier and integral 6 ft. long, autoclaveable connecting cable.

| ITEM # | SCOPE SIZE | OVERALL LENGTH | MIN. I.D. | NOMINAL PROXIMAL DIMENSIONS | MAX O.D. | REPLACE CARRIER |
|---|---|---|---|---|---|---|
| 522306 | Short | 147 mm | 12.8 mm | 24.1 x 14.2 mm | 23.3 mm | 527853 |
| 522311 | Long | 180 mm | 12.3 mm | 27.0 x 15.0 mm | 23.2 mm | 527850 |




*Drawings illustrate Nominal Proximal Internal Dimensions and Minimum Internal Diameter (I.D.),* **NOT TO SCALE**

# MEDIASTINOSCOPY

## Instrumentation

### ASPIRATING NEEDLE

507453

507454

| ITEM # | DESCRIPTION |
|---|---|
| 507453 | Reinforced angled shaft, with protective cover, distal needle 23 Ga., working length 8-1/4" (21 cm) |
| 507454 | Spare distal needle tip for aspirating needle |

### INSULATED SUCTION CAUTERY TUBE

507045

Fully insulated with thumb-valve for controlled suction.

| ITEM # | DESCRIPTION |
|---|---|
| 507045 | Supplied with 10 ft (305 cm) Bovie Cord and plug (507046) |

### BOVIE CORD FOR SUCTION TUBE

507046

For insulated suction.

| ITEM # | DESCRIPTION |
|---|---|
| 507046 | 10 ft (305 cm) |

# MEDIASTINOSCOPY

## Instrumentation

### BOVIE PENCIL HANDLE

351970

With connecting cord.

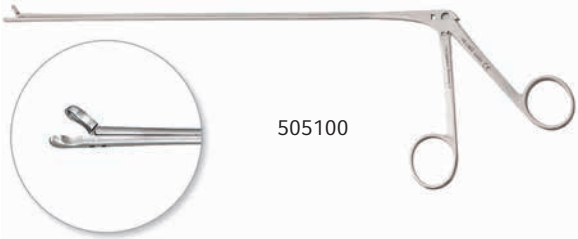
| ITEM # | DESCRIPTION |
|---|---|
| 351970 | 5-1/8" (13 cm) |

### JACKSON ALLIGATOR GRASPING FORCEPS

505400

| ITEM # | DESCRIPTION |
|---|---|
| 505400 | Standard, deeply serrated and grooved jaws, 4 mm wide by 23 mm long, working length 11-1/8" (28 cm) |
| 505420 | Small, finely serrated jaws taper from 3 mm to 1.55 mm width, 17 mm long, working length 11-3/4" (30 cm) |

### JACKSON CUP FORCEPS - STANDARD, MEDIUM LIGHTWEIGHT



505100

Jackson Forceps come in standard and extra lightweight construction that provides durability and strength. The jaw size, shape and angle are specially calculated for use through Jackson scopes.

| ITEM # | DESCRIPTION |
|---|---|
| 505100 | Straight, 4 mm diameter jaw, working length 28 cm |
| 505104 | Angled, 4 mm diameter jaw, working length 28 cm |

# MEDIASTINOSCOPY

## Instrumentation

### JACKSON CUP FORCEPS - EXTRA LIGHTWEIGHT

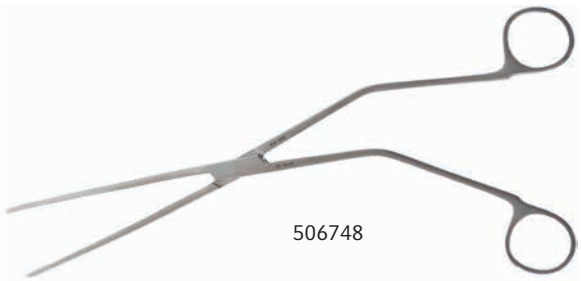
Jackson Forceps come in standard and extra lightweight construction that provides durability and strength. The jaw size, shape and angle are specially calculated for use through Jackson scopes.

| ITEM # | DESCRIPTION |
|---|---|
| 505110 | Straight, 2 mm diameter jaw, working length 20 cm |
| 505112 | Straight, 2 mm diameter jaw, working length 28 cm |
| 505114 | Angled, 2 mm diameter jaw, working length 20 cm |
| 505116 | Angled, 2 mm diameter jaw, working length 28 cm |

### PATTERSON ELONGATED CUP BITING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 505230 | Regular, 4 mm jaw width, 11-1/8" (28 cm) |

### MEDIASTINAL BLUNT-TIPPED DISSECTING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 506748 | Serrated, 16 mm tip, working length 7-1/2" (19 cm), 12" (31 cm) |

# MEDIASTINOSCOPY

## Instrumentation

### NORRIS SPONGE HOLDING FORCEPS

Bayonet-shaped, cross action forceps designed for use in mediastinoscopy. Straight distal portion of jaw is 16 cm long.

| ITEM # | DESCRIPTION |
|---|---|
| 506747 | Straight, serrated, 3.6 mm tip, 13-1/8" (34 cm) |

## Scope Holders

### TOBEY LARYNGOSCOPE HOLDER

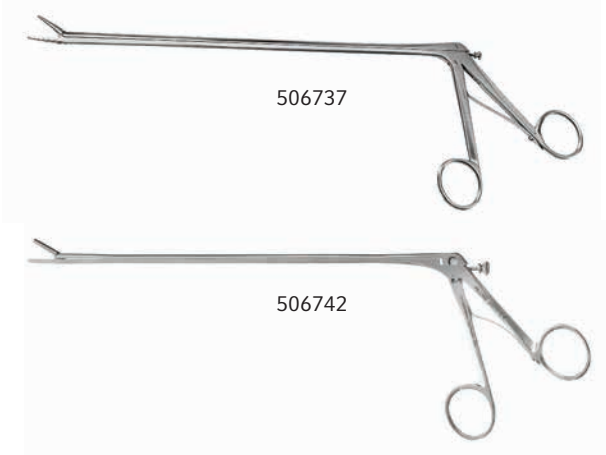
The laryngoscope/mediastinoscope holder with a quick attach/release mechanism that provides a secure hold of your laryngoscope. With the blue thumb tab mechanism on the Tobey Laryngoscope Holder, there is no more twisting or turning necessary to lock the laryngoscope into the holder. The Tobey Laryngoscope Holder also allows for fine-tune adjusting using the size adjustment knob for different laryngoscope handles.

| ITEM # | DESCRIPTION |
|---|---|
| 502248 | Overall width, 9" (23 cm) |

# MEDIASTINOSCOPY

## Clips and Appliers

### ALLIGATOR APPLYING FORCEPS AND LIGATING CLIPS



506737

506742

For use with McKenzie "V" clips or Duane "U" clips. Jaw opening is controlled by screw mechanism in handle. Stainless steel. Length 9-3/4" (25 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 506737 | Drew Forceps, serrated jaws |
| 506742 | Scoville Forceps, slotted jaws |
| 506743 | McKenzie "V" clips, smooth, vial of 100 |
| 506744 | McKenzie "V" clips, serrated, vial of 100 |
| 506746 | Duane "U" clips, smooth, vial of 100 |
| 506749 | Clip holding magazine, single row, weighted, manual loading for Duane and McKenzie Clips |

506743

506744

506746

506749

# VIDEO-ASSISTED THORACOSCOPY

## Retractors

### HEITMILLER MINI THORACOTOMY RETRACTOR

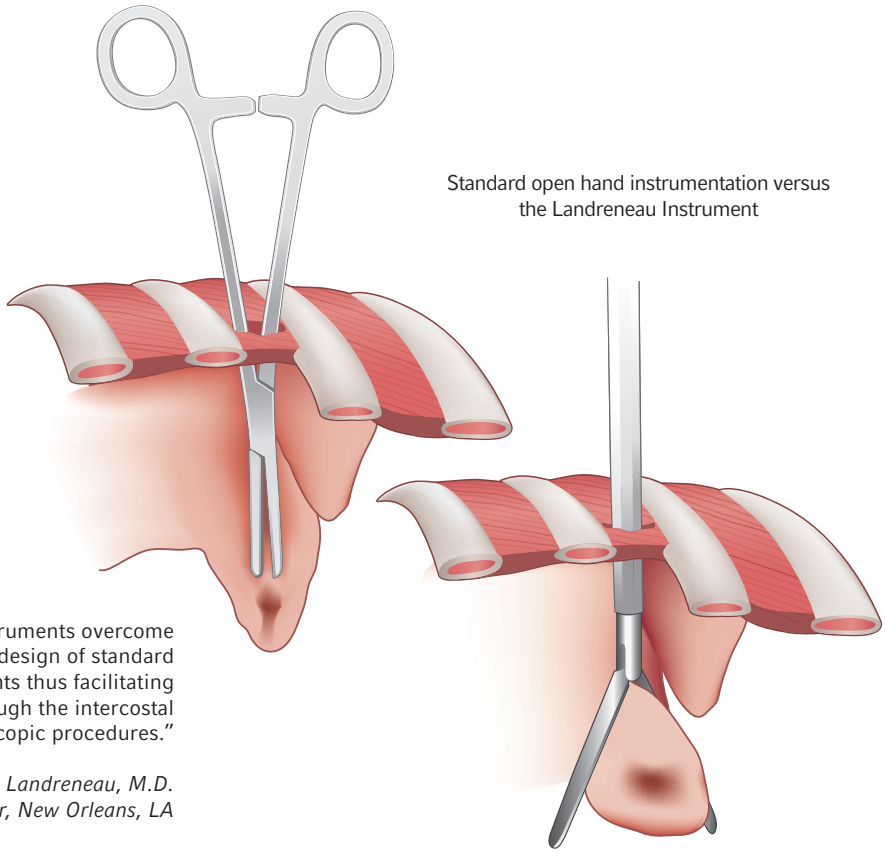
341310

Designed by Dr. Richard Heitmiller.

| ITEM # | DESCRIPTION |
|---|---|
| 341310 | This retractor provides excellent exposure for video-assisted thoracoscopy, open lung biopsies, transaxillary incisions and mid-CAB procedures in which mini-thoracotomy incisions are used. With its small "footprint," it also is ideal for mobilizing lung adhesions during vedo thoracotomies. |

## Landreneau Design

Landreneau Thoracoscopy Instruments are used in video-assisted thoracoscopy and minimally invasive procedures. Their unique design overcomes the limitations of the central-hinge on standard open instruments, enabling the instruments to be fully functional when placed through a small incision. Elongated shafts and large jaws provide extended reach while the ring-handled design offers the comfort and familiarity of a traditional open instrument. A custom sterilization tray is available to protect your instrument investment.



Standard open hand instrumentation versus the Landreneau Instrument

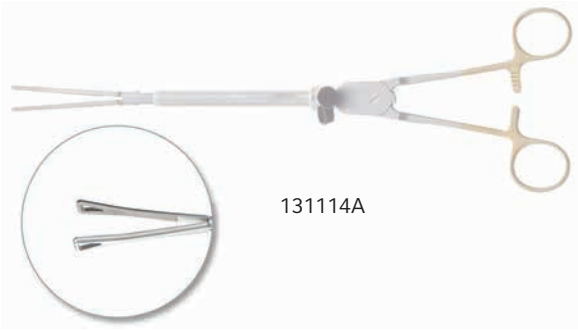
"The Landreneau design instruments overcome the limitations of the central hinge design of standard (open) hand surgical instruments thus facilitating instrument manipulation through the intercostal access during thoracoscopic procedures."

*Rodney J. Landreneau, M.D.*
*Ochsner Medical Center, New Orleans, LA*

# VIDEO ASSISTED THORACOSCOPY

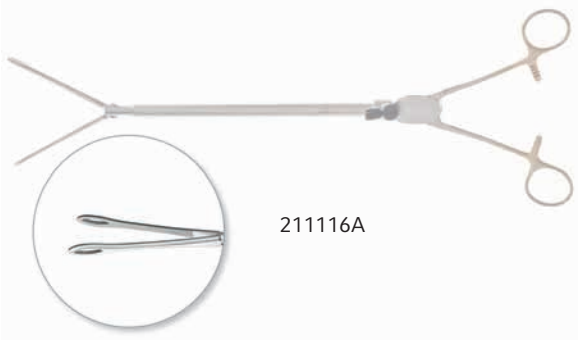
## Landreneau Design

### PENNINGTON GRASPING FORCEPS



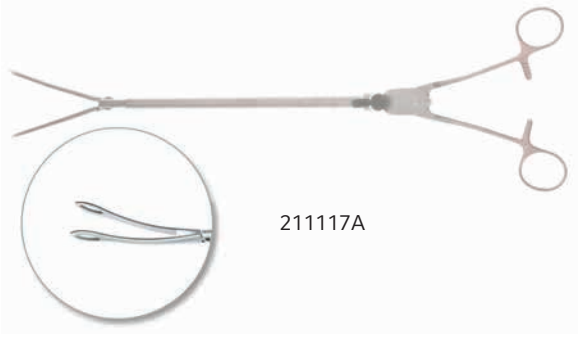

| ITEM # | DESCRIPTION |
|---|---|
| 131114A | 10 mm diameter, 13 cm shaft length, locking |

### STRAIGHT MASHER GRASPING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 211116A | Thin teardrop, 10 mm diameter, 21 cm shaft length, locking |

### CURVED MASHER GRASPING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 211117A | Thin teardrop, not designed for use with a 10 mm cannula, 21 cm shaft length, locking |

# VIDEO ASSISTED THORACOSCOPY

## Landreneau Design

### STRAIGHT MASHER GRASPING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 211118A | Round, not designed for use with a 10 mm cannula, 21 cm shaft length, locking |

### STRAIGHT DEBAKEY GRASPING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 211603A | 10 mm diameter, 21 cm shaft length, locking |

### LAWRENCE FINE DISSECTING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 211245A | 45 degree curve, not designed for use with a 10 mm cannula, 21 cm shaft length, locking |

# VIDEO ASSISTED THORACOSCOPY

## Landreneau Design

### MEEKER DISSECTING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 211290A | 90 degree curve, not designed for use with a 10 mm cannula, 21 cm shaft length, locking |

### METZENBAUM SCISSORS CURVED

| ITEM # | DESCRIPTION |
|---|---|
| 211325A | 10 mm diameter, 21 cm shaft length, non-locking |

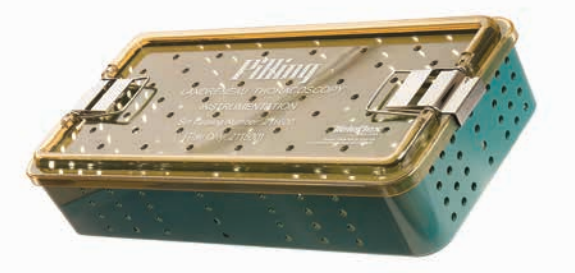
### STRAIGHT SINGLE ACTION NEEDLE HOLDER

| ITEM # | DESCRIPTION |
|---|---|
| 215558A | 5 mm diameter, 21 cm shaft length, locking |

# VIDEO ASSISTED THORACOSCOPY

## Landreneau Design

### LANDRENEAU THORACOSCOPY TRAY



211500

| ITEM # | DESCRIPTION |
|---|---|
| 211500 | 20-3/4" (52.5 cm) x 9-7/8" (25 cm) |

### LANDRENEAU THOROSCOPY SET

211600

| ITEM # | DESCRIPTION |
|---|---|
| 211600 | Complete set. Includes all catalog codes in the Landreneau Design section (except 341310, the optional Heitmiller Mini Thoracotomy Retractor) |

# KAISER-PILLING® INSTRUMENTS

Instruments designed specifically for thoracoscopy that deliver the versatility you require and the feel to which you are accustomed.

Unique instruments with a "No Cannula" technique provide you with a versatility not found before in thoracoscopy procedures.

Elimination of cannulas allows for the use of traditional patterns of instruments that have been elongated and shaped to meet the special needs of the thoracoscopist. These new-dimensioned instruments provide you with the familiar feel, weight and balance to which you are accustomed. This means you can rely on the practiced hand movements used in open procedures. The accessories extend your "reach" even farther.

Other advantages of the "No Cannula" procedure using these instruments are:

- Reduced patient costs since fewer cannulas are required
- Palpation of lesions is permitted
- Number of incisions is minimized as instrument length and shape permit access to all areas of the thoracic cavity.

# VIDEO ASSISTED THORACOSCOPY

## Kaiser-Pilling® Design

### KAISER-PILLING® SHORT JAW RING FORCEPS

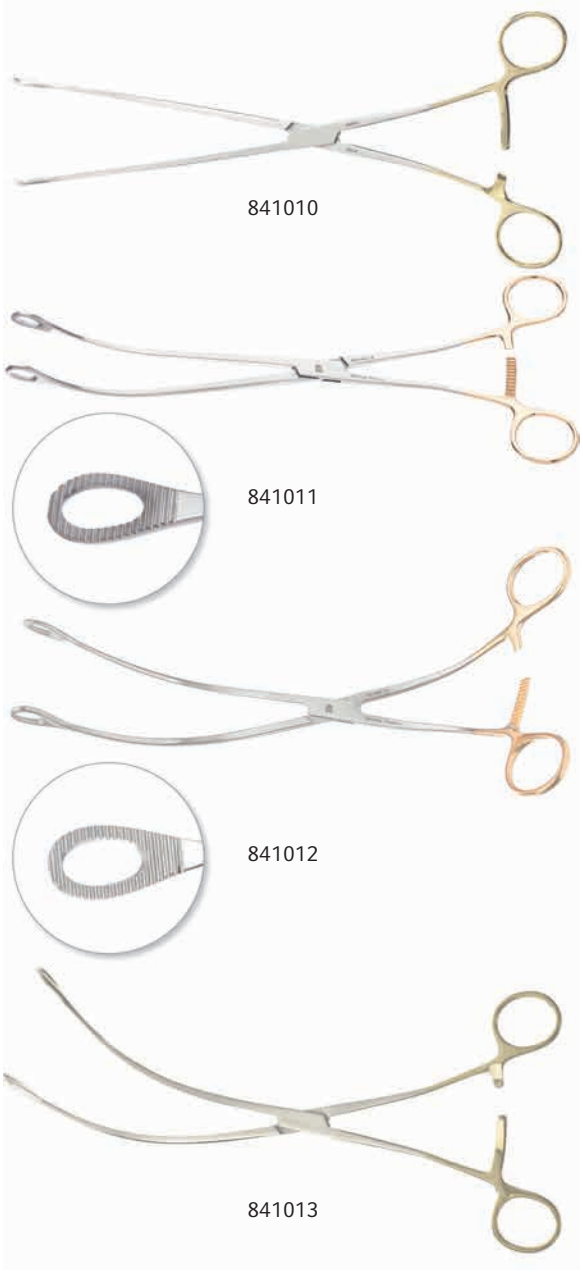
1 x 11 ratchets, 3-3/8" (8.5 cm) jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 841030 | Straight (1S), 12-5/8" (32 cm) |
| 841031 | Curved (2S), 12-1/8" (31 cm) |
| 841032 | C-shaped (4S), 10-7/8" (28 cm) |
| 841033 | Curved on side (3S), 12" (30.5 cm) |
| 841034 | Curved handle, 11-7/8" (30 cm) |

# VIDEO ASSISTED THORACOSCOPY

## Kaiser-Pilling® Design

### KAISER-PILLING® LONG JAW RING FORCEPS




1 x 11 ratchets, 6-3/8" (16 cm) jaw.

| ITEM # | DESCRIPTION |
|---|---|
| 841010 | Straight (1L), 6-3/8" (16 cm) jaw, 12-5/8" (32 cm) |
| 841011 | Curved (2L), 6-3/8" (16 cm) jaw, 12-1/4" (31 cm) |
| 841012 | "C" shaped (4L), 6-3/8" (16 cm) jaw, 10-7/8" (28 cm) |
| 841013 | Curved on side (3L), 12-1/8" (31 cm) |
| 841014 | Curved handle, 12-1/8" (31 cm) |
| 841015 | 90 degree ring jaw, 11-7/8" (30 cm) |
| 841016 | 45 degree ring jaw, 12-1/4" (31 cm) |

# VIDEO ASSISTED THORACOSCOPY

## Kaiser-Pilling® Design

### KAISER-PILLING® THORACOSCOPIC FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 841160 | Straight, without ratchets, 12" (31 cm) |
| 841161 | Slight curve, without ratchets, 11-3/4" (30 cm) |

# VIDEO ASSISTED THORACOSCOPY

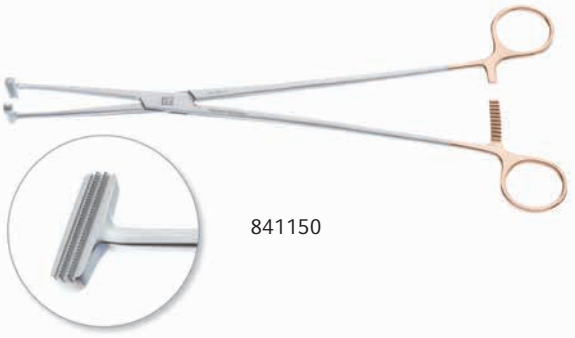
## Kaiser-Pilling® Design

### KAISER-PILLING® DEBAKEY®-TYPE RING FORCEPS

1 x 11 ratchets.

| ITEM # | DESCRIPTION |
|---|---|
| 841050 | Straight (1AG), 12-5/8" (32 cm) |
| 841051 | "S"-shaped (5AG), 11-3/4" (30 cm) |
| 841052 | Curved jaw (2AG), 12-1/4" (31 cm) |

### KAISER-PILLING® DEBAKEY®-TYPE ALLIS RING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| 841150 | 2 x 3 DeBakey®-type Jaws, 21 mm, 12" (31 cm) |

# VIDEO ASSISTED THORACOSCOPY

## Kaiser-Pilling® Design

### KAISER-PILLING® BIOPSY FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| 841100 | Malleable, 4 mm cup, 12-5/8" (32 cm) |
| 841101 | Rigid, slightly curved, 4 mm cup, 11" (28 cm) |

### KAISER-PILLING® ANGLE SICKLE KNIFE

| ITEM # | DESCRIPTION |
|---|---|
| 841330 | Sharp tip, 13" length (33 cm) |

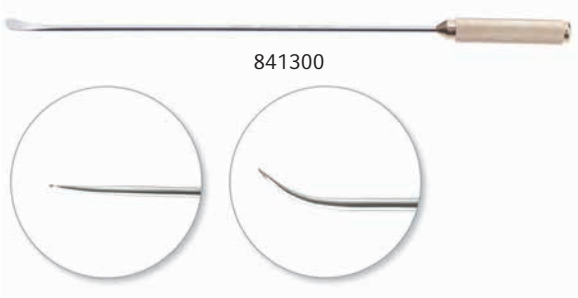
### KAISER-PILLING® BLUNT HOOK

| ITEM # | DESCRIPTION |
|---|---|
| 841401 | Insulated, 13" (33 cm) |

# VIDEO ASSISTED THORACOSCOPY

## Kaiser-Pilling® Design

### KAISER-PILLING® SPATULA



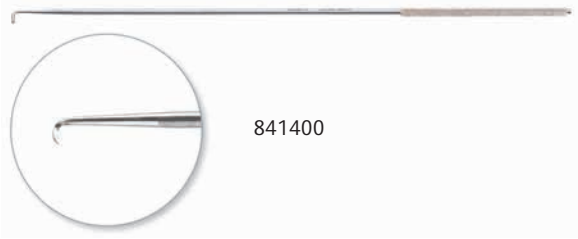

14" (35.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 841300 | Slight curve |
| 841301 | Acute curve |
| 841302 | Straight |

### KAISER-PILLING® ANDREWS SUCTION

| ITEM # | DESCRIPTION |
|---|---|
| 841351 | 11-3/4" (30 cm) |

### KAISER-PILLING® HOOK




| ITEM # | DESCRIPTION |
|---|---|
| 841400 | Blunt, 13" (33 cm) |

# VIDEO ASSISTED THORACOSCOPY

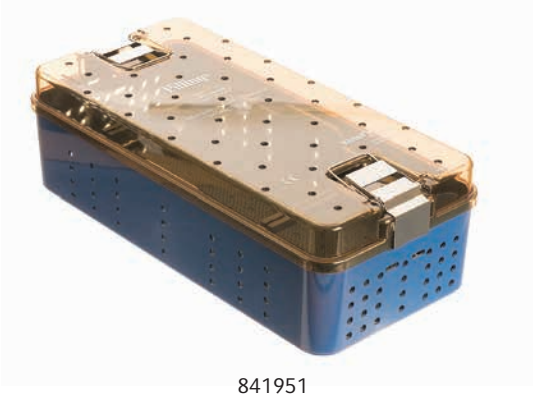
## Kaiser-Pilling® Design

### KAISER-PILLING® SUCTION WITH THUMB VALVE

841350

| ITEM # | DESCRIPTION |
|---|---|
| 841350 | 13-1/4" (33.5 cm) |

### KAISER-PILLING® STERILIZING TRAY



841951

| ITEM # | DESCRIPTION |
|---|---|
| 841951 | 20-3/4" length x 10" width x 4-5/8" height (52.5 x 25.5 x 11.5 cm) |

# MISCELLANEOUS CVT

## Endarterectomy Dissectors

### EFFLER-GROVES DOUBLE-END DISSECTOR AND HOOK

355810

| ITEM # | DESCRIPTION |
|---|---|
| 355810 | Lightweight, 12-1/4" (31 cm) |

### LEMMON INTIMA DISSECTORS

355191

| ITEM # | DESCRIPTION |
|---|---|
| 355191 | Slight curve, 6-3/8" (16.5 cm) |
| 355192 | Acute curve, 6-3/8" (16.5 cm) |

### OLIVEKRONA DOUBLE END DISSECTORS

355182

355186

Very useful as freeing instruments in endarterectomy.

| ITEM # | DESCRIPTION |
|---|---|
| 355180 | Lightweight, 7-1/4" (18.5 cm) |
| 355182 | Lightweight, 9-1/2" (24 cm) |
| 355184 | Heavy weight, 7-3/4" (19.5 cm) |
| 355186 | Heavy weight, 9-1/2" (24 cm) |

### FREER DOUBLE END ELEVATOR

355194

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 355194 | Sharp and blunt, 7" (18 cm) |

# MISCELLANEOUS CVT

## Marking Rings

### MARKING RING-VEIN GRAFT

355834

The aorta to coronary saphenous vein graft is widely used for the treatment of coronary atherosclerosis. Assessment of the post-operative result requires direct catheterization of the graft, and locating the proximal orifice can be difficult. The Vein Graft Ring is designed to be placed around the aortic end of the graft prior to completion of the proximal anastomosis. After completion of the proximal anastomosis the ring is sutured to the aorta by interrupted 5-0 or 6-0 sutures. The ring has been found helpful to the cardiologist in locating the aortic end of the graft. The rings are made of 20 Ga., type 316L medical grade stainless steel, available in diameters of 8, 10, 12 and 14 mm.

| ITEM # | DESCRIPTION |
|---|---|
| 355830 | CC Marking Ring, 8 mm, 10/pack |
| 355832 | CC Marking Ring, 10 mm, 10/pack |
| 355834 | CC Marking Ring, 12 mm, 10/pack |
| 355838 | CC Marking Ring, 14 mm, 10/pack |

## Obturators

### FITCH OBTURATORS

351316

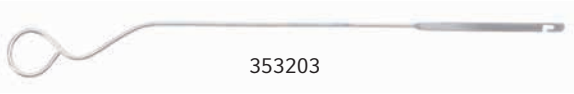
Fitch Obturators, olive tipped, for use with plastic vena cava catheters in open heart surgery. These obturators permit introduction of the venous drainage catheters into the right atrium and vena cava. Olive-shaped tip allows easy introduction through a purse-stringed site in the right atrium. The elongated head of the obturator is designed to block any blood entering the multiple perforations of the catheter during introduction. The malleable shaft permits control of the catheter tip in the right atrium and appropriately precurving the shaft allows the catheter to be steered into either vena cava.

| ITEM # | DESCRIPTION |
|---|---|
| 351316 | 26 Fr., 17-7/8" (45.5 cm) |
| 351318 | 30 Fr., 16-1/8" (41 cm) |

# MISCELLANEOUS CVT

## Tourniquet Stylets

### REPLACEMENT STYLET FOR RUMEL TOURNIQUET




| ITEM # | DESCRIPTION |
|---|---|
| 353203 | 66 x 4 mm tip, working length 7-5/8" (19.5 cm), overall length 10-1/4" (26 cm) |

### STYLET FOR RUMEL TOURNIQUET, CHILD SIZE

| ITEM # | DESCRIPTION |
|---|---|
| 353207 | Often used with rubber tubing and Identi-Loops, 7" (18 cm) |

### STYLET FOR WECK® STYLE RUMEL TOURNIQUET

| ITEM # | DESCRIPTION |
|---|---|
| 353206 | 2 mm-wide tip, working length 8-1/4" (21 cm), overall length 9-3/8" (24 cm) |

# MISCELLANEOUS CVT

## Tunnelers

### BERRY ANGIO ACCESS TUNNELER

355500

Designed by William B. Berry, M.D. of Pasadena, Texas, Angio Access Tunneler (355500) is used to create forearm loop tunnels for placement of arteriovenous grafts for hemodialysis. Removable interchangeable handle and bullet tip allow:

- Simplified surgical procedure with better surgical control.
- Reduced likelihood of "kinking."
- Less patient trauma.

Diamond knurled handle for ease of control. Suture hole in bullet tip allows secure graft attachment.

| ITEM # | DESCRIPTION |
|---|---|
| 355500 | Available in 10-3/4" (27.5 cm) length (105 degree arc) |

### CRAWFORD-COOLEY GRAFT TUNNELER

355497

Graft is attached to obturator tip and drawn through the tube. Tube is then withdrawn leaving graft placed in untwisted position.

| ITEM # | DESCRIPTION |
|---|---|
| 355497 | Tube slightly curved, 12 mm I.D., 17-1/2" (44.5 cm) |

### DEBAKEY® FEMORAL BYPASS TUNNELER

355495

For use in by-pass operation for segmental occlusive disease of the iliac and femoral arteries. This instrument is designed with a slightly malleable stainless steel bar with a handle on one end and an olive tip dilator on the other. This blunt end, introduced through one of the incisions, is inserted through the subcutaneous tissue into the other incision. A by-pass graft end is then attached by a simple ligature to the olive tip end which is withdrawn, pulling the graft through the subcutaneous tunnel connecting the two incisions.

| ITEM # | DESCRIPTION |
|---|---|
| 355495 | 20-3/4" (52.5 cm) |

# MISCELLANEOUS CVT

## Tunnelers

### GARRETT VEIN PASSER

355492

355490

The removable grasping stylet is designed for use in implanting the saphenous vein in femoral position.

| ITEM # | DESCRIPTION |
|---|---|
| 355492 | Removable, blunt bullet head 16 mm diameter used to create tunnel, 22-1/8" (56.5 cm) |
| 355490 | Tip only Garrett Vein Passer |

### HALLMAN TUNNELING FORCEPS

355493

| ITEM # | DESCRIPTION |
|---|---|
| 355493 | 14-5/8" (37 cm) |

# SPECIALTY SETS

## Pilling® Micro Vascular Set

### PILLING® MICRO VASCULAR SET OF 11 INSTRUMENTS

357651

357652

357653

357654

357655

357656

| ITEM # | DESCRIPTION |
|---|---|
| 357650 | Tray and Set |
| 429594 | Tray only 8" (20.5 cm) x 12 1/2" (31.5 cm) |
| 357651 | Micro Scissors, straight, 12 mm blades, 7-3/8" (19 cm) |
| 357652 | Micro Scissors, curved, 12 mm blades, 7-1/4" (18.5 cm) |
| 357653 | You-Potts Scissors, angled 45 degrees, 12 mm blades, 7-3/8" (18.5 cm) |
| 357654 | Micro Needle Holder, straight, no lock, 1.15 mm jaw, 7-3/8" (18.5 cm) |
| 357655 | Micro Needle Holder, curved, no lock, 7-3/8" (18.5 cm) |
| 357656 | Micro Needle Holder, straight, lock, 1.2 mm jaw, 7-1/2" (19 cm) |
| 357657 | Micro Needle Holder, curved, no lock, 0.6 mm jaw, 7-3/8" (18.5 cm) |
| 357658 | Micro Tying Forceps, round handle 8 mm diameter, straight 0.5 mm wide tip with platform, 6" (15 cm) |
| 357659 | Micro Tying Forceps, round handle 8 mm diameter, curved 0.5 mm wide tip with platform, 6" (15 cm) |
| 357660 | Micro Tying Forceps, round handle 8 mm diameter, straight 0.5 cm wide tip with platform, 7-1/8" (18 cm) |
| 357661 | Micro Tying Forceps, round handle 8 mm diameter, curved 0.5 mm wide tip with platform, 7-1/8" (18 cm) |

357657

357658

# SPECIALTY SETS

## Pilling® Micro Vascular Set

### PILLING® MICRO VASCULAR SET OF 11 INSTRUMENTS

357659

357660

357661

357650

429594

# SPECIALTY SETS

## Vascular Access Set

### THE PILLING® VASCULAR ACCESS SET

355600

*Designed for all Angle Access procedures — not just A-V Fistula — a logically planned set of instruments suited for:*

- End-to-end, end-to-side, A-V Fistula — any extremity.
- Fistulas with graft.
- External shunts.

341010

### COMPLETE SET:

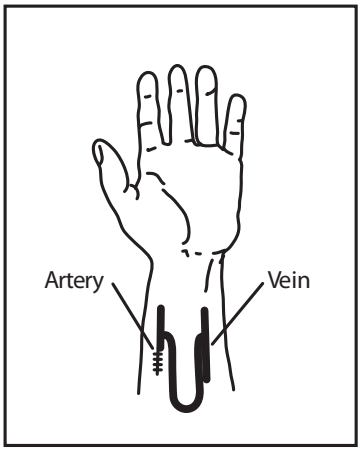
355600 W.G.H. Pilling® Vascular Access Set complete with stainless steel storage case.
341010 Stainless steel case for Pilling® Vascular Access Set.

# SPECIALTY SETS

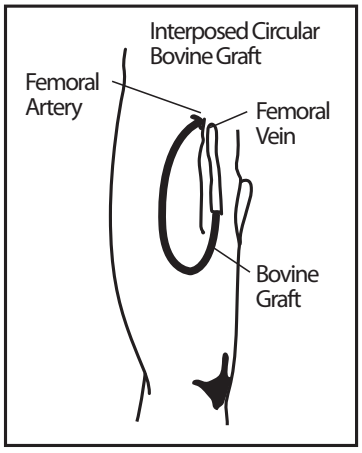
## Vascular Access Set

Vascular Access Sets suited for:

Brescia A-V Fistula side to side




A-V Fistula with external shunt




A-V Fistula with graft

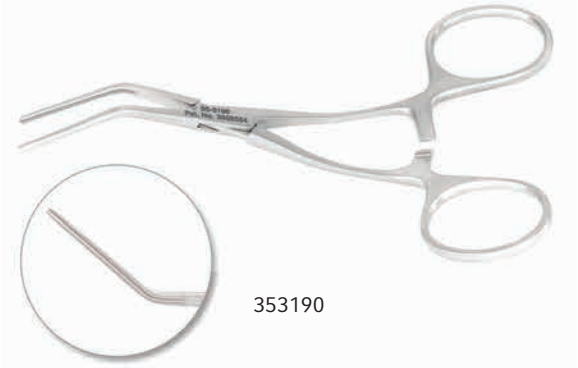
All instruments are supplied in a stainless steel sterilization/storage case for protection and easy instrument counts.

# SPECIALTY SETS

## Vascular Access Set

### THE PILLING® VASCULAR ACCESS SET

353187

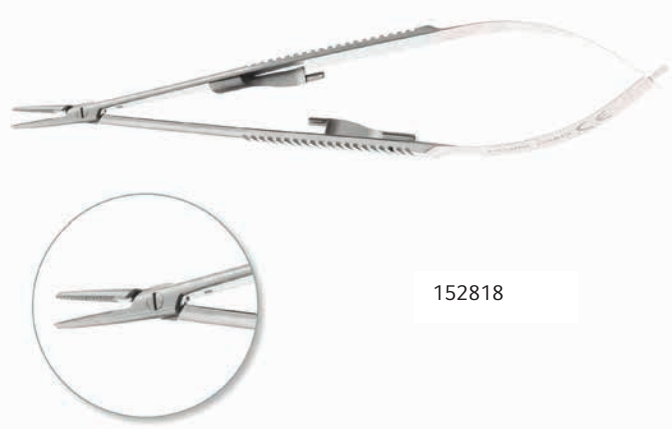


353190

165439

355277

| ITEM # | DESCRIPTION |
|---|---|
| 353187 | Gregory Mini-vascular Clamps, curved, extra-light, 4-1/8" (10.5 cm) |
| 353190 | Gregory Mini-vascular Clamps, angled 45 degrees, extra-light, 4-3/8" (11 cm) |
| 165439 | Two of the Short Model Gelpi, sharp prongs, 3-1/8" (8 cm) spread, 5-3/8" (13.5 cm) |
| 355275 | Hiebert Vascular Dilators, 0.5 mm x 1 mm |
| 355276 | Hiebert Vascular Dilators, 1.5 mm x 2 mm |
| 355277 | Hiebert Vascular Dilators, 2.5 mm x 3 mm |
| 355278 | Hiebert Vascular Dilators, 3.5 mm x 4 mm |
| 152818 | Castroviejo Needle Holder, straight, 11 x 1.4 mm jaw, 6" (15 cm), TC |
| 354964 | Castroviejo Needle Holder, straight, 13 x 1.4 mm jaw, 7-1/4" (18.5 cm), TC |



152818

354964

# SPECIALTY SETS

## Vascular Access Set

### THE PILLING® VASCULAR ACCESS SET (CONTINUED)

352145

353600

351830

351575

351827

| ITEM # | DESCRIPTION |
|---|---|
| 352145 | Potts-Type Scissors, angled 45 degrees, 9 mm blades, 4-1/8" (10.5 cm) |
| 353600 | DeBakey® Aortic Aneurysm Clamp, 3-3/4" (9.5 cm) jaw, 1 x 9 ratchets, 10-3/8" (26.5 cm) |
| 353011 | Three of the Johns Hopkins Bulldog® Clamps, curved jaws, 1-1/2" (4 cm) |
| 351830 | Gregory Suture "Stay" Clamps, straight, 3-7/8" (10 cm), TC |
| 351575 | DeBakey® Heparin Cannula, malleable, 3 mm tip, 2-1/2" (6.5 cm) |
| 351825 | Wheeler Pick-up Forceps, DeBakey®-type Jaw, 1.6 mm , 5-1/2" (14 cm) |
| 351827 | Wheeler Pick-up Forceps, DeBakey®-type Jaw, 1.6 mm, 7-1/8" (18 cm) |

# ORTHOPEDIC INSTRUMENTS

## CHAPTER OVERVIEW

Pilling® and KMedic® Orthopedic Instruments represent a high-quality line that offers the precision you require, the quality you demand, and the pattern assortments that meet your needs. Our categories of Orthopedic instruments include:

- KMedic® Wire and Pin Implants
- Wire Twisters, and Pin and Rod Cutters
- Pliers, Drills and Screwdrivers
- Rongeurs
- Ostetomes, Chisels and Gouges
- Nail Instruments
- Smartrack Sterilization and Storage Racks

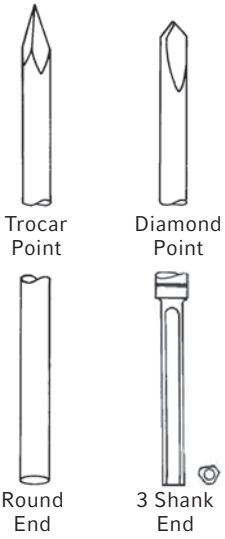
# KMEDIC® WIRE AND PIN IMPLANTS

Bend K-Wires up to 0.062" in diameter easily with our Gratloch Wire Bender KM48370.

## KMEDIC® WIRE AND PIN IMPLANTS

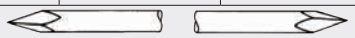
- Precision manufactured in Germany from certified implant stainless steel.
- Longer, gently tapered points for easier penetration.
- Smoothly hand-polished, causing less trauma when removed.
- K-Wires and Steinmann pins are sold six (6) per package.

*Please inquire about availability of any sizes and styles not shown.*




| KIRSCHNER WIRES (SMOOTH) — PKG/6 | | | | | |
|---|---|---|---|---|---|
| LENGTH | 0.028" (.7 mm) | 0.035" (.9 mm) | 0.045" (1.1 mm) | 0.054" (1.4 mm) | 0.062" (1.6 mm) |
| DOUBLE END TROCAR | | | | | |
| 4" | KM71100 | KM71101 | KM71102 | KM71104 | KM71103 |
| 5" | KM71105 | KM71106 | KM71107 | KM71108 | KM71109 |
| 6" | KM71021 | KM71022 | KM71023 | KM71024 | KM71025 |
| 9" | KM71110 | KM71111 | KM71112 | KM71114 | KM71113 |
| 12" | KM71120 | KM71121 | KM71122 | KM71124 | KM71123 |
| SINGLE TROCAR (ROUND END) | | | | | |
| 4" | KM71130 | KM71131 | KM71132 | KM71133 | KM71134 |
| 5" | KM71170 | KM71171 | KM71172 | KM71174 | KM71175 |
| 6" | — | — | KM71182 | — | KM71185 |
| 7" | — | KM71156 | — | — | — |
| 9" | KM71150 | KM71151 | KM71152 | KM71154 | KM71153 |
| 12" | KM71160 | KM71161 | KM71162 | KM71164 | KM71163 |
| DOUBLE END DIAMOND | | | | | |
| 4" | KM71200 | KM71201 | KM71202 | KM71203 | KM71204 |
| 5" | KM71205 | KM71206 | KM71207 | KM71208 | KM71209 |
| 6" | KM71030 | KM71031 | KM71032 | KM71034 | KM71033 |
| 9" | KM71210 | KM71211 | KM71212 | KM71214 | KM71213 |
| SINGLE DIAMOND (ROUND END) | | | | | |
| 4" | KM71230 | KM71231 | KM71232 | KM71233 | KM71234 |
| 9" | KM71240 | KM71241 | KM71242 | KM71244 | KM71243 |
| 12" | KM71250 | KM71251 | KM71252 | KM71254 | KM71253 |
| SUTURE PASSER SINGLE DIAMOND WITH SUTURE HOLE (ROUND END) | | | | | |
| 9" | — | — | KM71262 | — | KM71263 |
| SUTURE PASSER SINGLE DIAMOND WITH SUTURE HOLE (3 SHANK END) | | | | | |
| 9" | — | — | — | — | — |
| SINGLE TROCAR (3 SHANK END) | | | | | |
| 9" | — | — | — | — | — |
| SINGLE DIAMOND (3 SHANK END) | | | | | |
| 9" | — | — | — | — | — |

| KIRSCHNER WIRES (FULLY THREADED) — PKG/6 | | | | | |
|---|---|---|---|---|---|
| LENGTH | 0.028" (.7 mm) | 0.035" (.9 mm) | 0.045" (1.1 mm) | 0.054" (1.4 mm) | 0.062" (1.6 mm) |
| DOUBLE END TROCAR | | | | | |
| 6" | — | KM71290 | KM71291 | — | KM71293 |
| 9" | — | KM71301 | KM71302 | — | KM71303 |
| SINGLE TROCAR (ROUND END) | | | | | |
| 9" | — | KM71304 | KM71305 | — | KM71310 |
| DOUBLE END DIAMOND | | | | | |
| 9" | — | KM71311 | KM71312 | — | KM71313 |
| SINGLE DIAMOND (ROUND END) | | | | | |
| 9" | — | KM71314 | KM71315 | — | KM71307 |
| 10" | — | — | — | — | — |

| STEINMANN PINS (SMOOTH) — PKG/6 | | | | | | | |
|---|---|---|---|---|---|---|---|
| LENGTH | 5/64" (2.0 mm) | 3/32" (2.4 mm) | 7/64" (2.8 mm) | 1/8" (3.2 mm) | 9/64" (3.5 mm) | 5/32" (4.0 mm) | 0.177" (4.5 mm) |
| DOUBLE END TROCAR |  | | | | | | |
| 4" | — | — | — | — | — | — | — |
| 5" | — | — | — | — | — | — | — |
| 6" | — | — | — | — | — | — | — |
| 9" | KM71450 | KM71453 | KM71456 | KM71459 | KM71462 | KM71465 | KM71468 |
| 12" | — | — | — | — | — | — | — |
| SINGLE TROCAR (ROUND END) | | | | | | | |
| 4" | — | — | — | — | — | — | — |
| 5" | — | KM71432 | — | — | — | — | — |
| 6" | — | — | — | — | — | — | — |
| 7" | — | — | — | KM71434 | — | — | — |
| 9" | KM71510 | KM71513 | KM71516 | KM71519 | KM71522 | KM71525 | KM71528 |
| 12" | KM71674 | KM71676 | KM71677 | KM71680 | KM71681 | KM71682 | KM71683 |
| DOUBLE END DIAMOND | | | | | | | |
| 4" | — | — | — | — | — | — | — |
| 5" | — | — | — | — | — | — | — |
| 6" | — | — | — | — | — | — | — |
| 9" | KM71600 | KM71603 | KM71606 | KM71609 | KM71612 | KM71615 | KM71618 |
| SINGLE DIAMOND (ROUND END) | | | | | | | |
| 4" | — | — | — | — | — | — | — |
| 9" | KM71660 | KM71663 | KM71666 | KM71669 | KM71672 | KM71675 | KM71678 |
| 12" | — | — | — | — | — | — | — |
| SUTURE PASSER SINGLE DIAMOND WITH SUTURE HOLE (ROUND END) | | | | | | | |
| 9" | — | — | — | — | — | — | — |
| SUTURE PASSER SINGLE DIAMOND WITH SUTURE HOLE (3 SHANK END) | | | | | | | |
| 9" | KM71880 | KM71883 | KM71886 | KM71889 | KM71892 | KM71895 | KM71898 |
| SINGLE TROCAR (3 SHANK END) | | | | | | | |
| 9" | KM71480 | KM71483 | KM71486 | KM71489 | KM71492 | KM71495 | KM71498 |
| SINGLE DIAMOND (3 SHANK END) | | | | | | | |
| 9" | KM71630 | KM71633 | KM71636 | KM71639 | KM71642 | KM71645 | KM71648 |

| STEINMANN PINS (FULLY THREADED) — PKG/6 | | | | | | | |
|---|---|---|---|---|---|---|---|
| LENGTH | 5/64" (2.0 mm) | 3/32" (2.4 mm) | 7/64" (2.8 mm) | 1/8" (3.2 mm) | 9/64" (3.5 mm) | 5/32" (4.0 mm) | 0.177" (4.5 mm) |
| DOUBLE END TROCAR | | | | | | | |
| 6" | — | — | — | — | — | — | — |
| 9" | KM71750 | KM71753 | KM71756 | KM71759 | KM71762 | KM71765 | KM71768 |
| SINGLE TROCAR (ROUND END) | | | | | | | |
| 9" | KM71770 | KM71773 | KM71776 | KM71779 | KM71782 | KM71785 | KM71788 |
| DOUBLE END DIAMOND | | | | | | | |
| 9" | KM71730 | KM71733 | KM71736 | KM71739 | KM71742 | KM71745 | KM71748 |
| SINGLE DIAMOND (ROUND END) | | | | | | | |
| 9" | KM71700 | KM71703 | KM71706 | KM71709 | KM71712 | KM71715 | KM71718 |
| 10" | — | KM71679 | — | — | — | — | — |

# KMEDIC® WIRE AND PIN IMPLANTS

| STEINMANN PINS CALIBRATED (GUIDE WIRES) WITH 1/2" GRADUATIONS | | | | | |
|---|---|---|---|---|---|
| LENGTH | 0.062" (1.6 mm) | 5/64" (2.0 mm) | 3/32" (2.4 mm) | 7/64" (2.8 mm) | 1/8" (3.2 mm) |
| SINGLE TROCAR (ROUND END) | | | | | |
| 9" | KM71173 | — | — | — | — |
| SINGLE TROCAR 3 SHANK END | | | | | |
| 9" | — | — | KM71833 | — | — |
| SINGLE DIAMOND 3 SHANK END | | | | | |
| 9" | — | — | KM71853 | KM71856 | KM71859 |
| SINGLE DIAMOND 3 ROUND END | | | | | |
| 9" | — | — | KM71873 | — | — |

KM71009

## K-WIRE, STEINMANN PIN STERILIZATION CASES

KM71009
13" x 5-1/4" x 2" (closed)
Holds 9" K-Wires; 9" Steinmann Pins.

| K-WIRES - 1 ROW, HOLDS 4 EACH OF THE FOLLOWING: | |
|---|---|
| 0.028" (0.7 mm) | 0.045" (1.1 mm) |
| 0.035" (0.9 mm) | 0.062" (1.6 mm) |
| STEINMANN PINS - 2 ROWS, HOLDS 4 EACH OF THE FOLLOWING: | |
| 5/64" (2.0 mm) | 9/64" (3.5 mm) |
| 3/32" (2.4 mm) | 5/32" (4.0 mm) |
| 7/64" (2.8 mm) | 0.177" (4.5 mm) |
| 1/8" (3.2 mm) | |

## K-WIRE, STEINMANN PIN STERILIZATION CASES

KM71010
11-3/4" x 5-1/4" x 2" (closed)
Holds 4", 6" and 9" K-Wires; 9" Steinmann Pins.

| K-WIRES - 3 ROWS, HOLDS 4 EACH OF THE FOLLOWING: | |
|---|---|
| 0.028" (0.7 mm) | 0.045" (1.1 mm) |
| 0.035" (0.9 mm) | 0.062" (1.6 mm) |
| STEINMANN PINS - 1 ROW, HOLDS 2 EACH OF THE FOLLOWING: | |
| 5/64" (2.0 mm) | 9/64" (3.5 mm) |
| 3/32" (2.4 mm) | 5/32" (4.0 mm) |
| 7/64" (2.8 mm) | 0.177" (4.5 mm) |
| 1/8" (3.2 mm) | |

# KIRSCHNER WIRES, STEINMANN PIN, VICKERS K-WIRE DISPENSERS

| K-WIRE DISPENSER 6-1/4" | | | |
|---|---|---|---|
| PART NO. | LENGTH | DIAMETER | QTY. HELD |
| KM71001 | up to 6" | 0.031" (0.8 mm) | 100 |
| KM71002 | up to 6" | 0.039" (1.0 mm) | 50 |
| KM71003 | up to 6" | 0.047" (1.2 mm) | 40 |
| KM71004 | up to 6" | 0.054" (1.4 mm) | 25 |
| KM71006 | up to 6" | 0.062" (1.6 mm) | 20 |
| K-WIRE DISPENSER 12-1/4" | | | |
| KM71012 | up to 12" | 0.039" (1.0 mm) | 50 |
| KM71013 | up to 12" | 0.047" (1.2 mm) | 40 |
| KM71014 | up to 12" | 0.054" (1.4 mm) | 25 |
| KM71016 | up to 12" | 0.062" (1.6 mm) | 20 |
| STEINMANN PIN DISPENSER 12-1/4" | | | |
| KM71017 | up to 12" | 5/64" (2.0 mm) | 10 |
| KM71019 | up to 12" | 3/32" (2.5 mm) | 5 |

- Stores and dispenses one size at a time.
- Sharp points are protected by silicone insert in cap.
- To avoid injury, load wire with blunt end down.
- Hexagonal shape of cap prevents unwanted movement of dispenser.
- Diameter is marked for easy identification.

KM71001 - KM71006
For K-Wire up to 6" long.

KM71012 - KM71019
For K-Wire and pins up to 12" long. Plastic cap.

| VICKERS K-WIRE DISPENSER | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PART NO. | LENGTH | CHAMBER #1 | | CHAMBER #2 | | CHAMBER #3 | | CHAMBER #4 | |
| | | DIAMETER | QTY. HELD | DIAMETER | QTY. HELD | DIAMETER | QTY. HELD | DIAMETER | QTY. HELD |
| KM46542 | 4" | 0.039" (1.0 mm) | 60 | 0.047" (1.2 mm) | 40 | 0.055" (1.4 mm) | 30 | 0.063" (1.6 mm) | 18 |
| KM46538 | 12" | 0.039" (1.0 mm) | 60 | 0.047" (1.2 mm) | 40 | 0.055" (1.4 mm) | 30 | 0.063" (1.6 mm) | 18 |
| KM46539 | 12" | 0.070" (1.8 mm) | 15 | 5/64" (2.0 mm) | 12 | 0.086" (2.2 mm) | 10 | 3/32" (2.5 mm) | 8 |

KM46542
For 4" K-Wire.

- Easily stores and dispenses four different size wires.
- Dial on bottom enables for dispensing of one size at a time.
- To avoid injury, load wire with blunt end down.
- Dial can be locked to avoid accidental dispensing.
- Clearly marked chambers help to avoid mix-up.
- Dispenser is available exclusively from Teleflex®.

KM46538 - KM46539
For 12" K-Wire.

# KMEDIC® WIRE AND PIN IMPLANTS

## Shanz Pins

### SCHANZ PINS (PARTIALLY THREADED)

KM72220

| ITEM # | OVERALL LENGTH | THREAD LENGTH | DIAMETER |
|---|---|---|---|
| KM72220 | 5-7/8" (150 mm) | 1.97" (50 mm) | 5 mm |
| KM72222 | 6-3/4" (170 mm) | 1.97" (50 mm) | 5 mm |
| KM72230 | 7-1/2" (190 mm) | 1.97" (50 mm) | 5 mm |
| KM72224 | 7-7/8" (200 mm) | 1.97" (50 mm) | 5 mm |
| KM72226 | 10" (254 mm) | 1.97" (50 mm) | 5 mm |

# KMEDIC® WIRE AND PIN IMPLANTS

## Wire and Pin Drivers and Benders

### K-WIRE BENDER

KM49802

Bends up to 1.6 mm (0.062") K-Wire to 90 degree angle.

| ITEM # | DESCRIPTION |
|---|---|
| KM49802 | 3 prong, 5-3/4" (14.5 cm) |

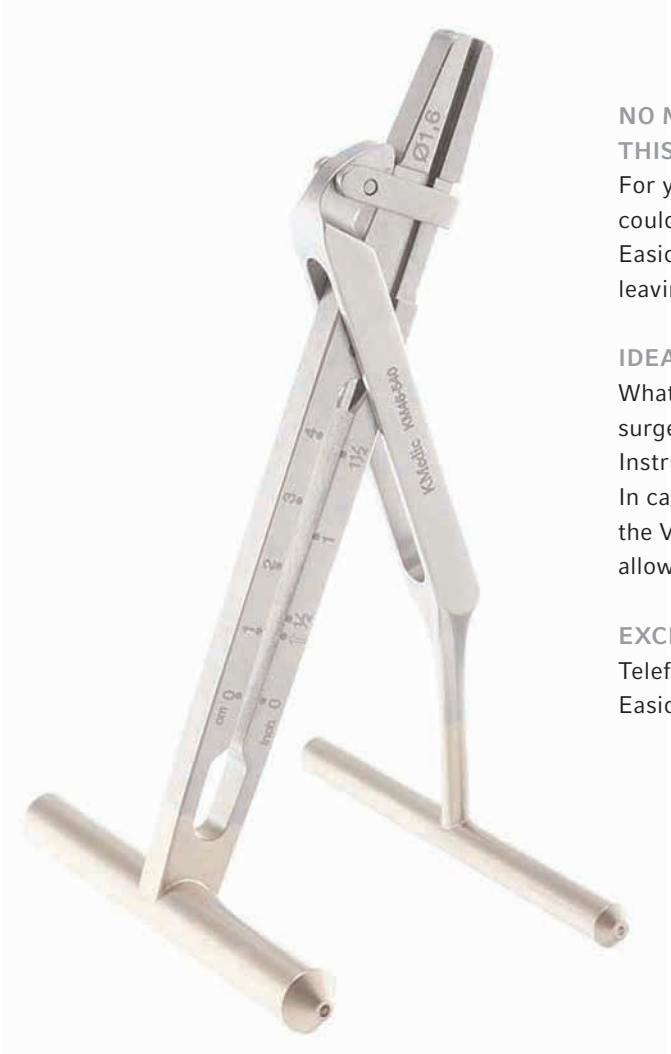
### K-WIRE AND PLATE BENDER

KM49724

Bends mini plates and up to 1.1 mm (0.045") K-Wire to 90 degree angle.

| ITEM # | DESCRIPTION |
|---|---|
| KM49724 | 3 prong, 5" (12.5 cm) |

# VICKERS EASIDRIVER




### NO MANUAL DEVICE HAS EVER ACHIEVED THIS FUNCTION

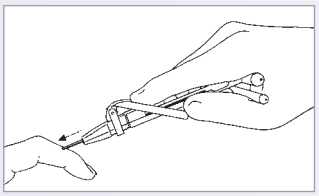
For years, surgeons have sought a simple pin driver that could actually be fully controlled with one hand. The Vickers Easidriver leaves the other hand free to manipulate tissue, leaving the patient in better hands.

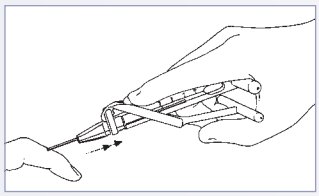
### IDEAL BACKUP UNIT FOR OFFICE AND HOSPITAL

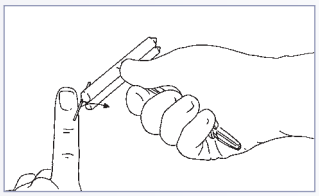
What do you use when your power equipment fails during surgery? Now you have the handy Vickers Easidriver Instrument. Without loss of precious time, it is ready for use. In cases where power equipment is not indicated or available, the Vickers Instrument can become your primary driver, allowing for feel and control that power units don't offer.

### EXCLUSIVELY FROM TELEFLEX®

Teleflex® is proud to be able to offer the Vickers Easidriver Instrument.







Now you can drive, bend and pull K-Wire for a fraction of the cost of power equipment.

## VICKERS EASIDRIVER INSTRUMENT

KM46540
5-1/2"
German Stainless

- Single handed operation
- Chuckless
- Depthscale
- Wire bending facility
- No maintenance
- No set-up
- Autoclavable
- For wire from 0.028" to 0.062"

# KMEDIC® WIRE AND PIN IMPLANTS

## Wire and Pin Drivers and Benders

### STEINMAN PIN CHUCK

KM48374

For insertion and removal of Steinmann Pins. Includes chuck key. Cannulation accepts wires and pins up to 0.236" (6.0 mm). Chuck accepts wires and pins up to 1/4" (6.35 mm).

| ITEM # | DESCRIPTION |
|---|---|
| KM48374 | Fully cannulated, 4" (10 cm) |

### UNIVERSAL CHUCK WITH T-HANDLE

KM47901

No more lost keys! Keyless chuck for insertion and removal of Steinmann Pins. Cannulation accepts wires and pins up to 0.236" (6.0 mm). Chuck accepts wires and pins up to 1/4" (6.35 mm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47901 | Fully cannulated with reverse lock, 4-1/2" (11.5 cm) |
| KM47903 | Fully cannulated, 4" (10 cm) |

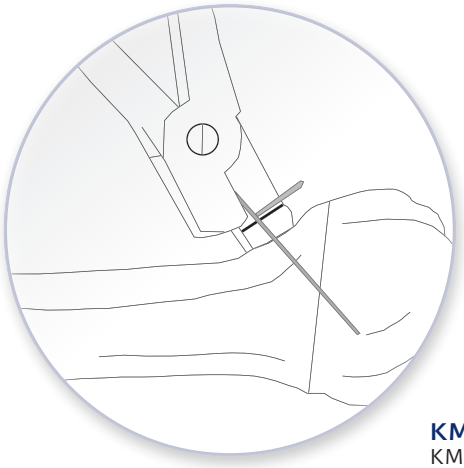
# KMEDIC® GRATLOCH™ WIRE BENDER

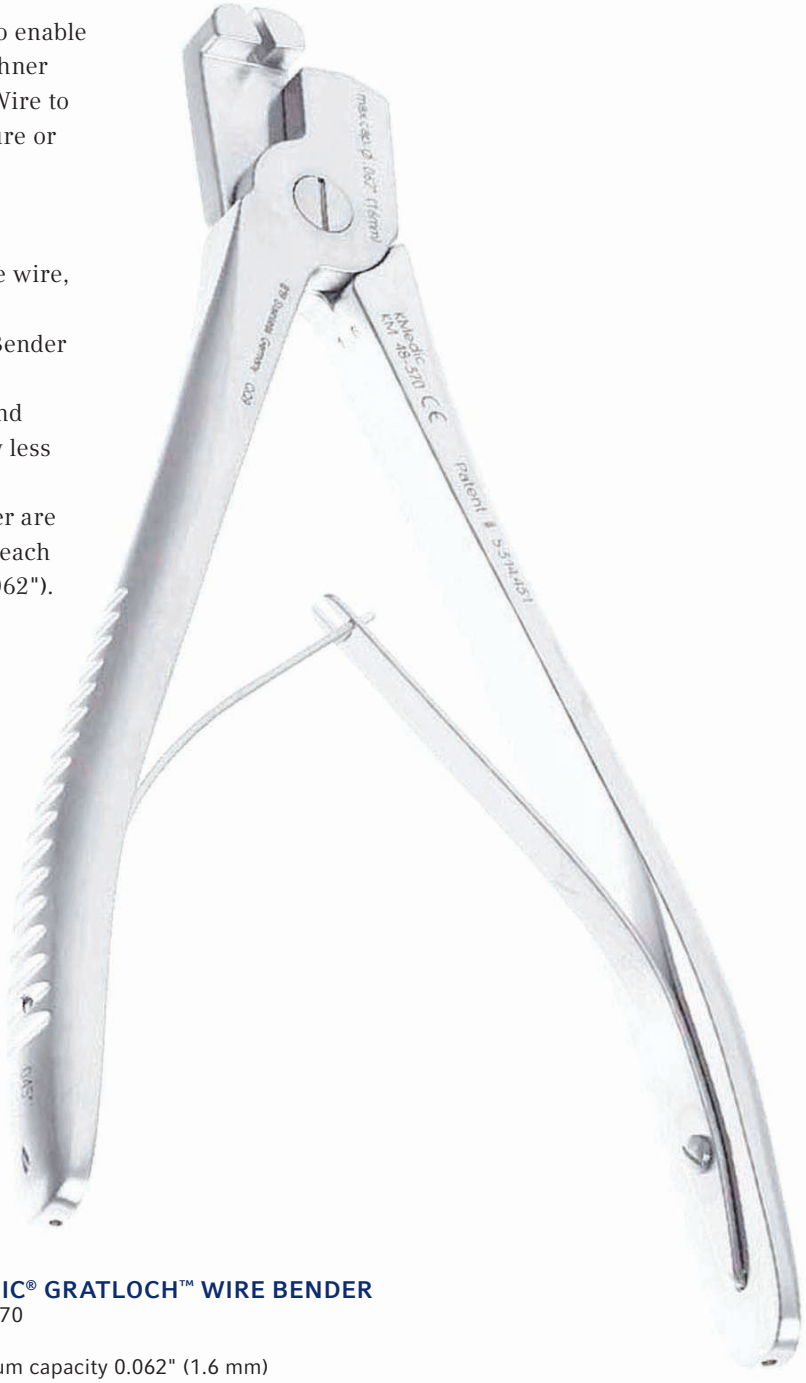
The KMedic® Gratloch™ Wire Bender is designed to enable single-handed stabilization and bending of a Kirschner wire simultaneously. The unique design allows K-Wire to be bent close to the bone without sacrificing fracture or osteotomy stability.

### TO BEND WIRE:

1. After the insertion of K-Wire in the bone, cut the wire, leaving a piece of 1/2" to 3/4" in length.
2. Insert the K-Wire into angled slot of Gratloch™ Bender as close to the bone as possible.
3. Press handles to bend wire (0.062" wire will bend 90 degrees; smaller diameters will bend slightly less than 90 degrees).
4. Additional features of the Gratloch™ Wire Bender are two angled cannulations at the proximal end of each handle for flush bending of wire (0.045" and 0.062").

KMedic® Gratloch™ Wire Bender Detail





**KMEDIC® GRATLOCH™ WIRE BENDER**
KM48370
7-1/2"
Maximum capacity 0.062" (1.6 mm)
Special hardened, wear-resistant
Stainless tool-grade stainless steel

# KMEDIC® WIRE AND PIN IMPLANTS

## Wire and Pin Drivers and Benders

### P.I. BURIED K-WIRE SET

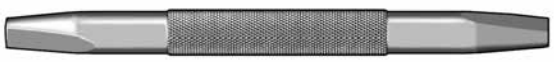
KM46573

KM46631

KM48252

| ITEM # | DESCRIPTION |
|---|---|
| KM69905 | KWire Set includes:<br>KM46572 - 2 MM DOUBLE ACTION WIRE EXTRACTION PLIERS<br>KM46573 - 4 MM DOUBLE ACTION WIRE EXTRACTION PLIERS<br>KM46574 - 6 MM DOUBLE ACTION WIRE EXTRACTION PLIERS<br><br>Recommended for heavy use. Double action and finely serrated carbide tips combine to provide a powerful grip on K-Wires and pins.<br>• 2 mm tip is ideal for removing K-Wire up to 0.62 mm from small, hard-to-reach sites.<br>• 4 mm and 6 mm jaws are ideal for grasping and pulling all sizes of K-Wires and pins.<br>• 7-1/4" (18.5 cm).<br><br>KM46631 - FLUSH WIRE CUTTER<br>This improved version of our Front and Side Cutter cuts flush to the bone like no other wire cutter. This is a big advantage in buried wire procedures.<br><br>Front and side cutting with carbide inserts, double action, maximum capacity 0.059" (1.5 mm), 6-3/4" (17 cm).<br><br>KM48252 - PLUG CUTTER<br>When removing K-Wire, use the Plug Cutter to extract a tiny cylinder of bone around the tip of the wire.<br><br>3 mm I.D., 5 mm O.D., length with obturator 4-1/2" (11.5 cm). |

### WIRE AND PIN BENDER



KM48372

Aids in bending pins and wires.

| ITEM # | DESCRIPTION |
|---|---|
| KM48372 | Accepts wires and pins up to 1/8" (3.2 mm), overall length 5-7/8" (15 cm) |

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Wire and Pin Drivers and Benders

### CROWN FIXATOR

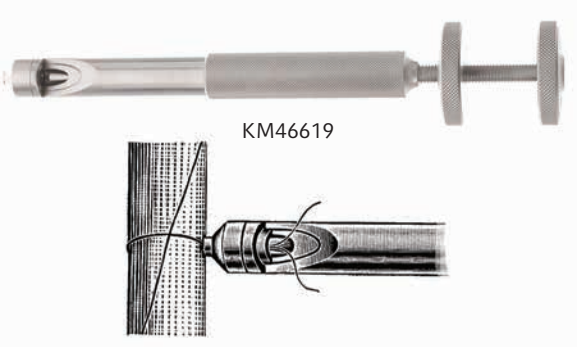
Helpful for fixating a fracture particle with K-Wire. Cannulation accepts wires up to 2.0 mm.

| ITEM # | DESCRIPTION |
|---|---|
| KM49910 | Cannulated, 6-1/2" (6.5 cm) |

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Wire Twisters

### LOUTIE WIRE TIGHTENER



KM46619

| ITEM # | DESCRIPTION |
|---|---|
| KM46619 | Maximum capacity 1.5 mm or 17 gauge cerclage wire, 8-1/2" (21.5 cm) |

### WIRE TWISTING FORCEPS

KM48322

KM48320 KM48324

Carbide inserts.

| ITEM # | DESCRIPTION |
|---|---|
| KM48320 | 6" (15 cm), TC |
| KM48322 | 4 mm tip, 8" (21 cm), TC |
| KM48324 | 6 mm tip, 7-1/4" (19 cm), TC |

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Wire Twisters

### WIRE PULLING FORCEPS

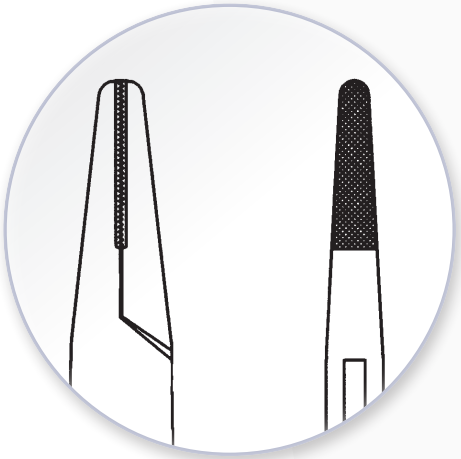
Facilitates holding and pulling of pins and wires.

| ITEM # | DESCRIPTION |
|---|---|
| KM46637 | Maximum capacity 1 mm, 6-1/2" (17 cm) |

# KMEDIC® CORWIN WIRE TWISTER

## HOW TO USE THE KMEDIC® CORWIN WIRE TWISTER:

1. Wrap wire around bone and position ends next to each other.
2. Grasp both ends of wire with jaws.
3. Engage the ratchet to enforce solid clamping.
4. Stabilize wiring site.
5. Pull back on center ring repeatedly until wire has reached desired tension.
6. Disengage ratchet.



Saves time by semi-automatically twisting soft wire.

**KMEDIC® CORWIN WIRE TWISTER**
KM46582
6-1/4" (16 cm) with carbide inserts
Maximum capacity 0.8 mm or 21 gauge cerclage wire

# KMEDIC® P.I. WIRE TWISTER AND TIGHTENER

**FOLLOW THESE EASY STEPS TO TWIST AND TIGHTEN CERCLAGE WIRE:**

1. Position wire around bone. Bend the ends of the wire slightly upwards.
2. Feed both twisted wire ends through the tongue and groove jaw and push out and up through the jaw fenestration.
3. Engage the ratchet. This will lock the wire in place. Turn the entire instrument, tightening the wire around the bone.

*For more information please refer to the Instruction For Use.*

**KMEDIC® P.I. WIRE TWISTER AND TIGHTENER**
KM69846
6-1/4" (16 cm)

# KMEDIC® JET WIRE TWISTER

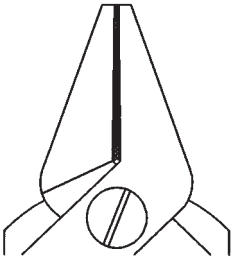
The KMedic® Jet Wire Twister is designed to provide fast, smooth and even twisting of soft wire, saving time in the OR. Suitable for the entire range of cerclage wire.

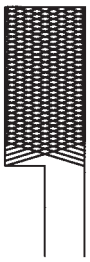
### HOW TO USE THE KMEDIC® JET WIRE TWISTER:

1. Wrap wire around bone and position ends next to each other.
2. Grasp both ends of wire with jaw.
3. Engage the ratchet to enforce solid clamping.
4. Stabilize wiring site.
5. Pull back on t-handle repeatedly until wire has reached desired tension.
6. Disengage ratchet.

Note: Jaws can be customized. Please contact us for details.

*For more information please refer to the Instruction For Use.*





**KMEDIC® JET WIRE TWISTER**
KM49810
11" (28 cm)
10 mm tip

# ABOUT KMEDIC® WIRE AND PIN CUTTERS

Teleflex® can meet all of your wire and pin cutting requirements with our complete line of KMedic® Stainless Steel Cutting Instruments.

### MADE FROM STAINLESS STEEL

All of our wire cutters are engineered to meet the demanding needs of cutting rods, pins, cables and wires in the Operating Room. Jaws are made from the toughest specially-tempered tool steel or have tungsten carbide inserts.

### MORE CUTTING POWER

Cutters designed with double action give you more cutting power and help absorb the shock of wire cutting. There is better control and less fatigue for the surgeon.

### MOST EXTENSIVE SELECTION

We offer more jaw and handle styles than any other instrument company.

### NOTE ON CARBIDE INSTRUMENTS

Instruments with carbide inserts can be replaced, however, welded carbide jaws cannot be replaced.

### TO ACHIEVE THE BEST RESULTS WHEN CUTTING WIRES AND PINS, FOLLOW THESE SIMPLE STEPS:

- Choose the appropriate cutter for the wire diameter you want to cut
- Do not exceed the maximum capacity marked on each cutter
- Cut wire in the middle of the jaw–not on the tip or in the corner
- Keep the jaw at right angles to the piece being cut. Do not twist or turn cutter

### IMPORTANT NOTE ON MAXIMUM CAPACITIES

All maximum capacities noted in this catalog are based on tests using standard strength implant material. Cutting material which exceeds our recommended maximum capacities may damage or shorten the life of cutting edges and voids the instrument warranty. Please check the size of the material and the maximum capacity of the instrument before using.

*For more information, please refer to the Instructions For Use.*

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Wire Cutters

### DELICATE WIRE CUTTER

KM46622

Delicate side-cutting jaws with carbide inserts. Especially useful for pediatric, foot and hand surgery.

| ITEM # | DESCRIPTION |
|---|---|
| KM46622 | Side cutting with carbide inserts, maximum capacity 0.028" (0.7 mm), 4-7/8" (12.5 cm) |

### PILLING® STAINLESS STEEL WIRE CUTTING FORCEPS

142550

| ITEM # | DESCRIPTION |
|---|---|
| 142550 | 6-7/8" (17.5 cm) |

### PILLING® WIRE CUTTERS

142519

142520

| ITEM # | DESCRIPTION |
|---|---|
| 142519 | Single action, 7-7/8" (20 cm), TC |
| 142520 | Angled jaw, double action, 8-1/2" (21.5 cm), TC |

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Wire Cutters

### SIDE CUTTER

KM46621

| ITEM # | DESCRIPTION |
|---|---|
| KM46621 | Side cutting, welded carbide jaws, maximum capacity 0.062" (1.6 mm), 7-1/4" (18.5 cm) |

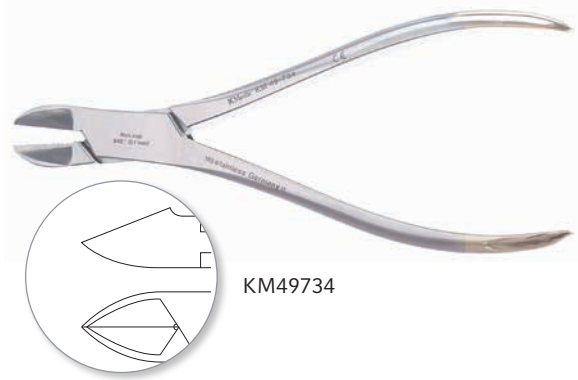
### KMEDIC® SIDE CUTTER

KM49736

Welded carbide jaws.

| ITEM # | DESCRIPTION |
|---|---|
| KM49736 | Maximum capacity 3/32" (2.4 mm), 9" (23 cm) |

### K-WIRE SIDE CUTTER



KM49734

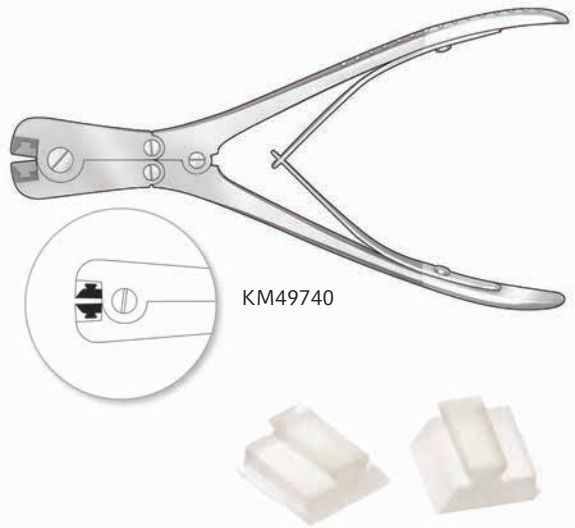
Welded hardened jaws.

| ITEM # | DESCRIPTION |
|---|---|
| KM49734 | Maximum capacity 0.045" (1.1 mm), 6" (15 cm) |

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Wire Cutters

### KMEDIC® WIRE CUTTER WITH SAFETY INSERTS




Combines maximum leverage and optimum safety. The KMedic® Wire Cutter with Safety Inserts can help prevent the potentially dangerous occurrence of flying K-Wire pieces in the OR. This instrument is designed to hold the cut piece of wire in its silicon inserts. After cutting, the remnant wire can be safely disposed of, thus preventing cut pieces from falling into the wound site or flying into the air. The silicon inserts are autoclavable and long-lasting. And as inserts are not glued into the jaws, replacement is fast and easy. Simply insert the new ones by pressing them into place. Inserts do not fall out or move under normal circumstances. Front and side cutting, double action.

| ITEM # | DESCRIPTION |
|---|---|
| KM49740 | Maximum capacity 0.062" (1.6 mm), 6-7/8" (17.5 cm) |
| KM49740P | Set of replacement silicon inserts |

### DOUBLE ACTION WIRE CUTTERS

KM46623

Narrow jaw makes this cutter a favorite with hand and foot surgeons.

| ITEM # | DESCRIPTION |
|---|---|
| KM46623 | Angled, side cutting with carbide inserts, maximum capacity 0.062" (1.6 mm), 6-5/8" (17 cm) |
| KM46624 | Angled, side cutting with carbide inserts, maximum capacity 3/32" (2.4 mm), 8-1/2" (21.5 cm) |

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Wire Cutters

### FRONT AND SIDE WIRE CUTTER

KM46625

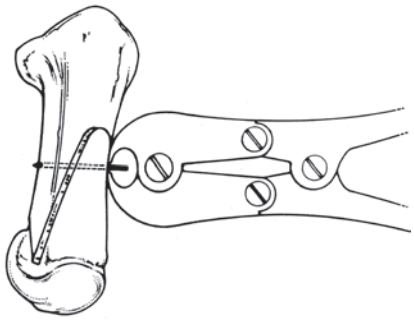
| ITEM # | DESCRIPTION |
|---|---|
| KM46625 | Front and side cutting with carbide inserts, double action, maximum capacity 0.062" (1.6 mm), 6-3/4" (17 cm) |

### FLUSH WIRE CUTTER

KM46631

This improved version of our Front and Side Cutter cuts flush to the bone like no other wire cutter. This is a big advantage in buried wire procedures.

| ITEM # | DESCRIPTION |
|---|---|
| KM46631 | Front and side cutting with carbide inserts, double action, maximum capacity 0.059" (1.5 mm), 6-3/4" (17 cm) |



# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

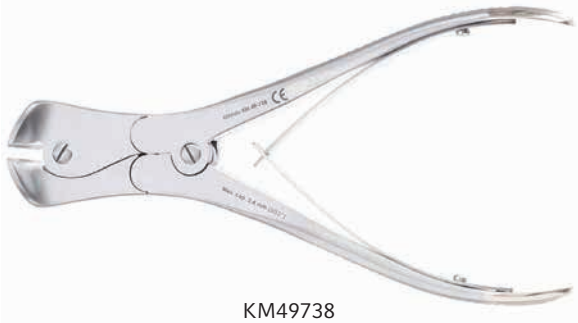
## Wire Cutters

### K-WIRE END CUTTER

KM49735

| ITEM # | DESCRIPTION |
|---|---|
| KM49735 | Maximum capacity 0.045" (1.1 mm), 5-1/2" (14 cm) |

### KMEDIC® END CUTTER



KM49738

Welded carbide jaws.

| ITEM # | DESCRIPTION |
|---|---|
| KM49738 | Maximum capacity 3/32" (2.4 mm), 8-1/2" (21.5 cm) |

## Pin Cutters

### CANNULATED PIN CUTTER

KM46647

Cannulation allows you to slide the cutter over the inserted wire. The piece cut off will be held safely inside the channel.

| ITEM # | DESCRIPTION |
|---|---|
| KM46647 | End cutting, maximum capacity 0.062 (1.6 mm), 7-1/4" (18.5 cm) |

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Pin Cutters

### DIAMOND PIN CUTTER

KM46651

Disassembles easily for cleaning.

| ITEM # | DESCRIPTION |
|---|---|
| KM46651 | End cutting, maximum capacity 5/64" (2 mm), 6-3/8" (16 cm) |

### END CUTTER

KM46649

| ITEM # | DESCRIPTION |
|---|---|
| KM46649 | End cutting, welded carbide jaws, maximum capacity 0.062" (1.6 mm), 5-3/4" (14.5 cm) |

### DOUBLE ACTION PIN CUTTER

KM49800

Double action handles give more power to cut pins up to 1/8" (3.2 mm). Side cutting.

| ITEM # | DESCRIPTION |
|---|---|
| KM49800 | Maximum capacity 1/8" (3.2 mm), 9-1/2" (24 cm) |

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Pin Cutters

### SIDE PIN CUTTER

KM46629

Heavy duty cutter for rods up to 4 mm and heavy Steinmann pins. Slightly angled jaws house long-lasting special carbide inserts for cutting hard titanium and stainless steel rods.

| ITEM # | DESCRIPTION |
|---|---|
| KM46629 | Side cutting with carbide inserts. Maximum capacity 5/32" (4 mm), 15" (38 cm) |

### SMALL PIN CUTTER

KM46632

| ITEM # | DESCRIPTION |
|---|---|
| KM46632 | Maximum capacity 1/8" (3.2 mm), 10-1/4" (26 cm) |

### MEDIUM PIN CUTTER

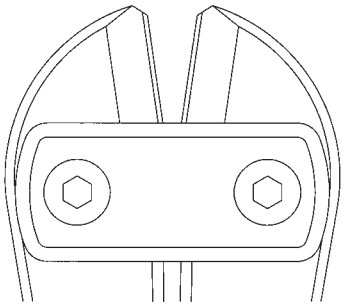
KM46633

Heavy duty cutters with replaceable jaws.

| ITEM # | DESCRIPTION |
|---|---|
| KM46633 | Maximum capacity 3/16" (4.7 mm), 14-3/8" (36.5 cm) |

# KMEDIC® LARGE PIN CUTTER

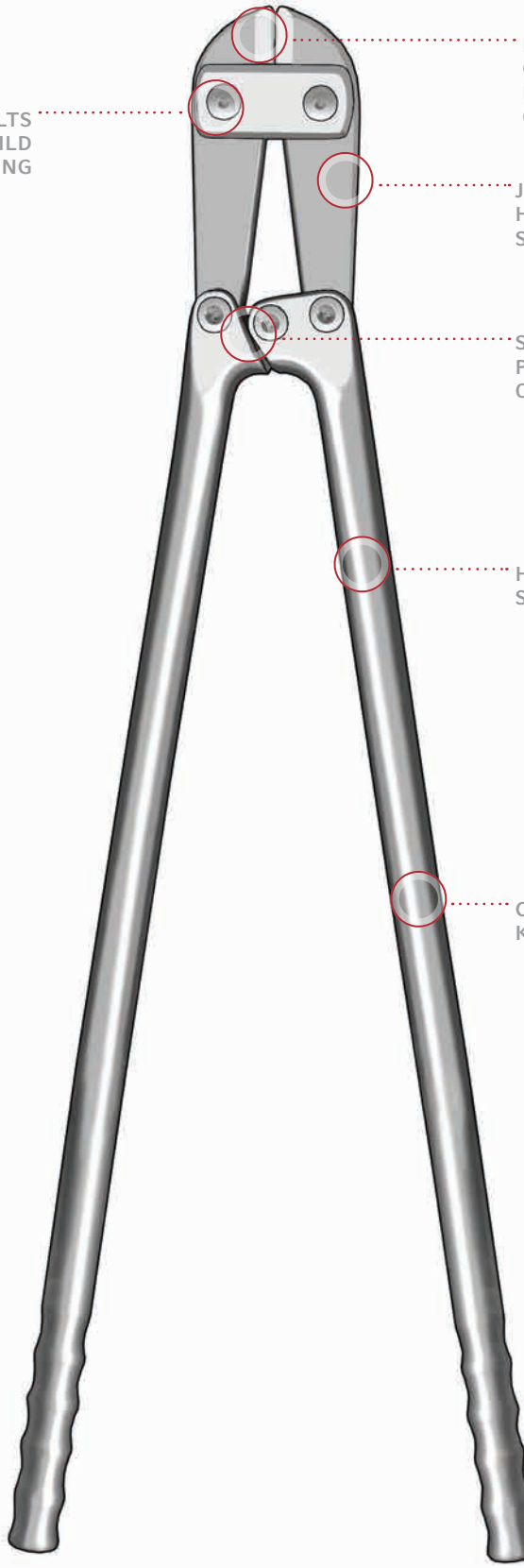
## Only available from Teleflex®



**PIN CUTTER (LARGE)**
KM46626
22-5/8" (57.5 cm)
Maximum capacity 1/4" (6.3 mm)

Precisely ground jaws are made from the hardest stainless steel available. This redesigned cutter will cut harder spinal rods for a longer period of time.

IMPORTANT: This large cutter is not designed to be used inside the patient's body.



# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Pin Cutters

### PLATE CUTTING FORCEPS

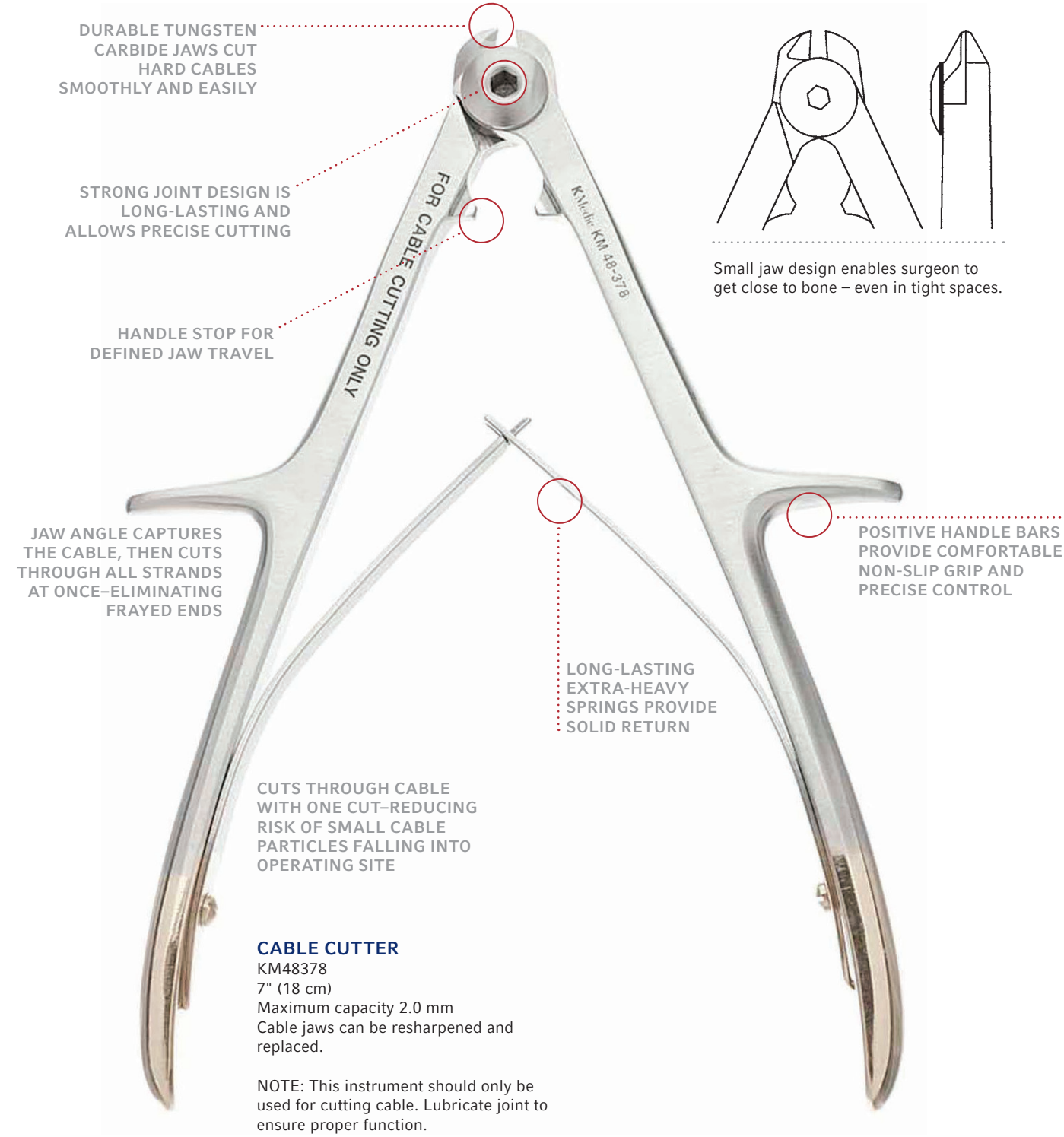
KM47932

For cutting stainless steel mini plates up to 1 mm.

| ITEM # | DESCRIPTION |
|---|---|
| KM47932 | Straight, 9-1/4" (24 cm) |

# KMEDIC® CABLE CUTTER

## Cuts cleanly through cables without fraying






Small jaw design enables surgeon to get close to bone – even in tight spaces.

### CABLE CUTTER

KM48378
7" (18 cm)
Maximum capacity 2.0 mm
Cable jaws can be resharpened and replaced.

NOTE: This instrument should only be used for cutting cable. Lubricate joint to ensure proper function.

# WIRE TWISTERS AND WIRE/PIN/ROD CUTTERS

## Rod Cutters

### HAND-HELD ROD CUTTER

KM46635

All of the benefits of the table top cutter in a hand-held model. Cuts rods from 4.76 mm 3/16" to 6.35 mm (1/4"). IMPORTANT: This large cutter is not designed to be used inside the patient's body.

| ITEM # | DESCRIPTION |
|---|---|
| KM46635 | Stainless steel with silicone handle, 27" (68.5 cm) |

# TABLE TOP ROD CUTTER

## Provides an easy and safe way to cut spinal rods.

**KMEDIC® TABLE TOP ROD CUTTER**
KM46628
27-1/2" (70 cm)
Cuts rods from 4.76 mm (3/16") to 6.35 mm (1/4")

Powerful double-action jaws enable surgeons to cut 1/4" rods with one hand. Shearing action cuts cleanly no raised burrs or sharp jagged edges. Unique cutting process can help prevent the potentially dangerous occurrence of flying rod pieces in the OR.

Ergonomically-designed Ortho-Grip™ Silicone Handle provides a comfortable, slip-proof grip. Base and handle are perfectly balanced to ensure stability and prevent lifting. Simple, efficient design has no folding levers, loose parts or bearings that can breakdown. Cuts rods from 4.76 mm (3/16") to 6.35 mm (1/4").

### HOW TO USE THE KMEDIC® TABLE TOP ROD CUTTER:

1. Lift handle up.
2. Insert rod in proper diameter hole.
3. Press handle down.

*Ortho-Grip is a trademark or registered trademark of Teleflex® Incorporated or its affiliates.*

# PLIERS

## Pliers

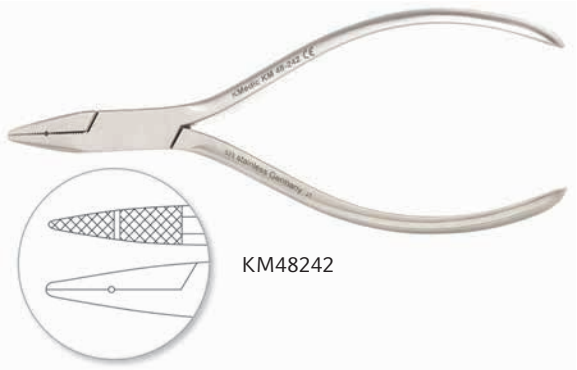
### NARROW NOSE WIRE PULLING FORCEPS

KM48253

Extra heavy jaws for pulling K-Wires and Steinmann Pins. An economical alternative to double action pliers. Jaw tapers to 3 mm.

| ITEM # | DESCRIPTION |
|---|---|
| KM48253 | 3 mm tip, 7-1/2" (19 cm) |

### NEEDLE NOSE PLIERS



KM48242

Delicate needle nose jaws specifically designed to handle cerclage wire. Jaw tapers to 1 mm.

| ITEM # | DESCRIPTION |
|---|---|
| KM48242 | Delicate, 5-3/8" (13.5 cm) |

# PLIERS

## Pliers

### NEEDLE NOSE PLIERS

Jaw tapers to 2 mm, making it easier to get close to the bone to remove K-Wires.

| ITEM # | DESCRIPTION |
|---|---|
| KM48245 | 5-3/8" (13.5 cm) |

### LONG JAW NEEDLE NOSE PLIERS

Long delicate jaws are 2 mm at the tip. Perfect for pulling K-Wires, especially in hard-to-reach sites.

| ITEM # | DESCRIPTION |
|---|---|
| KM48250 | Parallel grooved 2" (50 mm) long jaws, 1.5 mm tip, 7" (18 cm) |

# PLIERS

## Pliers

### FLAT NOSE PLIERS

KM48248

Delicate jaws taper to 2 mm. Made to twist and bend cerclage wire.

| ITEM # | DESCRIPTION |
|---|---|
| KM48248 | Delicate, 2 mm tip, 6" (15 cm) |

### FLAT NOSE PLIERS

KM48243

Combination plier and cutter. Cuts all sizes (0.2 mm to 1.5 mm) of cerclage wire. Jaws taper to 3.5 mm.

| ITEM # | DESCRIPTION |
|---|---|
| KM48243 | 6-1/2" (16.5 cm) |

# PLIERS

## Pliers

### FLAT NOSE PLIERS

KM48246

For wire manipulation.

| ITEM # | DESCRIPTION |
|---|---|
| KM48246 | Broad, 4 mm tip, 5-3/8" (13.5 cm) |

### PIN PULLING PLIERS

KM46578

Tungsten carbide inserts and grooved opposing jaw design grips small pins securely. Small size is well suited for hand procedures. Jaws are 3 mm at tip.

| ITEM # | DESCRIPTION |
|---|---|
| KM46578 | 5-1/2" (14 cm), TC |

### SCREW REMOVAL FORCEPS

KM49920

Useful for removing 3.0 mm to 4.5 mm screws.

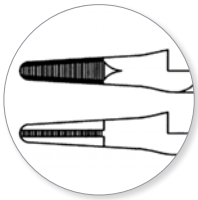
| ITEM # | DESCRIPTION |
|---|---|
| KM49920 | 7" (18 cm), with speed lock, TC |

# PLIERS

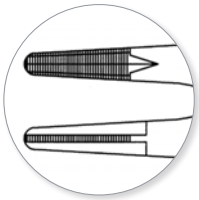
## Pliers

### K-WIRE EXTRACTION PLIERS

KM48257



KM48257



KM48258

With screw lock.

| ITEM # | DESCRIPTION |
|---|---|
| KM48257 | 3 mm tip, 5" (13 cm) |
| KM48258 | 4 mm tip, 7" (18 cm) |

### WIRE BENDING PLIERS

KM48269

| ITEM # | DESCRIPTION |
|---|---|
| KM48269 | 5-7/8" (15 cm) |

# PLIERS

## Pliers

### SLIP JOINT PLIERS

KM48262

Traditional design utility pliers with adjustable jaws. Good all-purpose plier for handling Steinmann Pins, K-Wires, screws and rods. 10 mm jaw tip.

| ITEM # | DESCRIPTION |
|---|---|
| KM48262 | Maximum opening 2" (5 cm), 8" (20.5 cm) |

### FLAT NOSE K-WIRE PLIERS

KM48256

Multi-purpose plier with flat jaws that taper to 6 mm for pulling K-Wire.

| ITEM # | DESCRIPTION |
|---|---|
| KM48254 | 6 mm tip, with side groove for cerclage wire, 6-3/4" (17 cm) |
| KM48256 | 6 mm tip, 6-3/4" (17 cm) |

### LINEMAN PLIERS

KM48259

Combination pliers and K-Wire Cutter. An economical general purpose instrument with cutting edge.

| ITEM # | DESCRIPTION |
|---|---|
| KM48259 | Side cutting, maximum capacity .062" (1.6 mm), 8-1/2" (21.5 cm) |

# PLIERS

## Pliers

### DOUBLE ACTION WIRE EXTRACTION PLIERS

KM46574

- Recommended for heavy use. Double action and finely serrated carbide tips combine to provide a powerful grip on K-Wires and pins.
- 2 mm tip is ideal for removing K-Wire up to 0.62 mm from small, hard-to-reach sites.
- 4 mm and 6 mm jaws are ideal for grasping and pulling all sizes of K-Wires and pins.
- 7-1/4" (18.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46572 | 2 mm delicate jaw, TC |
| KM46573 | 4 mm jaw, TC |
| KM46574 | 6 mm jaw, TC |

### PARALLEL PLIERS

KM48604

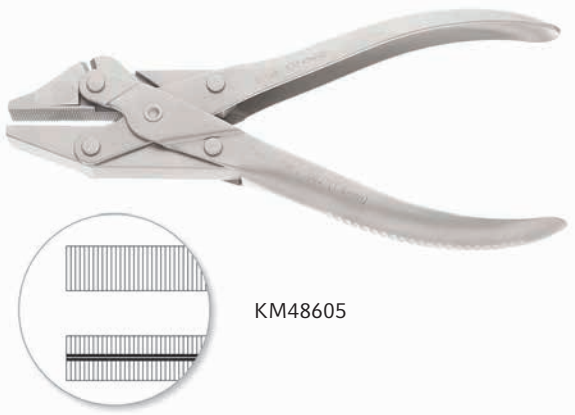
Parallel grooved 10 mm jaws provide enormous gripping power. Ideal for pin removal.

| ITEM # | DESCRIPTION |
|---|---|
| KM48604 | Maximum opening 1/2", 7-1/4" (18.5 cm) |

# PLIERS

## Pliers

### PARALLEL PLIERS WITH CUTTER



KM48605

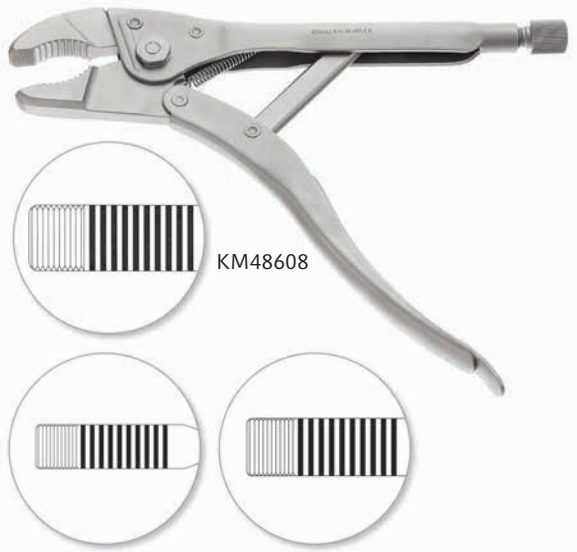
Combination pliers and wire cutter has all the benefits of our Parallel Pliers plus a cutting jaw for K-Wires up to 0.062" (1.6 mm).

| ITEM # | DESCRIPTION |
|---|---|
| KM48605 | Maximum capacity .062" (1.6 mm), 7" (18 cm) |

# PLIERS

## Locking Pliers

### HEAVY DUTY LOCKING PLIERS




With a new, reinforced, more durable jaw.

- Heavy duty jaws lock securely onto pins.
- Reinforced jaw hinge and housing are more rigid to help prevent side to side shifting.
- Made from 300 and 400 series surgical grade stainless steel.
- Will not chip or contaminate other instrumentation.
- Adjustment screw for easy control of jaw opening.
- One-handed, quick release self-locking lever.
- Available in three sizes.

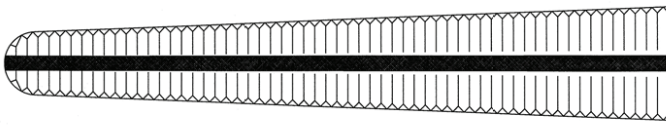
| ITEM # | DESCRIPTION |
|---|---|
| KM48600 | Small, 7 mm wide itp, maximum opening 1" (25 mm), 6-3/4" (17 cm) |
| KM48602 | Medium, 9 mm wide tip, maximum opening 1" (25 mm), 8" (20.5 cm) |
| KM48608 | Large, 13 mm wide tip, maximum opening 1-1/2" (38 mm), 10" (25.5 cm) |

### NEEDLE NOSE LOCKING PLIERS

With a new reinforced, more durable jaw.

- New 12" model has an impressive, powerful jaw. The body is made from 2.5 mm stainless steel. This plier will hold up better in the OR than any other needle nose plier - we guarantee it!
- Both pliers have a more durable, reinforced jaw hinge and housing which helps keep the ends in alignment, especially when the plier is twisted.
- Other features: one tapered "V" grooved jaw which locks securely onto pins; adjustment screw; and one handed, quick release self-locking lever.
- KMedic® Pliers are made from 300 and 400 series surgical grade stainless steel. Unlike "hardware store" quality, they will not chip or contaminate other instrumentation.

| ITEM # | DESCRIPTION |
|---|---|
| KM48606 | 9-1/2" (24 cm) |
| KM48610 | Large, 12" (30.5 cm) |



KM48610

# PLIERS

## Locking Pliers

### LOCKING PLIERS WITH SLAPHAMMERS

KM48616

KM48620

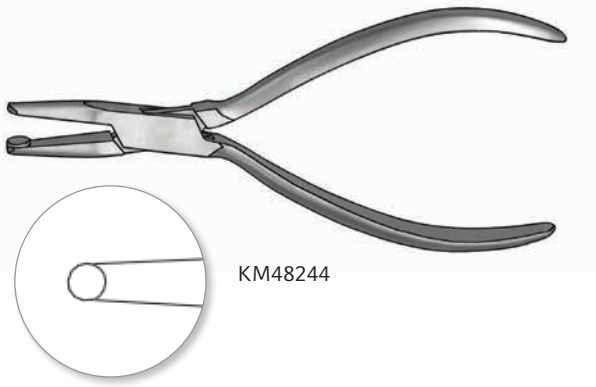
A powerful combination of locked gripping strength and controlled hammer action.

- These stainless steel heavy duty locking pliers with slaphammers enable surgeons to more easily extract prostheses, intramedullary nails and hip fracture plates.
- The large pliers offer maximum versatility - slaphammers can be attached in three places; on the end or on either side. Small and medium pliers have end attachments only.
- If additional force is required, a mallet may be used on the hammer plate.

| ITEM # | DESCRIPTION |
|---|---|
| KM48614 | Medium, end attachment only, 8" (20.5 cm) |
| KM48616 | Large, end and side attachments, 10" (25.5 cm) |
| KM48620 | Needle Nose Locking Pliers, medium, end attachment only, 9-1/2" (24 cm) |
| KM48622 | Needle Nose Locking Pliers, large, end and side attachments, 12" (30.5 cm) |

## Plate Bending Pliers

### MINI PLATE BENDING PLIERS



KM48244

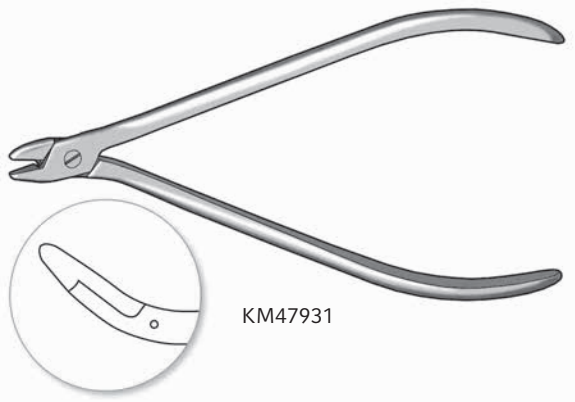
For 1.5 mm and 2.0 mm plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM48244 | 5-1/8" (13 cm) |

# PLIERS

## Plate Bending Pliers

### BENDING PLIERS



KM47931

For 1.5 mm and 2.0 mm plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47931 | 5-3/4" (14.5 cm) |

### PLATE BENDING PLIERS

KM47927

For reconstruction plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47927 | 9-3/8" (23.5 cm) |

### PLATE BENDING PLIERS

KM47928

Includes two anvils for narrow and broad plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47928 | 10" (26 cm) |

# PLIERS

## Plate Bending Pliers

### SMALL PLATE BENDING PLIERS

KM47925

For 2.7 mm and 3.5 mm plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47925 | 7-5/8" (19.5 cm) |

### PLATE BENDING PRESS

KM47929

| ITEM # | DESCRIPTION |
|---|---|
| KM47929 | 13-3/4" (35 cm) |

# PLIERS

## Socket Wrenches

### COMBINATION WRENCH

KM45412

| ITEM # | DESCRIPTION |
|---|---|
| KM45412 | 11 mm, 5-1/2" (14 cm) |

### SOCKET WRENCH

KM47912

| ITEM # | DESCRIPTION |
|---|---|
| KM45410 | 11 mm, 7-3/4" (20 cm) |
| KM47912 | Chrome vanadium, 11 mm, 6-3/4" (17 cm) |

### WRENCH

KM47914

For tightening 8 mm nuts.

| ITEM # | DESCRIPTION |
|---|---|
| KM47914 | 5-7/8" (15 cm) |

# WIRE GUIDES AND TRACTION BOWS

## DEMEL WIRE GUIDES

KM48382

| ITEM # | DESCRIPTION |
|---|---|
| KM48380 | 30 mm diameter, 10-1/2" (26.5 cm) |
| KM48382 | 47 mm diameter, 11-1/2" (29 cm) |
| KM48384 | 57 mm diameter, 12-1/2" (32 cm) |

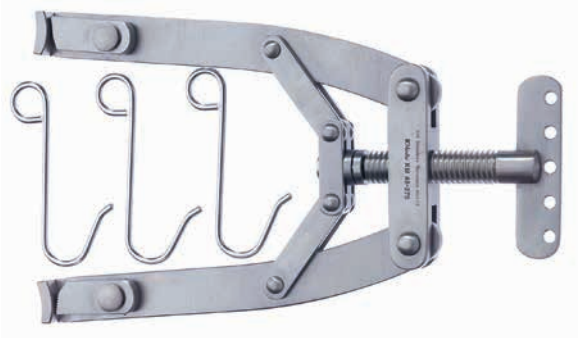
## WIRE AND PIN TRACTOR (BOEHLER)

KM48328

Each Wire and Pin Tractor comes with one single trocar round end Steinmann Pin as listed.

| ITEM # | SIZE | INSIDE LENGTH | INSIDE WIDTH | PIN INCLUDED | PIN SIZE AND DIAMETER |
|---|---|---|---|---|---|
| KM48326 | Small | 90 mm | 75 mm | KM71432 | 5" 2.4 mm |
| KM48328 | Medium | 160 mm | 90 mm | KM71434 | 7" 3.2 mm |
| KM48330 | Large | 210 mm | 150 mm | KM71525 | 9" 4.0 mm |

## KIRSCHNER BOWS



KM48270

Each Kirschner Bow comes with three hooks.

| ITEM # | DESCRIPTION |
|---|---|
| KM48270 | Small, 5-3/4" (14.5 cm) |
| KM48272 | Large, 7-1/2" (19 cm) |
| KM48274 | Extra large, 9-5/8" (24.5 cm) |

# LIGATURE CARRIERS AND WIRE PASSERS

## WIRE PASSERS (CANNULATED)

KM48386

Cannulation allows for easy feeding of wire around the bone.

| ITEM # | DESCRIPTION |
|---|---|
| KM48386 | 45 mm diameter, 7" (18 cm) |
| KM48388 | 70 mm diameter, 9-1/2" (24 cm) |

## SUTURE PASSERS

KM46917

KM46918

Used to pass sutures in shoulder surgery. Curved, 9-1/4" (23.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46917 | With crochet hook* |
| KM46918 | With suture hole |

*Autoclavable to 290°F (143°C)*

# DRILLS, DRILL BITS AND GUIDES

## Drills — Hand Drills

### BUNNELL DRILL

KM48392

Accepts wires and pins up to 4.0 mm (5/32"). Store chuck key in handle. Body is made of aluminum.

| ITEM # | DESCRIPTION |
|---|---|
| KM48392 | Cannulated, 3-jaw stainless Jacobs chuck, includes key chuck, 5-3/4" (14.5 cm) |
| KM48392P | Key only, stored in drill handle |

### MARTIN DRILL

KM48415

Stainless drill, anodized aluminum handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM48415 | 10-1/2" (26.5 cm) |

### MOORE DRILL AND BIT SET

KM48420

Drill is chrome plated with stainless handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM48423 | Moore Drill and complete set of stainless drill bits |
| KM48420 | Drill only, 11" (28 cm) |
| KM48421 | Drill bit, 70 mm length, 3.2 mm diameter |
| KM48422 | Drill bit, 90 mm length, 3.2 mm diameter |

# DRILLS, DRILL BITS AND GUIDES

## Drills — Hand Drills

### RALKS DRILL

KM48390

Includes key chuck. Accepts wires and pins up to 6.35 mm (1/4"). Offset handle. Body is made of aluminum.

| ITEM # | DESCRIPTION |
|---|---|
| KM48390 | Cannulated, 3-jaw stainless chuck, 5-3/4" (14.5 cm) |
| KM48390P | Key only |

### STILLE PATTERN DRILL, BITS AND BURRS

KM48425

| ITEM # | DESCRIPTION |
|---|---|
| KM48438 | Drill and complete set of stainless drill bits and burrs |
| KM48425 | Drill only, with quick coupling, chrome plated, stainless handle, 8" (20.5 cm) |
| KM48426 | Drill bit, 2.5 mm |
| KM48427 | Drill bit, 3.0 mm |
| KM48428 | Drill bit, 3.5 mm |
| KM48429 | Drill bit, 4.0 mm |
| KM48431 | Round burr, 5 mm |
| KM48433 | Round burr, 12 mm |
| KM48434 | Round burr, 16 mm |
| KM48435 | Drill bit, 1.0 mm |
| KM48436 | Drill bit, 1.5 mm |

KM48426

KM48427

KM48428

KM48429

KM48431

KM48433

KM48434

KM48435

KM48436

# DRILLS, DRILL BITS AND GUIDES

## Drills — Hand Drills

### STILLE-SHERMAN DRILL

KM48465

KM48466

KM48467

KM48468

| ITEM # | DESCRIPTION |
|---|---|
| KM48469 | Drill and complete set of stainless drill bits and burrs |
| KM48465 | Drill only, with quick coupling, chrome plated, stainless handle, 9-1/2" (24 cm) |
| KM48466 | Drill bit, 2.5 mm |
| KM48467 | Drill bit, 3.0 mm |
| KM48468 | Drill bit, 3.5 mm |

### UNIVERSAL DRILL

KM48394

This hand drill has a two-to-one gear ratio to ensure accurate drilling. The comfortable pistol grip offset handle gives the user perfect control. The chuck shaft and the entire length of the drill are cannulated. The cannulated shaft accepts Steinmann Pins, K-Wire, long shank drills and screw driver bits up to 4 mm (5/32").

| ITEM # | DESCRIPTION |
|---|---|
| KM48394 | Cannulated, stainless chuck, includes key chuck. Chuck accepts wires and pins up to 6.35 mm (1/4"). Body is made of aluminum, 10" (25.5 cm) |

# DRILLS, DRILL BITS AND GUIDES

## Drills — Hand Drills

### KIRSCHNER DRILL SET

KM48450

KM48451

| ITEM # | DESCRIPTION |
|---|---|
| KM48450 | Telescopic drill includes Drill Guide (KM48451), Coupling Bow (KM48442) and Chuck and Key (KM48443). Chrome plated gears, stainless handle. 15" (38 cm) |
| KM48451 | Drill Guide |
| KM48442 | Coupling Bow |
| KM48443 | Chuck and Key |

KM48442

KM48443

### TELESCOPIC HAND DRILL SET

KM48440

KM48441

| ITEM # | DESCRIPTION |
|---|---|
| KM48440 | Includes Drill Guide (KM48441), Coupling Bow (KM48442) and Chuck and Key (KM48443). Crome plated gears, stainless handle. 12" (30.5 cm) |
| KM48441 | Drill Guide (shown extended) |
| KM48442 | Coupling Bow |
| KM48443 | Chuck and Key |

KM48442

KM48443

# DRILLS, DRILL BITS AND GUIDES

## Drills — Hand Drills

### HUDSON DRILL AND BURRS

KM48454

KM48456

KM48457

KM48458

KM48459

KM48455

Burrs sold separately.

| ITEM # | DESCRIPTION |
|---|---|
| KM48454 | Drill only, all stainless steel with improved snap-lock chuck, 10-1/2" (26.5 cm) |
| KM48456 | Hudson Burr, 9 mm |
| KM48457 | Hudson Burr, 14 mm |
| KM48458 | Hudson Burr, 16 mm |
| KM48459 | Hudson Burr, 22 mm |
| KM48455 | Extension Piece, 3-7/8" (9.5 cm) |

# DRILLS, DRILL BITS AND GUIDES

## Drills — Hand Drills

### HUDSON DRILL BITS

KM48460

KM48461

KM48462

KM48463

For use with KM48454 Hudson Drill.

| ITEM # | DESCRIPTION |
|---|---|
| KM48460 | Cushing Drill bit, 14 mm |
| KM48461 | Drill bit, 2 mm |
| KM48462 | McKenzie Drill bit, 13 mm |
| KM48463 | D'Errico Dril bit, 16 mm |

# DRILLS, DRILL BITS AND GUIDES

## Drills — Quick Coupling Handles

### MINI QUICK COUPLING HANDLE

KM47902

For holding quick coupling drills, countersinks, taps and screwdrivers.

| ITEM # | DESCRIPTION |
|---|---|
| KM47902 | For mini screw set, 4-1/8" (10.5 cm) |

### SMALL QUICK COUPLING T-HANDLE

KM47960

For holding quick coupling drills, countersinks, taps and screwdrivers.

| ITEM # | DESCRIPTION |
|---|---|
| KM47960 | For small and large screw sets, 3-1/2" (8.5 cm) |

### SMALL QUICK COUPLING HANDLE

KM47904

For holding quick coupling drills, countersinks, taps and screwdrivers.

| ITEM # | DESCRIPTION |
|---|---|
| KM47904 | 4-1/2" (11.5 cm) |
| KM47908 | Rounded phenolic handle, 4-3/8" (11 cm) |

*Autoclavable to 290°F (143°C)*

## Drills — Adapters

### ADAPTER (POWER DRILL)

KM45002

| ITEM # | DESCRIPTION |
|---|---|
| KM45002 | 2-1/2" (6.5 cm) |

# KMEDIC® DRILL BIT STERILIZATION CASE

The KMedic® Drill Bit Sterilization Case provides easy access and can hold up to 19 5" (127 mm) Jacobs chuck* drill bits for sterilization and storage.

- Reduce OR footprint: Lid folds back and holds the case upright
- Prevent drill bit damage: Tray lowers and holds drill bits in place when closing lid
- Prevent accidental opening: Top of case locks when closed
- Quick identification: Drill bit sizes and part numbers are clearly noted on the inside of case

### EASY TO CLEAN

- Innovative one-piece design eliminates the risk of losing drill bits
- Anodized aluminum case is lightweight, yet built to withstand abuse
- Fully autoclavable to 270°F/132°C

* Also available in Quick Couple (QC) design.

KM48100

## DRILL BIT STERILIZATION CASE

KM48100
Drill Bit Sterilization Case - 5" (127 mm)
Holds 2 each of the 5" Jacob's chuck drill bits
(1 each of size 6.0 mm):
5.5 x 4.25 x 1.75" (140 mm x 108 mm x 45 mm)

KM48137

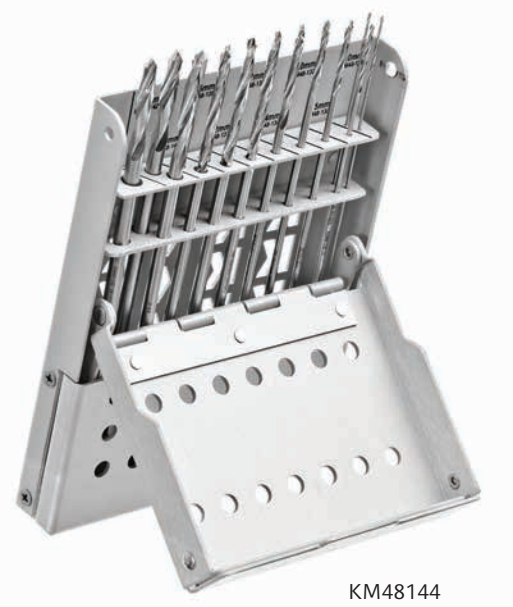
## 5" JACOB'S CHUCK DRILL BITS

| ITEM # | DESCRIPTION | FLUTE LENGTH |
|---|---|---|
| KM48-129 | 1.0 mm x 127 mm | 22.0 mm |
| KM48-130 | 1.5 mm x 127 mm | 22.0 mm |
| KM48-132 | 2.0 mm x 127 mm | 23.0 mm |
| KM48-134 | 2.4 mm x 127 mm | 22.0 mm |
| KM48-136 | 2.7 mm x 127 mm | 30.0 mm |
| KM48-137 | 3.2 mm x 127 mm | 42.0 mm |
| KM48-138 | 3.5 mm x 127 mm | 42.0 mm |
| KM48-140 | 4.0 mm x 127 mm | 35.0 mm |
| KM48-142 | 4.7 mm x 127 mm | 34.0 mm |
| KM48-143 | 6.0 mm x 127 mm | 37.0 mm |

## DRILL BIT CASE SET (FULLY LOADED)

KM48144

| QUANTITY | INCLUDES | QUANTITY | INCLUDES |
|---|---|---|---|
| 2 | 1.0 mm Drill Bit | 2 | 3.2 mm Drill Bit |
| 2 | 1.5 mm Drill Bit | 2 | 3.5 mm Drill Bit |
| 2 | 2.0 mm Drill Bit | 2 | 4.0 mm Drill Bit |
| 2 | 2.4 mm Drill Bit | 2 | 4.7 mm Drill Bit |
| 2 | 2.7 mm Drill Bit | 1 | 6.0 mm Drill Bit |



KM48144

# DRILLS, DRILL BITS AND GUIDES

## Drill Bits — Jacobs Chuck End

### DRILL BITS

KM48079

With round drill chuck end. Designed to fit any Jacobs chuck drill.

| ITEM # | DIAMETER | FLUTE LENGTH | OVERALL LENGTH |
|---|---|---|---|
| KM48070 | 1.0 mm | 25 mm | 2-1/8" (5.5 cm) |
| KM48072 | 1.1 mm | 11 mm | 1-3/4" (4.5 cm) |
| KM48071 | 1.5 mm | 30 mm | 2-3/4" (7 cm) |
| KM48073 | 2.0 mm | 38 mm | 3-3/8" (8.5 cm) |
| KM48076 | 2.5 mm | 43 mm | 3-3/4" (9.5 cm) |
| KM48077 | 2.7 mm | 32 mm | 3-3/8" (8.5 cm) |
| KM48080 | 3.2 mm | 40 mm | 5-1/8" (13 cm) |
| KM48079 | 3.2 mm | 70 mm | 7-1/8" (18 cm) |
| KM48081 | 3.5 mm | 42 mm | 3-3/4" (9.5 cm) |
| KM48082 | 3.5 mm | 50 mm | 7-1/8" (18 cm) |
| KM48085 | 4.5 mm | 55 mm | 5-1/8" (13 cm) |
| KM48086 | 6.0 mm | 70 mm Extra-Long | 7-1/8" (18 cm) |

## Drill Bits — Quick Coupling End

### DRILL BITS

KM48057

With quick coupling ends. To drill gliding and threaded holes. Designed to fit quick coupling handles KM47902, KM47904 and KM47960.

| ITEM # | DIAMETER | FLUTE LENGTH | WORKING LENGTH | OVERALL LENGTH |
|---|---|---|---|---|
| KM48051 | 1.1 mm | 20 mm | 35 mm | 2-3/8" (6 cm) |
| KM48052 | 1.5 mm | 23 mm | 60 mm | 3-3/8" (8.5 cm) |
| KM48054 | 2.0 mm | 50 mm | 75 mm | 3-7/8" (10 cm) |
| KM48057 | 2.5 mm | 50 mm | 85 mm | 4-3/8" (11 cm) |
| KM48058 | 2.7 mm | 50 mm | 75 mm | 3-7/8" (10 cm) |
| KM48061 | 3.2 mm | 50 mm | 120 mm | 5-3/4" (14.5 cm) |
| KM48060 | 3.2 mm | 50 mm | 170 mm Extra-Long | 7-5/8" (19.5 cm) |
| KM48063 | 3.5 mm | 50 mm | 85 mm | 4-3/8" (11 cm) |
| KM48050 | 3.5 mm | 50 mm | 170 mm Extra-Long | 7-5/8" (19.5 cm) |
| KM48067 | 4.5 mm | 50 mm | 120 mm | 5-3/4" (14.5 cm) |
| KM48068 | 4.5 mm | 50 mm | 170 mm Extra-Long | 7-5/8" (19.5 cm) |
| KM48069 | 6.0 mm | 60 mm | 170 mm Extra-Long | 7-5/8" (19.5 cm) |

# DRILLS, DRILL BITS AND GUIDES

## Drill Bits — Three-Fluted Drill Bits

### THREE-FLUTED DRILL BITS

KM47979

KM47981

With quick coupling ends.

| ITEM # | DIAMETER | FLUTE LENGTH | WORKING LENGTH | OVERALL LENGTH |
|---|---|---|---|---|
| KM48091 | 2.5 mm | 30 mm not calibrated | 85 mm | 4-3/8" (11 cm) |
| KM48092 | 2.5 mm | 28 mm not calibrated | 155 mm | 7-1/8" (18 cm) |
| KM47986 | 2.5 mm | 30 mm calibrated | 205 mm | 9" (23 cm) |
| KM48093 | 3.2 mm | 38 mm not calibrated | 120 mm | 5-3/4" (14.5 cm) |
| KM48094 | 3.2 mm | 38 mm not calibrated | 170 mm | 7-5/8" (19.5 cm) |
| KM47979 | 3.2 mm | 30 mm calibrated | 205 mm | 9" (23 cm) |
| KM48095 | 4.5 mm | 45 mm not calibrated | 120 mm | 5-3/4" (14.5 cm) |
| KM47981 | 4.5 mm | 58 mm not calibrated | 170 mm | 7-5/8 (19.5 cm) |

# DRILLS, DRILL BITS AND GUIDES

## Drill Bits — Countersinks

### MINI COUNTERSINK

KM47920

For mini screws 1.5/2.0 mm. Quick coupling end.

| ITEM # | DESCRIPTION |
|---|---|
| KM47920 | 1.1 mm tip, 2-1/4" (5.5 cm) |

### SMALL COUNTERSINKS

KM47922

For small screws 2.7/3.5/4.0 mm. Quick coupling end.

| ITEM # | DESCRIPTION |
|---|---|
| KM47922 | 2.0 mm tip, 2-7/8" (7 cm) |
| KM47923 | 90 degrees, 2.0 mm tip, 2-1/2" (6 cm) |

### MALLEOLAR COUNTERSINK

KM47924

For malleolar screws. Quick coupling end.

| ITEM # | DESCRIPTION |
|---|---|
| KM47924 | 3.2 mm tip, 4-1/2" (11.5 cm) |

# DRILLS, DRILL BITS AND GUIDES

## Drill Bits — Countersinks

### LARGE COUNTERSINK

KM47926

For large screws 4.5/6.5 mm. Quick coupling end.

| ITEM # | DESCRIPTION |
|---|---|
| KM47926 | 4.5 mm tip, 7-1/8" (18 cm) |

## Drill Bits — Taps

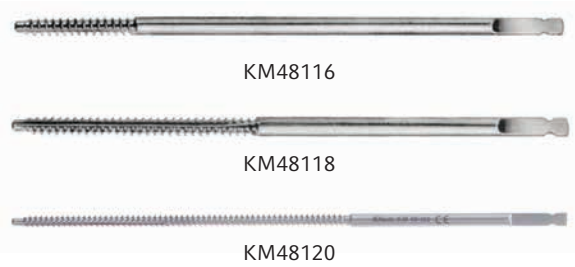
### TAPS

KM48122

With quick coupling ends, calibrated with cm graduations.

| ITEM # | DESCRIPTION |
|---|---|
| KM48104 | 3.5 mm diameter, for cortical screws, 7" |
| KM48102 | 4.5 mm diameter, for cortical screws, 7" |
| KM48122 | 6.5 mm diameter, for cancellous screws, 8" |

### TAPS



KM48116

KM48118

KM48120

With quick coupling ends, for 4.5 mm cortical and 4.5 mm malleolar (shaft) screws.

| ITEM # | DESCRIPTION |
|---|---|
| KM48116 | 5" |
| KM48118 | Long thread, 5" |
| KM48120 | Extra-long thread, 5" |

# DRILLS, DRILL BITS AND GUIDES

## Drill Bits — Taps

### TAPS

Taps: Used to prepare thread path for insertion of bone screws. With quick coupling ends.

| ITEM # | DESCRIPTION |
|---|---|
| KM48106 | 1.5 mm diameter, for cortical screws, thread pitch 0.5 mm, 2" |
| KM48108 | 2.0 mm diameter, for cortical screws, thread pitch 0.6 mm, 2-1/8" |
| KM48110 | 2.7 mm diameter, for cortical screws, thread pitch 1.0 mm, 4" |
| KM48112 | 3.5 mm diameter, fine thread, for cortical screws, thread pitch 1.25 mm, 4-3/8" |
| KM48114 | 3.5 mm diameter, coarse thread, for 3.5 and 4.0 mm cancellous screws, thread pitch 1.75 mm, 4-3/8" |

KM48106

KM48108

KM48110

KM48112

KM48114

# DRILLS, DRILL BITS AND GUIDES

## Drill Guides and Sleeves

### DRILL GUIDES

KM47977

KM47980

Drill guide ends are color coded.
Green = neutral
Gold = load

| ITEM # | DESCRIPTION |
|---|---|
| KM47977 | 2.0 mm, neutral and load end, for 2.0 mm drill bit and 2.7 mm cortical screw, 5-3/8" (13.5 cm) |
| KM48003 | 2.0 mm, neutral and load end, for 1.5 mm drill bit and 2.0 mm cortical screw, 4-3/8" (11 cm) |
| KM47978 | 2.5 mm, neutral and load end, for 2.5 mm drill bit and 3.5 mm cortical screw, 6-1/8" (15.5 cm) |
| KM47980 | 3.2 mm, neutral and load end, for 3.2 mm malleolar (shaft) drill bit and 4.5 mm cortical screw, 6-1/2" (16.5 cm) |

### UNIVERSAL DRILL GUIDE

KM47985

Can be used as neutral/load drill guide.

| ITEM # | DESCRIPTION |
|---|---|
| KM48004 | For 3.5 mm cortical screws and 3.5 mm malleolar (shaft) screws and 2.5 mm drill bits, 5-1/2" (14 cm) |
| KM47985 | For 4.5 mm cortical screws and 4.5 mm malleolar (shaft) screws and 3.2 mm drill bits, 7-1/8" (18 cm) |

# DRILLS, DRILL BITS AND GUIDES

## Drill Guides and Sleeves

### PARALLEL DRILL GUIDE AND DRILL SLEEVE

KM47970

| ITEM # | DESCRIPTION |
|---|---|
| KM47970 | 2 mm tip, three holes and one hole for 2.0 mm drill bits, 4-1/2" (11.5 cm) |

### DOUBLE DRILL SLEEVES

KM47972

| ITEM # | DESCRIPTION |
|---|---|
| KM47968 | For 1.1 mm and 1.5 mm drill bits and tap for 1.5 mm cortical screws |
| KM47966 | For 1.5 mm and 2.0 mm drill bits and tap for 2.0 mm cortical screws |
| KM48002 | For 2.0 mm and 2.7 mm drill bits and tap for 2.7 mm cortical screws |
| KM47972 | For 2.5 mm and 3.5 mm drill bits, tap for 3.5 mm cortical screws, and tap for 4.0 mm cancellous screws |
| KM47967 | For 3.2 mm and 4.5 mm drill bits, tap for 4.5 mm cortical screws, and tap for 4.5 mm malleolar (shaft) screws |
| KM47965 | For 3.2 mm drill bits and tap for 6.5 mm cancellous screws |

### DRILL SLEEVES

KM47976

| ITEM # | DESCRIPTION |
|---|---|
| KM47976 | 40 mm long tip, for 3.2 mm drill bits, for round hole and semi-tubular plates, 4-1/2" (11.5 cm) |
| KM47982 | 60 mm long tip, for 3.2 mm drill bits, for round hole plates, 5" (12.5 cm) |

# DRILLS, DRILL BITS AND GUIDES

## Drill Guides and Sleeves

### INSERT DRILL SLEEVE

KM47974

| ITEM # | DESCRIPTION |
|---|---|
| KM47974 | For 2.5 mm drill bits and long 3.5 mm lag screws, 1-5/8" (4 cm) |

### INSERT DRILL SLEEVE

KM47973

| ITEM # | DESCRIPTION |
|---|---|
| KM47973 | For 3.2 mm drill bits and 4.5 mm lag screws, 3-1/8" (8 cm) |

### TAP SLEEVES

KM47971

Also can be used as 3.2 mm drill bit guide.

| ITEM # | DESCRIPTION |
|---|---|
| KM47971 | For 3.2 mm drill bits, 4-1/2" (11.5 cm) |

# DRILLS, DRILL BITS AND GUIDES

## Drill Guides and Sleeves

### TAP SLEEVES

KM47969

Also can be used as 4.5 mm drill bit guide.

| ITEM # | DESCRIPTION |
|---|---|
| KM47969 | 4.5 mm diagonal, with toothed tip and tissue protector sleeve for 4.5 mm tap, 5-1/2" (14 cm) |

### GUIDEWIRE W/DRILLPOINT

| ITEM # | DESCRIPTION |
|---|---|
| KM48282 | 2 mm x 98 cm |
| KM48284 | 3 mm x 98 cm |

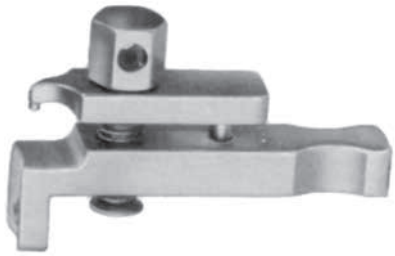
### POINTED DRILL GUIDE

KM47975

Used with tap sleeve KM47969 or KM47967.

| ITEM # | DESCRIPTION |
|---|---|
| KM47975 | For 4.5 mm cortical screws, 6" (15 cm) |

### TENSION DEVICE



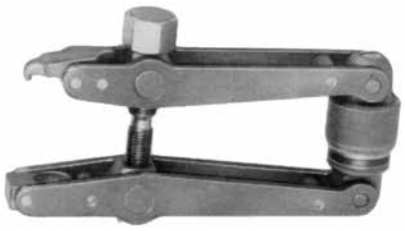
KM47910

| ITEM # | DESCRIPTION |
|---|---|
| KM47910 | Span: 8 mm, 2-1/2" (6.5 cm) |

# DRILLS, DRILL BITS AND GUIDES

## Drill Guides and Sleeves

### TENSION DEVICE ARTICULATED



KM47911

For standard and small plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47911 | Span: 20 mm, 3-1/2" (9 cm) |

### DRILL SLEEVE FOR TENSION DEVICE

KM47909

For 3.2 mm drill bit.

| ITEM # | DESCRIPTION |
|---|---|
| KM47909 | Span: 8 mm / 16 mm, 2" (5 cm) |

# TREPHINES

## MICHELE TREPHINE

KM48240

Designed for bone biopsy. Also facilitates removal of broken bone screws. 7-1/2" (19 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM48239 | Small, 3 mm I.D., 5 mm O.D. |
| KM48240 | Medium, 4 mm I.D., 6 mm O.D. |
| KM48241 | Large, 6 mm I.D., 8.1 mm O.D. |

## P.I. PLUG CUTTER

KM48252

When removing K-Wire, use the Plug Cutter to extract a tiny cylinder of bone around the tip of the wire.

| ITEM # | DESCRIPTION |
|---|---|
| KM48252 | 3 mm I.D., 5 mm O.D., length with obturator 4-1/2" (11.5 cm) |

## PLUG CUTTER

KM69832

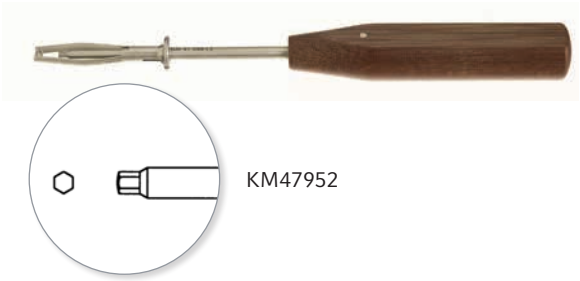
- These cutters are especially useful for arthrodesis of small and large joints by plug cutter graft technique.
- The plug cutters are designed to be used in pairs.
- The smaller diameter instrument will cut the plug opening and the larger one will harvest a bone graft that will fit into the opening.
- The plug can then be tapped into place using the Bone Impactor (KM69980).
- 6" (15 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM69830 | 5 mm I.D., 7 mm O.D. |
| KM69832 | 7 mm I.D., 9 mm O.D. |
| KM69834 | 10 mm I.D., 12 mm O.D. |
| KM69836 | 12 mm I.D., 14 mm O.D. |
| KM69838 | 20 mm I.D., 22 mm O.D. |
| KM69840 | 22 mm I.D., 24 mm O.D. |

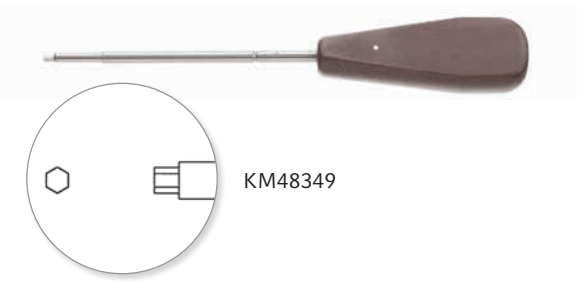
# SCREW DRIVERS

## Hex Head

### HEXAGONAL SCREWDRIVERS



KM47952



KM48349

| ITEM # | DESCRIPTION |
|---|---|
| KM48369 | 1.5 mm screwdriver with sleeve, 7-5/8" (19.5 cm) |
| KM47952 | 2.5 mm screwdriver with sleeve, 7-7/8" (20 cm) |
| KM48368 | 2.5 mm screwdriver with notch, 8-1/4" (21 cm) |
| KM48349 | 3.5 mm with notch, 9-5/8" (24.5 cm) |
| KM47955 | Screw holding sleeve only for KM47952, 2" (5 cm) |
| KM48365 | Screw holding sleeve only for KM48368, 3" (8 cm) |
| KM47983 | Screw holding sleeve only for KM48349, 5" (12.5 cm) |
| KM47956 | Screwdriver only for KM47952 |

*Autoclavable to 290°F (143°C)*

### HEXAGONAL SCREWDRIVER SHAFT (PELVIC)

KM47951

KM47961

KM48365

KM47983

| ITEM # | DESCRIPTION |
|---|---|
| KM47951 | 2.5 mm with notch, quick coupling end, 6-1/2" (16.5 cm) |
| KM47961 | 3.5 mm with notch, quick coupling end, 6-1/2" (16.5 cm) |
| KM48365 | Sleeve only for KM47951, 3" (8 cm) |
| KM47983 | Sleeve only for KM47961, 5" (12.5 cm) |

# SCREW DRIVERS

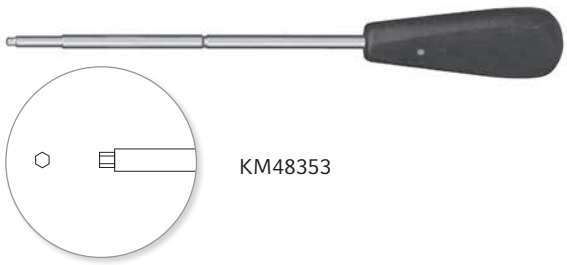
## Hex Head

### SCREWDRIVER SLEEVES

KM48365

| ITEM # | DESCRIPTION |
|---|---|
| KM48365 | Sleeve only for KM47951, KM48348, KM48364, KM48368, 3" (8 cm) |
| KM47983 | Sleeve only for KM48349, KM48353 and KM47961, 5" (12.5 cm) |

### LARGE HEXAGONAL SCREWDRIVER (PELVIC)



KM48353

| ITEM # | DESCRIPTION |
|---|---|
| KM48353 | 3.5 mm Screwdriver with notch, 11-3/4" (30 cm) |
| KM48364 | Screwdriver only, 2.5 mm with notch, 11" (27 cm) |
| KM47983 | Sleeve only for KM48353, 5" (12.5 cm) |

*Autoclavable to 290°F (143°C)*

### LARGE HEX SCREWDRIVER WITH UNIVERSAL JOINT

KM48396

| ITEM # | DESCRIPTION |
|---|---|
| KM48396 | 3.5 mm tip, quick coupling end, 11-5/8" (29.5 cm) |

### LARGE HEXAGONAL SCREWDRIVER

KM47954

| ITEM # | DESCRIPTION |
|---|---|
| KM47954 | 3.5 mm, quick coupling end, 3-7/8" (10 cm) |

# SCREW DRIVERS

## Hex Head

### MINI HEXAGONAL SCREWDRIVER

KM47950

KM47950B

KM47959

| ITEM # | DESCRIPTION |
|---|---|
| KM47950 | 1.5 mm, quick coupling end, sleeve included, 2-1/4" (5.5 cm) |
| KM47950B | Shaft only, 1.5 mm with notch, quick coupling end, 2" (5 cm) |
| KM47959 | Screw holding sleeve only |

### HEXAGONAL SCREWDRIVER SHAFT

KM48348

KM48365

| ITEM # | DESCRIPTION |
|---|---|
| KM48348 | 2.5 mm with notch, quick coupling end, 5-1/2" (14 cm) |
| KM48365 | Sleeve only |

# SCREW DRIVERS

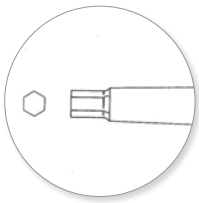
## Hex Head

### SCREWDRIVER

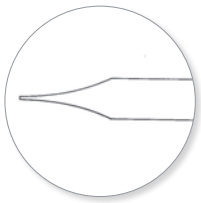
KM48350

| ITEM # | DESCRIPTION |
|---|---|
| KM48670 | 1.5 mm hexagonal |
| KM48350 | 2.5 mm hexagonal |
| KM48352 | 3.5 mm hexagonal |
| KM48354 | Single slot |
| KM48356 | Cruciform |
| KM48358 | Phillips |

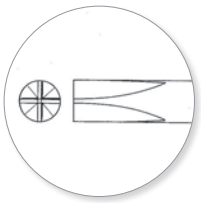
*Autoclavable to 290°F (143°C)*



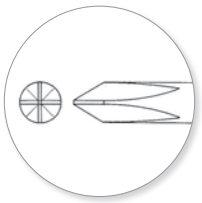
KM48352



KM48354



KM48356



KM48358

### SINGLE SLOT SCREWDRIVER

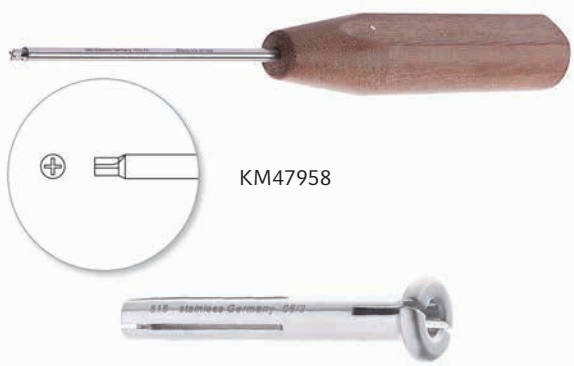
KM48355

| ITEM # | DESCRIPTION |
|---|---|
| KM48355 | Phenolic handle, 6-3/4" (17 cm) |

# SCREW DRIVERS

## Cruciform Head

### CRUCIFORM SCREWDRIVER



KM47958

KM47959

| ITEM # | DESCRIPTION |
|---|---|
| KM47957 | 1.5 / 2.0 mm screwdriver with sleeve, 7-1/2" (19 cm) |
| KM47959 | Screw holding sleeve only for KM47957 |
| KM47958 | Screwdriver only for KM47957 |

*Autoclavable to 290°F (143°C)*

### MINI CRUCIFORM SCREWDRIVER BIT

KM45004

| ITEM # | DESCRIPTION |
|---|---|
| KM45004 | 1.5 / 2 mm quick coupling end, 2-1/2" (6.5 cm) |

# SCREW DRIVERS

## T-Handle

### LARGE HEX SCREWDRIVER W/ T-HANDLE

| ITEM # | DESCRIPTION |
|---|---|
| KM48395 | 3.5 mm, quick coupling end, 6-7/8" (17.5 cm) |

## Depth Gauge

### SCREW DEPTH GAUGES

KM47934

Used to determine screw length required during internal fracture fixation (mm graduated). Snaps apart for easy cleaning. IMPORTANT NOTE: When not in use, retract measuring end inside gauge for probe protection.

| ITEM # | DESCRIPTION |
|---|---|
| KM47934 | Mini, up to 30 mm, 4-3/4" (12 cm) |
| KM47936 | Small, up to 50 mm, 6-1/4" (16 cm) |
| KM47940 | Large, up to 100 mm, 8-3/4" (22 cm) |
| KM47935 | Extra-long, up to 120 mm, 11" (28 cm) |

# SCREW DRIVERS

## Screw Driver Sets

### INTERCHANGEABLE SCREWDRIVER SET

KM48471

KM48473

KM48474

KM48475

KM48476

KM48477

| ITEM # | DESCRIPTION |
|---|---|
| KM48471 | Complete set with sterilization case |
| KM48473 | Screwdriver handle. Allows K-Wire and pins to be inserted with Jacobs Universal Chuck KM48478. Cannulation 1/4" (6.3 mm), includes key, 5-1/2" (14 cm) |
| KM48474 | Single slot, 5-1/2" (14 cm) |
| KM48475 | Cruciform, 5-1/2" (14 cm) |
| KM48476 | Phillips, 5-1/2" (14 cm) |
| KM48477 | Small Phillips, 5-1/2" (14 cm) |
| KM48478 | Jacobs Universal Chuck. Allows K-Wire and pins to be inserted with Jacobs chuck. Cannulation 1/4" (6.3 mm), includes key, 3" (7.5 cm) |
| KM48478P | Key for KM48478 Jacobs Universal Chuck |
| KM48479 | 3.5 mm diameter, 5-1/2" (14 cm) |
| KM48480 | 2.5 mm diameter, 5-1/2" (14 cm) |

KM48478

KM48479

KM48480

### MINI SCREW FIXATION SET

| ITEM # | DESCRIPTION |
|---|---|
| KM48414 | Mini Screw Fixation Set |

# SCREW DRIVERS

## Screw Holding Forceps

### SELF-RETAINING SCREW HOLDING FORCEPS

KM47930

| ITEM # | DESCRIPTION |
|---|---|
| KM47930 | 3-1/2" (9 cm) |

### SELF-RETAINING SCREW HOLDING FORCEPS

KM45210

| ITEM # | DESCRIPTION |
|---|---|
| KM45208 | For 1.5 mm to 2.7 mm screws |
| KM45210 | For 3.5 mm to 6.5 mm screws |

# BENDING IRONS AND ROD HOLDERS

## UNIVERSAL ROD BENDER

KM46664

| ITEM # | DESCRIPTION |
|---|---|
| KM46664 | 11-1/4" (28.5 cm) |

## IN SITU ROD BENDERS

KM49780

KM49781

Used in pairs, 13" (33 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49780 | Right, bends 3/16" (4.76 mm) rods |
| KM49781 | Left, bends 3/16" (4.76 mm) rods |
| KM49782 | Right, bends 1/4" (6.35 mm) rods |
| KM49783 | Left, bends 1/4" (6.35 mm) rods |

## ONE-HANDED ROD BENDER

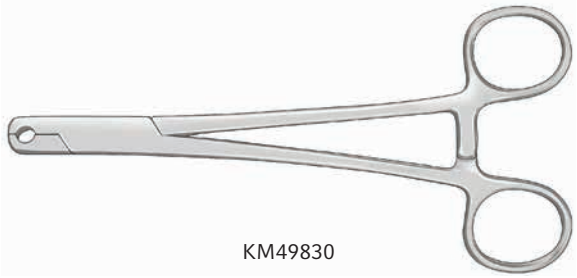
KM49812

For 3 mm and 4 mm diameter rods.

| ITEM # | DESCRIPTION |
|---|---|
| KM49812 | 7-1/2" (19 cm) |

# BENDING IRONS AND ROD HOLDERS

## ROD HOLDERS



KM49830

With ratchet, 7-1/4" (18.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49830 | Holds 5/32" (4.0 mm) rods |
| KM49831 | Holds 3/16" (4.76 mm) rods |
| KM49832 | Holds 1/4" (6.35 mm) rods |

## ROD HOLDERS

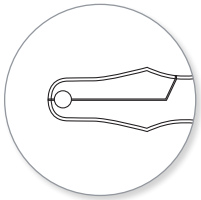
KM49706

Curved tip, with ratchet, 8-1/4" (21 cm).

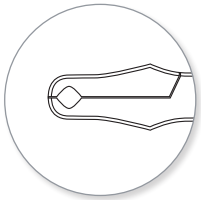
| ITEM # | DESCRIPTION |
|---|---|
| KM49701 | Threaded hole, holds 5/32" (4.0 mm) rods |
| KM49702 | Threaded hole, holds .177" (4.5 mm) rods |
| KM49706 | Without threaded hole, holds .197" (5.0 mm) rods |

## ROD HOLDER

KM49850



KM49850



KM49848

With ratchet, 10" (25.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49850 | Holds 1/4" (6.35 mm) rods, threaded hole |
| KM49848 | Prism holds 0.197" (5 mm) and 5.5 mm rods |

# BENDING IRONS AND ROD HOLDERS

## MINI PLATE BENDING IRON

KM47917

For mini and finger plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47917 | 4-3/4" |

## SMALL PLATE BENDING IRONS

KM47916

KM47915

Used in pairs. For 3.5 mm and 2.7 mm plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47916 | 5-1/2" (14 cm) |
| KM47915 | 5-1/2" (14 cm) |

## STANDARD PLATE BENDING IRON

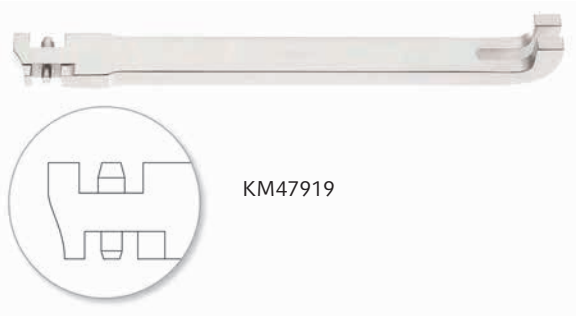
KM47918

For standard plates, with 4 holes.

| ITEM # | DESCRIPTION |
|---|---|
| KM47918 | 9-1/2" |

# BENDING IRONS AND ROD HOLDERS

## PLATE BENDING IRON



KM47919

| ITEM # | DESCRIPTION |
|---|---|
| KM47919 | For 3.5 mm and 4.5 mm plates |

## BENDING IRONS

KM45501

| ITEM # | DESCRIPTION |
|---|---|
| KM45501 | For 0.8 - 1.25 mm K-Wires, 4-1/2" (11.5 cm) |
| KM45502 | For 1.25, 1.6 and 2 mm K-Wires, 4-3/4" (12 cm) |

## BENDING TEMPLATES

KM47946

KM47947

Anodized aluminum reconstruction plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47946 | 22 holes, 3.5 mm, 8-1/4" (21 cm), curved |
| KM47947 | 22 holes, 3.5 mm, 10-3/8" (26 cm), straight |
| KM47948 | 16 holes, 4.5 mm, 10" (25.5 cm), straight |

# BENDING IRONS AND ROD HOLDERS

## BENDING TEMPLATES

KM47943

KM47944

KM47945

To simulate required plate bending. Anodized aluminum, color coded.

| ITEM # | DESCRIPTION |
|---|---|
| KM47944 | For small plates, 2-1/2" (6.5 cm) |
| KM47945 | For small plates, 3-1/2" (9 cm) |
| KM47941 | 5 holes, 3-1/2" (9 cm) |
| KM47942 | 7 holes, 4-1/2" (11.5 cm) |
| KM47943 | 9 holes, 6" (15 cm) |

## BENDING TEMPLATES

KM45127

Anodized aluminum.

| ITEM # | DESCRIPTION |
|---|---|
| KM45126 | 5 holes, 3.5 mm, 2-1/2" (6 cm) |
| KM45127 | 7 holes, 3.5 mm, 3-3/8" (8.5 cm) |
| KM45128 | 9 holes, 3.5 mm, 4-3/8" (11 cm) |
| KM45122 | 9 holes, 4.5 mm, 6-1/8" (15.5 cm) |

## PLATE HOLDING CLIPS

KM47963

| ITEM # | DESCRIPTION |
|---|---|
| KM47962 | 2.0 mm |
| KM47963 | 2.7 mm |
| KM47964 | 3.5 mm |

# ORTHOPEDIC RETRACTORS

## Hand-Held Orthopedic Retractors

### FRAZIER HOOKS

5" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM48158 | 1 sharp prong, 2.5 mm diameter |
| KM48161 | 1 blunt prong, 2.5 mm diameter |

### GILLIES HOOKS

7" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM58077 | Small |
| KM58083 | Large |

### ADSON DISSECTOR HOOKS

8" (20.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 654180 | Blunt |
| 654181 | Sharp |

# ORTHOPEDIC RETRACTORS

## Hand-Held Orthopedic Retractors

### FRAZIER DURA HOOKS

654191

| ITEM # | DESCRIPTION |
|---|---|
| 654190 | Blunt, 4-3/4" (12 cm) |
| 654191 | Sharp, 4-7/8" (12.5 cm) |

### HOEN HOOKS

594400

9-1/4" (23.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 594400 | Short prong |
| 594402 | Long prong |

### SNOOK HOOK

KM71431

Veterinary.

| ITEM # | DESCRIPTION |
|---|---|
| KM71431 | 8" (20.5 cm) |

### SMITHWICK DISSECTOR AND HOOK

622700

| ITEM # | DESCRIPTION |
|---|---|
| 622700 | 12-1/4" (31 cm) |

# ORTHOPEDIC RETRACTORS

## Hand-Held Orthopedic Retractors

### HOLSHER NERVE RETRACTORS

Primarily used to retract the nerve root. Blunt hook. 9-1/2" (24 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM48234 | 7 mm blade |
| KM48237 | 9 mm blade |

### NERVE ROOT RETRACTOR

Retractor blade lies on same plane as surgeon's finger. Gives surgeon unobstructed view.

| ITEM # | DESCRIPTION |
|---|---|
| KM55424 | 6 mm blade, 8-1/4" (21 cm) |

### BAYONET NERVE RETRACTOR

| ITEM # | DESCRIPTION |
|---|---|
| KM46932 | 7 mm wide x 1 mm deep blade |

# ORTHOPEDIC RETRACTORS

## Hand-Held Orthopedic Retractors

### SCOVILLE NERVE ROOT RETRACTORS

KM55426

Angled.

| ITEM # | DESCRIPTION |
|---|---|
| KM55426 | 8 mm blade, 8" (20.5 cm) |
| KM55428 | 13 mm blade, 7-5/8" (19.5 cm) |

### PERPENDICULAR NERVE RETRACTOR

| ITEM # | DESCRIPTION |
|---|---|
| KM46930 | 7 mm wide x 1 mm deep blade angled 90 degrees |

### RAGNELL-LINDE RETRACTOR

KM69982

Fine cross serrations help prevent slippage.
Double ended with serrations, 5-1/4" (13.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM69982 | 4 x 8 mm and 6 x 15 mm blades |

# ORTHOPEDIC RETRACTORS

## Hand-Held Orthopedic Retractors

### BLADE RETRACTORS

KM55421

| ITEM # | DESCRIPTION |
|---|---|
| KM55420 | 18 mm wide blade, 7" (18 cm) |
| KM55421 | 20 mm wide blade, 7" (18 cm) |
| KM55422 | 23 mm wide blade, 7" (18 cm) |

### LANGENBECK RETRACTORS

KM51104

| ITEM # | DESCRIPTION |
|---|---|
| KM51100 | #1, 3/8" x 1-1/4" (10 x 32 mm), 8-7/8" (22.5 cm) |
| KM51104 | #2, 3/8" x 1-3/4" (10 x 45 mm), 8" (20.5 cm) |
| KM51108 | #3, 1/2" x 1-3/4" (15 x 45 mm), 8-1/2" (21.5 cm) |
| KM51112 | #4, 5/8" x 1-1/2" (16 x 38 mm), 8" (20.5 cm) |

### DEEP RAKE RETRACTORS

KM52294

10-1/2" (26.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM52292 | 4 blunt prongs, 2-1/4" wide x 1-1/2" deep (5.5 x 4 cm) |
| KM52294 | 4 blunt prongs, 2-1/4" wide x 2" deep (5.5 x 5 cm) |
| KM52296 | 4 blunt prongs, 2-1/4" wide x 2-1/2 deep (5.5 x 6.5 cm) |
| KM52298 | 4 blunt prongs, 2-1/4" wide x 3" deep (5.5 x 7.5 cm) |

# ORTHOPEDIC RETRACTORS

## Hand-Held Orthopedic Retractors

### ISRAEL RAKE RETRACTORS

KM51080

9-1/2" (24 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM51078 | 3 blunt prongs, 30 mm wide x 37 mm deep |
| KM51080 | 4 blunt prongs, 40 mm wide x 40 mm deep |

### OLLIER RAKE RETRACTOR

KM52282

| ITEM # | DESCRIPTION |
|---|---|
| KM52282 | 4 blunt prongs, 55 mm wide x 40 mm deep blade, 9" (23 cm) |

### MEYERDING LAMINECTOMY RETRACTORS

KM51162

Sharp teeth.

| ITEM # | DESCRIPTION |
|---|---|
| KM51158 | Small, 17 mm wide blade, 9-1/2" (24 cm) |
| KM51162 | Medium, 25 mm wide blade, 9-1/2" (24 cm) |
| KM51164 | Large, 50 mm wide blade, 10" (25.5 cm) |

# ORTHOPEDIC RETRACTORS

## Hand-Held Orthopedic Retractors

### TAYLOR SPINAL RETRACTORS

KM52458

| ITEM # | DESCRIPTION |
|---|---|
| KM52458 | 1-1/4" wide x 3" long blade (3 x 7.5 cm), 7-3/4" (19.5 cm) |
| KM52460 | 1-1/4" wide x 4" long blade (3 x 10 cm), 7-3/4" (19.5 cm) |

### TAYLOR RETRACTORS

KM46936

| ITEM # | DESCRIPTION |
|---|---|
| KM46934 | Distal tip 3/4" wide and 3" long (20 x 76 mm), overall length 8-1/8" (20.5 cm) |
| KM46936 | Distal tip 3/4" wide and 4" long (20 x 102 mm), overall length 8-1/8" (20.5 cm) |

### HIBBS RETRACTORS

KM51060

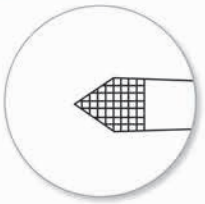
Used for deep soft tissue retraction. Sharp teeth, 9-1/2" (24 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM51059 | 25 mm wide x 50 mm deep blade |
| KM51060 | 26 mm wide x 75 mm deep blade |
| KM51061 | 25 mm wide x 100 mm deep blade |

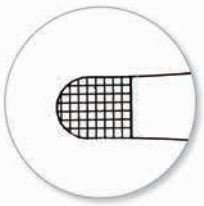
# ORTHOPEDIC RETRACTORS

## Hand-Held Orthopedic Retractors

### AUFRANC COBRA RETRACTORS



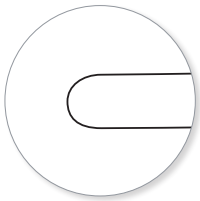
KM48208



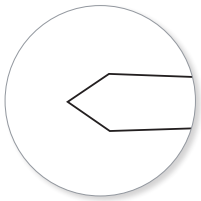
KM48210

With hollow handle, 1-1/4" wide blade, 10-1/2" (26.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM48208 | Serrated, pointed tip, 10 mm |
| KM48212 | Smooth, blunt tip, 10 mm |
| KM48210 | Serrated, blunt tip, 10 mm |
| KM48214 | Smooth, pointed tip, 10 mm |



KM48212



KM48214

### BENNETT BONE ELEVATOR AND RETRACTORS

KM46880

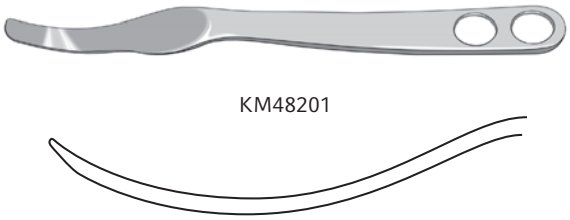
Hollow handle, 10" (25.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46880 | Small, 1-3/4" (4.5 cm) wide blade |
| KM46884 | Large, 2-1/2" wide blade |

# ORTHOPEDIC RETRACTORS

## Hand-Held Orthopedic Retractors

### PELVIC RETRACTOR



KM48201

| ITEM # | DESCRIPTION |
|---|---|
| KM48201 | 1" (24 mm) wide blade, 1/2" (12 mm) wide distal tip, 10-5/8" (27 cm) |

### MURPHY BONE SKID

KM46892

| ITEM # | DESCRIPTION |
|---|---|
| KM46892 | 11-3/4" (30 cm) |

# ORTHOPEDIC RETRACTORS

## Shoulder and Knee Retractors

### FUKUDA STYLE SHOULDER RETRACTORS

KM46907

7" (18 cm).

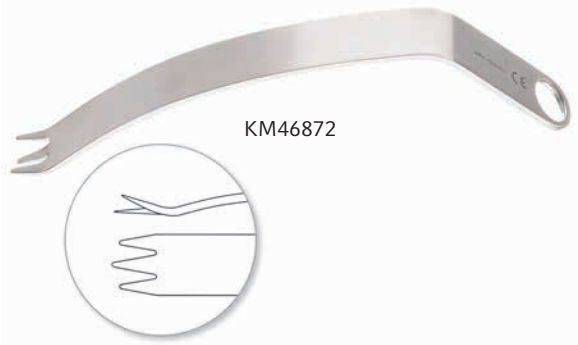
| ITEM # | DESCRIPTION |
|---|---|
| KM46906 | 1-1/2" wide x 3-1/4" long blade (4 x 8 cm) |
| KM46907 | 1-1/4" wide x 3-1/4" long blade (3 x 8 cm) |

### CAPSULE RETRACTOR

KM46908

| ITEM # | DESCRIPTION |
|---|---|
| KM46908 | 3 sharp prongs, 22 mm wide blade, 10" (25.5 cm) |

### BRISTOW/BANKART SOFT TISSUE RETRACTOR



KM46872

| ITEM # | DESCRIPTION |
|---|---|
| KM46872 | 3 blunt prongs, 21 mm wide blade, 7-7/8" (20 cm) |

# ORTHOPEDIC RETRACTORS

## Shoulder and Knee Retractors

### BRISTOW/BANKART HUMERAL RETRACTOR

| ITEM # | DESCRIPTION |
|---|---|
| KM46870 | 2 blunt prongs, 25 mm wide x 102 mm deep, 7-1/2" (19 cm) |

### HUMERAL HEAD RETRACTOR

| ITEM # | DESCRIPTION |
|---|---|
| KM46860 | 18 mm wide blade, 8-3/4" (22 cm) |

### SUBACROMION SPREADERS

| ITEM # | DESCRIPTION |
|---|---|
| KM46920 | Right |
| KM46921 | Left |

# ORTHOPEDIC RETRACTORS

## Shoulder and Knee Retractors

### BLOUNT DOUBLE PRONG RETRACTOR

KM48204

| ITEM # | DESCRIPTION |
|---|---|
| KM48204 | 1-3/4" (44 mm) wide blade, 10-1/2" (26.5 cm) |

### BLOUNT KNEE RETRACTOR

KM48206

| ITEM # | DESCRIPTION |
|---|---|
| KM48206 | 6 mm wide distal tip, 6-7/8" (17.5 cm) |

### BLOUNT SINGLE PRONG RETRACTOR

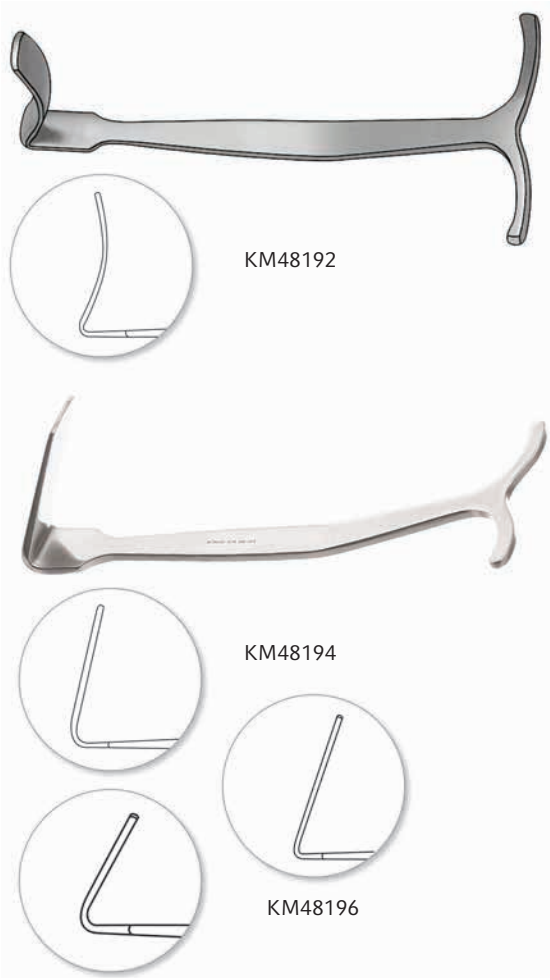
KM48202

| ITEM # | DESCRIPTION |
|---|---|
| KM48202 | 1-1/2" (37 mm) width blade, 10-1/2" (26.5 cm) |

# ORTHOPEDIC RETRACTORS

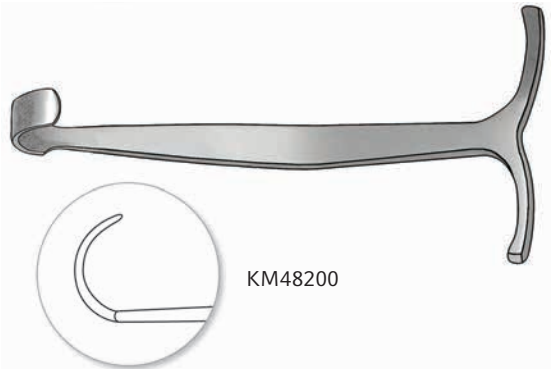
## Shoulder and Knee Retractors

### SMILLIE KNEE RETRACTORS




5-1/2" (14 cm).

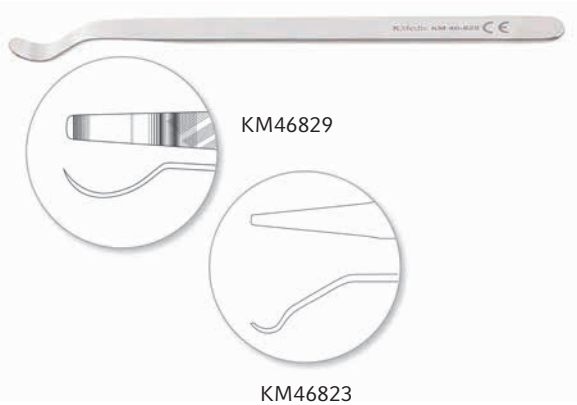
| ITEM # | DESCRIPTION |
|---|---|
| KM48192 | Reverse curve, 13 mm wide x 55 mm long blade |
| KM48198 | 19 mm wide x 30 mm long blade |
| KM48194 | 19 mm wide x 45 mm long blade |
| KM48196 | 19 mm wide x 60 mm long blade |
| KM48200 | Full curve, 13 mm wide x 18 mm long blade |



# ORTHOPEDIC RETRACTORS

## Hohmann Retractors

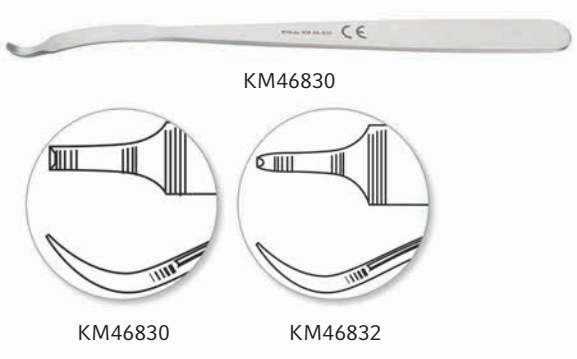
### HAYES HAND RETRACTORS




Used to elevate carpals and phalanges during hand procedures.

| ITEM # | DESCRIPTION |
|---|---|
| KM46823 | 3 mm wide distal tip, 6-1/4" (16 cm) |
| KM46829 | 6 mm wide distal tip, 6" (15 cm) |

### MINI HOHMANN RETRACTORS



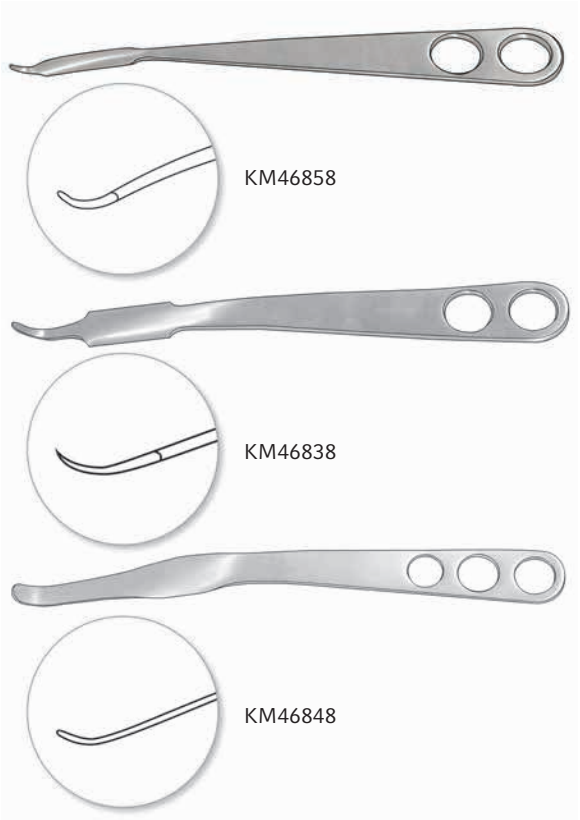

6-1/2" (16.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46830 | 6 mm wide blade |
| KM46832 | 8 mm wide blade |

# ORTHOPEDIC RETRACTORS

## Hohmann Retractors

### HOHMANN RETRACTORS

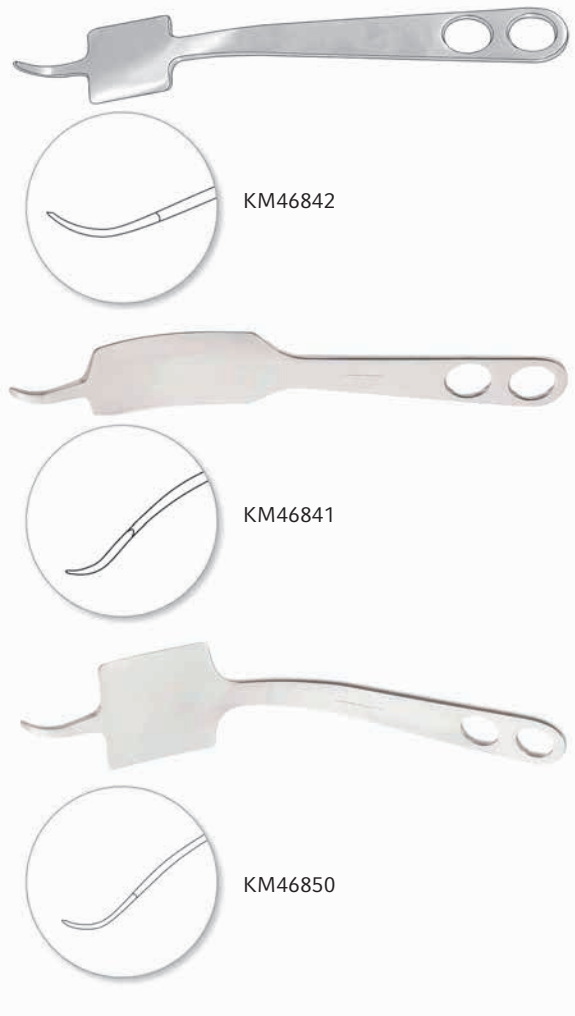



| ITEM # | DESCRIPTION |
|---|---|
| KM46858 | 8 mm wide blade, 8-1/2" (21.5 cm) |
| KM46836 | 10 mm wide blade, 9" (23 cm) |
| KM46838 | 18 mm wide blade, 9" (23 cm) |
| KM46848 | 22 mm wide blade, three holes, 11" (28 cm) |

# ORTHOPEDIC RETRACTORS

## Hohmann Retractors

### HOHMANN RETRACTORS




| ITEM # | DESCRIPTION |
|---|---|
| KM46842 | 43 mm wide blade, 9-1/2" (24 cm) |
| KM46841 | 43 mm wide blade, long 64 mm shank, 9" (23 cm) |
| KM46850 | 70 mm wide blade, 9-1/2" (24 cm) |

### HOHMANN RETRACTORS

For small fragments.

| ITEM # | DESCRIPTION |
|---|---|
| KM46826 | Finger ring handle, broad tip, 16 mm wide blade, 4-3/4" (12 cm) |

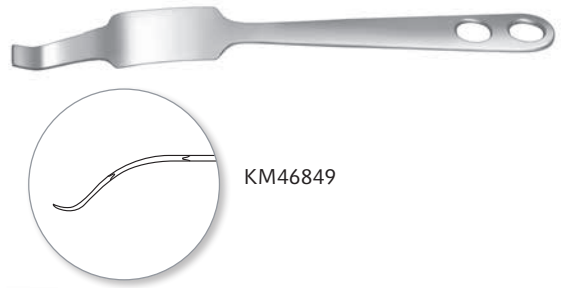
# ORTHOPEDIC RETRACTORS

## Hohmann Retractors

### HOHMANN RETRACTORS

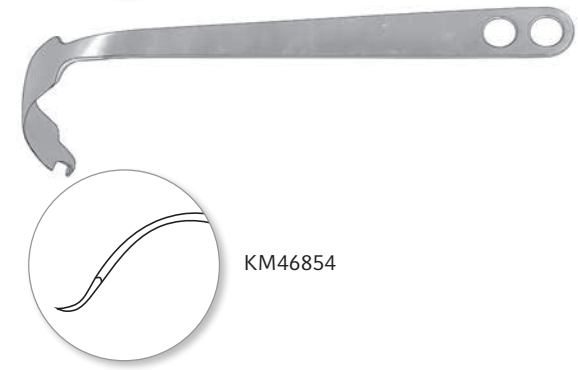
| ITEM # | DESCRIPTION |
|---|---|
| KM46827 | Broad tip, 15 mm wide blade, 6" (15 cm) |

### HOHMANN RETRACTORS




Useful in exposing acetabulum.

| ITEM # | DESCRIPTION |
|---|---|
| KM46849 | 35 mm wide blade with wide tip, long 52 mm shank, 11-1/4" (28.5 cm) |
| KM46852 | 22 mm wide blade curved 120 degrees, 16" (40.5 cm) |
| KM46854 | 40 mm wide blade curved 90 degrees, 13" (33 cm) |



# VICKERS FINGER RETRACTOR

The new KMedic® Vickers Retractors are designed to provide excellent visibility during hand and wrist procedures. Each of the retractors is self-retaining and automatically expands the wound site.

Ideal for retracting wounds on either the front, back or sides of fingers or thumb.

### VICKERS FINGER RETRACTOR

KM52425
2" x 3/4" x 1-1/4"
(51 mm x 19 mm x 32 mm)
2 x 2 blunt hooks
Maximum opening: 19 mm

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### VICKERS LOW PROFILE SMALL WOUND RETRACTOR

KM52426

Useful for small wound retraction.

| ITEM # | DESCRIPTION |
|---|---|
| KM52426 | 10 mm deep x 12 mm high, curved, smooth blades, maximum opening 30 mm, center blade 10 mm x 16 mm, 2-1/2" x 3" (6.5 x 7.5 cm) |

### VICKERS LOW PROFILE HAND RETRACTOR

KM52427

With three blunt prongs to secure placement.

| ITEM # | DESCRIPTION |
|---|---|
| KM52427 | 3 x 3 prongs, 3-1/4" (8.5 cm) |

### VICKERS UNIVERSAL RETRACTOR

KM52428

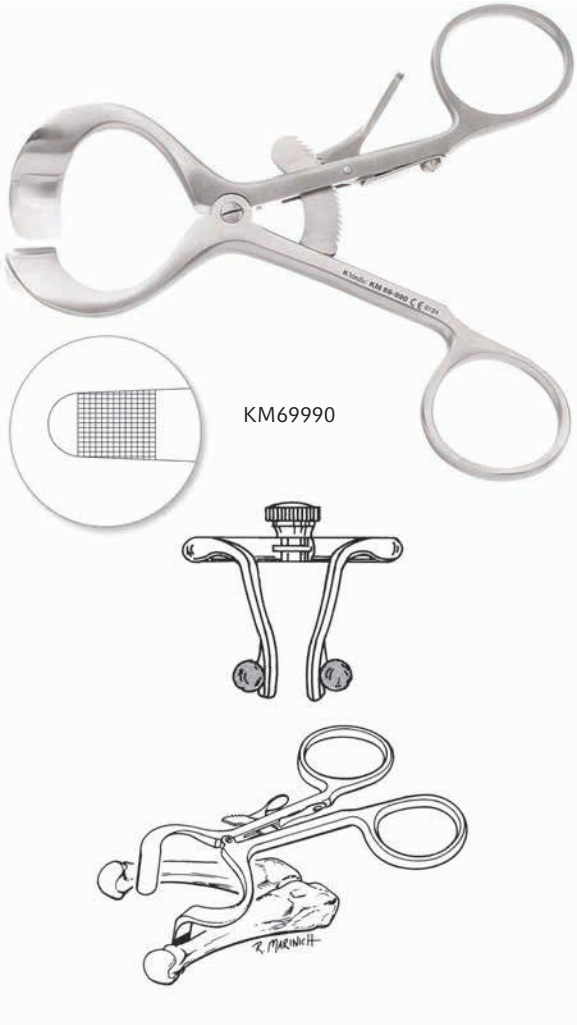
With two blunt prongs to secure placement.

| ITEM # | DESCRIPTION |
|---|---|
| KM52428 | 2 x 2 blunt prongs, 8 mm deep x 17 mm high, maximum opening 30 mm, center blade 10 mm x 16 mm, 2-1/2" x 3" (64 x 75 mm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### COX METATARSAL SPREADER



KM69990

- Specially designed thin serrated blades fit anatomically correct against the metatarsals.
- Precise design assures slip-proof hold on metatarsals.
- Affords excellent visibility for the surgeon.
- Designed by Dr. Kenneth Cox.
- A KMedic® Exclusive Product.

| ITEM # | DESCRIPTION |
|---|---|
| KM69990 | 11 mm wide blades, 4-1/2" (11.5 cm) |

### MALTZ-SEEBURGER RETRACTORS

KM58240

| ITEM # | DESCRIPTION |
|---|---|
| KM58240 | 4-1/2" (11.5 cm) |
| KM58242 | 5-1/2" (14 cm) |

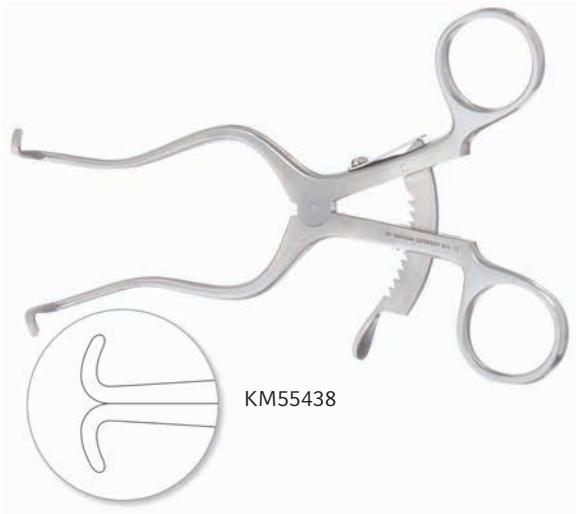
# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### SNITMAN ENDAURAL RETRACTOR

| ITEM # | DESCRIPTION |
|---|---|
| KM55497 | 3 x 3 sharp prongs |

### TISSUE RETRACTOR




| ITEM # | DESCRIPTION |
|---|---|
| KM55438 | 1 x 1 blunt prongs, 13 mm deep, 5-1/4" (13.5 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### KOLBEL SOFT TISSUE RETRACTOR

KM46922

| ITEM # | DESCRIPTION |
|---|---|
| KM46922 | Angled, 2 x 2-pronged, 7" (18 cm) |

### SCALP CONTOUR RETRACTORS

KM52546

Useful in hand procedures because handle is non-obstructive.

| ITEM # | DESCRIPTION |
|---|---|
| KM52546 | 3 x 4 blunt prongs, 5-1/2" (14 cm) |
| KM52548 | 3 x 4 sharp prongs, 5-1/2" (14 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### D'ERRICO-ADSON RETRACTOR

Angular prongs are heavier than those on a standard Adson.

| ITEM # | DESCRIPTION |
|---|---|
| KM55498 | 4 x 4 sharp prongs, 3/4" (2 cm) deep blade, 7-3/8" (19 cm) |

### MISKIMON CEREBELLUM RETRACTOR

| ITEM # | DESCRIPTION |
|---|---|
| KM55499 | 7 x 7 prongs, 35 mm deep x 32 mm high, 7-1/2" (19 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### MEYERDING LAMINECTOMY RETRACTORS

KM55431

Sharp blades, 6-1/2" (16.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM55430 | Blades 57 mm deep x 25 mm wide |
| KM55431 | Blades 51 mm deep x 25 mm wide |
| KM55432 | Blades 41 mm deep x 25 mm wide |

### MARKHAM-MEYERDING HEMILAMINECTOMY RETRACTORS

KM55440

KM55441

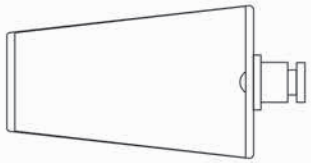
| ITEM # | DESCRIPTION |
|---|---|
| KM55440 | Left sharp blade 60 mm deep x 25 mm wide, 7" (18 cm) |
| KM55441 | Right sharp blade 60 mm deep x 25 mm wide, 7" (18 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### CERVICAL RETRACTOR SET

KM55480



KM55485

| ITEM # | DESCRIPTION |
|---|---|
| KM55480 | Set includes KM55481 and 7 pairs of blunt blades |
| KM55481 | Cervical retractor body, small, 6" (15 cm) |
| KM55482 | 25 mm deep blade, blunt |
| KM55483 | 30 mm deep blade, blunt |
| KM55484 | 35 mm deep blade, blunt |
| KM55485 | 40 mm deep blade, blunt |
| KM55486 | 45 mm deep blade, blunt |
| KM55487 | 50 mm deep blade, blunt |
| KM55488 | 55 mm deep blade, blunt |

### GELPI-SELETZ RETRACTOR

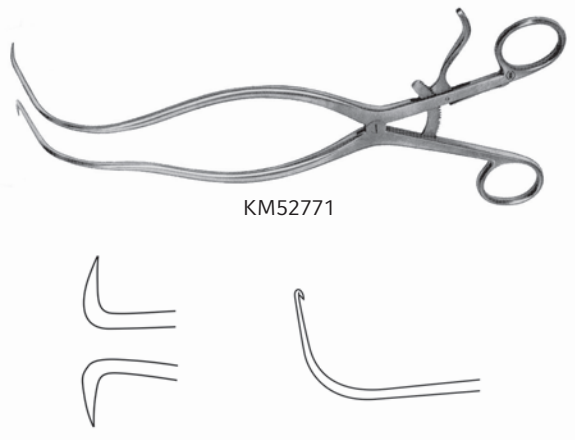
KM52765

| ITEM # | DESCRIPTION |
|---|---|
| KM52765 | Sharp points, deep blades, 6-1/4" (16 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### WILTSE-GELPI RETRACTOR



KM52771

| ITEM # | DESCRIPTION |
|---|---|
| KM52771 | Deep blades, sharp points, 10-7/8" (27.5 cm) |

### ADSON RETRACTOR

KM52474

Hinged arm design.

| ITEM # | DESCRIPTION |
|---|---|
| KM52474 | 4 x 5 blunt prongs, 13" (33 cm) |

### BECKMAN RETRACTOR

KM52470

| ITEM # | DESCRIPTION |
|---|---|
| KM52470 | 4 x 4 sharp prongs, 27 mm, side blade 5/8" (1.5 cm) deep, 12-1/4" (31 cm) |
| KM52472 | 4 x 4 blunt prongs, 27 mm, side blade 5/8" (1.5 cm) deep, 12-1/4" (31 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### BECKMAN-EATON RETRACTOR

KM52476

| ITEM # | DESCRIPTION |
|---|---|
| KM52476 | 7 x 7 sharp prongs, 40 x 48 mm, 12-1/4" (31 cm) |

### BECKMAN-ADSON LAMINECTOMY RETRACTORS

KM52484

4 x 4 prongs, hinged blades 25 mm high, 12-1/4" (31 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM52484 | Blunt, 25 mm deep |
| KM52488 | Blunt, 44 mm deep, max. opening 6" |
| KM52486 | Sharp, 44 mm deep |
| KM52490 | Sharp, 25 mm deep, max. opening 5-11/16" |

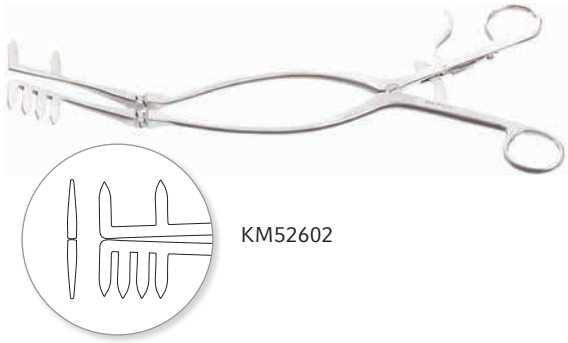
### BECKMAN-WEITLANER RETRACTORS

KM52542

With hinged blades. KMedic® Pattern, satin finish, 9-1/2" (24 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM52542 | 3 x 4 sharp prongs, 22 mm |
| KM52544 | 3 x 4 blunt prongs, 22 mm |

### HORIZONTAL RETRACTOR



KM52602

Primarily used to retract detached trochanter from the stump of the femoral neck. Hinged arms allow handles to be angled away from surgical site to minimize interference.

| ITEM # | DESCRIPTION |
|---|---|
| KM52602 | Hinged blades, 4 x 2 sharp prongs, 12-1/4" (31 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### VERTEBRA SPREADER (CLOWARD)

KM55490

| ITEM # | DESCRIPTION |
|---|---|
| KM55490 | #1 with ratchet, 3/4" (19 mm) spread, 5" (12.5 cm) |

### LUMBAR LAMINA SPREADERS

KM55495

| ITEM # | DESCRIPTION |
|---|---|
| KM55495 | #1, arm length, 3-1/2" (9 cm), 5-1/4" (13.5 cm) |
| KM55496 | #2, arm length, 4-1/4" (11 cm), 5-1/4" (13.5 cm) |

### VERTEBRAL BODY DISTRACTORS

KM55410

| ITEM # | DESCRIPTION |
|---|---|
| KM55410 | Small |
| KM55412 | Large, 11 mm wide x 3.8 mm deep jaws, 11-1/4" (28.5 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### INGE RETRACTOR

Available with or without teeth.

| ITEM # | DESCRIPTION |
|---|---|
| KM48217 | With teeth, 6-1/2" (16.5 cm) |
| KM48218 | Without teeth, 6-1/2" (16.5 cm) |
| KM48230 | With teeth, 10-3/8" (26.5 cm) |

### SAXENA BONE GRAFTING RETRACTOR

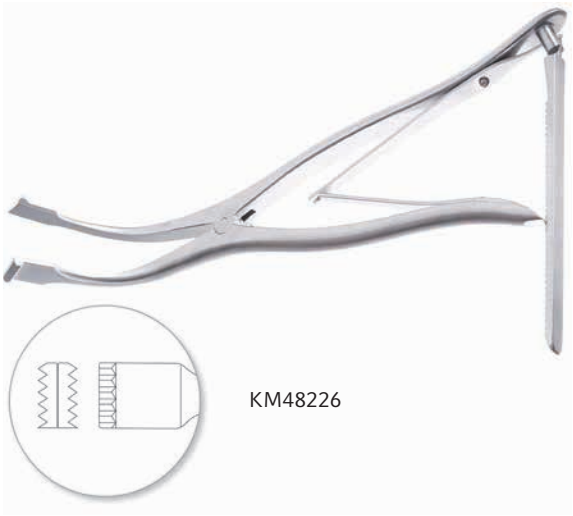
- Ratchet is calibrated in millimeters to accurately assess how wide the lateral portion of the bone graft needs to be.
- Helpful in many types of procedures to accurately assess the amount of bone graft needed, such as for fusions and nonunions.
- Available exclusively from KMedic®.

| ITEM # | DESCRIPTION |
|---|---|
| KM48220 | 35 mm graduated ratchet, 6-1/2" (16.5 cm) |

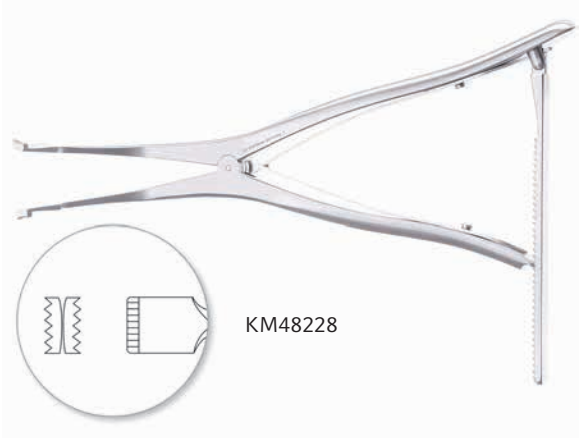
# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### LAMINA SPREADERS




| ITEM # | DESCRIPTION |
|---|---|
| KM48228 | Concave blades, 10-1/2" (26.5 cm) |
| KM48226 | Flat blades, 10-3/4" (27.5 cm) |



# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### INITIAL INCISION (CHARNLEY) RETRACTOR

KM52704

KM52707L

KM52707S

Used primarily for hip procedures.

| ITEM # | DESCRIPTION |
|---|---|
| KM52704 | 4 sharp prongs, stainless steel, maximum retraction width 9-3/4" (24.5 cm), prong depth 1-1/4" (32 mm), blade width 1" (25 mm), weight 3 lbs. Other blades are available |
| KM52704F | Frame only |
| KM52704S | Short blade, 1-1/4" deep x 1" wide (34 x 25 mm) |
| KM52705S | Short blade, 2" deep x 1" wide (51 x 25 mm) |
| KM52706S | Short blade, 2-1/4" deep x 1" wide (57 x 25 mm) |
| KM52707S | Short blade, 2-1/2" deep x 1" wide (64 x 25 mm) |
| KM52708S | Short blade, 3" deep x 1" wide (77 x 25 mm) |
| KM52709S | Short blade, 4" deep x 1" wide (102 x 25 mm) |
| KM52711S | Short blade, 5" deep x 1" wide (127 x 25 mm) |
| KM52704L | Long blade, 1-1/4" deep x 1" wide (34 x 25 mm) |
| KM52705L | Long blade, 2" deep x 1" wide (51 x 25 mm) |
| KM52706L | Long blade, 2-1/4" deep x 1" wide (57 x 25 mm) |
| KM52707L | Long blade, 2-1/2" deep x 1" wide (64 x 25 mm) |
| KM52708L | Long blade, 3" deep x 1" wide (77 x 25 mm) |
| KM52709L | Long blade, 4" deep x 1" wide (102 x 25 mm) |
| KM52711L | Long blade, 5" deep x 1" wide (127 x 25 mm) |

### SCOVILLE HEMILAMINECTOMY RETRACTOR BODY

KM55445

| ITEM # | DESCRIPTION |
|---|---|
| KM55445 | Spread 6-3/4" (17 cm), arm length 5-1/2" (14 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### HAVERFIELD-SCOVILLE HEMILAMINECTOMY RETRACTOR BODY

KM55446

| ITEM # | DESCRIPTION |
|---|---|
| KM55446 | Body only, 8-3/8" (21.5 cm) |

### SCOVILLE-HAVERFIELD RETRACTOR BLADE

KM55455

| ITEM # | DESCRIPTION |
|---|---|
| KM55455 | 1" x 3-1/2" |

### MEYERDING BLADES

KM55459

| ITEM # | DESCRIPTION |
|---|---|
| KM55458 | 1" wide x 2 1/4" deep (25 x 57 mm) |
| KM55459 | 1" wide x 3" deep (25 x 76 mm) |
| KM55460 | 2" wide x 3-1/4" deep (51 x 83 mm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### SCOVILLE BLADES

KM55451

Solid.

| ITEM # | DESCRIPTION |
|---|---|
| KM55451 | 1" wide x 2-1/2" deep (25 mm x 64 mm) |
| KM55452 | 2" wide x 2-1/2" deep (51 mm x 64 mm) |
| KM55453 | 1-1/8" wide x 2-5/8" deep (29 mm x 67 mm) |
| KM55454 | 1" wide x 3-1/2" deep (25 mm x 89 mm) |

### HIBBS BLADES

KM55465

| ITEM # | DESCRIPTION |
|---|---|
| KM55461 | 1" wide x 2" deep (25 x 51 mm) |
| KM55463 | 1" wide x 2-1/2" deep (25 x 64 mm) |
| KM55465 | 1" wide x 3" deep (25 x 76 mm) |
| KM55468 | 1" wide x 4" deep (25 x 102 mm) |
| KM55464 | 1-1/2" wide x 2-1/2" deep (38 x 64 mm) |
| KM55466 | 1-1/2" wide x 3" deep (38 x 76 mm) |
| KM55462 | 2" wide x 2" deep (51 x 51 mm) |
| KM55467 | 2" wide x 3" deep (51 x 76 mm) |
| KM55469 | 2" wide x 4" deep (51 x 102 mm) |

### TAYLOR LAMINECTOMY BLADE

KM55473

| ITEM # | DESCRIPTION |
|---|---|
| KM55473 | 3 prongs, 1-1/2" wide x 1-3/4" deep (38 x 44 mm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### SCOVILLE BLADES

KM55456

4-prong.

| ITEM # | DESCRIPTION |
|---|---|
| KM55456 | 1-1/2" wide x 1-5/8" deep (38 x 41 mm) |
| KM55457 | 1-7/8" wide x 2-5/8" deep (48 x 67 mm) |

### TAYLOR LAMINECTOMY BLADES

KM55474

4-prong.

| ITEM # | DESCRIPTION |
|---|---|
| KM55474 | 2" wide x 1-7/8" deep (51 x 48 mm) |
| KM55476 | 2-1/4" wide x 3-1/8" deep (57 x 79 mm) |
| KM55475 | 2-1/2" wide x 2-1/2" deep (64 x 64 mm) |

### TAYLOR SPINAL BLADES

KM55472

| ITEM # | DESCRIPTION |
|---|---|
| KM55471 | 1-1/4" wide x 3" deep (32 x 76 mm) |
| KM55472 | 1-1/4" wide x 4" deep (32 x 102 mm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### SCOVILLE BLADES

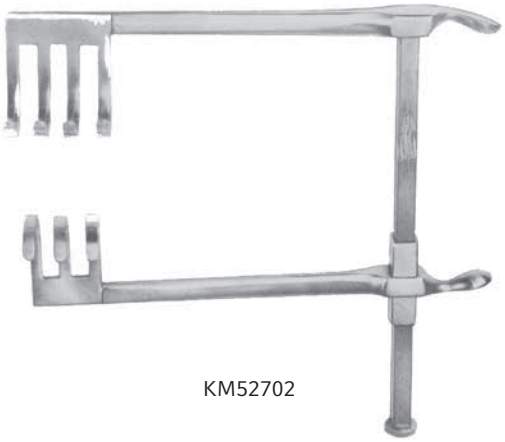
KM55447

KM55449

Hook style.

| ITEM # | DESCRIPTION |
|---|---|
| KM55447 | 2" deep (51 mm) |
| KM55448 | 3" deep (76 mm) |
| KM55449 | 2" deep (51 mm) with cross bar |
| KM55450 | 2-3/4" deep (70 mm) with cross bar |

### FRAZIER LAMINECTOMY RETRACTOR



KM52702

| ITEM # | DESCRIPTION |
|---|---|
| KM52702 | 3 x 4 blunt prongs, spread 3-1/2" (9 cm), arm length 5" (12.5 cm) |

# ORTHOPEDIC RETRACTORS

## Self-Retaining Orthopedic Retractors

### CRUTCHFIELD TONGS

KM48249

| ITEM # | DESCRIPTION |
|---|---|
| KM48249 | With two drills, 4-7/8" (12.5 cm) |

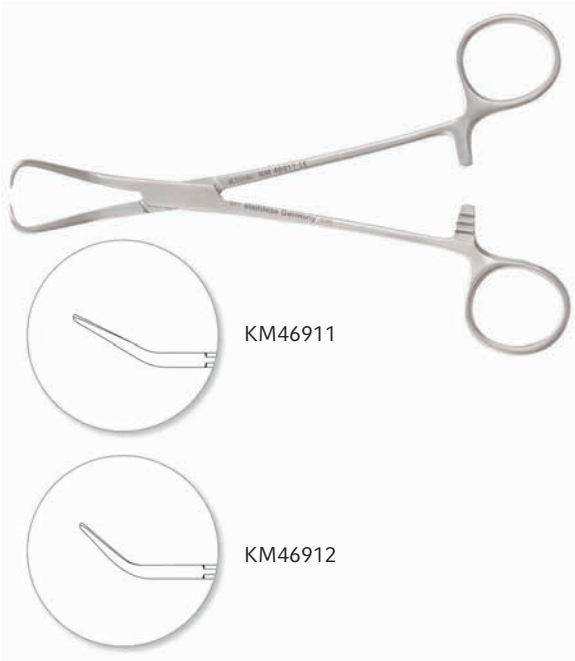
# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

### LEWIN BONE HOLDING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| KM47130 | Serrated, 7" (18 cm) |

### GLENOID PERFORATING FORCEPS




Pointed tips, 6-1/2" (17 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46911 | Slightly curved |
| KM46912 | Strongly curved |

# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

### BONE HOLDING FORCEPS

For positioning K-Wire up to 0.035" (0.9 mm).

| ITEM # | DESCRIPTION |
|---|---|
| KM45302 | Curved, with 0.035" (0.9 mm) K-Wire guide, 6-3/4" (17 cm) |

### BONE HOLDING FORCEPS

For positioning K-Wire up to 0.062" (1.6 mm).

| ITEM # | DESCRIPTION |
|---|---|
| KM45304 | Curved, with 0.062" (1.6 mm) K-wire guide, 5-1/2" (14 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

### BONE HOLDING FORCEPS

Curved, with K-Wire guide, 5" (13 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM45305 | 0.035" (0.9 mm) |
| KM45306 | 0.045" (1.1 mm) |
| KM45307 | 0.062" (1.6 mm) |

### LOCKE PHALANGEAL FORCEPS

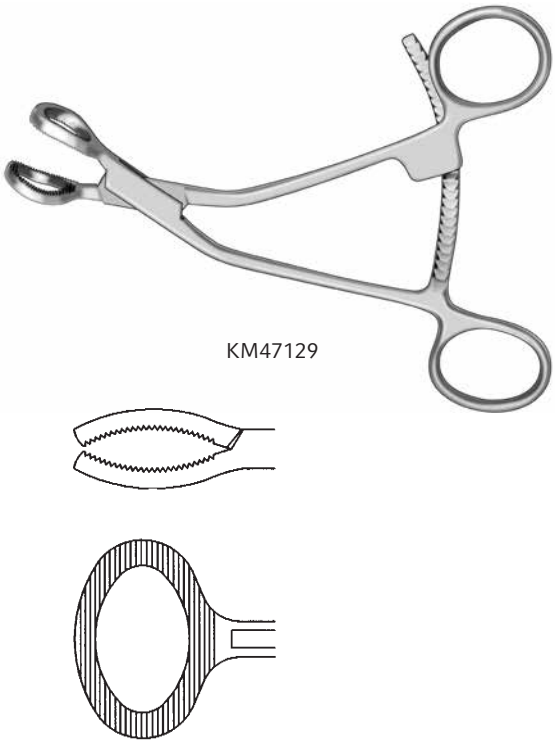
Very useful for removing the sesamoid bone.

| ITEM # | DESCRIPTION |
|---|---|
| KM69787 | Serrated, 1 x 2 teeth, 6" (15 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

### BONE HOLDING FORCEPS



KM47129

Angled, with fenestration.

| ITEM # | DESCRIPTION |
|---|---|
| KM47129 | Inside fenestration 22 x 14 mm, outside fenestration 30 x 20 mm, ratchet length 3" (76 mm), overall length 6" (15 cm) |

### MALLEOLLAR BONE HOLDING FORCEPS

KM47010

Grasping forceps for small bones.

| ITEM # | DESCRIPTION |
|---|---|
| KM47010 | 1 x 1 sharp points, 8-1/4" (21 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

### PARHAM-MARTIN BONE CLAMP

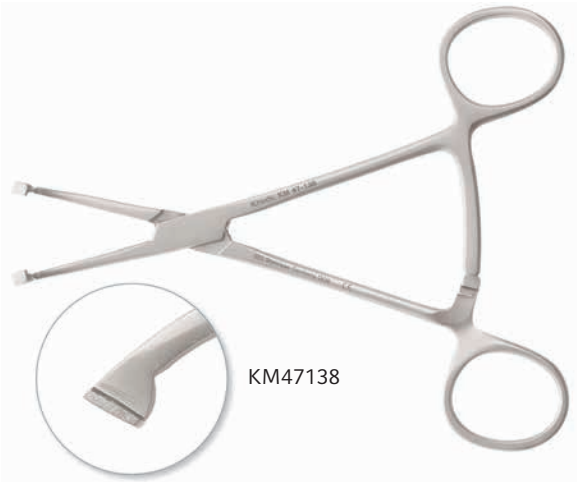
KM47172

KM47173

Fit thin end of band through slot in other end of band. Insert thin end into clamp. 8-1/4" (21 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47172 | Bands not included |
| KM47173 | Single band only |

### PLATE AND BONE HOLDING FORCEPS



KM47138

For positioning small bone plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47138 | 5-3/8" (14 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

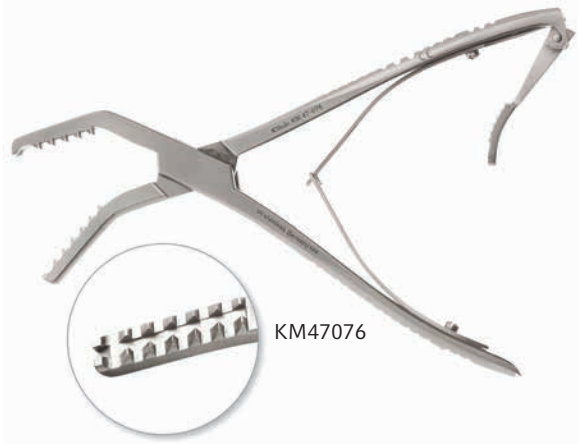
### PLATE AND BONE HOLDING FORCEPS

KM47139

For positioning mini bone plates.

| ITEM # | DESCRIPTION |
|---|---|
| KM47139 | 1 pointed tip, 5-1/4" (14 cm) |

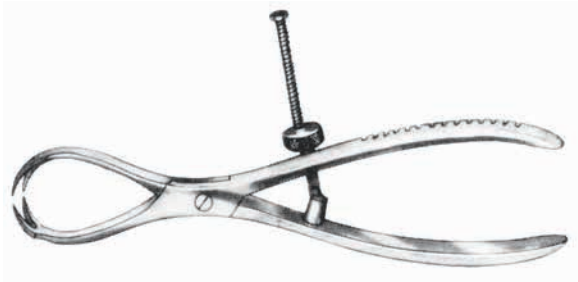
### SEMB BONE HOLDING FORCEPS


KM47076

Curved sideways. Deep teeth.

| ITEM # | DESCRIPTION |
|---|---|
| KM47074 | 4 x 5 teeth, without ratchet, 7-1/2" (19 cm) |
| KM47076 | 5 x 5 teeth, with ratchet, 8" (21 cm) |

### PATELLA BONE HOLDING FORCEPS


KM47012

| ITEM # | DESCRIPTION |
|---|---|
| KM47012 | 2 x 2 sharp teeth, with speed lock, 7" (18 cm) |

# BONE HOLDING INSTRUMENTS

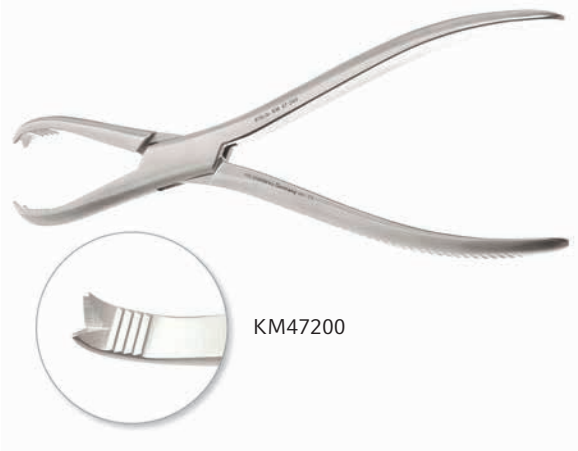
## Bone Holding Forceps

### VAN BUREN SEQUESTRUM FORCEPS

KM47072

| ITEM # | DESCRIPTION |
|---|---|
| KM47072 | Curved sideways, serrated, 9" (23 cm) |

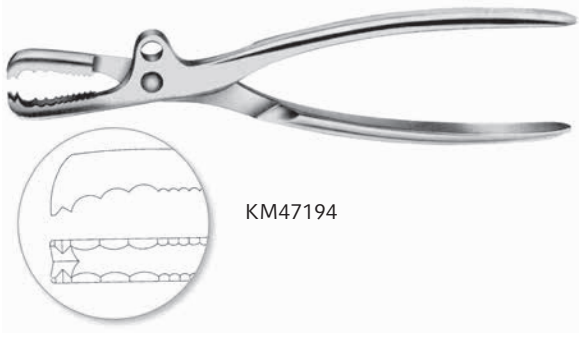
### LANGENBECK BONE HOLDING FORCEPS



KM47200

| ITEM # | DESCRIPTION |
|---|---|
| KM47200 | 2 x 2 teeth, 8-1/4" (21 cm) |

### FARABEUF BONE HOLDING FORCEPS



KM47194

Adjustable jaw.

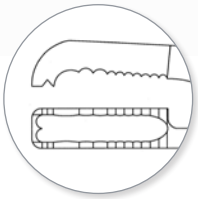
| ITEM # | DESCRIPTION |
|---|---|
| KM47194 | 9" (23 cm) |
| KM47196 | 10" (25.5 cm) |

# BONE HOLDING INSTRUMENTS

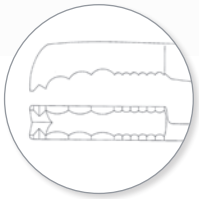
## Bone Holding Forceps

### FARABEUF-LAMBOTTE BONE HOLDING FORCEPS

KM47190



KM47190



KM47192

Adjustable jaw.

| ITEM # | DESCRIPTION |
|---|---|
| KM47190 | 7-1/2" (19 cm) |
| KM47192 | 10-1/2" (27 cm) |

### FERGUSSON BONE HOLDING FORCEPS

KM47198

| ITEM # | DESCRIPTION |
|---|---|
| KM47198 | Deep teeth, 8-1/4" (21 cm) |

### FIBULA BONE HOLDING FORCEPS

KM47170

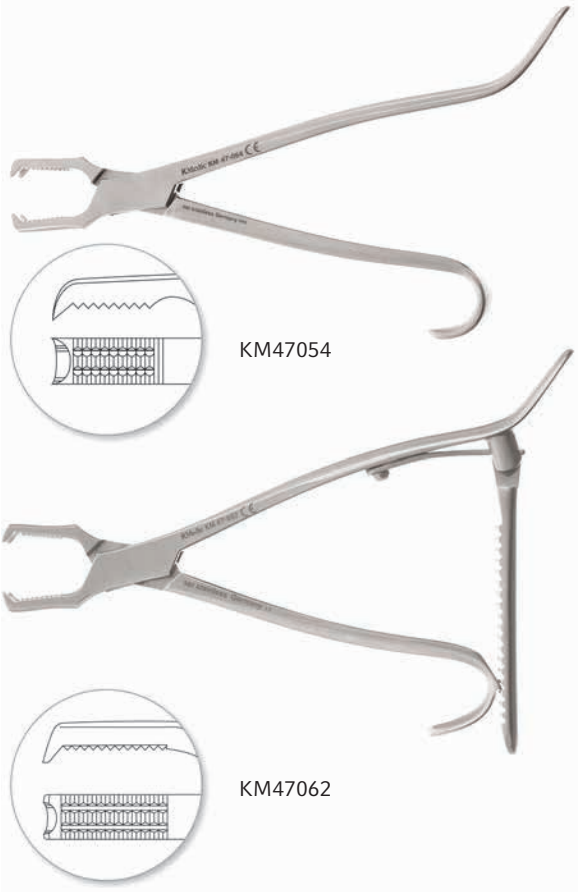
With angled tip and speed lock.

| ITEM # | DESCRIPTION |
|---|---|
| KM47170 | 8-1/2" (22 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

### KERN BONE HOLDING FORCEPS



KM47054

KM47062

| ITEM # | DESCRIPTION |
|---|---|
| KM47054 | Mini, 6-5/8" (17 cm), without ratchet |
| KM47056 | 9-1/2" (24 cm), without ratchet |
| KM47062 | 6-3/4" (17 cm), with ratchet |
| KM47064 | 9-1/2" (24 cm), with ratchet |

### LAMBOTTE BONE HOLDING FORCEPS

KM47204

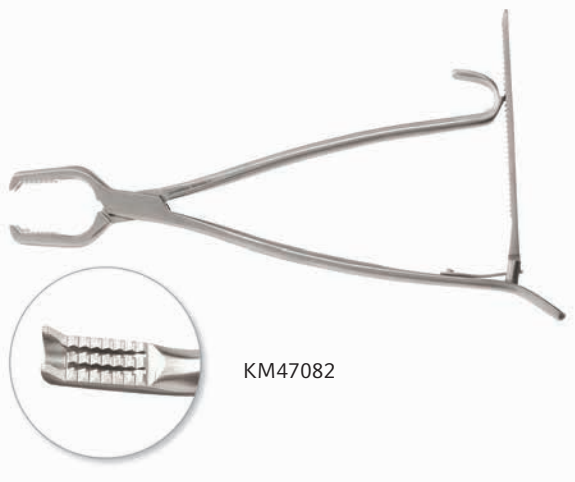
With swivel head, adjustable jaw.

| ITEM # | DESCRIPTION |
|---|---|
| KM47204 | 8-1/2" (22 cm) |
| KM47206 | 10-1/2" (27 cm) |
| KM47208 | 11-1/2" (29 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

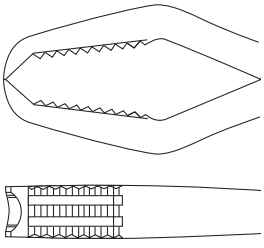
### LANE BONE HOLDING FORCEPS



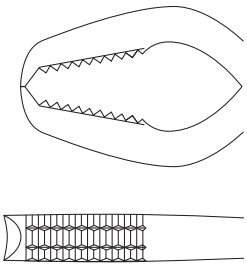
KM47082

Particularly well suited for use during insertion of intermedullary nails.

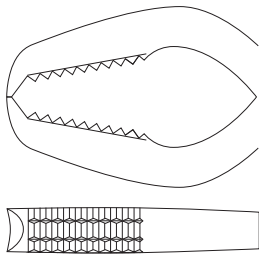
| ITEM # | DESCRIPTION |
|---|---|
| KM47078 | Light model, without ratchet, 13" (33 cm) |
| KM47080 | Light model, with ratchet, 13" (33 cm) |
| KM47068 | Standard model, without ratchet, 13" (33 cm) |
| KM47082 | Standard model, with ratchet, 13" (33 cm) |
| KM47070 | Without ratchet, 17" (43 cm) |
| KM47084 | With ratchet, 17" (43 cm) |



KM47078
KM47080



KM47068
KM47082



KM47070
KM47084

# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

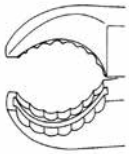
### ULRICH SELF-RETAINING BONE HOLDING FORCEPS

KM47108

Straight, with speed lock.

| ITEM # | DESCRIPTION |
|---|---|
| KM47108 | Mini, 7-1/4" (19 cm) |
| KM47110 | 8-1/2" (22 cm) |
| KM47112 | 9-7/8" (25 cm) |
| KM47114 | 10-1/4" (26 cm) |

KM47108



KM47110

KM47112

KM47114

### ULRICH SELF-RETAINING BONE HOLDING FORCEPS

KM47116

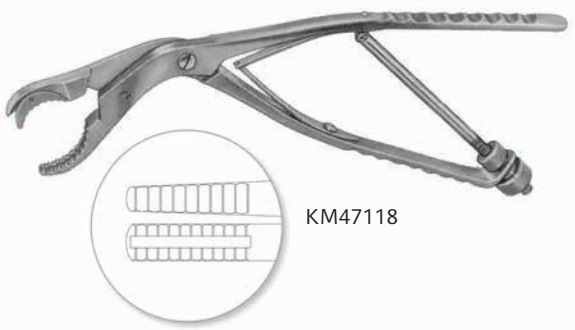
Angled, with speed lock.

| ITEM # | DESCRIPTION |
|---|---|
| KM47109 | 7-1/4" (19 cm) |
| KM47116 | 11" (28 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Holding Forceps

### ULRICH SELF-RETAINING BONE HOLDING FORCEPS




Angled, with speed lock and swivel jaw.

| ITEM # | DESCRIPTION |
|---|---|
| KM47118 | 11" (28 cm) |

### ANGLED BONE HOLDING FORCEPS

With swivel head, adjustable jaw.

| ITEM # | DESCRIPTION |
|---|---|
| KM47212 | 8-1/2" (22 cm) |

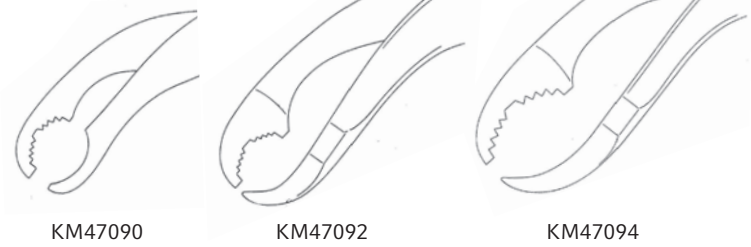
# BONE HOLDING INSTRUMENTS

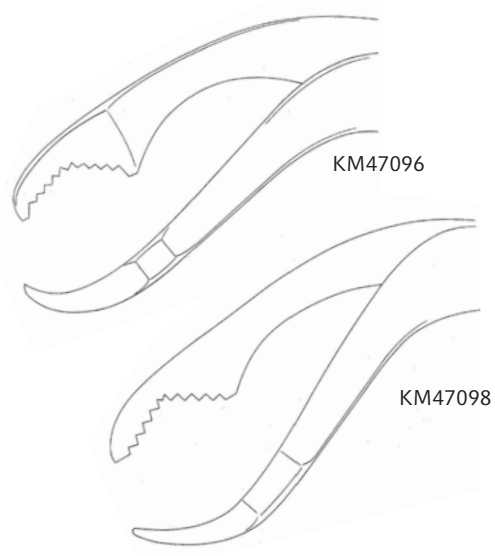
## Bone Holding Forceps

### VEBRUGGE SELF-CENTERING BONE HOLDING FORCEPS

Self centering, with speed lock.

| ITEM # | DESCRIPTION |
|---|---|
| KM47090 | 5-3/4" (15 cm) |
| KM47092 | 7-1/4" (19 cm) |
| KM47094 | 9-1/4" (24 cm) |
| KM47096 | 10" (26 cm) |
| KM47098 | 11-1/4" (29 cm) |




### VERBRUEGGE BONE HOLDING FORCEPS

With short ratchet.

| ITEM # | DESCRIPTION |
|---|---|
| KM47120 | 6-7/8" (18 cm) |

# BONE HOLDING INSTRUMENTS

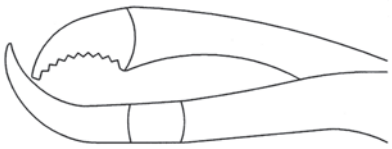
## Bone Holding Forceps

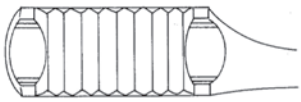
### VERBRUEGGE BONE HOLDING FORCEPS

KM47122

With long ratchet.

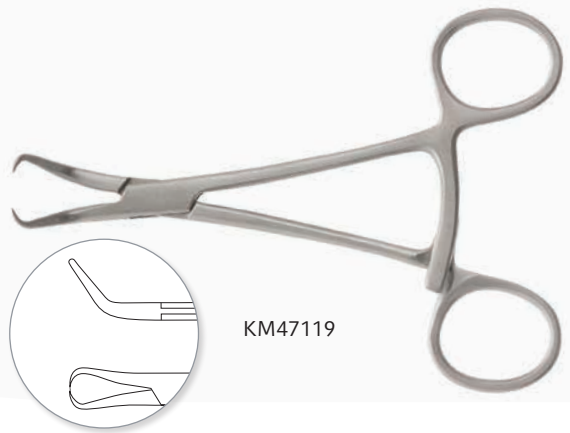
| ITEM # | DESCRIPTION |
|---|---|
| KM47122 | 10" (26 cm) |
| KM47124 | 10-1/2" (27 cm) |
| KM47126 | 11" (28 cm) |





## Bone Reduction Forceps

### STAGBEETLE BONE REDUCTION FORCEPS



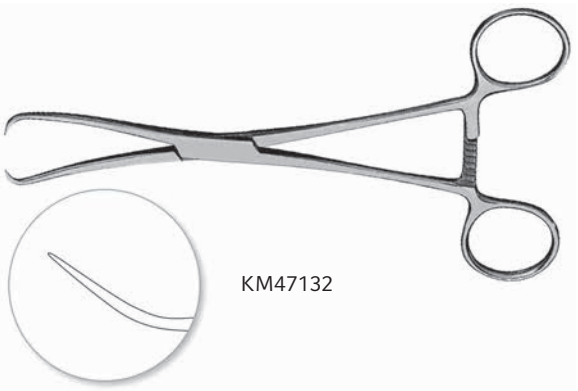
KM47119

| ITEM # | DESCRIPTION |
|---|---|
| KM47119 | Curved, pointed tips, 4-7/8" (13 cm) |

# BONE HOLDING INSTRUMENTS

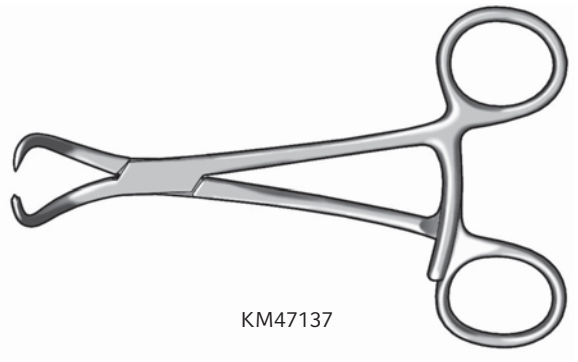
## Bone Reduction Forceps

### REILL BONE REDUCTION FORCEPS



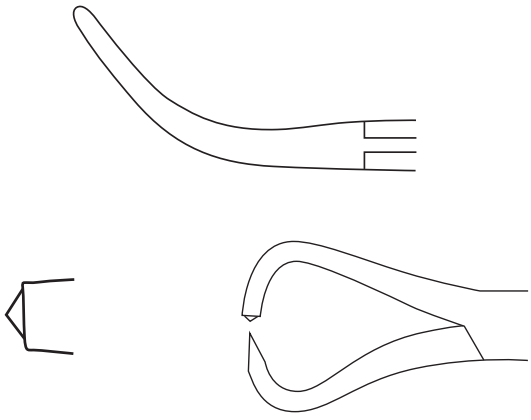

| ITEM # | DESCRIPTION |
|---|---|
| KM47132 | Curved, pointed tips, 6-3/4" (17 cm) |

### BONE REDUCTION FORCEPS




Curved. One tip has a stepped point for a better hold on bone.

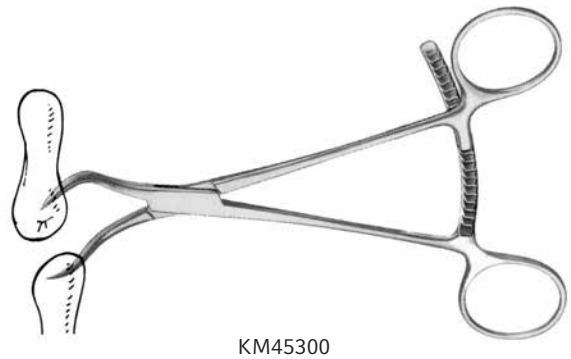
| ITEM # | DESCRIPTION |
|---|---|
| KM47137 | 5-1/4" (14 cm) |
| KM47136 | 6-3/4" (17 cm) |



# BONE HOLDING INSTRUMENTS

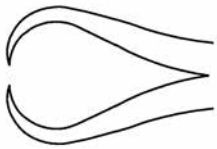
## Bone Reduction Forceps

### BONE REDUCTION FORCEPS



KM45300

| ITEM # | DESCRIPTION |
|---|---|
| KM45300 | Curved, pointed tips, 5" (13 cm) |



### BONE REDUCTION FORCEPS

KM47134

With ratchet completely engaged, the jaw opening is 9 mm wide.

| ITEM # | DESCRIPTION |
|---|---|
| KM47134 | Ratchet length: 2" (5 cm)<br>Opens to 4" (10 cm)<br>8" (21 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Reduction Forceps

### BONE REDUCTION FORCEPS

Curved and serrated with pointed tips.

| ITEM # | DESCRIPTION |
|---|---|
| KM47133 | Narrow, 5-1/4" (14 cm) |
| KM47135 | Broad, 5-1/2" (14 cm) |

# BONE HOLDING INSTRUMENTS

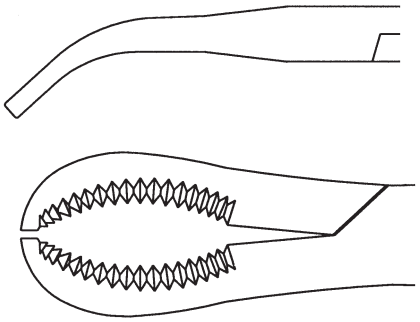
## Bone Reduction Forceps

### BONE REDUCTION FORCEPS

KM47105

Curved, with speed lock.

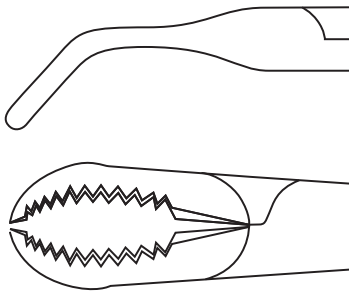
| ITEM # | DESCRIPTION |
|---|---|
| KM47105 | 7" (18 cm) |
| KM47107 | 9-5/8" (25 cm) |



### BONE REDUCTION FORCEPS

KM47128

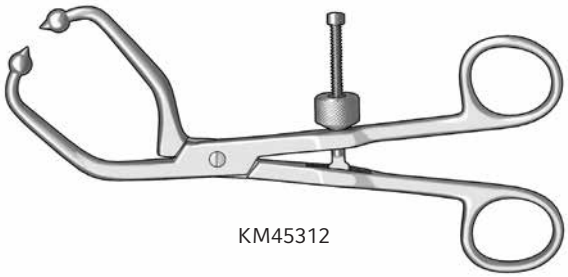
| ITEM # | DESCRIPTION |
|---|---|
| KM47128 | Small, curved, ratchet length 1-1/8" (28 mm), 5-1/2" (14 cm) |



# BONE HOLDING INSTRUMENTS

## Bone Reduction Forceps

### ANGLED PELVIC BONE REDUCTION FORCEPS

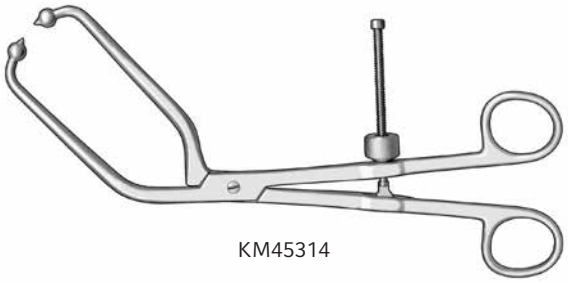


KM45312

Short tips.

| ITEM # | DESCRIPTION |
|---|---|
| KM45312 | Short pointed-ball tips, 7-3/8" (19 cm) |

### ANGLED PELVIC BONE REDUCTION FORCEPS



KM45314

Long tips.

| ITEM # | DESCRIPTION |
|---|---|
| KM45314 | Long pointed-ball tips, 9-5/8" (25 cm) |

### ASYMETRIC PELVIC REDUCTION FORCEPS

KM45310

| ITEM # | DESCRIPTION |
|---|---|
| KM45310 | Short pointed-ball tips, 16" (41 cm) |

# BONE HOLDING INSTRUMENTS

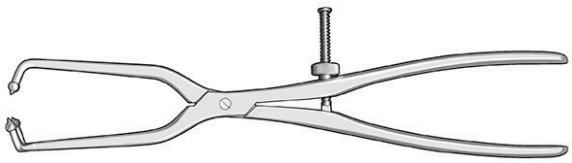
## Bone Reduction Forceps

### PELVIC REDUCTION FORCEPS

KM47100

| ITEM # | DESCRIPTION |
|---|---|
| KM47100 | With screws, 13-1/2" (35 cm) |

### PELVIC REDUCTION FORCEPS



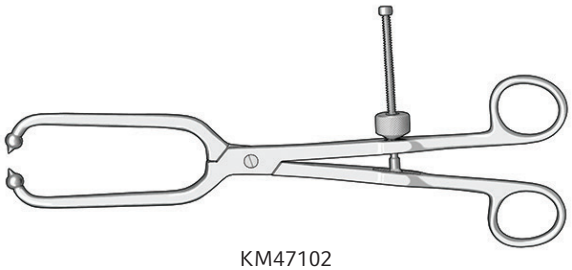
KM47101

| ITEM # | DESCRIPTION |
|---|---|
| KM47101 | 1 x 2 jaws, long pointed-ball tips, 16-1/8" (41 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Reduction Forceps

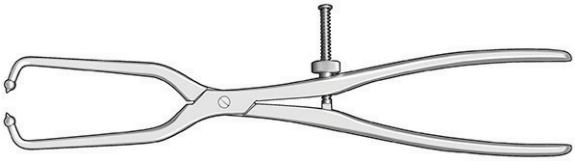
### PELVIC REDUCTION FORCEPS



KM47102

| ITEM # | DESCRIPTION |
|---|---|
| KM47102 | Angled tips, short pointed-ball tips, 10-1/8" (26 cm) |

### PELVIC REDUCTION FORCEPS



KM47103

| ITEM # | DESCRIPTION |
|---|---|
| KM47103 | Pointed tips, long pointed-ball tips, 16-1/8" (41 cm) |

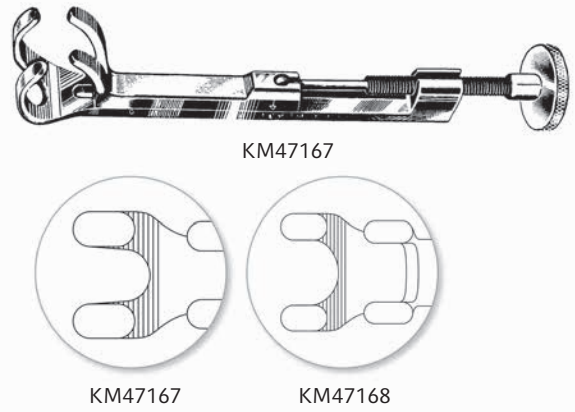
# BONE HOLDING INSTRUMENTS

## Bone Clamps

### BISHOP BONE CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| KM47202 | Adjustable jaw, 8-7/8" (22.5 cm) |

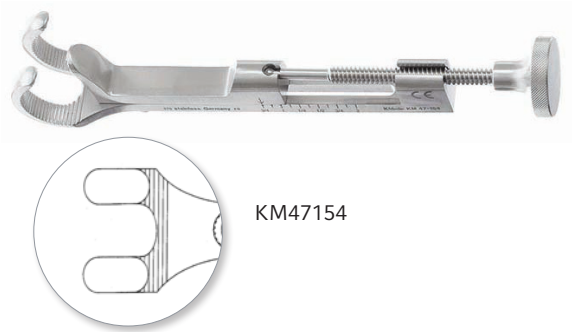
### LAMBERT-LOWMAN BONE CLAMPS




2 x 2 jaws. Calibrated in inches to measure bone diameter.

| ITEM # | DESCRIPTION |
|---|---|
| KM47167 | 7-1/4" (18.5 cm) |
| KM47168 | 8" (20.5 cm) |

### LOWMAN BONE CLAMPS



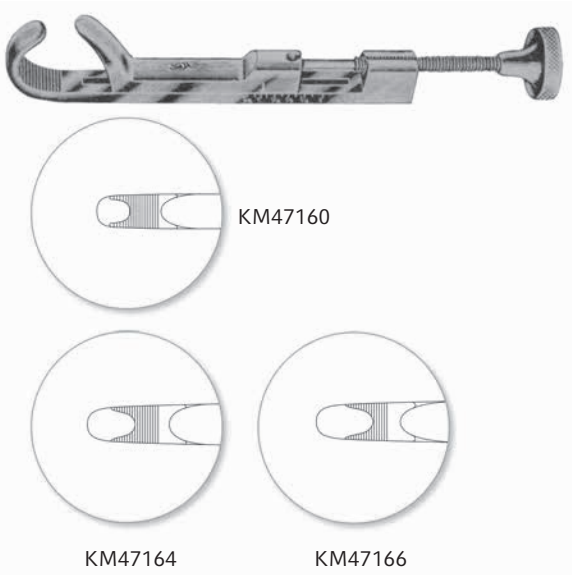

1 x 2 jaws. Calibrated in inches to measure bone diameter.

| ITEM # | DESCRIPTION |
|---|---|
| KM47140 | 4-3/4" (12 cm) |
| KM47154 | 5-5/8" (14.5 cm) |
| KM47156 | 6-3/4" (17 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Clamps

### LOWMAN BONE CLAMPS




1 x 1 jaws. Calibrated in inches to measure bone diameter.

| ITEM # | DESCRIPTION |
|---|---|
| KM47160 | 4-3/4" (12 cm) |
| KM47164 | 5-3/4" (14.5 cm) |
| KM47166 | 6-7/8" (17.5 cm) |

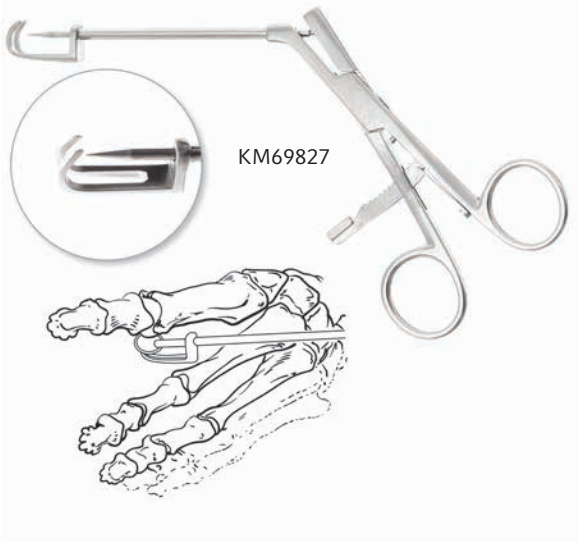
### ROSENBLOOM SESAMOID CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| KM69795 | Slightly curved, 6-1/2" (16.5 cm) |

# BONE HOLDING INSTRUMENTS

## Bone Clamps

### VOGEN SESAMOID CLAMP




- Designed to grasp and hold a sesamoid while dissecting it free.
- The sesamoid is first exposed within the capsule, then the two-pronged tip is hooked beneath the sesamoid. The plunger is then seated in the bone to secure it for manipulation and dissection.

| ITEM # | DESCRIPTION |
|---|---|
| KM69827 | 4" (10 cm) shaft |

# BONE HOOKS AND AWLS

## Bone Hooks

### SHARP HOOK

KM47880

To check fracture and remove ingrown tissue.

| ITEM # | DESCRIPTION |
|---|---|
| KM47880 | 6" (15 cm) |

### BONE HOOKS

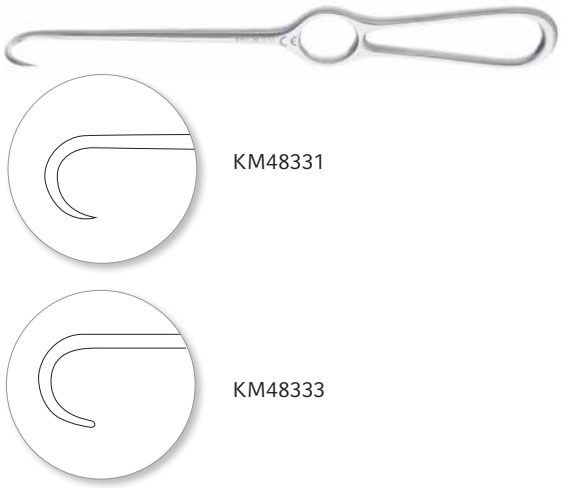
KM48343

KM48344

Sharp with grip handle, 9" (23 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM48342 | Small, 6 mm high x 10 mm deep |
| KM48343 | Medium, 11 mm high x 18 mm deep |
| KM48344 | Large, 12 mm high x 21 mm deep |

### VOLKMAN BONE HOOKS



KM48331

KM48333

| ITEM # | DESCRIPTION |
|---|---|
| KM48331 | Sharp, 15 mm high x 20 mm deep, 9" (23 cm) |
| KM48335 | Sharp, 15 mm high x 20 mm deep, 9-3/4" (25 cm) |
| KM48334 | Sharp, 19 mm high x 27 mm deep, 8-5/8" (22 cm) |
| KM48333 | Blunt, 15 mm high x 20 mm deep, 9" (23 cm) |

# BONE HOOKS AND AWLS

## Bone Hooks

### BONE HOOK

Large, for femurs. With T-handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM48332 | 18 mm high x 21 mm deep, 7-7/8" (20 cm) |

## Awls

### BONE AWL

| ITEM # | DESCRIPTION |
|---|---|
| KM48336 | Square taper, 6-1/4" (16 cm) |

### KUNTSCHER DIAMOND POINTED AWL

| ITEM # | DESCRIPTION |
|---|---|
| KM48303 | With handle, 11-5/8" (29.5 cm) |

# BONE HOOKS AND AWLS

## Awls

### PERTHES BONE AWL

KM48337

| ITEM # | DESCRIPTION |
|---|---|
| KM48337 | 8-1/4" (21 cm) |

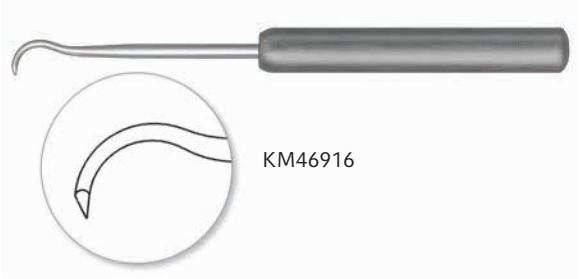
### RUSH AWL AND REAMERS

KM48339

For penetrating cortex of bone. Used as grooved director for insertion of pins.

| ITEM # | DESCRIPTION |
|---|---|
| KM48338 | 0.1" (2.5 mm) diameter, working length 7-1/2" (19 cm), pointed, 9-7/8" (25 cm) |
| KM48339 | 0.1" (3 mm) diameter, working length 8-1/4" (21 cm), pointed, 10-5/8" (27 cm) |
| KM48340 | 0.2" (5 mm) diameter, working length 8-1/2" (21.5 cm), pointed, 10-7/8" (27.5 cm) |
| KM48341 | 0.25" (6 mm) diameter, working length 10-1/2" (26.5 cm), pointed, 12-3/4" (32.5 cm) |

### SHOULDER PENETRATING AWL



KM46916

Phenolic handle.

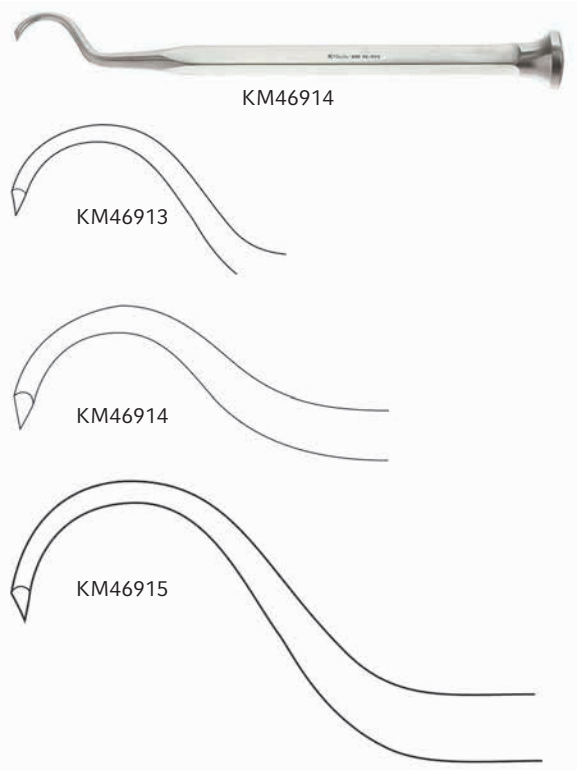
| ITEM # | DESCRIPTION |
|---|---|
| KM46916 | 9-1/4" (23.5 cm) |

*Autoclavable to 290°F (143°C)*

# BONE HOOKS AND AWLS

## Awls

### SHOULDER PERCUSSION AWLS




8-1/2" (21.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46913 | Small |
| KM46914 | Medium |
| KM46915 | Large |

# CARTILAGE AND TENDON INSTRUMENTS

## Clamps and Forceps

### MARTIN CARTILAGE CLAMPS

Deep teeth.

| ITEM # | DESCRIPTION |
|---|---|
| KM46802 | 7-3/8" (18.5 cm) |
| KM46814 | 8-1/8" (20.5 cm) |

### WALTON CARTILAGE CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| KM46818 | Slightly curved, 8-1/2" (21.5 cm) |

# CARTILAGE AND TENDON INSTRUMENTS

## Clamps and Forceps

### DINGMAN FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| KM46804 | Angular, 2 x 2 sharp teeth, serrated jaws, 7-1/2" (19 cm) |

### MENISCUS CLAMP

| ITEM # | DESCRIPTION |
|---|---|
| KM46750 | Curved shaft, 7-1/8" (18 cm) |

# CARTILAGE AND TENDON INSTRUMENTS

## Clamps and Forceps

### MENISCUS CLAMPS

Serrated, 5-3/8" (13.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46744 | Straight |
| KM46746 | Angled 20 degrees |

### PRESTON LIGAMENTUM FLAVUM FORCEPS (MENISCUS)

For grasping tags of the meniscus.

| ITEM # | DESCRIPTION |
|---|---|
| KM46748 | Serrated jaw with 1 x 2 tip, 7-1/4" (19 cm) |

### HOEN ALLIGATOR FORCEPS

For retrieving tendons or foreign bodies.

| ITEM # | DESCRIPTION |
|---|---|
| KM55170 | Serrated jaw with 1 x 2 tip, 5-7/8" (15 cm) shaft |

# CARTILAGE AND TENDON INSTRUMENTS

## Clamps and Forceps

### KLEINERT-KUTZ TENDON RETRIEVERS

Serrated with sharp teeth, 8" (20.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46735 | Flexible shaft |
| KM46739 | Rigid shaft |

### CARROLL TENDON RETRIEVER

065325

| ITEM # | DESCRIPTION |
|---|---|
| 065325 | Curved shaft, 6" (15 cm) |

# CARTILAGE AND TENDON INSTRUMENTS

## Clamps and Forceps

### BRAND TENDON PULLING FORCEPS

Angular shaft.

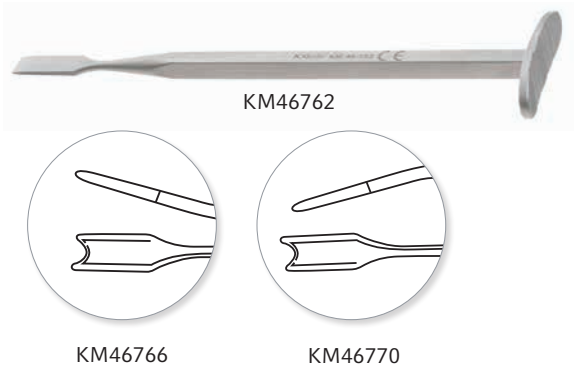
| ITEM # | DESCRIPTION |
|---|---|
| KM46736 | 6" (15 cm) |
| KM46737 | 7-1/2" (19 cm) |
| KM46738 | 9-1/2" (24 cm) |

## Cartilage Knives

### DOWNING CARTILAGE KNIFE

| ITEM # | DESCRIPTION |
|---|---|
| KM46772 | Curved blade, concave edge. With guards, 10" (25.5 cm) |

### SMILLIE KNIVES




Also known as a meniscus knife. Useful for fasciotomies, 6-1/4" (16 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46762 | Straight, chisel type |
| KM46766 | Curved left |
| KM46770 | Curved right |

# CARTILAGE AND TENDON INSTRUMENTS

## Cartilage Scissors

### MARTIN CARTILAGE SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| 790320 | Curved, two serrated blades, 8" (20.5 cm) |
| KM46828 | Two serrated blades, 8" (20.5 cm) |

### MUELLER CAPSULE SCISSORS

| ITEM # | DESCRIPTION |
|---|---|
| KM46821 | Angled, 9-1/2" (24 cm) |

# CARTILAGE AND TENDON INSTRUMENTS

## Tendon Strippers

### BUNNELL TENDON STRIPPERS

KM46732

KM46730

KM46731

KM46732

KM46733

KM46734

*Note gaps in circles are accurate.*

6" (15 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46730 | 3 mm |
| KM46731 | 4 mm |
| KM46732 | 5 mm |
| KM46733 | 6 mm |
| KM46734 | 7 mm |

# DISSECTORS AND ELEVATORS

## SMITHWICK HOOK AND DISSECTOR

KM49320

| ITEM # | DESCRIPTION |
|---|---|
| KM49320 | Double-ended, 12" (30.5 cm) |

## WOODSON DURAL SEPARATOR AND PACKER

KM55302

| ITEM # | DESCRIPTION |
|---|---|
| KM55302 | Double-ended with grooved blade, 3 mm blunt end, 7" (18 cm) |

## WOODSON ELEVATOR AND SPATULA

KM55300

| ITEM # | DESCRIPTION |
|---|---|
| KM55300 | Double-end, semi-sharp, angled, both ends 3 mm, 10" (25.5 cm) |

## RHOTON BALL-TIPPED DISSECTORS

KM55346

7-1/2" (19 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM55344 | Straight, 0.8 mm |
| KM55345 | Angled 90 degrees, 3 mm |
| KM55346 | Angled 90 degrees, 5 mm |
| KM55347 | Angled 40 degrees, 4 mm |
| KM55348 | Angled 40 degrees, 8 mm |

## RHOTON ELEVATORS

KM55333

7-1/2" (19 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM55333 | Curved |
| KM55334 | Angled |

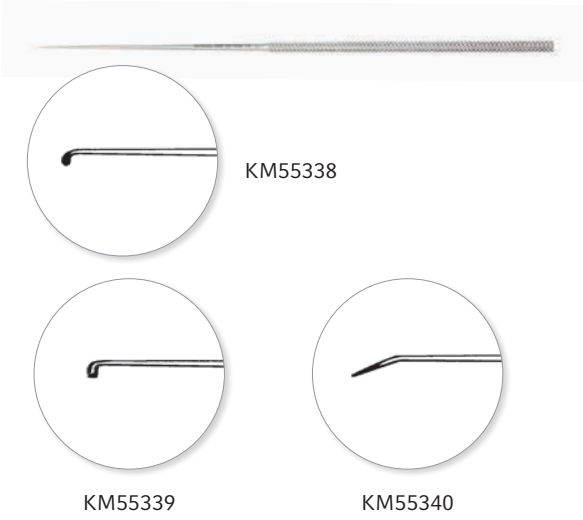
# DISSECTORS AND ELEVATORS

## RHOTON MICRO CURETTES

7-1/2" (19 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM55342 | Straight, 1 x 2 mm |
| KM55343 | Angled, 1 x 2 mm |

## RHOTON MICRO DISSECTION HOOKS




| ITEM # | DESCRIPTION |
|---|---|
| KM55338 | Sharp, angled 90 degrees |
| KM55339 | Blunt, angled 90 degrees |
| KM55340 | Sharp, angled 45 degrees |

## RHOTON NEEDLE SHARP

| ITEM # | DESCRIPTION |
|---|---|
| KM55341 | Straight, sharp |

# DISSECTORS AND ELEVATORS

## RHOTON ROUND DISSECTORS

| ITEM # | DESCRIPTION |
|---|---|
| KM55330 | Angled, 1 mm |
| KM55331 | Angled, 2 mm |
| KM55332 | Angled, 3 mm |

## RHOTON SPATULA DISSECTORS

| ITEM # | DESCRIPTION |
|---|---|
| KM55335 | #6 Small, angled |
| KM55336 | #7 Medium, angled |
| KM55337 | #8 Large, angled |

# DISSECTORS AND ELEVATORS

## Penfield Elevators/Dissectors

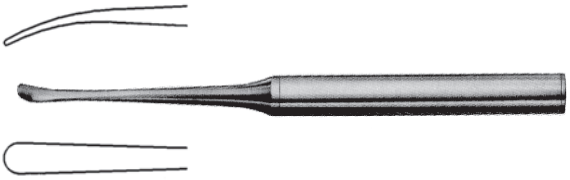
### PENFIELD ELEVATORS

KM57624

| ITEM # | DESCRIPTION |
|---|---|
| KM57624 | Style #1, double-ended, 7" (18 cm) |
| KM57626 | Style #2, double-ended, 7-3/4" (19.5 cm) |
| KM57628 | Style #3, double-ended, 7-3/4" (19.5 cm) |
| KM57630 | Style #4, single-ended, 8" (20.5 cm) |
| KM57632 | Style #5, double-ended, 7-1/2" (19 cm) |

KM57626

KM57628



KM57630

KM57632

# DISSECTORS AND ELEVATORS

## Double-Ended Elevators

### ALLERDYCE ELEVATOR AND DISSECTOR

KM57616

| ITEM # | DESCRIPTION |
|---|---|
| KM57616 | Double-ended, 8 mm semi-sharp end, 8 mm blunt end, 7-1/2" (19 cm) |

### FREER DOUBLE-END ELEVATOR

355194

Pilling® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| 355194 | Double-ended, sharp and blunt, 7" (18 cm) |

### FREER DOUBLE-END ELEVATOR

KM57614

KMedic® Pattern, satin finish.

| ITEM # | DESCRIPTION |
|---|---|
| KM57614 | Double-ended, 5 mm sharp and 5 mm blunt ends, 7-1/4" (18.5 cm) |

### KLEINERT-KUTZ ELEVATOR AND DISSECTOR

KM57615

| ITEM # | DESCRIPTION |
|---|---|
| KM57615 | Double-ended, 2 mm and 3 mm sharp ends, 7-5/8" (19.5 cm) |

### KLEINERT-KUTZ ELEVATOR AND DISSECTOR

065300

| ITEM # | DESCRIPTION |
|---|---|
| 065300 | Double-ended, 2.4 mm and 3.2 mm ends, 7-3/4" (19.5 cm) |

# DISSECTORS AND ELEVATORS

## Metatarsal Elevators

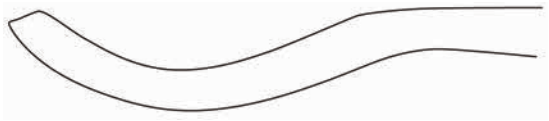
### MCGLAMERY® METATARSAL ELEVATOR

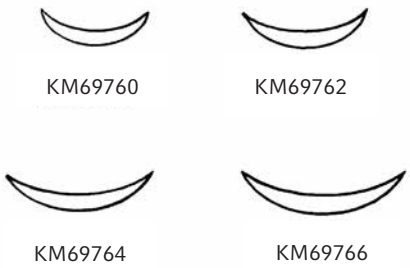
KM69758

| ITEM # | DESCRIPTION |
|---|---|
| KM69758 | Sharp, curved, 9 mm, 6-1/2" (16.5 cm) |

### MCGLAMERY® METATARSAL ELEVATORS

KM69764



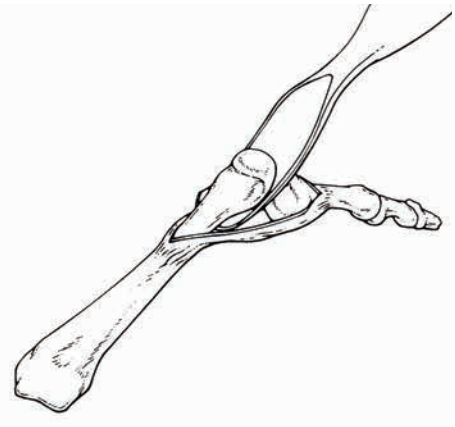


KM69760 KM69762

KM69764 KM69766

For foot surgeons, the McGlamry® Elevator is indispensable. It's the perfect tool to deglove a metatarsal head, and it's invaluable in numerous other procedures. Sharp edge, 6-1/2" (16.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM69760 | 11 mm |
| KM69762 | 13 mm |
| KM69764 | 15 mm |
| KM69766 | 17 mm |



# DISSECTORS AND ELEVATORS

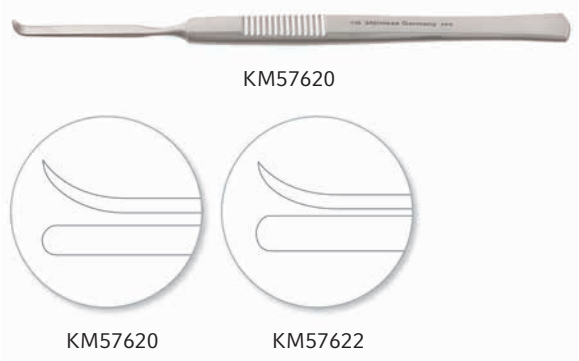
## Periosteal Elevators

### COTTLE DOUBLE-ENDED ELEVATOR

Graduated in 10 mm increments.

| ITEM # | DESCRIPTION |
|---|---|
| 053135 | Blade A 5 mm<br>Blade B 3 mm<br>8-7/8" (22.5 cm) |

### MCKENTY ELEVATORS




Semi-sharp, 5-1/2" (14 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM57620 | 4 mm |
| KM57622 | 5 mm |

# DISSECTORS AND ELEVATORS

## Periosteal Elevators

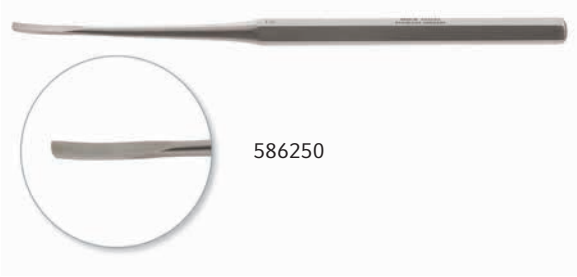
### KEY PERIOSTEAL ELEVATORS

KM46262

Sharp edge.

| ITEM # | DESCRIPTION |
|---|---|
| KM46258 | 1/4" (6.4 mm) wide, 7" (17.5 cm) |
| KM46260 | 3/8" (9.5 mm) wide, 7-1/2" (19 cm) |
| KM46262 | 1/2" (13 mm) wide, 7-1/2" (19 cm) |
| KM46264 | 3/4" (19 mm) wide, 7-7/8" (20 cm) |
| KM46266 | 1" (25.4 mm) wide, 8-3/8" (21.5 cm) |

### KEY PERIOSTEAL ELEVATOR



586250

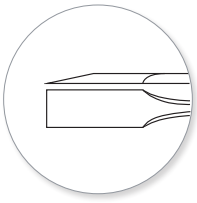
| ITEM # | DESCRIPTION |
|---|---|
| 586250 | 1/8" (3 mm) jaw, 7" (18 cm) |

### ADSON PERIOSTEAL ELEVATORS

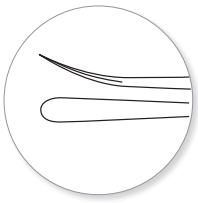
KM49310

Also known as Joseph Elevator, 7 mm, 6-3/4" (17 cm).

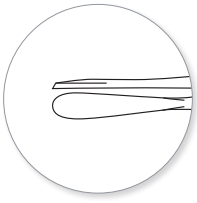
| ITEM # | DESCRIPTION |
|---|---|
| KM49310 | Sharp, straight |
| KM49311 | Blunt, curved |
| KM49313 | Semi-sharp, straight |
| KM49312 | Semi-sharp, curved |



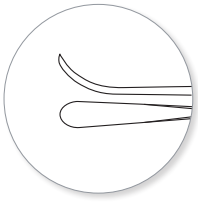
KM49310



KM49311



KM49313



KM49312

# DISSECTORS AND ELEVATORS

## Periosteal Elevators

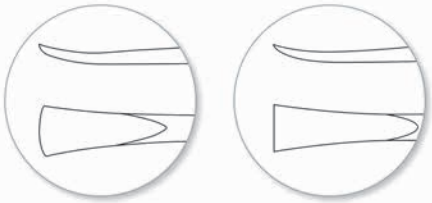
### CUSHING LITTLE JOKER ELEVATOR

358350

| ITEM # | DESCRIPTION |
|---|---|
| 358350 | 8 mm tip, 6-5/8" (16.5 cm) |

### CUSHING PERIOSTEAL ELEVATORS

KM49322

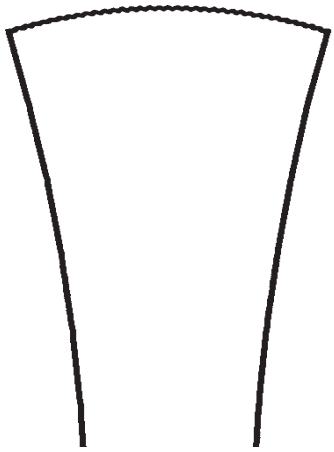


KM49322 KM49324

KM49326

7-1/2" (19 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49322 | 15 mm sharp, curved edge |
| KM49324 | 15 mm sharp, straight edge |
| KM49326 | 15 mm, Serrated, curved edge |

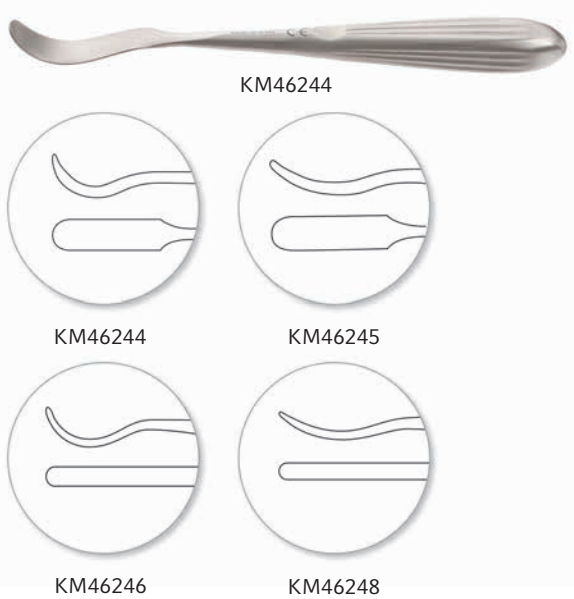


KM49326

# DISSECTORS AND ELEVATORS

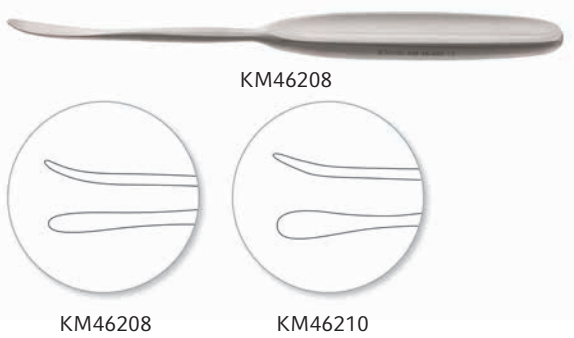
## Periosteal Elevators

### CREGO PERIOSTEAL ELEVATOR




| ITEM # | DESCRIPTION |
|---|---|
| KM46244 | Blunt, full curved, 15 mm, 7-3/8" (18.5 cm) |
| KM46245 | Sharp, slightly curved, 15 mm, 7-3/4" (19.5 cm) |
| KM46246 | Sharp, full curved, 7 mm, 7-3/4" (19.5 cm) |
| KM46248 | Sharp, slightly curved, 7 mm, 8" (20.5 cm) |

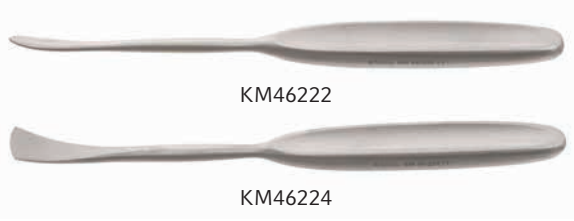
### LANE PERIOSTEAL ELEVATOR




Blunt, 7-3/4" (19.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46208 | Narrow, 6 mm |
| KM46210 | Broad, 10 mm |

### LANGENBECK PERIOSTEAL ELEVATOR




7-3/4" (19.5 cm)

| ITEM # | DESCRIPTION |
|---|---|
| KM46222 | Narrow, 6 mm, blunt edge |
| KM46224 | Broad, 17 mm, sharp edge |

# DISSECTORS AND ELEVATORS

## Periosteal Elevators

### SEDILLOT PERIOSTEAL ELEVATOR

KM58085

| ITEM # | DESCRIPTION |
|---|---|
| KM58085 | 16 mm, 7" (18 cm) |

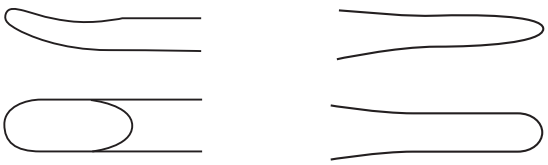
### SAYRE PERIOSTEAL ELEVATOR

586240

| ITEM # | DESCRIPTION |
|---|---|
| 586240 | Double-ended, 4 mm straight blunt end, 8 mm curved sharp end, 6-5/8" (17 cm) |

### SAYRE PERIOSTEAL ELEVATOR

KM58076

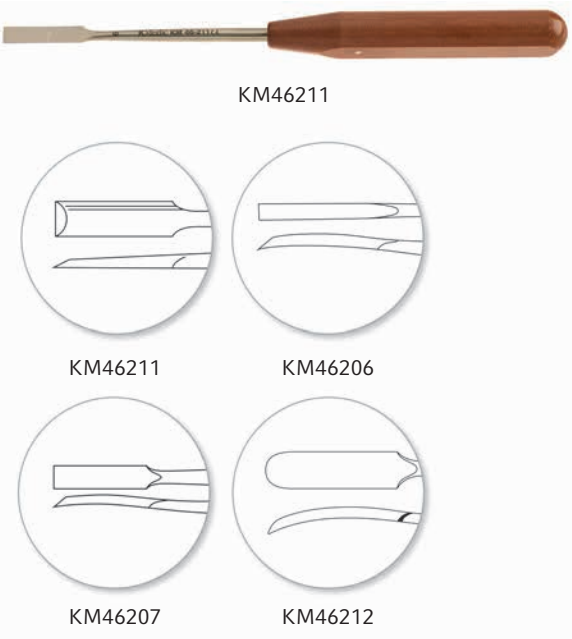


| ITEM # | DESCRIPTION |
|---|---|
| KM58075 | Double-ended, 5 mm sharp end, 9 mm sharp end, 6-1/2" (16.5 cm) |
| KM58076 | Double-ended, 5 mm blunt end, 9 mm blunt end, 6-1/2" (16.5 cm) |

# DISSECTORS AND ELEVATORS

## Periosteal Elevators

### PERIOSTEAL ELEVATOR




Phenolic handle, 7-1/2" (19 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46206 | Sharp, curved blade, 3 mm staight edge |
| KM46207 | Sharp, curved blade, 6 mm staight edge |
| KM46211 | Sharp, straight blade, 6 mm staight edge |
| KM46212 | Sharp, curved blade, 6 mm round edge |

**Autoclavable to 290°F (143°C)*

### PERIOSTEAL ELEVATOR

Phenolic handle.

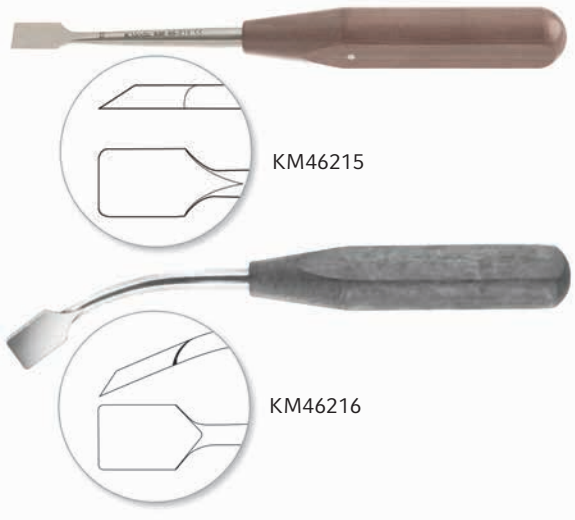
| ITEM # | DESCRIPTION |
|---|---|
| KM46213 | Sharp, straight blade, 14 mm oval edge, 7-7/8" (20 cm) |
| KM46214 | Sharp, curved blade, 14 mm oval edge, 7-5/8" (19.5 cm) |

**Autoclavable to 290°F (143°C)*

# DISSECTORS AND ELEVATORS

## Periosteal Elevators

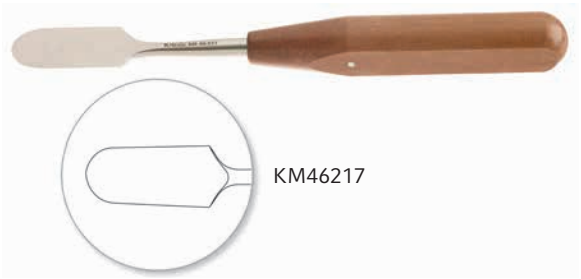
### PERIOSTEAL ELEVATOR




Phenolic handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM46215 | Sharp, straight blade, 13 mm staight edge, 7-1/4" (18.5 cm) |
| KM46216 | Sharp, curved blade, 13 mm staight edge, 7-5/8" (19.5 cm) |
| KM46217 | Sharp, straight blade, 20 mm round edge, 7-7/8" (20 cm) |

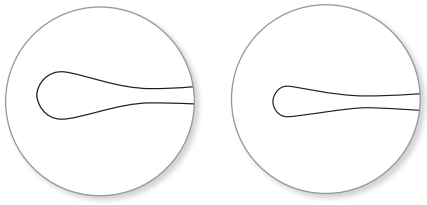
**Autoclavable to 290°F (143°C)*

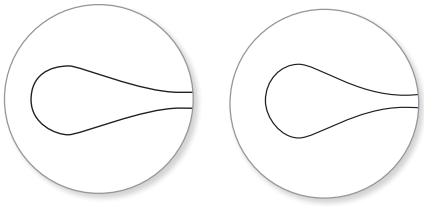



## Cobb Elevators

### COBB SPINAL ELEVATORS, HEX HANDLE

KM49342




All stainless steel and hexagonal handle.
Sharp, 9-1/2" (24 cm).

| ITEM # | TIP WIDTH |
|---|---|
| KM49340 | 1/2" (13 mm) |
| KM49342 | 3/4" (19 mm) |
| KM49344 | 1" (25.5 mm) |
| KM49346 | 1-1/4" (32 mm) |

# DISSECTORS AND ELEVATORS

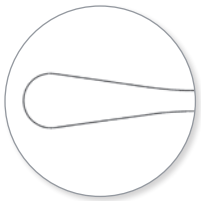
## Cobb Elevators

### COBB SPINAL ELEVATORS, ALUMINUM HANDLE

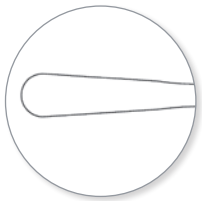
KM46414

All stainless steel working end and anodized aluminum handle. Sharp, 11" (28 cm).

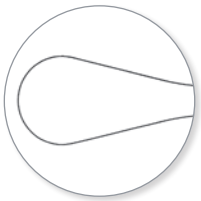
| ITEM # | TIP WIDTH |
|---|---|
| KM46413 | 3/8" (10 mm) |
| KM46414 | 1/2" (12 mm) |
| KM46416 | 3/4" (19 mm) |
| KM46418 | 1" (25 mm) |
| KM46420 | 1-1/4" (32 mm) |



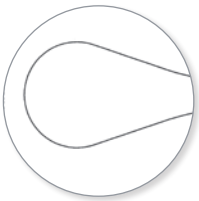
KM46414



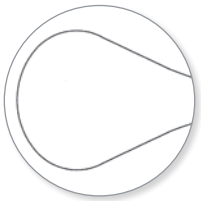
KM46413



KM46416



KM46418



KM46420

# DISSECTORS AND ELEVATORS

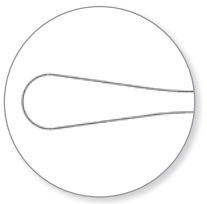
## Cobb Elevators

### COBB SPINAL ELEVATORS, STAINLESS STEEL HANDLE

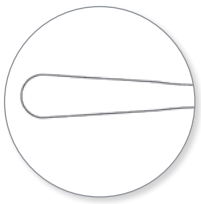
KM46414S

All stainless steel working end and handle.
Sharp, 11" (28 cm).

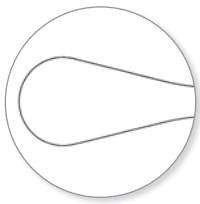
| ITEM # | TIP WIDTH |
|---|---|
| KM46413S | 3/8" (10 mm) |
| KM46414S | 1/2" (12 mm) |
| KM46416S | 3/4" (19 mm) |
| KM46418S | 1" (25 mm) |
| KM46420S | 1-1/4" (32 mm) |



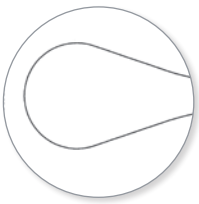
KM46414S



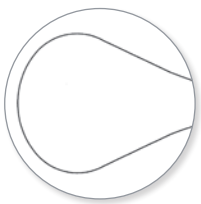
KM46413S



KM46416S



KM46418S



KM46420S

## Endoscopic Elevators

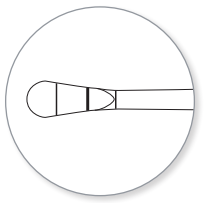
### ENDOSCOPIC COBB ELEVATORS

KM55614

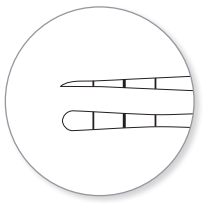
Phenolic handle.

| ITEM # | TIP WIDTH | TIP LENGTH | SHAFT LENGTH | SHAFT DIAMETER | HANDLE LENGTH | OVERALL LENGTH |
|---|---|---|---|---|---|---|
| KM55620 | 1/4" (6 mm) | 2.7" | 9.3" | 0.285" (7.2 mm) | 5" | 17" (43 cm) |
| KM55610 | 1/4" (6 mm) | 3-1/2" | 10" | 0.45" (11.5 mm) | 6-1/2" | 20" (51 cm) |
| KM55612 | 3/8" (10 mm) | 3-1/2" | 10" | 0.45" (11.5 mm) | 6-1/2" | 20" (51 cm) |
| KM55614 | 0.49" (12.5 mm) | 3-1/2" | 10" | 0.45" (11.5 mm) | 6-1/2" | 20" (51 cm) |

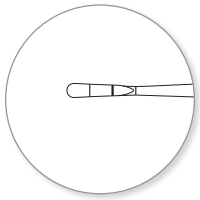
*Phenolic handles autoclavable to 290°F (143°C)*



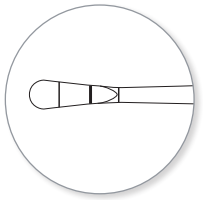
KM55614



KM55620



KM55610

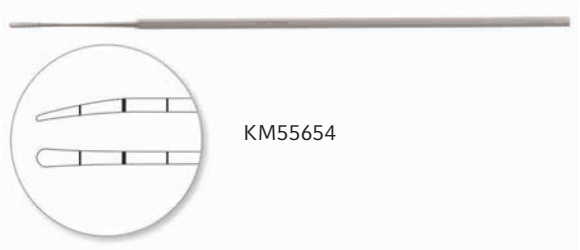


KM55612

# DISSECTORS AND ELEVATORS

## Endoscopic Elevators

### ENDOSCOPIC PENFIELD ELEVATOR

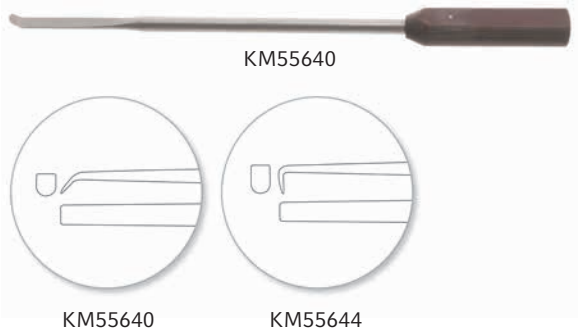


KM55654

Stainless steel handle.

| ITEM # | TIP WIDTH | TIP LENGTH | SHAFT DIAMETER | HANDLE LENGTH | OVERALL LENGTH |
|---|---|---|---|---|---|
| KM55654 | 0.16" (4 mm) | 3-1/2" | 0.280" (7 mm) | 11-1/2" | 15" (38 cm) |

### ENDOSCOPIC RIB ELEVATORS



KM55640

KM55640 KM55644

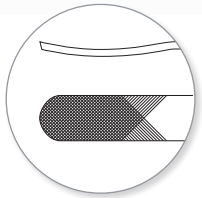
Sharp, with phenolic handle.

| ITEM # | TIP SHAPE | TIP WIDTH | TIP LENGTH | SHAFT LENGTH | SHAFT DIAMETER | HANDLE LENGTH | OVERALL LENGTH |
|---|---|---|---|---|---|---|---|
| KM55640 | Angled 45 degrees | 9 mm radius | 4" | 8" | 0.45" (11.5 mm) | 5" | 17" (43 cm) |
| KM55644 | Curved 90 degrees | 9 mm radius | 4" | 8" | 0.45" (11.5 mm) | 5" | 17" (43 cm) |

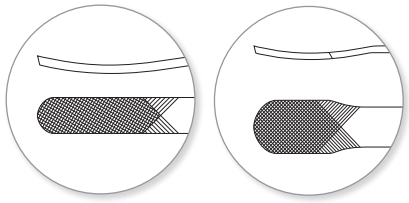
*Phenolic handles autoclavable to 290°F (143°C)*

## Specialty Elevators

### DARRACH ELEVATORS



KM46903



KM46902 KM46904

Useful in shoulder surgery. Blunt tips with serrations can be used to elevate or retract soft tissue and muscle from the operative site.

| ITEM # | DESCRIPTION |
|---|---|
| KM46902 | Small, 1/2" (12 mm) wide at tip, 10-1/4" (26 cm) |
| KM46903 | Medium, 3/4" (19 mm) wide at tip, 10-1/4" (26 cm) |
| KM46904 | Large, 1" (25 mm) wide at tip, 13-3/4" (35 cm) |

# DISSECTORS AND ELEVATORS

## Specialty Elevators

### HARRINGTON SPINAL ELEVATOR

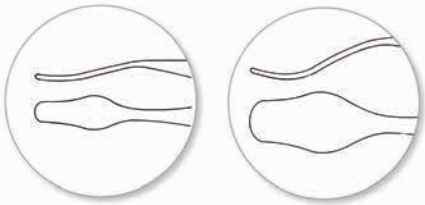
KM55798

All stainless steel.

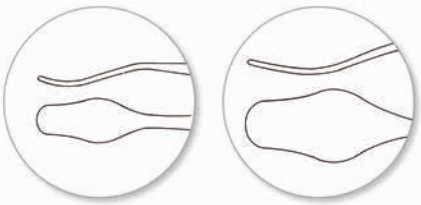
| ITEM # | DESCRIPTION |
|---|---|
| KM55798 | Sharp, 3/4" (19 mm) wide tip, 12" (30.5 cm) |

### CHANDLER ELEVATORS

KM46252



KM46250 KM46252

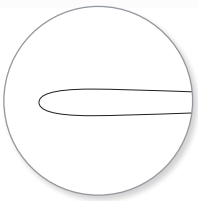


KM46254 KM46256

Blunt, slightly curved.

| ITEM # | TIP WIDTH | LENGTH |
|---|---|---|
| KM46250 | 8 mm | 7-1/8" (18 cm) |
| KM46252 | 12 mm | 8" (20.5 cm) |
| KM46254 | 17 mm | 9" (23 cm) |
| KM46256 | 19 mm | 10" (25.5 cm) |

### SACHS NERVE ELEVATOR



KM57618

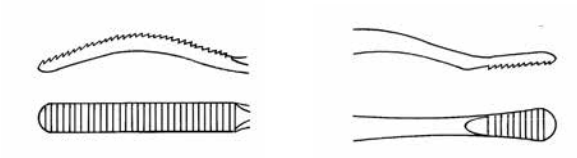
| ITEM # | DESCRIPTION |
|---|---|
| KM57618 | 3 mm blunt, 7-1/2" (19 cm) |

# BONE FILES AND RASPS

## Bone Files

### BONE FILE #10

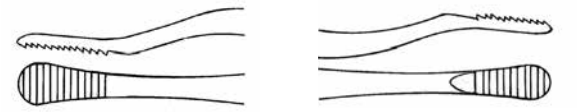
KM69542



| ITEM # | DESCRIPTION |
|---|---|
| KM69542 | Double-ended, plain serrations, 5 mm width, 7-1/8" (18 cm) |

### BONE FILE #12

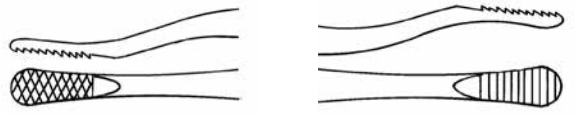
KM69543



| ITEM # | DESCRIPTION |
|---|---|
| KM69543 | Double-ended, plain serrations, 7 and 5 mm width, 7-1/8" (18 cm) |

### BONE FILE #12A

KM69544

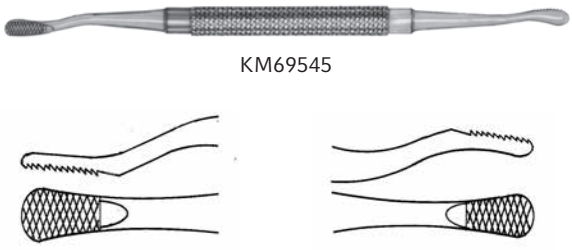


| ITEM # | DESCRIPTION |
|---|---|
| KM69544 | Double-ended, plain and cross serrations, 5 mm width, 7-1/8" (18 cm) |

# BONE FILES AND RASPS

## Bone Files

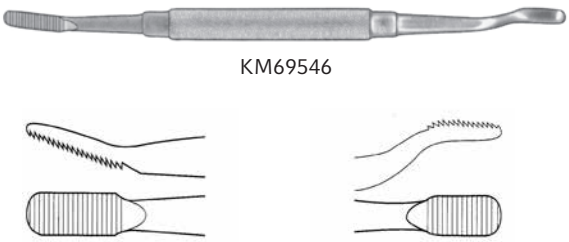
### BONE FILE #12CA



KM69545

| ITEM # | DESCRIPTION |
|---|---|
| KM69545 | Double-ended, cross serrations, 5 and 7 mm width, 7-1/8" (18 cm) |

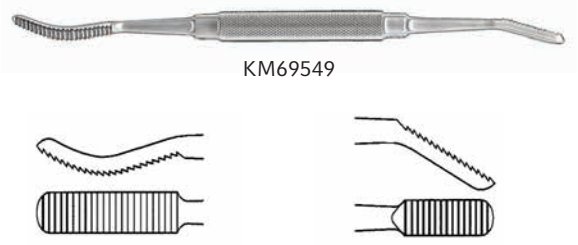
### BONE FILE #33



KM69546

| ITEM # | DESCRIPTION |
|---|---|
| KM69546 | Double-ended, plain serrations, 6 and 5 mm width, 7-1/8" (18 cm) |

### BONE FILE #45



KM69549

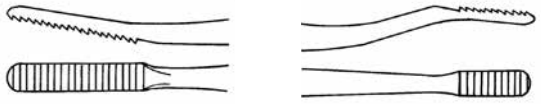
| ITEM # | DESCRIPTION |
|---|---|
| KM69549 | Double-ended, plain serrations, 6 and 5 mm width, 7-1/4" (18.5 cm) |

# BONE FILES AND RASPS

## Bone Files

### BONE RASP #64

KM58070



| ITEM # | DESCRIPTION |
|---|---|
| KM58070 | Double-ended, plain serrations, 3 and 4 mm width, 7-1/8" (18 cm) |

### BONE FILE #92A

KM69530

Single-ended, delicate, plain serrations.

| ITEM # | DESCRIPTION |
|---|---|
| KM69530 | Angled downward |

### BONE FILE #92B

KM69534

Single-ended, delicate, plain serrations.

| ITEM # | DESCRIPTION |
|---|---|
| KM69534 | Angled upward |

### NAIL RASP #93

KM69538

| ITEM # | DESCRIPTION |
|---|---|
| KM69538 | Double-ended, 2 mm wide, angled, 6-3/4" (17 cm) |

# BONE FILES AND RASPS

## Bone Files

### BONE FILE

KM46705

Single-ended, 2-sided, convex and flat blade 23 mm wide tapers to 6 mm.

| ITEM # | DESCRIPTION |
|---|---|
| KM46705 | 11" (28 cm) |

### BONE FILE

KM46650

Single-ended, bayonet shank, half round blade.

| ITEM # | DESCRIPTION |
|---|---|
| KM46650 | Fine teeth, 15 mm wide, 9-1/2" (24 cm) |

## Bone Rasps

### PUTTI BONE RASP

KM46652

Double-ended. One round blade, 10 mm wide, tapers to 4 mm, and one half round blade, 15 mm wide, tapers to 5 mm.

| ITEM # | DESCRIPTION |
|---|---|
| KM46652 | 12" (30.5 cm) |

### PUTTI BONE RASP

KM46654

Double-ended. Flat blades, 18 mm wide, taper to 4 mm. One blade end is curved up and one end is curved sideways.

| ITEM # | DESCRIPTION |
|---|---|
| KM46654 | 10-3/8" (26.5 cm) |

# BONE FILES AND RASPS

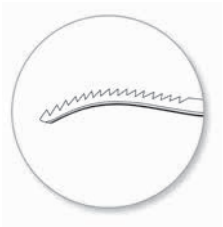
## Bone Rasps

### AUFRICHT RASPS

052162

KM58052

KM58052



KM58050

| ITEM # | DESCRIPTION |
|---|---|
| 052162 | Forward-cutting, 25 x 9 mm, 8" (20.5 cm) |
| KM58050 | Forward-cutting, 8.5 mm wide, 8-1/4" (21 cm) |
| KM58052 | Backward-cutting, 9 mm wide, 8-1/4" (21 cm) |

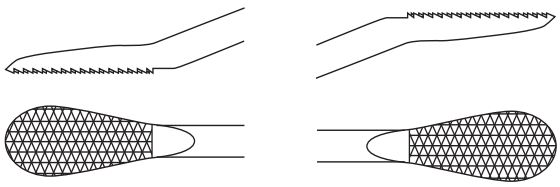
### AUFRICHT-GLABELLA RASP

052165

| ITEM # | DESCRIPTION |
|---|---|
| 052165 | Up and down-cutting, 9 x 30 mm, 7-1/2" (19 cm) |

### BONE RASP

KM69547



For rapid shaping of bone.

| ITEM # | DESCRIPTION |
|---|---|
| KM69547 | Double-ended, fine and coarse cross serrations, 13 mm wide, 8-1/2" (21.5 cm) |

# BONE FILES AND RASPS

## Bone Rasps

### CONVERSE RASP

052180

| ITEM # | DESCRIPTION |
|---|---|
| 052180 | Double-ended, fine and coarse serrations, 7-1/8" (18 cm) |

### COTTLE RASP

052130

| ITEM # | DESCRIPTION |
|---|---|
| 052130 | Straight down-cutting blade, 9 mm width, 8-1/4" (21 cm) |

### FOMAN RASP

KM46655

Double-ended. Fine and coarse serrations. 4-sided, convex and flat blades.

| ITEM # | DESCRIPTION |
|---|---|
| KM46655 | 8-1/2" (21.5 cm) |

### JOSEPH RASP

441530

| ITEM # | DESCRIPTION |
|---|---|
| 441530 | Fine serrations, 6-1/8" (15.5 cm) |

# BONE FILES AND RASPS

## Bone Rasps

### KLEINERT-KUTZ BONE RASP

Double-ended. Fine and coarse serrations.
4-sided, convex and flat blades.

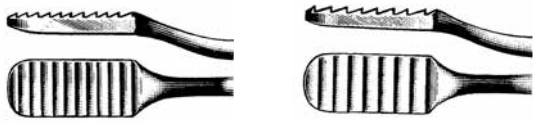
| ITEM # | DESCRIPTION |
|---|---|
| KM46653 | 8-7/8" (22.5 cm) |

### KLEINERT-KUTZ RASP

| ITEM # | DESCRIPTION |
|---|---|
| 441555 | 4-sided tips, 7.5 mm wide, 8-5/8" (22 cm) |

### LEWIS RASPS

KM58072


KM58072


KM58073

Single-ended bayonet shank, plain serrations,
8 mm wide, 7-1/2" (19 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM58072 | Fine serrations |
| KM58073 | Coarse serrations |

# BONE FILES AND RASPS

## Bone Rasps

### MALTZ RASP

| ITEM # | DESCRIPTION |
|---|---|
| 052100 | Straight down-cutting blade, 6 mm width, 7-1/8" (18 cm) |

### MALTZ RASP IMPROVED

| ITEM # | DESCRIPTION |
|---|---|
| KM58062 | Double-ended, forward and backward-cutting, 8 mm wide, 8-1/4" (21 cm) |

### POLOKOFF BONE RASPS

KM69540

KM69540

KM69541

Double-ended, plain serrations.

| ITEM # | DESCRIPTION |
|---|---|
| KM69540 | 6 mm wide, 7-7/8" (20 cm) |
| KM69541 | 3 and 4 mm wide, 7-7/8" (20 cm) |

# BONE FILES AND RASPS

## Rib Rasps

### ALEXANDER PERIOSTEAL RASP

| ITEM # | DESCRIPTION |
|---|---|
| KM58110 | 11 mm Sharp, 8-1/8" (20.5 cm) |

### FARABEUF PERIOSTEAL RASPS

Single-ended, Sharp, 5-7/8" (15 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM58106 | Straight blade, 13 mm curved edge |
| KM58108 | Curved blade, 13 mm straight edge |

### KIRMISSION PERIOSTEAL RASP

| ITEM # | DESCRIPTION |
|---|---|
| KM58112 | Sharp, 6-3/4" (17 cm) |

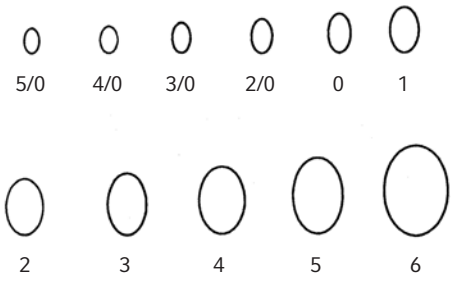
# CURETTES

## Brun Curettes

### BRUN (SPRATT) CURETTES

KM46521

KM49114



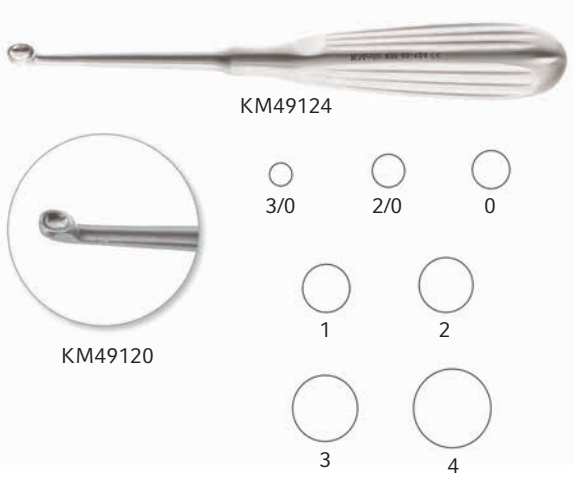

Oval cup, hollow handle.

| ITEM # | TIP SHAPE | SIZE | LENGTH |
|---|---|---|---|
| KM46511 | Straight | #5/0 | 7" (18 cm) |
| KM46512 | Straight | #4/0 | 7" (18 cm) |
| KM46513 | Straight | #3/0 | 7" (18 cm) |
| KM46515 | Straight | #2/0 | 7" (18 cm) |
| KM46517 | Straight | #0 | 7" (18 cm) |
| KM46519 | Straight | #1 | 7" (18 cm) |
| KM46521 | Straight | #2 | 7" (18 cm) |
| KM46523 | Straight | #3 | 7" (18 cm) |
| KM46525 | Straight | #4 | 7" (18 cm) |
| KM46529 | Straight | #5 | 7" (18 cm) |
| KM46531 | Straight | #6 | 7" (18 cm) |
| KM46563 | Straight | #3/0 | 9" (23 cm) |
| KM46564 | Straight | #2/0 | 9" (23 cm) |
| KM46565 | Straight | #0 | 9" (23 cm) |
| KM46566 | Straight | #1 | 9" (23 cm) |
| KM46567 | Straight | #2 | 9" (23 cm) |
| KM46568 | Straight | #3 | 9" (23 cm) |
| KM46569 | Straight | #4 | 9" (23 cm) |
| KM46570 | Straight | #5 | 9" (23 cm) |
| KM46571 | Straight | #6 | 9" (23 cm) |
| | | | |
| KM49110 | Angled 45 degrees | #3/0 | 9" (23 cm) |
| KM49111 | Angled 45 degrees | #2/0 | 9" (23 cm) |
| KM49112 | Angled 45 degrees | #0 | 9" (23 cm) |
| KM49113 | Angled 45 degrees | #1 | 9" (23 cm) |
| KM49114 | Angled 45 degrees | #2 | 9" (23 cm) |
| KM49115 | Angled 45 degrees | #3 | 9" (23 cm) |
| KM49116 | Angled 45 degrees | #4 | 9" (23 cm) |
| KM49117 | Angled 45 degrees | #5 | 9" (23 cm) |
| KM49118 | Angled 45 degrees | #6 | 9" (23 cm) |

# CURETTES

## Brun Curettes

### BRUN (SPRATT) CURETTES



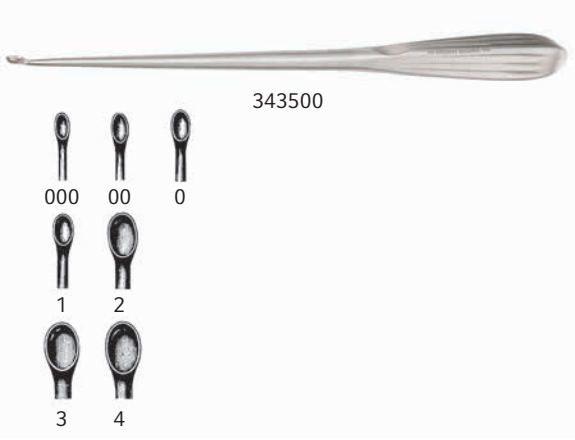

Round up, hollow handle.

| ITEM # | TIP SHAPE | SIZE | LENGTH |
|---|---|---|---|
| KM49120 | Straight | #3/0 | 6-3/4" (17 cm) |
| KM49121 | Straight | #2/0 | 6-3/4" (17 cm) |
| KM49122 | Straight | #0 | 6-3/4" (17 cm) |
| KM49123 | Straight | #1 | 6-3/4" (17 cm) |
| KM49124 | Straight | #2 | 6-3/4" (17 cm) |
| KM49125 | Straight | #3 | 6-3/4" (17 cm) |
| KM49126 | Straight | #4 | 6-3/4" (17 cm) |

# CURETTES

## Brun Curettes

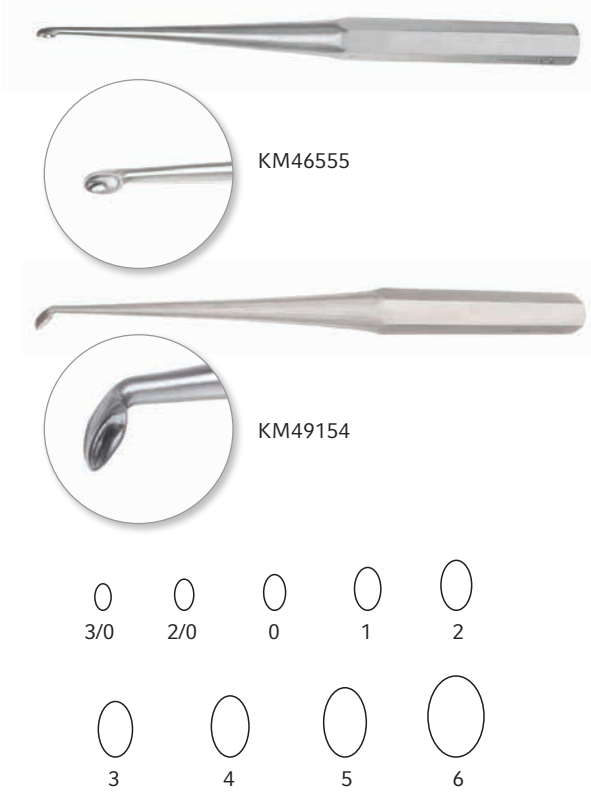
### BRUNS CURETTES




Pilling® Pattern, 8-7/8" (22.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 343500 | Size 000 |
| 343501 | Size 00 |
| 343502 | Size 0 |
| 343503 | Size 1 |
| 343504 | Size 2 |
| 343505 | Size 3 |
| 343506 | Size 4 |

### BRUN CURETTES




Solid hexagonal handle, 9" (23 cm).

| ITEM # | TIP SHAPE | SIZE |
|---|---|---|
| KM46551 | Straight | #3/0 |
| KM46552 | Straight | #2/0 |
| KM46553 | Straight | #0 |
| KM46554 | Straight | #1 |
| KM46555 | Straight | #2 |
| KM46556 | Straight | #3 |
| KM46557 | Straight | #4 |
| KM46558 | Straight | #5 |
| KM46559 | Straight | #6 |
| KM49150 | Angled 45 degrees | #3/0 |
| KM49151 | Angled 45 degrees | #2/0 |
| KM49152 | Angled 45 degrees | #0 |
| KM49153 | Angled 45 degrees | #1 |
| KM49154 | Angled 45 degrees | #2 |
| KM49155 | Angled 45 degrees | #3 |
| KM49156 | Angled 45 degrees | #4 |
| KM49157 | Angled 45 degrees | #5 |
| KM49158 | Angled 45 degrees | #6 |

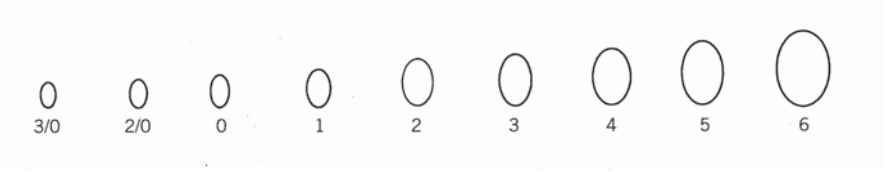
# CURETTES

## Cobb Curettes

### COBB CURETTES, ALUMINUM HANDLE

All stainless steel working end and anodized aluminum, knurled handle, 11" (28 cm).

| ITEM # | TIP SHAPE | SIZE |
|---|---|---|
| KM46422 | Straight | #3/0 |
| KM46423 | Straight | #2/0 |
| KM46424 | Straight | #0 |
| KM46425 | Straight | #1 |
| KM46426 | Straight | #2 |
| KM46427 | Straight | #3 |
| KM46428 | Straight | #4 |
| KM46429 | Straight | #5 |
| KM46430 | Straight | #6 |
| KM46433 | Angled | #3/0 |
| KM46434 | Angled | #2/0 |
| KM46435 | Angled | #0 |
| KM46436 | Angled | #1 |
| KM46437 | Angled | #2 |
| KM46438 | Angled | #3 |
| KM46439 | Angled | #4 |
| KM46440 | Angled | #5 |
| KM46441 | Angled | #6 |



# CURETTES

## Cobb Curettes

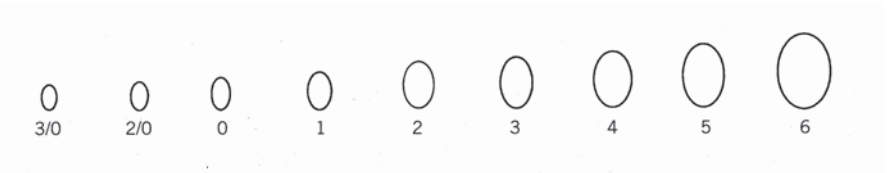
### COBB CURETTES, STAINLESS STEEL HANDLE

KM46427S

KM46438S

All stainless steel working end and stainless steel, knurled handle, 11" (28 cm).

| ITEM # | TIP SHAPE | SIZE |
|---|---|---|
| KM46422S | Straight | #3/0 |
| KM46423S | Straight | #2/0 |
| KM46424S | Straight | #0 |
| KM46425S | Straight | #1 |
| KM46426S | Straight | #2 |
| KM46427S | Straight | #3 |
| KM46428S | Straight | #4 |
| KM46429S | Straight | #5 |
| KM46430S | Straight | #6 |
| KM46433S | Angled | #3/0 |
| KM46434S | Angled | #2/0 |
| KM46435S | Angled | #0 |
| KM46436S | Angled | #1 |
| KM46437S | Angled | #2 |
| KM46438S | Angled | #3 |
| KM46439S | Angled | #4 |
| KM46440S | Angled | #5 |
| KM46441S | Angled | #6 |

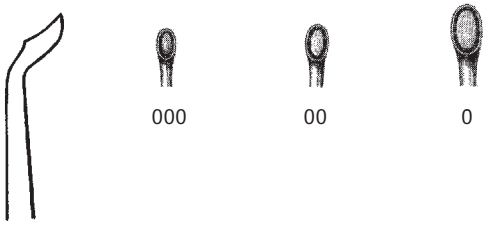


# CURETTES

## Specialty Bone Curettes

### EPSTEIN CURETTES

KM49584




Reverse angle, hollow handle, 8" (20.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49580 | #000 |
| KM49582 | #00 |
| KM49584 | #0 |

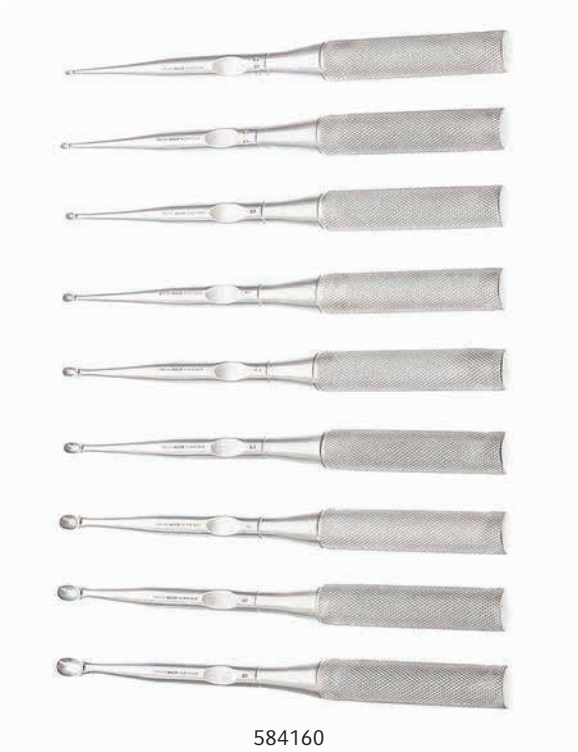
### SCOVILLE CURETTES

| ITEM # | DESCRIPTION |
|---|---|
| KM49574 | Straight, 10" (25.5 cm) |
| KM49576 | Down angle, 10" (25.5 cm) |
| KM49578 | Up angle, 10" (25.5 cm) |

# CURETTES

## Specialty Bone Curettes

### HATFIELD BONE CURETTES



584160

Stainless steel with satin finish. Oval shaped tips, overall length 9" (23 cm). Complete set of nine curettes.

| ITEM # | SIZE | TIP WIDTH | TIP LENGTH |
|---|---|---|---|
| 584160 | 000 | 2.5 mm | 4.0 mm |
| | 00 | 2.8 mm | 4.6 mm |
| | 0 | 3.3 mm | 5.0 mm |
| | 1 | 3.8 mm | 6.0 mm |
| | 2 | 4.8 mm | 7.6 mm |
| | 3 | 5.8 mm | 9.2 mm |
| | 4 | 7.2 mm | 11.6 mm |
| | 5 | 8.7 mm | 12.8 mm |
| | 6 | 10.5 mm | 15.5 mm |

### JANSEN CURETTE

KM29632

| ITEM # | DESCRIPTION |
|---|---|
| KM29632 | Double-ended, oval cups, 6" (15 cm) |

# CURETTES

## Specialty Bone Curettes

### MARTINI BONE CURETTE

KM29620

| ITEM # | DESCRIPTION |
|---|---|
| KM29620 | Double-ended, 4 mm and 5 mm round cups, 5-1/2" (14 cm) |

### WILLIGER BONE CURETTE

KM29630

| ITEM # | DESCRIPTION |
|---|---|
| KM29630 | Double-ended, 3 mm and 4 mm oval cups, 5-1/2" (14 cm) |

### V0LKMANN CURETTES

KM49202

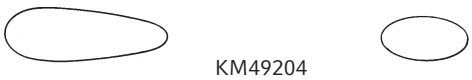
Double-ended, oval cups.

| ITEM # | DESCRIPTION |
|---|---|
| KM49200 | Double-ended, straight, 5" (12.5 cm) |
| KM49202 | Double-ended, straight, 5 1/2" (14 cm) |
| KM46550 | Double-ended, oval cups, 6 1/2" (16.5 cm) |
| KM49204 | Double-ended, straight, 8" (20.5 cm) |

KM49200

KM46550

KM49202

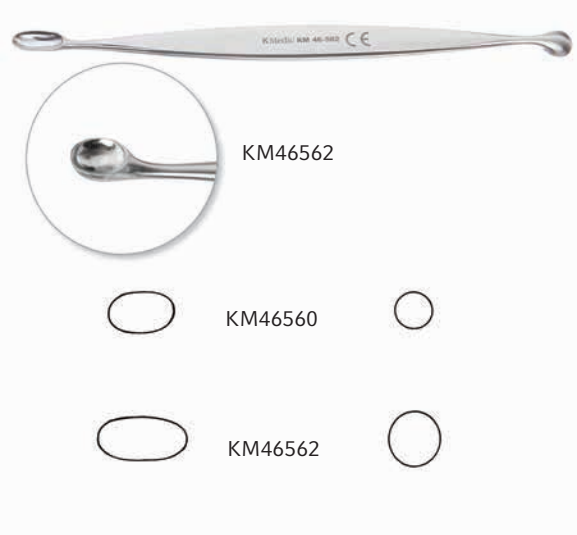


KM49204

# CURETTES

## Specialty Bone Curettes

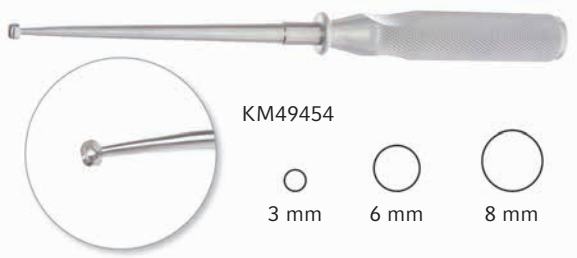
### V0LKMANN CURETTES




Double-ended, oval and round cups.

| ITEM # | DESCRIPTION |
|---|---|
| KM46560 | 5" (12.5 cm) |
| KM46561 | 8" (20.5 cm) |
| KM46562 | 6-1/2" (16.5 cm) |

### CONE RING CURETTES




Knurled handle and fenestrated cup, 9" (23 cm).

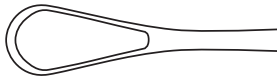
| ITEM # | TIP SHAPE | SIZE | TIP |
|---|---|---|---|
| KM49450 | Straight | #1 | 8 mm diameter |
| KM49452 | Straight | #2 | 6 mm diameter |
| KM49454 | Straight | #3 | 3 mm diameter |
| KM49456 | Angled 35 degrees | #1 | 8 mm diameter |
| KM49458 | Angled 35 degrees | #2 | 6 mm diameter |
| KM49460 | Angled 35 degrees | #3 | 3 mm diameter |

# CURETTES

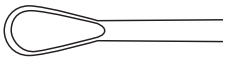
## Specialty Bone Curettes

### RING CURETTES

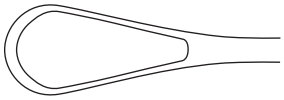
KM55685



KM55681
KM55685



KM55680
KM55684



KM55682
KM55686

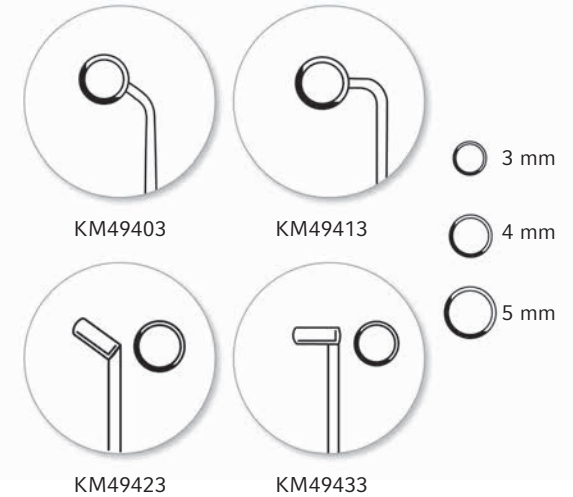
Hollow handle with fenestrated cup.

| ITEM # | DESCRIPTION |
|---|---|
| KM55680 | Size 0, small, 10" (25.5 cm) |
| KM55684 | Size 0, small, 11-1/2" (29 cm) |
| KM55681 | Size 2, medium, 10" (25.5 cm) |
| KM55685 | Size 2, medium, 11-1/2" (29 cm) |
| KM55682 | Size 6, large, 10-1/4" (26 cm) |
| KM55686 | Size 6, large, 12" (30.5 cm) |

### RAY PITUITARY CURETTES

KM49405

KM49424




KM49403 KM49413

KM49423 KM49433

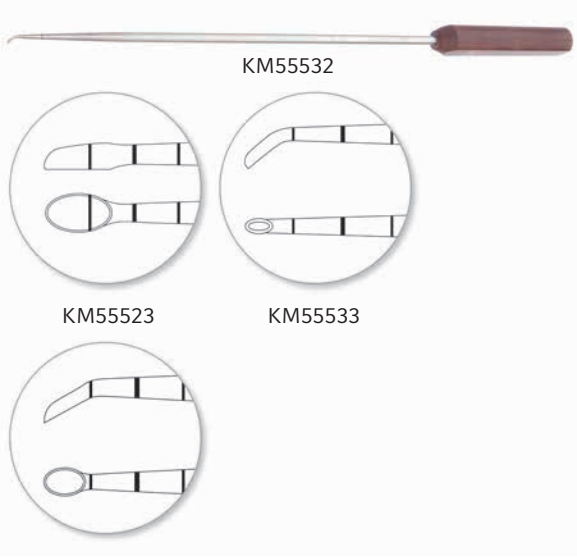
7-1/2" (19 cm).

| ITEM # | TIP SHAPE | TIP |
|---|---|---|
| KM49403 | Vertical angle 45 degrees | 3 mm |
| KM49404 | Vertical angle 45 degrees | 4 mm |
| KM49405 | Vertical angle 45 degrees | 5 mm |
| KM49413 | Vertical angle 90 degrees | 3 mm |
| KM49414 | Vertical angle 90 degrees | 4 mm |
| KM49415 | Vertical angle 90 degrees | 5 mm |
| KM49423 | Horizontal angle 45 degrees | 3 mm |
| KM49424 | Horizontal angle 45 degrees | 4 mm |
| KM49425 | Horizontal angle 45 degrees | 5 mm |
| KM49433 | Horizontal angle 90 degrees | 3 mm |
| KM49434 | Horizontal angle 90 degrees | 4 mm |
| KM49435 | Horizontal angle 90 degrees | 5 mm |

# CURETTES

## Endoscopic Curettes

### ENDO BRUN CURETTES



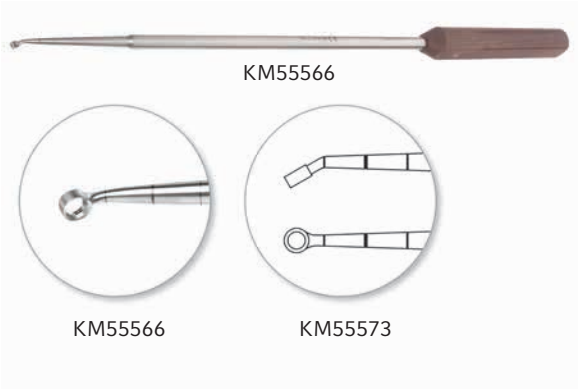

Endoscopic with phenolic handle.

| ITEM # | TIP SHAPE | TIP | TIP LENGTH | SHAFT LENGTH | SHAFT DIA. | HANDLE LENGTH | OVERALL LENGTH |
|---|---|---|---|---|---|---|---|
| KM55532 | Angled 40° | 2 x 4 mm cup | 2.7" | 9.3" | 0.285" | 5" | 17" (43 cm) |
| KM55523 | Straight | 3 x 6 mm cup | 2.7" | 9.3" | 0.285" | 5" | 17" (43 cm) |
| KM55533 | Angled 40° | 3 x 6 mm cup | 2.7" | 9.3" | 0.285" | 5" | 17" (43 cm) |
| KM55543 | Angled 40° | 3 x 6 mm cup | 3-1/2" | 10" | 0.45" | 6-1/2" | 20" (51 cm) |
| KM55556 | Angled 30° | 6 x 9 mm cup | 3-1/2" | 10" | 0.45" | 6-1/2" | 20" (51 cm) |

# CURETTES

## Endoscopic Curettes

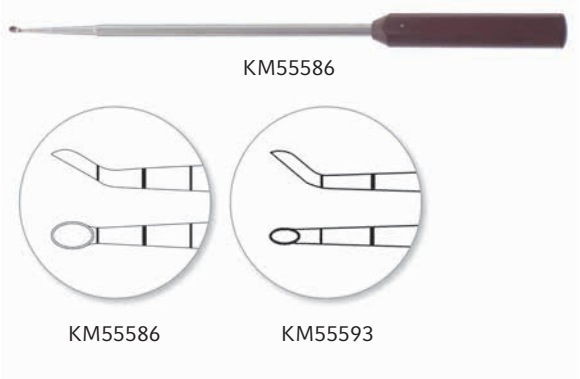
### ENDO CONE RING CURETTES




Endoscopic with phenolic handle.

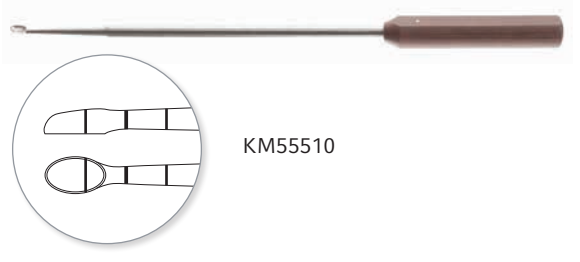
| ITEM # | TIP SHAPE | TIP | TIP LENGTH | SHAFT LENGTH | SHAFT DIA. | HANDLE LENGTH | OVERALL LENGTH |
|---|---|---|---|---|---|---|---|
| KM55573 | Angled 40° | 3 mm | 2.7" | 9.3" | 0.285" | 5" | 17" (43 cm) |
| KM55566 | Angled 30° | 6 mm | 3-1/2" | 10" | 0.45" | 6-1/2" | 20" (51 cm) |

### ENDO EPSTEIN CURETTES




| ITEM # | TIP SHAPE | TIP | TIP LENGTH | SHAFT LENGTH | SHAFT DIA. | HANDLE LENGTH | OVERALL LENGTH |
|---|---|---|---|---|---|---|---|
| KM55593 | Reverse-angled 40° | 3 x 6 mm | 2.7" | 9.3" | 0.285″ | 5" | 17" (43 cm) |
| KM55586 | Reverse-angled 30° | 6 x 9 mm | 3-1/2" | 10" | 0.45" | 6-1/2" | 20" (51 cm) |

### ENDO SCOVILLE CURETTE




Endoscopic with phenolic handle.

| ITEM # | TIP SHAPE | TIP | TIP LENGTH | SHAFT LENGTH | SHAFT DIA. | HANDLE LENGTH | OVERALL LENGTH |
|---|---|---|---|---|---|---|---|
| KM55510 | Straight | 9 x 15 mm | 3-1/2" | 10" | 0.45" | 6-1/2" | 20" (51 cm) |

# CURETTES

## SmartRack Curette Sterilizing Tray

### BRUN SMARTRACK FOR 7" CURETTES

KM98160

Aluminum and stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| KM98160 | Holds twelve 7" KMedic® Brun Curettes |

### COBB SMARTRACK FOR 11" INSTRUMENTS

KM98170

Aluminum and stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| KM98170 | Holds nine 11" KMedic® Cobb Curettes, Elevators or Gouges |

### HIBBS AND BRUN SMARTRACK FOR 9" INSTRUMENTS

KM98180

Aluminum and stainless steel.

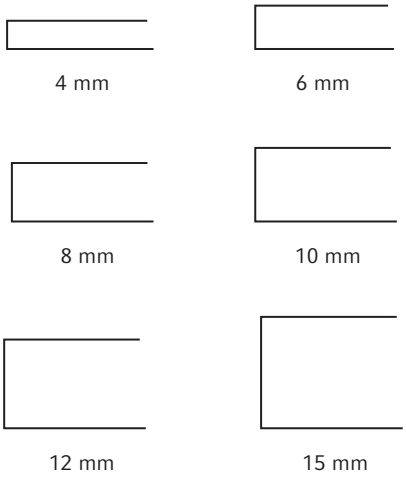
| ITEM # | DESCRIPTION |
|---|---|
| KM98180 | Holds twelve 9" KMedic® Brun Curettes, or Hibbs Chisels, Gouges or Osteotomes |

# OSTEOTOMES

## Lambotte

### MINI-LAMBOTTE OSTEOTOMES, STRAIGHT 5"

KM46342




Straight, without calibration lines, 5" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46336 | 1/8" (4 mm) |
| KM46338 | 1/4" (6 mm) |
| KM46340 | 5/16" (8 mm) |
| KM46342 | 3/8" (10 mm) |
| KM46344 | 1/2" (12 mm) |
| KM46343 | 9/16" (14 mm) |
| KM46345 | 5/8" (15 mm) |
| KM46346 | 11/16" (18 mm) |
| KM46347 | 3/4" (19 mm) |
| KM46335 | 13/16" (20 mm) |

### LAMBOTTE-STYLE OSTEOTOMES

051086

Pilling® Pattern, flat thin blade, 5" (12.5 cm).

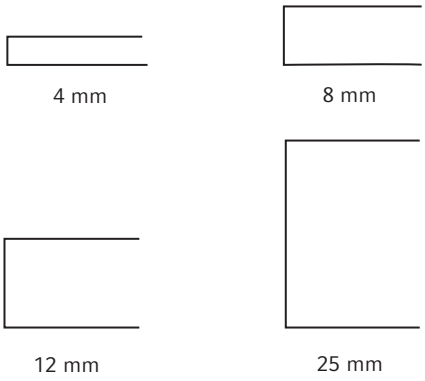
| ITEM # | DESCRIPTION |
|---|---|
| 051082 | 2 mm |
| 051084 | 4 mm |
| 051086 | 6 mm |
| 051088 | 8 mm |
| 051090 | 10 mm |
| 051092 | 12 mm |
| 051095 | 15 mm |

# OSTEOTOMES

## Lambotte

### LAMBOTTE OSTEOTOMES, STRAIGHT 7"

KM46348

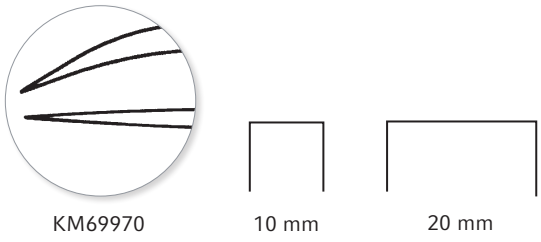



Straight, with calibration lines, 7" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46348 | 1/8" (4 mm) |
| KM46349 | 3/16" (5 mm) |
| KM46350 | 1/4" (6 mm) |
| KM46358 | 5/16" (8 mm) |
| KM46351 | 3/8" (10 mm) |
| KM46352 | 1/2" (12 mm) |
| KM46353 | 5/8" (16 mm) |
| KM46354 | 3/4" (19 mm) |
| KM46355 | 7/8" (22 mm) |
| KM46356 | 1" (25 mm) |

### LONG BEVEL OSTEOTOMES

KM69940




The unusually long bevel allows the cut bone to bend gradually as it is cut. Calibration lines, 7" (18 cm).

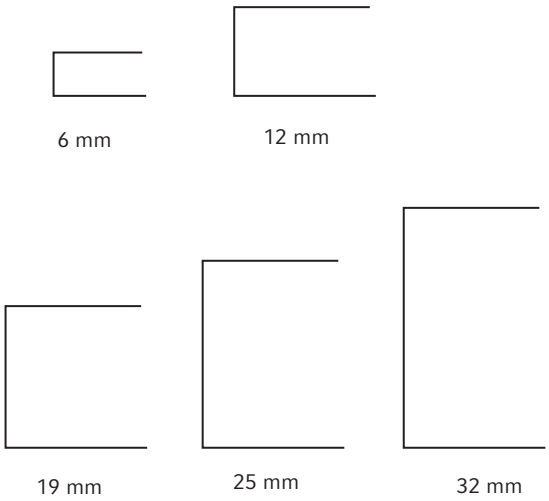
| ITEM # | DESCRIPTION |
|---|---|
| KM69940 | Straight, 10 mm |
| KM69946 | Straight, 20 mm |
| KM69950 | Straight, 25 mm |
| KM69970 | Curved, 5 mm |
| KM69975 | Curved, 10 mm |

# OSTEOTOMES

## Lambotte

### LAMBOTTE OSTEOTOMES, STRAIGHT 9"

KM46310

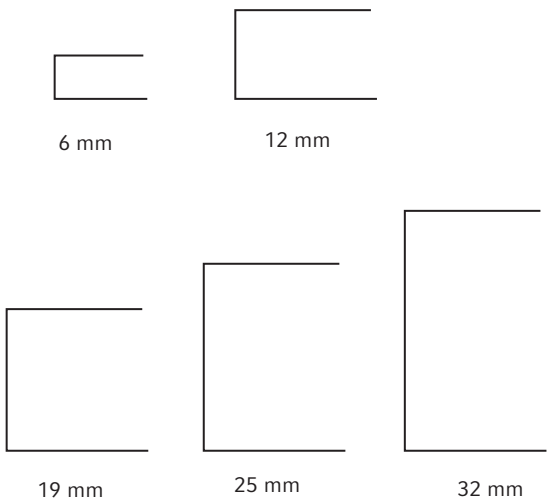



Straight, without calibration lines, 9" (23 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46304 | 1/4" (6 mm) |
| KM46306 | 1/2" (13 mm) |
| KM46310 | 3/4" (19 mm) |
| KM46314 | 1" (25 mm) |
| KM46318 | 1-1/4" (32 mm) |
| KM46322 | 1-1/2" (38 mm) |

### LAMBOTTE OSTEOTOMES, CURVED 9”

KM46330




Curved, without calibration lines, 9" (23 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46328 | 1/4" (6 mm) |
| KM46329 | 1/2" (12 mm) |
| KM46330 | 3/4" (19 mm) |
| KM46331 | 1" (25 mm) |
| KM46332 | 1-1/4" (32 mm) |
| KM46333 | 1-1/2" (38 mm) |

# OSTEOTOMES

## Specialty

### OSTEOTOMES

051104

Flat thin blade, 6" (15 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 051102 | 2 mm |
| 051103 | 3 mm |
| 051104 | 4 mm |
| 051105 | 5 mm |
| 051106 | 6 mm |
| 051107 | 7 mm |
| 051110 | 10 mm |

### MINI OSTEOTOMES

441208

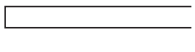
Curved, 5" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 441207 | 4 mm |
| 441208 | 6 mm |

## Hoke

### HOKE OSTEOTOMES

KM46499



3 mm

6 mm

8 mm

5-1/4" (13.5 cm).

| ITEM # | TIP | TIP WIDTH |
|---|---|---|
| KM46497 | Straight | 1/8" (3 mm) |
| KM46498 | Straight | 3/16" (4 mm) |
| KM46499 | Straight | 1/4" (6 mm) |
| KM46500 | Straight | 5 16" (8 mm) |
| KM46501 | Straight | 3/8" (10 mm) |
| KM46502 | Straight | 1/2" (13 mm) |
| KM46503 | Straight | 5/8" (16 mm) |
| KM46504 | Straight | 3/4" (19 mm) |
| KM46700 | Curved | 1/8" (3 mm) |
| KM46701 | Curved | 3/16" (4 mm) |
| KM46702 | Curved | 1/4" (6 mm) |
| KM46703 | Curved | 5/16" (8 mm) |
| KM46704 | Curved | 3/8" (10 mm) |
| KM46706 | Curved | 1/2" (13 mm) |
| KM46708 | Curved | 5/8" (16 mm) |
| KM46709 | Curved | 3/4" (19 mm) |

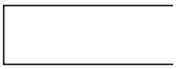
# OSTEOTOMES

## Sheehan

### SHEEHAN OSTEOTOMES

KM46274

4 mm



8 mm

12 mm

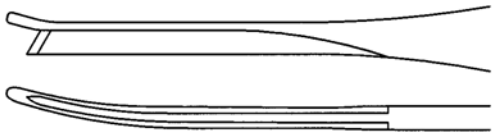
Straight, 6-1/4" (16 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46268 | 2 mm |
| KM46270 | 4 mm |
| KM46272 | 6 mm |
| KM46274 | 8 mm |
| KM46276 | 10 mm |
| KM46278 | 12 mm |
| KM46280 | 15 mm |

## Silver

### SILVER OSTEOTOMES

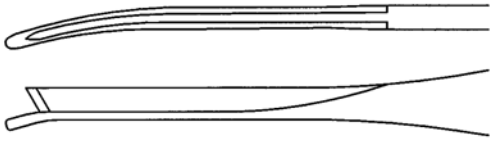
KM58100



KM58102

Single guard, 7" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM58100 | Straight |
| KM58102 | Guard, right |
| KM58104 | Guard, left |



KM58104

# OSTEOTOMES

## US Army

### U.S. ARMY PATTERN OSTEOTOMES

KM46286

7" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46284 | 6 mm |
| KM46286 | 12 mm |
| KM46288 | 18 mm |

## Stille

### STILLE OSTEOTOMES

KM49002

Straight, 8" (20.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49002 | 10 mm |
| KM49004 | 14 mm |
| KM49006 | 18 mm |
| KM49008 | 22 mm |

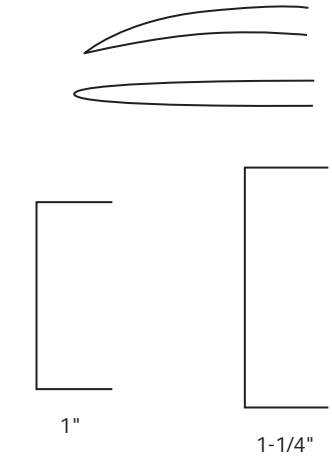
# OSTEOTOMES

## Hibbs

### HIBBS OSTEOTOMES

KM46363

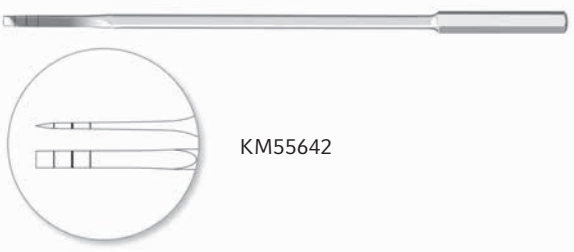
KM46379




9" (23 cm).

| ITEM # | TIP | TIP WIDTH |
|---|---|---|
| KM46359 | Straight | 1/4" |
| KM46360 | Straight | 3/8" |
| KM46361 | Straight | 1/2" |
| KM46362 | Straight | 5/8" |
| KM46363 | Straight | 3/4" |
| KM46364 | Straight | 7/8" |
| KM46365 | Straight | 1" |
| KM46366 | Straight | 1-1/8" |
| KM46367 | Straight | 1-1/4" |
| KM46368 | Straight | 1-1/2" |
| KM46373 | Curved | 1/4" |
| KM46376 | Curved | 3/8" |
| KM46377 | Curved | 1/2" |
| KM46378 | Curved | 5/8" |
| KM46379 | Curved | 3/4" |
| KM46380 | Curved | 7/8" |
| KM46381 | Curved | 1" |
| KM46382 | Curved | 1-1/8" |
| KM46383 | Curved | 1-1/4" |
| KM46384 | Curved | 1-1/2" |

### HIBBS ENDOSCOPIC OSTEOTOME



KM55642

Straight tip, 18-1/2" (47 cm).

| ITEM # | TIP WIDTH | TIP LENGTH | SHAFT LENGTH | SHAFT DIAMETER | HANDLE LENGTH |
|---|---|---|---|---|---|
| KM55642 | 3/8" (10 mm) | 3-1/2" | 10-3/4" | 0.43" (11 mm) | 4-1/4" |

# OSTEOTOMES

## Smith Peterson

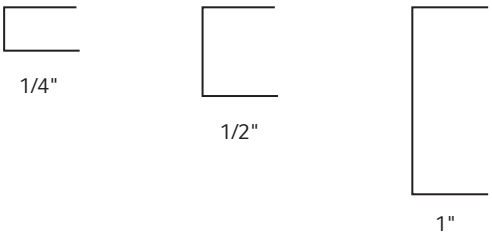
### SMITH PETERSON OSTEOTOME

KM46457

KM46462

8" (20.5 cm).

| ITEM # | TIP | TIP WIDTH |
|---|---|---|
| KM46448 | Straight | 1/4" |
| KM46449 | Straight | 3/8" |
| KM46450 | Straight | 1/2" |
| KM46451 | Straight | 5/8" |
| KM46452 | Straight | 3/4" |
| KM46453 | Straight | 1" |
| KM46454 | Straight | 1-1/4" |
| KM46457 | Curved | 1/4" |
| KM46458 | Curved | 3/8" |
| KM46459 | Curved | 1/2" |
| KM46460 | Curved | 5/8" |
| KM46461 | Curved | 3/4" |
| KM46462 | Curved | 1" |
| KM46463 | Curved | 1-1/4" |



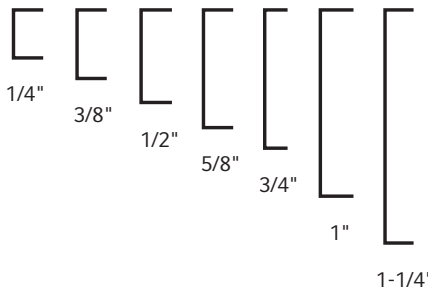

## Cobb

### COBB OSTEOTOME

KM49350

All stainless steel, 11" (28 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49350 | Straight, 1/4" |
| KM49351 | Straight, 3/8" |
| KM49352 | Straight, 1/2" |
| KM49353 | Straight, 5/8" |
| KM49354 | Straight, 3/4" |
| KM49355 | Straight, 1" |
| KM49356 | Straight, 1-1/4" |
| KM49357 | Curved, 1/4" |
| KM49358 | Curved, 3/8" |
| KM49359 | Curved, 1/2" |
| KM49360 | Curved, 5/8" |
| KM49361 | Curved, 3/4" |
| KM49362 | Curved, 1" |
| KM49363 | Curved, 1-1/4" |

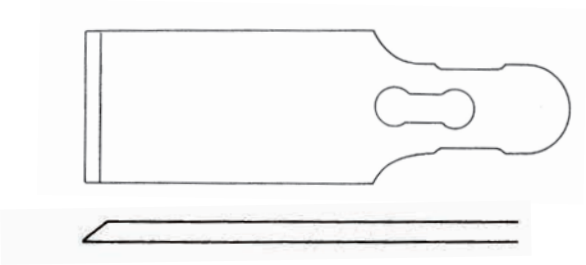


# OSTEOTOMES

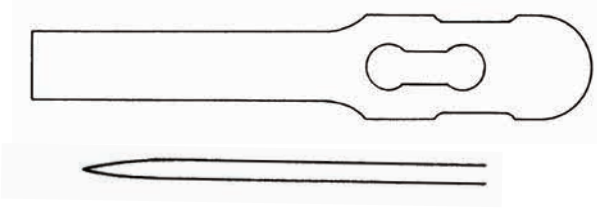
## Interchangeable Osteotome, Chisel and Gouge Set

### INTERCHANGEABLE OSTEOTOME, CHISEL AND GOUGE SET

KM49630

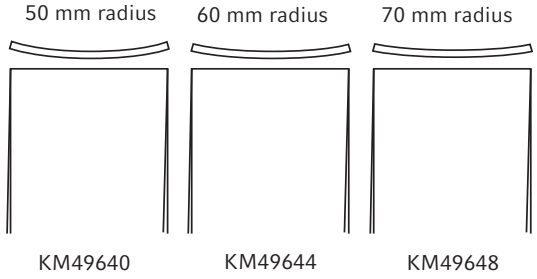


KM49664



KM49672

| ITEM # | DESCRIPTION |
|---|---|
| KM49630 | Complete set with handle, key and all blades |
| KM49632 | Phenolic handpiece only, 7-3/8" (18.5 cm) |
| KM49634 | Key only |
| KM49668 | Osteotome blade, 5 mm |
| KM49672 | Osteotome blade, 10 mm |
| KM49676 | Osteotome blade, 16 mm |
| KM49680 | Osteotome blade, 25 mm |
| KM49652 | Chisel blade, 5 mm |
| KM49656 | Chisel blade, 10 mm |
| KM49660 | Chisel blade, 16 mm |
| KM49664 | Chisel blade, 25 mm |
| KM49640 | Gouge blade, 1" wide, 50 mm radius |
| KM49644 | Gouge blade, 1" wide, 60 mm radius |
| KM49648 | Gouge blade, 1" wide, 70 mm radius |




*Blades should be discarded after use.*
*Phenolic handle is autoclavable to 290° F (143° C).*

# SMARTRACKS FOR OSTEOTOMES

## LIGHTWEIGHT RACKS FOR STERILIZATION AND STORAGE

- Nylon coated brackets help avoid metal-to-metal contact.
- Plastic plate on underside of top bracket helps protect sharp tips from being damaged.
- Side arm stays locked to help prevent instruments from falling out, even when turned upside down.
- Deep brackets hold instruments in place.
- Custom designed base keeps instruments upright during loading and unloading.
- Reinforced, sturdier frames are made from corrosion-resistant anodized aluminum.
- Fully autoclavable to 270°F/132°C.
- Quick reference chart easily identifies the type and size instrument rack holds.
- Manufactured only by Teleflex®.

### HOKE SMARTRACK

KM98150
8-1/4" x 5" x 2-1/4"
(21 cm x 12.5 cm x 5.5 cm)
Holds eight 5-1/4" (13.5 cm)

### LAMBOTTE SMARTRACK

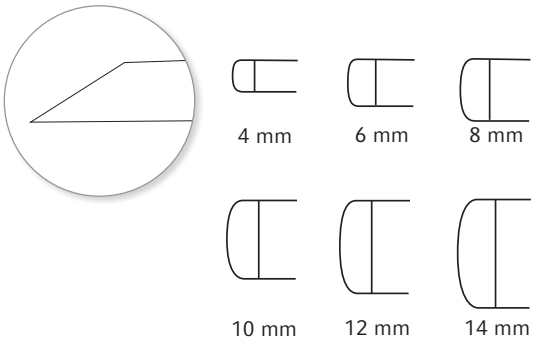
KM98190
11-3/4" x 5-1/2" x 3-3/8"
(30 cm x 8.5 cm x 14 cm)
Holds twelve 9" (23 cm) KMedic® Lambotte Osteotomes

# CHISELS AND GOUGES

## Chisels

### ALEXANDER CHISELS

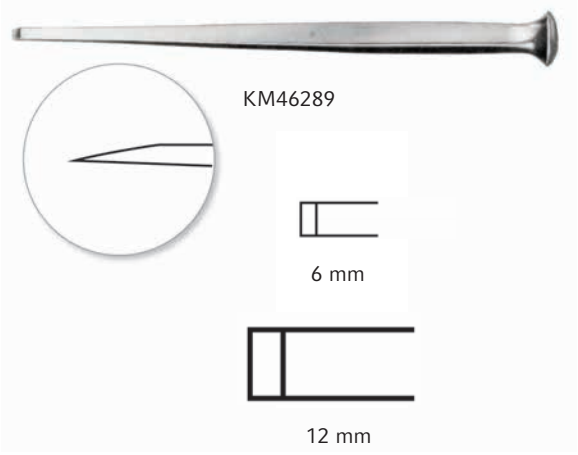
KM49042




7-1/8" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49040 | 4 mm |
| KM49041 | 6 mm |
| KM49042 | 8 mm |
| KM49043 | 10 mm |
| KM49044 | 12 mm |
| KM49045 | 14 mm |

### ARMY PATTERN CHISELS



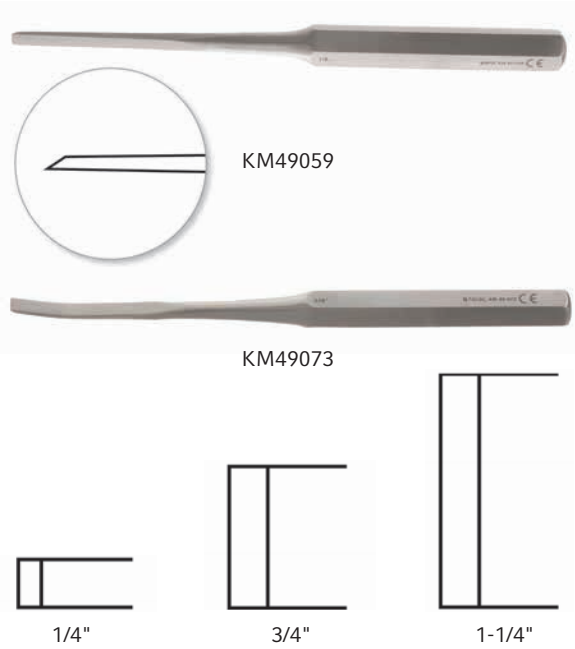

7-1/8" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46289 | 6 mm |
| KM46290 | 12 mm |
| KM46291 | 18 mm |

# CHISELS AND GOUGES

## Chisels

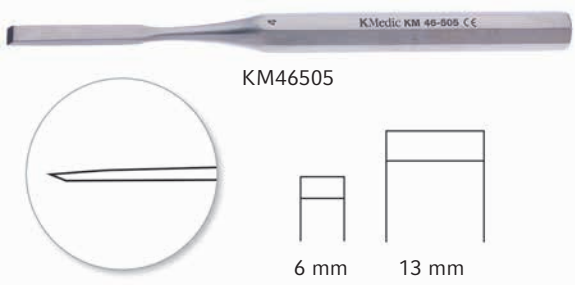
### HIBBS CHISELS




9" (23 cm).

| ITEM # | TIP | TIP WIDTH |
|---|---|---|
| KM49059 | Straight | 1/4" |
| KM49060 | Straight | 3/8" |
| KM49061 | Straight | 1/2" |
| KM49062 | Straight | 5/8" |
| KM49063 | Straight | 3/4" |
| KM49064 | Straight | 7/8" |
| KM49065 | Straight | 1" |
| KM49066 | Straight | 1-1/8" |
| KM49067 | Straight | 1-1/4" |
| KM49068 | Straight | 1-1/2" |
| KM49073 | Curved | 1/4" |
| KM49074 | Curved | 3/8" |
| KM49075 | Curved | 1/2" |
| KM49076 | Curved | 5/8" |
| KM49077 | Curved | 3/4" |
| KM49078 | Curved | 7/8" |
| KM49079 | Curved | 1" |
| KM49080 | Curved | 1-1/8" |
| KM49081 | Curved | 1-1/4" |
| KM49082 | Curved | 1-1/2" |

### HOKE CHISELS




Straight, 5-1/4" (13.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46505 | 3/16" (4 mm) |
| KM46506 | 1/4" (6 mm) |
| KM46507 | 3/8" (10 mm) |
| KM46508 | 1/2" (13 mm) |
| KM46509 | 3/4" (19 mm) |

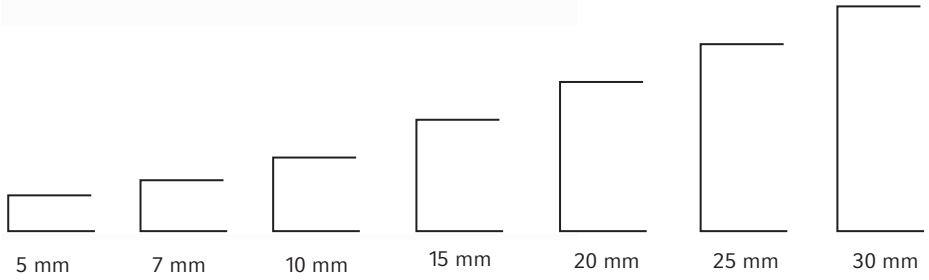
# CHISELS AND GOUGES

## Chisels

### LEXER CHISELS

Phenolic handle, 8-5/8" (22 cm).

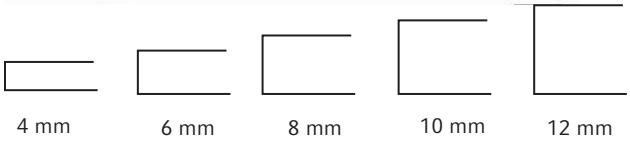
| ITEM # | DESCRIPTION |
|---|---|
| KM49246 | 5 mm |
| KM49248 | 7 mm |
| KM49250 | 10 mm |
| KM49252 | 15 mm |
| KM49254 | 20 mm |
| KM49256 | 25 mm |
| KM49258 | 30 mm |




### LEXER MINI CHISELS

Phenolic handle, 7-1/8" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49260 | 4 mm |
| KM49262 | 6 mm |
| KM49264 | 8 mm |
| KM49266 | 10 mm |
| KM49268 | 12 mm |




### STILLE-TYPE CHISELS

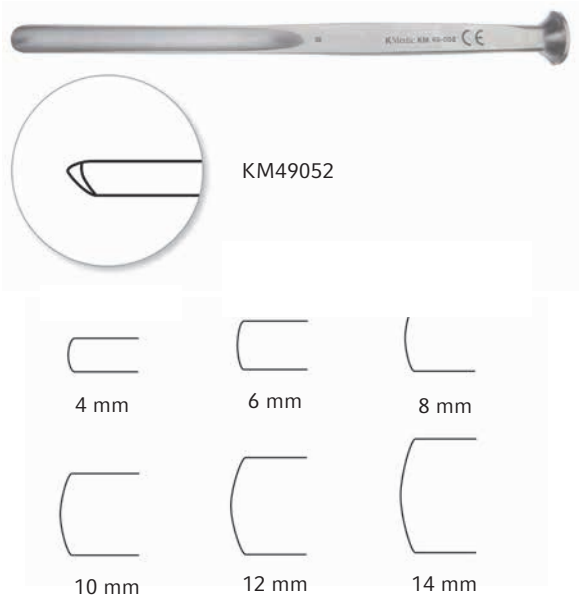
8-1/8" (20.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49010 | 10 mm |
| KM49012 | 14 mm |
| KM49014 | 18 mm |
| KM49016 | 22 mm |

# CHISELS AND GOUGES

## Gouges

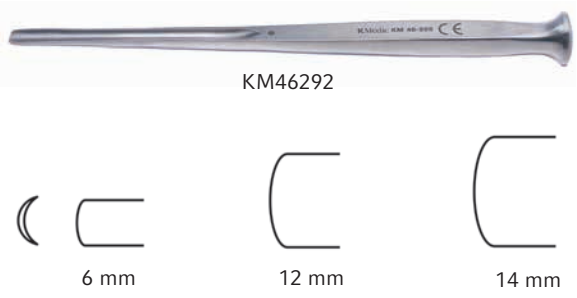
### ALEXANDER GOUGES




7" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49050 | 4 mm |
| KM49051 | 6 mm |
| KM49052 | 8 mm |
| KM49053 | 10 mm |
| KM49054 | 12 mm |
| KM49055 | 14 mm |

### U.S. ARMY PATTERN GOUGES




7" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46292 | 6 mm |
| KM46293 | 12 mm |
| KM46294 | 14 mm |

# CHISELS AND GOUGES

## Gouges

### STILLE-TYPE GOUGES

KM49018

8" (20.5 cm).

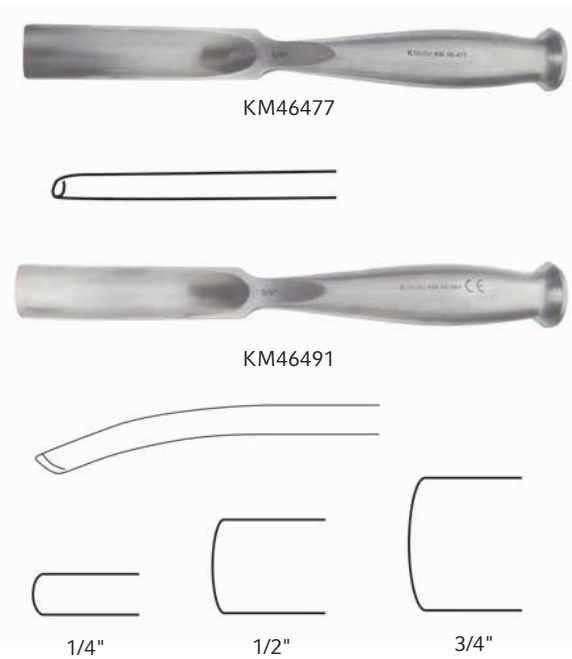
| ITEM # | DESCRIPTION |
|---|---|
| KM49018 | 10 mm |
| KM49020 | 14 mm |
| KM49022 | 18 mm |
| KM49024 | 22 mm |

### SHOULDER PENETRATING GOUGE

KM46919

| ITEM # | DESCRIPTION |
|---|---|
| KM46919 | 3 mm tip, 8-1/2" (21.5 cm) |

### SMITH PETERSON GOUGES

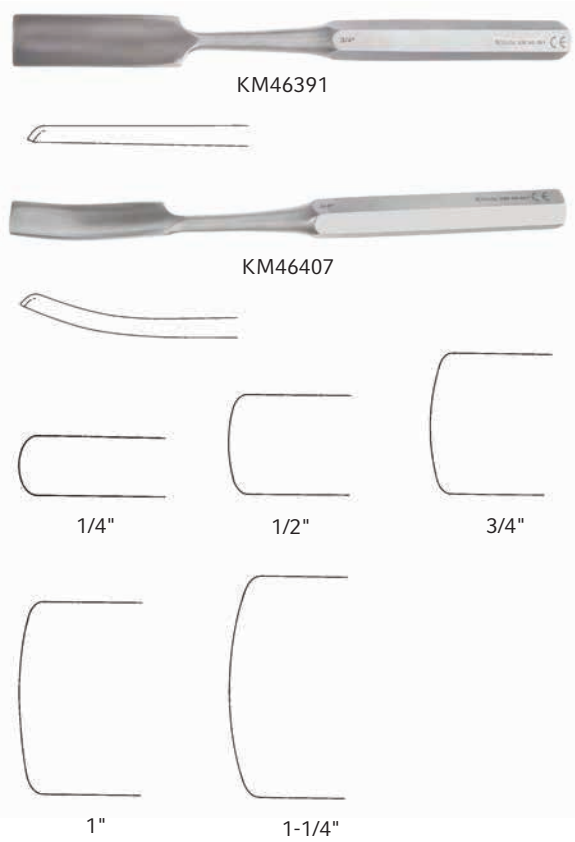



| ITEM # | TIP | TIP WIDTH |
|---|---|---|
| KM46466 | Straight | 1/4" |
| KM46467 | Straight | 3/8" |
| KM46468 | Straight | 1/2" |
| KM46476 | Straight | 5/8" |
| KM46477 | Straight | 3/4" |
| KM46478 | Straight | 1" |
| KM46479 | Straight | 1-1/4" |
| KM46487 | Curved | 1/4" |
| KM46488 | Curved | 3/8" |
| KM46489 | Curved | 1/2" |
| KM46490 | Curved | 5/8" |
| KM46491 | Curved | 3/4" |
| KM46493 | Curved | 1" |
| KM46495 | Curved | 1-1/4" |

# CHISELS AND GOUGES

## Gouges

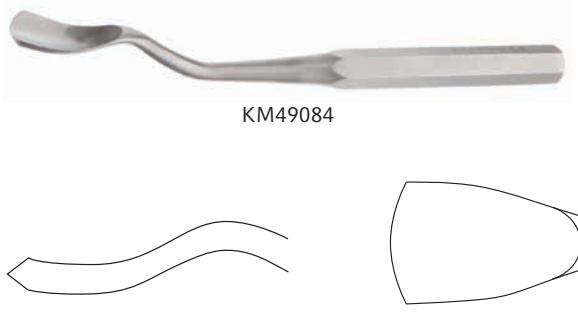
### HIBBS GOUGES




9" (23 cm).

| ITEM # | TIP | TIP WIDTH |
|---|---|---|
| KM46387 | Straight | 1/4" |
| KM46388 | Straight | 3/8" |
| KM46389 | Straight | 1/2" |
| KM46390 | Straight | 5/8" |
| KM46391 | Straight | 3/4" |
| KM46392 | Straight | 7/8" |
| KM46393 | Straight | 1" |
| KM46394 | Straight | 1-1/8" |
| KM46395 | Straight | 1-1/4" |
| KM46401 | Straight | 1-1/2" |
| KM46402 | Curved | 1/4" |
| KM46403 | Curved | 3/8" |
| KM46404 | Curved | 1/2" |
| KM46405 | Curved | 5/8" |
| KM46407 | Curved | 3/4" |
| KM46408 | Curved | 7/8" |
| KM46409 | Curved | 1" |
| KM46410 | Curved | 1-1/8" |
| KM46411 | Curved | 1-1/4" |
| KM46412 | Curved | 1-1/2" |

### SWAN NECK GOUGE



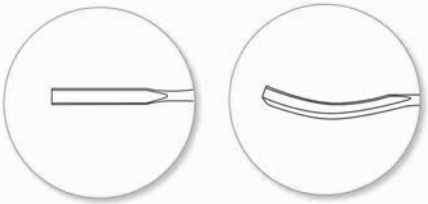

| ITEM # | DESCRIPTION |
|---|---|
| KM49084 | 1" distal tip, 9" (23 cm) |

# CHISELS AND GOUGES

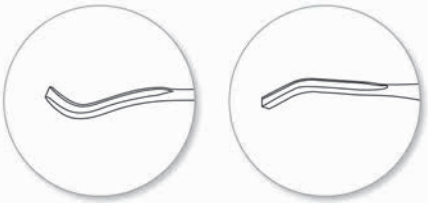
## Gouges

### COBB-TYPE SPINAL GOUGES

KM49032



KM49030 KM49032



KM49034 KM49036

All stainless, with knurled handle, 5/32" (7 mm) distal tip, 11" (28 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49030 | Straight |
| KM49032 | Medium curve |
| KM49034 | Strong curve |
| KM49036 | Reverse curve |

### HIBBS ENDOSCOPIC GOUGE

KM55630

Straight tip, stainless steel handle, 18-1/2" (47 cm).

| ITEM # | TIP WIDTH | TIP LENGTH | SHAFT LENGTH | SHAFT DIAMETER | HANDLE LENGTH |
|---|---|---|---|---|---|
| KM55630 | 0.28" (7 mm) | 3-1/2" | 10-3/4" | 0.43" | 4-1/4" |

# BONE TAMPS AND IMPACTORS

## Bone Tamps

### BONE TAMPS

Cross-serrated tip, 6-1/4" (16 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM46893 | 2 mm diameter |
| KM46894 | 3 mm |
| KM46895 | 4 mm |
| KM46896 | 5 mm |
| KM46897 | 6 mm |
| KM46898 | 8 mm |
| KM46899 | 10 mm |

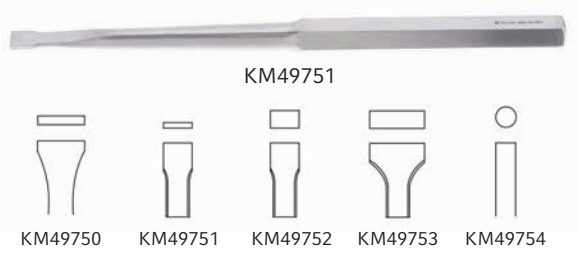
### BONE IMPACTOR

Designed to tap bone graft or bone parts into place with minimal trauma to the bone. The compactor head is nylon with a grid surface to prevent slippage.

| ITEM # | DESCRIPTION |
|---|---|
| KM69980 | Anodized aluminum handle with replaceable nylon caps, head diameter 20 mm, 6-1/2" (16.5 cm) |

*Autoclavable to 250°F (121°C)*

### BONE CHIP PACKERS




Stainless steel handle, 9-7/8" (25 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM49750 | 3 mm x 16 mm |
| KM49751 | 2 mm x 9 mm |
| KM49752 | 6 mm x 9 mm |
| KM49753 | 6 mm x 19 mm |
| KM49754 | 1/4" (5 mm) |

# BONE TAMPS AND IMPACTORS

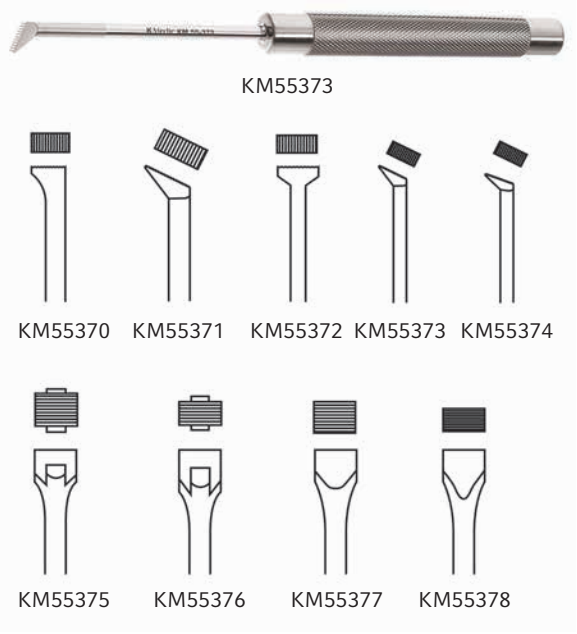
## Impactors

### ENDOSCOPIC BONE TAMP

Straight, stainless steel handle, 17" (43 cm).

| ITEM # | TIP WIDTH | TIP LENGTH | SHAFT LENGTH | SHAFT DIAMETER | HANDLE LENGTH |
|---|---|---|---|---|---|
| KM55676 | 3/8" (10 mm) | 0.16" | 12.59" | 0.280" (7.1 mm) | 4-1/4" |

### LUMBAR AND CERVICAL IMPACTORS AND DRIVERS




| ITEM # | DESCRIPTION |
|---|---|
| KM55370 | Impactor, standard offset, 6 mm x 12 mm, 8-1/2" (21.5 cm) |
| KM55371 | Impactor, central canal, 7 mm x 16 mm, 8-1/2" (21.5 cm) |
| KM55372 | Impactor, lateral narrow, 6 mm x 13 mm, 8-1/2" (21.5 cm) |
| KM55373 | Impactor, micro offset, 4 mm x 9.5 mm, 7" (18 cm) |
| KM55374 | Impactor, micro lateral, 4 mm x 10 mm, 7" (18 cm) |
| KM55375 | Graft driver, lumbar, guarded, 10 mm x 13 mm, 8-1/2" (21.5 cm) |
| KM55376 | Graft driver, anterior, guarded, 7 mm x 13 mm, 8-1/2" (21.5 cm) |
| KM55377 | Graft driver, lumbar, unguarded, 10 mm x 13 mm, 8-1/2" (21.5 cm) |
| KM55378 | Graft driver, anterior, unguarded, 7 mm x 13 mm, 8-1/2" (21.5 cm) |

# MALLETS

## Light and Medium Weight Mallets

### NARROW TIP MALLET

KM49764

Useful for hand surgery and in areas where access is limited.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM49764 | 7 oz. (198 g.) | 3 oz. (85 g.) | 18 x 18 mm (square contact surface) 7 mm (round contact surface) | 8" (20.5 cm) |

*Autoclavable to 290°F (143°C)*

### SOLID COPPER HEAD MALLET

051510

| ITEM # | WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|
| 051510 | 4 oz. (113 g.) | 3/4" (20 mm) | 6-1/2" (16.5 cm) |

### MINI MALLET

KM49765

Solid stainless steel.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM49765 | 4 oz. (113 g.) | 3 oz. (85 g.) | 20 mm | 7" (18 cm) |

# MALLETS

## Light and Medium Weight Mallets

### LUCAE BONE MALLETS

KM49761

KM46660

Solid stainless steel handles.

| ITEM # | WEIGHT | HEAD | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|---|
| KM49761 | 7 oz. (198 g.) | Stainless steel | 3 oz. (85 g.) | 19 mm | 7-1/2" (19 cm) |
| KM46660 | 9 oz. (260 g.) | Brass | 5 oz. (142 g.) | 25 mm | 8" (20.5 cm) |

### MALLET #49

KM46656

Lead filled and faced.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM46656 | 7 oz. (198 g.) | 5 oz. (142 g.) | 22 mm | 7-3/4" (19.5 cm) |

*Lead filled mallets should only be used to strike flat surfaces. Do not use to hit sharp objects as doing so can lead to flake off.*

### MALLET

KM46662

Lightweight. Includes two replaceable nylon caps, anodized aluminum handle.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM46662 | 7 oz. (198 g.) | 4 oz. (113 g.) | 25 mm | 7-1/2" (19 cm) |

*Autoclavable to 250°F (121°C)*

### MALLET CAPS

KM46662P

| ITEM # | DESCRIPTION |
|---|---|
| KM46662P | Pair of nylon caps for KM46662, 1" (2.5 cm) |

# MALLETS

## Light and Medium Weight Mallets

### NYLON HEAD MALLETS

051520

051525

| ITEM # | WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|
| 051520 | 8 oz. (227 g.) | 1" (25 mm) | 7-1/2" (19 cm) |
| 051525 | 11 oz. (312 g.) | 1-1/4" (32 mm) | 7-5/8" (19.5 cm) |

### NYLON HEAD MALLET FACES

051526

| ITEM # | DESCRIPTION |
|---|---|
| 051521 | Extra 1" nylon face for 051520 |
| 051526 | Extra 1-1/2" nylon face for 051525 |

### COLLIN MALLET

KM49760

Solid stainless steel.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM49760 | 7 oz. (198 g.) | 5 oz. (142 g.) | 30 mm | 8" (20.5 cm) |

# MALLETS

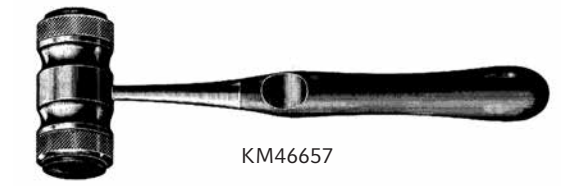
## Light and Medium Weight Mallets

### PECK MALLET

441420

| ITEM # | WEIGHT | OVERALL LENGTH |
|---|---|---|
| 441420 | 7.7 oz. (218 g.) | 7-7/8" (20 cm) |

### MEAD MALLET



KM46657

Includes replaceable nylon caps.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM46657 | 11 oz. (315 g.) | 6 oz. (170 g.) | 20 mm | 7-1/2" (19 cm) |

*Autoclavable to 250°F (121°C)*

### GERZOG BONE MALLET

KM46661

Lead filled and faced.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM46661 | 10 oz. (285 g.) | 7 oz. (200 g.) | 25 mm | 7-1/2" (19 cm) |

*Lead filled mallets should only be used to strike flat surfaces. Do not use to hit sharp objects as doing so can lead to flake off.*

# MALLETS

## Light and Medium Weight Mallets

### BERGMAN MALLETS

KM49766

Aluminum alloy handle.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM49766 | 15 oz. (425 g.) | 9 oz. (255 g.) | 30 mm | 8-7/8" (22.5 cm) |
| KM49767 | 1 lb. 1 oz. (482 g.) | 11 oz. (312 g.) | 45 mm | 9-1/2" (24 cm) |

### COMBINATION MALLETS

KM46687

With one nylon cap and one solid stainless side.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM46686 | 9 oz. (260 g.) | 5 oz. (142 g.) | 25 mm | 7-1/2" (19 cm) |
| KM46687 | 12 oz. (340 g.) | 8 oz. (227 g.) | 32 mm | 7-1/2" (19 cm) |

*Autoclavable to 250°F (121°C)*

### COMBINATION MALLET CAPS

KM46687P

With one nylon cap and one solid stainless side.

| ITEM # | DESCRIPTION |
|---|---|
| KM46686P | Nylon cap for KM46686, 1" (2.5 cm) |
| KM46687P | Nylon cap for KM46687, 1-1/4" (3.2 cm) |

# MALLETS

## Light and Medium Weight Mallets

### CLOWARD-STYLE MALLETS

KM55400

Solid stainless steel.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | BALL PEEN DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|---|
| KM55400 | 8 oz. (227 g.) | 4 oz. (113 g.) | 20.5 mm | 17.5 mm | 7-1/2" (19 cm) |
| KM55401 | 16 oz. (454 g.) | 8 oz. (227 g.) | 25 mm | 22 mm | 9" (23 cm) |

### ORTHOPEDIC MALLETS

KM49763

KM46666

Solid stainless steel.

| ITEM # | HANDLE LENGTH | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|---|
| KM49763 | Short | 1 lb. 2 oz. (510 g.) | 8 oz. (227 g.) | 30.5 mm | 7" (18 cm) |
| KM46666 | Normal | 2 lbs. (900 g.) | 1 lb. (455 g.) | 32 mm | 10-3/4" (27.5 cm) |

# MALLETS

## Heavyweight Mallets

### KIRK MALLET

KM46658

Brass filled with stainless steel face.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM46658 | 1 lb. 7 oz. (650 g.) | 1 lb. 4 oz. (570 g.) | 38 mm | 8" (20.5 cm) |

*Head is brass filled and should only be used to strike flat surfaces.*

### HEATH MALLET

KM46663

Heavyweight, solid stainless steel.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM46663 | 2 lbs. (907 g.) | 1 lb. 4 oz. (570 g.) | 40 mm | 7-1/2" (19 cm) |

### ORTHOPEDIC MALLETS

KM49762

Solid stainless steel.

| ITEM # | HANDLE LENGTH | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|---|
| KM49762 | Short | 2 lbs. (900 g.) | 1 lb. 5 oz. (595 g.) | 38 mm | 7-1/2" (19 cm) |
| KM46667 | Normal | 3 lbs. (1360 g.) | 2 lbs. (900 g.) | 50 mm | 11" (28 cm) |

# MALLETS

## Heavyweight Mallets

### PHENOLIC HANDLE MALLETS

KM46688

Grooved phenolic handle for comfortable and safe grip.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM46688 | 1 lb. 11 oz (765 g.) | 1 lb. (455 g.) | 32 mm | 11" (28 cm) |
| KM46689 | 2 lbs. 9 oz. (1162 g.) | 2 lbs. (900 g.) | 45 mm | 11" (28 cm) |

*Autoclavable to 290°F (143°C)*

### REPROCUSSION FREE MALLET

KM46690

Also known as a dead blow mallet. One nylon cap and one stainless steel side. Grooved phenolic handle for comfortable grip.

| ITEM # | WEIGHT | HEAD WEIGHT | HEAD DIAMETER | OVERALL LENGTH |
|---|---|---|---|---|
| KM46690 | 1 lb. 5 oz. (600 g.) | 10 oz. (285 g.) | 30 mm | 11" (28 cm) |

*Autoclavable to 250°F (121°C)*

### REPROCUSSION FREE MALLET CAP

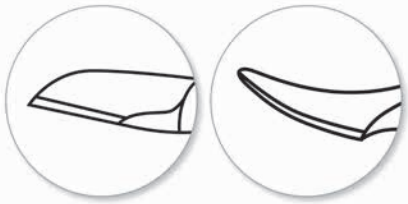
KM46690P

| ITEM # | DESCRIPTION |
|---|---|
| KM46690P | Cap only for KM46690 |

# BONE CUTTING FORCEPS

## CLEVELAND BONE CUTTING FORCEPS

KM47270



KM47270 KM47272

For small bones.

| ITEM # | DESCRIPTION |
|---|---|
| KM47270 | 5-3/4" (15 cm) |
| KM47272 | 6-1/2" (17 cm) |

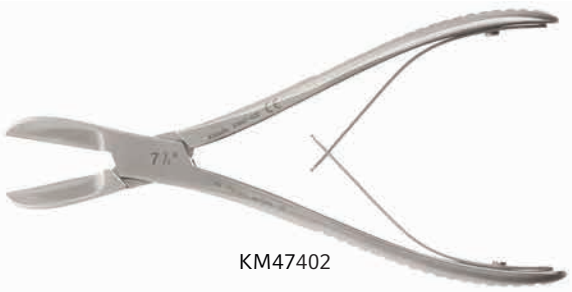
## MCINDOE BONE CUTTING FORCEPS

KM47546

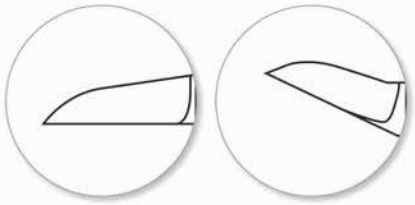
| ITEM # | DESCRIPTION |
|---|---|
| KM47546 | Angled, very delicate, 7" (18 cm) |

# BONE CUTTING FORCEPS

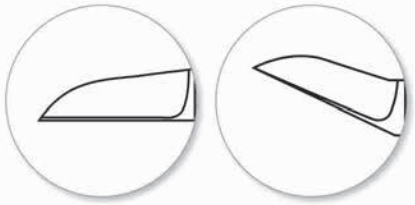
## LISTON BONE CUTTING FORCEPS



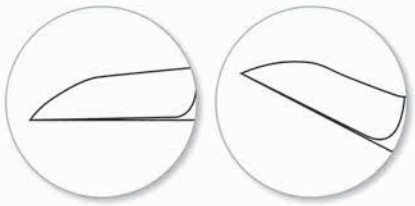
KM47402



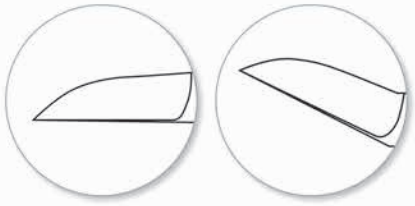
KM47398 KM47410



KM47400 KM47404



KM47402 KM47412

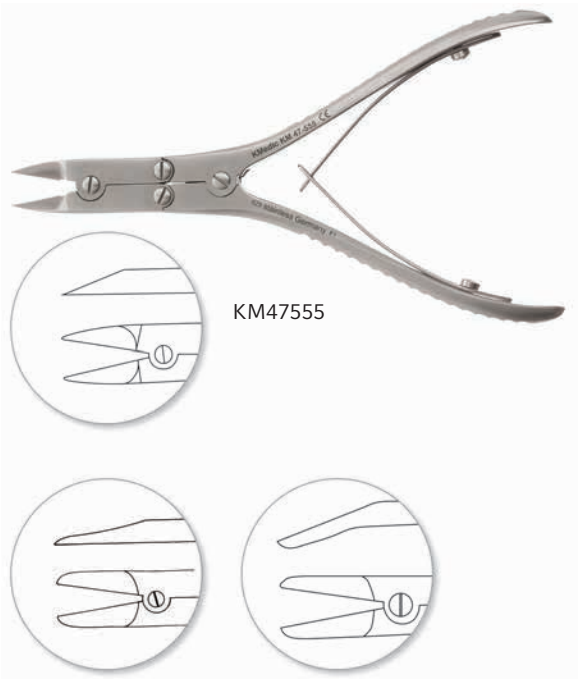


KM47406 KM47408

| ITEM # | DESCRIPTION |
|---|---|
| KM47398 | Straight, 5-1/2" (14 cm) |
| KM47410 | Angled on flat, 5-1/2" (14 cm) |
| KM47400 | Straight, 6-3/4" (17 cm) |
| KM47404 | Angled on flat, 6-3/4" (17 cm) |
| KM47402 | Straight, 7-7/8" (20 cm) |
| KM47412 | Angled, 7-7/8" (20 cm) |
| KM47406 | Straight, 8-5/8" (22 cm) |
| KM47408 | Angled on flat, 8-1/2" (22 cm) |

# BONE CUTTING FORCEPS

## RUSKIN-LISTON BONE CUTTING FORCEPS



KM47555

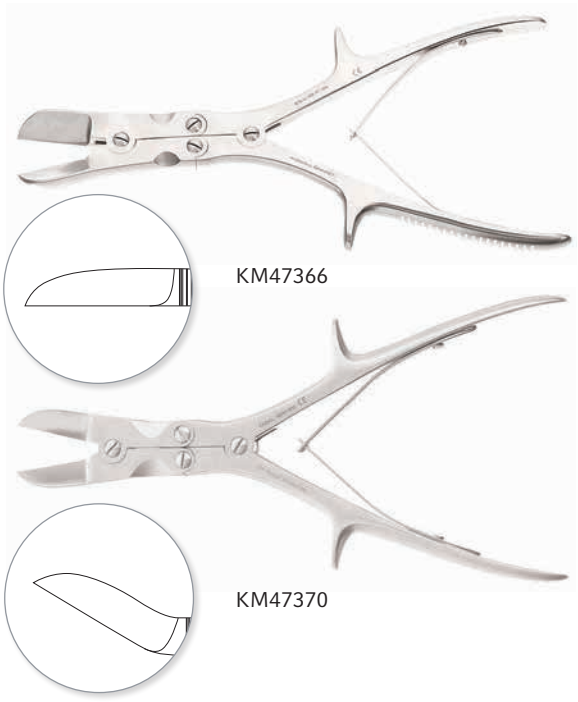
KM47540

KM47541

Delicate blades.

| ITEM # | DESCRIPTION |
|---|---|
| KM47555 | Straight, 5-5/8" (15 cm) |
| KM47557 | Angled, 5-1/2" (14 cm) |
| KM47540 | Straight, 7-1/8" (18 cm) |
| KM47541 | Angled on flat, 7" (18 cm) |

## STILLE-LISTON BONE CUTTING FORCEPS



KM47366

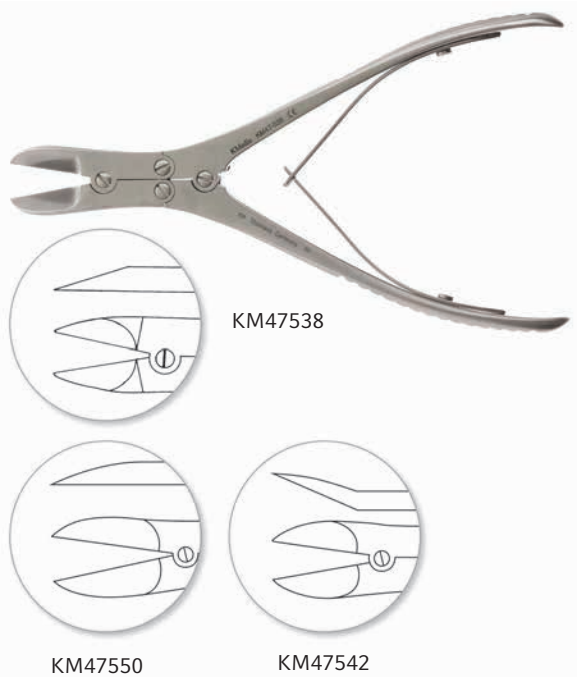
KM47370

10-1/2" (27 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47366 | Straight |
| KM47370 | Angled on flat |

# BONE CUTTING FORCEPS

## RUSKIN-LISTON BONE CUTTING FORCEPS




| ITEM # | DESCRIPTION |
|---|---|
| KM47550 | Straight, 6" (15 cm) |
| KM47538 | Straight, 7-1/4" (19 cm) |
| KM47542 | Angled, 7-1/4" (19 cm) |

## STILLE-HORSLEY BONE CUTTING FORCEPS

| ITEM # | DESCRIPTION |
|---|---|
| KM47374 | Angled, 9-3/8" (24 cm) |

# RONGEURS

## Single Action Design

### SYNOVECTOMY RONGEURS

KM47252

2 x 5 mm bite, extremely delicate.

| ITEM # | DESCRIPTION |
|---|---|
| KM47252 | Slightly curved, 6-7/8" (17.5 cm) |
| KM47253 | Strongly curved, 6-3/4" (17 cm) |

### RONGEUR #4

KM47274

| ITEM # | DESCRIPTION |
|---|---|
| KM47274 | Curved, 4 x 9 mm bite, 5-1/2" (14 cm) |

### RONGEUR #4A

KM47275

| ITEM # | DESCRIPTION |
|---|---|
| KM47275 | Curved, 4 x 7 mm bite, 6-1/2" (16.5 cm) |

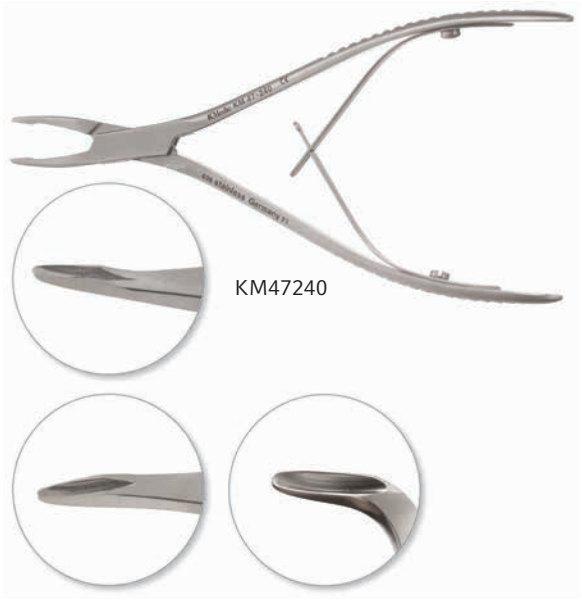
# RONGEURS

## Single Action Design

### RONGEUR #10 (1A)

| ITEM # | DESCRIPTION |
|---|---|
| KM47296 | 6-1/2" (16.5 cm) |

### MICRO FRIEDMAN RONGEURS



KM47240

KM47242

KM47244

1.5 x 5 mm bite. For soft tissue and cancellous bone only. Extremely delicate.

| ITEM # | DESCRIPTION |
|---|---|
| KM47240 | Straight, 5-3/4" (14.5 cm) |
| KM47242 | 30 degree angled, 5-1/2" (14 cm) |
| KM47244 | 90 degree angled, 5-1/2" (14 cm) |

# RONGEURS

## Single Action Design

### MINI FREIDMAN FONGEURS

Delicate, 2 x 8 mm bite, 6" (15 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47263 | Straight |
| KM47264 | Curved |

### FRIEDMAN RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| KM47262 | Curved, delicate, 4 x 11 mm bite, 5-3/4" (14.5 cm) |

# RONGEURS

## Single Action Design

### KLEINERT-KUTZ SYNOVECTOMY RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| 065202 | 25 degrees strongly curved, 5-1/4" (13.5 cm) |

### BANE RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| KM47310 | Curved, 3 x 16 mm bite, 7" (18 cm) |

# RONGEURS

## Single Action Design

### DEAN RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| KM47286 | Curved, 3 mm bite, 5-3/4" (14.5 cm) |

### CHICHIRELLI (BLUMENTHAL) RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| KM47267 | Curved 45 degrees, 4 x 13 mm bite, 6" (15 cm) |

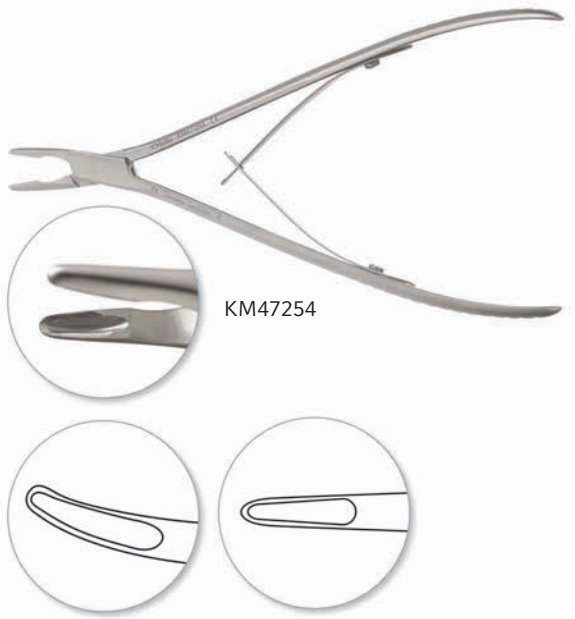
# RONGEURS

## Single Action Design

### BACON RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| KM47308 | Curved on side, 5 x 15 mm bite, 8" (20.5 cm) |

### LEMPERT RONGEURS




Delicate, 3 x 7 mm bite.

| ITEM # | DESCRIPTION |
|---|---|
| KM47258 | Straight, 6" (15 cm) |
| KM47260 | Curved, 6" (15 cm) |
| KM47254 | Straight, 7-1/2" (19 cm) |
| KM47256 | Curved, 7-1/2" (19 cm) |

# RONGEURS

## Single Action Design

### BEYER BONE BITING RONGEUR

028120

| ITEM # | DESCRIPTION |
|---|---|
| 028120 | Curved jaw, 16 x 3 mm cup, 6-3/4" (17 cm) |

### DEAN (BLUMENTHAL) RONGEURS

KM47266

KM47268

4 x 11 mm, 6" (15 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47266 | Curved 30 degrees |
| KM47268 | Curved 90 degrees |

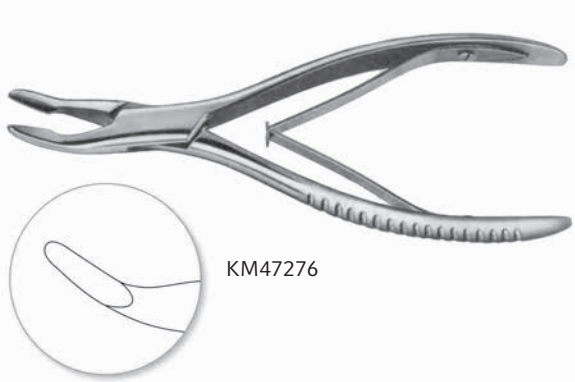
# RONGEURS

## Single Action Design

### HARTMAN RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| KM47285 | Curved, 4 x 14 mm bite, 7-1/4" (18.5 cm) |

### MEAD RONGEUR




| ITEM # | DESCRIPTION |
|---|---|
| KM47276 | Curved, 5 x 13 mm bite, 6-1/2" (16.5 cm) |

# RONGEURS

## Single Action Design

### ADSON RONGEURS

7 x 15 mm bite, 8" (20.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47302 | Straight |
| KM47306 | Curved |

### ADSON RAT TOOTH RONGEUR

Teeth facilitate easier bone excision.

| ITEM # | DESCRIPTION |
|---|---|
| KM47304 | Straight with teeth, 8 x 15 mm bite, 8" (20.5 cm) |

# RONGEURS

## Single Action Design

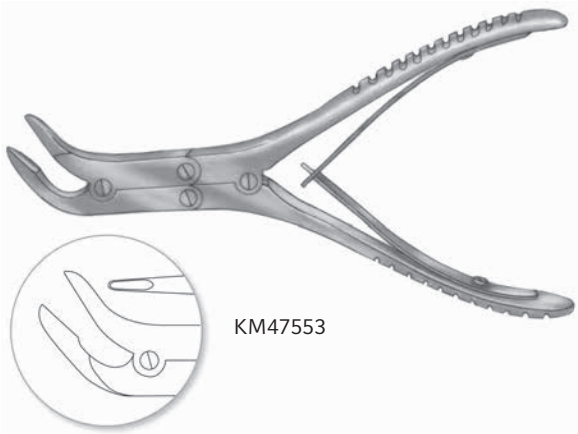
### LEUR RONGEURS

8 x 12 mm bite, 7-1/8" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47278 | Straight |
| KM47284 | Curved |

## Double Action Design

### KLEINERT-KUTZ SYNOVECTOMY RONGEUR




| ITEM # | DESCRIPTION |
|---|---|
| KM47553 | Curved on side, delicate, 2 x 10 mm bite, 6" (15 cm) |

# RONGEURS

## Double Action Design

### KLEINERT-KUTZ SYNOVECTOMY RONGEUR

KM47558

| ITEM # | DESCRIPTION |
|---|---|
| KM47558 | Fully curved, delicate, 3 mm bite, 6-1/8" (15.5 cm) |

### KLEINERT-KUTZ SYNOVECTOMY RONGEURS

KM47560 KM47562

Delicate, 6-1/8" (15.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47560 | Curved, 2 mm bite |
| KM47562 | Curved, 3 mm bite |

# RONGEURS

## Double Action Design

### KLEINERT-KUTZ DOUBLE ACTION RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| 065212 | 10 degrees lightly curved, 18.5 x 5 mm cup, 7-1/4" (18.5 cm) |

### BEYER RONGEURS

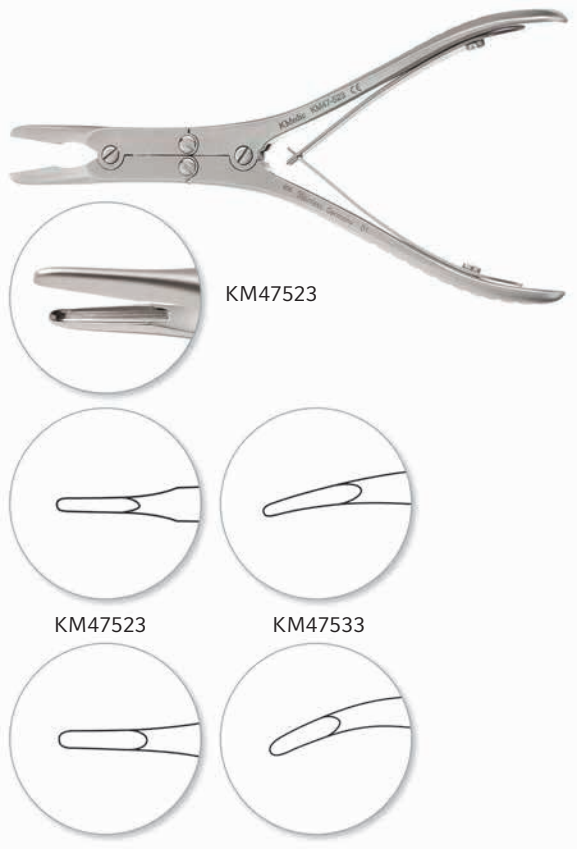
Curved, 7" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47520 | 3 x 14 mm bite |
| KM47522 | 4 x 15 mm bite |

# RONGEURS

## Double Action Design

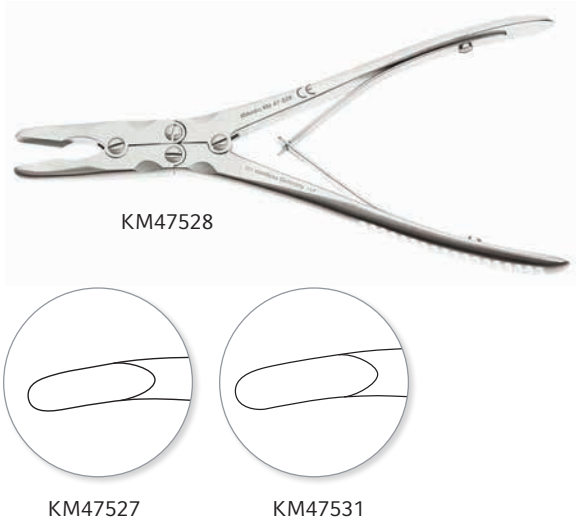
### RUSKIN RONGEURS




6" (15.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47523 | Straight, 2 x 14 mm bite |
| KM47532 | Straight, 3 x 15 mm bite |
| KM47533 | Curved, 2 x 15 mm bite |
| KM47534 | Curved, 3 x 15 mm bite |

### RUSKIN RONGEURS




7-1/4" (18.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47526 | Straight, 4 x 16 mm bite |
| KM47527 | Curved, 4 x 16 mm bite |
| KM47528 | Straight, 6 x 16 mm bite |
| KM47531 | Curved, 6 x 16 mm bite |

# RONGEURS

## Double Action Design

### RUSKIN RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| KM47525 | Curved, 5 x 10 mm bite, 7-1/4" (18.5 cm) |

### PILLING RUSKIN RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| 341836 | Double action, curved, 4 mm bite, 6-1/8" (15.5 cm) |

# RONGEURS

## Double Action Design

### ZAUFAL-JANSEN RONGEUR

KM47524

| ITEM # | DESCRIPTION |
|---|---|
| KM47524 | Curved, 5 x 15 mm bite, 7" (18 cm) |

### SMITH-PETERSEN LAMINECTOMY RONGEUR

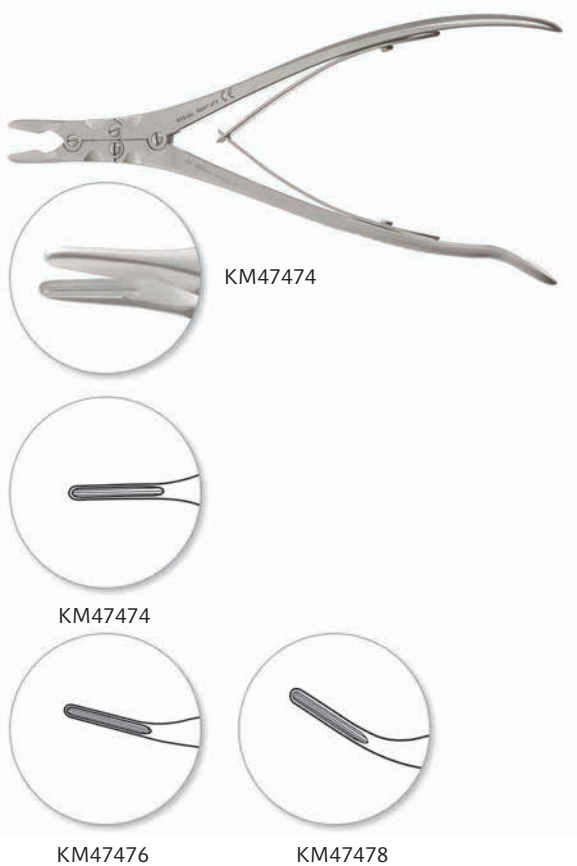
386152

| ITEM # | DESCRIPTION |
|---|---|
| 386152 | Double action, curved 15 degrees, 7-1/2" (19 cm) |

# RONGEURS

## Double Action Design

### SMITH-PETERSON LAMINECTOMY RONGEURS



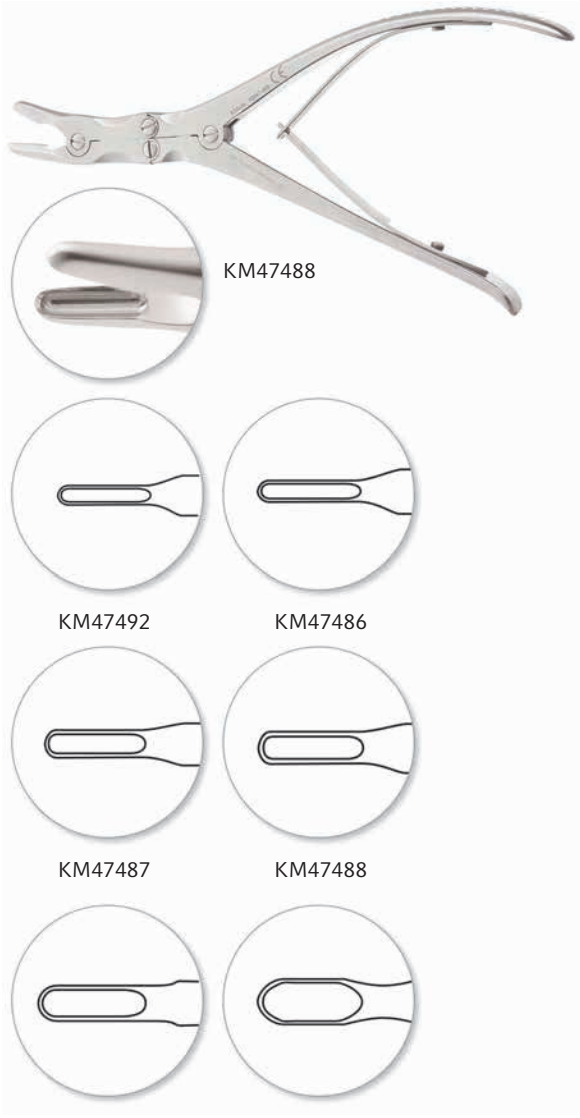

3 x 16 mm bite, 9-1/2" (24 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47474 | Straight |
| KM47476 | Curved |
| KM47478 | Full curved |

# RONGEURS

## Double Action Design

### LEKSELL RONGEURS




Curved 15 degrees, 9" (23 cm).

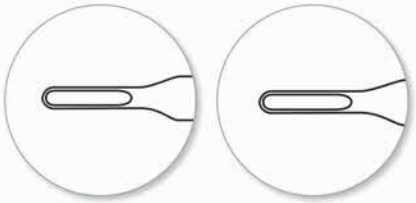
| ITEM # | DESCRIPTION |
|---|---|
| KM47492 | 3 x 16 mm bite |
| KM47486 | 4.5 x 16 mm bite |
| KM47487 | 5 x 16 mm bite |
| KM47488 | 6 x 16 mm bite |
| KM47489 | 7 x 16 mm bite |
| KM47490 | 8 x 16 mm bite |

# RONGEURS

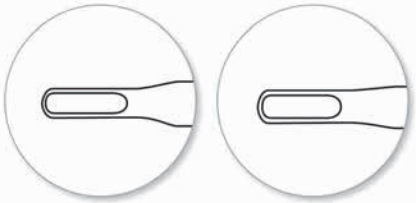
## Double Action Design

### LEKSELL RONGEURS

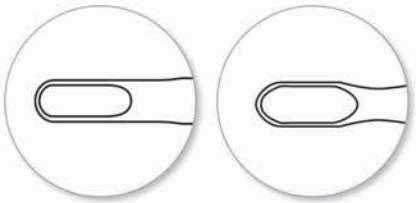
KM47497



KM47494 KM47495



KM47497 KM47498



KM47499 KM47496

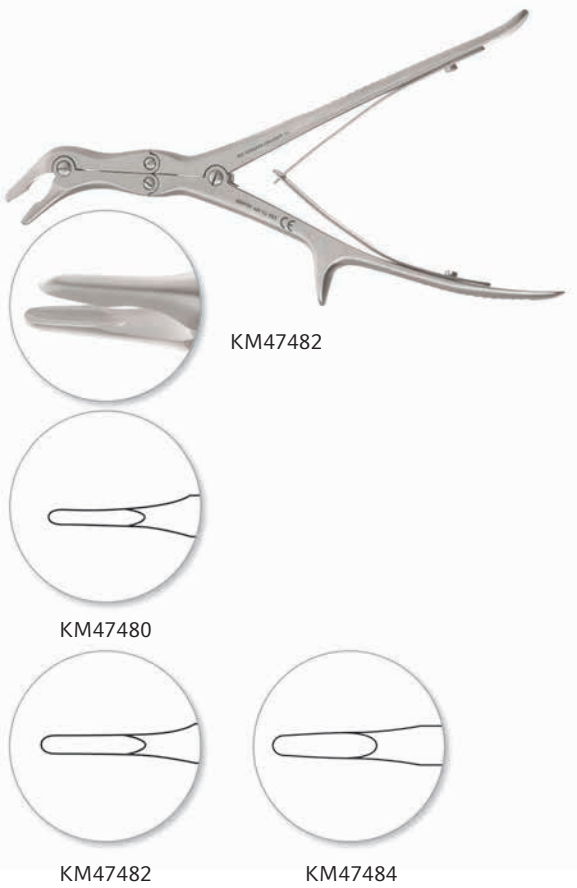
Curved 50 degrees, 9-1/2" (24 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47494 | 3 x 13 mm bite |
| KM47495 | 4 x 13 mm bite |
| KM47497 | 5 x 13 mm bite |
| KM47498 | 6 x 13 mm bite |
| KM47499 | 7 x 13 mm bite |
| KM47496 | 8 x 16 mm bite |

# RONGEURS

## Double Action Design

### ECHLIN DUCKBILL RONGEURS




Curved on side, 9" (23 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47480 | 2 x 12 mm bite |
| KM47482 | 3 x 12 mm bite |
| KM47484 | 4 x 12 mm bite |

# RONGEURS

## Double Action Design

### STILLE-LUER ECHLIN DUCKBILL RONGEURS

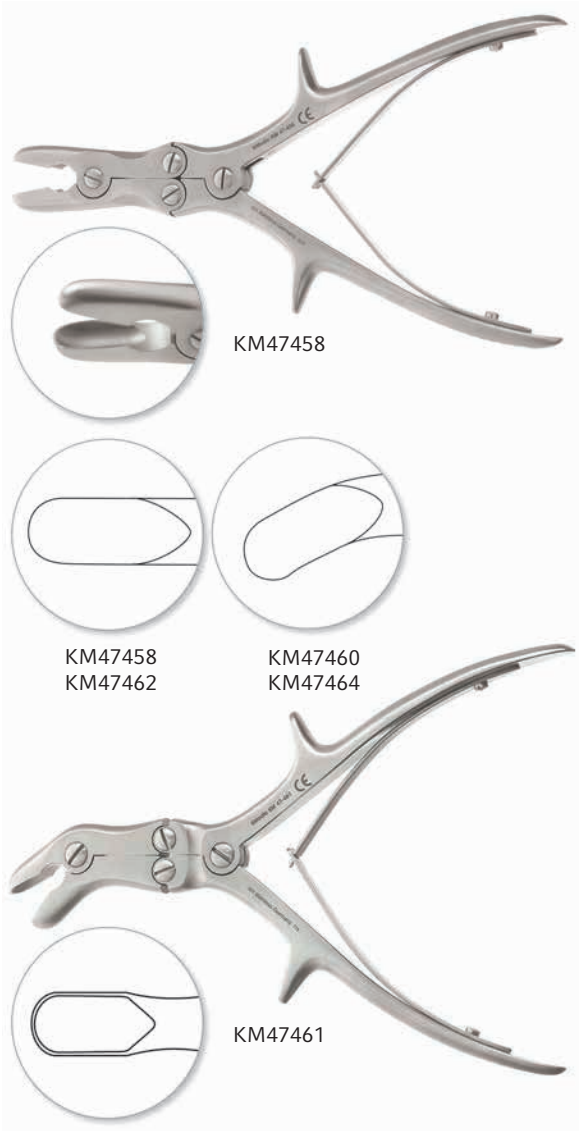
Curved on side, 9" (23 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47472 | 6 x 13 mm bite |
| KM47473 | 6 x 15 mm bite |

# RONGEURS

## Double Action Design

### STILLE-LEUR RONGEURS

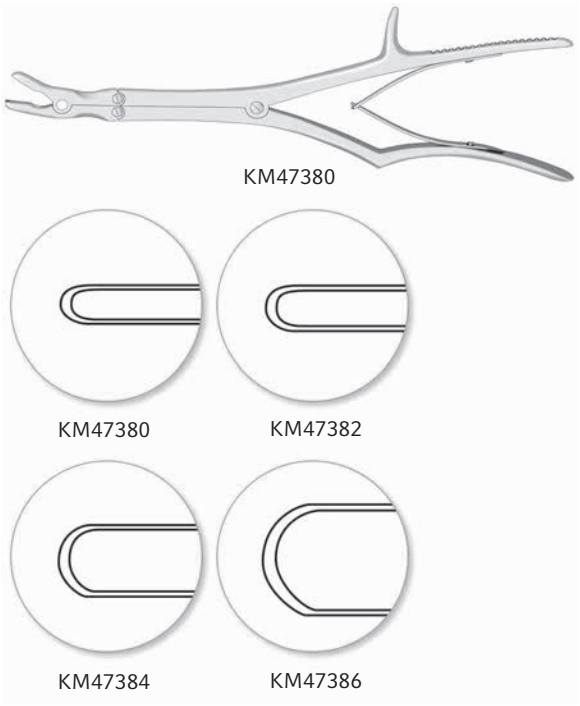



| ITEM # | DESCRIPTION |
|---|---|
| KM47458 | Straight, 10 x 18 mm, 8-1/2" (21.5 cm) |
| KM47462 | Straight, 10 x 18 mm, 10-1/2" (26.5 cm) |
| KM47460 | Curved, 10 x 18 mm, 8-3/8" (21 cm) |
| KM47464 | Curved, 10 x 18 mm, 10-1/2" (26.5 cm) |
| KM47461 | Curved on side, 10 x 16 mm, 8-1/2" (21.5 cm) |

# RONGEURS

## Double Action Design

### SYPERT RONGEURS




14" (35.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM47380 | 4 x 16 mm |
| KM47382 | 5 x 16 mm |
| KM47384 | 8 x 16 mm |
| KM47386 | 12 x 16 mm |

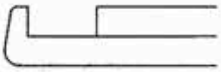
# KMEDIC® SPINAL RONGEURS AND PUNCHES

SHAFT LENGTH *measured in closed position*

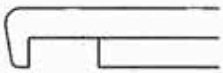
## IDENTIFICATION CHART

BITE STYLES *punch jaws, thin footplate*

*Forward 40°*

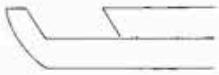


*Up 90°*



*Down 90°*

BITE STYLES *punch jaws, regular footplate*



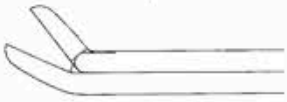
*Forward 40°*

*Up 90°*

*Down 90°*

BITE STYLES *cup jaws*

*Straight*

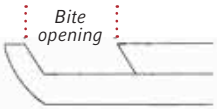


*Up*

*Down*

PUNCH JAWS

*Foot plate*




*Bite size*

*Bite size is etched on handles of spinal rongeurs and punches*

# Handle Styles

**STYLE I**
*Ring Handle*
*Handle Height 4"*

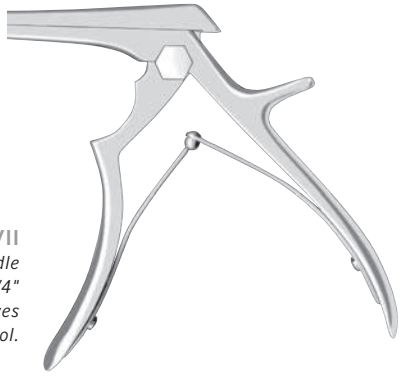
**STYLE II**
*Kerrison Handle*
*Handle Height 6-1/4"*

**STYLE III**
*Love-Kerrison Handle*
*(Cherry)*
*Handle Height 6"*

**STYLE IV**
*Large Kerrison Handle*
*Handle Height 6-1/4"*

**STYLE V**
*Small Kerrison Handle*
*Handle Height 5"*

**STYLE VI**
*Ferris-Smith*
*Herrison Ring Handle*
*Handle Height 5"*

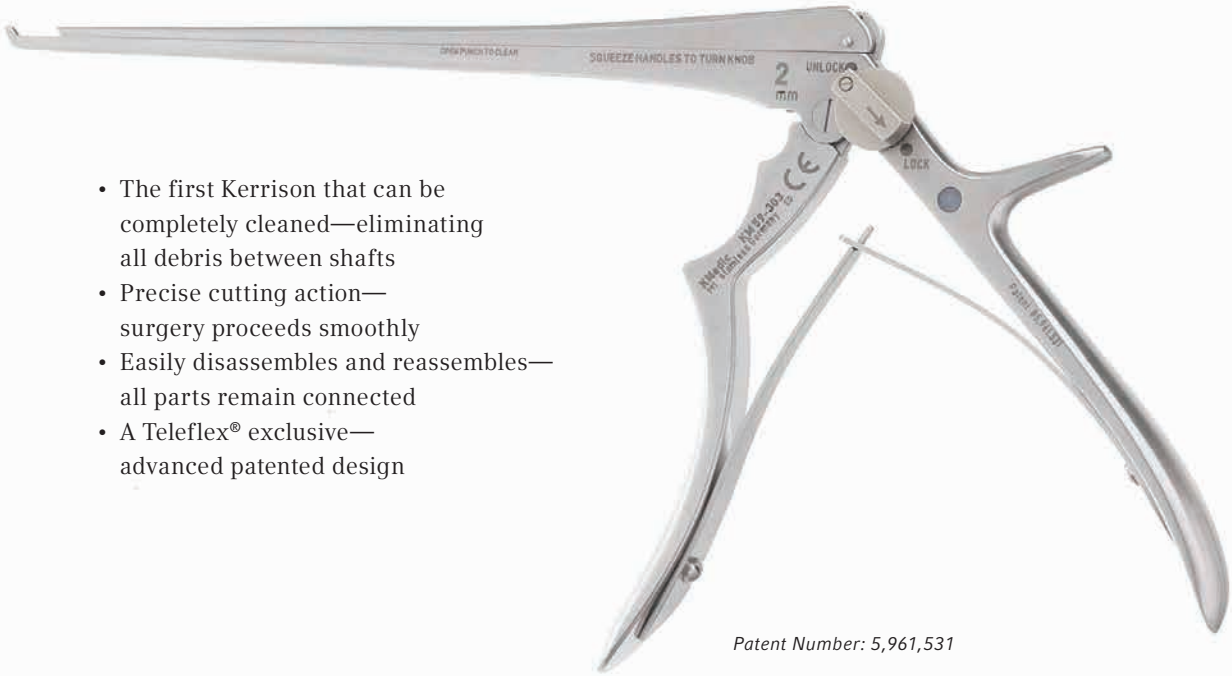


**STYLE VII**
*Spurling Kerrison Handle*
*Handle Height 4-3/4"*
*Wider grip improves*
*comfort and control.*

**STYLE VIII**
*Medium Kerrison Handle*
*Handle Height 5-1/4"*

*All KMedic® Spinal Rongeurs and Punches have bite size etched on handles for easy identification*

# KMEDIC® CLEANPUNCH® RONGEURS




- The first Kerrison that can be completely cleaned—eliminating all debris between shafts
- Precise cutting action—surgery proceeds smoothly
- Easily disassembles and reassembles—all parts remain connected
- A Teleflex® exclusive—advanced patented design

*Patent Number: 5,961,531*

In most punches, tissue and debris can be trapped between the top and bottom shafts. This "buildup" is not only unsanitary, but adversely affects the functioning of the instruments, which slows down procedures and can distract the surgeon. This problem caused by the common punch design, which does not allow parts to be disassembled and properly cleaned.

The KMedic® CleanPunch® Rongeur is the first Kerrison that easily disassembles and reassembles to ensure surgeons benefit from a clean, smooth cutting action. The product of fine craftsmanship and superior technology, the CleanPunch® Rongeur — like all KMedic® Certified Instruments—is designed and manufactured to perform impeccably.

### COMPLETELY CLEAN

With total access to the top shaft, debris is quickly removed. Cleaning requires no scraping or "excavating", which can damage an instrument and delay surgery.

### SIMPLE TO OPEN AND CLOSE

To open, simply turn knob arrow to "open" and pull back the top slider. To close, align top slider and bottom shaft, push slider forward, and turn knob arrow back to "close".

### REMAINS IN ONE PIECE

The KMedic® CleanPunch® Rongeur remains in one piece throughout disassembly and reassembly. Patented design ensures there's no possibility of losing or switching parts.

### ERGONOMIC DESIGN

The custom-designed handle has a wider grip for optimum control and comfort. In addition, it reduces fatigue and enhances concentration.

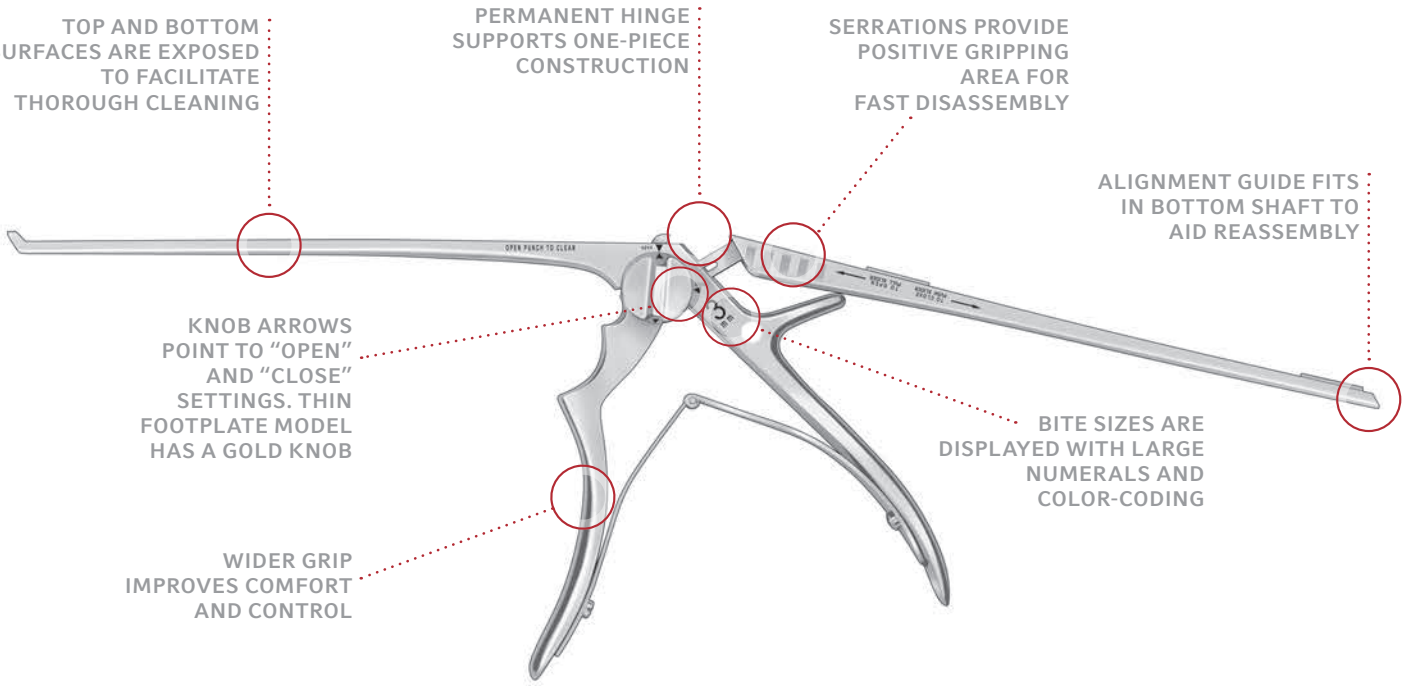
### GREATER FLEXIBILITY

The CleanPunch® Rongeur is available in 7" and 8" shaft lengths with regular and thin footplates, from 1 mm to 5 mm bites.

### A TELEFLEX® EXCLUSIVE

The patented CleanPunch® Rongeur conforms to the exacting standards that distinguish all KMedic® Certified Instruments.

# KMEDIC® CLEANPUNCH® RONGEUR




## FEATURES AND BENEFITS:

- Patented design enables the instrument to be completely cleaned, eliminating the "buildup" of bone, tissue and fluids that cause sticking and resistance to action.
- Provides a consistently smooth cutting action.
- Eliminates distractions that interrupt a surgeon's concentration required in delicate spinal procedures.
- Instant identification enables surgeons to quickly locate the right bite size. Large, legible mm sizes are etched on handles, as well as color coded.

## COLOR-CODED FOR INSTANT BITE SIZE RECOGNITION

1 mm – Red
2 mm – Blue
3 mm – Yellow
4 mm – Black
5 mm – Green
6 mm – White

## HANDLING THE KMEDIC® CLEANPUNCH® RONGEUR

### TO OPEN:

1. Hold punch in left hand. Turn knob to "open" position (align arrows).
2. Push knob up with left thumb. Grip top slider on serrations with right hand and pull back.
3. Clean interior surfaces.

### TO CLOSE:

1. Put knob in "open" position.
2. Align guides on top slider.
3. Push top slider forward until it clicks into place.
4. Turn knob to "close" position.
5. Test for proper functioning.

# RONGEURS

## Kerrison Rongeurs — CleanPunch® 2

### KERRISON CLEANPUNCH® 2 LAMINECTOMY RONGEURS

KM59306

Handle style VII, thin footplate, 7" (18 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM59300 | Forward | 1 mm |
| KM59303 | Forward | 2 mm |
| KM59306 | Forward | 3 mm |
| KM59309 | Forward | 4 mm |
| KM59312 | Forward | 5 mm |

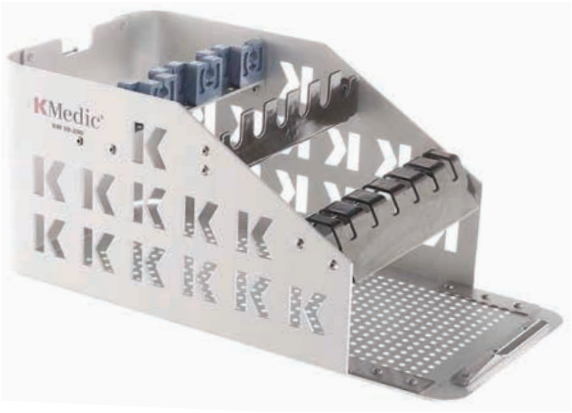
### KERRISON CLEANPUNCH® 2 LAMINECTOMY RONGEURS

KM59313

Handle style VII, thin footplate, 8" (20.5 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM59313 | Forward | 1 mm |
| KM59315 | Forward | 2 mm |
| KM59316 | Forward | 3 mm |
| KM59321 | Forward | 4 mm |
| KM59322 | Forward | 5 mm |

### CLEANPUNCH® CLEANING SYSTEM




KM59200

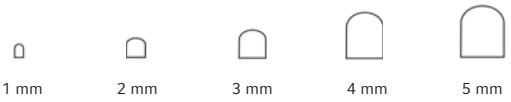
- Holds six CleanPunches in open position for maximum exposure during cleaning and sterilization.
- Lightweight anodized aluminum construction.
- Minimize footprint – compact design has removable lid that fits under rack.
- When open, instrument handles are exposed for quick identification and easy access in the O.R.
- Silicone-coated brackets prevent metal to metal contact.
- Protects sharp cutting edge during cleaning and sterilization process.
- Fits inside a standard container or can be wrapped separately.

| ITEM # | DESCRIPTION |
|---|---|
| KM59200 | Approximately 13-1/2" x 7" x 6" |

# RONGEURS

## Kerrison Rongeurs — Thin Footplate Design

### CERVICAL KERRISON THIN FOOTPLATE RONGEURS




- Thin footplate designed specifically for small bone in the cervical area.
- Gold hexagonal screw denotes thin footplate.
- Bite size etched on handle for quick identification.
- Care should be taken when using delicate thin footplate punches.
- Do not twist or pry instrument while cutting.
- Do not use on large bones.

*See the Instructions For Use for all instructions and contraindications.*

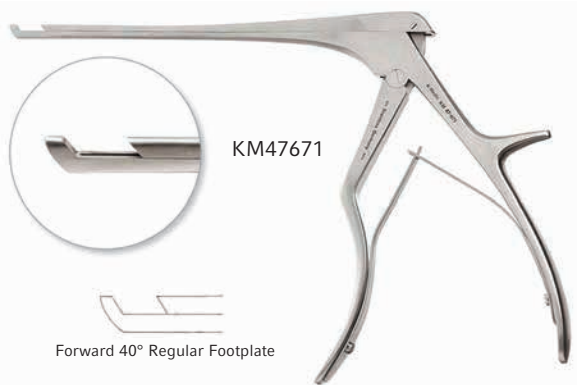
Handle style VII, thin footplate.

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM55891 | Forward | 1 mm | 6" (15 cm) |
| KM55892 | Forward | 2 mm | 6" (15 cm) |
| KM55895 | Forward | 3 mm | 6" (15 cm) |
| KM55898 | Forward | 4 mm | 6" (15 cm) |
| KM55901 | Forward | 5 mm | 6" (15 cm) |
| KM55904 | Forward | 1 mm | 7" (18 cm) |
| KM55908 | Forward | 2 mm | 7" (18 cm) |
| KM55911 | Forward | 3 mm | 7" (18 cm) |
| KM55914 | Forward | 4 mm | 7" (18 cm) |
| KM55917 | Forward | 5 mm | 7" (18 cm) |
| KM55925 | Forward | 1 mm | 8" (20.5 cm) |
| KM55926 | Forward | 2 mm | 8" (20.5 cm) |
| KM55927 | Forward | 3 mm | 8" (20.5 cm) |
| KM55928 | Forward | 4 mm | 8" (20.5 cm) |
| KM55929 | Forward | 5 mm | 8" (20.5 cm) |
| KM55905 | Up | 1 mm | 7" (18 cm) |
| KM55909 | Up | 2 mm | 7" (18 cm) |
| KM55912 | Up | 3 mm | 7" (18 cm) |
| KM55915 | Up | 4 mm | 7" (18 cm) |
| KM55918 | Up | 5 mm | 7" (18 cm) |
| KM55906 | Down | 1 mm | 7" (18 cm) |
| KM55910 | Down | 2 mm | 7" (18 cm) |
| KM55913 | Down | 3 mm | 7" (18 cm) |
| KM55916 | Down | 4 mm | 7" (18 cm) |
| KM55919 | Down | 5 mm | 7" (18 cm) |

# RONGEURS

## Kerrison Rongeurs — Standard Design

### LOVE-KERRISON LAMINECTOMY PUNCHES



Handle style IV, large handle, regular footplate.

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM47676 | Forward | 2 mm | 8" (20.5 cm) |
| KM47670 | Forward | 3 mm | 6" (15 cm) |
| KM47671 | Forward | 3 mm | 7" (18 cm) |
| KM47678 | Forward | 3 mm | 8" (20.5 cm) |
| KM47680 | Forward | 4 mm | 8" (20.5 cm) |
| KM47674 | Forward | 5 mm | 6" (15 cm) |
| KM47682 | Forward | 5 mm | 8" (20.5 cm) |
| KM47689 | Forward | 6 mm | 11" (28 cm) |

# RONGEURS

## Kerrison Rongeurs — Standard Design

### LOVE-KERRISON LAMINECTOMY PUNCHES

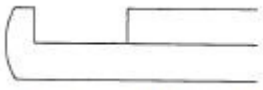
KM47644

3 mm 4 mm 5 mm

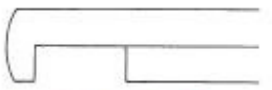
KM47648

Handle style IV, large handle, regular footplate.

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM47644 | Up | 3 mm | 6" (15 cm) |
| KM47645 | Up | 4 mm | 6" (15 cm) |
| KM47646 | Up | 5 mm | 6" (15 cm) |
| KM47648 | Down | 3 mm | 6" (15 cm) |
| KM47649 | Down | 4 mm | 6" (15 cm) |
| KM47650 | Down | 5 mm | 6" (15 cm) |



Up 90° Regular Footplate



Down 90° Regular Footplate

# RONGEURS

## Kerrison Rongeurs — Standard Design

### LOVE-KERRISON RONGEURS

Forward 40° Regular Footplate

Handle style II, large handle, regular footplate, 8" (20.5 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM47620 | Forward | 1 mm |
| KM47621 | Forward | 2 mm |
| KM47622 | Forward | 3 mm |
| KM47623 | Forward | 4 mm |
| KM47624 | Forward | 5 mm |

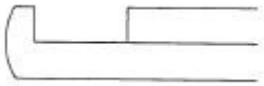
# RONGEURS

## Kerrison Rongeurs — Standard Design

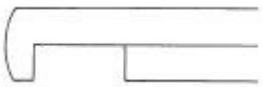
### LOVE-KERRISON LAMINECTOMY PUNCHES

Handle style IV, large handle, regular footplate.

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM47644 | Up | 3 mm | 6" (15 cm) |
| KM47645 | Up | 4 mm | 6" (15 cm) |
| KM47646 | Up | 5 mm | 6" (15 cm) |
| KM47648 | Down | 3 mm | 6" (15 cm) |
| KM47649 | Down | 4 mm | 6" (15 cm) |
| KM47650 | Down | 5 mm | 6" (15 cm) |
| KM47652 | Up | 3 mm | 8" (20.5 cm) |
| KM47853 | Up | 4 mm | 8" (20.5 cm) |
| KM47654 | Up | 5 mm | 8" (20.5 cm) |
| KM47656 | Down | 3 mm | 8" (20.5 cm) |
| KM47657 | Down | 4 mm | 8" (20.5 cm) |
| KM47658 | Down | 5 mm | 8" (20.5 cm) |



Up 90° Regular Footplate



Down 90° Regular Footplate

### SPURLING-KERRISON PUNCHES

Handle style IV, regular footplate, 8" (20.5 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM55870 | Forward | 3 mm |
| KM55871 | Forward | 4 mm |
| KM55872 | Forward | 5 mm |

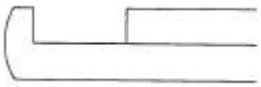
Forward 40° Regular Footplate

# RONGEURS

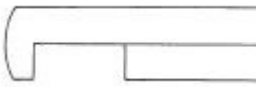
## Kerrison Rongeurs — Standard Design

### SPURLING-KERRISON PUNCHES

Forward 40° Regular Footplate



Up 90° Regular Footplate



Down 90° Regular Footplate

Compact handle design to accommodate smaller hands. Handle style V, regular footplate.

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM47879 | Forward | 1 mm | 7" (18 cm) |
| KM47996 | Forward | 2 mm | 7" (18 cm) |
| KM48024 | Forward | 2 mm | 8" (20.5 cm) |
| KM47685 | Forward | 2 mm | 11" (28 cm) |
| KM47997 | Forward | 3 mm | 7" (18 cm) |
| KM48025 | Forward | 3 mm | 8" (20.5 cm) |
| KM47686 | Forward | 3 mm | 11" (28 cm) |
| KM47998 | Forward | 4 mm | 7" (18 cm) |
| KM48026 | Forward | 4 mm | 8" (20.5 cm) |
| KM47687 | Forward | 4 mm | 11" (28 cm) |
| KM47999 | Forward | 5 mm | 7" (18 cm) |
| KM48027 | Forward | 5 mm | 8" (20.5 cm) |
| KM47688 | Forward | 5 mm | 11" (28 cm) |
| KM47855 | Forward | 6 mm | 7" (18 cm) |
| KM48028 | Forward | 6 mm | 8" (20.5 cm) |
| KM48029 | Forward | 6 mm | 11" (28 cm) |
| KM47988 | Up | 2 mm | 7" (18 cm) |
| KM48016 | Up | 2 mm | 8" (20.5 cm) |
| KM47989 | Up | 3 mm | 7" (18 cm) |
| KM48017 | Up | 3 mm | 8" (20.5 cm) |
| KM47990 | Up | 4 mm | 7" (18 cm) |
| KM48018 | Up | 4 mm | 8" (20.5 cm) |
| KM47991 | Up | 5 mm | 7" (18 cm) |
| KM48019 | Up | 5 mm | 8" (20.5 cm) |
| KM47857 | Up | 6 mm | 7" (18 cm) |
| KM47992 | Down | 2 mm | 7" (18 cm) |
| KM48020 | Down | 2 mm | 8" (20.5 cm) |
| KM47993 | Down | 3 mm | 7" (18 cm) |
| KM48021 | Down | 3 mm | 8" (20.5 cm) |
| KM47994 | Down | 4 mm | 7" (18 cm) |
| KM48022 | Down | 4 mm | 8" (20.5 cm) |
| KM47995 | Down | 5 mm | 7" (18 cm) |
| KM48023 | Down | 5 mm | 8" (20.5 cm) |
| KM47856 | Down | 6 mm | 7" (18 cm) |

# RONGEURS

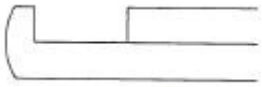
## Kerrison Rongeurs — Standard Design

### SCHLESINGER CERVICAL LAMINECTOMY RONGEURS

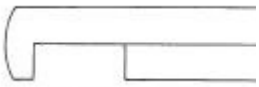
KM47612

Handle style IV, large handle, regular footplate, 6" (15 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM47610 | Up | 3 mm |
| KM47612 | Up | 5 mm |
| KM47614 | Down | 3 mm |
| KM47616 | Down | 5 mm |



Up 90° Regular Footplate



Down 90° Regular Footplate

3 mm

5 mm

### FERRIS-SMITH KERRISON RONGEURS

KM48040

KM48041

Handle style IV, thin footplate, 7" (18 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM48040 | Up | 6 mm |
| KM48041 | Down | 6 mm |

Up 90°
Thin Footplate

Down 90°
Thin Footplate

6 mm

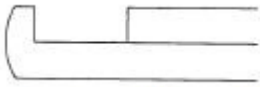
# RONGEURS

## Kerrison Rongeurs — Standard Design

### FERRIS-SMITH KERRISON RONGEURS

Handle style V, regular footplate.

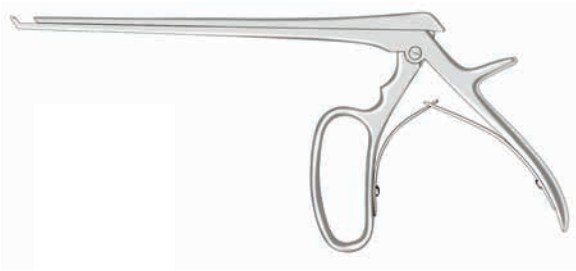
| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM48010 | Forward | 1 mm | 6" (15 cm) |
| KM47987 | Up | 6 mm | 7" ( 18 cm) |



Up 90° Regular Footplate

1 mm

### FERRIS-SMITH KERRISON PUNCHES



KM55823

Ring handle (handle style VI), regular footplate.

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM55813 | Forward | 3 mm | 7" (18 cm) |
| KM55823 | Forward | 3 mm | 8" (20.5 cm) |
| KM55815 | Forward | 5 mm | 7" (18 cm) |
| KM55825 | Forward | 5 mm | 8" (20.5 cm) |

Forward 40° Regular Footplate

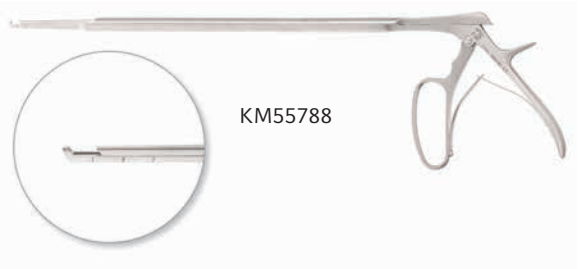
3 mm

5 mm

# RONGEURS

## Kerrison Rongeurs — Standard Design

### FERRIS-SMITH ENDOSCOPIC KERRISON RONGEURS




Graduated tip, ring handle, 3-1/4" tip length, .470" shaft diameter, working length 14" (35.5 cm), overall 20" (51 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM55788 | Forward | 2.5 mm |
| KM55790 | Forward | 4 mm |
| KM55782 | Down | 4 mm |

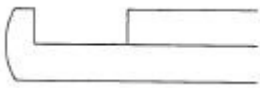
2.5 mm KM55788

4 mm KM55790

4 mm KM55782

### KERRISON RONGEUR

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| 411625 | Up | 3 mm | 3-1/2" (9 cm) |



Up 90° Regular Footplate

3 mm

# RONGEURS

## Kerrison Rongeurs — Standard Design

### KERRISON MULTI-BITE PUNCHES

Fenestrated upper shaft ejects cut pieces of bone and tissue. Delicate, thin footplate, for cervical use only, 7" (18 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM55980 | Up, fenestrated | 2 mm |
| KM55981 | Up, fenestrated | 3 mm |

Up 90°
Thin Footplate

2 mm 3 mm

### MOORELAND RONGEUR

| ITEM # | DESCRIPTION |
|---|---|
| KM47850 | 5 x 15 mm, 13-3/4" (35 cm) |

### FORAMINOTOMY PUNCHES

Handle style V, regular footplate, 8" (20.5 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM48030 | Curved up | 2 mm |
| KM48033 | Curved up | 3 mm |
| KM48032 | Curved up | 4 mm |

2 mm 3 mm 4 mm

# RONGEURS

## IVD Rongeurs

### DECKER IVD RONGEUR

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM55858 | Straight | 2 x 6 mm | 6" (15 cm) |

### PEAPOD IVD RONGEUR

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM55842 | Up angle | 2 x 6 mm | 5-1/2" (14 cm) |

### SELVERSTONE IVD RONGEUR

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM55860 | Straight | 2 x 3 mm | 6" (15 cm) |

# RONGEURS

## IVD Rongeurs

### WILDE IVD RONGEURS

KM47708

Fenestrated jaws, straight.

| ITEM # | DESCRIPTION | OVERALL LENGTH |
|---|---|---|
| KM47707 | Small, 4 x 9 mm bite | 5" (12.5 cm) |
| KM47708 | Medium, 5 x 10 mm bite | 5" (12.5 cm) |
| KM47709 | Large, 6 x 11 mm bite | 5" (12.5 cm) |

### CUSHING IVD RONGEURS

KM47710

KM47732

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM47710 | Straight | 2 x 10 mm | 5" (12.5 cm) |
| KM47730 | Straight | 2 x 10 mm | 7" (18 cm) |
| KM47712 | Up angle | 2 x 10 mm | 5" (12.5 cm) |
| KM47732 | Up angle | 2 x 10 mm | 7" (18 cm) |
| KM47714 | Down angle | 2 x 10 mm | 5" (12.5 cm) |
| KM47734 | Down angle | 2 x 10 mm | 7" (18 cm) |

### LOVE-GRUENWALD IVD RONGEURS

KM47760

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM47760 | Straight | 3 x 10 mm | 5" (12.5 cm) |
| KM47780 | Straight | 3 x 10 mm | 7" (18 cm) |
| KM47762 | Up angle | 3 x 10 mm | 5" (12.5 cm) |
| KM47782 | Up angle | 3 x 10 mm | 7" (18 cm) |
| KM47764 | Down angle | 3 x 10 mm | 5" (12.5 cm) |
| KM47784 | Down angle | 3 x 10 mm | 7" (18 cm) |

# RONGEURS

## IVD Rongeurs

### SPURLING IVD RONGEURS

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM47800 | Straight | 4 x 10 mm | 5" (12.5 cm) |
| KM47840 | Straight | 4 x 10 mm | 7" (18 cm) |
| KM47802 | Up angle | 4 x 10 mm | 5" (12.5 cm) |
| KM47842 | Up angle | 4 x 10 mm | 7" (18 cm) |
| KM47804 | Down angle | 4 x 10 mm | 5" (12.5 cm) |
| KM47844 | Down angle | 4 x 10 mm | 7" (18 cm) |

### CASPAR IVD RONGEURS

Fenestrated jaw, serrated cup.

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM55935 | Straight | 2 x 12 mm | 6-1/4" (16 cm) |
| KM55936 | Straight | 3 x 12 mm | 6-1/4" (16 cm) |
| KM55937 | Straight | 4 x 14 mm | 6-1/4" (16 cm) |
| KM55938 | Straight | 5 x 14 mm | 6-1/4" (16 cm) |
| KM55960 | Straight | 2 x 12 mm | 7-1/4" (18.5 cm) |
| KM55961 | Straight | 3 x 12 mm | 7-1/4" (18.5 cm) |
| KM55962 | Straight | 4 x 14 mm | 7-1/4" (18.5 cm) |
| KM55963 | Straight | 5 x 14 mm | 7-1/4" (18.5 cm) |
| KM55964 | Straight | 6 x 16 mm | 7-1/4" (18.5 cm) |
| KM55972 | Up angle | 3 x 12 mm | 7-1/4" (18.5 cm) |
| KM55973 | Up angle | 4 x 14 mm | 7-1/4" (18.5 cm) |
| KM55974 | Up angle | 5 x 14 mm | 7-1/4" (18.5 cm) |
| KM55966 | Down angle | 3 x 12 mm | 7-1/4" (18.5 cm) |
| KM55967 | Down angle | 4 x 14 mm | 7-1/4" (18.5 cm) |

2 x 12 mm

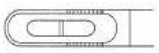
bite straight
KM55935
KM55960

3 x 12 mm

bite straight
KM55936
KM55961

bite up angle
KM55972

bite down angle
KM55966

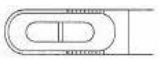


4 x 14 mm

bite straight
KM55937
KM55962

bite up angle
KM55973

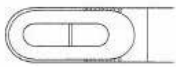
bite down angle
KM55967



5 x 14 mm

bite straight
KM55938
KM55963

bite up angle
KM55974



6 x 16 mm

bite straight
KM55964

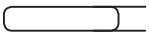
# RONGEURS

## IVD Rongeurs

### CASPAR IVD RONGEURS

6" (15 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM55946 | Straight | 2 x 10 mm |
| KM55947 | Straight | 3 x 10 mm |
| KM55948 | Straight | 4 x 10 mm |
| KM55949 | Straight | 5 x 10 mm |
| KM55952 | Up angle | 2 x 10 mm |
| KM55953 | Up angle | 3 x 10 mm |
| KM55954 | Up angle | 4 x 10 mm |
| KM55940 | Down angle | 2 x 10 mm |
| KM55941 | Down angle | 3 x 10 mm |
| KM55942 | Down angle | 4 x 10 mm |

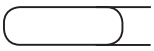


2 x 10 mm

bite straight
KM55946

bite up angle
KM55952

bite down angle
KM55940



3 x 10 mm

bite straight
KM55947

bite up angle
KM55953

bite down angle
KM55941

4 x 10 mm

bite straight
KM55948

bite up angle
KM55954

bite down angle
KM55942

5 x 10 mm

bite straight
KM55949

### SCHLESINGER IVD RONGEURS

Serrated jaws.

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM47700 | Straight | 2 x 10 mm | 6" (15 cm) |
| KM47702 | Straight | 3 x 10 mm | 6" (15 cm) |
| KM47704 | Straight | 4 x 10 mm | 6" (15 cm) |
| KM47703 | Up angle | 3 x 10 mm | 6" (15 cm) |

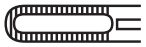
2 x 10 mm

bite straight
KM47700

3 x 10 mm

bite straight
KM47702

bite up angle
KM47703



4 x 10 mm

bite straight
KM47704

# RONGEURS

## IVD Rongeurs

### SCHLESINGER IVD RONGEURS

KM55694

9″ (23 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM55690 | Straight | 3 x 10 mm |
| KM55691 | Straight | 5 x 10 mm |
| KM55693 | Up angle | 3 x 10 mm |
| KM55694 | Up angle | 5 x 10 mm |

### OLDBERG IVD RONGEUR

| ITEM # | BITE | SIZE | OVERALL LENGTH |
|---|---|---|---|
| KM55856 | Round | 6 mm | 7" (18 cm) |

# RONGEURS

## IVD Rongeurs

### FERRIS-SMITH IVD RONGEURS

Ring handle lessens chance of slippage.
Handle style VI, 7" (18 cm) shaft.

| ITEM # | BITE | SIZE |
|---|---|---|
| KM47858 | Straight | 2 x 10 mm |
| KM47864 | Straight | 3 x 10 mm |
| KM47870 | Straight | 4 x 10 mm |
| KM47878 | Straight | 6 x 12 mm |
| KM47860 | Up angle | 2 x 10 mm |
| KM47866 | Up angle | 3 x 10 mm |
| KM47872 | Up angle | 4 x 10 mm |
| KM47873 | Up angle | 6 x 12 mm |
| KM47862 | Down angle | 2 x 10 mm |
| KM47868 | Down angle | 3 x 10 mm |
| KM47874 | Down angle | 4 x 10 mm |
| KM47875 | Down angle | 6 x 12 mm |

2 x 10 mm

bite straight
KM47858

bite up
KM47860

bite down
KM47862

3 x 10 mm

bite straight
KM47864

bite up
KM47866

bite down
KM47868

4 x 10 mm

bite straight
KM47870

bite up
KM47872

bite down
KM47874

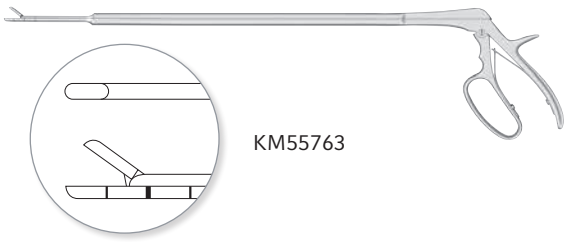
6 x 12 mm

bite straight
KM47878

bite up
KM47873

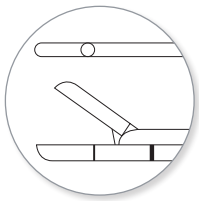
bite down
KM47875

### FERRIS-SMITH ENDOSCOPIC IVD RONGEURS



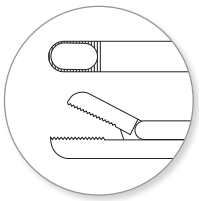

Handle style VI, ring handle, 3-1/4" tip length, 0.470" (12 mm) shaft diameter, 10-3/4" shaft length, 6" handle length, 20" (51 cm).

| ITEM # | BITE | SIZE |
|---|---|---|
| KM55762 | Straight | 2.5 x 10 mm |
| KM55763 | Straight | 4 x 10 mm |
| KM55767 | Up angle | 4 x 10 mm |
| KM55777 | Straight, serrated | 8 x 12 mm |



KM55762

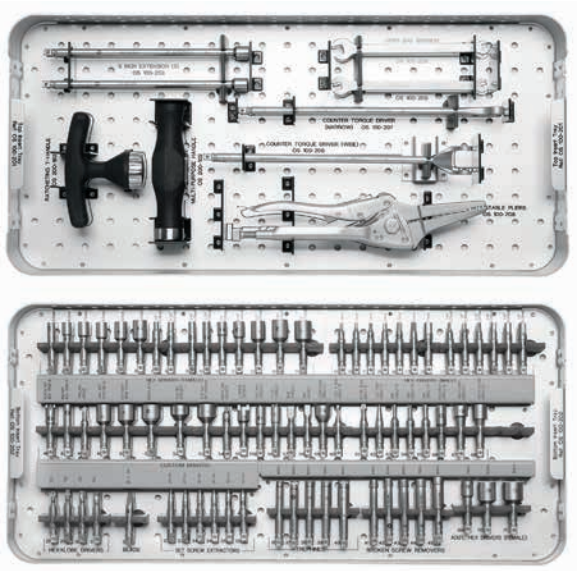
KM55767



KM55777

# TL SPINAL IMPLANT REMOVAL SYSTEM

## THORACOLUMBAR SPINAL IMPLANT REMOVAL SET



OS100200

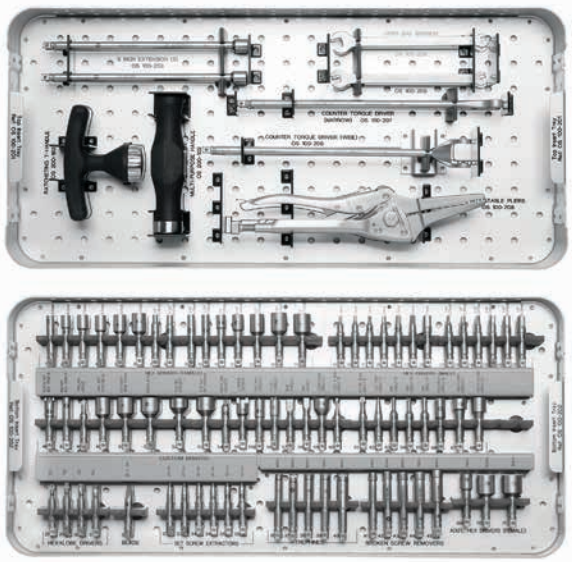
The new **OrthoSpecialties by KMedic™ Spinal Implant Removal Set** will satisfy a surgeon's instrument needs when conducting thoracic and lumbar implant revisions.

This set offers a unique combination of implant-specific instruments in one convenient yet comprehensive set, including more than 80 standard drivers, broken screw removers, trephines, and custom bits.

| ITEM # | DESCRIPTION |
|---|---|
| OS100200 | Complete Thoracolumbar Set |
| OS100198 | Instruments Only |
| OS100199 | Case Components Only |
| **CASE COMPONENTS** | |
| OS100201 | Upper Tray Insert |
| OS100202 | Bottom Tray Insert |
| OS100209 | Case Lid |
| OS100210 | Case Bottom |
| **GENERAL INSTRUMENTS** | |
| OS100203 | 8" Extender |
| OS100204 | Open End Wrench, 1/4" & 3/8" |
| OS100205 | Open End Wrench, 7/32" & 9/32" |
| OS100206 | Counter Torque Wrench, Wide |
| OS100207 | Counter Torque Wrench, Narrow |
| OS100208 | Adjustable Needle Nose Pliers |
| OS100102 | Multi-purpose Handle |
| OS100182 | Racheting T-Handle |
| **CUSTOM DRIVERS** | |
| OS100211 | Advanced Spine®, Sleeve Nut |
| OS100212 | Advanced Spine®, Anchor Screw |
| OS100216 | Aesculap®, 4-Prong |
| OS100221 | Corin®, 3-Lok |
| OS100217 | Cross®, 13.8 mm Hex |
| OS100220 | Cross®, 2-Prong |
| OS100218 | Cross®, Cap Nut Remover |
| OS100224 | Cross®, External Hex Scr Ext. |
| OS100219 | Cross®, Pentalobe |
| OS100228 | DePuy®, Cam Tightener |
| OS100225 | DePuy®, Dodecagon |
| OS100293 | DePuy®, Isola, Open |
| OS100294 | DePuy®, Isola, Closed |
| OS100226 | DePuy®, Locking & Inner |
| OS100292 | DePuy®, Monarch Pedicle |
| OS100227 | DePuy®, Outer Bone |
| OS100229 | DePuy®, X15, Hexalobe |
| OS100290 | DePuy®, X20 Hexalobe |
| OS100291 | DePuy®, X25 Hexalobe |
| OS100215 | SpineTech®, Octagon |
| OS100214 | Synthes®, 11 mm (12 pt) Hex |
| **HEX DRIVERS-MALE** | |
| OS100230 | 2.5 mm |
| OS100231 | 3.0 mm |
| OS100232 | 3.5 mm |
| OS100234 | 4.5 mm |
| OS100235 | 5.0 mm |
| OS100236 | 7.0 mm |
| OS100237 | 7/64" (2.78 mm) |
| OS100238 | 1/8" (3.18 mm) |
| OS100239 | 5/32" (3.97 mm) |
| OS100240 | 3/16" (4.76 mm) |
| OS100241 | 7/32" (5.56 mm) |
| OS100242 | 1/4" (6.35 mm) |
| **HEX DRIVERS - FEMALE** | |
| OS100250 | 5.0 mm |

# TL SPINAL IMPLANT REMOVAL SYSTEM

## THORACOLUMBAR SPINAL IMPLANT REMOVAL SET (CONTINUED)



OS100200

| ITEM # | DESCRIPTION |
|---|---|
| OS100251 | 6.0 mm |
| OS100252 | 7.0 mm |
| OS100295 | 7.5 mm |
| OS100253 | 8.0 mm |
| OS100254 | 9.0 mm |
| OS100255 | 10.0 mm |
| OS100296 | 13.0 mm |
| OS100297 | 15.0 mm |
| OS100256 | 1/8" (3.18 mm) |
| OS100257 | 5/32" (3.97 mm) |
| OS100258 | 3/16" (4.76 mm) |
| OS100259 | 7/32" (5.56 mm) |
| OS100260 | 1/4" (6.35 mm) |
| OS100261 | 5/16" (7.94 mm) |
| OS100262 | 3/8" (9.53 mm) |
| OS100263 | 7/16" (11.11 mm) |
| OS100264 | 1/2" (12.70 mm) |
| **STANDARD DRIVERS** | |
| OS100213 | Phillips Driver |
| OS100222 | Saddle, 5 mm |
| OS100223 | Saddle, 6 mm |
| OS100274 | Medium Blade |
| **HEXALOBE DRIVERS** | |
| OS100270 | T20 |
| OS100271 | T25 |
| OS100272 | T30 |
| OS100273 | T40 |
| **SET SCREW EXTRACTORS** | |
| OS100275 | For 2.5 mm Hex |
| OS100276 | For 3.0 mm Hex |
| OS100277 | For 3.5 mm Hex |
| **TREPHINES** | |
| OS100280 | For 4 mm Screw |
| OS100281 | For 5 mm Screw |
| OS100282 | For 6 mm Screw |
| OS100283 | For 7 mm Screw |
| OS100284 | For 8 mm Screw |
| **BROKEN SCREW REMOVERS** | |
| OS100285 | For 4 mm Screw |
| OS100286 | For 5 mm Screw |
| OS100287 | For 6 mm Screw |
| OS100288 | For 7 mm Screw |
| OS100289 | For 8 mm Screw |

# NAIL INSTRUMENTS

## Nail Nippers

### TURNBULL NAIL NIPPERS

188030

188032

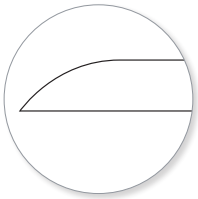
| ITEM # | DESCRIPTION |
|---|---|
| 188030 | 4-1/2" (11.5 cm) |
| 188032 | 5-5/8" (14.5 cm) |

### MYCOTIC NAIL NIPPERS

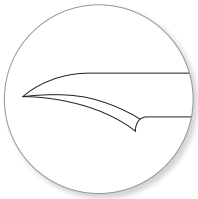
Double action helps prevent hand fatigue. Ideal for Mycotic and Onychauxis nails. Stainless, double action, barrel spring, 6" (15.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM69445 | Straight |
| KM69446 | Concave |

KM69445



KM69445

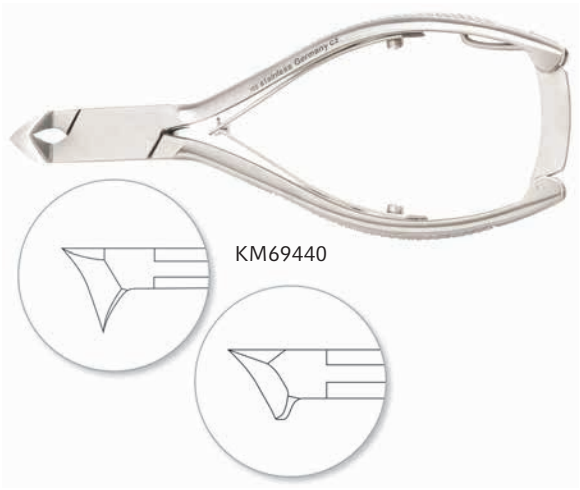


KM69446

# NAIL INSTRUMENTS

## Nail Nippers

### NAIL NIPPERS



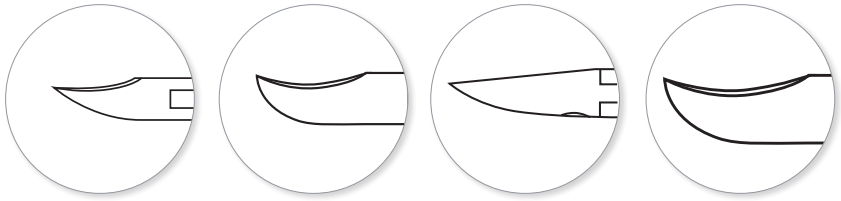

Stainless steel. Angled, concave, 5-1/2" (14 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM69440 | Sharp end |
| KM69441 | Blunt end |

### NAIL NIPPERS

Stainless steel, 5-1/2" (14 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM69418 | Narrow, concave |
| KM69430 | Heavy, concave |
| KM69432 | Heavy, straight |
| KM69438 | Heavy, concave, super size |



# NAIL INSTRUMENTS

## Nail Nippers

### TISSUE NIPPERS

KM69290

Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| KM69290 | 6 mm, 4" (10 cm) |
| KM69291 | 9 mm, 4" (10 cm) |
| KM69292 | 11 mm, 4-1/2" (11.5 cm) |
| KM69294 | 14 mm, 5" (12.5 cm) |

## Nail Splitters

### NAIL SPLITTERS

KM69557

| ITEM # | DESCRIPTION |
|---|---|
| KM69557 | Small, straight blade, single-ended, 6-1/8" (15.5 cm) |

# NAIL INSTRUMENTS

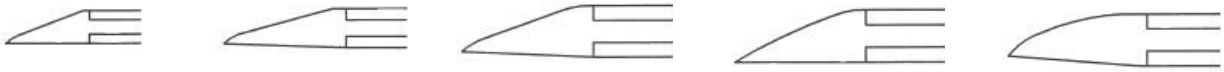
## Nail Splitters

### NAIL SPLITTERS

KM69320

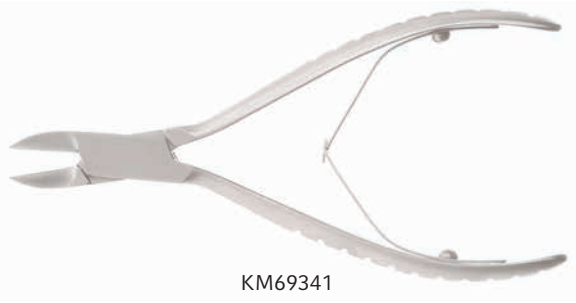
With grooved handles to improve grip.

| ITEM # | DESCRIPTION |
|---|---|
| KM69320 | 4" (10 cm) |
| KM69322 | 4-1/2" (11.5 cm) |
| KM69326 | Heavy jaw, 5" (12.5 cm) |
| KM69327 | Narrow jaw, 5" (12.5 cm) |
| KM69340 | 6" (15 cm) |



KM69320 KM69322 KM69326 KM69327 KM69340

### NAIL SPLITTERS



KM69341

Our splitters have the true feel of superb craftsmanship. The cutting edge is expertly ground and specially heat treated. For a sure grip, our stainless splitters come with grooved handles. Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| KM69341 | Tapered, 4" (10 cm) |
| KM69342 | Tapered, 4-1/2" (11.5 cm) |
| KM69343 | Tapered, 5" (12.5 cm) |
| KM69344 | Tapered, 6" (15 cm) |
| KM69448 | Delicate, 4-1/2" (11.5 cm) |

KM69341 KM69342 KM69343 KM69344 KM69348

# NAIL INSTRUMENTS

## Nail Splitters

### SHORT JAW NAIL SPLITTERS

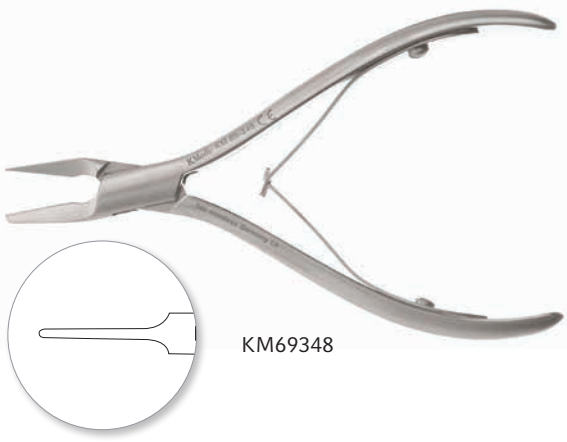
KM69930

Short jaw design provides increased leverage for easier cutting of thick nails — less strain on hand and splitter. Stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| KM69930 | Straight, 5" (12.5 cm) |
| KM69932 | Straight, 6" (15 cm) |

## Nail Forceps

### INGROWN NAIL FORCEPS



KM69348

Very delicate anvil design slides easily under nails.

| ITEM # | DESCRIPTION |
|---|---|
| KM69348 | Anvil pattern, narrow blade, 5" (12.5 cm) |

# NAIL INSTRUMENTS

## Nail Forceps

### PLATYPUS NAIL REMOVING FORCEPS

KM69792

| ITEM # | DESCRIPTION |
|---|---|
| KM69792 | 3 mm, narrow, 5-1/2" (14 cm) |
| KM69793 | 6 mm, broad, 5-1/2" (14 cm) |

## Nail Scissors

### INGROWN NAIL INSTRUMENT #81

KM69595

| ITEM # | DESCRIPTION |
|---|---|
| KM69595 | Single-ended, 5" (12.5 cm) |

# NAIL INSTRUMENTS

## Nail Scissors

### INGROWN NAIL SPLITTING SCISSORS

KM69805

| ITEM # | DESCRIPTION |
|---|---|
| KM69805 | One serrated blade, 6" (15 cm) |

### NAIL SCISSORS

KM69106

| ITEM # | DESCRIPTION |
|---|---|
| KM69106 | Curved, 4" (10.5 cm) |

# BONE SAWS AND KNIVES

## GIGLI SAW BLADES

KM46612

KM46616

KM46610

KM46617

For cutting hard bone in difficult areas or situations.

| ITEM # | DESCRIPTION |
|---|---|
| KM46612 | 9" (23 cm) |
| KM46613 | 12" (30.5 cm) |
| KM46609 | 16" (40.5 cm) |
| KM46614 | 20" (51 cm) |
| KM46615 | 30" (76 cm) |
| KM46616 | Loop-style, 3-1/2" (9 cm) wide, one pair |
| KM46610 | Loop-style with snap lock, 3-3/8" (8.5 cm) wide, one pair |
| KM46617 | T-style, 2-1/2" wide, one pair |

# BONE SAWS AND KNIVES

## RANEY GIGLI SAW GUIDE

| ITEM # | DESCRIPTION |
|---|---|
| KM46620 | Curved tip, straight shaft |

## CHARRIERE BONE SAWS

KM46683

Stainless steel frame, chrome blades.

| ITEM # | DESCRIPTION |
|---|---|
| KM46645 | 10-1/2" (26.5 cm) complete |
| KM46646 | Chrome blade only for KM46645 |
| KM46683 | 14" (35.5 cm) complete |
| KM46684 | 12 mm chrome blade only for KM46683 |
| KM46685 | 14 mm chrome blade only for KM46683 |

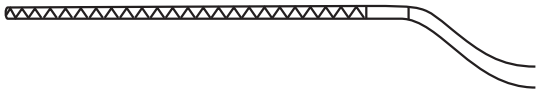
## JOSEPH BONE SAWS

KM58096

KM58097

7" (19 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM58096 | Straight |
| KM58097 | Bayonet left |
| KM58098 | Bayonet right |



KM58098

## LANGENBECK METACARPAL SAW

KM46601

| ITEM # | DESCRIPTION |
|---|---|
| KM46601 | 9" (23 cm) |

# BONE SAWS AND KNIVES

## LISTON AMPUTATING KNIVES

KM46598

| ITEM # | DESCRIPTION |
|---|---|
| KM46598 | 6-3/4" (17 cm) blade |
| KM46600 | 8" (20.5 cm) blade |

## SATTERLEE BONE SAW

KM46643

| ITEM # | DESCRIPTION |
|---|---|
| KM46643 | Complete with ring handle, 11-1/2" (29 cm) |

## SATTERLEE SAW BLADES ONLY

KM46642

KM46644

| ITEM # | DESCRIPTION |
|---|---|
| KM46642 | Blade only for KM46643, 8-3/8" (21.5 cm) |
| KM46644 | Blade only for KM46643 |

## PERCY AMPUTATION SHIELD

KM46602

| ITEM # | DESCRIPTION |
|---|---|
| KM46602 | 12" (30.5 cm) |

# PLASTER CAST INSTRUMENTS

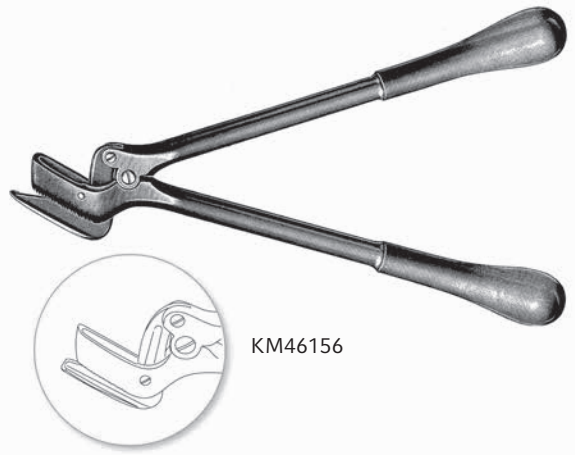
## BRUNS SHEARS

KM46090

For heavier plaster.

| ITEM # | DESCRIPTION |
|---|---|
| KM46090 | One blade serrated, 9-3/8" (24 cm) |

## STILLE PLASTER SHEARS



KM46156

For cast removal.

| ITEM # | DESCRIPTION |
|---|---|
| KM46156 | 15" (38 cm) |

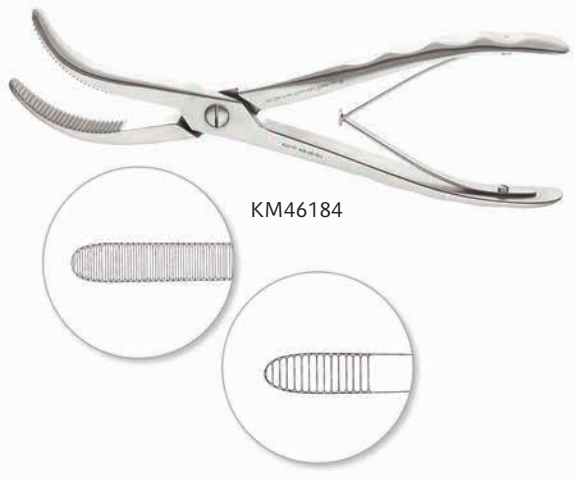
## PEDIATRIC CAST BREAKER

KM46188

| ITEM # | DESCRIPTION |
|---|---|
| KM46188 | 7" (18 cm) |

# PLASTER CAST INSTRUMENTS

## WOLFF (BOEHLER) CAST BREAKERS



KM46184

KM46186

| ITEM # | DESCRIPTION |
|---|---|
| KM46186 | Small, 7" (18 cm) |
| KM46184 | 9-7/8" (25 cm) |

## HENNIG PLASTER SPREADER

KM46138

To relieve cast pressure or for cast removal.
One-handed operation.

| ITEM # | DESCRIPTION |
|---|---|
| KM46138 | 10-5/8" (27 cm) |

# PLASTER CAST INSTRUMENTS

## KMEDIC® CAST SPREADER

KM46134

To relieve cast pressure or for cast removal.
One-handed operation.

| ITEM # | DESCRIPTION |
|---|---|
| KM46134 | 8-7/8" (22.5 cm) |

## WALTON CAST SPREADER

KM46133

To relieve cast pressure or for cast removal.
One-handed operation.

| ITEM # | DESCRIPTION |
|---|---|
| KM46133 | 8-5/8" (22 cm) |

## REINER PLASTER KNIFE

KM46058

Stainless handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM46058 | 7" (18 cm) |

# PLASTER CAST INSTRUMENTS

## ENGEL PLASTER SAW

KM46056

Chrome handle and stainless blade.

| ITEM # | DESCRIPTION |
|---|---|
| KM46056 | 6" (15 cm) |

# MEASURING DEVICES

## Rulers

### FLEXIBLE RULERS

KM39694

Inch and millimeter graduated.

| ITEM # | DESCRIPTION |
|---|---|
| KM39692 | 6" (152 mm) |
| KM39694 | 8" (203 mm) |
| KM39698 | 12" (305 mm) |
| KM39700 | 20" (508 mm) |

### KUNTSCHER X-RAY SCALE

KM48299

Ruler for X-rays.

| ITEM # | DESCRIPTION |
|---|---|
| KM48299 | Graduated in mm, 19-5/8" (50 cm) |

### MEASURING TAPE

KM48313

| ITEM # | DESCRIPTION |
|---|---|
| KM48313 | Linen, graduated in inch and cm up to 150 cm |

# MEASURING DEVICES

## Calipers

### CASTOVIEJO CALIPER

KM53042

| ITEM # | DESCRIPTION |
|---|---|
| KM53042 | Graduated in mm up to 40 mm, 6-1/2" (16.5 cm) |

### TOWNLEY FEMUR CALIPER

KM48314

Takes inside and outside measurements up to 4" (10 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM48314 | 4-1/2" (11.5 cm) |

### NEURO CALIPER

KM48315

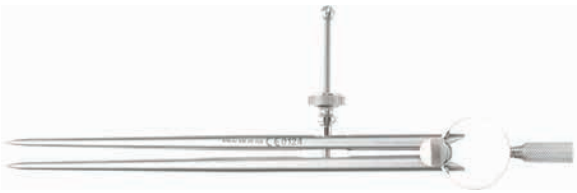
Inside measuring faces extra long (60 mm) for neurosurgery. Inside and outside measuring faces and depth bar, stainless steel.

| ITEM # | DESCRIPTION |
|---|---|
| KM48315 | Graduated in inch/mm to 5-3/4" (145 mm), 9" (23 cm) |

# MEASURING DEVICES

## Specialty

### BONE COMPASS



KM48302

| ITEM # | DESCRIPTION |
|---|---|
| KM48302 | 8" (20.5 cm) |

### POLK FINGER GONIOMETER

KM48310

| ITEM # | DESCRIPTION |
|---|---|
| KM48310 | Graduated in inch and cm, 6" (15 cm) |

# SMARTRACKS

## CLEANPUNCH® CLEANING SYSTEM

KM59200

- Holds six CleanPunches® in open position for maximum exposure during cleaning and sterilization.
- Lightweight anodized aluminum construction.
- Minimize footprint - compact design has removable lid that fits under rack.
- When open, instrument handles are exposed for quick identification and easy access in the OR.
- Silicone-coated brackets prevent metal to metal contact.
- Protects sharp cutting edge during cleaning and sterilization process.
- Fits inside a standard container or can be wrapped separately.

| ITEM # | DESCRIPTION |
|---|---|
| KM59200 | Approximately 13-1/2" x 7" x 6" |

# SMARTRACKS FOR OSTEOTOMES

### HOKE SMARTRACK

KM98150
8-1/4" x 5" x 2-1/4"
(21 cm x 12.5 cm x 5.5 cm)
Holds eight 5-1/4" (13.5 cm)

### LIGHTWEIGHT RACKS FOR STERILIZATION AND STORAGE

- Nylon coated brackets help avoid metal-to-metal contact.
- Plastic plate on underside of top bracket helps protect sharp tips from being damaged.
- Side arm stays locked to help prevent instruments from falling out, even when turned upside down.
- Deep brackets hold instruments in place.
- Custom designed base keeps instruments upright during loading and unloading.
- Reinforced, sturdier frames are made from corrosion-resistant anodized aluminum.
- Fully autoclavable to 270°F/132°C.
- Quick reference chart easily identifies the type and size instrument rack holds.
- Manufactured only by Teleflex®.

# SMARTRACKS

## BRUN SMARTRACK FOR 7" CURETTES

KM98160

Aluminum and stainless steel, nylon coated brackets.

| ITEM # | DESCRIPTION |
|---|---|
| KM98160 | Holds twelve 7" KMedic® Brun Curettes |

## COBB SMARTRACK FOR 11" INSTRUMENTS

KM98170

Aluminum and stainless steel, nylon coated brackets.

| ITEM # | DESCRIPTION |
|---|---|
| KM98170 | Holds nine 11" KMedic® Cobb Curettes, Elevators or Gouges |

# SMARTRACKS

## HIBBS AND BRUN SMARTRACK FOR 9" INSTRUMENTS

KM98180

Aluminum and stainless steel, nylon coated brackets.

| ITEM # | DESCRIPTION |
|---|---|
| KM98180 | Holds twelve 9" KMedic® Brun Curettes, or Hibbs Chisels, Gouges or Osteotomes |

## SMARTRACK LAMBOTTE FOR 9" OSTEOTOMES

KM98190

| ITEM # | DESCRIPTION |
|---|---|
| KM98190 | Holds twelve 9" (23 cm) KMedic® Lambotte Osteotomes, 11-3/4" x 5-1/2" x 3-3/8" (30 x 8.5 x 14 cm), nylon coated brackets |

# SMARTRACKS

## SMITH PETERSON SMARTRACK

KM98195

Holds fourteen 8" KMedic® Smith Peterson osteotomes or gouges, nylon coated brackets.

| ITEM # | DESCRIPTION |
|---|---|
| KM98195 | Approximately 11" x 10" x 4" (28 x 25.5 x 10 cm) |

# SPECIALTY TRAYS

## Flat Packs

### INSTRUMENT FLAT PACKS

KM98112

Covers made of leather. Removeable inserts made of cotton.

| ITEM # | DESCRIPTION |
|---|---|
| KM98112 | Holds twelve instruments, 7" x 4" (18 x 10 cm) |
| KM98116 | Holds sixteen instruments, 8" x 5" (20 x 12.5 cm) |
| KM98120 | Holds twenty instruments, 8" x 6" (20 x 15 cm) |
| KM98112P | One cotton insert for KM98112.<br>Holds twelve instruments. |
| KM98116P | Pair of cotton inserts for KM98116.<br>Holds sixteen instruments. |
| KM98120P | Pair of cotton inserts for KM98120.<br>Holds twenty instruments. |

# MISCELLANEOUS ORTHOPEDIC

## Lead Hands

### LEAD HANDS

KM49090

Oxidation of lead surfaces is a normal process. To prolong the life of lead hands, autoclave temperatures should not exceed 248 degrees F (120 degrees C). Avoid using chemical sterilization as it can cause severe corrosion.

| ITEM # | DESCRIPTION |
|---|---|
| KM49090 | Adult, 14-1/2" (37 cm) |
| KM49092 | Child, 9-1/2" (24 cm) |

### LEAD HANDS

KM49093

Thinner and more flexible model. Longer fingers wrap on ends eliminating side tabs.

| ITEM # | DESCRIPTION |
|---|---|
| KM49093 | Adult, 2 mm thick, 9-1/2" (24 cm) |

# MISCELLANEOUS ORTHOPEDIC

## Ring Cutters

### FINGER RING CUTTER

KM29430

KM29434

| ITEM # | DESCRIPTION |
|---|---|
| KM29430 | Chrome, with saw blade, 6-1/4" (16 cm) |
| KM29434 | Saw blade only |

## Diagnostic Instructions

### BUCK NEURO HAMMER STAINLESS

KM28492

Stainless steel with brush and needle.

| ITEM # | DESCRIPTION |
|---|---|
| KM28492 | 7-3/4" (19.5 cm) |

# MISCELLANEOUS ORTHOPEDIC

## Diagnostic Instruments

### TAYLOR PERCUSSION HAMMER

KM28468

| ITEM # | DESCRIPTION |
|---|---|
| KM28468 | 8" (20.5 cm) |

### WARTENBERG NEUROLOGICAL PIN WHEEL

KM28514

| ITEM # | DESCRIPTION |
|---|---|
| KM28514 | 7" (18 cm) |

## Specialty Hand Instruments

### JOHNSON-TUCKER HOOK AND FORK

KM69790

| ITEM # | DESCRIPTION |
|---|---|
| KM69790 | Double ended, delicate, 6-1/2" (16.5 cm) |

# MISCELLANEOUS ORTHOPEDIC

## Specialty Hand Instruments

### EXCAVATOR AND PACKER

KM69502

| ITEM # | DESCRIPTION |
|---|---|
| KM69502 | Double-ended |

### PROBE AND PACKER

KM69495

| ITEM # | DESCRIPTION |
|---|---|
| KM69495 | Double-ended, 1 mm and 2 mm ends, 6" (15 cm) |

### SPATULA AND PACKER

KM69498

| ITEM # | DESCRIPTION |
|---|---|
| KM69498 | Double-ended, 5-3/4" (14.5 cm) |

### VERUCCA CURETTE EXCAVATOR

KM69457

With McGlamry Bullneck. Will resist bending.

| ITEM # | DESCRIPTION |
|---|---|
| KM69457 | Single-ended, straight, 4 mm without hole, 5" (12.5 cm) |

# MISCELLANEOUS ORTHOPEDIC

## Specialty Hand Instruments

### EXCAVATOR AND PROBE

KM69518

| ITEM # | DESCRIPTION |
|---|---|
| KM69518 | Double-ended, 1 mm and 1.5 mm ends, 6" (15 cm) |

### CURETTE EXCAVATORS

KM69488

| ITEM # | DESCRIPTION |
|---|---|
| KM69488 | Double-ended, 1.5 mm and 2.0 mm ends, 5-1/2" (14 cm) |
| KM69492 | Double-ended, 1.5 mm and 2.5 mm ends, 5-1/2" (14 cm) |

### CURETTE EXCAVATORS

KM69480

Single-ended, with hole, 5" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM69468 | #58, 1.0 mm |
| KM69478 | #58, 1.5 mm |
| KM69480 | #58, 2.0 mm |
| KM69484 | #58, 2.5 mm |

### CURETTE EXCAVATORS

KM69463

Single-ended, without hole, 5" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM69459 | #57, 1.0 mm |
| KM69461 | #57, 1.5 mm |
| KM69463 | #57, 2.0 mm |
| KM69465 | #57, 2.5 mm |

# MISCELLANEOUS ORTHOPEDIC

## Specialty Hand Instruments

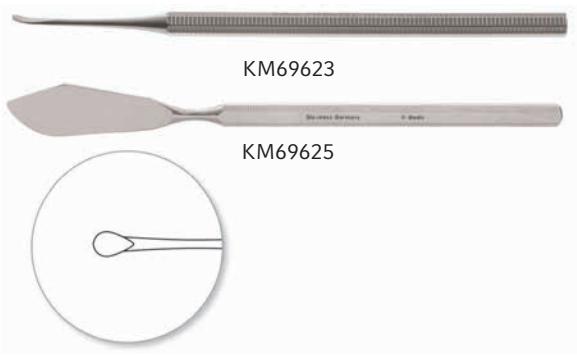
### LOCKE ELEVATORS

KM69579

With McGlamry Bullneck. Will resist bending.

| ITEM # | DESCRIPTION |
|---|---|
| KM69579 | Narrow blade, single-ended, 4-1/2" (11.5 cm) |
| KM69590 | Wide blade, single-ended, 5" (12.5 cm) |

### CORN KNIVES



KM69623

KM69625

KM69622

Single-ended.

| ITEM # | DESCRIPTION |
|---|---|
| KM69622 | Soft Corn Knife, #45, straight, round blade |
| KM69623 | Soft Corn Spoon Knife, slightly curved, oval blade |
| KM69625 | Corn Knife, curved |

### GOLF STICK KNIVES

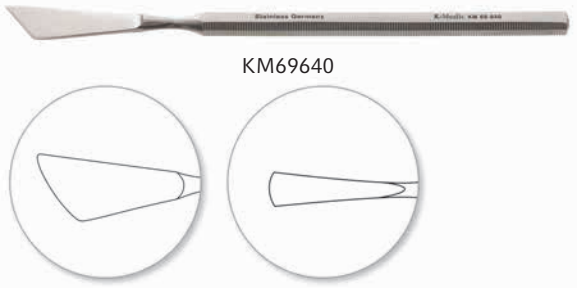
KM69620

| ITEM # | DESCRIPTION |
|---|---|
| KM69618 | #41 |
| KM69620 | #43 |

# MISCELLANEOUS ORTHOPEDIC

## Specialty Hand Instruments

### CHISELS



KM69640

KM69645 KM69650

| ITEM # | DESCRIPTION |
|---|---|
| KM69640 | Curved, medium |
| KM69645 | Curved, extra-large |
| KM69650 | Curved, spade pattern |

### WRIST TENDON APPROXIMATOR

| ITEM # |
|---|
| KM52450 |

# MISCELLANEOUS ORTHOPEDIC

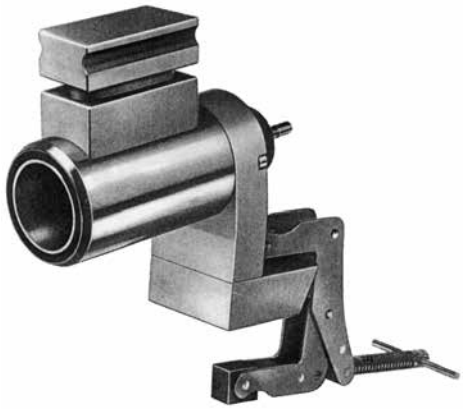
## PELVIC BALL SPIKE

KM47906

KM47921

| ITEM # | DESCRIPTION |
|---|---|
| KM47906 | Straight, 11-3/4" (30 cm) |
| KM47921 | Spiked disk only |

## BONE MILL



KM98200

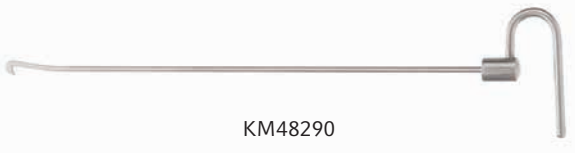
| ITEM # | DESCRIPTION |
|---|---|
| KM98200 | With crank and table clamp |

## FIXATION PIN

| ITEM # |
|---|
| KM47907 |

# MISCELLANEOUS ORTHOPEDIC

## KUNTSCHER EXTRACTORS



KM48290

| ITEM # | DESCRIPTION |
|---|---|
| KM48288 | Femoral, 19-1/8" (48.5 cm) |
| KM48290 | Tibial, 19-1/4" (49 cm) |

## KUNTSCHER REAMER

| ITEM # | DESCRIPTION |
|---|---|
| KM48301 | Cannulated, 15" (38 cm) |

## KUNTSCHER SKIN PROTECTOR

| ITEM # | DESCRIPTION |
|---|---|
| KM48297 | 6-1/8" (15.5 cm) |

# OPHTHALMIC INSTRUMENTS

## CHAPTER OVERVIEW

Pilling® Ophthalmic Instruments represent a high-quality line that offers the precision you require, the quality you demand, and the pattern assortments that meet your needs. Our categories of Ophthalmic instruments include:

- Dressing, Tissue, Jeweler's, and Cilia Forceps
- Spring Handle and Ring Handle Scissors
- Barraquer and Castroviejo Needle Holders
- Hooks, Curettes, Probes and Dilators
- Additional patterns are available

Contact your local representative for more information.

# FORCEPS

## Dressing Forceps

### BISHOP-HARMON DRESSING FORCEPS

427392

KM53428

3-3/8" (8.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 425350 | Extra delicate, serrated, 0.4 mm tip |
| KM53426 | Extra delicate, serrated, 0.7 mm tip |
| 427392 | Delicate, cross-serrated, 0.9 mm tip |
| KM53428 | Delicate, serrated, 1 mm tip |

### DRESSING FORCEPS

427400

427410

Delicate, serrated, 3-7/8" (10 cm).

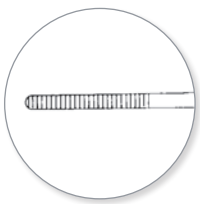
| ITEM # | DESCRIPTION |
|---|---|
| 427400 | Straight tip |
| 427410 | Lightly curved tip |

# FORCEPS

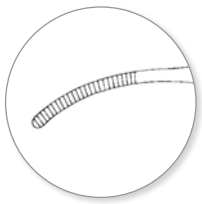
## Dressing Forceps

### GRAEFE EYE DRESSING FORCEPS

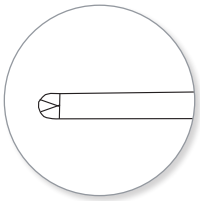
KM53420



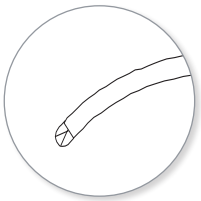
KM53404



KM53408



KM53420



KM53422

| ITEM # | DESCRIPTION |
|---|---|
| KM53404 | Straight, serrated, 0.9 mm tip, 2-7/8" (7 cm) |
| KM53408 | Curved, serrated, 1.2 mm tip, 2-1/2" (6.5 cm) |
| KM53420 | Straight, 1x2 teeth, 0.9 mm tip, 2-7/8" (7 cm) |
| KM53422 | Curved, 1x2 teeth, 1 mm tip, 2-1/2" (6.5 cm) |

# FORCEPS

## Tissue Forceps

### BISHOP-HARMON TISSUE FORCEPS

427390

1 x 2 teeth, 3-3/8" (8.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 425360 | 0.4 mm tip |
| 427390 | 0.7 mm tip |
| KM53440 | 1.0 mm tip |

### BONN IRIS TISSUE FORCEPS

425390

| ITEM # | DESCRIPTION |
|---|---|
| 425380 | Long model, 0.12 mm tip, 2-3/4" (7 cm) |
| 425390 | Tying platform, 1 x 2 teeth, 3-3/4" (10 cm) |

### CASTROVIEJO-COLIBRI TISSUE FORCEPS

425312

| ITEM # | DESCRIPTION |
|---|---|
| 425312 | Curved tip, 1 x 2 teeth, 0.12 mm tip, 4-3/8" (11 cm) |

### COLIBRI CORNEAL TISSUE FORCEPS

425590

| ITEM # | DESCRIPTION |
|---|---|
| 425590 | 1 x 2 teeth, 0.12 mm tip, 3" (8 cm) |

# FORCEPS

## Tissue Forceps

### MCPHERSON TISSUE FORCEPS

425560

| ITEM # | DESCRIPTION |
|---|---|
| 425560 | 1 x 2 teeth, 3-1/2" (9 cm) |

### TISSUE FORCEPS

427420

| ITEM # | DESCRIPTION |
|---|---|
| 427420 | Straight, delicate, 1 x 2 teeth, 3-7/8" (10 cm) |

### TROUTMAN-BARRAQUER TISSUE FORCEPS

KM53460

| ITEM # | DESCRIPTION |
|---|---|
| KM53460 | Tying platform, 1 x 2 teeth, 0.3 mm tip, 2-7/8" (7.5 cm) |

# FORCEPS

## Tying Forceps

### CASTROVIEJO SUTURE FORCEPS

427370

With tying platform, 1 x 2 teeth, straight, 3-7/8" (10 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 427384 | 0.12 mm |
| 427370 | 0.3 mm tip |
| 427382 | 0.5 mm tip |

### KELMAN-MCPHERSON FORCEPS

425605

With tying platform, angled.

| ITEM # | DESCRIPTION |
|---|---|
| 425605 | 3-1/4" (8.5 cm) |

### MCPHERSON TYING FORCEPS

425200

425210

With tying platform, smooth, 3-1/4" (8.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 425200 | Straight |
| 425210 | Angled |

### MICRO TYING FORCEPS

KM44012

With tying platform.

| ITEM # | DESCRIPTION |
|---|---|
| KM44012 | Straight, 0.3 mm tip, 4-3/8" (11 cm) |

# FORCEPS

## Tying Forceps

### PLATFORM TYING FORCEPS

KM44014

With tying platform.

| ITEM # | DESCRIPTION |
|---|---|
| KM44014 | 0.7 mm tip, 5-1/2" (14 cm) |

### TENNANT TYING FORCEPS

425190

425191

With tying platform, smooth, round handle, 4" (10 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 425190 | Straight |
| 425191 | Curved |

### TEW TYING FORCEPS

394430

With tying platform, straight jaw with longitudinal serrations, 7-1/8" (18 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 394430 | 0.5 mm tip |
| 394431 | 1 mm tip |

# FORCEPS

## Jeweler's Forceps

### JEWELER'S FORCEPS

425700

425710

425720

425740

425730

425750

| ITEM # | DESCRIPTION |
|---|---|
| 425700 | #1, 4-3/4" (12 cm) |
| 425710 | #3, 4-3/4" (12 cm) |
| 425720 | #3-C, 4-3/8" (11 cm) |
| 425730 | #4, 4-1/4" (10.8 cm) |
| 425740 | #5, 4-1/4" (10.8 cm) |
| 425750 | #7, 4-5/8" (11.5 cm) |

# FORCEPS

## Cilia Forceps

### BARRAQUER CILIA AND SUPPLE FORCEPS

KM53580

| ITEM # | DESCRIPTION |
|---|---|
| KM53580 | Smooth platform, 4-1/2" (11.5 cm) |

### BERGH CILIA FORCEPS

KM53568

| ITEM # | DESCRIPTION |
|---|---|
| KM53568 | Finely serrated, 3-1/2" (9 cm) |

### DOUGLAS CILIA FORCEPS

KM53560

| ITEM # | DESCRIPTION |
|---|---|
| KM53560 | Finely serrated, 3-1/2" (9 cm) |

# FORCEPS

## Cilia Forceps

### LITTAUER CILIA FORCEPS

KM53564

| ITEM # | DESCRIPTION |
|---|---|
| KM53564 | Finely serrated, 3-1/2” (9 cm) |

### ZIEGLER CILIA FORCEPS

KM53574

| ITEM # | DESCRIPTION |
|---|---|
| KM53574 | Smooth, 3-1/2" (9 cm) |

## Chalazion Forceps

### DESMARRES CHALAZION FORCEPS

KM53688

3-1/2" (9 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM53686 | 20 mm wide tip |
| KM53688 | 24 mm wide tip |
| KM53690 | 30 mm wide tip |

# FORCEPS

## Columella Forceps

### COTTLE COLUMELLA FORCEPS

443480

| ITEM # | DESCRIPTION |
|---|---|
| 443480 | 1/2" (12 mm) tip, 4-3/8" (11 cm) |

## Fixation Forceps

### GRAEFE FIXATION FORCEPS

KM53480

KM53484

5 x 6 teeth, 4-1/4" (10.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM53480 | Without catch |
| KM53484 | With catch |

## Scleral Forceps

### CASTROVIEJO CORNEO-SCLERAL FORCEPS

425520

Tying platform, 1 x 2 teeth, 4-3/8" (11 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 425510 | 0.12 mm tip |
| 425520 | 0.3 mm tip |
| 425530 | 0.5 mm tip |

# SCISSORS

## Spring Handle

### CASTROVIEJO KERATOPLASTY SCISSORS

423330

Flat handle, angled 45 degrees, 3-7/8" (10 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 423330 | Very delicate, 1.4 mm tip |
| 423340 | Blunt tip |

### CASTROVIEJO KERATOPLASTY MICRO SCISSORS

423320

Flat handle, angled 45 degrees, 3-7/8" (10 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 423320 | Very delicate |

### CASTROVIEJO SCISSORS

352145

Spring handle for maximum control. Angled 45 degrees.

| ITEM # | DESCRIPTION |
|---|---|
| 352145 | 9 mm blades, 4-1/8" (10.5 cm) |

# SCISSORS

## Spring Handle

### MCCLURE IRIS SCISSORS

144295

Angled on flat for increased control and visibility.

| ITEM # | DESCRIPTION |
|---|---|
| 144295 | 4-3/4" (12 cm) |
| 352144 | 12 mm blades, 4-1/2" (11.5 cm) |

### MICRO REILL SCISSORS

KM44022

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM44022 | Serrated, curved, 5-1/2" (14 cm) |

### MICRO SPRING SCISSORS

KM44250

Flat handle, 6" (15 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM44253 | Straight, 9 mm blades |
| KM44251 | Curved, 9 mm blades |
| KM44252 | Straight, 14 mm blades |
| KM44250 | Curved, 14 mm blades |

# SCISSORS

## Spring Handle

### FINE STITCH SCISSORS

423422

| ITEM # | DESCRIPTION |
|---|---|
| 423422 | 4-5/8" (11.5 cm) |

### VANNAS SCISSORS

KM44263

KM44261

KM44260

Very delicate, flat handle, 3-3/8" (8.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM44263 | Straight |
| KM44262 | Curved |
| KM44261 | Angled |
| KM44260 | Angled on flat |

### VANNAS CAPSULOTOMY SCISSORS

423460

3-3/8" (8.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 423450 | Straight |
| 423460 | Curved |

# SCISSORS

## Spring Handle

### WESTCOTT MICRO-TENOTOMY SCISSORS

KM44272

Flat handle, 10 mm blade, 4" (10 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM44270 | Curved, blunt |
| KM44271 | Curved, sharp |
| KM44272 | Straight, blunt |
| KM44273 | Straight, sharp |

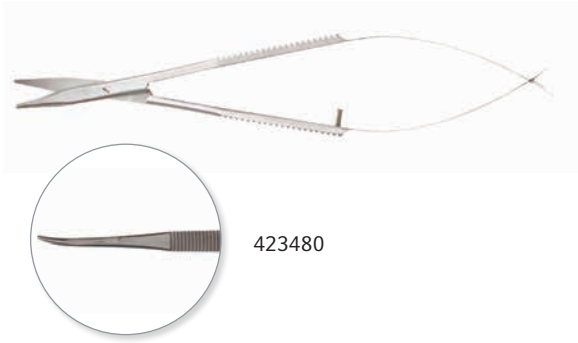
### WESTCOTT STITCH SCISSORS

423410

| ITEM # | DESCRIPTION |
|---|---|
| 423410 | 4-3/4" (12 cm) |

### WESTCOTT TENOTOMY SCISSORS

KM44275



423480

Flat handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM44274 | Curved, blunt, 4-3/4" (12 cm) |
| KM44275 | Curved, sharp, 4-3/4" (12 cm) |
| KM44276 | Straight, blunt, 4-3/4" (12 cm) |
| KM44277 | Straight, sharp, 4-3/4" (12 cm) |
| 423480 | Curved right, 4-1/2" (11.5 cm) |
| 423490 | Curved left, 4-3/4" (12 cm) |

# SCISSORS

## Spring Handle

### HEPP-SCHEIDEL DISSECTING SCISSORS

KM44024

Round handle.

| ITEM # | DESCRIPTION |
|---|---|
| KM44024 | Curved, 5-1/2" (14 cm) |

### DIGITATE-HEIFETZ SCISSORS

066100

066102

| ITEM # | DESCRIPTION |
|---|---|
| 066100 | Straight, 5-3/4" (14.5 cm) |
| 066102 | Curved, 5-3/4" (14.5 cm) |
| 066104 | Straight, 4-3/4" (12 cm) |

### IRIS SCISSORS WITH BARRAQUER HANDLE

055502

Round handle.

| ITEM # | DESCRIPTION |
|---|---|
| 055502 | Curved, 18 mm blades, 5-3/4" (14.5 cm) |

# SCISSORS

## Spring Handle

### MICRO SPRING SCISSORS

KM44018

KM44018

KM44020

KM44255

KM44254

| ITEM # | DESCRIPTION |
|---|---|
| KM44018 | Straight, 11 mm blade, 5-1/2" (14 cm) |
| KM44020 | Curved, 11 mm blade, 5-1/2" (14 cm) |
| KM44257 | Straight, 9 mm blade, 6" (15 cm) |
| KM44255 | Curved, 9 mm blade, 6" (15 cm) |
| KM44256 | Straight, 14 mm blade, 6" (15 cm) |
| KM44254 | Curved, 14 mm blade, 6" (15 cm) |

# SCISSORS

## Ring Handle

### MINIATURE EYE SCISSORS

423430

3-1/2" (9 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 423428 | Straight |
| 423430 | Curved |

### EYE SCISSORS

423432

Delicate, 4" (10 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 423432 | Straight |
| 423434 | Curved |

### EYE SCISSORS

423438

Standard, large rings.

| ITEM # | DESCRIPTION |
|---|---|
| 423438 | Curved, 4-1/2" (11.5 cm) |

# SCISSORS

## Ring Handle

### GRADLE SCISSORS

KM53318

Slightly curved, Sharp/Sharp.

| ITEM # | DESCRIPTION |
|---|---|
| KM53316 | 3-3/4" (9.5 cm) |
| KM53318 | Ribbon type, 4" (10 cm) |

### IRIS MINIATURE SCISSORS

055100

055102

Round handle, 15 mm blades, 3-1/2" (9 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 055100 | Straight |
| 055102 | Curved |

# SCISSORS

## Ring Handle

### IRIS RIBBON SCISSORS

KM53267

Slightly curved, Sharp/Sharp.

| ITEM # | DESCRIPTION |
|---|---|
| KM53265 | Curved, 3-3/4" (9.5 cm) |
| KM53267 | Curved, 4" (10 cm) |

### LITTLER DISSECTING SCISSORS

423425

Round handle.

| ITEM # | DESCRIPTION |
|---|---|
| 423425 | Curved, 1 mm dia. hole, 4-5/8" (12 cm) |

### STITCH SCISSORS

423440

Light curved, needle points.

| ITEM # | DESCRIPTION |
|---|---|
| 423440 | Lightly curved, needle points, 3-3/4" (9.5 cm) |

# NEEDLE HOLDERS

## BARRAQUER NEEDLE HOLDERS

424180

424190

Delicate, 5-1/4" (13 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 424170 | Straight, without lock |
| 424180 | Curved, with lock |
| 424190 | Curved, without lock |

## CASTROVIEJO NEEDLE HOLDERS

424100

Delicate.

| ITEM # | DESCRIPTION |
|---|---|
| 424100 | Straight, with lock, 5-3/4" (14.5 cm) |
| 424102 | Straight, without lock, 5-1/4" (13 cm) |
| 424110 | Curved, with lock, 5-1/4" (13 cm) |

## DIGITATE-HEIFETZ NEEDLE HOLDERS

066200

066204

Round handle, 5-7/8" (15 cm).

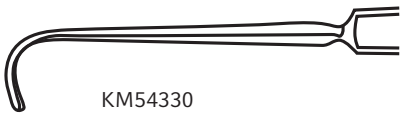
| ITEM # | DESCRIPTION |
|---|---|
| 066200 | Straight, without lock, 0.4 mm |
| 066204 | Curved, without lock, 0.6 mm |

# HOOKS

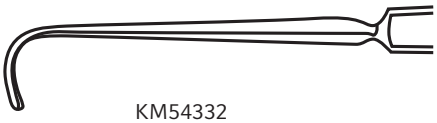
## Strabismus Hooks

### GRAEFE STRABISMUS HOOKS

KM54332



KM54330



KM54332

KM54334

| ITEM # | DESCRIPTION |
|---|---|
| KM54330 | Small, 5-1/8" (13 cm) |
| KM54332 | Medium, 5-1/2" (14 cm) |
| KM54334 | Large, 5-1/2" (14 cm) |

## Lens Hooks

### SINSKEY MICRO LENS HOOKS

421141

| ITEM # | DESCRIPTION |
|---|---|
| 421140 | 0.25 mm diam., 4-1/2" (11.5 cm) |
| 421141 | 0.20 mm diam., 4-1/2" (11.5 cm) |
| 421142 | 45 degree angled, 0.20 mm diam., 4-3/8" (11.1 cm) |

# HOOKS

## Muscle Hooks

### JAMESON MUSCLE HOOK

421200

| ITEM # | DESCRIPTION |
|---|---|
| 421200 | 5-1/4" (13.5 cm) |

### O'CONNOR HOOK

422250

| ITEM # | DESCRIPTION |
|---|---|
| 422250 | 4-7/8" (12.5 cm) |

### VON GRAEFE STRABISMUS HOOKS

422190

| ITEM # | DESCRIPTION |
|---|---|
| 422180 | Size 1, 8.5 mm hooks, 5-1/8" (13 cm) |
| 422190 | Size 2, 10.5 mm hooks, 5-3/8" (13.5 cm) |
| 422200 | Size 3, 12.5 mm hooks, 5-1/2" (14 cm) |

# CURETTES

## MEYHOEFFER CURETTES

KM54309

KM54307

KM54309

KM54311

KM54313

5" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| KM54307 | Size 00, 1.0 mm |
| KM54309 | Size 0, 1.5 mm |
| KM54311 | Size 1, 1.7 mm |
| KM54313 | Size 2, 2.0 mm |

# KNIVES

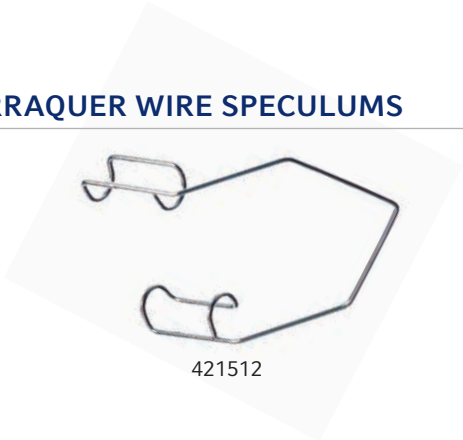
## NUCLEUS KNIFE

KM69524

| ITEM # | DESCRIPTION |
|---|---|
| KM69524 | #71, small, 5-1/4" (13.5 cm) |

# SPECULA

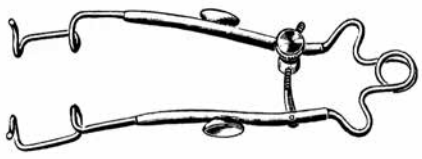
## BARRAQUER WIRE SPECULUMS



421512

| ITEM # | DESCRIPTION |
|---|---|
| 421510 | Blades 4 mm wide, 1-1/8" (3 cm) |
| 421512 | Blades 6 mm wide, 1-5/8" (4 cm) |
| KM54108 | Blades 10 mm wide, 1-3/4" (4.5 cm) |

## GRAEFE EYE SPECULUM



KM54080

| ITEM # | DESCRIPTION |
|---|---|
| KM54080 | 3-1/2" (9 cm) |

# LACRIMAL PROBES/DILATORS

## BOWMAN LACRIMAL PROBES

426096

Sterling Silver, 4-7/8" (12.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 426090 | Size 0000-000 |
| 426092 | Size 00-0 |
| 426094 | Size 1-2 |
| 426096 | Size 3-4 |
| 426098 | Size 5-6 |
| 427002 | Size 7-8 |

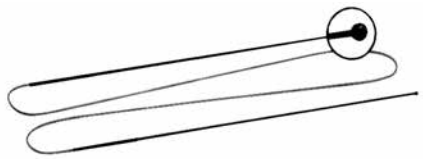
## WILLIAMS LACRIMAL PROBES

166490

5-1/8" (13 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 166480 | Size 1-2 |
| 166485 | Size 3-4 |
| 166490 | Size 5-6 |
| 166495 | Size 7-8 |

## LACRIMAL PROBE



426010

Disposable.

| ITEM # | DESCRIPTION |
|---|---|
| 426010 | 4-5/8" (11.5 cm) |

# LACRIMAL PROBES/DILATORS

## CASTROVIEJO LACRIMAL DILATOR

426080

| ITEM # | DESCRIPTION |
|---|---|
| 426080 | Double-ended, one medium taper and one needle point, 5-1/2" (14 cm) |

## WILDER LACRIMAL DILATORS

426040

426050

4-3/8" (11 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 426040 | Long taper, fine tip |
| 426050 | Medium taper, medium tip |

# EYE SPUDS/NEEDLES

## DIX SPUD AND NEEDLE

KM54272

| ITEM # | DESCRIPTION |
|---|---|
| KM54272 | Spud and needle (not pictured) in reversible screw handle |

## FOREIGN BODY NEEDLES AND SPUDS

KM54280

KM54284

| ITEM # | DESCRIPTION |
|---|---|
| KM54280 | Needle, 2 x 5 mm blade, 5" (12.5 mm) |
| KM54282 | Davis, 0.8 mm blade, 4-3/4" (12 cm) |
| KM54284 | Ellis, 1.2 mm blade, 4-1/2" (11.5 cm) |

# IRRIGATION CANNULA

## LACRIMAL CANNULA

429526

429527

| ITEM # | DESCRIPTION |
|---|---|
| 429526 | 23 gauge, curved, 1-7/8" (4.8 cm) |
| 429527 | 23 gauge, straight, 2" (5 cm) |

## AIR INJECTION CANNULA

429548

5 mm tip angled 45 degrees, 3/4" (2 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 429546 | 27 Ga. |
| 429548 | 30 Ga. |

## HEALON INJECTION CANNULA

429566

| ITEM # | DESCRIPTION |
|---|---|
| 429566 | 21 Ga., 5 mm tip angled 50 degrees, 1-1/8" (2.9 cm) |

## SHEPPARD INCISION IRRIGATION CANNULA

428650

Tip angled 45 degrees, 1-3/8" (3.5 cm).

| ITEM # | DESCRIPTION |
|---|---|
| 428655 | 27 Ga. |
| 428650 | 30 Ga. |

# IRRIGATION CANNULA

## TROUTMAN ALPHA-CHYMOTRYPSIN CANNULA

429512

| ITEM # | DESCRIPTION |
|---|---|
| 429512 | 25 Ga., curved tip, 1-3/4" (4.5 cm) |

## BISHOP HARMON ANTERIOR CHAMBER IRRIGATION CANNULA

429520

| ITEM # | DESCRIPTION |
|---|---|
| 429520 | 19 Ga., with squeeze bulb and adapter |
| 429534 | Silicone squeeze bulb only, 2-1/4" (5.5 cm) |
| 429524 | Cannula only, 19 Ga., angled 7 mm, flattened tip |
| 429532 | Adapter only, 1-1/8" (3 cm) |

# CALIPERS

## CASTROVIEJO CALIPER

428630

| ITEM # | DESCRIPTION |
|---|---|
| 428630 | 0-20 mm scale, 3-3/8" (8.5 cm) |

# CUTTING BLOCK

## CUTTING BLOCK



411331

| ITEM # | DESCRIPTION |
|---|---|
| 411331 | Made of POM (polyoxymethylene), 3" x 1-1/2" x 3/8" (7.5 x 4 x 1 cm) |

# EYE SHIELDS

## EYE SHIELDS

429340

| ITEM # | DESCRIPTION |
|---|---|
| 429430 | Clear, protective, no UV Shielding, 6" (15 cm) |

## FOX EYE SHIELD WITH GOFFMAN EYE GARTERS

| ITEM # | DESCRIPTION |
|---|---|
| 429317 | Fox eye shield and 50 eye garters in assorted colors, 3" (7.5 cm) |
| KM54668 | Eye shield only, 3" x 2-3/8" (7.5 x 6 cm) |

## UNIVERSAL EYE SHIELD

429318

| ITEM # | DESCRIPTION |
|---|---|
| 429318 | 20 per pack, 3-1/8" x 2-1/2" (8 x 6.5 cm) |

# LAPAROSCOPIC INSTRUMENTS

## CHAPTER OVERVIEW

Pilling® Laparoscopic Instruments are a high-quality line that offer the precision you require, the quality you demand and the pattern assortments that meet your needs.

Our laparoscopic instruments are perfectly suited for a variety of minimally invasive procedures. Optional extended lengths on select patterns provide the access you need for cases where additional reach is required. Teleflex® is now proud to offer six variations of 5 mm Slide Lock Grasper.

## PRODUCTS

Pilling® Laparoscopic Quality Instruments for superior access.

Our full line offering of laparoscopic instruments includes the following:

- 100 percent high-quality German instruments
- Extensive pattern selection in a variety of sizes and lengths
- Radel insulation
- Large-channel flush ports for thorough cleaning
- Fully-rotating instruments have smooth action, great tactile feel and one-finger rotation
- One-piece design

# LAPAROSCOPIC INSTRUMENTS

## Handle Types

### INLINE RATCHETED HANDLE

### INSULATED NON-ROTATING HANDLE

### INSULATED ROTATING HANDLE

### NON-INSULATED NON-ROTATING HANDLE

### NON-INSULATED ROTATING HANDLE

### RATCHETED NON-ROTATING HANDLE

### RATCHETED ROTATING HANDLE

### RONGEUR, ERGO GRIP HANDLE

### SLIDE-LOCK HANDLE

### SPRING-LOADED NON-ROTATING HANDLE

### SQUEEZE HANDLE

### U-HANDLE

728200 Flush Port Replacement Cap. Fits all handles.

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Dissectors, Grasping Forceps

### CLAW GRASPER

728077

Spring-Loaded, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728077 | 2x3 Teeth, 5 mm, 35 cm |
| 728096 | 2x3 Teeth, 10 mm, 35 cm |

### MARYLAND DISSECTORS

728014

Insulated Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728012 | Non-Rotating, Monopolar, 5 mm, 35 cm |
| 728013 | Non-Rotating, Monopolar, 5 mm, 45 cm |
| 728014 | Rotating, Monopolar, 5 mm, 35 cm |
| 728015 | Rotating, Monopolar, 5 mm, 45 cm |
| 728081 | Non-Rotating, Monopolar, 10 mm, 35 cm |

### TAPERED MARYLAND DISSECTORS

728016

Insulated, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728016 | Monopolar, 5 mm, 35 cm |

### MIXTER DISSECTOR

728017

Insulated, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728017 | Monopolar, 5 mm, 35 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Dissectors, Grasping Forceps

### TAPERED (DOLPHIN NOSE) DISSECTION FORCEPS

728021

Insulated Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728020 | Non-Rotating, Monopolar, 5 mm, 35 cm |
| 728021 | Rotating, Monopolar, 5 mm, 35 cm |
| 728022 | Rotating, Monopolar, 5 mm, 45 cm |

### BULLET NOSE DISSECTOR

728023

Insulated, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728023 | Monopolar, 5 mm, 35 cm |

### BLUNT NOSE GRASPER

728026

Insulated Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728024 | Non-Rotating, Monopolar, 5 mm, 45 cm |
| 728025 | Non-Rotating, Monopolar, 5 mm, 45 cm |
| 728026 | Rotating, Monopolar, 5 mm, 35 cm |
| 728027 | Rotating, Monopolar, 5 mm, 45 cm |

### MICRO DISSECTORS

728029

Insulated Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728028 | Non-Rotating, Monopolar, 5 mm, 35 cm |
| 728029 | Rotating, Monopolar, 5 mm, 35 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Dissectors, Grasping Forceps

### STRONG GRASPING FORCEPS

728030

Insulated, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728030 | Monopolar, 5 mm, 35 cm |
| 728031 | Monopolar, 5 mm, 45 cm |

### BOWEL GRASPER-HUNTER

728032

Non-Insulated, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728032 | 5 mm, 35 cm |
| 728033 | 5 mm, 45 cm |

# LAPAROSCOPIC INSTRUMENTS

## 10 MM Dissectors

### MARYLAND DISSECTORS

728082

Insulated, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728082 | Monopolar, 10 mm, 35 cm |

### MIXTER DISSECTORS

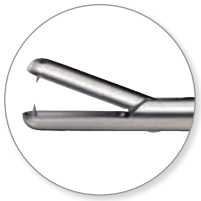
728091

| ITEM # | DESCRIPTION |
|---|---|
| 728090 | Insulated, Rotating Handle, Monopolar, 10 mm, 35 cm |
| 728091 | Rongeur Ergo Grip Handle, Monopolar, 10 mm, 35 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5-10 MM Biopsy Forceps

### BIOPSY GRASPERS



728079

Spring-Loaded, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728079 | 1 x 1 Teeth, 5 mm, 35 cm |
| 728080 | 1 x 1 Teeth, 5 mm, 45 cm |

### SPOON GRASPER

728097

Spring-Loaded, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728097 | 10 mm, 35 cm |

### BIOPSY FORCEPS

728034

Insulated, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728034 | Oval, Monopolar, 5 mm, 35 cm |
| 728035 | Oval, Monopolar, 5 mm, 45 cm |

### BIOPSY PUNCH FORCEPS

728036

Insulated, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728036 | Single Tooth, Monopolar, 5 mm, 35 cm |
| 728037 | Single Tooth, Monopolar, 5 mm, 45 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5-10 MM Biopsy Forceps

### HOOK BIOPSY PUNCH

728038

Insulated, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728038 | Monopolar, 5 mm, 35 cm |
| 728039 | Monopolar, 5 mm, 45 cm |

### BIOPSY PUNCH

728040

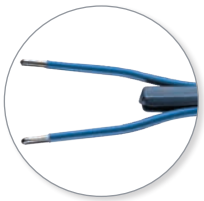
Insulated, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728040 | Monopolar, 5 mm, 35 cm |
| 728041 | Monopolar, 5 mm, 45 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Bipolar Forceps

### MICRO TIP



728098

U-Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728098 | 5 mm, 35 cm |
| 728099 | 5 mm, 45 cm |

### STANDARD TIP

728100

U-Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728100 | 5 mm, 35 cm |
| 728101 | 5 mm, 45 cm |

### GRASPING

728102

U-Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728102 | 5 mm, 32 cm |
| 728103 | 5 mm, 45 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Ratcheted Graspers

### LONG GRASPERS, SINGLE-ACTION

P15128

Slide Lock Handle.

| ITEM # | DESCRIPTION |
|---|---|
| P15128 | Non-Rotating, 5 mm, 36 cm |
| P30186 | Non-Rotating, 5 mm, 45 cm |
| P35235 | Rotating, 5 mm, 36 cm |

### LONG GRASPER, DOUBLE-ACTION

P29862

Slide Lock, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| P29862 | 5 mm, 36 cm |

### RETRACTION GRASPERS

P29863

Slide Lock Handle.

| ITEM # | DESCRIPTION |
|---|---|
| P29863 | Rotating, Double-Action, 5 mm, 36 cm |
| P29864 | Non-Rotating, Single-Action, 5 mm, 36 cm |
| P35236 | Rotating, Single-Action, 5 mm, 36 cm |

### RATCHETED GRASPERS

728043

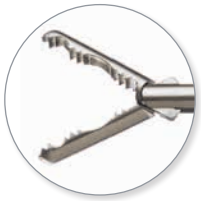
Ratcheted Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728042 | Non-Rotating, Blunt Nose, 5 mm, 35 cm |
| 728043 | Rotating, Blunt Nose, Insulated Shaft, 5 mm, 35 cm |
| 728058 | Rotating, Heavy-Aggressive, Tungsten Carbide, Monopolar, 5 mm, 35 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Ratcheted Graspers

### DUAL CUP GRASPERS



728046

Ratcheted Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728044 | Non-Rotating, 5 mm, 35 cm |
| 728045 | Non-Rotating, 5 mm, 45 cm |
| 728046 | Rotating, 5 mm, 35 cm |
| 728047 | Rotating, 5 mm, 45 cm |

### GRABBER FENESTRATED FORCEPS

728054

Ratcheted, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728054 | 5 mm, 37 cm |
| 728057 | Long Grasping, Fenestrated, Tungsten Carbide, 5 mm, 35 cm |

### LONG, DOUBLE-ACTION GRASPERS

728052

Ratcheted,Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728052 | 5 mm, 37 cm |
| 728053 | 5 mm, 45 cm |

### LONG, SINGLE-ACTION GRASPERS

728050

Ratcheted, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728050 | 5 mm, 37 cm |
| 728051 | 5 mm, 45 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Ratcheted Graspers

### RETRACTION GRASPERS

728056

Ratcheted, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728055 | Single-Action, 5 mm, 37 cm |
| 728056 | Double-Action, 5 mm, 37 cm |

### SNAKE TOOTH GRASPERS

728059

Ratcheted Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728059 | Non-Rotating, Double-Action, 5 mm, 35 cm |
| 728060 | Rotating, Double-Action, 5 mm, 35 cm |

### STRONG GRASPER

728061

Ratcheted, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728061 | Atraumatic, Fenestrated, 5 mm, 35 cm |

### ALLIS GRASPERS

728064

Ratcheted Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728062 | Non-Rotating, Insulated Shaft, 5 mm, 35 cm |
| 728063 | Non-Rotating, Insulated Shaft, 5 mm, 45 cm |
| 728064 | Rotating, Insulated Shaft, 5 mm, 35 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5-10 MM Ratcheted Graspers

### ATRAUMATIC ALLIS GRASPERS

728067

Ratcheted Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728065 | Non-Rotating, Insulated Shaft, 5 mm, 35 cm |
| 728066 | Non-Rotating, Insulated Shaft, 5 mm, 45 cm |
| 728067 | Rotating, Insulated Shaft, 5 mm, 35 cm |
| 728068 | Rotating, Insulated Shaft, 5 mm, 37 cm |

### BABCOCK GRASPERS

728069

Ratcheted Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728069 | Non-Rotating, 5 mm, 35 cm |
| 728070 | Non-Rotating, Insulated, 5 mm, 45 cm |
| 728071 | Rotating, 5 mm, 35 cm |
| 728072 | Rotating, 5 mm, 35 cm |
| 728092 | Non-Rotating, 10 mm, 37 cm |
| 728093 | Rotating, 10 mm, 37 cm |

### PADDLE BABCOCK GRASPERS

728073

Ratcheted, Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728073 | 5 mm, 37 cm |
| 728094 | 10 mm, 37 cm |

### DEBAKEY GRASPERS

728075

Ratcheted Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728074 | Non-Rotating, Insulated Shaft, 5 mm, 35 cm |
| 728075 | Rotating, Insulated Shaft, 5 mm, 35 cm |
| 728076 | Rotating, Insulated Shaft, 5 mm, 45 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Ratcheted Graspers

### TENACULUM GRASPERS

728078

Ratcheted, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728078 | 5 mm, 35 cm |
| 728095 | 10 mm, 35 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Needle Holders

### TUNGSTEN CARBIDE

728105

Squeeze Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728104 | Straight, 5 mm, 35 cm |
| 728105 | Curved, 5 mm, 35 cm |
| 728106 | Curved, 5 mm, 45 cm |

### TUNGSTEN CARBIDE, RATCHETED

728107

Inline Ratcheted Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728107 | Curved Left, 5 mm, 35 cm |
| 728108 | Curved Right, 5 mm, 35 cm |
| 728109 | Straight, 5 mm, 35 cm |

# LAPAROSCOPIC INSTRUMENTS

## 5 MM Scissors

### HOOK SCISSORS

728002

Insulated Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728000 | Non-Rotating, Monopolar, 5 mm, 35 cm |
| 728001 | Non-Rotating, Monopolar, 5 mm, 45 cm |
| 728002 | Rotating, Monopolar, 5 mm, 35 cm |
| 728003 | Rotating, Monopolar, 5 mm, 45 cm |

### SUPERCUT SCISSORS, METZENBAUM

728008

Insulated Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728006 | Non-Rotating, Double-Action, Monopolar, 5 mm, 35 cm |
| 728007 | Non-Rotating, Double-Action, Monopolar, 5 mm, 45 cm |
| 728008 | Rotating, Double-Action, Monopolar, 5 mm, 35 cm |
| 728009 | Rotating, Double-Action, Monopolar, 5 mm, 45 cm |

### MICRO SCISSORS

728011

Non-Insulated, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728010 | Straight, 5 mm, 35 cm |
| 728011 | Curved Left, 5 mm, 35 cm |

### SUPERCUT SCISSORS, PERITONEAL

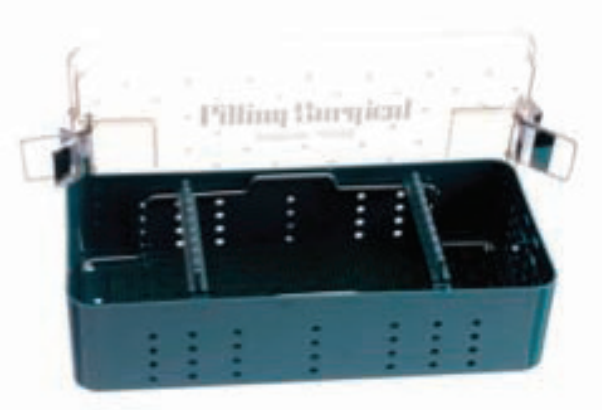
728004

Non-Insulated, Non-Rotating Handle.

| ITEM # | DESCRIPTION |
|---|---|
| 728004 | Single-Action, 5 mm, 35 cm |
| 728005 | Single-Action, 5 mm, 45 cm |

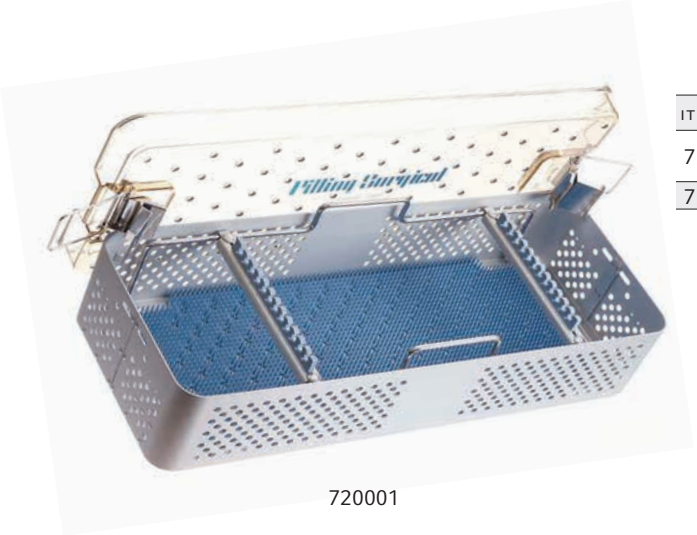
# LAPAROSCOPIC INSTRUMENTS

## Trays




720000

| ITEM # | DESCRIPTION |
|---|---|
| 720000 | Ext. size: 9-7/8" W x 20-3/4" L (25 x 52.5 cm) with silicone mat |
| 720000M | Silicone mat for 720000 |




720001

| ITEM # | DESCRIPTION |
|---|---|
| 720001 | For 45 cm laparoscopic instruments.<br>Ext. size: 26" L (66 cm), with silicone mat |
| 720001M | Silicone mat for 720001 |

# LAPAROSCOPIC INSTRUMENTS

## Electrodes, Coagulators

### ELECTRODE HANDLE

| | | ELECTRODE | SUCTION COAGULATOR | IRRIGATION/SUCTION COAGULATOR |
|---|---|---|---|---|
| ELECTRODE TIPS | BLUNT NEEDLE | 728161 *33 cm*<br>728162 *45 cm* | 728171 *33 cm*<br>728172 *45 cm* | 728181 *33 cm*<br>728182 *45 cm* |
| | RIGHT ANGLE (L-HOOK) | 728163 *33 cm*<br>728164 *45 cm* | 728173 *33 cm*<br>728174 *45 cm* | 728183 *33 cm*<br>728184 *45 cm* |
| | J-HOOK | 728165 *33 cm*<br>728166 *45 cm* | 728175 *33 cm*<br>728176 *45 cm* | 728185 *33 cm*<br>728186 *45 cm* |
| | SPATULA | 728167 *33 cm*<br>728168 *45 cm* | 728177 *33 cm*<br>728178 *45 cm* | 728187 *33 cm*<br>728190 *45 cm* |
| | BLUNT NOSE | 728169 *33 cm*<br>728170 *45 cm* | 728179 *33 cm*<br>728180 *45 cm* | 728191 *33 cm*<br>728192 *45 cm* |

# LAPAROSCOPIC INSTRUMENTS

## Verres Needles, Cannulas, Probes, Knot Pushers, Telescopes

## VERRES NEEDLES

Verres Needle

### Reusable.

| ITEM # | DESCRIPTION |
|---|---|
| 140875 | 10 cm |
| 140877 | 12 cm |
| 140878 | 15 cm |
| 728113 | 18 cm |

### Weck® Vista® Disposable.

| ITEM # | DESCRIPTION |
|---|---|
| 35120 | 14 Ga., 12 cm |
| 35150 | 14 Ga., 15 cm |

### Irrigating/Aspirating Tubes.

| ITEM # | DESCRIPTION |
|---|---|
| 728114 | 15 Ga., 33 cm |
| 728115 | 15 Ga., 45 cm |
| 728116 | 19 Ga., 33 cm |
| 728117 | 19 Ga., 45 cm |
| 728118 | 22 Ga., 33 cm |
| 728119 | 22 Ga., 45 cm |

### Modular Reusable.

| ITEM # | DESCRIPTION |
|---|---|
| 140879 | 15 cm |
| 140880 | 18 cm |
| 140881 | Disposable needle tip for 140879, 10/box |
| 140882 | Disposable needle tip for 140880, 10/box |

## CANNULAS

### Suction/Irrigation, Dual (Trumpet) Valve.

| ITEM # | DESCRIPTION |
|---|---|
| 728142 | 5 mm, 28 cm |
| 728143 | 5 mm, 45 cm |
| 728144 | 5 mm, 34 cm |
| 728145 | 10 mm, 35 cm |

### Hasson.

| ITEM # | DESCRIPTION |
|---|---|
| 728152 | 10/11 mm |
| 728155 | Auto Valve, 10/11 mm |
| 728156 | Thoracic Cannula Threaded, 12 mm |

### Reducer Sleeves.

| ITEM # | DESCRIPTION |
|---|---|
| 728157 | 10/11 mm to 5 mm |
| 728158 | 12 mm to 5 mm |
| 728159 | 12 mm to 10 mm |
| 728160 | 5 mm to 3 mm |

### Caps.

| ITEM # | DESCRIPTION |
|---|---|
| 728153 | White, 11 mm x 15 mm |
| 728154 | Blue, 8 mm x 18 mm |

## PROBES, KNOT PUSHERS

728140

### Palpation Probes.

| ITEM # | DESCRIPTION |
|---|---|
| 728140 | 32 cm |
| 728141 | 45 cm |

### Knot Pushers.

| ITEM # | DESCRIPTION |
|---|---|
| 728195 | Appel Type Knot Pusher, 5 mm, 40 cm |
| 728197 | Appel Type Knot Pusher, 10 mm, 40 cm |
| 728199 | Knot Pusher, 4 mm, 30 cm |

# LAPAROSCOPIC INSTRUMENTS

## Verres Needles, Cannulas, Probes, Knot Pushers, Telescopes

### TELESCOPES

728126

Fully Autoclavable.

| ITEM # | DESCRIPTION |
|---|---|
| 728120 | 5 mm, 30 cm, 0° |
| 728121 | 5 mm, 30 cm, 30° |
| 728122 | 5 mm, 30 cm, 45° |
| 728125 | 10 mm, 33 cm, 0° |
| 728126 | 10 mm, 33 cm, 30° |
| 728130 | 10 mm, 33 cm, 45° |
| 728131 | 10 mm, 45 cm, 0° |
| 728132 | 10 mm, 45 cm, 30° |
| 728133 | 10 mm, 45 cm, 45° |
| 728134 | Pediatric, 2.7 mm, 18 cm, 0° |
| 728135 | Pediatric, 2.7 mm, 18 cm, 30° |

## Retractors

### FIVE FINGER FAN

728148

| ITEM # | DESCRIPTION |
|---|---|
| 728148 | Rigid, 95 mm |
| 728149 | Articulating |

### THREE FINGER FAN

728147

| ITEM # | DESCRIPTION |
|---|---|
| 728147 | 42 mm Spread |

# LAPAROSCOPIC INSTRUMENTS

## Retractors

### LAZY "S"

728146

| ITEM # | DESCRIPTION |
|---|---|
| 728146 | 10 mm wide, Set of two |

### HASSON "S"

728150

| ITEM # | DESCRIPTION |
|---|---|
| 728150 | 10 mm wide, Set of two |
| 728151 | 13 mm wide, Set of two |

### HASSON "S"

306010A

| ITEM # | DESCRIPTION |
|---|---|
| 306010A | 13 mm wide, Set of two |

### O'REILLY ESOPHAGEAL

381801A

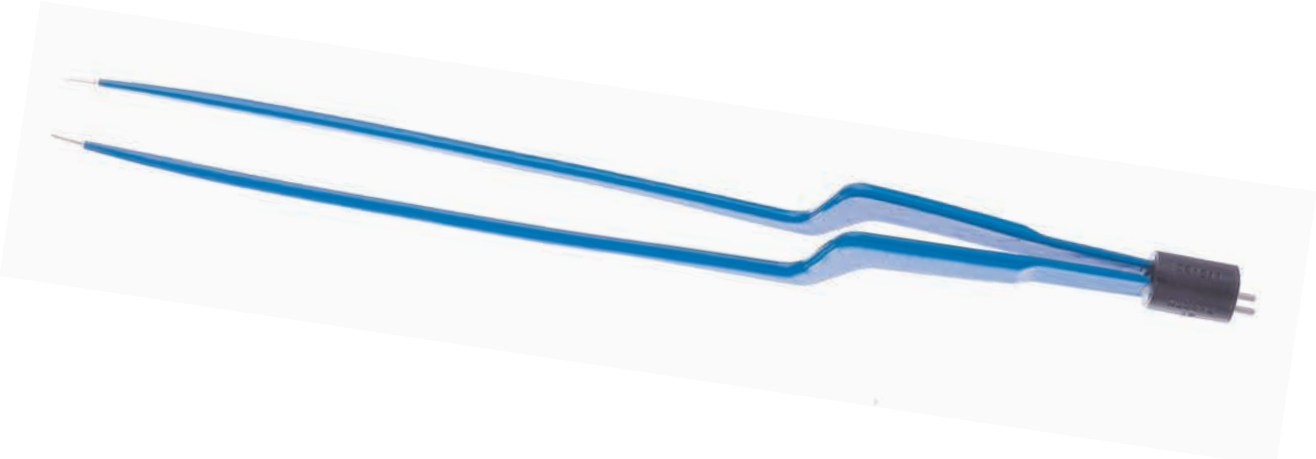
| ITEM # | DESCRIPTION |
|---|---|
| 381801A | 9 mm wide, 54 cm |

# ELECTROSURGERY INSTRUMENTS

## CHAPTER OVERVIEW

Our Weck® Electrosurgery Instruments represent a high-quality line that offers the precision you require, the quality you demand, and the pattern assortments that meet your needs. Our categories of Electrosurgical instruments include:

- Biceps Non-stick Bipolar Forceps and Cords
- Bipolar Forceps and Cords
- Disposable Electrodes
- Coagulation Suction Tubes



# ELECTROSURGERY

## Biceps Non-stick Bipolar Forceps and Cords

### WECK® BICEPS JEWELERS FORCEPS

394250

Straight, non-stick bipolar forceps, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 394250 | #5, 0.5 mm tips, without stops, 4-3/4" (12.5 cm) |

### WECK® BICEPS BAYONET FORCEPS

394267

Straight, non-stick bipolar forceps, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 394807 | 0.5 mm tips, without stops, 7-1/2" (19 cm) |
| 394267 | 0.5 mm tips, with stops, 8" (20.5 cm) |
| 394258 | 1.0 mm tips, with stops, 8" (20.5 cm) |

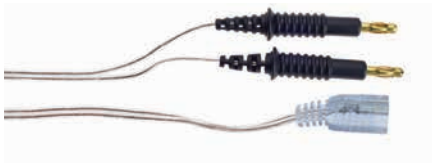
### WECK® BICEPS CERULLO BAYONET FORCEPS

394811

Straight, non-stick bipolar forceps, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 394811 | 0.5 mm tips, without stops, 10" (25.5 cm) |

### WECK® BICEPS FORCEPS CORDS



394246

394247

Fits all Biceps® Forceps.

| ITEM # | DESCRIPTION |
|---|---|
| 394246 | Disposable, sterile, 12' (3.6 m), 10 per box |
| 394247 | Non-sterile, 12’ (3.6 m) |

# ELECTROSURGERY

## Biceps Forceps and Cords

### WECK® BIPOLAR ADSON FORCEPS

392028

Straight, bipolar forceps, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 392026 | 1.0 mm tips, non-insulated, 5" (12.5 cm) |
| 392028 | 1.0 mm tips, insulated, 5" (12.5 cm) |

### WECK® BIPOLAR CUSHING FORCEPS

191023

Straight, bipolar forceps, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 191023 | 1.5 mm tips, insulated, 7" (18 cm) |

### WECK® BIPOLAR CUSHING BAYONET FORCEPS

392036

Straight, bipolar forceps, insulated, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 392034 | 0.7 mm tips, 7-1/2" (19 cm) |
| 392036 | 1.0 mm tips, 7-1/2" (19 cm) |
| 392204 | 1.5 mm tips, 7-3/4" (19.5 cm) |
| 191025 | 2.0 mm tips, 7-1/2" (19 cm) |

### WECK® BIPOLAR SCOVILLE-GREENWOOD BAYONET FORCEPS

392014

Straight, bipolar forceps, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 392012 | 1.5 mm tips, non-insulated, 7-3/4" (19.5 cm) |
| 392014 | 1.5 mm tips, insulated, 7-3/4" (19.5 cm) |

# ELECTROSURGERY

## Biceps Forceps and Cords

### WECK® BIPOLAR IRIS FORCEPS

392043

Straight, bipolar forceps, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 392043 | 0.4 mm tips, serrated handle, 3-1/2" (9 cm) |

### WECK® BIPOLAR JEWELER'S FORCEPS

392018

Straight, bipolar forceps, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 392018 | 0.4 mm tips, smooth handle, 4" (10 cm) |

### WECK® BIPOLAR SEMKIN FORCEPS

392040

Straight, bipolar forceps, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 392040 | 0.7 mm tips, with stops, 5-1/2" (14 cm) |

### WECK® BIPOLAR FORCEPS CORDS

394237

394238

Fits all standard bipolar forceps.

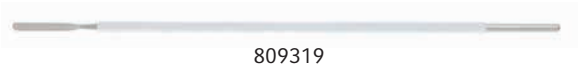
| ITEM # | DESCRIPTION |
|---|---|
| 394236 | Disposable, sterile, 12' (3.6 m), 10 per box |
| 394237 | Rubber, non-sterile, 12' (3.6 m) |
| 394238 | Silicone, non-sterile, 12' (3.6 m) |

# ELECTROSURGERY

## Disposable Electrodes

### WECK® DISPOSABLE ELECTRODES

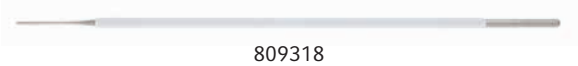
809315



809319

809316

809317



809318

Sterile, 24 per box.

| ITEM # | DESCRIPTION |
|---|---|
| 809315 | Blade electrode, 3/4" (19 mm) blade, 2-3/4" (7 cm) |
| 809319 | Blade electrode, 3/4" (19 mm) blade, 6" (15 cm) extended length |
| 809316 | Needle electrode, 3/4" (19 mm) blunt needle, 1/32" (0.7 mm) dia., 2-3/4" (7 cm) |
| 809317 | Needle electrode, 3/4" (19 mm) needle, 1/32" (0.7 mm) dia., 2-3/4" (7 cm) |
| 809318 | Needle electrode, 3/4" (19 mm) needle, 1/32" (0.7 mm) dia., 6" (15 cm) extended length |

### WECK® DISPOSABLE IMA/ENT ELECTRODES



809335



809339



809337



809338

Sterile, 24 per box.

| ITEM # | DESCRIPTION |
|---|---|
| 809335 | Blade electrode, 3/4" (2 cm) blade, extended insulation, 2-3/4" (7 cm) |
| 809339 | Blade electrode, 3/4" (2 cm) blade, extended insulation, 6" (15 cm) extended length |
| 809337 | Needle electrode, 3/4" (2 cm) needle, 1/32" dia., extended insulation, 2-3/4" (7 cm) |
| 809338 | Needle electrode, 3/4" (2 cm) needle, 1/32" dia., extended insulation, 6" (15 cm) extended length |

# ELECTROSURGERY

## Electrodes

### WECK® ROUND LOOP ELECTRODES

809564

Electrodes, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 809562 | 1/4" dia. loop, 1-3/4" (4.5 cm) |
| 809564 | 3/8" dia. loop, 1-3/4" (4.5 cm) |

### WECK® NEEDLE ELECTRODE

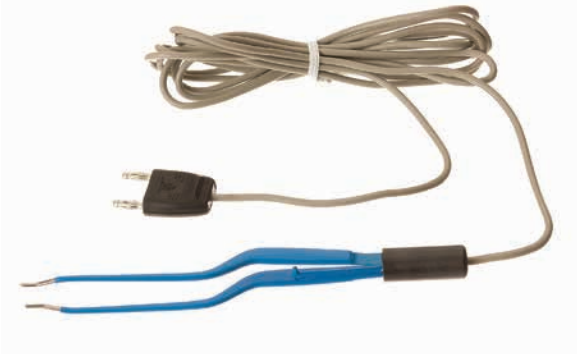
809504

Electrodes, non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 809504 | 3/8" needle, 0.015 dia., 2-1/8" (5.5 cm) |

## Monopolar Handswitching Forceps

### WECK® MONOPOLAR HANDSWITCHING FORCEPS



809267

Non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 809267 | Curved inward, 2.0 mm tips, insulated,<br>8" (20.5 cm), 10' (3 m) cord |

# ELECTROSURGERY

## Coagulation Suction Tubes

### COAGULATION SUCTION TUBES

809600

Disposable foot control coagulation suction tubes, sterile, 10 per box.

| ITEM # | DESCRIPTION |
|---|---|
| 809600 | 11 French, with stylet, 6" (15 cm) |
| 809610 | 11 French, with stylet, 8" (20.5 cm) |

### ACTIVE ADAPTER

809300

Non-sterile.

| ITEM # | DESCRIPTION |
|---|---|
| 809300 | For use with the following generators: Aspen/ Conmed, Bard/Birtcher (771, 772, 773, 737, 737XL, 4400, 6000, 6400), Burdick (SU-7, SU-8), Concept (9600, 9601, 9900), EMS System (101, 2000, 2000BP, 2000BP-11, 3000, 5000), Neomed, Ritter (AS, CSV, CSVII, 400 Series, URO), Valleylab |

# ADDITIONAL SURGICAL PRODUCTS

# DEKNATEL® SUTURE

Security that builds confidence

### DEKLENE® MAXX™ POLYPROPYLENE SUTURE

Polypropylene for cardiovascular anastomosis with superior handling characteristics providing optimal elongation and reduced memory.

### TEVDEK®/POLYDEK® BRAIDED POLYESTER SUTURE

Unrivaled knot security and easy tie-down.

### NEXTSTITCH® VALVE SUTURE

Simplifies precise placement of adjacent sutures while reducing needle trauma to the annulus.

### GABBAY FRATER SUTURE ORGANIZER

GFS-10A 4 pieces of 3
GFS-1A 4 pieces of 1

*For additional information please contact your Teleflex® surgical representative, call customer service or visit our website at Teleflexsurgicalcatalog.com*

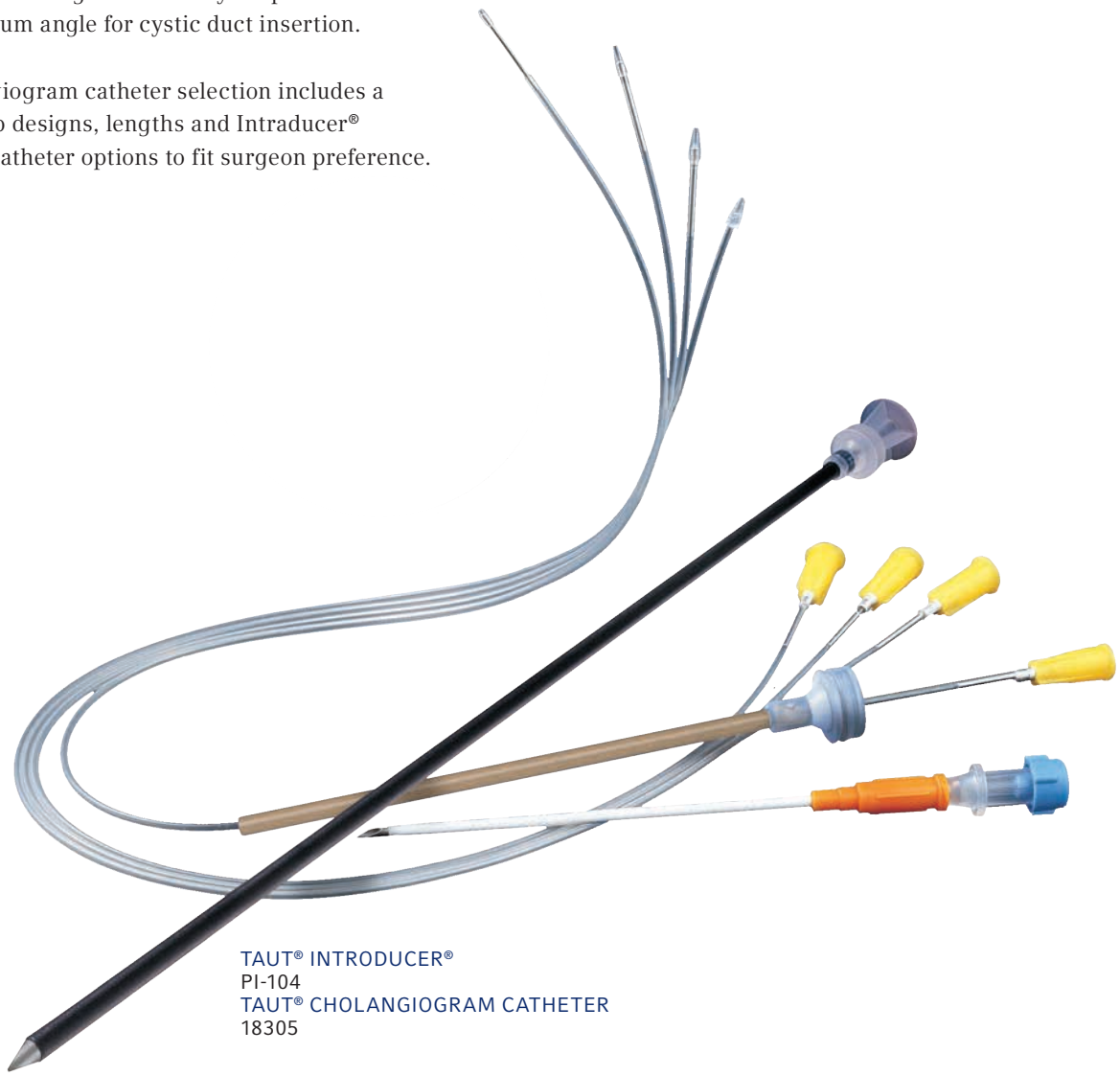
*Teleflex, Deklene, Deknatel, Maxx, NextStitch, Polydek and Tevdek are trademarks or registered trademarks of Teleflex Incorporated or its affiliates.*

# TAUT® CHOLANGIOGRAPHY CATHETERS

## Visualize Anatomy with Confidence

Teleflex® leads the industry with a variety of Taut® Cholangiogram Catheters. Taut® Catheter memory allows surgeons to easily shape the catheter to the optimum angle for cystic duct insertion.

Our cholangiogram catheter selection includes a variety of tip designs, lengths and Intraducer® Peritoneal Catheter options to fit surgeon preference.



TAUT® INTRODUCER®
PI-104
TAUT® CHOLANGIOGRAM CATHETER
18305

*For additional information please contact your Teleflex® surgical representative, call customer service or visit our website at Teleflexsurgicalcatalog.com*

*Teleflex, Intraducer, System One and Taut are trademarks or registered trademarks of Teleflex Incorporated or its affiliates.*

# TAUT® SYSTEM ONE™ COMMON BILE DUCT EXPLORATION KIT

## Remove Billiary Stones with Confidence

The Taut® System One™ Kit is an integrated combination of products designed specifically for transcystic laparoscopic common bile duct exploration. The tools needed for several methods to clear common bile duct stones are provided in one convenient kit.

This multifunctional, restockable kit contains:

- Balloon Catheter (50640)
- Titanium Retrieval Basket (50024)
- Flexible Guidewire (50035)
- High-Pressure Syringe (K05-01251)
- Intraducer® Peritoneal Catheter (PI-128)

50000

*For additional information please contact your Teleflex® surgical representative, call customer service or visit our website at Teleflexsurgicalcatalog.com*

*Teleflex, Intraducer, System One and Taut are trademarks or registered trademarks of Teleflex Incorporated or its affiliates.*

# WECK VISTA® BLADELESS LAPAROSCOPIC ACCESS PORTS

Confidence. Clarity. Control

The Weck Vista® Line of Bladeless Laparoscopic Access Ports meets the needs of surgeons performing minimally invasive procedures by providing the broadest line of primary entry points: balloon and cone open access ports, optical ports and standard ports.

The unique reusable obturators from Teleflex® offer the best of both worlds: performance for surgeons and cost effectiveness for the facility.

Beyond our own line of ports seen here, our patented asymmetrical dilating tip is widely used in robotic procedures with the da Vinci® Obturator.

### OPTICAL ACCESS PORT

- Clear visualization of tissue layers
- Securely grasps laparoscopes

### BALLOON AND CONE OPEN ACCESS PORTS

- Designed to maintain pneumoperitoneum
- Easy one-hand stabilizer mechanism

### BLADELESS ACCESS PORTS

- Asymmetrical dilating tip for minimal defect
- Ridged or smooth cannulas

### REUSABLE OBTURATORS

- Bladeless tip compatible with cannula only offerings
- Cost effective and environmentally friendly solution

WECK Vista®
Optical
Ridged
10 mm x 100 mm
405910R

WECK Vista®
Bladeless
Smooth
12 mm x 100 mm
405912

WECK Vista®
Cone Open
Access Port
Smooth
12 mm x 100 mm
405933L

WECK Vista®
Open Balloon
Stability
Smooth
12 mm x 100 mm
412944L

WECK Vista®
Bladeless Reusable
Obturator
Stainless Steel
5mm x 100mm
405188

*Additional sizes available*

*For additional information please contact your Teleflex® surgical representative, call customer service or visit our website at Teleflexsurgicalcatalog.com*

# WECK EFx™ ENDO FASCIAL CLOSURE SYSTEM

## A True Unassisted Approach to Port Site Closure

The WECK EFx® Endo Fascial Closure System facilitates an effective endo fascial port site closure of fascial defects resulting from the use of 10 mm – 15 mm diameter trocars. Its unique approach allows the surgeon confidence in a predictable and uniform closure across varying patient anatomies.

### WECK EFX® ENDO FASCIAL CLOSURE SYSTEM FEATURES:

- Consistent and uniform 1 cm fascial purchase across varying patient anatomy
- Universal tapered body design accommodates varying port site diameters
- Depth control for safety

*da Vinci is a trademark or registered trademark of Intuitive Surgical, Inc. Teleflex, Weck EFx and Weck Vista are trademarks or registered trademarks of Teleflex Incorporated or its affiliates.*

EFX-001

*For additional information please contact your Teleflex® surgical representative, call customer service or visit our website at Teleflexsurgicalcatalog.com*

# WECK® SKIN STAPLERS

## WECK® VISISTAT® FIXED HEAD SKIN STAPLERS

The Visistat® Staplers are pre-loaded with medical-grade stainless steel staples that provide numerous benefits to the patient:

- Sharper staples result in less trauma to the tissue
- Taller staples lead to easier removal
- Ergonomic design allows the OR staff to place staples with a high hand position to avoid contact with the incision

VISISTAT® SKIN STAPLER
Wide
528235

VISISTAT® SKIN STAPLER
Regular
528135

VISISTAT® ROTATING HEAD STAPLER
Wide
529235

## WECK® ROTATING HEAD SKIN STAPLER

Whether you're looking for flexibility or an improved angle of approach or a more ergonomic closure solution, the Weck® Rotating Head Stapler delivers. Improved visualization and easy rotation ensures staple placement where intended, every time, saving you time without compromising the result.

## SKIN STAPLE EXTRACTORS

Weck® Skin Staple Extractors are disposable devices used for the removal of skin staples.

*For additional information please contact your Teleflex® surgical representative, call customer service or visit our website at Teleflexsurgicalcatalog.com*

*Teleflex, Visistat and Weck are trademarks or registered trademarks of Teleflex Incorporated or its affiliates.*

# INDEX

## Alphabetical

## #


1 mm Fine Perforated Cases....322
10 mm Dissectors....1138
5 mm Bipolar Forceps....1141
5 mm Dissectors, Grasping Forceps....1135
5 mm Needle Holders....1147
5 mm Ratcheted Graspers....1142
5 mm Scissors....1148
5-10 mm Biopsy Forceps....1139


## A


Abdominal Vascular Retractor Set With Split Wishbone - Components....241
Ablaza-Blanco Cardiac Valve Retractor....755
Abraham Laryngeal Syringe Cannula....435
Abramson-Dedo Micro-Laryngoscope....397
Abrams Pleural Biopsy Needle....767
Access Ports....1167
Accessory Boxes....334
ACMI Illuminator End Adapter For Type II Cables....464
Adair-Allis Intestinal Tissue Forceps....87
Adair Tenaculum....278
Adams Tissue Forceps....53
Adapter, Electrosurgical....1161
Adapter (Power Drill)....856
Adapters, Fiber Optic....464
Adenotome Blades....521
Adenotomes/Tonselectomes....521
Adson-Brown Laser Tissue Forceps....45
Adson-Brown Titanium Tissue Forceps....686
Adson-Debakey® Tissue Forceps....44
Adson Dissector Hooks....882
Adson Dressing Forceps....34
Adson Hemostatic Forceps....56
Adson Laser Tissue Forceps....36
Adson Periosteal Elevators....960
Adson Rat Tooth Rongeur....1031
Adson Retractor....220, 907
Adson Rongeurs....1031
Adson Suction Tubes....243
Adson Suction Tubes, Curved....243
Adson Tissue Forceps....43
Adson Titanium Dressing Forceps....686
Adson Titanium Tissue Forceps....686
Air Injection Cannula....1128
Air-Lon® Trachea Tube Inhalation Sets....484
Air-Lon® Trachea Tubes....484
Alexander Chisels....1002
Alexander Gouges....1005
Alexander Periosteal Rasp....978
Alexander Periosteotome....716
Allen Intestinal Clamps....87
Allerdyce Elevator and Dissector....504, 957
Alligator Applying Forceps and Ligating Clips....779
Alligator Forceps....494
Alligator Nasal Forceps....505
Allis Delicate Tissue Forceps....88
Allis Grasper....1144
Allison Lung Retractors....215, 744
Allis Tissue Forceps....88, 251
Alm Retractors....217
Aluminum Utility Cases....322
Amato Neonatal Sternal Retractors....728
Amato Pediatric Dilators Set....768
Anderson Adson Retractor....221
Anderson-Nievert Osteotomes....508
Andrews Infant Suction Tube....246, 765
Andrews Pynchon Suction Tube....246, 765
Andrews Tongue Depressor....528
Angled Bone Holding Forceps....929
Angled Laser Retractors....430
Angled Pelvic Bone Reduction Forceps....936
Angle Finder....310
**Aortic Punches**....762
Diamond Edge Design....762
Reusable Punches....763
Aortic Vascular Clamps....628
Approximation Clamp....319
Approximators....714
Army Pattern Chisels....1002
Asch Septum Forceps....507
Aspirating Needle....775
Aspirating Tubes....431
Asymetric Pelvic Reduction Forceps....936
Atraumatic Allis Grasper....1145
Aufranc Cobra Retractors....889
Aufricht-Glabella Rasp....510, 974
Aufricht Nasal Retractor....520
Aufricht Rasp....509, 974
Auto Endo5® Applier....375
Auvard Weighted Vaginal Specula....285
Awls....942


## B


Babcock Grasper....1145
Babcock Tissue Forceps....90, 251, 555
Baby Metzenbaum Scissors....122
Backbiter Forceps....514
Backhaus Towel Clamps....30
Backhaus Towel Forceps Ebonized....30
Bacon Rongeur....1028
Bahnson Aorta Clamp....629
Bailey Aorta Clamps....629
Bailey Aortic Valve Rongeurs....757
Bailey Cardiac Technique® Needle Holder....169, 674
Bailey-Gibbon Rib Approximator Retractor....716
Bailey Rib Approximator Retractors....716
Bainbridge Forceps....91
Bakes Common Duct Dilators Set....309
Bakst Cardiac Scissors....667
Balfour Center Blades....233
Balfour Fourth Blade Attachments....234

Balfour Retractors ..... 230
Balfour Retractors Permanent Side Blade Model ..... 231
Ballenger Knives ..... 508
Ballenger Sponge Forceps ..... 25
Balloon Catheter ..... 1166
Bane Rongeur ..... 1026
Bantam Wire Cutting Scissors ..... 110
**Bariatric, Open/Extended Length** ..... 249
Forceps and Clamps ..... 249
Knife Handles/Suction Tubes ..... 249
Needle Holders ..... 259
Retractors ..... 261
Scissors ..... 256
Barnhill Adenoid Curettes ..... 522
Baron Suction Tubes ..... 245
Barraquer Cilia And Suture Forceps ..... 1109
Barraquer Delicate Needle Holders ..... 181
Barraquer Micro Needle Holders ..... 175, 180
Barraquer Needle Holders ..... 1121
Barraquer Wire Speculums ..... 216, 1125
Barraya Titanium Tissue Forceps ..... 687
Barr Crypt Hook ..... 305
Barrett Tenaculum ..... 278
Barron Hemorrhoidal Alligator Seizing Forceps ..... 298
Baumgarten Wire Twister ..... 182, 684
Baumgartner Bulldog® Needle Holder ..... 150
Baumgartner Needle Holder ..... 150
Bayonet Nerve Retractor ..... 884
Beall Circumflex Artery Scissors ..... 656
Beall Micro Coronary Scissors ..... 657
Beasley-Babcock Tissue Forceps ..... 46
Becker Septum Scissors ..... 512
Beckman-Adson Laminectomy Retractors ..... 222, 908
Beckman-Adson Retractors ..... 223, xx
Beckman-Eaton Retractor ..... 908
Beckman Retractor ..... 222, 907
Beckman-Weitlaner Retractors ..... 221, 908
Beck Miniature Pediatric Aortic Clamp ..... 589
Beck-Type Aorta Clamps ..... 630
Beck-Type Vessel Clamp ..... 590, 596
Bellina Laser Rulers ..... 288
Bellucci Alligator Scissors ..... 498
Bending Irons ..... 880
Bending Irons and Rod Holders ..... 877
Bending Pliers ..... 845
Bending Templates ..... 880
Bengolea Forceps ..... 57
Bennett Bone Elevator and Retractors ..... 889
Bergh Cilia Forceps ..... 1109
Bergman Mallets ..... 1015
Bernay Finger Rake Tracheal Retractors ..... 192, 491
Berry Angio Access Tunneler ..... 796
Berry Sternal "Big Ugly" Technique® Needle Holder ..... 183, 684
Best Colon Clamp ..... 92
Bethea Sheet Holders ..... 291
Bethune Rib Cutter ..... 718
Beyer Bone Biting Rongeur ..... 1029
Beyer Rongeurs ..... 1034
Billeau Ear Loops ..... 493
Biopsy Cup Forceps ..... 451
Biopsy Forceps ..... 1139
Biopsy Grasper ..... 1139
Biopsy Punch ..... 1140
Biopsy Punch, OB/GYN ..... 266
Biopsy Punch Forceps ..... 1139
Biro Dermal Naevus Scissors ..... 133
Bishop Bone Clamp ..... 939
Bishop Harmon Anterior Chamber Irrigation Cannula ..... 1129
Bishop-Harmon Dressing Forceps ..... 1102
Bishop-Harmon Tissue Forceps ..... 1104
Blade Retractors ..... 886
Blair (Rollet) Retractor ..... 193
Blake Gallstone Grasping Forceps ..... 93
Blakesley Nasal Forceps ..... 505
Blanco Valve Instruments ..... 755
Bland Cervical Traction Forceps ..... 264
Blepharoplasty Scissors ..... 133
Blount Double Prong Retractor ..... 893
Blount Knee Retractor ..... 893
Blount Single Prong Retractor ..... 893
Blue Fiber Optic Cables ..... 463
Blunt Nose Grasper ..... 1136
Bodenhammer Rectal Speculum ..... 302
Boettcher Tonsil Scissors ..... 530
Boies Nasal Elevator ..... 503
Bonchek-Carpentier Sternal/Atrial Valve Retractor ..... 737
Bone Awl ..... 943
Bone Chip Packers ..... 1009
Bone Compass ..... 311, 1084
Bone Cutting Forceps ..... 1019
Bone File ..... 973
Bone File #10 ..... 970
Bone File #12 ..... 970
Bone File #12A ..... 970
Bone File #12Ca ..... 971
Bone File #33 ..... 971
Bone File #45 ..... 971
Bone File #92A ..... 972
Bone File #92B ..... 972
**Bone Files and Rasps** ..... 970
Bone Files ..... 970
Bone Rasps ..... 973
**Bone Holding Instruments** ..... 918
Bone Clamps ..... 939
Bone Holding Forceps ..... 918
Bone Reduction Forceps ..... 931
**Bone Hooks and Awls** ..... 942
Awls ..... 943
Bone Hooks ..... 942
Bone Impactor ..... 1009
Bone Mill ..... 1098
Bone Rasp ..... 974
Bone Rasp #64 ..... 972
Bone Reduction Forceps ..... 932
Bone Saws and Knives ..... 1075
**Bone Tamps and Impactors** ..... 1009
Bone Tamps ..... 1009
Impactors ..... 1010
Bonney Tissue Forceps ..... 46
Bonnier Catheter Adapter ..... 435, 766
Bonn Iris Tissue Forceps ..... 1104
Boston University Suspension System ..... 411
Boston University System Laryngoscope Handle Extension ..... 412
Boston University System Pivoting Extension Arm Assembly ..... 412

Boucheron Ear Speculum....499
**Bougies/Dilators**....465
Esophageal Bougies....465
Laryngeal Dilators....468
Bougie Sterilization Tray....466
Bovie Cord For Suction Tube....462, 775
Bovie Pencil Handle....776
Bowel Grasper-Hunter....1137
Bowls....329
Bowman Lacrimal Probes....307, 1126
Boxes With Entries = Endoscope Sizes Available....444
Bozeman Uterine Dressing Forceps....262
Brachial Large Vessel Approximators....318
Brachial Large Vessel Clips....318, 567
Brand Tendon Pulling Forceps....950
Braun Episiotomy Scissors....272
Braun Tenaculum....278
Brewster Phrenic Retractors....202
Brewster Retractors....196
Bridge Hemostatic Forceps....57
Bridge X-Action Forceps....251
Brigham Dressing Forceps....41
Brinkerhoff Rectal Specula....302
Bristow/Bankart Humeral Retractor....892
Bristow/Bankart Soft Tissue Retractor....891
Bronchial and Esophageal Instrumentation....451
**Bronchoscopes**....445
Bronchoscope Accessories....441
Cleaning Brushes....445
Holinger Design....438
Holinger Pediatric Design....439
Laser Bronchoscopes....440
Bronchoscope Adapter....441
Bronchoscope System....440
Bronchoscope Window Plug Replacement Lens....441
Bronchus Clamp....555
Brown-Adson Tissue Forceps....44
Brown Needle Holder....151
Brown Tissue Forceps....46
Bruening Bayonet Nasal Snare....517
Brun Curettes....981
Brun Smartrack For 7" Curettes....991, 1087
Brun (Spratt) Curettes....979
Bruns Shears....1078
**Brushes**....444
Bronchoscope....444
Tracheostomy Tubes....492
Buck Ear Curettes....493
Buck Neuro Hammer Stainless....1092
Buie Pile Clamp....298
Buie Suction Tubes....306
**Bulldog® and Micro Vessel Clamps**....560
Bulldog® Clamps....560
Micro Vessel Clamps....568
Bulldog® Clamp Applying Forceps....567
Bullet Nose Dissector....1136
Bunnell Drill....850
Bunnell Tendon Strippers....952
Bunt Forceps Holder....341
Burford Adult Retractor....737
Burford Aluminum Adult Retractor....737
Burford-Finochietto Infant-Child Retractor....729
Busch Umbilical Scissors....271

# C

Cables, Pilling® Blue Fiber Optic....463
Calipers....1082, 1130
Callison-Adson Tissue Forceps....44
Calman Carotid Bulldog® Clamps....604
Calman Clamp....607
Camera and Light Cord Cases....330
Cannula Cleaners....343
Cannulas....764, 1151
Cannulas, Irrigation....1128
Cannulated Pin Cutter....827
Caplan Nasal Scissors....512
Capsule Retractor....891
Cardiac Valve Forceps....549
Cardiac Valve Hook, Calibrated....758
**Care and Cleaning**....10
Carlens Mediastinoscopes....774
Carmalt Forceps....58, 251
Carmalt Splinter Forceps....32
Carroll Tendon Retriever....949
**Cartilage and Tendon Instruments**....946
Cartilage Knives....950
Cartilage Scissors....951
Clamps and Forceps....946
Tendon Strippers....952
Caspar IVD Rongeurs....1062
Castaneda Pediatric Clamps....575
Castaneda Titanium Vascular Clamping Forceps....693
Castroviejo Caliper....311, 1083, 1130
Castroviejo-Colibri Tissue Forceps....1104
Castroviejo Corneo-Scleral Forceps....1111
Castroviejo Keratoplasty Micro Scissors....1112
Castroviejo Keratoplasty Scissors....1112
Castroviejo Lacrimal Dilator....1127
Castroviejo Micro Needle Holders....176, 681
Castroviejo Needle Holders....176, 681, 1121
Castroviejo Scissors....673, 1112
Castroviejo Suture Forceps....1106
Castroviejo Technique® Needle Holders....178, 680
**Catheters**....297
Catheter Guides....297
Cholangiography....1165
Coronary Perfusion Catheters....761
Centimeter Subtraction Ruler....309, 435
Cervical Kerrison Thin Footplate Rongeurs....1050
Cervical Laser Hooks....288
Cervical Retractor Set....906
Chandler Elevators....969
Charriere Bone Saws....1076
Chaux Deep Blade Assembly....722
Chaux-Lemole Bi-Angle T-Frame....754
Chaux Multipurpose Sternal Ima Retractor....720
Chaux Sternal Ima-Mitral Valve Retractor....721
Cheanvechai-Favaloro Swivel Rake Assembly....725
Cheanvechai Rake Assembly....725
Cherry Supraceliac Clamp....630
Chest Drain Pulling Clamp....559
Chichirelli (Blumenthal) Rongeur....1027
Children's Hospital Retractor....202
**Chisels and Gouges**....1002
Chisels....1002
Gouges....1005

**Chisel and Gouge Set** ..... 1000
Interchangeable Osteotome, Chisel and Gouge Set ..... 1000
Church Scissors ..... 118
Circutract Set - Components ..... 239
**Clamps** ..... 26
Aortic Aneurysm Clamps ..... 648
Aortic Compressor ..... 655
Aortic Vascular Clamps ..... 629
Bariatric ..... 249
Bone Clamps ..... 939
Bronchus and Lung Clamps ..... 555
Bulldog® Clamps ..... 560, 703
Carotid Clamps ..... 604
Carotid Clamps, 1 mm Jaw ..... 607
Carotid Clamps, 1.5 mm Jaw ..... 609
Cartilage and Tendon Instruments ..... 946
Chest Drain Pulling Clamp ..... 559
Circumcision Clamps ..... 269
Cooley Vascular Clamps ..... 622
CVT ..... 544
Femoral-Popliteal Clamps ..... 612
Gastrointestinal Forceps and Clamps ..... 87
General ..... 25
Hemostatic Forceps and Clamps ..... 56
Micro Vessel Clamps ..... 568
OB/GYN ..... 262
Pediatric Clamps, 1 mm Jaw ..... 575
Pediatric Clamps, 1.5 mm Jaw ..... 577
Pediatric Clamps, 2 mm Jaw ..... 589
Pediatric Clamps, Cooley-Type Jaw ..... 595
Pediatric Vascular Clamps ..... 693
Peripheral Vascular Clamps ..... 613
Rectal ..... 298
Renal Clamps ..... 610
Right Angle Clamps ..... 76
Ring Handled Bulldog® Clamps ..... 602
Towel Clamps ..... 29
Tubing Clamps ..... 26
Vascular Clamps ..... 573, 696
Clark Artery Forceps ..... 251
Clark Hysterectomy Clamps ..... 254
Claw Grasper ..... 1135
Cleaners and Lubricants ..... 345
Cleanpunch® Cleaning System ..... 1049, 1085
Clerf-Arrowsmith Safety Pin Closing Forceps ..... 455
Cleveland Bone Cutting Forceps ..... 1019
Cleveland Clinic Renal Clamps ..... 610
**Clips and Appliers** ..... 779
Mediastinoscopy ..... 779
Micro Clips and Appliers ..... 315
Cloward-Style Mallets ..... 1016
Coagulation Suction Tubes ..... 1161
Coarctation Hook ..... 758
Cobb Curettes, Aluminum Handle ..... 982
Cobb Curettes, Stainless Steel Handle ..... 983
Cobb Osteotome ..... 999
Cobb Smartrack For 11" Instruments ..... 991, 1087
Cobb Spinal Elevators, Aluminum Handle ..... 966
Cobb Spinal Elevators, Hex Handle ..... 965
Cobb Spinal Elevators, Stainless Steel Handle ..... 967
Cobb-Type Spinal Gouges ..... 1008
Colibri Corneal Tissue Forceps ..... 1104
Coller Forceps ..... 59
Collier Anderson Clamps ..... 252
Collier Hemostatic Forceps ..... 60
Collin Lung Tissue Forceps ..... 555
Collin Mallet ..... 1013
Collins Tongue Seizing Forceps ..... 523
Colver Coakley Tonsil Forceps ..... 523
Combination Mallet Caps ..... 1015
Combination Mallets ..... 1015
Combination Wrench ..... 847
Cone Ring Curettes ..... 987
Conn Aortic Compressor ..... 655
**Container Systems** ..... 368
Accessories ..... 370
Pilling® Container Systems ..... 368
Containers and Trays ..... 326
Converse Needle Holder ..... 151
Converse Rasp ..... 510, 975
Converse Skin Hooks ..... 185
Cooley Anastomosis Clamps ..... 596
Cooley Aorta Clamp ..... 648
Cooley Carotid, Subclavian and Renal Clamp ..... 622
Cooley Clamps ..... 597
Cooley Clamps For Pediatric and Infant Cardiovascular Surgery ..... 597
Cooley Clamps For Pediatric Cardiovascular Surgery ..... 595
Cooley Coarctation Clamps ..... 623
Cooley Dilators ..... 768
Cooley Iliac Clamps ..... 623
Cooley Jaw Multipurpose Clamps ..... 624
Cooley Jaw Vascular Tissue Forceps ..... 547
Cooley-Mayo Curved Scissors ..... 118
Cooley Mitral Valve Retractors ..... 751
Cooley Partial-Occlusion Clamps ..... 625
Cooley Patent-Ductus Clamps ..... 626
Cooley Pediatric Cardiovascular Clamps ..... 598
Cooley Pediatric Derra Clamps ..... 599
Cooley Pediatric Modified Anastomosis Clamp ..... 600
Cooley Pediatric Multipurpose Clamps ..... 600
Cooley Pediatric Patent Ductus Clamps ..... 601
Cooley Peripheral Vascular Clamps ..... 627
Cooley Scissors ..... 256
Cooley Sternum Retractors ..... 733
Cooley Sump Suction Tube ..... 247, 765
Cooley Titanium Pediatric Clamp ..... 695
Cooley Vena Cava Clamps ..... 627
Corn Knives ..... 1096
Coronary Potts Scissors ..... 661
Coronary Ultra Fine Tissue Forceps ..... 54, 547
Coryllos-Bethune Rib Shears ..... 718
Cottle Alar Retractor ..... 196
Cottle Columella Forceps ..... 507, 1111
Cottle Double Ended Elevator ..... 503, 959
Cottle Knife Guide and Retractor ..... 508
Cottle Nasal Knife ..... 508
Cottle Osteotomes ..... 508
Cottle Rasp ..... 510, 975
Cottle Septum Speculum ..... 519
Cottle Skin Hooks ..... 185
Couëtil Ima Sternal Retractor ..... 723
Cox Metatarsal Spreader ..... 901
Cradles and Holders ..... 370
Crafoord Coarctation Vascular Clamps ..... 631
Crafoord Tissue Forceps ..... 54
Crafoord Titanium Clamping Forceps ..... 696
Crawford Aortic Retractors ..... 751

Crawford-Cooley Graft Tunneler....796
Crawford Suture Ring....756
Crawford Thoraco-Abdominal Aneurysm Clamps....648
Crego Periosteal Elevator....962
Crile Forceps....60
Crile Hemostats....60
Crile Murray Bulldog® Needle Holders....162
Crile Retractor....203
Crile Titanium Hemostatic Forceps....692
Crile Wood Bulldog® Needle Holders....162
Crile Wood Needle Holders....161, 259
Crouch Clamp....76
Crown Fixator....816
Cruciform Screwdriver....873
Crutchfield Tongs....917
**Curettes**....979
Brun Curettes....979
Cobb Curettes....982
Ear Curettes....493
Endoscopic Curettes....989
OB/GYN Curettes....275
Ophthalmic....1124
Specialty Bone Curettes....984
Curette Excavators....1095
Curved Masher Grasping Forceps....781
Cushing Bayonet Dressing Forceps....37
Cushing Bayonet Tissue Forceps....47
Cushing Blunt Elevator....717
Cushing Decompression Retractor....196, 745
Cushing Dressing Forceps....36
Cushing Gutsch Bayonet Dressing Forceps....37
Cushing Gutsch Dressing Forceps....36
Cushing Gutsch Tissue Forceps....47
Cushing IVD Rongeurs....1061
Cushing Little Joker Elevator....961
Cushing Nerve and Vein Retractor....197, 745
Cushing Periosteal Elevators....961
Cushing Tissue Forceps....47
Cushing Titanium Dressing Forceps....687
Cushing Titanium Tissue Forceps....687
Cushing Vein Retractors....261
**Customer Service....8**
Cutting Block....520, 1130
**CVT Forceps and Clamps**....544
Bronchus and Lung Clamps....555
Chest Drain Pulling Clamp....559
Ligature Carriers....553
Micro Forceps....550
Tissue Forceps....544
**CVT Needle Holders**....674
Castro-Type Micro Needle Holders....681
Pilling® Technique® Design....674
Wire Twisters....684
**CVT Retractors**....720
Epicardial....720
Hand-Held....744
Henly-Type Retractors....748
IMA....720
Sternal Retractors/Rib Spreaders....727
Pilling® Sternal Retractor and Rib Spreader Dimensions....741
Sternal Closure....743
C.W. Mayo Tissue Forceps....55
Cylindrical Sponges....357
Cystic Duct Catheter Clamps....93

# D

Dale Femoral-Popliteal Anastomosis Clamps....612
Dale Femoral-Popliteal Clamps....612
Dale First Rib Rongeur....714
Dandy Hemostatic Forceps....61
Dandy Kolodny Forceps....61
Dandy Nerve Hook....190
Darling Tape Passing Clamp "Aorta Go Around"....553
Darrach Elevators....968
Davidson Scapula Retractors....215, 746
Davis Brain Spatulas....214
Davis-Finochietto Infant Retractor....727
Davis & Mcivor Left Tongue Blades....524
Davis & Mcivor Right Tongue Blades....525
Davis Mouth Gag Blade, Size 2....525
Davis Mouth Gags....526
Davis Retractors....203
Davis Tissue Forceps....55
Day Ear Hook....493
Dean (Blumenthal) Rongeurs....1029
Dean Rongeur....1027
Dean Scissors....121
Dean Tonsil Scissors....530
Deaver Retractors....207
Debakey® Acutely Curved Clamps....591
Debakey®-Adson Coronary Suction Tubes....248, 766
Debakey® Angled Peripheral Vascular Clamp....614
Debakey® Aorta Clamp....649
Debakey® Aortic Aneurysm Clamps....650
Debakey® Aortic Exclusion Clamp....614
Debakey® Bainbridge Clamps....92
Debakey® Bainbridge Vascular Clamps....615
Debakey® Carbide Forceps....49, 545
Debakey® Chest Retractors....734
Debakey® Child Retractor....729
Debakey® Coarctation Clamps....577, 616
Debakey®-Cooley Retractor....210
Debakey® Cross Action Bulldog® Clamps....560
Debakey® Curved Clamps....651
Debakey® Curved Peripheral Vascular Clamp....616
Debakey® Diethrich Delicate Vascular Tissue Forceps....48, 546
Debakey® Diethrich Diama-Grip Tissue Forceps....546
Debakey® Endarterectomy Scissors....667
Debakey® Femoral Bypass Tunneler....796
Debakey® Fiberoptic Illuminated Suction Tube....247
Debakey® Full Curved Aortic Aneurysm Clamps....652
Debakey® Gelpi Retractor, Short Model....224
Debakey® Grasper....1145
Debakey® Hysterectomy Clamp....265
Debakey® Lung Grasping Forceps....556
Debakey®-Metzenbaum Dissecting Scissors....127, 668
Debakey® Miniature Anastamosis Clamp....591
Debakey® Modified Semb Ligature Carrier....553
Debakey® Multi-Purpose Angled Clamps....632
Debakey® Multipurpose Vascular Clamps....580
Debakey® Multipurpose Vascular Clamps Long....581
Debakey® Partial Occlusion Clamps....578
Debakey® Patent Ductus Clamps....584, 617
Debakey® Pediatric and Adult Vascular Clamps....582
Debakey® Pediatric Multipurpose Clamps....592
Debakey® Potts Scissors....658
Debakey® Renal Artery Clamp....611

Debakey® Right Angle Forceps ..... 76
Debakey® Ring Handle Bulldog® Clamps ..... 602
Debakey® Scissors ..... 127, 667
Debakey® Spoon Clamps ..... 579
Debakey® "S" Shaped Peripheral Vascular Clamp ..... 613
Debakey® Suction Tubes ..... 247, 766
Debakey® Tangential Occlusion Clamps ..... 633
Debakey® Technique® Needle Holders ..... 170, 674
Debakey® Thoracic Dissecting Forceps ..... 94
Debakey® Thoracic Tissue Forceps ..... 47, 544
Debakey® Tissue Forceps ..... 250
Debakey® Titanium Bulldog® Clamps ..... 703
Debakey® Titanium Needle Holder ..... 709
Debakey® Titanium Pediatric Clamps ..... 695
Debakey® Titanium Ring Handle Needle Holders ..... 709
Debakey® Titanium Tissue Forceps ..... 50, 688
Debakey® Titanium Vascular Clamps ..... 697
Debakey® Ultralight Forceps ..... 48, 545
Debakey® Valve Hooks ..... 758
Debakey® Valve Scissors ..... 668
Debakey® Vascular Dilators ..... 769
Debakey® Vascular Scissors ..... 659
Debakey® Vascular Tissue Forceps ..... 48, 544
Deborah-Castaneda Partial Occlusion Clamps ..... 585
Deborah-Castaneda Peripheral Vascular Clamps ..... 586
Decannulation Stoppers ..... 488
Decker IVD Rongeur ..... 1060
Dedo Double-Action Anterior Commissure Laryngoscopes ..... 404
Dedo Laser Micro-Laryngoscope ..... 400
Dedo-Pilling® Laser Laryngoscope Extra-Long ..... 401
Dedo-Pilling® Micro-Laryngoscope ..... 396
Dedo Table-Mounted Mayo Tray ..... 412
Deep Deaver Retractors ..... 209
Deep Rake Retractors ..... 194, 886
Deklene® Maxx™ Polypropylene Suture ..... 1164
De Lee Cervical Grasping Forceps ..... 262
De Lee Obstetrical Forceps ..... 270
De Lee Universal Retractor ..... 286
Delicate Center-Action Bronchoscopic Forceps ..... 459
Delicate Operating Scissors ..... 112
Delicate Wire Cutter ..... 823
Demartel Acutely Angled Scissors ..... 127
Demartel Scissors ..... 128
Demel Wire Guides ..... 848
Demos Tibial Artery Clamp ..... 613
Denhardt Mouth Gag ..... 528
Denis Micro Ring Forceps ..... 553
Denis Titanium Micro Forceps ..... 690
Dennis Anastomosis Clamp ..... 95
Derf Needle Holders ..... 151
Derf Needle Holder Standard - Stainless Steel Jaw ..... 152
Derf Titanium Ring Handle Needle Holder ..... 710
Dermal Instruments ..... 312
Derra Miniature Anastomosis Clamps ..... 618
Derra Partial Occlusion Clamps ..... 587
Derra Titanium Anastamosis Clamps ..... 696
D'errico-Adson Retractor ..... 904
Deschamps Ligature Carriers ..... 314
Desjardin Gallstone Grasping Forceps ..... 95
Desmarres Chalazion Forceps ..... 1110
Desmarres Lid Retractors ..... 197
Desmarre Valve Retractors ..... 752
Devine-Millard-Aufrecht Nasal Retractor Fiber Optic Lighting ..... 215
Diamond Pin Cutter ..... 828
Diethrich Bulldog® Clamps ..... 561
Diethrich Caval Occlusion Clamp ..... 619
Diethrich Coronary Artery Clamp ..... 619
Diethrich Delicate Angled Coronary Scissors ..... 662
Diethrich-Potts Vascular Scissors ..... 662
Diethrich Right Angle Clamps ..... 77
Digitate®-Heifetz Needle Holders ..... 684, 1121
Digitate®-Heifetz Scissors ..... 132, 1116
Dilator Instrument Trays ..... 323
**Dilators**
Amato Design, Vascular ..... 768
Cooley Design, Vascular ..... 768
DeBakey® Design, Vascular ..... 769
Dilators, Sounds and Needles ..... 295
Esophageal Bougies ..... 465
Garrett Design, Vascular ..... 770
Hiebert Design, Vascular ..... 771
Laryngeal Dilators ..... 468
OB/GYN ..... 272
Ophthalmic ..... 1126
Tracheal Dilators ..... 489
Valve Dilators ..... 760
Dingman Forceps ..... 947
Dingman Mouth Gag ..... 526
Dingman Zygoma Hook ..... 192
**Dissectors and Elevators** ..... 953
Cobb Elevators ..... 965
Double Ended Elevators ..... 957
Endarterectomy Dissectors ..... 793
Endoscopic Elevators ..... 967
Laparoscopic Dissector ..... 1135
Metatarsal Elevators ..... 958
Penfield Elevators/Dissectors ..... 956
Periosteal Elevators ..... 959
Specialty Elevators ..... 968
Dittel Urethral Sounds ..... 295
Dix Spud and Needles ..... 1127
Doering Carotid End Point Micro Rongeur Forceps ..... 607
Double Action Pin Cutter ..... 828
Double Action Wire Cutters ..... 825
Double Action Wire Extraction Pliers ..... 841
Double Drill Sleeves ..... 864
Double Ended Probes ..... 307
Douglas Cilia Forceps ..... 1109
Downing Cartilage Knife ..... 950
Doyen Abdominal Scissors ..... 118
Doyen Ferguson Scissors ..... 119
Doyen Intestinal Clamps ..... 95
Doyen Raspatories ..... 717
Doyen Retractors ..... 210
Doyen Scissors ..... 119
Dressing Forceps ..... 38, 1102
**Drills, Drill Bits and Guides** ..... 850
Adapters ..... 856
Countersinks ..... 860
Guides and Sleeves ..... 863
Jacobs Chuck End ..... 858
Quick Coupling End ..... 858
Quick Coupling Handles ..... 856
Taps ..... 861
Three-Fluted Drill Bits ..... 859
Dual Cup Grasper ..... 1143

Duffield Scissors....137
Duplay Tenaculum....279
Duval Lung Tissue Forceps....556

# E

**Ear Instruments**....493
Curettes....493
Elevators....494
Forceps....494
Miscellaneous....501
Scissors....498
Specula....499
Ear Knife Blades....501
Eastman Vaginal Retractors....286
Echlin Duckbill Rongeurs....1041
Edna Non-Perforating Towel Clamps....29
Edna Towel Forceps....29
Effler-Groves Double-End Dissector and Hook....793
Effler-Groves Special Lightweight Bulldog® Clamp....561
EFx™ Endo Fascial Closure System....1168
Electrode Handle....1150
Electrode Tips....1150
**Electrosurgery**....1156
Bipolar Forceps and Cords....1156
Coagulation Suction Tubes....1161
Disposable Electrodes....1159
Electrodes....1160
Monopolar Handswitching Forceps....1160
**Elevators**....494
Cobb Elevators....965
Double Ended Elevators....957
Ear Elevators....494
Endoscopic Elevators....967
Metatarsal Elevators....958
Nasal Elevators....503
Penfield Elevators/Dissectors....956
Periosteal Elevators....959
Specialty Elevators....968
Elliot Obstetricial Forceps....270
Emesis Basins....338
Emmett Uterine Probe....272
Emmett Uterine Tenaculum Hooks....291
Endaural Ear Speculum....501
End Cutter....828
Endo Brun Curettes....989
Endo Cone Ring Curettes....990
Endo Epstein Curettes....990
Endoscopic Bone Tamp....1010
Endoscopic Cobb Elevators....967
Endoscopic Penfield Elevator....968
Endoscopic Rib Elevators....968
Endo Scoville Curette....990
Engel Plaster Saw....1081
Eppendorfer Biopsy Punch....266
Epstein Curettes....984
Esmarch Bandage Scissors....101
Esmarch Plaster Shears....101
**Esophagoscopes**....447
Holinger Design....448
Jackson Design....449
Jesberg Design....447
Pillsbury-Jesberg Design....447
Specula....450
Ethmoid Punch....516
Eve Tonsil Snares....531
Ewald Dressing Forceps....35
Ewald Tissue Forceps....45
Example Clamp....607
Excavator and Packer....1094
Excavator and Probe....1095
**Extended Length/Open Bariatric**....249
Forceps and Clamps....249
Knife Handles/Suction Tubes....249
Needle Holders....259
Retractors....261
Scissors....256
Extra Light Technique® Needle Holders....172, 676
Extra-Lightweight Construction Forceps....451
Extra Long Center Blades....229
Eye Scissors....1118
Eye Shields....1131
Eye Spuds/Needles....1127

# F

Face Lift Retractor Fiberoptic Lighting On #2 Deaver Retractor....215
Fansler-Ives Rectal Specula....303
Fansler Operating Speculum....303
Farabeuf Bone Holding Forceps....924
Farabeuf-Lambotte Bone Holding Forceps....925
Farabeuf Periosteal Rasps....978
Farabeuf Retractors....203
Farrell (Lathbury) Applicator....501
Farrell Rubio Retractor....738
Farrier Oval Speculum....500
Farr Retractors....216
Favalaro-Semb Ligature Carriers....554
Favaloro-Morse Sternal Retractors....733
Favaloro Proximal Anastomosis Clamp....633
Feder-Ossoff Micro-Laryngeal Grasping Forceps....420
Feder-Ossoff Micro-Laryngeal Scissors....422
Feder-Ossoff Phonosurgery Instrument Sterilizing Tray....424
Feder-Ossoff Phonosurgery Set....421
Feilchenfeld Splinter Forceps....32
Female Catheter Silvers....297
Ferguson Angiotribe Forceps....298
Ferguson-Frazier Suction Tubes....243
Ferguson Long Dissecting Scissors....128, 668
Fergusson Bone Holding Forceps....925
Ferris-Smith Endoscopic IVD Rongeurs....1065
Ferris-Smith Endoscopic Kerrison Rongeurs....1058
Ferris-Smith Ivd Rongeurs....1065
Ferris-Smith Kerrison Punches....1057
Ferris-Smith Kerrison Rongeurs....1056
Ferris Smith Tissue Forceps....50
Fess Sinoscopy Forceps....514
Fiber Optic Cables....463
Fiber Optic Instrument Cable End Adapters....464
Fibula Bone Holding Forceps....925
Files....970
Filters....371
Fine Stitch Scissors....1114
Finger Ring Cutters....1092
Finochietto Needle Holder....170

Finochietto Retractors ..... 731
Finochietto Rib Retractor ..... 727
Finochietto Thoracic Forceps ..... 77
Finochietto Titanium Sternal Retractor ..... 713
Fisher Tonsil Knife and Dissector ..... 533
"Fish Hook" Neuro Elastic Retractors ..... 367
Fitch Obturators ..... 794
Five Finger Fan ..... 1152
Fixation Pin ..... 1098
Flash Trays ..... 324
Flat Nose K-Wire Pliers ..... 840
Flat Nose Pliers ..... 837
Flexible Endoscopic Forceps ..... 460
Flexible Rake Retractor Skin Hooks ..... 185
Flexible Rulers ..... 1082
**Floor Grade Instruments** ..... 349
  Forceps ..... 349
  Needle Holders ..... 353
  Scissors ..... 354
Flush Wire Cutter ..... 826
Fluvog Slide Attachment For Pilling® Bronchoscopes ..... 441
Foerster Sponge Forceps ..... 25, 250
Foman Nasal Scissors ..... 512
Foman Rasp ..... 975
Fomon Lower Lateral Scissors ..... 513
Fomon Retractor ..... 185
Foraminotomy Punches ..... 1059
Forbes Esophageal Specula ..... 450
**Forceps** ..... 1102
  Bariatric ..... 249
  Biopsy Cup Forceps ..... 452
  Bipolar ..... 1156
  Bone Cutting Forceps ..... 1019
  Bone Holding Forceps ..... 918
  Bone Reduction Forceps ..... 931
  Chalazion Forceps ..... 1110
  Cilia Forceps ..... 1109
  Columella Forceps ..... 1111
  CVT ..... 544
  Delivery Forceps ..... 270
  Dressing Forceps ..... 34, 1102
  Ear Forceps ..... 498
  Electrosurgical ..... 1156, 1160
  Extended Length/Open Bariatric Forceps ..... 249
  Extra Delicate Hemostatic Forceps ..... 73
  Fixation Forceps ..... 1111
  Floor Grade Forceps ..... 349
  Gastrointestinal Forceps ..... 87
  General ..... 25
  Grasping Forceps ..... 454
  Hemostatic Forceps ..... 56
  Jeweler's Forceps ..... 1108
  Laparoscopic ..... 1135
  Laryngoscope Forceps ..... 416
  Laser Scope Forceps ..... 460
  Micro Forceps ..... 550
  Mosquito Forceps ..... 62, 74, 351
  Nail Forceps ..... 1072
  Nasal Forceps ..... 505
  OB/GYN ..... 262
  Ophthalmic ..... 1102
  Pediatric Scope Forceps ..... 460
  Rectal Forceps ..... 298
  Scleral Forceps ..... 1111
  Screw Holding Forceps ..... 876
  Screw Removal Forceps ..... 838
  Splinter Forceps ..... 32
  Sponge Forceps ..... 25
  Tissue Forceps ..... 41, 544, 1104
  Tying Forceps ..... 1106
  Urology Forceps ..... 292
  Wire Cutting Forceps ..... 823
**Forceps, Titanium** ..... 686
  Hemostatic Forceps ..... 692
  Micro Forceps ..... 690
  Tissue and Dressing Forceps ..... 686
Forceps Cases ..... 330
For Difficult Intubations ..... 397
Foreign Body Needles and Spuds ..... 1127
Fox Curettes ..... 312
Fox Eye Shield With Goffman Eye Garters ..... 1131
Frazier Dura Hooks ..... 883
Frazier Hooks ..... 882
Frazier Laminectomy Retractor ..... 916
Frazier Suction Tubes ..... 243
Freeman Face Lift Retractor ..... 195
Freer D Model Septum Knife ..... 508
Freer Double Ended Elevator ..... 503
Freer Double End Elevator ..... 717, 793, 957
Freer Retractor ..... 186
Freer Skin Hook ..... 186
Friedman Rongeur ..... 1025
Frontal Sinus Curette ..... 516
Frontal Sinus Forceps ..... 516
Frontal Sinus Thru-Cut Forceps ..... 515
Front and Side Wire Cutter ..... 826
Fukuda Style Shoulder Retractors ..... 891
Fukushima Suction Tubes ..... 246
Fully Insulated Suction Tube ..... 462


# G


Gabbay-Frater™ Suture Organizer ..... 1164
Garrett Dilator Holders ..... 771
Garrett Vascular Dilators ..... 770
Garrett Vein Passer ..... 797
Garrigue Weighted Vaginal Speculum ..... 285
Gauze Flat Sponges ..... 358
Gelpi Retractors ..... 224
Gelpi-Seletz Retractor ..... 225, 906
Gelpi Standard Retractor ..... 224
Gemini Forceps ..... 78
Gerald Debakey® Tissue Forceps ..... 51, 548
Gerald Diama-Grip Dressing Forceps ..... 549
Gerald Dressing Forceps ..... 37, 250, 547
Gerald Tissue Forceps ..... 50, 548
Gerald Titanium Dressing Forceps ..... 689
Gerald Titanium Tissue Forceps ..... 689
Gerbode-Burford Adult Retractor ..... 738
Gerbode-Burford Child Retractor ..... 729
Gerbode Patent Ductus Clamp ..... 634
Gerbode Sternal Retractors ..... 739
Gerbode Technique® Needle Holder ..... 171, 675
Gerbode Valve Dilator ..... 760
Gerzog Bone Mallet ..... 1014
Giannini Technique® Needle Holder ..... 179, 679
Gigli Saw Blades ..... 1075

Gilles Titanium Tissue Forceps....689
Gillies Converse Skin Hooks....186
Gillies Hooks....882
Gillies Needle Holder Scissors....153
Gillies Zygoma Elevator....504
Glenoid Perforating Forceps....918
Glover Atrial Appendage Clamp....634
Glover Coarctation Clamps....635
Glover Curved Clamps....636
Glover Curved Miniature Pediatric Clamp....593
Glover Patent Ductus Clamps....636
Glover Right Angle Curved Clamps....637
Glover Spoon Shaped Clamps....637
Glover Style Bulldog® Clamps....562
Glover Titanium Auricular Clamp....699
Glover Titanium Coarctation Vascular Clamps....699
Goelet Retractor....204
Goldman-Fox Scissors....143
Goldman Septum Displacer....503
Golf Stick Knives....1096
Gomco® Circumcision Clamps....269
Gomez/Poly-Tract Poly Clamps....242
Gordon Bead Grasping Forceps....455
Gorney Rhytidectomy Scissors....121
Gouges....1005
Goulian Depth Gauge and Guards....24
Goulian Skin Graft Knife Set....23
Grabber Fenestrated Forceps....1143
Gradle Scissors....134, 1119
Graefe Eye Dressing Forceps....1103
Graefe Eye Speculum....1125
Graefe Fixation Forceps....1111
Graefe Strabismus Hooks....1122
Graefe Tissue Forceps....51
Grant Abdominal Aortic Aneurysm Clamps, "Texas Twister"....653
Graves Vaginal Specula....283
Gray Cystic Duct Forceps....78
Green Retractor....197
Greg Comdone Extractor....312
Gregory Carotid Angled Bulldog® Clamp....604
Gregory Internal Carotid "Soft" Bulldog® Clamp....604
Gregory Miniature Vascular Clamps....603
Gregory Profunda Clamps....620
Gregory Technique® Suture "Stay" Clamps....184, 679
Grieshaber Wire Retractors....216
Grooved Director and Tongue Ties....307
Grooved Directors....307
Gross Spoon and Hook....502
Gruber Ear Speculum....501
Gruenwald Bayonet Forceps....38
Grunwald Suture Guide Holder....756
**Guarantee/Warranty....9**
Guidewire with Drillpoint....866
Guilmet Titanium Dressing Forceps....690
Gunnar Roller Clamps....26
Gut and Colon Clamps....99
Guthrie Skin Hook....186
Guyon Catheter Guide....297

# H

Haight Baby Retractor....730
Haight Retractors....214, 746
Haimovici Scissors....669
Hallman Tunneling Forceps....797
Halsey Needle Holders....153
Halsey Titanium Ring Handle Needle Holder....710
Halsted Mosquito Forceps....62
Halsted Mosquito Forceps With Teeth....62
Halsted Titanium Hemostatic Forceps....692
Hamburger-Brennan-Mahorner Retractor....237
Hand-Held Rod Cutter....833
Hank Uterine Dilators....273
Harken Clamps....638
Harrington Clamps....78
Harrington Extra Deep Retractors....210
Harrington Retractors....210
Harrington Spinal Elevator....969
Harrington Splanchnic Retractors....211
Hartman Mosquito Forceps....63
Hartmann Alligator Forceps....495
Hartmann Ear Dressing Forceps....495
Hartmann Ear Speculum....500
Hartmann-Herzfeld Cup Forceps....497
Hartman Rongeur....1030
Hasson "S"....1153
Hatfield Bone Curettes....985
Haverfield-Scoville Hemilaminectomy Retractor Body....913
Hayes Anterior Resection Clamps....96
Hayes Hand Retractors....895
Healon Injection Cannula....1128
Healy-Jako Pediatric Subglottiscope....406
Heaney-Ballantine Hysterectomy Clamps....266
Heaney Ballentine Clamps....255
Heaney Biopsy Curette....275
Heaney Bulldog® Needle Holder....166
Heaney Hysterectomy Forceps....265
Heaney Needle Holders....166, 259
Heaney-Simon Vaginal Retractor....286
Heath Mallet....1017
Heath Suture and Wire Cutting Scissors....111
Heavy Duty Locking Pliers....843
Hegar Baumgartner Needle Holders....163
Hegar Uterine Dilators....274
Heiss Retractors....217
Heiss Titanium Clamping Forceps....699
Heitmiller Mini Thoracotomy Retractor....740, 780
Hemoclip® Clips and Appliers....384
Hemoclip® Plus....382
Hemoclip® Traditional....382
Hem-o-Lok® Endoscopic Appliers....375
Hem-o-lok® Open Appliers....375
Hem-o-Lok® Polymer Ligating Clips....376
Henly Popliteal Retractor....227
Henly Subclavian Artery Clamp....621
Hennig Plaster Spreader....1079
Henrotin Vulsellum....281
Henrotin Weighted Vaginal Speculum....285
Heparin Cannula With Luer-Lok....764
Hepp-Scheidel Dissecting Scissors....1116
Hercules Plaster Scissors....101
Herrick Kidney Clamp....292
Hess Angular Mosquito Tip Serrefine....563
Hexagonal Screwdrivers....869
Hexagonal Screwdriver Shaft....871
Hexagonal Screwdriver Shaft (Pelvic)....869

Hex-Handle Osteotomes ....509
Hibbs and Brun Smartrack For 9" Instruments ....991, 1088
Hibbs Blades ....914
Hibbs Chisels ....1003
Hibbs Endoscopic Gouge ....1008
Hibbs Endoscopic Osteotome ....998
Hibbs Gouges ....1007
Hibbs Osteotomes ....998
Hibbs Retractors ....888
Hiebert Double-Ended Vascular Dilators ....771
High Mayo Perforated Trays ....326
Hi-Level Bandage Scissors ....102
Hill Ferguson Rectal Retractors ....301
Hill Stitch Scissors ....106
Hirschman Anoscopes ....305
Hoen Alligator Forceps ....948
Hoen Hooks ....883
Hohmann Retractors ....896
Hoke Chisels ....1003
Hoke Osteotomes ....995
Holinger Anterior Commissure Laryngoscopes ....393
Holinger Aspirating Tubes ....461
Holinger Cup Biting Specimen Forceps ....452
Holinger Fiberoptic Esophagoscopes ....448
Holinger "Hour Glass" Anterior Commissure Laryngoscopes ....394
Holinger Infant Esophageal Speculum ....450
Holinger Infant (Newborn) Slide Laryngoscope ....390
Holinger Knife Handle ....434, 533
Holinger Laryngeal Knife Handle ....24
Holinger Laryngectomy Tubes ....485
Holinger "Slotted" Anterior Commissure Laryngoscope ....394
Holinger Tracheostomy Tube ....482
Holinger Ventilating Fiberoptic Bronchoscope ....438
Hollinger Laryngeal Dissector ....434
Holman Scope Brushes ....445
Holman Scope Brushes - For Bronchoscopes and Esophagoscopes ....492
Holman Trachea Tube Brushes ....492
Holsher Nerve Retractors ....884
Hook Biopsy Punch ....1140
Hook Scissors ....1148
**Hooks** ....1122
Bone Hooks ....942
Lens Hooks ....1122
Muscle Hooks ....1123
Ophthalmic ....1122
Strabismus Hooks ....1122
Valve Hooks ....758
Horizon™ Cartridge ....378
Horizon™ Clips ....378
Horizon™ 11" Multi-Angle Access Open Surgical Applier ....379
Horizon™ Endosaphenous Vein Applier ....379
Horizontal Retractor ....908
House Alligator Forceps ....495
House Bellucci Mini Alligator Scissors ....499
House Curettes ....494
House Retractor ....494
House Strut Forceps ....496
Howard-Debakey® Aortic Aneurysm Clamps ....653
Howell Coronary Technique® Needle Holder ....171, 675
Howell Valve Technique® Needle Holder ....171, 675
Hudson Drill and Burrs ....854
Hudson Drill Bits ....855
Hudson Tissue Forceps ....45
Hufnagel Aorta Clamps ....639
Hufnagel Titanium Vascular Clamp ....700
Hulka Tenaculum and Probe ....279
Humeral Head Retractor ....892
Hurd Dissector and Pillar Retractor ....529
Hurst Tungsten-Filled Esophageal Bougies ....465
Hysterectomy Scissors ....257

## I

IMA Retractor ....723
Impactor/Bone ....1009
Improved Balfour Retractors Interchangeable Side Blade Model ....231
Improved Henly Retractors ....227, 749
Improved Henly Retractor Side Blades ....228, 749
Improved Holinger Ventilating Fiberoptic Bronchoscopes ....439
Improved Tucker Mediastinoscope ....774
In-Ex Adson Dressing Forceps ....349
In-Ex Adson Tissue Forceps ....349
In-Ex Allis Tissue Forceps ....352
In-Ex Backhaus Towel Clamps ....350
In-Ex Baumgartner Needle Holders ....353
In-Ex Bozeman Uterine Dressing Forceps ....353
In-Ex Crile Forceps ....351
In-Ex Edna Towel Clamp ....350
In-Ex Halsted Mosquito Forceps ....351
In-Ex Hoff Towel Clamp ....350
In-Ex Iris Scissors ....355
In-Ex Kelly Forceps ....352
In-Ex Lister Bandage Scissors ....354
In-Ex Littauer Suture Scissors ....354
In-Ex Mayo Hegar Needle Holders ....354
In-Ex Mayo Scissors ....356
In-Ex Operating Scissors ....355
In-Ex Rochester-Pean Forceps ....352
In-Ex Sponge Forceps ....351
In-Ex Thumb Forceps ....349
In-Ex Webster Needle Holder ....353
In-Ex Wire Scissors ....355
Infant Retractor ....204
Inge Retractor ....910
Ingrown Nail Forceps ....1072
Ingrown Nail Instrument #81 ....1073
Ingrown Nail Splitting Scissors ....1074
Initial Incision (Charnley) Retractor ....911
Inline Ratcheted Handle ....1134
Insert Drill Sleeve ....865
*In Situ* Rod Benders ....877
*In Situ* Venous Valvulotome ....773
*In Situ* Venous Valvulotome Sterilizing Case ....772
**Instrument Accessories** ....329
Bowls ....338
Brushes ....344, 444, 445, 492
Cleaners and Lubricants ....343
Containers and Trays ....322
Instrument Holders and Stringers ....339
Miscellaneous ....348
Sterilization Case and Tray Solutions ....329
Instrument Cleaning Brushes ....344
Instrument Flat Packs ....1090

Instrument Holders and Stringers ....339
Instrument Rack ....342
Instrument Sterilization Tray ....326
Instrument Stringers ....340
Instrument Trays ....326
**Instrumentation Services ....13**
**Instrumentation for Bronchoscopes and Esophagoscopes** ....452
Biopsy Cup Forceps ....452
Forceps for Pediatric and Laser scopes ....460
Grasping Forceps ....454
Suction Tubes ....461
Telescopes and Accessories ....442
**Instrumentation for Laryngoscopes** ....416
Forceps ....416
Laryngeal Mirrors ....436
Laser Instrumentation ....430
Micro-Laryngeal/Feder-Ossoff ....420
Micro-Laryngeal/Jako ....427
Micro-Laryngeal/Jako-Kleinsasser ....425
Miscellaneous ....434
Suction Tubes ....419
Insulated Cautery Suction Tube ....419
Insulated Non-Rotating Handle ....1134
Insulated Rotating Handle ....1134
Insulated Suction Cautery Tube ....775
Interchangeable Osteotome, Chisel and Gouge Set ....1000
Interchangeable Screwdriver Set ....875
Intracardiac Technique® Needle Holders ....173, 677
Intracardiac Titanium Ring Handle Needle Holder ....711
Intraducer® Peritoneal Catheter ....1166
Iodine Cup ....338
Iowa Trumpet Needle Guide ....291
Iris Dressing Forceps ....38
Iris Miniature Scissors ....134, 1119
Iris Ribbon Scissors ....135, 1120
Iris Scissors ....135, 149
Iris Scissors With Barraquer Handle ....132, 1116
Iris Tissue Forceps ....52
Irrigation Cannula ....1128
Israel Rake Retractors ....887
Israel Retractor ....195

# J

Jackson Alligator Grasping Forceps ....776
Jackson Alligator Grasping Forceps - Double-Action ....454
Jackson Alligator Grasping Forceps - Extra Delicate ....454
Jackson Alligator Grasping Forceps - Light Construction ....454
Jackson Alligator Grasping Forceps - Standard ....454
Jackson Cross Action Forceps ....416
Jackson Cup Forceps - Extra Lightweight ....777
Jackson Cup Forceps - Standard, Medium Lightweight ....776
Jackson Direct or Anterior Commissure Laryngoscopes ....392
Jackson Double Prong Grasping Forceps ....456
Jackson Dull-Pointed Ring Rotation Forceps ....456
Jackson Esophageal Dilators ....467
Jackson Extra-Long Tracheostomy Tubes with Rotating Lock ....472
Jackson Fenestrated Meat Grasping Forceps ....456
Jackson Fenestrated Peanut Grasping Forceps ....456
Jackson Fiber Optic Oval Esophagoscopes ....449
Jackson Forceps Parts Kit ....457
Jackson Forward Grasping Cup Forceps ....457
Jackson Improved Style Trachea Tubes For Use With Shikani Speaking Valve ....475
Jackson Improved Tracheostomy Tubes ....474
Jackson Improved Tracheostomy Tubes - Regular Length ....471
Jackson Improved Tracheostomy Tubes - Short Length ....473
Jackson Improved Tracheostomy Tubes With 15 mm Adapter - Regular Length ....473
Jackson Improved Tracheostomy Tubes With 15 mm Adapter - Short Length ....474
Jackson Laryngeal Cup Forceps - Extra-Lightweight 2 mm Cups ....417
Jackson Laryngeal Cup Forceps - Standard Lightweight 4 and 6 mm Cups ....416
Jackson Laryngeal Dilators ....468
Jackson Laryngeal Scissors ....427
Jackson Laryngectomy Tubes ....485
Jackson Open End Aspirating Tube ....419, 462
Jackson Original Tracheostomy Tubes - Regular Length ....478
Jackson Original Tracheostomy Tubes - Short Length ....479
Jackson Original Tracheostomy Tubes With 15 mm Adapter - Regular Length ....480
Jackson Original Tracheostomy Tubes With 15 mm Adapter - Short Length ....480
Jackson Rotation Forceps ....455
Jackson Square Punch Specimen Forceps ....452
Jackson Standard Fiber Optic Slide Laryngoscopes ....391
Jackson Standard Sponge Carrier ....434
Jackson Tracheal Hemostat ....79
Jackson Tracheal Retractor, Double Ended ....191, 490
Jackson Tracheal Tenaculum ....190, 490
Jackson Trachea Retractor ....192, 491
Jackson Triangular Punch Specimen and Tissue Forceps ....417
Jackson-Trousseau Tracheal Dilators ....489
Jackson Vaginal Retractors ....287
Jackson "Velvet-Eye" Aspirating Tubes ....419, 461
Jacobson Bulldog® Clamps ....563
Jacobson Hemostatic Forceps ....73
Jacobson Micro Needle Holder ....179, 682
Jacobson Micro-Surgical Needle Holders ....180, 683
Jacobson Micro Titanium Needle Holders ....707
Jacobson Titanium Castroviejo Needle Holders ....707
Jacobson Vascular Scissors ....672
Jacob's Vulsellum Forceps ....281
Jako-Cherry Micro-Laryngoscope Type II (Newborn) ....396
Jako Coagulation Probe ....427
Jako Fine Ball Tip Hook ....427
Jako Fine Sponge Carrier ....434
Jako Fine Suction Tubes ....428
Jako-Kleinsasser Micro-Laryngeal Cup Forceps ....425
Jako-Kleinsasser Micro-Laryngeal Grasping Forceps ....426
Jako-Kleinsasser Micro-Laryngeal Scissors ....426
Jako Laryngeal Needle Holder ....428
Jako Micro-Laryngoscope Type III ....395
Jako Mirror ....428
Jako Rigid Stem Instruments ....429
Jako Sickle Knife ....428
Jameson Muscle Hook ....1123
Jamison-Metzenbaum Tenotomy Scissors ....130, 669
Jamison Technique® Needle Holder ....172, 676
Jansen Bayonet Dressing Forceps ....39
Jansen Curette ....985
Jansen-Middleton Nasal Rongeurs ....507
Jansen Retractors ....218

Jarcho Tenaculum....279
Javid Carotid Shunt Clamps....605
Jehle Sterile Coronary Catheters....761
Jennings Mouth Gag....527
Jesberg Fenestrated Grasping Forceps....457
Jesberg Oval Esophagoscopes....447
Jeweler's Forceps....1108
Johns Hopkins (Blalock) Bulldog® Clamps....564
Johnson Bulldog® Needle Holder....154
Johnson Needle Holder....154
Johnson Neuroma Retractor....226
Johnson Skin Hook....187
Johnson-Tucker Hook and Fork....1093
Jones Cross-Action Towel Forceps....31
Jones Hemostat....65
Jorgenson Scissors....120, 257
Joseph Bone Saws....1076
Joseph Periosteal Elevator....504
Joseph Rasp....510, 975
Joseph Scissors....136
Joseph Skin Hooks....187
Judd-Allis Intestinal Forceps....89
Julian Needle Holder....172

# K

Kahler Grasping Forceps....458
Kaiser-Pilling® Andrews Suction....791
Kaiser-Pilling® Angle Sickle Knife....790
Kaiser-Pilling® Biopsy Forceps....790
Kaiser-Pilling® Blunt Hook....790
Kaiser-Pilling® Hook....791
Kaiser-Pilling® Spatula....791
Kaiser-Pilling® Sterilizing Tray....792
Kaiser-Pilling® Suction With Thumb Valve....792
Kaiser-Pilling® Debakey®-Type Allis Ring Forceps....789
Kaiser-Pilling® Debakey®-Type Ring Forceps....789
Kaiser-Pilling® Long Jaw Ring Forceps....787
Kaiser-Pilling® Short Jaw Ring Forceps....786
Kaiser-Pilling® Thoracoscopic Forceps....788
Kantrowitz Forceps....79
Kantrowitz Right Angle Forceps....252
Kartchner Internal Carotid Clamp....608
Kay Aortic Anastomosis Clamp....641
Kaye Scissors....136
Kay-Lambert Aortic Anastomosis Clamp....640
Kay Titanium Vascular Clamp....700
"K" Dissector Sponges....359
Kelly Fistula Scissors....137
Kelly Forceps....65
Kelly Placenta Clamp....262
Kelly Retractors....211
Kelly Vulsellum....281
Kelman-Mcpherson Forceps....1106
Kern Bone Holding Forceps....926
Kerrison Cleanpunch® 2 Laminectomy Rongeurs....1049
Kerrison Multi-Bite Punches....1059
Kerrison Rongeur....1058
Kerrison Thru-Cut Rongeur....515
Kevorkian-Young Cervical Biopsy Forceps....267
Kevorkian-Younge Biopsy Curette....276
Kevorkian-Younge Curettes....276
Keyes Dermal Skin Punches....313
Keyhole Brackets....336
Key Periosteal Elevator....960
Killian Nasal Speculums....518
Kirklin Sternal Awls....744
Kirk Mallet....1017
Kirmission Periosteal Rasp....978
Kirschner Bows....848
Kirschner Drill Set....853
Kleinert-Kutz Bone Rasp....976
Kleinert-Kutz Double Action Rongeur....1034
Kleinert Kutz Elevator and Dissector....504, 957
Kleinert-Kutz Micro Clip Applying Forceps....319, 568
Kleinert-Kutz Micro Vessel Clips....315, 567
Kleinert-Kutz Rasp....511, 976
Kleinert-Kutz Skin Hooks....187
Kleinert-Kutz Synovectomy Rongeur....1026, 1032
Kleinert-Kutz Tendon Retrievers....949
Kleinert-Ragnell Retractor....202
Kleinertz-Kutz Hook....188
Klintmalm™ Liver Transplant Clamps....96
KMedic® Cable Cutter....832
KMedic® Cast Spreader....1080
KMedic® CleanPunch® Rongeurs....1047
KMedic® Comdone Extractor (Walton)....313
KMedic® Corwin Wire Twister....819
KMedic® Drill Bit Sterilization Case....857
KMedic® End Cutter....827
KMedic® Gratloch™ Wire Bender....814
KMedic® Jet Wire Twister....821
KMedic® Large Pin Cutter....830
KMedic® P.I. Wire Twister and Tightener....820
KMedic® Side Cutter....824
KMedic® Skin Hook....188
KMedic® Spinal Rongeurs and Punches....1045
KMedic® Utility Shears....102
KMedic® Wire and Pin Drivers and Benders....811
KMedic® Wire and Pin Implants....806
KMedic® Wire Cutter With Safety Inserts....825
Knapp Iris Scissors....137
**Knife Handles**....22
Extended Length/Open Bariatric....249
General....22
Specialty....23
**Knives**....1125
Cartilage Knives....950
Nasal Knives....508
Nucleus Knife....1125
Ophthalmic....1125
Knight Nasal Scissors....513
Knives and Knife Handle....423
Knot Pushers....1151
Knowles Bandage Scissors....102
Kocher Intestinal Clamps....97
Kocker X-Action Forceps....253
Kogan Endocervical Speculum....284
Kolbel Soft Tissue Retractor....903
Krause Nasal Snares....517
Kuntscher Diamond Pointed Awl....943
Kuntscher Extractors....1099
Kuntscher Reamer....1099
Kuntscher Skin Protector....1099
Kuntscher X-Ray Scale....309, 1082
Kuyper-Murphy Sternal Retractors....735
K-Wire and Plate Bender....811

K-Wire Bender ..... 811
K-Wire End Cutter ..... 827
K-Wire Extraction Pliers ..... 839
K-Wire Side Cutter ..... 824

# L

Laborde Tracheal Dilator ..... 489
Lacrimal Cannula ..... 1128
Lacrimal Probe ..... 1126
La Force Adenotomes ..... 521
La Grange Scissors ..... 138
Lahey (Baby Metz) Scissors ..... 122
Lahey Dissecting Forceps ..... 80
Lahey Finger Retractors ..... 192
Lahey Gall Duct Forceps, Slender Blades ..... 80
Lahey Retractor ..... 198
Lahey Traction Forceps ..... 66
Lambert-Kay Aortic Anastomosis Clamp ..... 640
Lambert-Lowman Bone Clamps ..... 939
Lambotte Bone Holding Forceps ..... 926
Lambotte Osteotomes, Curved 9" ..... 994
Lambotte Osteotomes, Straight 7" ..... 993
Lambotte Osteotomes, Straight 9" ..... 994
Lambotte-Style Osteotomes ..... 509, 992
Lamina Spreaders ..... 911
Laminectomy Wedge Sponges ..... 360
Landreneau Thoracoscopy Tray ..... 784
Landreneau Thoroscopy Set ..... 784
Lane Bone Holding Forceps ..... 927
Lane Periosteal Elevator ..... 962
Langenbeck Bone Holding Forceps ..... 924
Langenbeck Metacarpal Saw ..... 1076
Langenbeck Periosteal Elevator ..... 962
Langenbeck Retractors ..... 198, 886
Lap Chole Instrument Inserts ..... 331
**Laparoscopic Instruments** ..... 1134
10 mm Dissectors ..... 1138
5 mm Bipolar Forceps ..... 1141
5 mm Dissectors, Grasping Forceps ..... 1135
5 mm Needle Holders ..... 1147
5 mm Ratcheted Graspers ..... 1142
5 mm Scissors ..... 1148
5-10 mm Biopsy Forceps ..... 1139
Electrodes, Coagulators ..... 1150
Handle Types ..... 1134
Retractors ..... 1152
Telescopes ..... 1151
Trays ..... 1149
Large Countersink ..... 861
Large Hexagonal Screwdriver ..... 870
Large Hexagonal Screwdriver (Pelvic) ..... 870
Large Hex Screwdriver With Universal Joint ..... 870
Large Hex Screwdriver W/ T-Handle ..... 874
Larry Probe and Groove Director ..... 306
Laryngeal Instrumentation For Laryngoscopes and Micro-Laryngoscopes ..... 416
Laryngeal Micro Atomizer ..... 436
Laryngeal Mirrors ..... 436, 524
**Laryngoscope and Laser Laryngoscope** ..... 388
Laryngoscope Holders ..... 411
Laryngoscopes/Monocular View ..... 389
Laser Micro-Laryngoscopes ..... 400
Micro-Laryngoscopes/Binocular View ..... 395
Teeth Guards ..... 389
Venturi Anesthesia Devices ..... 414
Video Laryngoscopes ..... 409
**Laryngoscope and Instrumentation** .....
Laser Instrumentation ..... 430
Micro-Laryngeal/Feder-Ossoff ..... 420
Micro-Laryngeal/Jako ..... 427
Micro-Laryngeal/Jako-Kleinsasser ..... 425
Miscellaneous ..... 434
Ossoff Double-Action Posterior Commissure Laryngoscope ..... 405
Suction Tubes ..... 419
Laser Mirror ..... 289
Laser Operating Platform - Ebonized ..... 430
Laser Spatula Retractors ..... 430
Laser Specula ..... 290
Lawrence Fine Dissecting Forceps ..... 782
Lawrence Hemostatic Forceps ..... 66
Lazy "S" ..... 1153
"L" Brackets ..... 334
Lead Hands ..... 1091
Lebsche Sternum Knife ..... 719
Lees Bronchus Clamps ..... 557
Lejeune Thoracic Forceps ..... 57
Leksell Rongeurs ..... 1039
Leland Jones Clamps ..... 97, 621
Leland-Jones Titanium Vascular Clamps ..... 701
Lemmon Intima Dissectors ..... 793
Lemole-Pilling® Valve Retractor ..... 753
Lemole Self Retaining Atrial Retractor ..... 754
Lemole Side Arm Extension ..... 755
Lemole-Strong Aorta Clamps ..... 641
Lempert Rongeurs ..... 1028
Leur Rongeurs ..... 1032
Lewin Bone Holding Forceps ..... 918
Lewis Rasps ..... 976
Lewis Tonsil Snare ..... 531
Lexer Chisels ..... 1004
Lexer Mini Chisels ..... 1004
Ligation ..... 373
**Ligature Carriers** ..... 319
Ligature Carriers and Wire Passers ..... 849
Miscellaneous ..... 314
Scope and Light Carriers Identification Index ..... 534
Lincoln-Metzenbaum Scissors ..... 131
Lincoln Scissors ..... 131
Lineman Pliers ..... 840
Lister Bandage Scissors ..... 103
Liston Amputating Knives ..... 1077
Liston Bone Cutting Forceps ..... 1020
Littauer Cilia Forceps ..... 1110
Littauer Standard Suture Scissors ..... 106
Littauer Stitch Scissors ..... 106
Littler Dissecting Scissors ..... 1120
Little Retractor ..... 198
Littler Stitch Scissors ..... 107
Litvak Pereyra Ligature Needle ..... 296
Locke Elevators ..... 1096
Locke Phalangeal Forceps ..... 920
Locking Plate Crimper ..... 743
Locking Plates ..... 743
Locking Pliers With Slaphammers ..... 844
Lockwood-Allis Intestinal Tissue Forceps ..... 89

Long 1 mm Pediatric Clamps ..... 575
Long Bevel Osteotomes ..... 993
Long, Double-Action Grasper ..... 1143
Long Grasper, Double-Action ..... 1142
Long Grasper, Single-Action ..... 1142
Long Jaw Needle Nose Pliers ..... 836
Long, Single-Action Grasper ..... 1143
Lore Subglottic Specimen and Tissue Forceps ..... 418
Lore Tube Holding Forceps ..... 26
Lothrop Uvula Retractor ..... 529
Louisville Micro Vessel Approximator With Clips ..... 316, 568
Loutie Wire Tightener ..... 817
Love-Gruenwald Ivd Rongeurs ..... 1061
Love-Kerrison Laminectomy Punches ..... 1051
Love-Kerrison Rongeurs ..... 1053
Lovelace Lung Tissue Forceps ..... 557
Love Nerve Retractors ..... 199
Lower Gall Duct Forceps ..... 81
Lowman Bone Clamps ..... 939
Lowsley Prostatic Retractors ..... 297
Lucae Bayonet Dressing Forceps ..... 39
Lucae Bone Mallets ..... 1012
Luer-Lock Catheter Adapter ..... 435, 767
Luer Tracheostomy Tube ..... 483
Lukens Thymus Retractor ..... 204, 490
Lumbar and Cervical Impactors and Drivers ..... 1010
Lumbar Lamina Spreaders ..... 909

# M

Macquigg-Mixter Forceps ..... 81
Magill Catheter Forceps ..... 523
Magnetic Instrument Mats ..... 348
Mahorner Thyroid Retractor ..... 237
Maini Richardson Double Ended Center Blade For Henly Retractor ..... 228, 750
Maini Side Blade For Henly Retractor ..... 228
Maini Side Blade For Improved Henly Retractor ..... 750
Maki™ Scissors ..... 105
Malleolar Countersink ..... 860
Malleollar Bone Holding Forceps ..... 921
**Mallets** ..... 1011
Heavyweight Mallets ..... 1017
Light and Medium Weight Mallets ..... 1011
Mallet #49 ..... 1012
Mallet Caps ..... 1012
Maloney-Style & Hurst-Style Bougies ..... 465
Maloney Tapered Tungsten-Filled Esophageal Bougies ..... 466
Maltz Rasp ..... 511, 977
Maltz Rasp Improved ..... 977
Maltz-Seeburger Retractors ..... 901
Markham-Meyerding Hemilaminectomy Retractors ..... 905
Marking Rings ..... 794
Marking Ring-Vein Graft ..... 794
Martin Cartilage Clamps ..... 946
Martin Cartilage Scissors ..... 121, 951
Martin Drill ..... 850
Martini Bone Curette ..... 986
Martin Laryngectomy Tubes - Regular and Extension ..... 486
Martin Rectal Hook ..... 305
Maryland Dissectors ..... 1135
Masson Bulldog® Needle Holders ..... 165
Masson Needle Holder ..... 166, 259
Masterson Hysterectomy Forceps ..... 255
Mastin Muscle Forceps ..... 66
Mayo Abdominal Retractor ..... 211
Mayo Beveled Blade Scissors ..... 114
Mayo Clinic Tube ..... 482
Mayo-Collins Retractors ..... 204
Mayo Dissecting Scissors ..... 115
Mayo Dissecting Scissors, TC ..... 116
Mayo (Guyon) Vessel Clamp ..... 98
Mayo-Harrington Scissors ..... 117
Mayo Harrington Super-Cut Scissors ..... 257
Mayo Hegar Broad Bulldog® Needle Holders ..... 165
Mayo Hegar Needle Holders ..... 163, 260
Mayo Hegar Titanium Ring Handle Needle Holders ..... 711
Mayo Masson Needle Holder ..... 260
Mayo Noble Scissors ..... 117
Mayo-Pean Forceps ..... 67
Mayo-Robson Intestinal Clamps ..... 98
Mayo Round Surface Blade Scissors ..... 115
Mayo Scissors ..... 257
Mayo-Stille Scissors ..... 117
Mayo Trays ..... 326
Mayo Vessel Clamp ..... 293
Mcallister Bulldog® Needle Holder ..... 167
Mcburney Retractor ..... 199
Mcclean Obstetricial Forceps ..... 270
Mcclure Iris Scissors ..... 132, 673, 1113
Mcdougal™ Prostatectomy Clamps ..... 293
Mcgivney Forceps ..... 299
Mcglamery® Metatarsal Elevator ..... 958
Mcindoe Bone Cutting Forceps ..... 1019
Mcindoe Titanium Tissue Forceps ..... 690
Mcivor Mouth Gag ..... 527
Mckenty Elevator ..... 504, 959
Mclean-Tucker-Luikart Obstetrical Forceps ..... 271
Mcpherson Tissue Forceps ..... 1105
Mead Mallet ..... 1014
Mead Rongeur ..... 1030
**Measuring Devices** ..... 1082
Calipers ..... 1083
Measuring Tape ..... 310, 1082
Rulers ..... 1082
Specialty ..... 1084
**Measuring Guidelines and Common Jaw Patterns of Surgical Instruments ..... 18**
Mediastinal Blunt-Tipped Dissecting Forceps ..... 777
**Mediastinoscopy** ..... 774
Clips and Appliers ..... 779
Instrumentation ..... 775
Mediastinoscopes ..... 774
Scope Holders ..... 778
Medicine Cup ..... 338
Medium Pin Cutter ..... 829
Meeker Dissecting Forceps ..... 783
Meeker Hemostatic Dissecting Forceps ..... 81
Meltzer Adenoid Punch ..... 533
Meniscus Clamp ..... 947
Metal Labels ..... 370
Metzenbaum Scissors ..... 123, 258
Metzenbaum Scissors, Curved ..... 783
Metzenbaum Scissors, Delicate ..... 122
Meyerding Blades ..... 913
Meyerding Finger Retractors ..... 200
Meyerding Laminectomy Retractors ..... 887, 905

Meyhoeffer Currettes ..... 1124
M.G.H. Vulsellum ..... 282
Michel Clip Applying Forceps ..... 320
Michel Clip Forceps ..... 320
Michele Trephine ..... 868
Michel Skin Clips ..... 320
Micro-Aneurysm Bulldog® Clips and Appliers ..... 571
Micro Clamp Applicator ..... 319
Micro Clamp Case ..... 321
Micro Clips and Appliers ..... 315
Temporary Vessel Clips ..... 315
Micro Clip Sterilizing Tray ..... 321, 572
Micro Diama-Grip Ring Forceps ..... 552
Micro Dissector ..... 1136
Micro Friedman Rongeurs ..... 1024
Micro Grasping Forceps ..... 550
Micro Instrument Trays ..... 323
Micro-Laryngeal Forceps ..... 425
Micro-Laryngeal Probes - Ebonized ..... 433
Microminiature Alligator Forceps ..... 495
Micro Mosquito Forceps ..... 74
Micro Reill Scissors ..... 1113
Micro Ring Tip Forceps ..... 552
Micro Scissors ..... 1148
Micro Spring Scissors ..... 1113, 1117
Microsubglottic Instruments ..... 408, 432
Micro Surgery Needle Holders ..... 176, 683
Micro Surgery Technique® Needle Holders ..... 179, 680
Microsurgical Cases ..... 332
Micro Tip ..... 1141
Micro Titanium Castroviejo Needle Holders ..... 707
Micro Titanium Diama-Grip Tying Forceps ..... 691
Micro Titanium Scissors ..... 704
Micro Tying Forceps ..... 551, 1106
Micro Vascular Anastomosis Scissors ..... 672
Micro Vascular Nerve Hook ..... 759
Micro Vascular Round Handle Needle Holders ..... 175, 683
Micro Vascular Scissors ..... 663
Micro Vascular Set Of 11 Instruments ..... 798
Microvascular Titanium Ring Handle Needle Holders ..... 712
Milan-London Vacuum Tube ..... 289
Miller-Senn Retractors ..... 207
Mills Valvulotome ..... 772
Mini-Aneurysm Bulldog® Clips and Appliers ..... 572
Miniature Eye Scissors ..... 1118
Miniature Pediatric Clamps ..... 594
Miniature Satinsky Reynolds Clamps ..... 593
Mini Countersink ..... 860
Mini Cruciform Screwdriver Bit ..... 873
Mini Freidman Fongeurs ..... 1025
Mini Hexagonal Screwdriver ..... 871
Mini Hohmann Retractors ..... 895
Mini-Lambotte Osteotomes, Straight 5" ..... 992
Mini Mallet ..... 1011
Mini Osteotomes ..... 509, 995
Mini Plate Bending Iron ..... 879
Mini Plate Bending Pliers ..... 844
Mini Quick Coupling Handle ..... 856
Mini Screw Fixation Set ..... 875
Mini Weck® Micro Vessel Approximator ..... 316
**Mirrors** ..... 524
Laryngeal Mirrors ..... 524
**Miscellaneous CVT** ..... 793
Endarterectomy Dissectors ..... 793
Marking Rings ..... 794
Obturators ..... 794
Tourniquet Stylets ..... 795
Tunnelers ..... 796
**Miscellaneous General** ..... 307
Dermal Instruments ..... 312
Ligature Carriers ..... 314
Measuring Devices ..... 309
Probes, Cannulae and Dilators ..... 307
**Miscellaneous Orthopedic** ..... 1091
Diagnostic Instruments ..... 1092
Lead Hands ..... 1091
Ring Cutters ..... 1092
Specialty Hand Instruments ..... 1093
Miskimon Cerebellum Retractor ..... 905
Mitchel-Adam Multipurpose Clamp ..... 622
Mitchell Aortomy Clamp ..... 642
Mixter Clamps ..... 82
Mixter Dissecting Forceps ..... 82
Mixter Dissectors ..... 1135, 1138
Mixter Forceps ..... 83, 97
Mixter Gall Duct Forceps ..... 83
Mixter "Pedi" Gall Duct Forceps ..... 84
Mixter Right Angle Forceps ..... 252
Mixter Thoracic Forceps ..... 82
Mogen Circumcision Clamp ..... 269
Moisture Barrier For $Co_2$ Coupler-Manipulator ..... 440
Moleskin Scissors ..... 104
Moore Drill and Bit Set ..... 850
Mooreland Rongeur ..... 1059
Morris Ascending Aorta Clamps ..... 643
Morse-Andrews Suction Tube ..... 248, 765
Morse Sternal Retractors With Double Blades ..... 732
Morse Towel Clip Tubing Holders ..... 26
Morse Valve Retractor ..... 752
Mosquito Forceps ..... 63
Mosquito Forceps Serrated ..... 64
**Mouth and Throat Instruments** ..... 521
Adenotomes/Tonselectomes ..... 521
Curettes ..... 522
Forceps ..... 523
Laryngeal Mirrors ..... 524
Miscellaneous ..... 533
Mouth Gags ..... 524
Retractors ..... 528
Scissors ..... 530
Snares ..... 531
Mouth Gags ..... 524
Mueller Capsule Scissors ..... 951
Mueller Rake Retractor ..... 194
Multipurpose Retractors ..... 229, 748
Multipurpose Stainless Steel Trays ..... 325
Murphy Bone Skid ..... 890
Murphy Rake Retractors ..... 193
Mycotic Nail Nippers ..... 1068
Myringotomy Knife ..... 502

# N

**N-Compass™ Instrument Management System** ..... **14**
**Nail Instruments** ..... 1068
Forceps ..... 1072
Instruments ..... 1074

Nippers ....1068
Scissors....1073
Splitters....1070
Nail Nippers....1069
Nail Rasp #93....972
Narrow Nose Wire Pulling Forceps ....835
Narrow Tip Mallet....1011
**Nasal Instruments**....503
Elevators ....503
Forceps ....505
Knives ....508
Miscellaneous....520
Osteotomes....508
Raspatories ....509
Scissors....512
Sinus Instruments ....514
Snares ....517
Specula....518
Nasal Snare Wires ....517
**Needle Holders**....150
Bariatric ....259
Berry Sternal Technique® Needle Holder....183, 684
Castro-Type Micro Needle Holders ....175
CVT-Type Needle Holders....169
Extended Length/Open Bariatric....259
Floor Grade Needle Holders ....353
General Needle Holders....150
Intracardiac Technique® Needle Holders....173, 677
Laparoscopic ....1147
Ophthalmic ....1121
Pilling® Extra Light Technique® Needle Holders ....172, 676
Suture Tags....184
Wire Twisters....182
**Needle Holders, Titanium** ....707
Flat Handle Micro Needle Holders ....708
Ring Handle Needle Holders....709
Round Handle Micro Needle Holders....707
Needle Nose Locking Pliers....843
Needle Nose Pliers ....835
Needles, Urology....295
Neivert-Eve Tonsil Snare....531
Neivert Needle Holder ....155
Nelson Lobectomy Scissors....129
Nelson Metzenbaum Scissors....258
Nelson Metzenbaum Super-Cut Scissors ....258
Nelson Scissors ....129
Nelson Tissue Forceps ....53, 549
Nerve Root Retractor ....884
Neuro Caliper....311, 1083
Neurofeel Micro Scissors....672
Neuro Sponges....360
Nevins Forceps....40
News Trachea Retractor....190, 490
NextStitch® Valve Suture ....1164
Nicholas-Jehle Sterile Multi-Headed Perfusion Catheter ....761
Nichols Tubing Holder....27
Nippers ....1068
Nolan Needle Holders ....261
Non-Insulated Non-Rotating Handle ....1134
Non-Insulated Rotating Handle ....1134
Non-Perforated Container Bottom ....368
Norris Sponge Holding Forceps ....418, 778
Norris Tracheostomy Buttons....487
Northbent Stitch Scissors ....107
Novak Biopsy Curette....276
Noyes Ear Forceps....496
Noyes Nasal Alligator Forceps....505
Nucleus Knife ....1125
Nylon Head Mallet Faces ....1013
Nylon Head Mallets ....1013


# O


**OB/GYN**....262
Biopsy Punch....266
Circumcision Clamps....269
Curettes ....275
Delivery Forceps....270
Forceps and Clamps ....262
Laser Instruments ....288
Miscellaneous....291
Probes, Sounds and Dilators....272
Retractors ....286
Scissors....271
Specula....283
Tenaculums and Vulsellums....278
Obturators....794
Ochsner-Favaloro Improved Retractor Set
With Poly Clamps ....723
Ochsner-Favaloro Retractor Parts ....724
Ochsner-Favaloro Retractor Set....724
Ochsner Forceps (Kocher) ....69
Ochsner Ribbon Retractors....214
O'Conner Skin Hook ....188
O'Connor Hook ....1123
Offset Metzenbaum Scissors ....670
Oldberg IVD Rongeur....1064
Olivekrona Double End Dissectors ....793
Ollier Rake Retractor....195, 887
Olsen Hegar Needle Holder and Scissors ....158
Olsen-Hegar Needle Holders ....159
One-Handed Rod Bender ....877
O'Neill Double Curved Clamp ....644
**Operating Scissors**....114
Operating Scissors, B/B....113
Operating Scissors, S/B ....113
Operating Scissors, S/S....113
Operating Scissors, TC....114
Ophthalmic Instruments ....1100
O'Reilly Esophageal....1153
Original Henly Popliteal Retractor....226, 750
Orthopedic Mallets....1016
**Orthopedic Retractors**....882
Hand-Held Orthopedic Retractors....882
Hohmann Retractors ....895
Self-Retaining Orthopedic Retractors ....899
Shoulder and Knee Retractors....891
O'Shaughnessy Titanium Clamping Forceps ....701
Ossoff Adult Subglottiscopes....407
Ossoff Double-Action Posterior Commissure
Laryngoscope ....405
Ossoff-Karlan-Dedo Laser Micro-Laryngoscopes ....402
Ossoff-Karlan Grasping Forceps - Ebonized ....433
Ossoff-Karlan-Jako Laser Micro-Laryngoscope....403
Ossoff-Karlan Micro Suction Tube - Ebonized ....433
Ossoff-Karlan Posterior Commissure Micro-Laryngoscope.404
Ossoff-Karlan Vocal Cord Roller - Ebonized....434

Ossoff-Pilling® Micro-Laryngoscope ..... 398
Ossoff-Pilling® Micro-Laryngoscope (Laser Finish) ..... 403
Ossoff Micro Suction Tube Ebonized ..... 289
Osteotome Case ..... 332
**Osteotomes** ..... 992
Cobb ..... 999
Hibbs ..... 998
Hoke ..... 995
Interchangeable Osteotome, Chisel and Gouge Set ..... 1000
Lambotte ..... 992
Nasal ..... 508
Sheehan ..... 996
Silver ..... 996
Smartrack ..... 1001
Smith Peterson ..... 999
Specialty ..... 995
Stille ..... 997
US Army ..... 997
Osteotome, Smartrack ..... 1086
O'Sullivan-O'Connor Abdominal Retractors ..... 234
Oval Spoon Forceps ..... 497

# P

Paddle Babcock Grasper ..... 1145
Parallel Drill Guide and Drill Sleeve ..... 864
Parallel Pliers ..... 841
Parallel Pliers With Cutter ..... 842
Parham-Martin Bone Clamp ..... 922
Parker-Mott Retractors ..... 205
Parker Retractors ..... 205
Par Needle Holders ..... 155
Par Scissors ..... 138
Parsonnet Epicardial Retractor ..... 720
Pass Thru Brackets ..... 336
Patella Bone Holding Forceps ..... 923
Pate Tray Posts ..... 327
Patient Size Listing ..... 388
Patterson Elongated Cup Biting Forceps ..... 418, 777
Patterson Trocar and Cannula ..... 308
Pean Clamps ..... 67
Peanut Sponges ..... 362
Peapod IVD Rongeur ..... 1060
Peck-Joseph Skin Hook ..... 188
Peck Mallet ..... 1014
Peck-Vienna Nasal Speculum ..... 519
Pederson Vaginal Specula ..... 284
Pediatric Bronchoscopic Instruments ..... 460
Pediatric Cast Breaker ..... 1078
Pediatric Mixter Dissecting Forceps ..... 83
Pediatric Poole Suction Tube ..... 244
Pediatric Titanium Sternal Spreader ..... 713
Pediatric Universal Clamps ..... 751
Peers Towel Forceps ..... 31
Pelvic Ball Spike ..... 1098
Pelvic Reduction Forceps ..... 937
Pelvic Retractor ..... 890
Penfield Elevators ..... 956
Pennington Forceps ..... 99
Pennington Grasping Forceps ..... 781
Percy Amputation Shield ..... 1077
Perforated Container Lid ..... 368
Perforated Mayo Trays ..... 327
Perforated Silicone Mat ..... 369
Perforated Tray With Feet ..... 369
Periosteal Elevator ..... 964
Perpendicular Nerve Retractor ..... 885
Perthes Bone Awl ..... 944
Phaneuf Uterine Artery Forceps ..... 264
Phenolic Handle Mallets ..... 1018
P.I. Buried K-Wire Set ..... 815
Piffard Curettes ..... 313
**Pilling® and KMedic® Surgical Instruments ..... 7**
Pilling®-Wolvek Sternal Approximation and Fixation System ..... 743
Pillsbury-Jesberg Esophagoscopes ..... 447
Pin Cutters ..... 827
Pin Mats ..... 337
Pin Pulling Pliers ..... 838
P.I. Plug Cutter ..... 868
**Policies and Procedures ..... 11**
Plain Splinter Forceps ..... 32
Plaster Cast Instruments ..... 1078
Plastic Scissors ..... 139
Plasti Stats® Adson Forceps ..... 74
Plasti Stats® Collier Forceps ..... 74
Plasti Stats® Crile Hemostats ..... 75
Plasti Stats® Kocher Forceps ..... 75
Plasti Stats® Mosquito Forceps ..... 75
Plate and Bone Holding Forceps ..... 922
Plate Bending Iron ..... 880
Plate Bending Pliers ..... 845
Plate Bending Press ..... 846
Plate Cutting Forceps ..... 831
Plate Holding Clips ..... 881
Platform Tying Forceps ..... 1107
Platypus Nail Removing Forceps ..... 1073
**Pliers** ..... 835
Locking Pliers ..... 843
Plate Bending Pliers ..... 844
Socket Wrenches ..... 847
Plug Cutter ..... 868
Pointed Drill Guide ..... 866
Polk Finger Goniometer ..... 310, 1084
Polk Placenta Forceps ..... 263
Polokoff Bone Rasps ..... 977
Polysulfone Sterilization Trays ..... 324
Pool Abdominal Suction Tubes ..... 244
Poole Suction Tubes ..... 249
Ports, Laparoscopic Access ..... 1167
Potts Micro Titanium Scissors ..... 706
Potts Scissors ..... 663
Potts Smith Dissecting Scissors ..... 670
Potts-Smith Dressing Forceps ..... 40
Potts Smith Forceps ..... 249
Potts Smith Scissors ..... 664
Potts-Smith Technique® Dressing Forceps ..... 40
Potts-Smith Tissue Forceps ..... 54
Potts Smith Vascular Scissors ..... 665
Potts Tenotomy Scissors ..... 130, 258, 670
Pratt Crypt Hook ..... 306
Pratt Rectal Specula ..... 304
Pratt "T" Forceps ..... 299
Pratt Uterine Dilators ..... 275
Preemie Retractor ..... 727
Premium Diamond-Edge Aortic Punch, Full Length ..... 762
Premium Diamond-Edge Aortic Punch, Mid-Length ..... 762

Presbyterian Hospital Tubing Clamp ..... 27
Preston Ligamentum Flavum Forceps (Meniscus) ..... 948
Probe and Packer ..... 1094
Probe/Elevators ..... 423
**Probes, Cannulae and Dilators** ..... 307
OB/GYN Probes, Sounds and Dilators ..... 272
Probes, Knot Pushers (Laparoscopic) ..... 1151
Probes, Ophthalmic ..... 1126
Probes with Proximal Eye ..... 308
Providence Hospital Forceps ..... 70
Providence Hospital Hemostats ..... 71
Pryor-Pean Retractor ..... 287
**Punches** ..... 266
Aortic Punches ..... 762
Biopsy Punch ..... 266
Reusable Punches ..... 763
Spinal Rongeur and Punch ..... 1045
Putti Bone Rasp ..... 973

# R

Ragnell-Linde Retractor ..... 885
Ragnell Retractor ..... 205
Ragnell Scissors ..... 140
Ragnell Scissors, Delicate ..... 140
Rail Clamps ..... 339, 725
Ralks Drill ..... 851
Randall Kidney Stone Grasping Forceps ..... 292
Randall Suction Biopsy Curette ..... 277
Raney Clip Applying Forceps ..... 367
Raney Gigli Saw Guide ..... 1076
Raney Nylon Clips ..... 367
Rankin Forceps ..... 71
Rankin-Kelly Hemostat Forceps ..... 71
Raspatories ..... 509
Raspatories and Periosteal Elevators ..... 716
**Rasps** ..... 972
Bone Rasp ..... 974
Bone Rasp #64 ..... 972
Ratchet Lock ..... 655
Ratcheted Grasper ..... 1142
Ratcheted Non-Rotating Handle ..... 1134
Ratcheted Rotating Handle ..... 1134
Ray Pituitary Curettes ..... 988
**Rectal** ..... 298
Forceps and Clamps ..... 298
Miscellaneous ..... 305
Retractors and Specula ..... 301
Rectal Biopsy Forceps ..... 299
Reill Bone Reduction Forceps ..... 932
Reiner Plaster Knife ..... 1080
Renal Artery Titanium Vascular Clamp ..... 702
Renal Perfusion Clamps ..... 570
Replacement Clips ..... 415
Replacement Guide Silicone Caps ..... 443
Replacement Luer-Lok Hub Adapter ..... 415
Replacement Stylet For Rumel Tourniquet ..... 795
Replacement Telescope Guide Silicone Caps ..... 442
Replogie Pediatric Aorta Cross Clamp ..... 589
Replogle Infant Sternal Retractor ..... 730
Reprocussion Free Mallet ..... 1018
Reprocussion Free Mallet Cap ..... 1018
Retraction Grasper ..... 1142
Retractor Fiber Optic "Light Beam" ..... 242
**Retractors** ..... 720
Bariatric ..... 261
Epicardial ..... 720
Extended Length/Open Bariatric ..... 261
Hand-Held ..... 744
Henly-Type Retractors ..... 748
IMA ..... 720
Laparoscopic ..... 1152
Mouth and Throat Retractors ..... 528
OB/GYN Retractors ..... 286
Pilling® Sternal Retractor and Rib Spreader Dimensions ..... 741
Rectal Retractors and Specula ..... 301
Sternal Closure ..... 743
Sternal Retractors/Rib Spreaders ..... 727
Titanium Instruments ..... 713
Urology Retractors ..... 297
Valve Retractors ..... 751
**Retractors, Hand-Held** ..... 185
Abdominal-Type Retractors ..... 207
Double Ended Retractors ..... 201
Hook and Rake Retractors ..... 190
Ribbon-Type Malleable Retractors ..... 214
Single Ended Retractors ..... 196
Skin Hooks ..... 185
Specialty Retractors ..... 215
**Retractors, Orthopedic** ..... 882
Hand-Held Orthopedic Retractors ..... 882
Hohmann Retractors ..... 895
Self-Retaining Orthopedic Retractors ..... 899
Shoulder and Knee Retractors ..... 891
Vickers Finger ..... 899
**Retractors, Self-Retaining** ..... 216
Abdominal/Balfour-Type Retractors ..... 230
Thyroid Retractors ..... 237
Weitlaner, Gelpi and Henly-Type Retractors ..... 218
Wire and Alm-Type Retractors ..... 216
**Retractors, Table-Mounted** ..... 238
Circutract Retractor System ..... 238
Miscellaneous Retractors ..... 242
Wishbone Retractor System ..... 240
Revuelta-Garcia Allis Curved Clamps ..... 557
Revuelta Garcia Valve Leaflet Retractor ..... 752
Revuelta-Garcia Valve Mirror ..... 759
Revuelta-Garcia Valve Scissors ..... 671
Rhinoplasty Flat Tip Scissors ..... 513
Rhoton Ball-Tipped Dissectors ..... 953
Rhoton Elevators ..... 953
Rhoton Micro Curettes ..... 954
Rhoton Micro Dissection Hooks ..... 954
Rhoton Needle Sharp ..... 954
Rhoton Round Dissectors ..... 955
Rhoton Spatula Dissectors ..... 955
**Rib Instruments** ..... 714
Approximators ..... 716
Raspatories and Periosteal Elevators ..... 716
Rib Shears / Sternum Cutters ..... 718
Rongeurs ..... 714
Ribbon Retractors ..... 214
Richardson Appendectomy Retractor ..... 211
Richardson-Eastman Retractors ..... 212
Richardson Retractors ..... 212
Richter Heath Clip Forceps ..... 320
Rienhoff Retractors ..... 736

Rienhoff Swan-Neck Clamp ....84
Right Angle Clamp....253
Right Angle X-Action Forceps....253
Rigid Endoscope....444
Rigid Rake Retractor Skin Hooks....188
Ring Curettes....988
Rizzuti Angled Micro Clip Applying Forceps ....319, 569
Rochester Ochsner Forceps....254
Rochester-Ochsner Forceps (Kocher)....70
Rochester Pean Forceps.... 68, 254
Rochester-Pean Forceps, 12"....69
Rochester Pean Hemostatic Forceps....254
Rod Cutters....816
Rod Holder....878
Roeder Towel Forceps....31
Rogers Hysterectomy Forceps....255
Roger Wire Cutting Scissors.... 111
Rollet Retractor....189
Rongeur #4 ....1023
Rongeur #4A....1023
Rongeur #10 (1A)....1024
Rongeur, Ergo Grip Handle....1134
**Rongeurs** ....1023
Aortic Valve Rongeurs....757
Double Action Design....1033
Kerrison Rongeurs — CleanPunch® 2 ....1049
Kerrison Rongeurs — Thin Footplate Design ....1050
Kerrison Rongeurs — Standard Design....1051
IVD Rongeurs ....1060
Rib Shears / Sternum Cutters ....718
Single Action Design....1023
Spinal Rongeur and Punch....1045
Roos Brachial Plexus Root Retractor....747
Roos First Rib Shear....718
Roos Scalenectomy Forceps ....84
Rosebud/Cherry Sponges ....363
Rosenbloom Sesamoid Clamp....940
Rosen Suction Tubes....245
Rotating Rectal Biopsy Forceps....300
Rotating Tip Fiber Optic Cable Adapter ....464
Round Cup Forceps ....497
Round Shaft Beaver Blade Handles....23
Roux Retractors....206
Rubin Septal Morselizer....506
Rubio Technique® Wire Twister ....182, 685
Rulers....309
Rumel Thoracic Forceps ....85
Rush Awl And Reamers....944
Ruskin-Liston Bone Cutting Forceps....1021
Ruskin Rongeur ....714, 1035
Russian Tissue Forceps....55, 250
Ryder Bulldog® Needle Holders....160
Ryder Extra Fine Technique® Needle Holders....160, 678
Ryder French Eye Needle Holders....159
Ryder Needle Holders....160
Ryder Titanium Ring Handle Needle Holders....712

# S

Saalfeld Comdone Extractor....313
Sachs Nerve Elevator ....969
Safety Handle....324
Sage Tonsil Snare ....532
Sam Roberts Cup Biopsy Forceps ....453
Santulli Angular Model Bulldog® Clamp....564
Sarot Bronchus Clamps....558
Sarot Intra-Thoracic Artery Forceps....72
Sarot Needle Holder....168
Satinsky Clamps ....645
Satinsky Scissors....671
Satinsky Titanium Vascular Clamps....702
Satterlee Bone Saw ....1077
Satterlee Saw Blades Only ....1077
Sauerbruch Retractors....201
Sauerbruch Rongeurs ....715
Saws and Knives....1075
Sawtell Hemostatic Forceps ....85
Sawyer Rectal Retractors....301
Saxena Bone Grafting Retractor....910
Sayre Periosteal Elevator ....963
**Scales and Gauges....16**
Scalp Contour Retractors....220, 903
Schamberg Comdone Extractors....314
Schanz Pins (Partially Threaded)....810
Schlesinger Cervical Laminectomy Rongeurs....1056
Schlesinger IVD Rongeurs ....1063
Schnidt Forceps (Tonsil) ....72
Schnitman Sharp Skin Hook With Eye....189
Schroeder Tenaculum....279, 290
Schroeder Vulsellum ....282
Schubert Biopsy Punches ....267
Schumaker Angular Aorta Clamps....646
Schwartz Clamp Holding Forceps ....569
Schwartz Micro-Bulldog® Clamps ....569
**Scissors** ....656
Bandage Scissors and Shears ....101
Bariatric ....256
Cartilage Scissors....951
CVT ....656
Delicate and Iris-Type Scissors ....132
Ear Scissors ....498
Extended Length/Open Bariatric....256
Floor Grade Scissors ....354
General....101
Laparoscopic ....1148
Mayo-Type Scissors.... 114
Metzenbaum-Type Scissors ....122
Micro Scissors ....705
Mouth and Throat Scissors ....530
Nail Scissors ....1073
Nasal Scissors....512
OB/GYN Scissors....271
Operating Scissors .... 112
Ophthalmic .... 1112
Plastic....139
Potts-Style Scissors.... 656, 706
Ring Handle, Ophthalmic .... 1118
Spring Handle, Ophthalmic.... 1112
Stitch and Suture Removal Scissors ....106
Super-Cut and Ultimate-Cut Scissors....144
Titanium Scissors ....704
Titanium Micro Scissors ....704
Vascular and Cardiac Scissors ....667
Venous Valve ....673
Wire Cutting Scissors.... 110
Scope And Light Carriers Identification Index....534
Scope Case....329

Scopes....534
Scoville Blades....914
Scoville Curettes....984
Scoville-Haverfield Retractor Blade....913
Scoville Hemilaminectomy Retractor Body....912
Scoville Nerve Root Retractors....885
Scope Holder/Mediastinoscopy....774
Screw Depth Gauges....874
**Screw Drivers**....869
Cruciform Head....873
Depth Gauge....874
Hex Head....869
Screw Driver Sets....875
Screw Holding Forceps....876
Screwdriver Sleeves....870
Screw Removal Forceps....838
T-Handle....874
Scrub Files....344
Sedillot Periosteal Elevator....963
Self-Retaining Screw Holding Forceps....876
Selman Tissue Forceps....55
Selverstone Ivd Rongeur....1060
Semb Bone Holding Forceps....923
Semb Dissecting Forceps....554
Semb Ligature Forceps....554
Semb Retractor....201
Semken Dressing Forceps....41
Semkin Tissue Forceps....52
Senning Featherweight Bulldog® Clamps....565
Senn-Kanavel Delicate Retractor....206
Senn Retractors....206
Serrefines Cross-Action Clamps....73
Shambaugh Adenoid Curettes....522
Shambaugh Reverse Curve Adenotomes....521
Shanz Pins....810
Sharp Hook....942
Shea Vein Graft Scissors....140
**Shears**....718
Rib Shears/Sternum Cutters....718
Sheehan Osteotomes....996
Sheppard Incision Irrigation Cannula....1128
Shikani-French Speaking Valve and Inner Tube Combination....476
Shikani-French Tracheostomy Speaking Valve....477
Short 1 mm Pediatric Clamps....576
Short Jaw Nail Splitters....1072
Shortbent Stitch Scissors....108
Shoulder Penetrating Awl....944
Shoulder Penetrating Gouge....1006
Shoulder Percussion Awls....945
Side Biter Forceps....515
Side Cutter....824
Side Pin Cutter....829
Silicone Mats....327
Silver Osteotomes....996
Simpson-Luikart Obstetrical Forceps....271
Simpson Obstetrical Forceps....271
Simpson Uterine Sound....273
Sims Rectal Speculum....304
Sims Scissors....119
Sims Uterine Curettes....277
Sims Uterine Sounds....273
Sims Vaginal Retractors....287
Single One-Piece Fiber Optic Light Carriers/Cables....401
Single Slot Screwdriver....872
Singley Dressing Forceps....250
Singley Tissue Forceps....53, 550
Sinskey Micro Lens Hooks....1122
Sinus Instruments....514
Sinus Seeker....516
Sisson Nerve Hook....190, 759
Sistrunk Fine Scissors....120
Sistrunk Heavy Scissors....120
Skillman Mosquito Forceps....64
Skin Hooks....185
Skin Self-Retaining Retractors....217
Skin Staplers....1169
Slender Pederson Speculum....284
Slide-Lock Handle....1134
Slip Joint Pliers....840
Slotted "U" Brackets....335
Sluder-Jansen Mouth Gag....528
Small Countersinks....860
Small Pin Cutter....829
Small Plate Bending Irons....879
Small Plate Bending Pliers....846
Small Quick Coupling Handle....856
Small Quick Coupling T-Handle....856
Smartracks....1085
Smartrack Lambotte For 9" Osteotomes....1088
Smillie Knee Retractors....894
Smillie Knives....950
Smith-Petersen Laminectomy Rongeur....1037
Smith Peterson Gouges....1006
Smith Peterson Osteotome....999
Smith Peterson Smartrack....1089
Smith Rectal Retractor....301
Smithwick Dissector and Hook....883
Smithwick Hook and Dissector....953
Snake Tooth Grasper....1144
**Snares**....531
Mouth and Throat Snares....531
Nasal Snares....517
Snitman Endaural Retractor....902
Snook Hook....883
Socket Wrenches....847
Solid Copper Head Mallet....1011
Solvay Spay Hook....191
Somer Uterine Elevating Forceps....263
Sonnenschein Child Nasal Speculum....518
Sounds, OB/GYN....272
Sounds, Urology....295
Spatula and Packer....1094
Specialty Sponges....357
**Specialty Trays**....1090
Flat Packs....1090
**Specula**....1125
Ear Specula....499
Esophagoscope Specula....450
Nasal Specula....518
OB/GYN Specula....283
Ophthalmic....1125
Rectal....301
Spencer Coronary Technique® Needle Holder....179, 680
Spencer Scissors....108
Spencer Stitch Scissors....109
Spinal Implant Removal Set....1066
Splinter Forceps....32

Splitters, Nail ..... 1070
Sponge Bowls ..... 338
Sponges ..... 357
Spoon Grasper ..... 1139
Spring-Loaded Non-Rotating Handle ..... 1134
Spurling Ivd Rongeurs ..... 1062
Spurling-Kerrison Punches ..... 1054
Squeeze Handle ..... 1134
"S" Retractor ..... 201
SS Riser Bracket ..... 335
Stagbeetle Bone Reduction Forceps ..... 931
Stainless Steel Wire Cutting Forceps ..... 823
Stamey Needles ..... 296
Standard Plate Bending Iron ..... 879
Standard Tip ..... 1141
Staude-Moore Tenaculum ..... 280
Staude Tenaculum ..... 280
Steinman Pin Chuck ..... 813
Sterilization and Storage Trays ..... 410
Sterilization Case and Tray Solutions ..... 328
Sterilization Containers ..... 368
Sterilization Trays ..... 325, 1149
Sternal Approximator ..... 743
Sternal Locking Plates ..... 743
Stevens Tenotomy ..... 141
Stevens Tenotomy, Delicate ..... 141
Stewart Rectal Hook ..... 306
Stille-Horsley Bone Cutting Forceps ..... 1022
Stille-Liston Bone Cutting Forceps ..... 1021
Stille-Luer Duckbill Rongeur ..... 715
Stille-Luer Echlin Duckbill Rongeurs ..... 1042
Stille-Luer Rongeurs ..... 1043
Stille Osteotomes ..... 997
Stille Pattern Drill, Bits and Burrs ..... 851
Stille Pattern Rib Shears ..... 719
Stille Plaster Shears ..... 1078
Stille-Sherman Drill ..... 852
Stille-Type Chisels ..... 1004
Stille-Type Gouges ..... 1006
Stitch Scissors ..... 1120
Stone Intestinal Clamps ..... 100
Stoney Deep Aorta Clamps ..... 646
Stoney Spleno-Renal Shunt Clamp ..... 611
Storey Hemostatic Forceps ..... 86
Strabismus Scissors ..... 142
Straight Debakey® Grasping Forceps ..... 782
Straight Masher Grasping Forceps ..... 781
Straight Single Action Needle Holder ..... 783
Stratte Needle Holders ..... 169
Strelinger Right Angle Clamp ..... 100
Strippers, Tendon ..... 952
Strong Aorta Clamps ..... 642
Strong Grasper ..... 1144
Strong Grasping Forceps ..... 1137
Strong Suction Irrigator ..... 419
Strong T-Bar Retractor System ..... 726
Strong T-Bar Unilateral System Components ..... 726
Strully Probed Tip Scissors ..... 131, 671
Stylet For Rumel Tourniquet, Child Size ..... 795
Stylet For Weck® Style Rumel Tourniquet ..... 795
Subacromion Spreaders ..... 892
**Subglottiscopes** ..... 406
Laser Subglottiscopes ..... 406
**Suction Tubes** ..... 765
Bronchoscopes and Esophagoscopes ..... 452
General ..... 243
Specialty ..... 245
Suctions ..... 424
Super-Cut (Baby) Metzenbaum Scissors ..... 146
Super-Cut Hi-Level Bandage Scissors ..... 144
Super-Cut Iris Scissors ..... 147
Super-Cut Jamison Scissors ..... 146
Super-Cut Lister Bandage Scissors ..... 144
Super-Cut Lister Bandage Scissors with Large Finger Ring ..... 144
Super-Cut Mayo Scissors ..... 145
Super-Cut Metzenbaum Scissors ..... 146
Super-Cut Operating Scissors ..... 145
Supercut Scissors, Metzenbaum ..... 1148
Supercut Scissors, Peritoneal ..... 1148
Super-Cut Stevens Scissors ..... 147
Surg-I-Band® Tape ..... 348
Surgical Cases and Trays ..... 333
Surgical Utility Cases ..... 333
Suture, CVT ..... 1164
Suture Organizer ..... 1164
Suture Passers ..... 849
Suture Removal Scissors ..... 110
Suture Rings, Valve ..... 756
Suture Tags ..... 184
Swan Neck Gouge ..... 1007
Sweet Modified Sternal Punch ..... 744
Synovectomy Rongeurs ..... 1023
Sypert Rongeur ..... 1044

# T

Table Clamp ..... 413
Table Top Rod Cutter ..... 834
Takahashi Forceps ..... 506
Tamps, Bone ..... 1009
Tapered (Dolphin Nose) Dissection Forceps ..... 1136
Tapered Maryland Dissectors ..... 1135
Tap Sleeves ..... 865
Taut® Cholangiogram Catheter ..... 1165
Taut® Intraducer® ..... 1165
Taut® System One™ Common Bile Duct Exploration Kit ..... 1166
Taylor Laminectomy Blades ..... 914
Taylor Percussion Hammer ..... 1093
Taylor Retractors ..... 888
Taylor Spinal Blades ..... 915
Taylor Spinal Retractors ..... 888
Teale Uterine Vulsellum ..... 282
Teeth Guards ..... 389
Telescope Guides ..... 442
Telescope Locking Device ..... 443
Telescopes ..... 1152
Telescope Compatibility chart ..... 444
Telescopes with Fiber Optic Illumination ..... 443
Telescopic Hand Drill Set ..... 853
Temporary Occlusion Clips ..... 315, 568
Tenaculum Grasper ..... 1146
Tenaculums and Vulsellums ..... 278
Tennant Tying Forceps ..... 1107
Tension Device ..... 866
Tension Device Articulated ..... 867
Tevdek®/Polydek® Braided Polyester Suture ..... 1164

Tew Tying Forceps....551, 1107
The Bush Retrograde Valvulotome....773
The Pilling® Vascular Access Set....800
Thin Vascular and Coronary Technique®
Needle Holders....173
Thomas-Gaylor Biopsy Punch....268
Thomas-Gaylor Cervical Biopsy Forceps....268
Thompson Carotid Closure Clamp....609
Thompson Clamp....608
Thompson Thoracic Instrument Holder....339
Thoms-Allis Tissue and Traction Forceps....89
Thoms-Allis Vulsellum Forceps....290
Thoracic Artery Forceps....56
Thoracolumbar Spinal Implant Removal Set....1066
**Thoracoscopy**....781
Kaiser-Pilling™ Thoracoscopic Forceps....788
Landreneau Design....780
Video Assisted....781
Thorek Scissors....121
Three Finger Fan....1152
Three-Fluted Drill Bits....859
Throat Snare Wires....532
Thru-Cut Forceps....514
Thumb Bayonet Dressing Forceps....39
Thumb Dressing Forceps....34
Thumb Forceps....34
Thumb Tissue Forceps....41, 249
Tieck Infant Nasal Speculum....518
Tischler Biopsy Punches....268
Tissue Forceps....42, 1105
Tissue Nippers....1070
Tissue Retractor....902
**Titanium Instruments: Forceps and Clamps**....686
Bulldog® Clamps....703
Hemostatic Forceps....692
Micro Forceps....690
Pediatric Vascular Clamps....693
Tissue and Dressing Forceps....686
Vascular Clamps....696
**Titanium Instruments: Needle Holders**....707
Flat Handle Micro Needle Holders....708
Ring Handle Needle Holders....709
Round Handle Micro Needle Holders....707
Titanium Instruments: Retractors....713
**Titanium Instruments: Scissors**....704
Micro Scissors....704
Titanium Retrieval Basket....1166
TL Spinal Implant Removal System....1066
Tobey Ear Forceps....496
Tobey Laryngoscope Holder....413, 778
Tonsil Clamp....253
Tonsil Forceps....253
Tonsil Sponges....365
Tourniquet Stylets....795
Townley Femur Caliper....312, 1083
Trachea Hook....191
**Tracheostomy Tubes**....471
Air-Lon® Design....484
Cleaning Brushes....492
Decannulation Stoppers....488
Holinger Design....482
Jackson Improved Design....471
Jackson Improved Design – Shikani Valve Compatible....475
Jackson Original Design....478
Laryngectomy Style Tubes....485
Luer Design....483
Mayo Design....482
Miscellaneous....490
Trach Buttons....487
Tracheal Dilators....489
Tracheostomy Tubes....489
Tucker Design....481
**Trademarks**....12
Transplant Donor Sternal Retractors....740
Transplant Recovery Balfour Retractors....232
Tray Handle....325
Trays....325, 328, 1149
Trephines....868
Troutman Alpha-Chymotrypsin Cannula....1129
Troutman-Barraquer Tissue Forceps....1105
Tubbs Valve Dilator....760
Tucker Bead Grasping Forceps....458
Tucker Lumen Finders....467
Tucker Mid-Lighted Side Slide Laryngoscopes....389
Tucker Trachea Tubes and Valves....481
Tuffier Retractor....736
Tungsten Carbide....1147
Tungsten Carbide, Ratcheted....1147
Tuning Forks....502
Tunnelers....796
Turnbull Nail Nippers....1068
Tuttle Thoracic Tissue Forceps....53, 550
Two-Level Lap Chole Cases....331
Tyding Tonsil Snare....532
Tygon Tubing With Luer-Lock Connector....414
Tyrell Hooks....189

# U

U-Handle....1134
Ulnar Radial Approximator....317
Ulrich Self-Retaining Bone Holding Forceps....928
Ultimate-Cut Cooley Scissors....145
Ultimate Cut Mayo Scissors....148
Ultimate Cut Metzenbaum Scissors....148
Ultimate Cut Potts Scissors....148
Ultimate Cut Stevens Tenotomy Scissors....149
Umbilical Scissors....272
Universal Brackets....335
Universal Chuck With T-Handle....813
Universal Drill....852
Universal Drill Guide....863
Universal Eye Shield....1131
Universal Joint For Wexler Retractors....235
Universal Rod Bender....877
Universal Shears....105
Unna Comdone Extractor....314
**Urology**....292
Catheter Guides....297
Dilators, Sounds and Needles....295
Forceps and Clamps....292
Retractors....297
Urschel First Rib Rongeur....715
Urschel-Leksell Rongeur....714
U.S. Army (Army-Navy) Retractors....207
U.S. Army Pattern Gouges....1005
U.S. Army Pattern Osteotomes....997

Utility Scissors....105

# V

**Valve Instruments**....751
Aortic Valve Rongeurs....757
Coronary Perfusion Catheters....761
Suture Rings....756
Valve Dilators....760
Valve Hooks....758
Valve Retractors....751
Valve Sternal Blade Assembly....722
**Valvulotomes**....772
Antegrade Cut....772
Bush....773
*In Situ*....772
Mills-Type....772
Valvulotome Antegrade Cut....772
Van Beek Nerve Approximators....318
Van Buren Catheter Guide....297
Van Buren Sequestrum Forceps....924
Van Buren Urethral Dilators....296
Vanderbilt Vessel Forceps....73
Vanguard Splinter Liberator....33
Vannas Capsulotomy Scissors....1114
Vannas Scissors....1114
**Vascular Clamps**....573
Aortic Aneurysm Clamps....648
Aortic Compressor....655
Aortic Vascular Clamps....629
Carotid Clamps....604
Carotid Clamps, 1 mm Jaw....607
Carotid Clamps, 1.5 mm Jaw....609
Cooley Vascular Clamps....622
Femoral-Popliteal Clamps....612
Pediatric Clamps, 1 mm Jaw....575
Pediatric Clamps, 1.5 mm Jaw....577
Pediatric Clamps, 2 mm Jaw....589
Pediatric Clamps, Cooley-Type Jaw....595
Peripheral Vascular Clamps....613
Renal Clamps....610
Ring Handled Bulldog® Clamps....602
Vascular Debakey® Bayonet Tissue Forceps....49, 546
**Vascular Dilators**....768
Amato Design....768
Cooley Design....768
DeBakey® Design....769
Garrett Design....770
Hiebert Design....771
Vasectomy Clamp....294
Vasectomy Forceps....294
Vasovasostomy Approximator....318
Vebrugge Self-Centering Bone Holding Forceps....930
Venous Valve Scissors....673
Venturi Adapters For Bronchoscopes and Laryngoscopes....414
Venturi Ventilating Needles....415
Verbruegge Bone Holding Forceps....930
Vernon Wire Scissors....112
Verres Needles....1151
Vertebral Body Distractors....909
Vertebra Spreader (Cloward)....909
Verucca Curette Excavator....1094
Vickers Easidriver....812
Vickers Finger Retractor....899
Vickers Low Profile Hand Retractor....900
Vickers Low Profile Small Wound Retractor....900
Vickers Universal Retractor....900
**Video Assisted Thoracoscopy**....781
Kaiser-Pilling™ Design....786
Landreneau Design....780
Retractors....780
Video Laryngoscope Systems....409
Vienna Nasal Speculums....519
Virtus Splinter Forceps....33
Visistat® Skin Stapler, Regular....1167
Visistat® Skin Stapler, Wide....1167
Visistat® Rotating Head Stapler, Wide....1167
Vogen Sesamoid Clamp....941
Volkman Bone Hooks....942
Volkmann Curettes....986
Volkmann Pocket Retractors....193
Volkmann Rake Retractors....194
Volkman Retractors....194
Von Graefe Strabismus Hooks....1123
Vorse Tubing Occluding Clamps....28
Vorse Tubing Occluding Clamps With Safety Guard....28
V-Silicone Retainers....337
Vulsellums and Tenaculums....278

# W

Wachenfeldt Clip Applying and Removing Forceps....321
Wallace Caesarean Forceps....263
Walton Cartilage Clamp....946
Walton Cast Spreader....1080
Wangensteen Needle Holder....174
Wartenberg Neurological Pin Wheel....1093
Webster Bulldog® Needle Holder....157
Webster Needle Holders....156
Webster Skin Graft Knife Handle....23
Weck® Biceps Bayonet Forceps....1156
Weck® Biceps Cerullo Bayonet Forceps....1156
Weck® Biceps Forceps Cords....1156
Weck® Biceps Jewelers Forceps....1156
Weck® Bipolar Adson Forceps....1157
Weck® Bipolar Cushing Bayonet Forceps....1157
Weck® Bipolar Cushing Forceps....1157
Weck® Bipolar Forceps Cords....1158
Weck® Bipolar Iris Forceps....1158
Weck® Bipolar Jeweler's Forceps....1158
Weck® Bipolar Scoville-Greenwood Bayonet Forceps....1157
Weck® Bipolar Semkin Forceps....1158
Weck® Daniels Blades....521
Weck® Daniels Tonsillectome....522
Weck® Disposable Electrodes....1159
Weck® Disposable Ima/Ent Electrodes....1159
Weck EFx™ Endo Fascial Closure System....1167
Weck® Instrument Cleaner....344
Wec-Kleen™....347
**Weck® Ligation Solutions**....373
Weck® Hem-o-lok® Polymer Locking Ligation System....374
Weck® Horizon™ Metal Ligation System....380
Weck® Liquid Detergent....345
Weck-Lube™....345
Weck® Micro Vessel Approximators....317
Weck® Needle Electrode....1160

Weck®-Rack Retainer Clips ..... 342
Weck®-Racks ..... 342
Weck®-Rack Security Rods ..... 343
Weck®-Rack Separator Clips ..... 343
Wec-Kreem™ ..... 347
Weck® Round Loop Electrodes ..... 1160
Weck® Skin Staplers ..... 1167
**Weck® Specialty Products** ..... 367
Pin Cutters ..... 827
Rod Cutters ..... 833
Wire and Pin Drivers and Benders ..... 816
Wire Guides and Traction Bows ..... 848
Wire Twisters and Wire/Pin/Rod Cutters ..... 816
Weck Vista® Bladeless Laparoscopic Access Ports ..... 1167
Weck® Wipe ..... 346
Wecprep Blades ..... 24
Wec-Wash™ ..... 346
Weitlaner Retractors ..... 218
Wertheim-Cullen Pedicle Clamp ..... 266
Westcott Micro-Tenotomy Scissors ..... 1115
Westcott Stitch Scissors ..... 1115
Westcott Tenotomy Scissors ..... 1115
Westphal Dissecting Forceps ..... 86
Wexler Bantam Retractor ..... 234
Wexler Deaver Blade ..... 235
Wexler Deep Spreader ..... 236
Wexler Expandable Blade ..... 236
Wexler Standard Octagon Frame ..... 235
Wheeler Technique® Plaque and Vessel Forceps ..... 54, 549
White Tonsil Forceps ..... 524
Wieder Tongue Depressor ..... 529
Wiener Antrum Rasp ..... 511
Wiener Skin Hooks ..... 189
Wilcox Pediatric Cardiac Retractor ..... 728
Wilde (Blakesley) Nasal Forceps ..... 506
Wilde Ear Forceps ..... 498
Wilde IVD Rongeurs ..... 1061
Wilder Lacrimal Dilator ..... 1127
Willauer-Allis Tissue Forceps ..... 90, 558
Willauer-Deaver Retractors ..... 209
Willauer Forceps ..... 87
Williams Lacrimal Probes ..... 307, 1126
Williams Splinter Forceps ..... 33
Williger Bone Curette ..... 986
Wiltse-Gelpi Retractor ..... 226, 907
Window Plug ..... 441
Wire and Pin Bender ..... 815
Wire and Pin Tractor (Boehler) ..... 848
Wire Bending Pliers ..... 839
Wire Cutters ..... 823
Wire Cutting Scissors ..... 112
Wire Forceps ..... 183
Wire Passers (Cannulated) ..... 849
Wire Pulling Forceps ..... 818
Wire Scissors ..... 111
**Wire Twisters** ..... 816
Needle Holder/Wire Twisters ..... 182
Wire Twisting Forceps ..... 685, 817
Wire and Pin Drivers and Benders ..... 811, 816
Wire and Pins/Shanz Pins ..... 810
Wirthlin Spleno-Renal Shunt Clamp ..... 611
Wishbone Lechner-Harrington Liver Blade ..... 242
Wittner Biopsy Forceps ..... 269
W.M. Lemmon Extra Deep Deaver Retractors ..... 209
W.M. Lemmon Technique® Needle Holders ..... 174, 678
Wolff (Boehler) Cast Breakers ..... 1079
Wood Bulldog® Clamps ..... 566
Woodson Dural Separator and Packer ..... 953
Woodson Elevator and Spatula ..... 953
Wrench ..... 847
Wrist Tendon Approximator ..... 1097
Wullstein-Weitlaner Retractors ..... 219
Wutzler Scissors ..... 143
Wylie Abdominal Aorta Clamp ..... 654
Wylie Calcified Arterial Punch ..... 763
Wylie Carotid Closure Clamp ..... 605
Wylie Carotid Dissecting Clamp ..... 605
Wylie External Carotid Clamp ..... 606
Wylie Hypogastric Clamp ..... 606
Wylie Internal Carotid Clamp ..... 606
Wylie "J" Aortic Clamps ..... 647
Wylie Lumbar Bulldog® Clamp ..... 566
Wylie Renal Vein Retractors ..... 213, 747
Wylie Splanchnic Retractor ..... 213
Wylie Uterine Tenaculum ..... 280

# Y

Yankauer Suction Tubes ..... 244, 249
Yankauer Suction Tube With Switch Valve ..... 245
Yankauer Tonsil Scissors ..... 530
Yasargil Vascular Scissors ..... 666
You-Potts Vascular Scissors ..... 666
Yu Holtgreve Malleable Blade ..... 233

# Z

Zanger Abdominal Aorta Clamps ..... 654
Zaufal-Jansen Rongeur ..... 1037
Zenker Forceps ..... 254
Z-Hysterectomy Forceps ..... 256
Ziegler Cilia Forceps ..... 1110
Zipser Penis Clamp ..... 295

# INDEX

## Item Number

## 0


001200 ..... 380
001201 ..... 380
001204 ..... 380
001205 ..... 380
002200 ..... 379
002204 ..... 379
003200 ..... 380
003204 ..... 380
004200 ..... 380
004204 ..... 380
005200 ..... 380
020100 ..... 495
020120 ..... 494
020121 ..... 494
020130 ..... 496
020155 ..... 497
020165 ..... 497
020204 ..... 499
020210 ..... 498
020211 ..... 498
020300 ..... 494
020302 ..... 494
020571 ..... 495
025100 ..... 499
025101 ..... 499
025102 ..... 499
025103 ..... 499
025104 ..... 499
025160 ..... 500
025162 ..... 500
025163 ..... 500
025164 ..... 500
025165 ..... 500
025166 ..... 500
025167 ..... 500
025168 ..... 500
025169 ..... 500
026275 ..... 192
026510 ..... 502
027100 ..... 39
028120 ..... 1029
029350 ..... 494
029480 ..... 501
029550 ..... 219
029555 ..... 219
030100 ..... 518
030180 ..... 518
030301 ..... 518
030302 ..... 518
030303 ..... 518
030304 ..... 518
031100 ..... 39
031430 ..... 505
031500 ..... 507
031502 ..... 507
031505 ..... 507
031750 ..... 512
031800 ..... 513
036100 ..... 508
036110 ..... 508
036111 ..... 508
036500 ..... 503
036501 ..... 503
037101 ..... 511
037500 ..... 517
037510 ..... 517
037512 ..... 517
050120 ..... 508
050190 ..... 508
050200 ..... 23
050201 ..... 24
050202 ..... 24
050203 ..... 24
050204 ..... 24
050205 ..... 24
050206 ..... 24
050207 ..... 24
050208 ..... 24
050209 ..... 24
050211 ..... 24
050212 ..... 24
050213 ..... 24
050230 ..... 23
051082 ..... 509, 992
051084 ..... 509, 992
051086 ..... 509, 992
051088 ..... 509, 992
051090 ..... 509, 992
051092 ..... 509, 992
051095 ..... 509, 992
051102 ..... 509, 995
051103 ..... 509, 995
051104 ..... 509, 995
051105 ..... 509, 995
051106 ..... 509, 995
051107 ..... 509, 995
051109 ..... 509
051110 ..... 509, 995
051150 ..... 508
051152 ..... 508
051155 ..... 508
051158 ..... 508
051190 ..... 508
051191 ..... 508
051195 ..... 508
051510 ..... 1011
051520 ..... 1013
051521 ..... 1013
051525 ..... 1013
051526 ..... 1013
052100 ..... 511, 997
052130 ..... 510, 975
052162 ..... 509, 974
052165 ..... 510, 974
052180 ..... 510, 975
053102 ..... 504
053115 ..... 503
053120 ..... 504
053135 ..... 503
053135 ..... 959
054015 ..... 189
054016 ..... 189
054100 ..... 187
054102 ..... 187
054105 ..... 187
054107 ..... 187
054110 ..... 187
054120 ..... 185
054125 ..... 187
054126 ..... 186
054128 ..... 186
054130 ..... 186
054135 ..... 185
054140 ..... 187
054142 ..... 187
054144 ..... 187
054165 ..... 191
054500 ..... 185
054590 ..... 206
054600 ..... 205
054620 ..... 201
054720 ..... 520
055100 ..... 134
055100 ..... 1119
055102 ..... 1119
055135 ..... 151
055200 ..... 151
055502 ..... 132, 116
056110 ..... 142
056120 ..... 110
056200 ..... 139
056201 ..... 139
056302 ..... 513
056310 ..... 122
056360 ..... 513
056400 ..... 512
056650 ..... 506
057150 ..... 505
057200 ..... 35
057202 ..... 35
057205 ..... 35
057207 ..... 43
057210 ..... 43
057212 ..... 43
057214 ..... 43
057215 ..... 45
057220 ..... 44
057230 ..... 43
057250 ..... 44
057302 ..... 46
060100 ..... 217
060101 ..... 217
060105 ..... 217
060120 ..... 190, 759
065100 ..... 315, 567
065105 ..... 315, 567
065108 ..... 315, 568
065109 ..... 315, 568
065110 ..... 318, 567
065111 ..... 318, 567
065125 ..... 315, 567
065145 ..... 315, 567
065151 ..... 318
065152 ..... 318
065155 ..... 319, 568
065165 ..... 317
065166 ..... 316
065170 ..... 317
065172 ..... 316, 568
065173 ..... 316, 568
065175 ..... 319, 569
065181 ..... 318
065190 ..... 317
065195 ..... 318
065196 ..... 318
065199 ..... 321, 572
065202 ..... 1026
065212 ..... 1034
065300 ..... 957
065325 ..... 949
066100 ..... 132, 1116
066102 ..... 132, 1116
066104 ..... 132, 1116
066200 ..... 684, 1121
066204 ..... 684, 1121
070100 ..... 529
070101 ..... 529
070107 ..... 528
070114 ..... 190, 490
070116 ..... 192, 491
070140 ..... 529
070202 ..... 527
070222 ..... 528
070232 ..... 528
070300 ..... 526
070301 ..... 526
070302 ..... 526
070303 ..... 526
070305 ..... 526
070312 ..... 525
070330 ..... 525
070332 ..... 525
070334 ..... 525
070340 ..... 524
070342 ..... 524
070344 ..... 524
070450 ..... 526
070501 ..... 521
070502 ..... 521
070503 ..... 521
070511 ..... 521
070512 ..... 521
070521 ..... 521
070522 ..... 521
070523 ..... 521
070600 ..... 522
070604 ..... 521
070605 ..... 521
070635 ..... 532
070640 ..... 532
070651 ..... 531
070652 ..... 531
070660 ..... 531
070665 ..... 531
070701 ..... 517
070701 ..... 532
070702 ..... 517, 532
070704 ..... 517, 532
070705 ..... 517, 532
070706 ..... 517, 532
072120 ..... 522
072122 ..... 522
072124 ..... 522
073370 ..... 533
073500 ..... 529
073502 ..... 529
074115 ..... 530
074120 ..... 530
074140 ..... 530
075116 ..... 72
075118 ..... 63
075120 ..... 72
075122 ..... 72
087396 ..... 327
087403 ..... 327
087405 ..... 327
087419 ..... 327
087420 ..... 327
087531 ..... 340
087532 ..... 340
087533 ..... 340
087550 ..... 340
087552 ..... 340
087559 ..... 340
087561 ..... 340
087702 ..... 322
087747 ..... 322

087748 ..... 322
087749 ..... 322
087750 ..... 322

# 1

101010 ..... 351
101011 ..... 351
101012 ..... 352
101013 ..... 352
101014 ..... 352
101015 ..... 352
101016 ..... 351
101017 ..... 351
101022 ..... 350
101023 ..... 350
101024 ..... 350
101027 ..... 352
101028 ..... 350
101031 ..... 353
101032 ..... 353
101033 ..... 353
101034 ..... 353
101035 ..... 356
101036 ..... 356
101037 ..... 356
101038 ..... 356
101039 ..... 355
101050 ..... 325
101054 ..... 325
101061 ..... 325
101075 ..... 326
101130 ..... 354
101131 ..... 354
101140 ..... 355
101141 ..... 355
101142 ..... 354
101143 ..... 354
101144 ..... 355
101145 ..... 355
101146 ..... 354
101147 ..... 349
101148 ..... 349
101149 ..... 349
101150 ..... 349
101151 ..... 351
101152 ..... 351
114527 ..... 385
121380 ..... 348
121381 ..... 348
121382 ..... 348
121383 ..... 348
121384 ..... 348
121385 ..... 348
121386 ..... 348
121387 ..... 348
121388 ..... 348
121389 ..... 348
121390 ..... 348
121391 ..... 348
121410 ..... 25
121412 ..... 25
121415 ..... 25
121417 ..... 25
121422 ..... 25
121425 ..... 25
121427 ..... 25
121600 ..... 30
121605 ..... 30
121610 ..... 31
121640 ..... 31
121650 ..... 31
121655 ..... 29
121656 ..... 29
131114A ..... 781
137061 ..... 381
137062 ..... 381
137081 ..... 381
137082 ..... 381
137085 ..... 381
137086 ..... 381
137111 ..... 381
137112 ..... 381
137117 ..... 381
137118 ..... 381
140875 ..... 1151
140877 ..... 1151
140878 ..... 1151
140879 ..... 1151
140880 ..... 1151
140881 ..... 1151
140882 ..... 1151
141106 ..... 114
141146 ..... 114
141310 ..... 114
141312 ..... 114
141315 ..... 114
141317 ..... 114
141332 ..... 115
141395 ..... 119
141448 ..... 122
141450 ..... 122
141452 ..... 122
141460 ..... 123
141462 ..... 123
141467 ..... 123
141469 ..... 123
142220 ..... 116
142235 ..... 116
142237 ..... 116
142312 ..... 108
142325 ..... 106
142415 ..... 103
142420 ..... 103
142422 ..... 103
142425 ..... 101
142452 ..... 105
142515 ..... 111
142518 ..... 111
142519 ..... 823
142520 ..... 823
142521 ..... 182, 684
142550 ..... 743, 823
144295 ..... 132, 1113
144300 ..... 135
144310 ..... 135
144315 ..... 135
144317 ..... 135
144319 ..... 142
144321 ..... 142
144330 ..... 142
144332 ..... 142
144338 ..... 137
144340 ..... 137
144350 ..... 141
144352 ..... 141
151210 ..... 320
151222 ..... 320
151228 ..... 320
151240 ..... 320
151350 ..... 348
151351 ..... 348
152255 ..... 314
152256 ..... 314
152402 ..... 163
152406 ..... 163
152448 ..... 157
152496 ..... 153
152710 ..... 150
152720 ..... 163
152722 ..... 163
152724 ..... 163
152760 ..... 159
152762 ..... 159
152764 ..... 159
152771 ..... 161
152772 ..... 163
152780 ..... 161
152781 ..... 161
152782 ..... 161
152784 ..... 161
152786 ..... 161
152790 ..... 161
152792 ..... 161
152796 ..... 168
152798 ..... 152
152800 ..... 154
152802 ..... 154
152805 ..... 155
152808 ..... 156
152818 ..... 176, 681, 802
152819 ..... 176, 681
152825 ..... 176, 683
152827 ..... 176, 683
152837 ..... 167
152842 ..... 170
152850 ..... 174
152855 ..... 169
162210 ..... 244
162212 ..... 244
162300 ..... 244
162301 ..... 244
162310 ..... 246, 765
162345 ..... 245
162410 ..... 243
162411 ..... 243
162412 ..... 243
162413 ..... 243
162414 ..... 243
162415 ..... 243
162416 ..... 243
162421 ..... 243
163000 ..... 241
163100 ..... 241, 411
163102 ..... 241
163103 ..... 241
163104 ..... 241
163108 ..... 241
163109 ..... 241
163111 ..... 241
163117 ..... 241
163200 ..... 241
163201 ..... 241
163203 ..... 241
163211 ..... 241
163212 ..... 241
163213 ..... 241
163400 ..... 241
163401 ..... 241
163406 ..... 241
163420 ..... 241
163422 ..... 241
163424 ..... 241
163436 ..... 242
163701 ..... 242
164110 ..... 208
164112 ..... 208
164115 ..... 208
164118 ..... 208
164120 ..... 208
164122 ..... 208
164125 ..... 208
164130 ..... 208
164132 ..... 208
164134 ..... 208
164164 ..... 214
164166 ..... 214
164168 ..... 214
164170 ..... 214
164172 ..... 214
164174 ..... 214
164374 ..... 193
164376 ..... 193
164384 ..... 193
164402 ..... 194
164403 ..... 194
164404 ..... 194
164406 ..... 194
164412 ..... 194
164413 ..... 194
164414 ..... 194
164416 ..... 194
164443 ..... 193
164444 ..... 193
164446 ..... 193
164453 ..... 193
164454 ..... 193
164456 ..... 193
164520 ..... 210
164521 ..... 210
164522 ..... 210
164525 ..... 211
164526 ..... 211
164527 ..... 211
164528 ..... 211
164540 ..... 211
164542 ..... 212
164543 ..... 212
164544 ..... 212
164550 ..... 212
164630 ..... 198
164631 ..... 198
164632 ..... 198
164635 ..... 201
164636 ..... 201
164637 ..... 201
164650 ..... 196
164652 ..... 196
164656 ..... 196
164658 ..... 196
164698 ..... 205
164700 ..... 203
164702 ..... 203
164710 ..... 204
164715 ..... 207
164750 ..... 206
164752 ..... 206
164754 ..... 202
164786 ..... 188
164790 ..... 200
164865 ..... 197
164865 ..... 745
165085 ..... 217
165086 ..... 217
165100 ..... 231
165105 ..... 231
165107 ..... 232
165130 ..... 231
165133 ..... 231
165135 ..... 231
165137 ..... 231
165138 ..... 231
165141 ..... 233
165142 ..... 233
165143 ..... 233
165145 ..... 233
165146 ..... 233
165147 ..... 233
165149 ..... 233

165150....233
165160....233
165170....234
165171....234
165200....230
165203....230
165240....230
165300....234
165348....218
165350....218
165352....218
165354....218
165356....218
165358....218
165360....218
165362....218
165364....218
165366....218
165370....221
165372....221
165374....221
165380....221
165382....221
165384....221
165400....223
165402....223
165439....224
165439....802
165440....224
165510....217
165550....218
165552....218
165590....216
165591....216
165592....216
165595....216
165596....216
165597....216
166000....242
166002....242
166480....307, 1126
166485....307, 1126
166490....307, 1126
166495....307, 1126
166500....308
166501....308
166502....308
166503....308
166504....308
166505....308
166507....308
166520....308
166521....308
166522....308
166523....308
166527....308
166571....307
166573....307
166610....307
166611....307
166612....307
166613....307
166632....307
166633....307
166851....341
166853....341
166855....341
166857....341
166859....341
166861....341
166868....340
166870....340
166872....340
166874....340
166876....340
168000....239
168101....239
168103....239
168104....239
168105....239
168110....239
168111....239
168201....239
168202....239
168203....239
168210....239
168211....239
168212....239
168213....239
168220....239
168221....239
168222....239
168254....239
168257....239
171117....91
171120....91
171122....91
171155....66
172495....84
172500....83
172503....83
172506....83
172525....81
172530....80
172531....80
172532....80
172550....78
172560....98
172570....93
172571....93
172616....93
172625....95
172650....292
172655....292
172660....292
172665....292
172700....309
175000....251
175001....251
175002....251
175003....251
175004....251
175005....251
175006....251
175007....251
175008....251
175009....251
175010P....251
175011....251
175012....251
175013....251
175014....254
175015P....254
175016....252
175017....252
175018....252
175019....252
175020P....256
175021....259
175022....259
175023....261
175024....261
175025P....261
175026....250
175027....250
175028....250
175029....250
175030P....250
175031....250
175032....250
175033....250
175034....250
175035....250
175036....250
175037....250
175038....255
175039....255
175040P....259
175041....259
175042....257
175043....257
175045....257
175046....257
175048....257
175049....257
175052....257
175053....252
175054....252
175055....249
175056....249
175057....253
175058....259
175059....255
175060....255
175061....257
175062....260
175063....260
175065....260
175066....260
175067....257
175068....257
175069....258
175070....258
175071....258
175072....258
175073....252
175074....252
175075....258
175076....258
175077....258
175078....261
175079....261
175080....261
175081....261
175082....261
175083....249
175084....249
175085....249
175086....249
175087....249
175088....249
175089....258
175090....258
175091....258
175092....253
175093....252
175094....252
175095....253
175096....254
175097....254
175098....254
175099....254
175100....254
175101....254
175102....255
175103....255
175104....250
175105....250
175106....250
175107....250
175108....250
175109....249
175110....249
175111....253
175112....253
175113....254
175114....249
175115....249
175116....249
175117....249
175118....256
175119....256
175120....256
175121....256
175122....256
175123....256
175124....256
175125....256
181102....34
181104....34
181106....34
181108....34
181127....41
181129....41
181131....41
181133....41
181139....41
181155....41
181166....41
181220....34
181223....43
181225....43
181228....43
181235....44
181237....35
181240....45
181250....51
181255....46
181270....41
181272....52
181310....42
181327....46
181360....55
181365....55
181370....55
181410....36
181556....32
181557....32
181559....32
181600....38
181602....38
181604....52
181610....52
181614....52
181800....75
181802....75
181804....74
181806....75
181808....75
181810....75
181812....75
181814....75
181816....75
181818....75
181820....75
181822....61
181824....74
181830....68
181832....75
182050....60
182060....60
182070....60
182080....60
182085....60
182086....60
182090....60
182095....60
182097....60
182098....60
182100....65

182110 ..... 65
182120 ..... 71
182130 ..... 71
182140 ..... 71
182150 ..... 71
182160 ..... 65
182200 ..... 73
182205 ..... 73
182210 ..... 73
182300 ..... 62
182310 ..... 62
182350 ..... 62
182355 ..... 62
182390 ..... 72
182400 ..... 68
182405 ..... 68
182415 ..... 68
182420 ..... 68
182440 ..... 68
182445 ..... 68
182455 ..... 68
182460 ..... 68
182600 ..... 70
182605 ..... 70
182615 ..... 70
182620 ..... 70
182655 ..... 70
182665 ..... 70
182670 ..... 70
182795 ..... 88
182850 ..... 88
182860 ..... 88
182870 ..... 88
182875 ..... 88
182880 ..... 88
182900 ..... 89
182905 ..... 89
182910 ..... 89
182915 ..... 87
182920 ..... 89
18305 ..... 1165
183010 ..... 90, 555
183020 ..... 90, 555
183400 ..... 99
183410 ..... 99
183975 ..... 96
183977 ..... 96
184001 ..... 96
184002 ..... 96
184003 ..... 96
185005 ..... 87
185006 ..... 87
185010 ..... 87
185030 ..... 95
185060 ..... 67
185065 ..... 67
185066 ..... 67
185067 ..... 67
185202 ..... 95
185204 ..... 95
185210 ..... 97
185212 ..... 97
185214 ..... 97
185220 ..... 98
185222 ..... 98
185331 ..... 92
185402 ..... 100
185404 ..... 100
185714 ..... 190
188030 ..... 1068
188032 ..... 1068
191023 ..... 1157
191025 ..... 1157

# 2

200100 ..... 360
200101 ..... 360
200102 ..... 360
200103 ..... 360
200104 ..... 361
200105 ..... 361
200106 ..... 361
200108 ..... 361
200110 ..... 361
200112 ..... 361
200120 ..... 361
200121 ..... 361
200123 ..... 361
200131 ..... 361
200161 ..... 360
200200 ..... 359
200201 ..... 359
200202 ..... 359
200203 ..... 359
200211 ..... 359
200212 ..... 359
200214 ..... 362
200215 ..... 362
200217 ..... 362
200218 ..... 363
200220 ..... 358
200230 ..... 363
200231 ..... 363
200232 ..... 363
200233 ..... 364
200234 ..... 364
200235 ..... 364
200236 ..... 364
200240 ..... 358
200250 ..... 358
200322 ..... 365
200326 ..... 365
200327 ..... 365
200328 ..... 365
200333 ..... 366
200334 ..... 366
200335 ..... 366
200340 ..... 366
200400 ..... 357
200401 ..... 357
200402 ..... 357
200403 ..... 357
200550 ..... 346
202030 ..... 298
202060 ..... 304
202062 ..... 304
202067 ..... 304
202095 ..... 305
202096 ..... 305
202097 ..... 305
202105 ..... 303
202140 ..... 301
202150 ..... 301
202151 ..... 301
202600 ..... 306
202623 ..... 305
202630 ..... 306
202635 ..... 306
202792 ..... 306
202970 ..... 298
203142 ..... 299
204004 ..... 300
204016 ..... 300
204018 ..... 300
211116A ..... 781
211117A ..... 781
211118A ..... 782
211245A ..... 782
211290A ..... 783
211325A ..... 783
211500 ..... 784
211600 ..... 784
211603A ..... 782
212000 ..... 283
212001 ..... 283
212002 ..... 283
212005 ..... 283
212010 ..... 284
212011 ..... 284
212012 ..... 284
212185 ..... 285
212187 ..... 285
212195 ..... 285
212196 ..... 285
212197 ..... 285
212225 ..... 287
212226 ..... 287
212227 ..... 287
212228 ..... 287
212229 ..... 287
212241 ..... 288
212242 ..... 288
212263 ..... 287
212264 ..... 287
212265 ..... 287
212271 ..... 286
212275 ..... 286
212295 ..... 287
212305 ..... 286
212350 ..... 286
212500 ..... 262
212505 ..... 262
212600 ..... 272
212605 ..... 273
212610 ..... 273
212612 ..... 273
212647 ..... 275
212659 ..... 273
212661 ..... 273
212662 ..... 273
212663 ..... 273
212664 ..... 273
212665 ..... 273
212666 ..... 273
212667 ..... 273
212668 ..... 273
212669 ..... 273
212670 ..... 273
212671 ..... 273
212673 ..... 274
212675 ..... 274
212676 ..... 274
212677 ..... 274
212678 ..... 274
212679 ..... 274
212680 ..... 274
212681 ..... 274
212682 ..... 274
212749 ..... 277
212750 ..... 277
212751 ..... 277
212752 ..... 277
212753 ..... 277
212754 ..... 277
212755 ..... 277
212905 ..... 275
212910 ..... 276
212930 ..... 276
213011 ..... 268
213036 ..... 267
213050 ..... 262
213055 ..... 262
213065 ..... 279
213080 ..... 279
213085 ..... 279
213090 ..... 280
213095 ..... 280
213100 ..... 278
213110 ..... 278
213120 ..... 278
213140 ..... 264
213150 ..... 281
213155 ..... 281
213157 ..... 281
213160 ..... 281
213175 ..... 282
213180 ..... 282
213230 ..... 263
214081 ..... 272
214090 ..... 272
214161 ..... 264
214170 ..... 265
214172 ..... 265
214175 ..... 265
214180 ..... 266
214182 ..... 266
214215 ..... 265
214230 ..... 266
214550 ..... 271
214555 ..... 271
214570 ..... 271
214595 ..... 270
214605 ..... 271
214687 ..... 296
214688 ..... 296
214689 ..... 296
214691 ..... 296
214770 ..... 291
215558A ..... 783
237061 ..... 381
237081 ..... 381
237085 ..... 381
237111 ..... 381
237115 ..... 381
237117 ..... 381
237141 ..... 381
237145 ..... 381
238110 ..... 381
238110T ..... 381
238170 ..... 381
238200 ..... 379
241108 ..... 296
241110 ..... 296
241112 ..... 296
241114 ..... 296
241116 ..... 296
241118 ..... 296
241120 ..... 296
241122 ..... 296
241124 ..... 296
241126 ..... 296
241128 ..... 296
241130 ..... 296
241132 ..... 296
242005 ..... 293
242006 ..... 293
243110 ..... 293
243200 ..... 297
243201 ..... 297
244000 ..... 294
244001 ..... 294

# 3

306010A ..... 1153
32-0798K ..... 670

32-0799K ..... 670
337081 ..... 381
337085 ..... 381
337111 ..... 381
337115 ..... 381
337117 ..... 381
337141 ..... 381
337145 ..... 381
338110 ..... 379
338110T ..... 381
338170 ..... 381
341100 ..... 726
341112 ..... 726
341113 ..... 726
341114 ..... 726
341120 ..... 723
341123 ..... 724
341124 ..... 724
341126 ..... 724
341127 ..... 724
341128 ..... 724
341129 ..... 724
341131 ..... 725
341133 ..... 725
341136 ..... 723
341139 ..... 723
341147 ..... 721
341148 ..... 722
341149 ..... 722
341150 ..... 720
341150 ..... 742
341154 ..... 722
341155 ..... 721, 742
341156 ..... 722
341158 ..... 732, 741
341160 ..... 732, 741
341162 ..... 732, 742
341163 ..... 733, 742
341164 ..... 733, 742
341170 ..... 738, 742
341175 ..... 734, 742
341177 ..... 734, 741
341178 ..... 734, 741
341180 ..... 739, 742
341181 ..... 739, 742
341194 ..... 733, 742
341195 ..... 733, 742
341198 ..... 737, 742
341200 ..... 729, 741
341205 ..... 730, 741
341224 ..... 738, 742
341225 ..... 737, 742
341227 ..... 737, 742
341250 ..... 729, 741
341290 ..... 727, 741
341296 ..... 730, 741
341302 ..... 727, 741
341303 ..... 728, 741
341304 ..... 728, 741
341305 ..... 728, 741
341310 ..... 740, 780
341312 ..... 727, 741
341315 ..... 728, 741
341317 ..... 729, 741
341326 ..... 731, 741
341328 ..... 731, 741
341330 ..... 731, 742
341332 ..... 731, 742
341362 ..... 736, 741
341366 ..... 736, 741
341387 ..... 740
341389 ..... 740, 742
341390 ..... 736, 741
341397 ..... 735, 741
341398 ..... 735, 741
341448 ..... 716
341450 ..... 716
341460 ..... 716
341501 ..... 721, 753
341502 ..... 753
341503 ..... 753
341506 ..... 753
341511 ..... 753
341512 ..... 753
341513 ..... 753
341514 ..... 754
341515 ..... 755
341520 ..... 721, 753
341522 ..... 721, 753
341523 ..... 721, 753
341524 ..... 721, 753
341525 ..... 721, 753
341531 ..... 751
341635 ..... 202
341640 ..... 201
341650 ..... 215, 746
341651 ..... 215, 746
341678 ..... 215, 744
341679 ..... 215, 744
341690 ..... 214, 746
341692 ..... 214, 746
341694 ..... 214, 746
341696 ..... 214, 746
341698 ..... 214, 746
341720 ..... 209
341722 ..... 209
341730 ..... 209
341732 ..... 209
341740 ..... 210
341770 ..... 211
341773 ..... 211
341780 ..... 213
341790 ..... 210
341791 ..... 210
341795 ..... 213, 747
341797 ..... 213, 747
341803 ..... 715
341836 ..... 714, 1036
341950 ..... 718
341960 ..... 718
341961 ..... 718
341980 ..... 719
341985 ..... 718
341992 ..... 747
342000 ..... 743
342002 ..... 743
342004 ..... 743
342006 ..... 743
342008 ..... 743
342015 ..... 756
342020 ..... 719
342025 ..... 720
342040 ..... 744
342043 ..... 744
342044 ..... 744
342102 ..... 715
342105P ..... 715
342107 ..... 715
342141 ..... 715
342142 ..... 714
342143 ..... 714
342160 ..... 127, 667
342162 ..... 127, 667
342166 ..... 127, 667
342167 ..... 127, 667
342168 ..... 127, 667
342169 ..... 127, 667
342200 ..... 127, 668
342201 ..... 127, 668
342202 ..... 127, 668
342203 ..... 127, 668
342204 ..... 127, 668
342206 ..... 127, 668
342220 ..... 130, 669
342221 ..... 130, 669
342222 ..... 130, 669
342223 ..... 130, 669
342242 ..... 129
342243 ..... 129
342245 ..... 129
342270 ..... 121
342272 ..... 121
342273 ..... 120
342275 ..... 128
342275 ..... 668
342501 ..... 85
342504 ..... 85
342511 ..... 85
342513 ..... 85
342514 ..... 85
342533 ..... 85
342557 ..... 79
342558 ..... 79
342559 ..... 79
342560 ..... 94
342561 ..... 94
342562 ..... 94
342563 ..... 94
342565 ..... 94
342566 ..... 76
342567 ..... 76
342568 ..... 76
342569 ..... 76
342571 ..... 72
342572 ..... 72
342575 ..... 84
342580 ..... 87
342583 ..... 85
342585 ..... 56
342587 ..... 57
342590 ..... 73
342594 ..... 57
342596 ..... 78
342597 ..... 78
342598 ..... 78
342600 ..... 82
342601 ..... 82
342603 ..... 82
342605 ..... 97
342606 ..... 97
342611 ..... 81
342615 ..... 77
342625 ..... 84
342632 ..... 78
342633 ..... 78
342655 ..... 556
342660 ..... 555
342662 ..... 555
342664 ..... 555
342670 ..... 556
342672 ..... 556
342675 ..... 557
342710 ..... 554
342711 ..... 554
342720 ..... 90, 558
342721 ..... 90, 558
342725 ..... 90, 555
342726 ..... 90, 555
342800 ..... 557
342802 ..... 557
342804 ..... 555
342822 ..... 558
342823 ..... 558
342910 ..... 55
342915 ..... 55
342933 ..... 53, 550
342935 ..... 53, 550
342950 ..... 53, 549
342965 ..... 46
342967 ..... 46
342980 ..... 47, 544
342981 ..... 47, 544
342982 ..... 47, 544
342984 ..... 47, 544
342986 ..... 47, 544
343000 ..... 171, 675
343027 ..... 169
343030 ..... 183, 684
343030 ..... 743
343145 ..... 716
343148 ..... 717
343149 ..... 717
343152 ..... 717
343153 ..... 717
343295 ..... 767
343393 ..... 339, 725
343395 ..... 339
343500 ..... 981
343501 ..... 981
343502 ..... 981
343503 ..... 981
343504 ..... 981
343505 ..... 981
343506 ..... 981
343590 ..... 559
35120 ..... 1151
35150 ..... 1151
351316 ..... 794
351318 ..... 794
351348 ..... 183, 685
351349 ..... 182, 685
351351 ..... 26
351352 ..... 26
351353 ..... 26
351354 ..... 26
351355 ..... 26
351358 ..... 27
351370 ..... 27
351373 ..... 28
351374 ..... 28
351375 ..... 28
351376 ..... 28
351377 ..... 28
351378 ..... 28
351390 ..... 26
351470 ..... 761
351472 ..... 761
351474 ..... 761
351476 ..... 761
351490 ..... 761
351500 ..... 247, 766
351501 ..... 247, 766
351502 ..... 248, 766
351504 ..... 248, 766
351505 ..... 248, 765
351506 ..... 248, 766
351508 ..... 247
351547 ..... 247, 765
351560 ..... 764
351573 ..... 764
351574 ..... 764
351575 ..... 764, 803
351576 ..... 764
351577 ..... 764
351578 ..... 764
351586 ..... 764
351587 ..... 764
351593 ..... 764
351594 ..... 764
351645 ..... 627

351646 ..... 627
351650 ..... 627
351651 ..... 627
351652 ..... 627
351653 ..... 627
351654 ..... 627
351661 ..... 228
351661 ..... 750
351664 ..... 228
351664 ..... 750
351666 ..... 229, 748
351667 ..... 229, 748
351668 ..... 229, 748
351669 ..... 229, 748
351670 ..... 229, 748
351671 ..... 229, 748
351672 ..... 229, 748
351673 ..... 229, 748
351675 ..... 229, 748
351676 ..... 228, 749
351677 ..... 228, 749
351678 ..... 228, 749
351679 ..... 227, 749
351680 ..... 227, 749
351685 ..... 216
351715 ..... 655
351737 ..... 759
351743 ..... 557
351744 ..... 557
351745 ..... 671
351747 ..... 752
351748 ..... 549
351749 ..... 758
351750 ..... 755
351752 ..... 755
351754 ..... 755
351755 ..... 755
351763 ..... 755
351767 ..... 752
351768 ..... 752
351769 ..... 752
351770 ..... 752
351771 ..... 752
351772 ..... 752
351773 ..... 751
351774 ..... 751
351779 ..... 226
351779 ..... 750
351780 ..... 752
351783 ..... 754
351784 ..... 229
351784 ..... 748, 758
351788 ..... 751
351789 ..... 751
351790 ..... 751
351791 ..... 751
351800 ..... 48, 544
351801 ..... 48, 546
351802 ..... 48, 544
351803 ..... 48, 546
351803DG ..... 546
351804 ..... 48, 544
351806 ..... 48, 546
351808 ..... 48, 544
351810 ..... 48, 544
351812 ..... 48, 544
351814 ..... 48, 544
351815 ..... 49, 545
351817 ..... 49, 545
351818 ..... 49, 545
351819 ..... 49 545
351820 ..... 48, 545
351821 ..... 48, 545
351824 ..... 49, 545
351825 ..... 54, 549, 803
351827 ..... 54, 549, 803
351829 ..... 54, 549
351830 ..... 184, 679, 803
351831 ..... 184, 679
351835 ..... 53, 547
351838 ..... 54, 547
351839 ..... 54, 547
351840 ..... 55
351841 ..... 55
351842 ..... 55
351843 ..... 49, 546
351845 ..... 49, 546
351850 ..... 40
351852 ..... 40
351854 ..... 40
351856 ..... 40
351858 ..... 40
351860 ..... 36
351861 ..... 37
351862 ..... 40
351863 ..... 40
351864 ..... 40
351865 ..... 40
351870 ..... 54
351872 ..... 54
351874 ..... 54
351876 ..... 54
351898 ..... 54
351900 ..... 37, 547
351901 ..... 51, 548
351901DG ..... 549
351902 ..... 37, 547
351905 ..... 50, 548
351907 ..... 50, 548
351908 ..... 51, 548
351909 ..... 51, 548
351910 ..... 51, 548
351970 ..... 776
352090 ..... 118
352100 ..... 128
352103P ..... 128
352106 ..... 128
352109 ..... 128
352120 ..... 128
352123 ..... 128
352126 ..... 128
352129 ..... 128
352132P ..... 657
352133 ..... 657
352134 ..... 657
352135 ..... 657
352136 ..... 657
352140 ..... 663
352144 ..... 673, 1113
352145 ..... 673, 803, 1112
352146 ..... 662
352147 ..... 662
352148 ..... 662
352149 ..... 662
352150 ..... 664
352151 ..... 660
352152 ..... 664
352153 ..... 660
352154 ..... 664
352155 ..... 660
352162 ..... 662
352164 ..... 661
352165 ..... 661
352166 ..... 661
352167 ..... 661
352168 ..... 661
352169 ..... 656
352170 ..... 664
352171 ..... 664
352173 ..... 659
352174 ..... 659
352177 ..... 659
352178 ..... 661
352180 ..... 667
352181 ..... 667
352183 ..... 667
352184 ..... 667
352185 ..... 659
352187 ..... 658
352191 ..... 659
352196 ..... 659
352197 ..... 659
352199 ..... 668
352210 ..... 127
352232 ..... 667
352235 ..... 122
352237 ..... 122
352240 ..... 118
352250 ..... 118
352295 ..... 671
352297 ..... 669
352298 ..... 669
352598 ..... 756
352605 ..... 772
352606 ..... 673
352607 ..... 673
352610 ..... 772
352611 ..... 772
352612 ..... 773
352613 ..... 773
352614 ..... 773
352615 ..... 760
352630 ..... 760
352680 ..... 773
352681 ..... 773
352682 ..... 773
352683 ..... 773
352690 ..... 773
352691 ..... 773
352692 ..... 773
352693 ..... 773
352705 ..... 768
352800 ..... 757
352802 ..... 757
352804 ..... 757
352806 ..... 757
352808 ..... 757
352810 ..... 757
352825 ..... 763
352950 ..... 22
352951 ..... 22
352952 ..... 22
352953 ..... 22
352954 ..... 22
352957 ..... 22
352959 ..... 22
353001 ..... 564
353002 ..... 564
353003 ..... 564
353011 ..... 564, 803
353012 ..... 564
353014 ..... 564
353016 ..... 564
353025 ..... 563
353035 ..... 567
353040 ..... 569
353041 ..... 569
353042 ..... 569
353043 ..... 569
353050 ..... 560
353052 ..... 560
353054 ..... 560
353056 ..... 560
353060 ..... 560
353062 ..... 560
353064 ..... 560
353066 ..... 560
353070 ..... 564
353075 ..... 566
353077 ..... 604
353078 ..... 604
353080 ..... 604
353085 ..... 604
353086 ..... 605
353087 ..... 605
353100 ..... 562
353102 ..... 562
353105 ..... 562
353110 ..... 562
353112 ..... 562
353115 ..... 562
353120 ..... 562
353123 ..... 566
353124 ..... 566
353125 ..... 566
353126 ..... 566
353127 ..... 566
353128 ..... 566
353131 ..... 563
353132 ..... 563
353135 ..... 565
353136 ..... 565
353137 ..... 565
353138 ..... 565
353140 ..... 570
353142 ..... 570
353150 ..... 561
353151 ..... 561
353152 ..... 561
353153 ..... 561
353154 ..... 561
353155 ..... 561
353182 ..... 602
353183 ..... 603
353186 ..... 602
353187 ..... 603
353187 ..... 802
353189 ..... 602
353190 ..... 603
353190 ..... 802
353192 ..... 602
353195 ..... 602
353203 ..... 795
353206 ..... 795
353207 ..... 795
353490 ..... 97, 621
353491 ..... 97, 621
353492 ..... 97, 621
353494 ..... 620
353495 ..... 620
353496 ..... 620
353500 ..... 616
353503 ..... 616
353510 ..... 617
353513 ..... 617
353515 ..... 611
353522 ..... 611
353524 ..... 611
353528 ..... 612
353531 ..... 610
353532 ..... 610
353533 ..... 610
353534 ..... 610
353535 ..... 614
353536 ..... 619
353538 ..... 621
353539 ..... 630
353540 ..... 613
353541 ..... 612
353542 ..... 612

353543 ..... 612
353545 ..... 614
353546 ..... 633
353550 ..... 616
353560 ..... 92, 615
353562 ..... 92, 615
353565 ..... 92, 615
353567 ..... 615
353568 ..... 613
353569 ..... 605
353570 ..... 606
353571 ..... 606
353580 ..... 641
353581 ..... 642
353582 ..... 641
353583 ..... 642
353584 ..... 641
353585 ..... 640
353586 ..... 640
353588 ..... 642
353595 ..... 654
353596 ..... 654
353597 ..... 654
353600 ..... 650, 803
353602 ..... 650
353605 ..... 650
353607 ..... 650
353609 ..... 653
353610 ..... 653
353617 ..... 643
353618 ..... 643
353619 ..... 643
353620 ..... 639
353622 ..... 639
353623 ..... 629
353625 ..... 652
353626 ..... 652
353627 ..... 652
353630 ..... 651
353631 ..... 651
353632 ..... 651
353635 ..... 651
353639 ..... 622
353640 ..... 553
353641 ..... 648
353642 ..... 648
353643 ..... 648
353645 ..... 554
353646 ..... 554
353647 ..... 553
353650 ..... 649
353651 ..... 653
353653 ..... 653
353655 ..... 647
353656 ..... 647
353657 ..... 606
353658 ..... 654
353660 ..... 633
353662 ..... 633
353664 ..... 633
353666 ..... 633
353668 ..... 633
353670 ..... 633
353672 ..... 646
353674 ..... 646
353680 ..... 632
353682 ..... 632
353684 ..... 632
353686 ..... 632
353690 ..... 632
353692 ..... 632
353694 ..... 632
353696 ..... 632
353700 ..... 619
353800 ..... 636
353802 ..... 636
353806 ..... 634
353810 ..... 635
353812 ..... 635
353815 ..... 635
353817 ..... 635
353825 ..... 636
353827 ..... 636
353835 ..... 637
353837 ..... 637
353840 ..... 637
353842 ..... 637
353860 ..... 646
353862 ..... 646
353865 ..... 646
353872 ..... 100
354000 ..... 645
354002 ..... 645
354004 ..... 645
354005 ..... 645
354010 ..... 645
354031 ..... 638
354032 ..... 638
354033 ..... 638
354034 ..... 638
354084 ..... 629
354087 ..... 629
354100 ..... 630
354102 ..... 630
354125 ..... 596
354135 ..... 618
354136 ..... 618
354137 ..... 618
354165 ..... 644
354170 ..... 634
354180 ..... 593
354185 ..... 593
354190 ..... 590
354191 ..... 590
354320 ..... 655
354400 ..... 582
354402 ..... 582
354404 ..... 582
354406 ..... 582
354408 ..... 583
354410 ..... 583
354412 ..... 583
354414 ..... 584
354416 ..... 584
354420 ..... 579
354422 ..... 579
354424 ..... 579
354427 ..... 589
354428 ..... 577
354430 ..... 577
354432 ..... 577
354434 ..... 580
354435 ..... 591
354436 ..... 580
354438 ..... 580
354442 ..... 581
354444 ..... 581
354446 ..... 581
354448 ..... 584
354450 ..... 586
354452 ..... 586
354454 ..... 586
354456 ..... 585
354458 ..... 585
354460 ..... 585
354462 ..... 585
354464 ..... 587
354466 ..... 587
354468 ..... 587
354470 ..... 587
354472 ..... 587
354474 ..... 588
354476 ..... 588
354482 ..... 588
354484 ..... 588
354486 ..... 588
354488 ..... 578
354490 ..... 578
354494 ..... 578
354496 ..... 578
354500 ..... 631
354501 ..... 631
354720 ..... 594
354721 ..... 594
354722 ..... 594
354723 ..... 594
354724 ..... 594
354729 ..... 591
354730 ..... 591
354735 ..... 592
354737 ..... 592
354739 ..... 592
354750 ..... 589
354755 ..... 593
354800 ..... 601
354801 ..... 601
354802 ..... 601
354803 ..... 601
354804 ..... 601
354805 ..... 600
354806 ..... 600
354807 ..... 600
354808 ..... 601
354810 ..... 596
354815 ..... 599
354816 ..... 599
354817 ..... 599
354826 ..... 597
354827 ..... 597
354830 ..... 597
354835 ..... 598
354836 ..... 598
354839 ..... 622
354845 ..... 596
354847 ..... 600
354900 ..... 170, 674
354902 ..... 170, 674
354904 ..... 170, 674
354906 ..... 170, 674
354908 ..... 170, 674
354915 ..... 174, 678
354916 ..... 174, 678
354917 ..... 174, 678
354920 ..... 171, 675
354928 ..... 171, 675
354931 ..... 169, 674
354941 ..... 172, 676
354958 ..... 173, 677
354959 ..... 173, 677
354960 ..... 173, 677
354961 ..... 173, 677
354962 ..... 173, 677
354964 ..... 178, 680, 802
354964DG ..... 178, 681
354965 ..... 178, 680
354965DG ..... 178, 681
354966 ..... 179, 680
354967 ..... 179, 680
354969 ..... 179, 680
354971 ..... 179, 679
354972 ..... 681
354973 ..... 681
354974 ..... 681
354975 ..... 681
354981 ..... 172, 676
354982 ..... 172, 676
354985 ..... 173, 677
354986 ..... 173, 677
354987 ..... 173, 677
354988 ..... 173, 677
354990 ..... 160, 678
354992 ..... 160, 678
354994 ..... 160, 678
354996 ..... 160, 678
354998 ..... 160, 678
355055 ..... 76
355080 ..... 770
355081 ..... 770
355082 ..... 770
355083 ..... 770
355084 ..... 770
355085 ..... 770
355086 ..... 770
355087 ..... 770
355088 ..... 770
355089 ..... 770
355090 ..... 770
355091 ..... 770
355092 ..... 770
355093 ..... 770
355094 ..... 770
355095 ..... 770
355096 ..... 770
355097 ..... 770
355098 ..... 770
355099 ..... 770
355100 ..... 771
355101 ..... 771
355175 ..... 758
355180 ..... 793
355182 ..... 793
355184 ..... 793
355186 ..... 793
355191 ..... 793
355192 ..... 793
355194 ..... 503, 717
355194 ..... 793, 957
355196 ..... 605
355198 ..... 607
355275 ..... 771, 802
355276 ..... 771, 802
355277 ..... 771, 802
355278 ..... 771, 802
355285 ..... 769
355286 ..... 323, 769
355287 ..... 769
355288 ..... 769
355290 ..... 769
355291 ..... 323, 769
355292 ..... 769
355295 ..... 769
355296 ..... 769
355297 ..... 769
355298 ..... 769
355299 ..... 769
355300 ..... 769
355301 ..... 769
355302 ..... 769
355303 ..... 769
355304 ..... 769
355305 ..... 769
355306 ..... 769
355309 ..... 768
355310 ..... 768
355311 ..... 768
355312 ..... 768
355313 ..... 768
355314 ..... 768
355315 ..... 768
355490 ..... 797

355492 ..... 797
355493 ..... 797
355495 ..... 796
355497 ..... 796
355500 ..... 796
355558DG ..... 177, 681
355559DG ..... 177, 681
355560DG ..... 177, 681
355798 ..... 77
355799 ..... 77
355800 ..... 77
355801 ..... 77
355810 ..... 793
355819 ..... 561
355830 ..... 794
355832 ..... 794
355834 ..... 794
355838 ..... 794
356000 ..... 547
356002 ..... 547
356003 ..... 547
356025 ..... 627
356027 ..... 623
356028 ..... 623
356031 ..... 627
356040 ..... 626
356041 ..... 626
356045 ..... 623
356046 ..... 623
356051 ..... 625
356052 ..... 625
356053 ..... 625
356060 ..... 648
356070 ..... 624
356071 ..... 624
356072 ..... 624
357100 ..... 576
357102 ..... 576
357106 ..... 576
357110 ..... 576
357180 ..... 607
357185 ..... 607
357191 ..... 575
357192 ..... 575
357194 ..... 608
357195 ..... 609
357197 ..... 608
357198 ..... 609
357200 ..... 575
357202 ..... 575
357262 ..... 575
357270 ..... 575
357302 ..... 595
357304 ..... 595
357306 ..... 595
357308 ..... 595
357310 ..... 595
357532 ..... 759
357580 ..... 571
357581 ..... 571
357582 ..... 571
357583 ..... 571
357586 ..... 571
357590 ..... 572
357591 ..... 572
357592 ..... 572
357593 ..... 572
357594 ..... 666
357595 ..... 666
357601 ..... 180, 683
357603 ..... 180, 683
357603DG ..... 179, 682
357622 ..... 666
357623 ..... 672
357642 ..... 666
357643 ..... 666
357645 ..... 552
357645DG ..... 552
357647 ..... 552
357647DG ..... 552
357648 ..... 552
357648DG ..... 552
357650 ..... 798
357651 ..... 672, 798
357652 ..... 672, 798
357653 ..... 666, 798
357654 ..... 175, 683, 798
357655 ..... 175, 683, 798
357656 ..... 175, 683, 798
357656DG ..... 178, 681
357657 ..... 175, 683, 798
357658 ..... 551, 798
357659 ..... 551, 798
357660 ..... 551, 798
357661 ..... 551, 798
357667 ..... 175, 683
357672 ..... 175, 683
357674 ..... 175, 683
357675 ..... 175, 683
357676 ..... 175, 683
357676DG ..... 178, 681
357677 ..... 175, 683
357677DG ..... 178, 681
357681 ..... 550
357690 ..... 663
357691 ..... 663
358001 ..... 180, 682
358002 ..... 180, 682
358003 ..... 180, 682
358007 ..... 553
358344 ..... 717
358350 ..... 961
359003 ..... 704
359006 ..... 704
359016 ..... 706
359017 ..... 706
359018 ..... 706
359019 ..... 706
359020 ..... 706
359021 ..... 50, 688
359022 ..... 50, 688
359024 ..... 50, 688
359025 ..... 50, 688
359027 ..... 50, 688
359028 ..... 50, 688
359029 ..... 50, 688
359030 ..... 50, 688
359031 ..... 50, 688
359032 ..... 50, 688
359033 ..... 691
359034 ..... 691
359036 ..... 691
359037 ..... 691
359042 ..... 691
359043 ..... 686
359048 ..... 689
359049 ..... 689
359050 ..... 690
359051 ..... 689
359052 ..... 687
359053 ..... 687
359054 ..... 690
359055 ..... 708
359058 ..... 708
359059 ..... 708
359061 ..... 708
359062 ..... 708
359063 ..... 708
359069 ..... 707
359071 ..... 707
359073 ..... 707
359074 ..... 707
359075 ..... 707
359080 ..... 711
359082 ..... 711
359083 ..... 710
359085 ..... 710
359092 ..... 712
359093 ..... 712
359097 ..... 712
359099 ..... 709
359102 ..... 709
359103P ..... 709
359104 ..... 709
359105 ..... 709
359110 ..... 711
359111 ..... 711
359112 ..... 711
359113P ..... 711
359118 ..... 712
359119 ..... 712
359122 ..... 703
359123 ..... 703
359124 ..... 703
359127 ..... 703
359128 ..... 703
359131 ..... 703
359138 ..... 699
359139 ..... 699
359152 ..... 700
359159 ..... 698
359160 ..... 700
359161 ..... 697
359162 ..... 697
359163 ..... 697
359169 ..... 701
359170 ..... 701
359171 ..... 701
359173 ..... 698
359181 ..... 698
359183 ..... 698
359184 ..... 698
359185 ..... 697
359186 ..... 697
359187 ..... 697
359188 ..... 697
359191 ..... 702
359193 ..... 702
359194 ..... 699
359195 ..... 698
359201 ..... 693
359206 ..... 693
359208 ..... 693
359209 ..... 694
359210 ..... 694
359211 ..... 694
359212 ..... 694
359213 ..... 694
359214 ..... 694
359215 ..... 694
359221 ..... 695
359236 ..... 696
359237 ..... 696
359238 ..... 702
359250 ..... 704
359253 ..... 704
359259 ..... 705
359260 ..... 705
359261 ..... 705
359262 ..... 705
359263 ..... 705
359264 ..... 705
359265 ..... 705
359266 ..... 705
359267 ..... 705
359268 ..... 705
359269 ..... 705
359270 ..... 705
359271 ..... 705
359272 ..... 705
359273 ..... 705
359274 ..... 705
359275 ..... 705
359276 ..... 705
359277 ..... 705
359278 ..... 705
359279 ..... 705
359280 ..... 705
359281 ..... 705
359282 ..... 705
359283 ..... 691
359284 ..... 691
359296 ..... 692
359299 ..... 692
359307 ..... 692
359313 ..... 701
359314 ..... 699
359321 ..... 701
359325 ..... 696
359328 ..... 708
359329 ..... 708
359335 ..... 708
359339 ..... 708
359340 ..... 707
359342 ..... 707
359343 ..... 707
359344 ..... 708
359345 ..... 708
359346 ..... 708
359347 ..... 708
359349 ..... 708
359350 ..... 708
359352 ..... 708
359353 ..... 713
359354 ..... 695
359355 ..... 695
359356 ..... 695
359357 ..... 695
359358 ..... 695
359359 ..... 686
359360 ..... 687
359361 ..... 686
359381 ..... 709
359382 ..... 712
359383 ..... 713
359401 ..... 707
359402 ..... 707
359403 ..... 707
359407 ..... 690
380200 ..... 214
380202 ..... 214
380204 ..... 214
380206 ..... 214
380208 ..... 214
380210 ..... 214
381801A ..... 1153
382710 ..... 221
382722 ..... 220
382800 ..... 367
382805 ..... 367
386152 ..... 1037
392012 ..... 1157
392014 ..... 1157
392018 ..... 1158
392026 ..... 1157
392028 ..... 1157
392034 ..... 1157
392036 ..... 1157
392040 ..... 1158
392043 ..... 1158

392204 ..... 1157
394236 ..... 1158
394237 ..... 1158
394238 ..... 1158
394246 ..... 1156
394247 ..... 1156
394250 ..... 1156
394258 ..... 1156
394267 ..... 1156
394430 ..... 551, 1107
394431 ..... 551, 1107
394807 ..... 1156
394811 ..... 1156
395115 ..... 672
395118 ..... 39
395128 ..... 672

# 4

405188 ..... 1167
405910R ..... 1167
405912 ..... 1167
405933L ..... 1167
411140 ..... 500
411145 ..... 500
411165 ..... 501
411166 ..... 501
411200 ..... 493
411201 ..... 493
411202 ..... 493
411203 ..... 493
411204 ..... 493
411230 ..... 493
411231 ..... 493
411232 ..... 493
411241 ..... 493
411304 ..... 501
411331 ..... 520, 1130
411515 ..... 496
411520 ..... 495
411525 ..... 496
411535 ..... 497
411540 ..... 497
411625 ..... 1058
411700 ..... 245
411702 ..... 245
411704 ..... 245
411720 ..... 245
411724 ..... 245
411726 ..... 245
411727 ..... 245
411728 ..... 245
412944L ..... 1167
421140 ..... 1122
421141 ..... 1122
421142 ..... 1122
421200 ..... 1123
421510 ..... 216, 1125
421512 ..... 216, 1125
421610 ..... 197
421620 ..... 197
421630 ..... 197
421640 ..... 197
422180 ..... 1123
422190 ..... 1123
422200 ..... 1123
422250 ..... 1123
423320 ..... 1112
423330 ..... 1112
423340 ..... 1112
423410 ..... 1115
423422 ..... 1114
423425 ..... 1120
423428 ..... 1118
423430 ..... 1118
423432 ..... 1118
423434 ..... 1118
423438 ..... 1118
423440 ..... 1120
423450 ..... 1114
423460 ..... 1114
423480 ..... 1115
423490 ..... 1115
424100 ..... 1121
424102 ..... 1121
424110 ..... 1121
424170 ..... 1121
424180 ..... 1121
424190 ..... 1121
425190 ..... 1107
425191 ..... 1107
425200 ..... 1106
425210 ..... 1106
425312 ..... 1104
425350 ..... 1102
425360 ..... 1104
425380 ..... 1104
425390 ..... 1104
425510 ..... 1111
425520 ..... 1111
425530 ..... 1111
425560 ..... 1105
425590 ..... 1104
425605 ..... 1106
425700 ..... 1108
425710 ..... 1108
425720 ..... 1108
425730 ..... 1108
425740 ..... 1108
425750 ..... 1108
426010 ..... 1126
426040 ..... 1127
426050 ..... 1127
426080 ..... 1127
426090 ..... 307, 1126
426092 ..... 307, 1126
426094 ..... 307, 1126
426096 ..... 307, 1126
426098 ..... 307, 1126
427002 ..... 307, 1126
427370 ..... 1106
427382 ..... 1106
427384 ..... 1106
427390 ..... 1104
427392 ..... 1102
427400 ..... 1102
427410 ..... 1102
427420 ..... 1105
428630 ..... 311, 1130
428650 ..... 1128
428655 ..... 1128
429317 ..... 1131
429318 ..... 1131
429430 ..... 1131
429512 ..... 1129
429520 ..... 1129
429524 ..... 1129
429526 ..... 1128
429527 ..... 1128
429532 ..... 1129
429534 ..... 1129
429546 ..... 1128
429548 ..... 1128
429566 ..... 1128
429594 ..... 323, 798
429601 ..... 323
431110 ..... 519
431111 ..... 519
431112 ..... 519
431120 ..... 519
431130 ..... 519
431325 ..... 505
431360 ..... 506
431362 ..... 506
431366 ..... 506
431425 ..... 512
431433 ..... 514
431437 ..... 514
431440 ..... 514
431445 ..... 515
431446 ..... 515
431451 ..... 515
431452 ..... 515
431461 ..... 515
431462 ..... 515
431463 ..... 515
431480 ..... 515
431481 ..... 516
431710 ..... 516
431711 ..... 516
431728 ..... 516
431729 ..... 516
431732 ..... 516
431733 ..... 516
432007 ..... 516
437081 ..... 381
437085 ..... 381
437111 ..... 381
437115 ..... 381
437117 ..... 381
437141 ..... 381
437145 ..... 381
438110 ..... 381
438170 ..... 381
441207 ..... 509, 995
441208 ..... 509, 995
441420 ..... 1014
441530 ..... 510, 975
441555 ..... 511, 976
441730 ..... 503
441740 ..... 504
442100 ..... 187
442102 ..... 187
442104 ..... 187
442106 ..... 187
442108 ..... 187
442110 ..... 188
442145 ..... 185
442147 ..... 185
442210 ..... 196
442245 ..... 203
442260 ..... 202
442288 ..... 214
442295 ..... 195
442502 ..... 139
442510 ..... 136
442512 ..... 136
442515 ..... 141
442525 ..... 140
442560 ..... 121
442576 ..... 140
443100 ..... 151
443120 ..... 152
443480 ..... 507
443480 ..... 1111
443500 ..... 73
443502 ..... 73
443505 ..... 73
443507 ..... 73
443508 ..... 73
443510 ..... 73
443512 ..... 73
443610 ..... 507
447025 ..... 36
447030 ..... 45
447050 ..... 30
450205 ..... 24
452510 ..... 523
452550 ..... 523
452551 ..... 523
454100 ..... 25
454300 ..... 30
454305 ..... 30
454320 ..... 29
454322 ..... 29
456002 ..... 23
456005 ..... 23
456006 ..... 23
456007 ..... 23
460100 ..... 113
460105 ..... 113
460110 ..... 113
460115 ..... 113
460135 ..... 113
460140 ..... 113
460165 ..... 113
460170 ..... 113
460175 ..... 113
460177 ..... 113
460179 ..... 113
460180 ..... 112
460219 ..... 113
460220 ..... 113
460245 ..... 113
460400 ..... 115
460410 ..... 115
460420 ..... 115
460430 ..... 115
460460 ..... 115
460461 ..... 115
460600 ..... 117
460601 ..... 117
460620 ..... 115
460630 ..... 115
460720 ..... 119
460820 ..... 124
460821 ..... 124
460830 ..... 123
460840 ..... 124
460841 ..... 124
460870 ..... 124
460871 ..... 124
460873 ..... 131
460880 ..... 124
460881 ..... 124
460883 ..... 131
460884 ..... 124
460885 ..... 124
460889 ..... 124
461125 ..... 527
461126 ..... 527
461128 ..... 527
461310 ..... 131
461311 ..... 131
461350 ..... 522
461351 ..... 522
461352 ..... 522
461353 ..... 522
461354 ..... 522
461430 ..... 137
461431 ..... 137
461600 ..... 523
461605 ..... 523
461610 ..... 524
461615 ..... 524
461660 ..... 533
461661 ..... 533
462105 ..... 124
462110 ..... 124

462120 ..... 117
462121 ..... 117
462148 ..... 129
462149 ..... 129
462150 ..... 129
462151 ..... 129
462201 ..... 131
462530 ..... 131
462530 ..... 671
462540 ..... 143
462541 ..... 143
462550 ..... 143
462600 ..... 135
462605 ..... 135
462632 ..... 136
462633 ..... 136
462640 ..... 135
462641 ..... 135
462680 ..... 142
462681 ..... 142
462690 ..... 142
462691 ..... 142
463810 ..... 103
463820 ..... 105
463830 ..... 103
463840 ..... 104
463885 ..... 101
463900 ..... 148
463901 ..... 148
463903 ..... 148
463910 ..... 148
463911 ..... 148
463912 ..... 148
463913 ..... 148
463915 ..... 148
463920 ..... 149
463921 ..... 149
463930 ..... 149
463932 ..... 149
463941 ..... 148
463950 ..... 145
464220 ..... 136
464500 ..... 114
464502 ..... 114
464600 ..... 116
464605 ..... 116
464610 ..... 116
464615 ..... 116
464700 ..... 126
464701 ..... 126
464705 ..... 126
464706 ..... 126
464707 ..... 125
464710 ..... 126
464711 ..... 126
464712 ..... 125
464715 ..... 126
464716 ..... 126
464718 ..... 125
464720 ..... 126
464721 ..... 126
464722 ..... 125
464725 ..... 126
464726 ..... 126
464727 ..... 125
464800 ..... 129
464801 ..... 129
464810 ..... 138
465100 ..... 34
465105 ..... 34
465110 ..... 34
465115 ..... 34
465120 ..... 34
465125 ..... 34
465130 ..... 34
465150 ..... 34
465155 ..... 34
465160 ..... 34
465165 ..... 34
465170 ..... 34
466150 ..... 39
466151 ..... 38
466160 ..... 40
466170 ..... 41
466200 ..... 36
466210 ..... 36
466211 ..... 36
466220 ..... 37
466225 ..... 37
466225 ..... 547
467100 ..... 42
467105 ..... 42
467110 ..... 42
467115 ..... 42
467120 ..... 42
467125 ..... 42
468190 ..... 50
468220 ..... 47
468230 ..... 47
468240 ..... 47
471100 ..... 338
471105 ..... 338
471115 ..... 338
471120 ..... 338
471125 ..... 338
471130 ..... 338
471135 ..... 338
471140 ..... 338
471175 ..... 326
471185 ..... 326
471210 ..... 326
471215 ..... 326
475080 ..... 63
475082 ..... 63
475084 ..... 62
475086 ..... 62
475100 ..... 62
475101 ..... 62
475102 ..... 62
475130 ..... 64
475131 ..... 64
475200 ..... 70
475201 ..... 70
475210 ..... 65
475211 ..... 65
475250 ..... 99
475305 ..... 59
475306 ..... 59
475307 ..... 59
475308 ..... 60
475309 ..... 60
475310 ..... 61
475311 ..... 61
475312 ..... 61
475313 ..... 61
476105 ..... 67
476106 ..... 67
476110 ..... 67
476115 ..... 67
476120 ..... 67
476125 ..... 67
476150 ..... 67
476155 ..... 67
476156 ..... 67
476160 ..... 67
476165 ..... 67
476170 ..... 67
476175 ..... 67
476200 ..... 69
476205 ..... 69
476206 ..... 69
476210 ..... 69
476215 ..... 69
476220 ..... 69
476225 ..... 69
476250 ..... 69
476255 ..... 69
476260 ..... 69
476265 ..... 69
476270 ..... 69
476275 ..... 69
476300 ..... 58
476310 ..... 58
476330 ..... 58
476340 ..... 58
477090 ..... 83
477091 ..... 82
477092 ..... 82
477093 ..... 82
477108 ..... 82
477109 ..... 59
477110 ..... 59
477112 ..... 59
477113 ..... 59
477115 ..... 299
477116 ..... 59
477117 ..... 59
477118 ..... 59
477170 ..... 61
477190 ..... 56
477191 ..... 56
480100 ..... 203
480105 ..... 204
480125 ..... 207
480126 ..... 207
480140 ..... 206
480145 ..... 206
480150 ..... 204
480170 ..... 205
480172 ..... 205
480195 ..... 213
480196 ..... 213
481175 ..... 186
481180 ..... 189
481220 ..... 196, 745
481230 ..... 197, 745
481231 ..... 197, 745
481250 ..... 199
481390 ..... 195
481500 ..... 198
481520 ..... 197
481530 ..... 199
481610 ..... 198
481616 ..... 212
481617 ..... 212
481618 ..... 212
481629 ..... 212
481825 ..... 209
481826 ..... 209
481827 ..... 209
482350 ..... 211
482370 ..... 210
482371 ..... 210
485205 ..... 235
485210 ..... 235
485220 ..... 235
485225 ..... 236
485262 ..... 236
485265 ..... 237
485270 ..... 237
485450 ..... 234
486100 ..... 234
488210 ..... 217
488305 ..... 219
488306 ..... 219
488350 ..... 227
488360 ..... 220
488361 ..... 220
488370 ..... 222
488390 ..... 224
488395 ..... 224
496105 ..... 80
496110 ..... 80
496111 ..... 80
496112 ..... 86
496215 ..... 86
496216 ..... 86
496217 ..... 86

# 5

50000 ..... 1166
50024 ..... 1166
50035 ..... 1166
500310 ..... 88
500311 ..... 88
500312 ..... 88
500316 ..... 88
500399 ..... 90
500400 ..... 90
500402 ..... 90
500410 ..... 91
500412 ..... 91
501500 ..... 534
501550 ..... 534
501552 ..... 534
501554 ..... 534
501556 ..... 534
501558 ..... 534
501560 ..... 534
501580 ..... 534
501648 ..... 534
501650 ..... 534
501652 ..... 534
501654 ..... 534
501656 ..... 534
501658 ..... 534
501660 ..... 534
501810 ..... 534
501814 ..... 534
501820 ..... 534
501824 ..... 534
501830 ..... 534
502002 ..... 534
502004 ..... 534
502010 ..... 534
502012 ..... 534
502020 ..... 534
502022 ..... 534
502030 ..... 534
502031 ..... 534
502032 ..... 534
502033 ..... 534
502040 ..... 534
502045 ..... 534
502060 ..... 534
502080 ..... 534
502082 ..... 534
502084 ..... 534
502086 ..... 534
502090 ..... 534
502100 ..... 534
502108 ..... 534
502109 ..... 534
502110 ..... 534
502200 ..... 534
502203 ..... 534
502245 ..... 413
502248 ..... 413, 778

502260 ..... 411
502261 ..... 411
502262 ..... 412
502265 ..... 412
502275 ..... 389
502276 ..... 389
502300 ..... 534
502301 ..... 534
502302 ..... 534
502500 ..... 534
502502 ..... 534
502504 ..... 534
502506 ..... 535
502508 ..... 535
502510 ..... 535
502512 ..... 535
502514 ..... 535
502516 ..... 535
502525 ..... 535
502527 ..... 535
502532 ..... 535
502534 ..... 535
502536 ..... 535
502538 ..... 535
502540 ..... 441
502550 ..... 535
502562 ..... 414
502566 ..... 414
502574 ..... 414
502594 ..... 415
502599 ..... 415
502600 ..... 415, 535
502602 ..... 535
502604 ..... 535
502606 ..... 535
502608 ..... 535
502620 ..... 535
502622 ..... 535
502624 ..... 535
502626 ..... 535
502630 ..... 535
502632 ..... 535
502634 ..... 535
502636 ..... 535
502640 ..... 535
502641 ..... 535
502642 ..... 535
502643 ..... 535
502644 ..... 535
502645 ..... 535
502646 ..... 535
502647 ..... 535
502650 ..... 535
502651 ..... 535
502652 ..... 535
502653 ..... 535
502654 ..... 535
502655 ..... 535
502656 ..... 535
502657 ..... 535
502658 ..... 535
502659 ..... 535
502750 ..... 535
502752 ..... 535
502754 ..... 535
502756 ..... 535
502758 ..... 535
502765 ..... 535
502767 ..... 536
502800 ..... 536
502802 ..... 536
502804 ..... 536
502808 ..... 536
502815 ..... 536
502817 ..... 536
502819 ..... 536
503500 ..... 536
503502 ..... 536
503505 ..... 536
503525 ..... 536
503527 ..... 536
503533 ..... 536
503539 ..... 536
503541 ..... 536
503550 ..... 536
503552 ..... 536
503554 ..... 536
503556 ..... 536
503558 ..... 536
503560 ..... 536
503562 ..... 536
503564 ..... 536
503600P ..... 536
503602 ..... 536
503604 ..... 536
503606 ..... 536
503608 ..... 536
503610P ..... 536
503612 ..... 536
503614 ..... 536
503625 ..... 536
503627 ..... 536
503629 ..... 536
503631 ..... 536
503633 ..... 536
503635 ..... 536
503650 ..... 536
503652 ..... 536
503654 ..... 536
503656 ..... 536
503658 ..... 536
503660P ..... 536
503675 ..... 536
503676 ..... 536
503677 ..... 536
504075 ..... 309, 435
504171 ..... 66
504180 ..... 57
504181 ..... 57
504190 ..... 81
505005 ..... 459
505010 ..... 459
505014 ..... 459
505016 ..... 459
505018 ..... 459
505020 ..... 459
505022 ..... 459
505028 ..... 459
505030 ..... 459
505032 ..... 459
505046 ..... 459
505048 ..... 459
505050 ..... 459
505056 ..... 459
505100 ..... 416
505100 ..... 776
505102 ..... 416
505104 ..... 416, 776
505106 ..... 416
505110 ..... 417, 777
505112 ..... 417, 777
505113 ..... 453
505114 ..... 417, 777
505116 ..... 417, 777
505123 ..... 453
505130 ..... 453
505132 ..... 453
505134 ..... 453
505136 ..... 453
505138 ..... 453
505140 ..... 453
505142 ..... 453
505144 ..... 453
505146 ..... 453
505148 ..... 453
505150 ..... 453
505152 ..... 453
505160 ..... 451
505162 ..... 451
505166 ..... 451
505168 ..... 451
505195 ..... 418
505196 ..... 418
505230 ..... 418, 777
505313 ..... 452
505334 ..... 452
505342 ..... 417
505400 ..... 454, 776
505402 ..... 454
505403 ..... 454
505404 ..... 454
505406 ..... 454
505414 ..... 454
505415 ..... 454
505420 ..... 454, 776
505422 ..... 454
505432 ..... 454
505433 ..... 454
505450 ..... 455
505455 ..... 455
505456 ..... 455
505462 ..... 455
505463 ..... 455
505515 ..... 458
505605 ..... 427
505650 ..... 460
505654 ..... 460
505662 ..... 460
505670 ..... 460
505674 ..... 460
505680 ..... 460
505682 ..... 460
505686 ..... 460
505690 ..... 460
506000 ..... 457
506003 ..... 457
506004 ..... 457
506008 ..... 457
506016 ..... 457
506017 ..... 457
506053 ..... 457
506060 ..... 456
506063 ..... 456
506070 ..... 456
506075 ..... 456
506076 ..... 456
50613AC ..... 464
50614AC ..... 464
50615AC ..... 464
506150 ..... 455
506152 ..... 455
506155 ..... 458
506157 ..... 458
50616AC ..... 464
506220 ..... 456
506232 ..... 456
506251 ..... 456
506252 ..... 456
506330 ..... 455
506331 ..... 455
50640 ..... 1166
506455 ..... 425
506460 ..... 425
506461 ..... 425
506462 ..... 425
506463 ..... 425
506465 ..... 425
506470 ..... 426
506471 ..... 426
506472 ..... 426
506475 ..... 426
506476 ..... 426
506477 ..... 426
506478 ..... 426
506479 ..... 426
506485 ..... 419
506490 ..... 428
506663 ..... 429
506664 ..... 429
506665 ..... 429
506666 ..... 429
506667 ..... 429
506668 ..... 429
506669 ..... 429
506672 ..... 427
506673 ..... 429
506679 ..... 427
506680 ..... 428
506705 ..... 24, 434
506705 ..... 533
506707 ..... 434
506737 ..... 779
506742 ..... 779
506743 ..... 779
506744 ..... 779
506746 ..... 779
506747 ..... 418
506747 ..... 778
506748 ..... 777
506749 ..... 779
506750 ..... 434
506751 ..... 434
506752 ..... 434
506802 ..... 421
506802 ..... 422
506804 ..... 422
506806 ..... 422
506808 ..... 422
506810 ..... 422
506812 ..... 422
506814 ..... 422
506816 ..... 422
506818 ..... 422
506820 ..... 422
506822 ..... 422
506824 ..... 422
506830 ..... 423
506832 ..... 423
506842 ..... 423
506844 ..... 423
506856 ..... 420
506858 ..... 420
506860 ..... 420
506862 ..... 420
506864 ..... 420
506870 ..... 424
506872 ..... 424
506874 ..... 424
506880 ..... 423
506882 ..... 423
506884 ..... 423
506888 ..... 423
506890 ..... 421
506890 ..... 424
506950 ..... 425
506952 ..... 425
507010 ..... 419
507011 ..... 462
507012 ..... 462
507013 ..... 462

507014 ..... 462
507015 ..... 462
507020 ..... 462
507023 ..... 462
507027 ..... 462
507028 ..... 462
507030 ..... 419
507031 ..... 461
507032 ..... 461
507033 ..... 461
507034 ..... 461
507035 ..... 461
507040 ..... 461
507041 ..... 461
507045 ..... 419, 775
507046 ..... 419, 462
507046 ..... 775
507048 ..... 462
507050 ..... 461
507051 ..... 461
507052 ..... 461
507055 ..... 461
507057 ..... 461
507060 ..... 461
507065 ..... 461
507120 ..... 428
507121 ..... 428
507122 ..... 428
507267S ..... 436
507335 ..... 435, 766
507336 ..... 435, 767
507375 ..... 416
507434 ..... 435
507453 ..... 775
507454 ..... 775
507485S ..... 436
507498S ..... 436
507500 ..... 468
507501 ..... 468
507502 ..... 468
507503 ..... 468
507504 ..... 468
507505 ..... 468
507506 ..... 468
507507 ..... 468
507508 ..... 468
507509 ..... 468
507510 ..... 468
507511 ..... 468
507512 ..... 468
507513 ..... 468
507514 ..... 468
507515 ..... 468
507516 ..... 468
507517 ..... 468
507595 ..... 465
507596 ..... 465
507597 ..... 465
507598 ..... 465
507599 ..... 465
507600 ..... 465
507601 ..... 465
507602 ..... 465
507603 ..... 465
507604 ..... 465
507605 ..... 465
507606 ..... 465
507607 ..... 465
507608 ..... 465
507609 ..... 465
507610 ..... 465
507611 ..... 465
507612 ..... 465
507613 ..... 465
507614 ..... 465
507615 ..... 465
507807 ..... 467
507808 ..... 467
507809 ..... 467
507810 ..... 467
507812 ..... 467
507814 ..... 467
507816 ..... 467
507818 ..... 467
507820 ..... 467
507822 ..... 467
507824 ..... 467
507826 ..... 467
507828 ..... 467
507830 ..... 467
507832 ..... 467
507834 ..... 467
507836 ..... 467
507838 ..... 467
507840 ..... 467
507842 ..... 467
507875 ..... 467
507876 ..... 467
507877 ..... 467
507920 ..... 466
507922 ..... 466
507924 ..... 466
507926 ..... 466
507928 ..... 466
507930 ..... 466
507932 ..... 466
507934 ..... 466
507936 ..... 466
507938 ..... 466
507940 ..... 466
507942 ..... 466
507944 ..... 466
507946 ..... 466
507948 ..... 466
507950 ..... 466
507952 ..... 466
507954 ..... 466
507956 ..... 466
507958 ..... 466
507960 ..... 466
508000 ..... 466
508002 ..... 324, 410
508004 ..... 324, 410
508200 ..... 436, 524
508201 ..... 436, 524
508202 ..... 436, 524
508203 ..... 436, 524
508204 ..... 436, 524
508205 ..... 436, 524
508206 ..... 436, 524
508207 ..... 436, 524
508208 ..... 436, 524
508209 ..... 436, 524
508230 ..... 428
508540 ..... 445, 492
508541 ..... 445, 492
508542 ..... 445, 492
508543 ..... 445, 492
508544 ..... 445, 492
508545 ..... 492
508546 ..... 492
508547 ..... 492
508548 ..... 492
508590 ..... 457
508600 ..... 288
508601 ..... 288
508602 ..... 289
508605 ..... 288
508606 ..... 288
508610 ..... 290
508612 ..... 290
508614 ..... 290
508694 ..... 290
508696 ..... 290
509004 ..... 430
509005 ..... 430
509006 ..... 430
509007 ..... 430
509008 ..... 430
509009 ..... 430
509010 ..... 430
509012 ..... 431
509013 ..... 431
509014 ..... 431
509201 ..... 433
509202 ..... 433
509203 ..... 433
509204 ..... 289, 433
509205 ..... 433
509206 ..... 433
509207 ..... 434
509209 ..... 289
509214 ..... 430
509215 ..... 430
509216 ..... 430
509301 ..... 408, 432
509302 ..... 408, 432
509304 ..... 408, 432
509305 ..... 408, 432
510100 ..... 164
510101 ..... 164
510110 ..... 164
510111 ..... 164
510120 ..... 164
510121 ..... 164
510130 ..... 164
510131 ..... 164
510140 ..... 164
510151 ..... 165
510161 ..... 165
510181 ..... 150
510201 ..... 162
510211 ..... 162
510221 ..... 167
510241 ..... 162
510250 ..... 172
510251 ..... 162
510311 ..... 154
510312 ..... 154
510321 ..... 157
510325 ..... 156
510335 ..... 155
510395 ..... 155
510400 ..... 161
510405 ..... 161
510410 ..... 161
510415 ..... 161
510420 ..... 161
510430 ..... 161
510440 ..... 158
510441 ..... 158
510445 ..... 158
510467 ..... 168
510469 ..... 168
511101 ..... 165
511102 ..... 165
511110 ..... 166
511112 ..... 166
511115 ..... 160
511125 ..... 474
511130 ..... 160
511130P ..... 474
511131 ..... 160
511132 ..... 160
511133 ..... 160
511134 ..... 160
511134P ..... 474
511135 ..... 160
511135P ..... 474
511138 ..... 160
511139 ..... 160
511139P ..... 474
511140 ..... 474
511144 ..... 474
511145P ..... 474
511149 ..... 474
511250 ..... 166
511251 ..... 166
511252 ..... 167
511635 ..... 483
511725 ..... 481
511729 ..... 481
511730 ..... 481
511734 ..... 481
511735 ..... 481
511739 ..... 481
511740 ..... 481
511744 ..... 481
511745 ..... 481
511749 ..... 481
511930 ..... 482
511940 ..... 482
511945 ..... 482
511955 ..... 482
512205 ..... 482
512780 ..... 487
512782 ..... 487
512784 ..... 487
514375 ..... 489
514376 ..... 489
514377 ..... 489
514380 ..... 489
514412 ..... 204, 490
514413 ..... 190, 490
514414 ..... 191, 490
514430 ..... 192, 491
514431 ..... 192, 491
514433 ..... 192, 491
514435 ..... 192, 491
514436 ..... 192, 491
514437 ..... 192, 491
514438 ..... 192, 491
514480 ..... 79
515105 ..... 484
515106 ..... 484
515110 ..... 484
515115 ..... 484
515116 ..... 484
515120 ..... 484
515121 ..... 484
515125 ..... 484
515126 ..... 484
516270 ..... 485
516275 ..... 485
516280 ..... 485
516285 ..... 485
516390 ..... 486
516400 ..... 486
516430 ..... 486
518010 ..... 471
518015 ..... 471
518020 ..... 471
518025 ..... 471
518025A ..... 475
518025 ..... 476
518029 ..... 471
518029A ..... 475
518030 ..... 471
518030A ..... 475
518030 ..... 476

518034 ..... 471
518034A ..... 475
518035 ..... 471
518035A ..... 475
518035 ..... 476
518039 ..... 471
518039A ..... 475
518040 ..... 471
518040A ..... 475
518040 ..... 476
518044 ..... 471
518045 ..... 471
518049 ..... 471
518050 ..... 471
518055 ..... 471
518085 ..... 477
518100 ..... 478
518115 ..... 478
518120 ..... 478
518125 ..... 478
518129 ..... 478
518130 ..... 478
518134 ..... 478
518135 ..... 478
518139 ..... 478
518140 ..... 478
518144 ..... 478
518145 ..... 478
518149 ..... 478
518150 ..... 478
518155 ..... 478
518215 ..... 473
518220 ..... 473
518225 ..... 473
518230 ..... 473
518235 ..... 473
518240 ..... 473
518245 ..... 473
518250 ..... 473
518315 ..... 479
518320 ..... 479
518325 ..... 479
518330 ..... 479
518335 ..... 479
518340 ..... 479
518426 ..... 473
518431 ..... 473
518436 ..... 473
518441 ..... 473
518446 ..... 473
518456 ..... 474
518521 ..... 480
518526 ..... 480
518531 ..... 480
518536 ..... 480
518541 ..... 480
518546 ..... 480
518556 ..... 480
518620 ..... 474
518625 ..... 474
518630 ..... 474
518635 ..... 474
518640 ..... 474
518720 ..... 480
518730 ..... 480
518900 ..... 472
518902 ..... 472
518904 ..... 472
518906 ..... 472
518908 ..... 472
519000 ..... 485
519005 ..... 485
519010 ..... 485
519015 ..... 485
519020 ..... 485
519025 ..... 485
519030 ..... 485
520120 ..... 111
520130 ..... 111
520135 ..... 109
520140 ..... 109
520150 ..... 110
520152 ..... 110
521185 ..... 324
521186 ..... 324
521187 ..... 324
521450 ..... 389, 536
521455 ..... 389, 536
521460 ..... 389, 537
521465 ..... 389, 537
521500 ..... 390, 537
521550 ..... 391, 537
521552 ..... 391, 537
521554 ..... 391, 537
521556 ..... 391, 537
521558 ..... 391, 537
521820 ..... 392, 537
521824 ..... 392, 537
522000 ..... 537
522001 ..... 537
522002 ..... 393, 537
522004 ..... 393, 537
522010 ..... 393, 537
522012 ..... 393, 537
522020 ..... 537
522022 ..... 537
522030 ..... 394, 537
522032 ..... 394, 537
522040 ..... 393, 537
522045 ..... 393, 537
522045 ..... 394, 537
522190 ..... 403, 537
522191 ..... 403, 537
522193 ..... 537
522194 ..... 409, 537
522195 ..... 409
522200P ..... 537
522202 ..... 537
522204 ..... 537
522205 ..... 537
522206 ..... 395, 537
522207 ..... 537
522208 ..... 537
522209 ..... 395, 537
522210 ..... 537
522215 ..... 537
522216 ..... 395, 537
522220 ..... 396, 537
522222 ..... 396, 538
522224 ..... 396, 538
522225P ..... 396, 538
522226 ..... 409, 538
522227 ..... 538
522228 ..... 400, 538
522229 ..... 397, 538
522230 ..... 538
522231 ..... 538
522232 ..... 403, 538
522233 ..... 404, 538
522234 ..... 538
522235 ..... 538
522236 ..... 538
522237 ..... 538
522238 ..... 538
522240 ..... 415
522241 ..... 415
522242 ..... 406, 538
522243 ..... 538
522244 ..... 538
522245 ..... 538
522250 ..... 538
522255 ..... 538
522260 ..... 538
522261 ..... 538
522262 ..... 538
522263 ..... 538
522264 ..... 538
522265 ..... 538
522266 ..... 538
522267 ..... 538
522268 ..... 538
522269 ..... 539
522270 ..... 539
522271 ..... 539
522272 ..... 539
522273 ..... 539
522274 ..... 539
522275 ..... 539
522276 ..... 539
522280 ..... 539
522290 ..... 404, 539
522291 ..... 405, 539
522292 ..... 404, 539
522293 ..... 539
522294 ..... 539
522295 ..... 539
522296 ..... 539
522297 ..... 539
522300P ..... 539, 774
522301 ..... 539, 774
522302 ..... 539, 774
522305P ..... 539
522306 ..... 539, 774
522310P ..... 539
522311 ..... 539, 774
522401 ..... 539
522402 ..... 539
522403 ..... 539
522404 ..... 539
522408 ..... 539
522412 ..... 539
522500 ..... 539
522502 ..... 539
522504 ..... 539
522506 ..... 539
522508 ..... 539
522510 ..... 539
522512 ..... 539
522514 ..... 539
522516 ..... 539
522525 ..... 539
522527 ..... 539
522550 ..... 439, 539
522552 ..... 439
522554 ..... 439
522556 ..... 439
522575 ..... 438
522576 ..... 438
522577 ..... 438
522578 ..... 438
522579 ..... 438
522580 ..... 438
522581 ..... 438
522582 ..... 438
522583 ..... 438
522584 ..... 438
522585 ..... 438
522586 ..... 438
522587 ..... 438
522590 ..... 441
522595 ..... 441
522596 ..... 441
523100 ..... 384
523105 ..... 384
523106 ..... 384
523109 ..... 384
523110 ..... 384
523111 ..... 384
523120 ..... 381, 384
523121 ..... 384
523121T ..... 381
523120P ..... 440
523130 ..... 382, 384
523130P ..... 440
523135 ..... 384
523140 ..... 384
523140P ..... 440
523150 ..... 384
523150P ..... 440
523151 ..... 384
523160 ..... 384
523160P ..... 440
523165 ..... 384
523166 ..... 384
523167 ..... 384
523168 ..... 384
523170 ..... 384
523175 ..... 384
523177 ..... 384
523178 ..... 384
523180 ..... 384
523210P ..... 440
523300 ..... 384
523335 ..... 384
523360 ..... 384
523370 ..... 384
523400 ..... 384
523435 ..... 384
523460 ..... 384
523470 ..... 384
523505 ..... 450
523540 ..... 384
523550 ..... 384
523551 ..... 384
523570 ..... 448
523571 ..... 448
523572 ..... 448
523573 ..... 448
523574 ..... 448
523575 ..... 448
523577 ..... 448
523579 ..... 448
523581 ..... 448
523582 ..... 448
523600 ..... 384
523600P ..... 449
523602 ..... 449
523604 ..... 449
523606 ..... 449
523608 ..... 449
523610P ..... 449
523612 ..... 449
523614 ..... 449
523635 ..... 384
523640 ..... 447
523642 ..... 447
523644 ..... 447
523646 ..... 447
523648 ..... 447
523649 ..... 447
523650P ..... 447
523652 ..... 447
523654 ..... 447
523656 ..... 447
523658 ..... 447
523660 ..... 384
523660P ..... 447
523670 ..... 384
523675 ..... 450
523677 ..... 450

523700 ..... 384
523735 ..... 384
523760 ..... 384
523770 ..... 384
523800 ..... 384
523835 ..... 384
523860 ..... 384
523870 ..... 384
524010 ..... 443
524012 ..... 443
524022 ..... 443
524036 ..... 442
524037 ..... 442
524038 ..... 442
524039 ..... 442
524040 ..... 442
524041 ..... 442
524042 ..... 443
524044 ..... 443
524045 ..... 443
524050 ..... 443
524060 ..... 409
524230 ..... 189
525150 ..... 215
525215 ..... 215
527800 ..... 401
527805 ..... 401
527820 ..... 401
527825 ..... 401
527830 ..... 401
527835 ..... 401
527850 ..... 401
527853 ..... 401
527860 ..... 401
527862 ..... 401
527863 ..... 401
527867 ..... 409
528135 ..... 1169
528235 ..... 1169
529235 ..... 1169
533105 ..... 385
533106 ..... 385
533108 ..... 385
533109 ..... 385
533110 ..... 385
533111 ..... 385
533140 ..... 385
533150 ..... 385
533151 ..... 385
533152 ..... 385
533164 ..... 385
533165 ..... 385
533166 ..... 385
533167 ..... 385
533168 ..... 385
533175 ..... 385
533177 ..... 385
533178 ..... 385
533180 ..... 385
533181 ..... 385
533700 ..... 385
533702 ..... 385
533735 ..... 385
533737 ..... 385
533800 ..... 385
533802 ..... 385
533835 ..... 385
533837 ..... 385
533860 ..... 385
533862 ..... 385
533870 ..... 385
533872 ..... 385
534140 ..... 385
534150 ..... 385
534201 ..... 308
534202 ..... 308
534203 ..... 308
534735 ..... 385
534737 ..... 385
534835 ..... 385
534837 ..... 385
536100 ..... 243
536103 ..... 243
536104 ..... 243
536105 ..... 243
536107 ..... 244
536220 ..... 246
536220 ..... 765
536275 ..... 26
537061 ..... 381
537081 ..... 381
540111 ..... 57
540140 ..... 66
540150 ..... 81
541094 ..... 88
541100 ..... 88
541120 ..... 88
543965 ..... 375
544113 ..... 377
544114 ..... 377
544115 ..... 377
544121 ..... 377
544121L ..... 377
544121T ..... 377
544123 ..... 377
544124 ..... 377
544130 ..... 377
544130L ..... 377
544130T ..... 377
544170 ..... 377
544171 ..... 377
544172 ..... 377
544179 ..... 375
544180 ..... 375
544181 ..... 377
544182 ..... 377
544191 ..... 377
544192 ..... 377
544220 ..... 376
544230 ..... 376
544240 ..... 375
544250 ..... 376
544965 ..... 375
544965L ..... 377
544990 ..... 377
544990L ..... 377
544990T ..... 377
544995 ..... 377
544995L ..... 377
544995T ..... 375
544500 ..... 377
550190 ..... 66
584160 ..... 985
586240 ..... 963
586250 ..... 960
594400 ..... 883
594402 ..... 883

# 6

616370 ..... 99
622700 ..... 883
640200 ..... 670
640205 ..... 670
640210 ..... 665
640212 ..... 665
640214 ..... 665
640216 ..... 665
640225 ..... 665
640245 ..... 665
640260 ..... 665
640280 ..... 130
640280 ..... 670
640524 ..... 46
654180 ..... 882
654181 ..... 882
654190 ..... 883
654191 ..... 883
658500 ..... 367
658505 ..... 367

# 7

720000 ..... 1149
720000M ..... 327, 1149
720001 ..... 1149
720001M ..... 327, 1149
728000 ..... 1148
728001 ..... 1148
728002 ..... 1148
728003 ..... 1148
728004 ..... 1148
728005 ..... 1148
728006 ..... 1148
728007 ..... 1148
728008 ..... 1148
728009 ..... 1148
728010 ..... 1148
728011 ..... 1148
728012 ..... 1135
728013 ..... 1135
728014 ..... 1135
728015 ..... 1135
728016 ..... 1135
728017 ..... 1135
728020 ..... 1136
728021 ..... 1136
728022 ..... 1136
728023 ..... 1136
728024 ..... 1136
728025 ..... 1136
728026 ..... 1136
728027 ..... 1136
728028 ..... 1136
728029 ..... 1136
728030 ..... 1137
728031 ..... 1137
728032 ..... 1137
728033 ..... 1137
728034 ..... 1139
728035 ..... 1139
728036 ..... 1139
728037 ..... 1139
728038 ..... 1140
728039 ..... 1140
728040 ..... 1140
728041 ..... 1140
728042 ..... 1142
728043 ..... 1142
728044 ..... 1143
728045 ..... 1143
728046 ..... 1143
728047 ..... 1143
728050 ..... 1143
728051 ..... 1143
728052 ..... 1143
728053 ..... 1143
728054 ..... 1143
728055 ..... 1144
728056 ..... 1144
728057 ..... 1143
728058 ..... 1142
728059 ..... 1144
728060 ..... 1144
728061 ..... 1144
728062 ..... 1144
728063 ..... 1144
728064 ..... 1144
728065 ..... 1145
728066 ..... 1145
728067 ..... 1145
728068 ..... 1145
728069 ..... 1145
728070 ..... 1145
728071 ..... 1145
728072 ..... 1145
728073 ..... 1145
728074 ..... 1145
728075 ..... 1145
728076 ..... 1145
728077 ..... 1135
728078 ..... 1146
728079 ..... 1139
728080 ..... 1139
728081 ..... 1135
728082 ..... 1138
728090 ..... 1138
728091 ..... 1138
728092 ..... 1145
728093 ..... 1145
728094 ..... 1145
728095 ..... 1146
728096 ..... 1135
728097 ..... 1139
728098 ..... 1141
728099 ..... 1141
728100 ..... 1141
728101 ..... 1141
728102 ..... 1141
728103 ..... 1141
728104 ..... 1147
728105 ..... 1147
728106 ..... 1147
728107 ..... 1147
728108 ..... 1147
728109 ..... 1147
728113 ..... 1151
728114 ..... 1151
728115 ..... 1151
728116 ..... 1151
728117 ..... 1151
728118 ..... 1151
728119 ..... 1151
728120 ..... 1152
728121 ..... 1152
728122 ..... 1152
728125 ..... 1152
728126 ..... 1152
728130 ..... 1152
728131 ..... 1152
728132 ..... 1152
728133 ..... 1152
728134 ..... 1152
728135 ..... 1152
728140 ..... 1151
728141 ..... 1151
728142 ..... 1151
728143 ..... 1151
728144 ..... 1151
728145 ..... 1151
728146 ..... 1153
728147 ..... 1152
728148 ..... 1152
728149 ..... 1152
728150 ..... 1153
728151 ..... 1153
728152 ..... 1151
728153 ..... 1151

728154 ..... 1151
728155 ..... 1151
728156 ..... 1151
728157 ..... 1151
728158 ..... 1151
728159 ..... 1151
728160 ..... 1151
728161 ..... 1150
728162 ..... 1150
728163 ..... 1150
728164 ..... 1150
728165 ..... 1150
728166 ..... 1150
728167 ..... 1150
728168 ..... 1150
728169 ..... 1150
728170 ..... 1150
728171 ..... 1150
728172 ..... 1150
728173 ..... 1150
728174 ..... 1150
728175 ..... 1150
728176 ..... 1150
728177 ..... 1150
728178 ..... 1150
728179 ..... 1150
728180 ..... 1150
728181 ..... 1150
728182 ..... 1150
728183 ..... 1150
728184 ..... 1150
728185 ..... 1150
728186 ..... 1150
728187 ..... 1150
728190 ..... 1150
728191 ..... 1150
728192 ..... 1150
728195 ..... 1151
728197 ..... 1151
728199 ..... 1151
728200 ..... 1134
730295 ..... 301
730296 ..... 301
732101 ..... 305
740165 ..... 297
740166 ..... 297
742100 ..... 269
742102 ..... 269
742104 ..... 269
742106 ..... 269
742108 ..... 269
742110 ..... 269
746550 ..... 292
746797 ..... 297
746798 ..... 297
746800 ..... 295
752338 ..... 274
752347 ..... 274
752348 ..... 274
752349 ..... 274
752351 ..... 274
752354 ..... 274
752380 ..... 273
752381 ..... 273
752382 ..... 273
752383 ..... 273
752384 ..... 273
752385 ..... 273
752390 ..... 275
752391 ..... 275
752392 ..... 275
752393 ..... 275
752394 ..... 275
752395 ..... 275
752396 ..... 275
752397 ..... 275
752526 ..... 269
754125 ..... 279
754160 ..... 280
754370 ..... 282
762500 ..... 264
766520 ..... 267
766522 ..... 267
770405 ..... 263
770730 ..... 263
790310 ..... 112
790315 ..... 112
790320 ..... 121, 951

# 8

801886 ..... 191
806024 ..... 324
806026 ..... 324
806034 ..... 325
806040 ..... 325
806048 ..... 325
806050 ..... 325
806052 ..... 325
806058 ..... 327
806060 ..... 327
806062 ..... 327
806064 ..... 327
806066 ..... 327
806068 ..... 326
806070 ..... 326
806072 ..... 326
806074 ..... 326
806076 ..... 326
806078 ..... 326
806098 ..... 324
806122 ..... 341
809267 ..... 1160
809300 ..... 1161
809315 ..... 1159
809316 ..... 1159
809317 ..... 1159
809318 ..... 1159
809319 ..... 1159
809335 ..... 1159
809337 ..... 1159
809338 ..... 1159
809339 ..... 1159
809504 ..... 1160
809562 ..... 1160
809564 ..... 1160
809600 ..... 1161
809610 ..... 1161
840100 ..... 342
840105 ..... 342
840110 ..... 342
840111 ..... 343
840112 ..... 343
840113 ..... 343
840114 ..... 343
840116 ..... 342
840117 ..... 342
840118 ..... 342
840200 ..... 340
840210 ..... 340
840215 ..... 340
840220 ..... 342
840221 ..... 340
840222 ..... 340
841010 ..... 787
841011 ..... 787
841012 ..... 787
841013 ..... 787
841014 ..... 787
841015 ..... 787
841016 ..... 787
841030 ..... 786
841031 ..... 786
841032 ..... 786
841033 ..... 786
841034 ..... 786
841050 ..... 789
841051 ..... 789
841052 ..... 789
841100 ..... 790
841101 ..... 790
841150 ..... 789
841160 ..... 788
841161 ..... 788
841300 ..... 791
841301 ..... 791
841302 ..... 791
841330 ..... 790
841350 ..... 792
841351 ..... 791
841400 ..... 791
841401 ..... 790
841951 ..... 792
850102 ..... 347
850103 ..... 344
850110 ..... 345
850115 ..... 346
850150 ..... 345
850155 ..... 347
850310 ..... 327
850345 ..... 325
850350 ..... 325
850355 ..... 325
850360 ..... 325
850500 ..... 343
850502 ..... 343
884227 ..... 291

# 9

910110 ..... 344
920100 ..... 368
920200 ..... 368
920300 ..... 369
920400 ..... 369
930100 ..... 368
930200 ..... 368
930300 ..... 369
930301 ..... 369
930400 ..... 369
940100 ..... 368
940200 ..... 368
940300 ..... 369
940301 ..... 369
940400 ..... 369
960364 ..... 326
970002 ..... 370
970003 ..... 370
970008 ..... 371
970010 ..... 370
970020 ..... 370
970030 ..... 370
970040 ..... 371
970600 ..... 370
970601 ..... 370
970602 ..... 370
970603 ..... 370
970604 ..... 370
970605 ..... 370
970700 ..... 371
970701 ..... 371
970702 ..... 371
970705 ..... 371
971000 ..... 370
971001 ..... 370
971002 ..... 370
971003 ..... 370
971004 ..... 370
971005 ..... 370
971010 ..... 371
979000 ..... 371

# 10

1037800 ..... 488
1037801 ..... 488
1037802 ..... 488
1037803 ..... 488
1037804 ..... 488
1037805 ..... 488
1037806 ..... 488
1037807 ..... 488
1037808 ..... 488
1037809 ..... 488
1037810 ..... 488
1037811 ..... 488
1037812 ..... 488
1037813 ..... 488
1037814 ..... 488
1037815 ..... 488
1037816 ..... 488
1037817 ..... 488
1037818 ..... 488
1037819 ..... 488
1037820 ..... 488
1037821 ..... 488
1037822 ..... 488
1037823 ..... 488
1037824 ..... 488
1037825 ..... 488
1037826 ..... 488
1037827 ..... 488
1037828 ..... 488
1037829 ..... 488
1037830 ..... 488
1037831 ..... 488
1037832 ..... 488
1037833 ..... 488
1037834 ..... 488
1037835 ..... 488
1037836 ..... 488
1037837 ..... 488
1037838 ..... 488
1037839 ..... 488

# A

A358AFA ..... 463
A358PRA ..... 463

# DP

DP-28K ..... 762
DP-36K ..... 762
DP-40K ..... 762
DP-44K ..... 762
DP-48K ..... 762
DP-52K ..... 762
DP-56K ..... 762
DP-60K ..... 762

# E

EFX-001 ..... 1168

# G

GFS-1A ..... 1164
GFS-10A ..... 1164

# K

K05-01251 ..... 1166

# KM1-2

KM11202 ..... 102
KM28468 ..... 1093
KM28492 ..... 1092
KM28514 ..... 1093
KM29430 ..... 1092
KM29434 ..... 1092
KM29495 ..... 312
KM29496 ..... 312
KM29497 ..... 312
KM29498 ..... 312
KM29499 ..... 312
KM29500 ..... 312
KM29503 ..... 313
KM29505 ..... 313
KM29507 ..... 313
KM29511 ..... 313
KM29512 ..... 313
KM29513 ..... 313
KM29514 ..... 313
KM29515 ..... 313
KM29517 ..... 313
KM29566 ..... 313
KM29580 ..... 314
KM29582 ..... 314
KM29584 ..... 314
KM29592 ..... 314
KM29604 ..... 313
KM29606 ..... 312
KM29620 ..... 986
KM29630 ..... 986
KM29632 ..... 985

# KM3

KM31680 ..... 103
KM31792 ..... 102
KM31804 ..... 102
KM31832 ..... 105
KM31834 ..... 101
KM31836 ..... 102
KM34306 ..... 117
KM34308 ..... 117
KM34310 ..... 117
KM34312 ..... 117
KM34334 ..... 118
KM34336 ..... 118
KM34348 ..... 120
KM34354 ..... 120
KM34356 ..... 120
KM34458 ..... 125
KM34462 ..... 125
KM34472 ..... 125
KM34474 ..... 125
KM34560 ..... 140
KM34562 ..... 140
KM34602 ..... 137
KM34607 ..... 137
KM34612 ..... 137
KM34621 ..... 138
KM34642 ..... 121
KM34648 ..... 143
KM35068 ..... 109
KM35078 ..... 107
KM35080 ..... 108
KM35084 ..... 106
KM35092 ..... 109
KM35104 ..... 107
KM35120 ..... 106
KM35200 ..... 112
KM35202 ..... 144
KM35210 ..... 144
KM35212 ..... 144
KM35214 ..... 144
KM35220 ..... 145
KM35250 ..... 145
KM35280 ..... 145
KM35286 ..... 145
KM35292 ..... 145
KM35298 ..... 145
KM35316 ..... 145
KM35322 ..... 145
KM35340 ..... 145
KM35364 ..... 146
KM35370 ..... 146
KM35380 ..... 146
KM35382 ..... 146
KM35392 ..... 146
KM35394 ..... 146
KM35396 ..... 146
KM35406 ..... 146
KM35418 ..... 146
KM35430 ..... 146
KM35450 ..... 147
KM35452 ..... 147
KM35454 ..... 147
KM35460 ..... 147
KM35484 ..... 147
KM35490 ..... 147
KM35494 ..... 147
KM35496 ..... 146
KM35510 ..... 133
KM35515 ..... 133
KM36078 ..... 64
KM36164 ..... 74
KM36165 ..... 74
KM36196 ..... 71
KM36198 ..... 71
KM36360 ..... 69
KM36362 ..... 69
KM36566 ..... 83
KM36816 ..... 298
KM36818 ..... 298
KM36826 ..... 298
KM36828 ..... 298
KM38082 ..... 38
KM38304 ..... 42
KM39050 ..... 44
KM39052 ..... 35
KM39054 ..... 44
KM39056 ..... 44
KM39057 ..... 44
KM39058 ..... 35
KM39059 ..... 35
KM39060 ..... 35
KM39062 ..... 35
KM39064 ..... 44
KM39086 ..... 41
KM39088 ..... 52
KM39364 ..... 32
KM39366 ..... 32
KM39386 ..... 32
KM39390 ..... 32
KM39410 ..... 32
KM39412 ..... 32
KM39478 ..... 33
KM39509 ..... 33
KM39511 ..... 33
KM39513 ..... 33
KM39534 ..... 33
KM39536 ..... 33
KM39670 ..... 341
KM39682 ..... 344
KM39684 ..... 344
KM39692 ..... 309, 1082
KM39694 ..... 309, 1082
KM39698 ..... 309, 1082
KM39700 ..... 309, 1082

# KM4

KM41064 ..... 153
KM41066 ..... 153
KM41068 ..... 158
KM41162 ..... 163
KM41164 ..... 163
KM41270 ..... 165
KM41272 ..... 165
KM41278 ..... 165
KM41284 ..... 165
KM41286 ..... 165
KM41300 ..... 165
KM41424 ..... 159
KM41428 ..... 159
KM41440 ..... 159
KM41452 ..... 159
KM42254 ..... 320
KM42256 ..... 321
KM42258 ..... 321
KM42618 ..... 308
KM42823 ..... 243
KM42824 ..... 243
KM42825 ..... 243
KM42825P ..... 243
KM42826 ..... 243
KM42830 ..... 243
KM42863 ..... 244
KM42864 ..... 244
KM42866 ..... 244
KM42873 ..... 244
KM42874 ..... 244
KM42876 ..... 244
KM42880 ..... 246
KM42881 ..... 246
KM42882 ..... 246
KM42883 ..... 246
KM42884 ..... 246
KM42885 ..... 246
KM42890 ..... 246
KM42891 ..... 246
KM42892 ..... 246
KM42893 ..... 246
KM42894 ..... 246
KM42895 ..... 246
KM42901 ..... 246
KM42902 ..... 246
KM42903 ..... 246
KM42904 ..... 246
KM42905 ..... 246
KM42906 ..... 246
KM44012 ..... 1106
KM44014 ..... 1107
KM44018 ..... 1117
KM44020 ..... 1117
KM44022 ..... 1113
KM44024 ..... 1116
KM44028 ..... 319
KM44030 ..... 319
KM44031 ..... 321
KM44121 ..... 181
KM44122 ..... 181
KM44123 ..... 181
KM44124 ..... 181
KM44125 ..... 181
KM44126 ..... 181
KM44127 ..... 181
KM44128 ..... 181
KM44129 ..... 181
KM44130 ..... 181
KM44131 ..... 181
KM44132 ..... 181
KM44133 ..... 181
KM44134 ..... 181
KM44135 ..... 181
KM44136 ..... 181
KM44137 ..... 181
KM44138 ..... 181
KM44139 ..... 181
KM44150 ..... 181
KM44151 ..... 181
KM44152 ..... 181
KM44153 ..... 181
KM44154 ..... 181
KM44155 ..... 175
KM44156 ..... 175
KM44157 ..... 175
KM44158 ..... 175
KM44159 ..... 180
KM44160 ..... 180
KM44161 ..... 180
KM44162 ..... 180
KM44163 ..... 175
KM44164 ..... 175
KM44165 ..... 175
KM44166 ..... 175
KM44167 ..... 175
KM44168 ..... 175
KM44169 ..... 175
KM44170 ..... 175
KM44171 ..... 180
KM44172 ..... 180
KM44173 ..... 180
KM44174 ..... 180
KM44175 ..... 180
KM44176 ..... 180
KM44177 ..... 180
KM44178 ..... 180
KM44200 ..... 176
KM44201 ..... 176
KM44202 ..... 176
KM44203 ..... 176
KM44204 ..... 176
KM44205 ..... 176
KM44207 ..... 176
KM44208 ..... 176
KM44210 ..... 177
KM44211 ..... 177
KM44212 ..... 177
KM44213 ..... 177
KM44214 ..... 176
KM44215 ..... 176
KM44216 ..... 177
KM44217 ..... 177
KM44218 ..... 177
KM44219 ..... 177
KM44220 ..... 177
KM44221 ..... 177
KM44222 ..... 177
KM44223 ..... 177
KM44250 ..... 1113

KM44251 ..... 1113
KM44252 ..... 1113
KM44253 ..... 1113
KM44254 ..... 1117
KM44255 ..... 1117
KM44256 ..... 1117
KM44257 ..... 1117
KM44260 ..... 1114
KM44261 ..... 1114
KM44262 ..... 1114
KM44263 ..... 1114
KM44270 ..... 1115
KM44271 ..... 1115
KM44272 ..... 1115
KM44273 ..... 1115
KM44274 ..... 1115
KM44275 ..... 1115
KM44276 ..... 1115
KM44277 ..... 1115
KM45002 ..... 856
KM45004 ..... 873
KM45122 ..... 881
KM45126 ..... 881
KM45127 ..... 881
KM45128 ..... 881
KM45208 ..... 876
KM45210 ..... 876
KM45300 ..... 933
KM45302 ..... 919
KM45304 ..... 919
KM45305 ..... 920
KM45306 ..... 920
KM45307 ..... 920
KM45310 ..... 936
KM45312 ..... 936
KM45314 ..... 936
KM45410 ..... 847
KM45412 ..... 847
KM45501 ..... 880
KM45502 ..... 880
KM46056 ..... 1081
KM46058 ..... 1080
KM46090 ..... 1078
KM46133 ..... 1080
KM46134 ..... 1080
KM46138 ..... 1079
KM46156 ..... 1078
KM46184 ..... 1079
KM46186 ..... 1079
KM46188 ..... 1078
KM46206 ..... 964
KM46207 ..... 964
KM46208 ..... 962
KM46210 ..... 962
KM46211 ..... 964
KM46212 ..... 964
KM46213 ..... 964
KM46214 ..... 964
KM46215 ..... 965
KM46216 ..... 965
KM46217 ..... 965
KM46222 ..... 962
KM46224 ..... 962
KM46244 ..... 962
KM46245 ..... 962
KM46246 ..... 962
KM46248 ..... 962
KM46250 ..... 969
KM46252 ..... 969
KM46254 ..... 969
KM46256 ..... 969
KM46258 ..... 960
KM46260 ..... 960
KM46262 ..... 960
KM46264 ..... 960
KM46266 ..... 960
KM46268 ..... 996
KM46270 ..... 996
KM46272 ..... 996
KM46274 ..... 996
KM46276 ..... 996
KM46278 ..... 996
KM46280 ..... 996
KM46284 ..... 997
KM46286 ..... 997
KM46288 ..... 997
KM46289 ..... 1002
KM46290 ..... 1002
KM46291 ..... 1002
KM46292 ..... 1005
KM46293 ..... 1005
KM46294 ..... 1005
KM46304 ..... 994
KM46306 ..... 994
KM46310 ..... 994
KM46314 ..... 994
KM46318 ..... 994
KM46322 ..... 994
KM46328 ..... 994
KM46329 ..... 994
KM46330 ..... 994
KM46331 ..... 994
KM46332 ..... 994
KM46333 ..... 994
KM46335 ..... 992
KM46336 ..... 992
KM46338 ..... 992
KM46340 ..... 992
KM46342 ..... 992
KM46343 ..... 992
KM46344 ..... 992
KM46345 ..... 992
KM46346 ..... 992
KM46347 ..... 992
KM46348 ..... 993
KM46349 ..... 993
KM46350 ..... 993
KM46351 ..... 993
KM46352 ..... 993
KM46353 ..... 993
KM46354 ..... 993
KM46355 ..... 993
KM46356 ..... 993
KM46358 ..... 993
KM46359 ..... 998
KM46360 ..... 998
KM46361 ..... 998
KM46362 ..... 998
KM46363 ..... 998
KM46364 ..... 998
KM46365 ..... 998
KM46366 ..... 998
KM46367 ..... 998
KM46368 ..... 998
KM46373 ..... 998
KM46376 ..... 998
KM46377 ..... 998
KM46378 ..... 998
KM46379 ..... 998
KM46380 ..... 998
KM46381 ..... 998
KM46382 ..... 998
KM46383 ..... 998
KM46384 ..... 998
KM46387 ..... 1007
KM46388 ..... 1007
KM46389 ..... 1007
KM46390 ..... 1007
KM46391 ..... 1007
KM46392 ..... 1007
KM46393 ..... 1007
KM46394 ..... 1007
KM46395 ..... 1007
KM46401 ..... 1007
KM46402 ..... 1007
KM46403 ..... 1007
KM46404 ..... 1007
KM46405 ..... 1007
KM46407 ..... 1007
KM46408 ..... 1007
KM46409 ..... 1007
KM46410 ..... 1007
KM46411 ..... 1007
KM46412 ..... 1007
KM46413 ..... 966
KM46413S ..... 967
KM46414 ..... 966
KM46414S ..... 967
KM46416 ..... 966
KM46416S ..... 967
KM46418 ..... 966
KM46418S ..... 967
KM46420 ..... 966
KM46420S ..... 967
KM46422 ..... 982
KM46422S ..... 983
KM46423 ..... 982
KM46423S ..... 983
KM46424 ..... 982
KM46424S ..... 983
KM46425 ..... 982
KM46425S ..... 983
KM46426 ..... 982
KM46426S ..... 983
KM46427 ..... 982
KM46427S ..... 983
KM46428 ..... 982
KM46428S ..... 983
KM46429 ..... 982
KM46429S ..... 983
KM46430 ..... 982
KM46430S ..... 983
KM46433 ..... 982
KM46433S ..... 983
KM46434 ..... 982
KM46434S ..... 983
KM46435 ..... 982
KM46435S ..... 983
KM46436 ..... 982
KM46436S ..... 983
KM46437 ..... 982
KM46437S ..... 983
KM46438 ..... 982
KM46438S ..... 983
KM46439 ..... 982
KM46439S ..... 983
KM46440 ..... 982
KM46440S ..... 983
KM46441 ..... 982
KM46441S ..... 983
KM46448 ..... 999
KM46449 ..... 999
KM46450 ..... 999
KM46451 ..... 999
KM46452 ..... 999
KM46453 ..... 999
KM46454 ..... 999
KM46457 ..... 999
KM46458 ..... 999
KM46459 ..... 999
KM46460 ..... 999
KM46461 ..... 999
KM46462 ..... 999
KM46463 ..... 999
KM46466 ..... 1006
KM46467 ..... 1006
KM46468 ..... 1006
KM46476 ..... 1006
KM46477 ..... 1006
KM46478 ..... 1006
KM46479 ..... 1006
KM46487 ..... 1006
KM46488 ..... 1006
KM46489 ..... 1006
KM46490 ..... 1006
KM46491 ..... 1006
KM46493 ..... 1006
KM46495 ..... 1006
KM46497 ..... 995
KM46498 ..... 995
KM46499 ..... 995
KM46500 ..... 995
KM46501 ..... 995
KM46502 ..... 995
KM46503 ..... 995
KM46504 ..... 995
KM46505 ..... 1003
KM46506 ..... 1003
KM46507 ..... 1003
KM46508 ..... 1003
KM46509 ..... 1003
KM46511 ..... 979
KM46512 ..... 979
KM46513 ..... 979
KM46515 ..... 979
KM46517 ..... 979
KM46519 ..... 979
KM46521 ..... 979
KM46523 ..... 979
KM46525 ..... 979
KM46529 ..... 979
KM46531 ..... 979
KM46540 ..... 812
KM46550 ..... 986
KM46551 ..... 981
KM46552 ..... 981
KM46553 ..... 981
KM46554 ..... 981
KM46555 ..... 981
KM46556 ..... 981
KM46557 ..... 981
KM46558 ..... 981
KM46559 ..... 981
KM46560 ..... 987
KM46561 ..... 987
KM46562 ..... 987
KM46563 ..... 979
KM46564 ..... 979
KM46565 ..... 979
KM46566 ..... 979
KM46567 ..... 979
KM46568 ..... 979
KM46569 ..... 979
KM46570 ..... 979
KM46571 ..... 979
KM46572 ..... 815, 841
KM46573 ..... 815, 841
KM46574 ..... 815, 841
KM46578 ..... 838
KM46582 ..... 819
KM46598 ..... 1077
KM46600 ..... 1077
KM46601 ..... 1076
KM46602 ..... 1077
KM46609 ..... 1075
KM46610 ..... 1075
KM46612 ..... 1075
KM46613 ..... 1075
KM46614 ..... 1075
KM46615 ..... 1075

KM46616 1075
KM46617 1075
KM46619 817
KM46620 1076
KM46621 824
KM46622 823
KM46623 825
KM46624 825
KM46625 826
KM46626 830
KM46629 829
KM46631 826
KM46631 815
KM46632 829
KM46633 829
KM46635 833
KM46637 818
KM46642 1077
KM46643 1077
KM46644 1077
KM46645 1076
KM46646 1076
KM46647 827
KM46649 828
KM46650 973
KM46651 828
KM46652 973
KM46653 976
KM46654 973
KM46655 975
KM46656 1012
KM46657 1014
KM46658 1017
KM46660 1012
KM46661 1014
KM46662 1012
KM46662P 1012
KM46663 1017
KM46664 877
KM46666 1016
KM46667 1017
KM46683 1076
KM46684 1076
KM46685 1076
KM46686 1015
KM46686P 1015
KM46687 1015
KM46687P 1015
KM46688 1018
KM46689 1018
KM46690 1018
KM46690P 1018
KM46700 995
KM46701 995
KM46702 995
KM46703 995
KM46704 995
KM46705 973
KM46706 995
KM46708 995
KM46709 995
KM46730 952
KM46731 952
KM46732 952
KM46733 952
KM46734 952
KM46735 949
KM46736 950
KM46737 950
KM46738 950
KM46739 949
KM46744 948
KM46746 948
KM46748 948
KM46750 947
KM46762 950
KM46766 950
KM46770 950
KM46772 950
KM46802 946
KM46804 947
KM46814 946
KM46818 946
KM46821 951
KM46823 895
KM46826 897
KM46827 898
KM46828 951
KM46829 895
KM46830 895
KM46832 895
KM46836 896
KM46838 896
KM46841 897
KM46842 897
KM46848 896
KM46849 898
KM46850 897
KM46852 898
KM46854 898
KM46858 896
KM46860 892
KM46870 892
KM46872 891
KM46880 889
KM46884 889
KM46892 890
KM46893 1009
KM46894 1009
KM46895 1009
KM46896 1009
KM46897 1009
KM46898 1009
KM46899 1009
KM46902 968
KM46903 968
KM46904 968
KM46906 891
KM46907 891
KM46908 891
KM46911 918
KM46912 918
KM46913 945
KM46914 945
KM46915 945
KM46916 944
KM46917 849
KM46918 849
KM46919 1006
KM46920 892
KM46921 892
KM46922 903
KM46930 885
KM46932 884
KM46934 888
KM46936 888
KM47010 921
KM47012 923
KM47054 926
KM47056 926
KM47062 926
KM47064 926
KM47068 927
KM47070 927
KM47072 924
KM47074 923
KM47076 923
KM47078 927
KM47080 927
KM47082 927
KM47084 927
KM47090 930
KM47092 930
KM47094 930
KM47096 930
KM47098 930
KM47100 937
KM47101 937
KM47102 938
KM47103 938
KM47105 935
KM47107 935
KM47108 928
KM47109 928
KM47110 928
KM47112 928
KM47114 928
KM47116 928
KM47118 929
KM47119 931
KM47120 930
KM47122 931
KM47124 931
KM47126 931
KM47128 935
KM47129 921
KM47130 918
KM47132 932
KM47133 934
KM47134 933
KM47135 934
KM47136 932
KM47137 932
KM47138 922
KM47139 923
KM47140 939
KM47154 939
KM47156 939
KM47160 940
KM47164 940
KM47166 940
KM47167 939
KM47168 939
KM47170 925
KM47172 922
KM47173 922
KM47190 925
KM47192 925
KM47194 924
KM47196 924
KM47198 925
KM47200 924
KM47202 939
KM47204 926
KM47206 926
KM47208 926
KM47212 929
KM47240 1024
KM47242 1024
KM47244 1024
KM47252 1023
KM47253 1023
KM47254 1028
KM47256 1028
KM47258 1028
KM47260 1028
KM47262 1025
KM47263 1025
KM47264 1025
KM47266 1029
KM47267 1027
KM47268 1029
KM47270 1019
KM47272 1019
KM47274 1023
KM47275 1023
KM47276 1030
KM47278 1032
KM47284 1032
KM47285 1030
KM47286 1027
KM47296 1024
KM47302 1031
KM47304 1031
KM47306 1031
KM47308 1028
KM47310 1026
KM47366 1021
KM47370 1021
KM47374 1022
KM47380 1044
KM47382 1044
KM47384 1044
KM47386 1044
KM47398 1020
KM47400 1020
KM47402 1020
KM47404 1020
KM47406 1020
KM47408 1020
KM47410 1020
KM47412 1020
KM47458 1043
KM47460 1043
KM47461 1043
KM47462 1043
KM47464 1043
KM47472 1042
KM47473 1042
KM47474 1038
KM47476 1038
KM47478 1038
KM47480 1041
KM47482 1041
KM47484 1041
KM47486 1039
KM47487 1039
KM47488 1039
KM47489 1039
KM47490 1039
KM47492 1039
KM47494 1040
KM47495 1040
KM47496 1040
KM47497 1040
KM47498 1040
KM47499 1040
KM47520 1034
KM47522 1034
KM47523 1035
KM47524 1037
KM47525 1036
KM47526 1035
KM47527 1035
KM47528 1035
KM47531 1035
KM47532 1035
KM47533 1035
KM47534 1035
KM47538 1022
KM47540 1021
KM47541 1021
KM47542 1022
KM47546 1019
KM47550 1022
KM47553 1032
KM47555 1021
KM47557 1021
KM47558 1033
KM47560 1033

KM47562 ..... 1033
KM47610 ..... 1056
KM47612 ..... 1056
KM47614 ..... 1056
KM47616 ..... 1056
KM47620 ..... 1053
KM47621 ..... 1053
KM47622 ..... 1053
KM47623 ..... 1053
KM47624 ..... 1053
KM47644 ..... 1052, 1054
KM47645 ..... 1052, 1054
KM47646 ..... 1052, 1054
KM47648 ..... 1052, 1054
KM47649 ..... 1052, 1054
KM47650 ..... 1052, 1054
KM47652 ..... 1054
KM47654 ..... 1054
KM47656 ..... 1054
KM47657 ..... 1054
KM47658 ..... 1054
KM47670 ..... 1051
KM47671 ..... 1051
KM47674 ..... 1051
KM47676 ..... 1051
KM47678 ..... 1051
KM47680 ..... 1051
KM47682 ..... 1051
KM47685 ..... 1055
KM47686 ..... 1055
KM47687 ..... 1055
KM47688 ..... 1055
KM47689 ..... 1051
KM47700 ..... 1063
KM47702 ..... 1063
KM47703 ..... 1063
KM47704 ..... 1063
KM47707 ..... 1061
KM47708 ..... 1061
KM47709 ..... 1061
KM47710 ..... 1061
KM47712 ..... 1061
KM47714 ..... 1061
KM47730 ..... 1061
KM47732 ..... 1061
KM47734 ..... 1061
KM47760 ..... 1061
KM47762 ..... 1061
KM47764 ..... 1061
KM47780 ..... 1061
KM47782 ..... 1061
KM47784 ..... 1061
KM47800 ..... 1062
KM47802 ..... 1062
KM47804 ..... 1062
KM47840 ..... 1062
KM47842 ..... 1062
KM47844 ..... 1062
KM47850 ..... 1059
KM47853 ..... 1054
KM47855 ..... 1055
KM47856 ..... 1055
KM47857 ..... 1055
KM47858 ..... 1065
KM47860 ..... 1065
KM47862 ..... 1065
KM47864 ..... 1065
KM47866 ..... 1065
KM47868 ..... 1065
KM47870 ..... 1065
KM47872 ..... 1065
KM47873 ..... 1065
KM47874 ..... 1065
KM47875 ..... 1065
KM47878 ..... 1065
KM47879 ..... 1055
KM47880 ..... 942
KM47901 ..... 813
KM47902 ..... 856
KM47903 ..... 813
KM47904 ..... 856
KM47906 ..... 1098
KM47907 ..... 1098
KM47908 ..... 856
KM47909 ..... 867
KM47910 ..... 866
KM47911 ..... 867
KM47912 ..... 847
KM47914 ..... 847
KM47915 ..... 879
KM47916 ..... 879
KM47917 ..... 879
KM47918 ..... 879
KM47919 ..... 880
KM47920 ..... 860
KM47921 ..... 1098
KM47922 ..... 860
KM47923 ..... 860
KM47924 ..... 860
KM47925 ..... 846
KM47926 ..... 861
KM47927 ..... 845
KM47928 ..... 845
KM47929 ..... 846
KM47930 ..... 876
KM47931 ..... 845
KM47932 ..... 831
KM47934 ..... 874
KM47935 ..... 874
KM47936 ..... 874
KM47940 ..... 874
KM47941 ..... 881
KM47942 ..... 881
KM47943 ..... 881
KM47944 ..... 881
KM47945 ..... 881
KM47946 ..... 880
KM47947 ..... 880
KM47948 ..... 880
KM47950 ..... 871
KM47950B ..... 871
KM47951 ..... 869
KM47952 ..... 869
KM47954 ..... 870
KM47955 ..... 869
KM47956 ..... 869
KM47957 ..... 873
KM47958 ..... 873
KM47959 ..... 871
KM47959 ..... 873
KM47960 ..... 856
KM47961 ..... 869
KM47962 ..... 881
KM47963 ..... 881
KM47964 ..... 881
KM47965 ..... 864
KM47966 ..... 864
KM47967 ..... 864
KM47968 ..... 864
KM47969 ..... 866
KM47970 ..... 864
KM47971 ..... 865
KM47972 ..... 864
KM47973 ..... 865
KM47974 ..... 865
KM47975 ..... 866
KM47976 ..... 864
KM47977 ..... 863
KM47978 ..... 863
KM47979 ..... 859
KM47980 ..... 863
KM47981 ..... 859
KM47982 ..... 864
KM47983 ..... 869
KM47985 ..... 863
KM47986 ..... 859
KM47987 ..... 1057
KM47988 ..... 1055
KM47989 ..... 1055
KM47990 ..... 1055
KM47991 ..... 1055
KM47992 ..... 1055
KM47993 ..... 1055
KM47994 ..... 1055
KM47995 ..... 1055
KM47996 ..... 1055
KM47997 ..... 1055
KM47998 ..... 1055
KM47999 ..... 1055
KM48-129 ..... 857
KM48-130 ..... 857
KM48-132 ..... 857
KM48-134 ..... 857
KM48-136 ..... 857
KM48-137 ..... 857
KM48-138 ..... 857
KM48-140 ..... 857
KM48-142 ..... 857
KM48-143 ..... 857
KM48002 ..... 864
KM48003 ..... 863
KM48004 ..... 863
KM48010 ..... 1057
KM48016 ..... 1055
KM48017 ..... 1055
KM48018 ..... 1055
KM48019 ..... 1055
KM48020 ..... 1055
KM48021 ..... 1055
KM48022 ..... 1055
KM48023 ..... 1055
KM48024 ..... 1055
KM48025 ..... 1055
KM48026 ..... 1055
KM48027 ..... 1055
KM48028 ..... 1055
KM48029 ..... 1055
KM48030 ..... 1059
KM48032 ..... 1059
KM48033 ..... 1059
KM48040 ..... 1056
KM48041 ..... 1056
KM48050 ..... 858
KM48051 ..... 858
KM48052 ..... 858
KM48054 ..... 858
KM48057 ..... 858
KM48058 ..... 858
KM48060 ..... 858
KM48061 ..... 858
KM48063 ..... 858
KM48067 ..... 858
KM48068 ..... 858
KM48069 ..... 858
KM48070 ..... 858
KM48071 ..... 858
KM48072 ..... 858
KM48073 ..... 858
KM48076 ..... 858
KM48077 ..... 858
KM48079 ..... 858
KM48080 ..... 858
KM48081 ..... 858
KM48082 ..... 858
KM48085 ..... 858
KM48086 ..... 858
KM48091 ..... 859
KM48092 ..... 859
KM48093 ..... 859
KM48094 ..... 859
KM48095 ..... 859
KM48100 ..... 857
KM48102 ..... 861
KM48104 ..... 861
KM48106 ..... 862
KM48108 ..... 862
KM48110 ..... 862
KM48112 ..... 862
KM48114 ..... 862
KM48116 ..... 861
KM48118 ..... 861
KM48120 ..... 861
KM48122 ..... 861
KM48144 ..... 857
KM48158 ..... 882
KM48161 ..... 882
KM48192 ..... 894
KM48194 ..... 894
KM48196 ..... 894
KM48198 ..... 894
KM48200 ..... 894
KM48201 ..... 890
KM48202 ..... 893
KM48204 ..... 893
KM48206 ..... 893
KM48208 ..... 889
KM48210 ..... 889
KM48212 ..... 889
KM48214 ..... 889
KM48217 ..... 910
KM48218 ..... 910
KM48220 ..... 910
KM48226 ..... 911
KM48228 ..... 911
KM48230 ..... 910
KM48234 ..... 884
KM48237 ..... 884
KM48239 ..... 868
KM48240 ..... 868
KM48241 ..... 868
KM48242 ..... 835
KM48243 ..... 837
KM48244 ..... 844
KM48245 ..... 836
KM48246 ..... 838
KM48247 ..... 310
KM48248 ..... 837
KM48249 ..... 917
KM48250 ..... 836
KM48252 ..... 815, 868
KM48253 ..... 835
KM48254 ..... 840
KM48256 ..... 840
KM48257 ..... 839
KM48258 ..... 839
KM48259 ..... 840
KM48262 ..... 840
KM48269 ..... 839
KM48270 ..... 848
KM48272 ..... 848
KM48274 ..... 848
KM48282 ..... 866
KM48284 ..... 866
KM48288 ..... 1099
KM48290 ..... 1099
KM48297 ..... 1099
KM48299 ..... 309, 1082
KM48301 ..... 1099
KM48302 ..... 311
KM48302 ..... 1084

KM48303 ..... 943
KM48310 ..... 310, 1084
KM48313 ..... 310, 1082
KM48314 ..... 312, 1083
KM48315 ..... 311, 1083
KM48320 ..... 817
KM48322 ..... 817
KM48324 ..... 817
KM48326 ..... 848
KM48328 ..... 848
KM48330 ..... 848
KM48331 ..... 942
KM48332 ..... 943
KM48333 ..... 942
KM48334 ..... 942
KM48335 ..... 942
KM48336 ..... 943
KM48337 ..... 944
KM48338 ..... 944
KM48339 ..... 944
KM48340 ..... 944
KM48341 ..... 944
KM48342 ..... 942
KM48343 ..... 942
KM48344 ..... 942
KM48348 ..... 871
KM48349 ..... 869
KM48350 ..... 872
KM48352 ..... 872
KM48353 ..... 870
KM48354 ..... 872
KM48355 ..... 872
KM48356 ..... 872
KM48358 ..... 872
KM48364 ..... 870
KM48365 ..... 869
KM48368 ..... 869
KM48369 ..... 869
KM48370 ..... 814
KM48372 ..... 815
KM48374 ..... 813
KM48380 ..... 848
KM48382 ..... 848
KM48384 ..... 848
KM48386 ..... 849
KM48388 ..... 849
KM48390 ..... 851
KM48390P ..... 851
KM48392 ..... 850
KM48392P ..... 850
KM48394 ..... 852
KM48395 ..... 874
KM48396 ..... 870
KM48414 ..... 875
KM48415 ..... 850
KM48420 ..... 850
KM48421 ..... 850
KM48422 ..... 850
KM48423 ..... 850
KM48425 ..... 851
KM48426 ..... 851
KM48427 ..... 851
KM48428 ..... 851
KM48429 ..... 851
KM48431 ..... 851
KM48433 ..... 851
KM48434 ..... 851
KM48435 ..... 851
KM48436 ..... 851
KM48438 ..... 851
KM48440 ..... 853
KM48441 ..... 853
KM48442 ..... 853
KM48442 ..... 853
KM48443 ..... 853
KM48443 ..... 853
KM48450 ..... 853
KM48451 ..... 853
KM48454 ..... 854
KM48455 ..... 854
KM48456 ..... 854
KM48457 ..... 854
KM48458 ..... 854
KM48459 ..... 854
KM48460 ..... 855
KM48461 ..... 855
KM48462 ..... 855
KM48463 ..... 855
KM48465 ..... 852
KM48466 ..... 852
KM48467 ..... 852
KM48468 ..... 852
KM48469 ..... 852
KM48471 ..... 875
KM48473 ..... 875
KM48474 ..... 875
KM48475 ..... 875
KM48476 ..... 875
KM48477 ..... 875
KM48478 ..... 875
KM48478P ..... 875
KM48479 ..... 875
KM48480 ..... 875
KM48600 ..... 843
KM48602 ..... 843
KM48604 ..... 841
KM48605 ..... 842
KM48606 ..... 843
KM48608 ..... 843
KM48610 ..... 843
KM48614 ..... 844
KM48616 ..... 844
KM48620 ..... 844
KM48622 ..... 844
KM48670 ..... 872
KM49002 ..... 997
KM49004 ..... 997
KM49006 ..... 997
KM49008 ..... 997
KM49010 ..... 1004
KM49012 ..... 1004
KM49014 ..... 1004
KM49016 ..... 1004
KM49018 ..... 1006
KM49020 ..... 1006
KM49022 ..... 1006
KM49024 ..... 1006
KM49030 ..... 1008
KM49032 ..... 1008
KM49034 ..... 1008
KM49036 ..... 1008
KM49040 ..... 1002
KM49041 ..... 1002
KM49042 ..... 1002
KM49043 ..... 1002
KM49044 ..... 1002
KM49045 ..... 1002
KM49050 ..... 1005
KM49051 ..... 1005
KM49052 ..... 1005
KM49053 ..... 1005
KM49054 ..... 1005
KM49055 ..... 1005
KM49059 ..... 1003
KM49060 ..... 1003
KM49061 ..... 1003
KM49062 ..... 1003
KM49063 ..... 1003
KM49064 ..... 1003
KM49065 ..... 1003
KM49066 ..... 1003
KM49067 ..... 1003
KM49068 ..... 1003
KM49073 ..... 1003
KM49074 ..... 1003
KM49075 ..... 1003
KM49076 ..... 1003
KM49077 ..... 1003
KM49078 ..... 1003
KM49079 ..... 1003
KM49080 ..... 1003
KM49081 ..... 1003
KM49082 ..... 1003
KM49084 ..... 1007
KM49090 ..... 1091
KM49092 ..... 1091
KM49093 ..... 1091
KM49110 ..... 979
KM49111 ..... 979
KM49112 ..... 979
KM49113 ..... 979
KM49114 ..... 979
KM49115 ..... 979
KM49116 ..... 979
KM49117 ..... 979
KM49118 ..... 979
KM49120 ..... 980
KM49121 ..... 980
KM49122 ..... 980
KM49123 ..... 980
KM49124 ..... 980
KM49125 ..... 980
KM49126 ..... 980
KM49150 ..... 981
KM49151 ..... 981
KM49152 ..... 981
KM49153 ..... 981
KM49154 ..... 981
KM49155 ..... 981
KM49156 ..... 981
KM49157 ..... 981
KM49158 ..... 981
KM49200 ..... 986
KM49202 ..... 986
KM49204 ..... 986
KM49246 ..... 1004
KM49248 ..... 1004
KM49250 ..... 1004
KM49252 ..... 1004
KM49254 ..... 1004
KM49256 ..... 1004
KM49258 ..... 1004
KM49260 ..... 1004
KM49262 ..... 1004
KM49264 ..... 1004
KM49266 ..... 1004
KM49268 ..... 1004
KM49310 ..... 960
KM49311 ..... 960
KM49312 ..... 960
KM49313 ..... 960
KM49320 ..... 953
KM49322 ..... 961
KM49324 ..... 961
KM49326 ..... 961
KM49340 ..... 965
KM49342 ..... 965
KM49344 ..... 965
KM49346 ..... 965
KM49350 ..... 999
KM49351 ..... 999
KM49352 ..... 999
KM49353 ..... 999
KM49354 ..... 999
KM49355 ..... 999
KM49356 ..... 999
KM49357 ..... 999
KM49358 ..... 999
KM49359 ..... 999
KM49360 ..... 999
KM49361 ..... 999
KM49362 ..... 999
KM49363 ..... 999
KM49403 ..... 988
KM49404 ..... 988
KM49405 ..... 988
KM49413 ..... 988
KM49414 ..... 988
KM49415 ..... 988
KM49423 ..... 988
KM49424 ..... 988
KM49425 ..... 988
KM49433 ..... 988
KM49434 ..... 988
KM49435 ..... 988
KM49450 ..... 987
KM49452 ..... 987
KM49454 ..... 987
KM49456 ..... 987
KM49458 ..... 987
KM49460 ..... 987
KM49574 ..... 984
KM49576 ..... 984
KM49578 ..... 984
KM49580 ..... 984
KM49582 ..... 984
KM49584 ..... 984
KM49630 ..... 1000
KM49632 ..... 1000
KM49634 ..... 1000
KM49640 ..... 1000
KM49644 ..... 1000
KM49648 ..... 1000
KM49652 ..... 1000
KM49656 ..... 1000
KM49660 ..... 1000
KM49664 ..... 1000
KM49668 ..... 1000
KM49672 ..... 1000
KM49676 ..... 1000
KM49680 ..... 1000
KM49701 ..... 878
KM49702 ..... 878
KM49706 ..... 878
KM49724 ..... 811
KM49734 ..... 824
KM49735 ..... 827
KM49736 ..... 824
KM49738 ..... 827
KM49740 ..... 825
KM49740P ..... 825
KM49750 ..... 1009
KM49751 ..... 1009
KM49752 ..... 1009
KM49753 ..... 1009
KM49754 ..... 1009
KM49760 ..... 1013
KM49761 ..... 1012
KM49762 ..... 1017
KM49763 ..... 1016
KM49764 ..... 1011
KM49765 ..... 1011
KM49766 ..... 1015
KM49767 ..... 1015
KM49780 ..... 877
KM49781 ..... 877
KM49782 ..... 877
KM49783 ..... 877
KM49800 ..... 828
KM49802 ..... 811

KM49810....821
KM49812....877
KM49830....878
KM49831....878
KM49832....878
KM49848....878
KM49850....878
KM49910....816
KM49920....838

# KM5

KM51059....888
KM51060....888
KM51061....888
KM51078....887
KM51080....887
KM51100....886
KM51104....886
KM51108....886
KM51112....886
KM51158....887
KM51162....887
KM51164....887
KM51214....213
KM51222....211
KM51230....207
KM51232....207
KM51234....207
KM51236....207
KM51238....207
KM51240....207
KM51242....207
KM51530....199
KM51532....199
KM51534....199
KM51752....214
KM51755....214
KM51766....214
KM52040....186
KM52055....188
KM52060....188
KM52064....188
KM52068....188
KM52076....203
KM52082....192
KM52086....192
KM52087....192
KM52094....206
KM52098....191
KM52116....200
KM52118....200
KM52122....200
KM52124....200
KM52128....200
KM52130....200
KM52156....188
KM52158....188
KM52162....188
KM52164....188
KM52166....188
KM52172....188
KM52174....185
KM52176....185
KM52182....185
KM52184....185
KM52188....185
KM52192....185
KM52254....194
KM52264....194
KM52266....194
KM52282....195, 887
KM52292....194, 886
KM52294....194, 886
KM52296....194, 886
KM52298....194, 886
KM52338....194
KM52425....899
KM52426....900
KM52427....900
KM52428....900
KM52450....1097
KM52458....888
KM52460....888
KM52470....222, 907
KM52472....222, 907
KM52474....221, 907
KM52476....223, 908
KM52484....222, 908
KM52486....222, 908
KM52488....222, 908
KM52490....222, 908
KM52492....219
KM52494....219
KM52498....219
KM52542....223, 908
KM52544....223, 908
KM52546....220, 903
KM52548....220, 901
KM52602....908
KM52702....916
KM52704....912
KM52704F....912
KM52704L....912
KM52704S....912
KM52705L....912
KM52705S....912
KM52706L....912
KM52706S....912
KM52707L....912
KM52707S....912
KM52708L....912
KM52708S....912
KM52709L....912
KM52709S....912
KM52711L....912
KM52711S....912
KM52765....225, 906
KM52768....225
KM52769....225
KM52771....226, 907
KM52776....225
KM52778....225
KM52782....226
KM53042....311, 1083
KM53174....141
KM53176....141
KM53265....135, 1120
KM53267....135, 1120
KM53316....134, 1119
KM53318....134, 1119
KM53404....1103
KM53408....1103
KM53420....1103
KM53422....1103
KM53426....1102
KM53428....1102
KM53440....1104
KM53460....1105
KM53480....1111
KM53484....1111
KM53560....1109
KM53564....1110
KM53568....1109
KM53574....1110
KM53580....1109
KM53686....1110
KM53688....1110
KM53690....1110
KM54080....1125
KM54108....1125
KM54272....1127
KM54280....1127
KM54282....1127
KM54284....1127
KM54307....1124
KM54309....1124
KM54311....1124
KM54313....1124
KM54330....1122
KM54332....1122
KM54334....1122
KM54338....189
KM54342....189
KM54346....189
KM54348....189
KM54366....193
KM54368....193
KM54372....193
KM54668....1131
KM55100....39
KM55164....495
KM55170....948
KM55188....495
KM55300....953
KM55302....953
KM55330....955
KM55331....955
KM55332....955
KM55333....953
KM55334....953
KM55335....955
KM55336....955
KM55337....955
KM55338....954
KM55339....954
KM55340....954
KM55341....954
KM55342....954
KM55343....954
KM55344....953
KM55345....953
KM55346....953
KM55347....953
KM55348....953
KM55370....1010
KM55371....1010
KM55372....1010
KM55373....1010
KM55374....1010
KM55375....1010
KM55376....1010
KM55377....1010
KM55378....1010
KM55400....1016
KM55401....1016
KM55410....909
KM55412....909
KM55420....886
KM55421....886
KM55422....886
KM55424....884
KM55426....885
KM55428....885
KM55430....905
KM55431....905
KM55432....905
KM55438....902
KM55440....905
KM55441....905
KM55445....912
KM55446....913
KM55447....916
KM55448....916
KM55449....916
KM55450....916
KM55451....914
KM55452....914
KM55453....914
KM55454....914
KM55455....913
KM55456....915
KM55457....915
KM55458....913
KM55459....913
KM55460....913
KM55461....914
KM55462....914
KM55463....914
KM55464....914
KM55465....914
KM55466....914
KM55467....914
KM55468....914
KM55469....914
KM55471....915
KM55472....915
KM55473....914
KM55474....915
KM55475....915
KM55476....915
KM55480....906
KM55481....906
KM55482....906
KM55483....906
KM55484....906
KM55485....906
KM55486....906
KM55487....906
KM55488....906
KM55490....909
KM55495....909
KM55496....909
KM55497....900
KM55498....904
KM55499....904
KM55510....990
KM55523....989
KM55532....989
KM55533....989
KM55543....989
KM55556....989
KM55566....990
KM55573....990
KM55586....990
KM55593....990
KM55610....967
KM55612....967
KM55614....967
KM55620....967
KM55630....1008
KM55640....968
KM55642....998
KM55644....968
KM55654....968
KM55676....1010
KM55680....988
KM55681....988
KM55682....988
KM55684....988
KM55685....988
KM55686....988
KM55690....1064
KM55691....1064
KM55693....1064
KM55694....1064
KM55762....1065
KM55763....1065
KM55767....1065

KM55777 ..... 1065
KM55782 ..... 1058
KM55788 ..... 1058
KM55790 ..... 1058
KM55798 ..... 969
KM55813 ..... 1057
KM55815 ..... 1057
KM55823 ..... 1057
KM55825 ..... 1057
KM55842 ..... 1060
KM55856 ..... 1064
KM55858 ..... 1060
KM55860 ..... 1060
KM55870 ..... 1054
KM55871 ..... 1054
KM55872 ..... 1054
KM55891 ..... 1050
KM55892 ..... 1050
KM55895 ..... 1050
KM55898 ..... 1050
KM55901 ..... 1050
KM55904 ..... 1050
KM55905 ..... 1050
KM55906 ..... 1050
KM55908 ..... 1050
KM55909 ..... 1050
KM55910 ..... 1050
KM55911 ..... 1050
KM55912 ..... 1050
KM55913 ..... 1050
KM55914 ..... 1050
KM55915 ..... 1050
KM55916 ..... 1050
KM55917 ..... 1050
KM55918 ..... 1050
KM55919 ..... 1050
KM55925 ..... 1050
KM55926 ..... 1050
KM55927 ..... 1050
KM55928 ..... 1050
KM55929 ..... 1050
KM55935 ..... 1062
KM55936 ..... 1062
KM55937 ..... 1062
KM55938 ..... 1062
KM55940 ..... 1063
KM55941 ..... 1063
KM55942 ..... 1063
KM55946 ..... 1063
KM55947 ..... 1063
KM55948 ..... 1063
KM55949 ..... 1063
KM55952 ..... 1063
KM55953 ..... 1063
KM55954 ..... 1063
KM55960 ..... 1062
KM55961 ..... 1062
KM55962 ..... 1062
KM55963 ..... 1062
KM55964 ..... 1062
KM55966 ..... 1062
KM55967 ..... 1062
KM55972 ..... 1062
KM55973 ..... 1062
KM55974 ..... 1062
KM55980 ..... 1059
KM55981 ..... 1059
KM56104 ..... 502
KM56168 ..... 501
KM56170 ..... 501
KM56172 ..... 501
KM56174 ..... 501
KM56284 ..... 502
KM56312 ..... 502
KM56318 ..... 502
KM56330 ..... 502
KM56334 ..... 502
KM57176 ..... 498
KM57614 ..... 504, 957
KM57615 ..... 504, 957
KM57616 ..... 504, 957
KM57618 ..... 969
KM57620 ..... 959
KM57622 ..... 959
KM57624 ..... 956
KM57626 ..... 956
KM57628 ..... 956
KM57630 ..... 956
KM57632 ..... 956
KM58050 ..... 974
KM58052 ..... 974
KM58062 ..... 977
KM58070 ..... 972
KM58072 ..... 976
KM58073 ..... 976
KM58075 ..... 963
KM58076 ..... 963
KM58077 ..... 882
KM58083 ..... 882
KM58085 ..... 963
KM58096 ..... 1076
KM58097 ..... 1076
KM58098 ..... 1076
KM58100 ..... 996
KM58102 ..... 996
KM58104 ..... 996
KM58106 ..... 978
KM58108 ..... 978
KM58110 ..... 978
KM58112 ..... 978
KM58240 ..... 901
KM58242 ..... 901
KM59200 ..... 1049, 1085
KM59300 ..... 1049
KM59303 ..... 1049
KM59306 ..... 1049
KM59309 ..... 1049
KM59312 ..... 1049
KM59313 ..... 1049
KM59315 ..... 1049
KM59316 ..... 1049
KM59321 ..... 1049
KM59322 ..... 1049

# KM6

KM63300 ..... 302
KM63318 ..... 303
KM63319 ..... 303
KM63350 ..... 302
KM63352 ..... 302
KM63354 ..... 302
KM63503 ..... 299
KM64006 ..... 295
KM64008 ..... 295
KM64010 ..... 295
KM64012 ..... 295
KM64014 ..... 295
KM64016 ..... 295
KM64018 ..... 295
KM64020 ..... 295
KM64022 ..... 295
KM64024 ..... 295
KM64026 ..... 295
KM64028 ..... 295
KM64030 ..... 295
KM64032 ..... 295
KM64034 ..... 295
KM64227 ..... 269
KM64288 ..... 284
KM64796 ..... 276
KM64802 ..... 276
KM64808 ..... 277
KM64830 ..... 284
KM65084 ..... 268
KM65115 ..... 267
KM65118 ..... 267
KM65162 ..... 266
KM65186 ..... 268
KM65188 ..... 268
KM65204 ..... 268
KM65205 ..... 268
KM65490 ..... 291
KM65492 ..... 291
KM65494 ..... 291
KM65496 ..... 291
KM65498 ..... 291
KM67164 ..... 119
KM67166 ..... 119
KM67168 ..... 119
KM67170 ..... 119
KM67172 ..... 119
KM67174 ..... 119
KM67292 ..... 272
KM67294 ..... 271
KM67498 ..... 270
KM67500 ..... 270
KM67509 ..... 270
KM67511 ..... 270
KM67516 ..... 270
KM67526 ..... 271
KM69106 ..... 1074
KM69290 ..... 1070
KM69291 ..... 1070
KM69292 ..... 1070
KM69294 ..... 1070
KM69320 ..... 1071
KM69322 ..... 1071
KM69326 ..... 1071
KM69327 ..... 1071
KM69340 ..... 1071
KM69341 ..... 1071
KM69342 ..... 1071
KM69343 ..... 1071
KM69344 ..... 1071
KM69348 ..... 1072
KM69418 ..... 1069
KM69430 ..... 1069
KM69432 ..... 1069
KM69438 ..... 1069
KM69440 ..... 1069
KM69441 ..... 1069
KM69445 ..... 1068
KM69446 ..... 1068
KM69448 ..... 1071
KM69457 ..... 1094
KM69459 ..... 1095
KM69461 ..... 1095
KM69463 ..... 1095
KM69465 ..... 1095
KM69468 ..... 1095
KM69478 ..... 1095
KM69480 ..... 1095
KM69484 ..... 1095
KM69488 ..... 1095
KM69492 ..... 1095
KM69495 ..... 1094
KM69498 ..... 1094
KM69502 ..... 1094
KM69518 ..... 1095
KM69524 ..... 1125
KM69530 ..... 972
KM69534 ..... 972
KM69538 ..... 972
KM69540 ..... 977
KM69541 ..... 977
KM69542 ..... 970
KM69543 ..... 970
KM69544 ..... 970
KM69545 ..... 971
KM69546 ..... 971
KM69547 ..... 974
KM69549 ..... 971
KM69557 ..... 1070
KM69579 ..... 1096
KM69590 ..... 1096
KM69595 ..... 1073
KM69618 ..... 1096
KM69620 ..... 1096
KM69622 ..... 1096
KM69623 ..... 1096
KM69625 ..... 1096
KM69640 ..... 1097
KM69645 ..... 1097
KM69650 ..... 1097
KM69758 ..... 958
KM69760 ..... 958
KM69762 ..... 958
KM69764 ..... 958
KM69766 ..... 958
KM69787 ..... 920
KM69790 ..... 1093
KM69792 ..... 1073
KM69793 ..... 1073
KM69795 ..... 940
KM69805 ..... 1074
KM69820 ..... 104
KM69824 ..... 104
KM69827 ..... 941
KM69830 ..... 868
KM69832 ..... 868
KM69834 ..... 868
KM69836 ..... 868
KM69838 ..... 868
KM69840 ..... 868
KM69846 ..... 820
KM69905 ..... 815
KM69930 ..... 1072
KM69932 ..... 1072
KM69940 ..... 993
KM69946 ..... 993
KM69950 ..... 993
KM69970 ..... 993
KM69975 ..... 993
KM69980 ..... 1009
KM69982 ..... 885
KM69990 ..... 901

# KM7

KM71431 ..... 883
KM72220 ..... 810
KM72222 ..... 810
KM72224 ..... 810
KM72226 ..... 810
KM72230 ..... 810

# KM9

KM98112 ..... 1090
KM98112P ..... 1090
KM98116 ..... 1090
KM98116P ..... 1090
KM98120 ..... 1090
KM98120P ..... 1090
KM98150 ..... 1001, 1086
KM98160 ..... 991, 1087

KM98170.....991, 1087
KM98180.....991, 1088
KM98190.....1001, 1088
KM98195.....1089
KM98200.....1098

# MDP

MDP-28K.....762
MDP-36K.....762
MDP-40K.....762
MDP-44K.....762
MDP-48K.....762
MDP-52K.....762
MDP-56K.....762
MDP-60K.....762

# O

O358PRA.....463
OS100102.....1066
OS100182.....1066
OS100198.....1066
OS100199.....1066
OS100200.....1066
OS100201.....1066
OS100202.....1066
OS100203.....1066
OS100204.....1066
OS100205.....1066
OS100206.....1066
OS100207.....1066
OS100208.....1066
OS100209.....1066
OS100210.....1066
OS100211.....1066
OS100212.....1066
OS100213.....1067
OS100214.....1066
OS100215.....1066
OS100216.....1066
OS100217.....1066
OS100218.....1066
OS100219.....1066
OS100220.....1066
OS100221.....1066
OS100222.....1067
OS100223.....1067
OS100224.....1066
OS100225.....1066
OS100226.....1066
OS100227.....1066
OS100228.....1066
OS100229.....1066
OS100230.....1066
OS100231.....1066
OS100232.....1066
OS100234.....1066
OS100235.....1066
OS100236.....1066
OS100237.....1066
OS100238.....1066
OS100239.....1066
OS100240.....1066
OS100241.....1066
OS100242.....1066
OS100250.....1066
OS100251.....1067
OS100252.....1067
OS100253.....1067
OS100254.....1067
OS100255.....1067
OS100256.....1067
OS100257.....1067
OS100258.....1067
OS100259.....1067
OS100260.....1067
OS100261.....1067
OS100262.....1067
OS100263.....1067
OS100264.....1067
OS100270.....1067
OS100271.....1067
OS100272.....1067
OS100273.....1067
OS100274.....1067
OS100275.....1067
OS100276.....1067
OS100277.....1067
OS100280.....1067
OS100281.....1067
OS100282.....1067
OS100283.....1067
OS100284.....1067
OS100285.....1067
OS100286.....1067
OS100287.....1067
OS100288.....1067
OS100289.....1067
OS100290.....1066
OS100291.....1066
OS100292.....1066
OS100293.....1066
OS100294.....1066
OS100295.....1067
OS100296.....1067
OS100297.....1067

# P

P356PRA.....463
P358PRA.....463
P15128.....1142
P29862.....1142
P29863.....1142
P29864.....1142
P30186.....1142
P35235.....1142
P35236.....1142
P37304.....333
P37305.....334
P37306.....335
P37308.....330
P37309.....330
P37310.....329
P37311.....329
P37312.....329
P37313.....329
P37314.....329
P37315.....333
P37316.....331
P37317.....331
P37318.....329
P37319.....329, 377
P37320.....332
P37321.....332
P37322.....332
P37323.....332
P37324.....332
P37325.....332
P37326.....332
P37327.....330
P37328.....330
P37329.....331
P37330.....331
P37331.....333
P37332.....333
P37333.....333
P37334.....333
P37335.....332
P37336.....333
P37337.....333
P37338.....333
P37339.....335
P37341.....335
P37342.....335
P37343.....335
P37344.....335
P37345.....335
P37346.....335
P37347.....335
P37348.....335
P37349.....335
P37350.....335
P37351.....336
P37352.....336
P37353.....336
P37354.....336
P37355.....336
P37356.....336
P37357.....336
P37358.....335
P37361.....337
P37372.....336
P37373.....336
P37374.....336
P37375.....336
P37376.....336
P37377.....336
P37378.....336
P37379.....336
P37380.....336
P37381.....336
P37382.....336
P37383.....336
P37384.....336
P37385.....336
P37387.....336
P37388.....336
P37389.....336
P37390.....336
P37391.....337
P37392.....337
P37393.....337
P37394.....337
P37395.....337
P37396.....337
P37397.....337
P37398.....337
P37399.....337
P37400.....337
P37401.....337
P37402.....337
P37403.....337
P37404.....337
P37419.....333
P37420.....335
P37421.....335
P37422.....335
P37423.....335
P37424.....335
P37425.....335
P37426.....335
P37427.....336
P37428.....336
P37429.....336
P37430.....336
P37431.....336
P37432.....336
P37433.....336
P37435.....337
P37436.....337
P37437.....337
P37447.....337
P37448.....337
P37449.....337
P37450.....337
P37451.....337
P37452.....337
P37453.....337
P37454.....337
P37455.....337
P37456.....337
P37457.....337
P37458.....337
P37485.....336
P37486.....336
P37487.....336
P37544.....335
P37545.....334
P37564.....335
P37593.....334
P37872.....331
PI-104.....1165
PI-128.....1166

# S

S358PRA.....463

# W

W356PXA.....463
W358PRA.....463
W358PXA.....463