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Retractor portfolio.

# Retractor Portfolio



symmetry surgical™

# Retractors



|                                   |        |                                |        |                               |         |                                 |         |
|-----------------------------------|--------|--------------------------------|--------|-------------------------------|---------|---------------------------------|---------|
| Abdominal Self-Retaining          | RET-2  | General Purpose Lighted        | RET-62 | Orthopaedic Shoulder          | RET-97  |                                 |         |
| Abdominal Bookwalter® Bars        | RET-8  | General Purpose Self-Retaining | RET-62 | Plastic Surgery Brow Lift     | RET-97  | Spine Karlin™                   | RET-125 |
| Abdominal Bookwalter® Blades      | RET-10 | Hysterectomy                   | RET-71 | Plastic Surgery Hand          | RET-97  | Spine Micro Discectomy          | RET-126 |
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| Abdominal Bookwalter® Rings       | RET-24 | Mastectomy                     | RET-74 | Rectal Self-Retaining         | RET-99  | Spine Bookwalter®               | RET-136 |
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Questions? Contact us at [customerservice@symmetrysurgical.com](mailto:customerservice@symmetrysurgical.com) or learn more at [symmetrysurgical.com](http://symmetrysurgical.com)





# The Surgical Instrument Desk Reference

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## How to Use Our Catalog

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The Symmetry Surgical catalog is designed with you in mind, to be your trusted resource for surgical instrumentation. We took great care in creating an easy-to-use, robust catalog and we think you'll be pleased with the design as you become more familiar with our broad portfolio.

## Layout

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The catalog is organized by surgical specialty **and** product function.

And we know that it is difficult to pick up an instrument and know what specialty it's listed in. To make your job easier, we've sorted the instruments in our portfolio by surgical function, too, including Energy, Laparoscopic, Retractors and Sterilization Solutions.

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Rectal

Retractors

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Sterilization Solutions

Alphabetical & Numeric Indexes

## Abdominal (Self-Retaining)

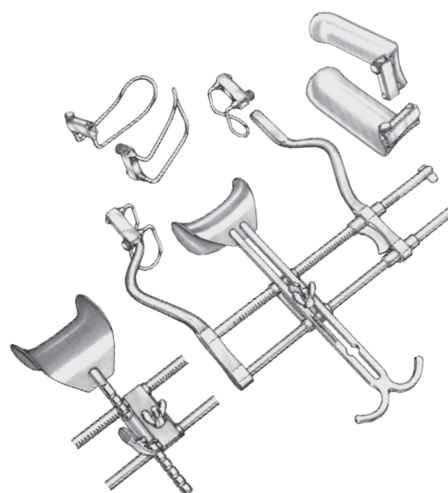
### Balfour Abdominal Retractor

| CODE       | DIMENSIONS      |                  |
|------------|-----------------|------------------|
| 24-5200AAA | 16 x 2½ x 3½ in | 406 x 63 x 89 mm |



### Balfour Abdominal Retractor

| CODE     | DESCRIPTION                                                                                              | DIMENSIONS      |                  |
|----------|----------------------------------------------------------------------------------------------------------|-----------------|------------------|
| 24-5200A | Includes: Two Pairs Lateral Snap-On Wire Blades, Left Hand Assembly Provided Unless Specified Otherwise. | 16 x 2½ x 3½ in | 406 x 63 x 89 mm |



### Balfour Abdominal Retractor

| CODE      | DESCRIPTION                                                                                                                                                                                                                          | DIMENSIONS      |                  |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| 24-5200AA | Includes: Two Pairs Lateral Snap-On Wire Blades, One Center Blade (Chosen From: 24-5012, 24-5014, 24-5022, 24-5024, 24-5026, 50-2428, 24-5030, 24-5032, 24-5034 or 24-5036). Left Hand Assembly Provided Unless Specified Otherwise. | 16 x 2½ x 3½ in | 406 x 63 x 89 mm |



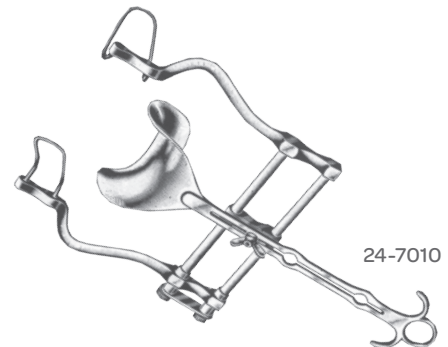
## Abdominal (Self-Retaining)



24-5200-1

### Balfour Abdominal Retractor

| CODE      | DESCRIPTION                                                                                                                | DIMENSIONS               | WIDTH            | LENGTH          |
|-----------|----------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|-----------------|
| 24-5200-1 | Includes: Two Pairs Lateral Snap-On Wire Blades, One Center Blade (Left Hand Assembly Provided Unless Specified Otherwise) | 8 1/2 x 2 1/2 x 3 1/2 in | 216 x 63 x 89 mm |                 |
| 24-5012   |                                                                                                                            |                          | 2 1/2 in 63 mm   | 1 3/4 in 44 mm  |
| 24-5014   |                                                                                                                            |                          | 3 5/8 in 92 mm   | 1 3/4 in 44 mm  |
| 24-5022   |                                                                                                                            |                          | 2 3/4 in 69 mm   | 2 5/8 in 66 mm  |
| 24-5024   |                                                                                                                            |                          | 3 3/8 in 85 mm   | 2 3/4 in 69 mm  |
| 24-5026   |                                                                                                                            |                          | 1 5/8 in 41 mm   | 2 5/8 in 66 mm  |
| 50-2428   |                                                                                                                            |                          | 1 5/8 in 41 mm   | 3 1/2 in 88 mm  |
| 24-5030   |                                                                                                                            |                          | 2 1/2 in 63 mm   | 2 5/8 in 66 mm  |
| 24-5032   |                                                                                                                            |                          | 2 1/2 in 63 mm   | 3 1/2 in 88 mm  |
| 24-5034   |                                                                                                                            |                          | 2 in 50 mm       | 6 1/2 in 165 mm |
| 24-5036   |                                                                                                                            |                          | 2 1/2 in 63 mm   | 6 1/2 in 165 mm |



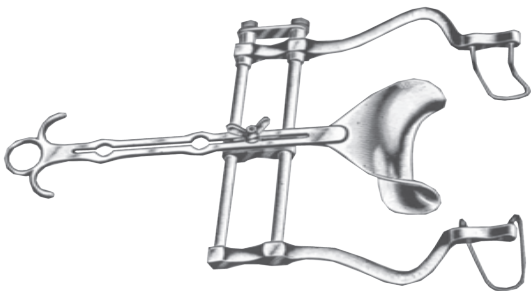
24-7010

### Balfour Abdominal Retractor

Standard Model with Fenestrated Blades 2 1/2 in (64 mm) Deep with Center Blade 24-7072 3 x 2 in (76 x 51 mm)

| CODE    | MAX SPREAD      | DIMENSIONS                  |
|---------|-----------------|-----------------------------|
| 24-7010 | 7 1/8 in 181 mm | 2 1/2 x 3 1/2 in 63 x 89 mm |
| 24-7020 | 10 in 254 mm    |                             |

Abdominal (Self-Retaining)



24-7020

Balfour Abdominal Retractor

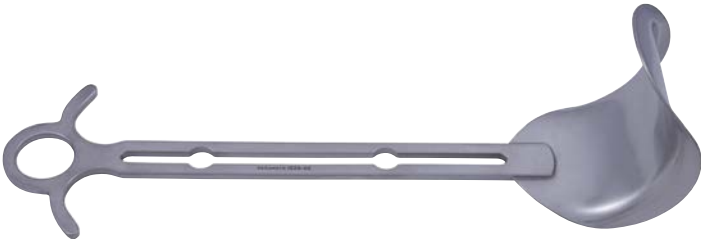
Standard Model: Fenestrated Blades 4 in (102 mm) Deep, with Center Blade 24-7073

| CODE    | MAX SPREAD                  |
|---------|-----------------------------|
| 24-7073 | 3 3⁄8 x 2 1⁄2 in 86 x 64 mm |
| 24-7015 | 7 1⁄8 in 181 mm             |
| 24-7017 | 10 in 254 mm                |



Balfour Abdominal Retractor

| CODE    | DESCRIPTION            | DIMENSIONS (WxD)            | LENGTH          |
|---------|------------------------|-----------------------------|-----------------|
| 50-4516 | Center Blade, Standard | 3 1⁄2 x 1 3⁄4 in 89 x 45 mm | 9 3⁄4 in 248 mm |



50-4521

Balfour Abdominal Retractor

| CODE    | DESCRIPTION               | DIMENSIONS (WxD)            | DIMENSIONS      |
|---------|---------------------------|-----------------------------|-----------------|
| 50-4521 | Center Blade, Supra-Pubic | 2 3⁄4 x 2 3⁄4 in 70 x 70 mm | 9 1⁄2 in 241 mm |
| 50-4522 | Center Blade, Supra-Pubic | 3 1⁄4 x 2 3⁄4 in 83 x 70 mm | 9 3⁄4 in 248 mm |

## Abdominal (Self-Retaining)



50-4504

### Balfour Abdominal Retractor

Fenestrated Lateral Blade, One Pair

| CODE    | DESCRIPTION                                      | BLADE DEPTH |
|---------|--------------------------------------------------|-------------|
| 50-4504 | Use with 50-4503 and 50-4509                     | 2½ in 64 mm |
| 50-4505 | Use with 50-4503 and 50-4509                     | 3½ in 89 mm |
| 50-4506 | Use with 50-4503 and 50-4509                     | 4 in 102 mm |
| 24-5201 | Wire Lateral Blades for Use with 24-5200 Series  | 2½ in 64 mm |
| 24-5203 | Wire Blades for Use with 24-5200 Series          | 4 in 101 mm |
| 24-5202 | Solid Lateral Blades for Use with 24-5200 Series | 2½ in 64 mm |
| 24-5204 | Solid Lateral Blades for Use with 24-5200 Series | 4 in 101 mm |



50-4527

### Balfour Abdominal Retractor

Fourth Arm Attachment

| CODE    | DESCRIPTION          | DIMENSIONS   |
|---------|----------------------|--------------|
| 50-4527 | Without Blade, Right | 12 in 305 mm |
| 50-4526 | Without Blade, Left  | 12 in 305 mm |



### Balfour Abdominal Retractor

| CODE    | DESCRIPTION                                                                                                                                                           | DIMENSIONS            |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 50-5651 | Miniature Model, Self-Retaining with Fixed Lateral Fenestrated Blades 1 x 1 in (25 x 25 mm) and One Center Blade 1 x 1 in (25 x 25 mm), Maximum Spread 3¾ in (95 mm). | 3½ x 3¾ in 89 x 95 mm |

## Abdominal (Self-Retaining)



### Balfour Fenestrated Retractor

With Two Lateral Blades and One Center Blade

| CODE    | TOTAL OPENING |        | LATERAL BLADE (W X D) |            | CENTER BLADE (W X D) |            |
|---------|---------------|--------|-----------------------|------------|----------------------|------------|
| 50-4500 | 7 in          | 178 mm | 1 1/4 x 2 in          | 32 x 51 mm | 3 x 2 in             | 76 x 51 mm |



### Balfour Retractor Complete

Self-Retaining with Ratchet Crossbar

| CODE    | COMPLETE TOTAL OPENING |        | LATERAL BLADES (W X D) |            | CENTER BLADE (W X D) |            |
|---------|------------------------|--------|------------------------|------------|----------------------|------------|
| 50-4514 | 7 in                   | 178 mm | 1 1/2 x 2 1/4 in       | 38 x 57 mm | 3 1/4 x 2 1/4 in     | 83 x 57 mm |
|         |                        |        | 1 1/2 x 3 1/4 in       | 38 x 83 mm | 2 1/2 x 2 1/2 in     | 64 x 64 mm |



### Horgan Abdominal Retractor

| CODE    | DESCRIPTION            | DIMENSIONS |        |
|---------|------------------------|------------|--------|
| 50-4524 | Malleable Center Blade | 14 3/4 in  | 375 mm |



### Wing Nut

| CODE    | DESCRIPTION |
|---------|-------------|
| 24-7002 | Wing Nut    |

## Abdominal (Self-Retaining)



### Balfour Retractor with Fenestrated Blades

Abdominal Retractor, Self-Retaining with Trigger Ratchet. Includes Two Pair of Detachable Lateral Fenestrated Blades and One Center Blade

| CODE    | TOTAL OPENING |        | LATERAL BLADES (W X D) |            | CENTER BLADE (W X D) |            | TOTAL WIDTH |        |
|---------|---------------|--------|------------------------|------------|----------------------|------------|-------------|--------|
| 50-4503 | 7 5/8 in      | 194 mm | 1 3/4 x 2 1/2 in       | 44 x 64 mm | 2 1/2 x 2 1/2 in     | 64 x 64 mm | 7 5/8       | 194 mm |
|         |               |        | 1 3/4 x 3 3/8 in       | 44 x 86 mm |                      |            |             |        |

Also Available in a 10 1/2 in Diameter. Part number: 50-4509.



### Balfour Retractor with Fenestrated Blades

Abdominal Retractor, Self-Retaining. With Two Fixed Blades, Two Removable Small Blades and One Large Removable Blade

| CODE    | TOTAL OPENING |        | LATERAL BLADE (W X D) |            | CENTER BLADE (W X D) |            |
|---------|---------------|--------|-----------------------|------------|----------------------|------------|
| 50-4510 | 8 1/2 in      | 216 mm | 1 1/2 x 2 1/2 in      | 38 x 64 mm | 2 1/2 x 2 1/2 in     | 64 x 64 mm |



### O'Connor-O'Sullivan Abdominal Retractor

| CODE    | DESCRIPTION                                          | LENGTH           |             |
|---------|------------------------------------------------------|------------------|-------------|
| 24-8500 | Complete Set (24-8509, 24-8511, 24-8512)             |                  |             |
| 24-8509 | Frame Only, with 2 Rotatable Lateral Blades Attached | 1 x 2 1/3 in     | 25 x 60 mm  |
| 24-8511 | Center Blade, 2/Each Included in 24-8500             | 1 3/4 x 3 1/4 in | 44 x 83 mm  |
| 24-8512 | Center Blade, 1/Each Included in 24-8500             | 2 3/4 x 4 1/8 in | 70 x 105 mm |
| 24-8599 | Wing Nuts (Pair)                                     |                  |             |

## Abdominal (Bookwalter® Bars)

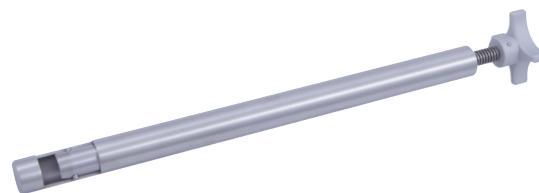
### Bookwalter® Violi Gooseneck Table Post

| CODE    | DESCRIPTION                        |
|---------|------------------------------------|
| 50-4681 | Table Post for 1 in (25 mm) System |



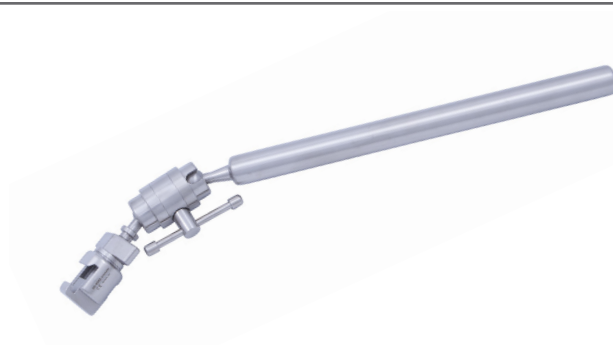
### Bookwalter® Lightweight Horizontal Bar

| CODE    | DESCRIPTION    | LENGTH           |
|---------|----------------|------------------|
| 50-4552 | Horizontal Bar | 14 1/4 in 362 mm |



### Bookwalter® Lightweight Horizontal Flex Bar

| CODE    | DESCRIPTION                     |
|---------|---------------------------------|
| 50-4582 | Lightweight Horizontal Flex Bar |



### Bookwalter® Ironman Horizontal

| CODE    | DESCRIPTION                          |
|---------|--------------------------------------|
| 50-4678 | Violi Ironman Horizontal Ring Holder |

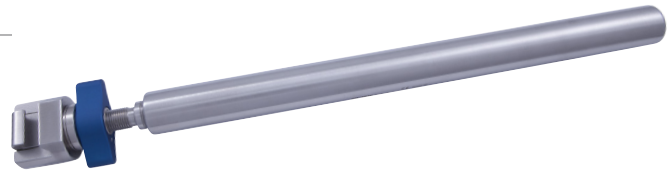




## Abdominal (Bookwalter® Bars)

### Bookwalter® Lightweight Horizontal Bar

| CODE    | DESCRIPTION    | LENGTH         |
|---------|----------------|----------------|
| 50-4618 | Horizontal Bar | 15 ¼ in 387 mm |



### Bookwalter® Lightweight Extension Bar

Requires the Use of a Second Bookwalter® Post Coupler 50-4554

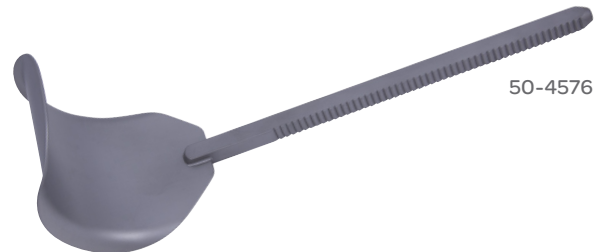
| CODE    | DIMENSIONS   |
|---------|--------------|
| 50-4553 | 12 in 305 mm |
| 50-4797 | 18 in 458 mm |



50-4553

### Bookwalter® Balfour Blade

| CODE      | DIMENSIONS              |
|-----------|-------------------------|
| 50-4576   | 2 ¾ x 3 in 70 x 76 mm   |
| BW1271017 | 3 ½ x 2 ¾ in 89 x 70 mm |



50-4576

### Bookwalter® Gelpi Blade

| CODE    | DIMENSIONS           |
|---------|----------------------|
| 50-4577 | 1 x 5 in 25 x 127 mm |



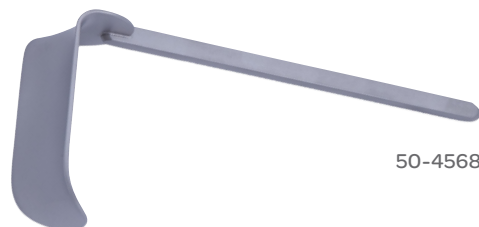
## Abdominal (Bookwalter® Blades)



50-4566

### Bookwalter® Harrington Blade

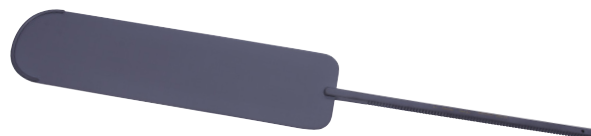
| CODE      | DIMENSIONS             |
|-----------|------------------------|
| 50-4566   | 2½ x 5⅝ in 63 x 143 mm |
| BW1045176 | 3½ x 10 in 89 x 254 mm |



50-4568

### Bookwalter® Kelly Blade

| CODE      | DESCRIPTION | WIDTH      | DEPTH       |
|-----------|-------------|------------|-------------|
| 50-4574   | Kelly Blade | 1 in 25 mm | 1 in 25 mm  |
| 50-4575   | Kelly Blade | 1 in 25 mm | 2½ in 64 mm |
| 50-4565   | Kelly Blade | 2 in 51 mm | 1½ in 38 mm |
| 50-4563   | Kelly Blade | 2 in 51 mm | 2 in 51 mm  |
| 50-4572   | Kelly Blade | 2 in 51 mm | 2½ in 64 mm |
| 50-4568   | Kelly Blade | 2 in 51 mm | 3 in 76 mm  |
| 50-4569   | Kelly Blade | 2 in 51 mm | 4 in 102 mm |
| 50-4570   | Kelly Blade | 2 in 51 mm | 5 in 127 mm |
| 50-4571   | Kelly Blade | 2 in 51 mm | 6 in 152 mm |
| BW1045000 | Kelly Blade | 2 in 51 mm | 8 in 203 mm |



67-7499

### Bookwalter® Opti-Length® Retractor Blade

Malleable with Lip

| CODE    | DIMENSIONS             |
|---------|------------------------|
| 67-7502 | 1½ x 11 in 38 x 279 mm |
| 67-7504 | 2 x 11 in 51 x 279 mm  |
| 67-7499 | 3 x 11 in 76 x 279 mm  |
| 67-7500 | 4 x 11 in 102 x 279 mm |

## Abdominal (Bookwalter® Blades)



50-4644

### Bookwalter® Rake Retractor

| CODE    | DESCRIPTION | WIDTH            |       | DEPTH            |        |
|---------|-------------|------------------|-------|------------------|--------|
| 50-4644 | 3 Prong     | $\frac{2}{3}$ in | 17 mm | $\frac{3}{4}$ in | 19 mm  |
| 50-4645 | 4 Prong     | $\frac{3}{4}$ in | 19 mm | $\frac{1}{3}$ in | 8.4 mm |
| 50-4646 | 6 Prong     | 1 in             | 25 mm | $\frac{1}{3}$ in | 8.4 mm |



50-4598

### Bookwalter® Richardson Blade

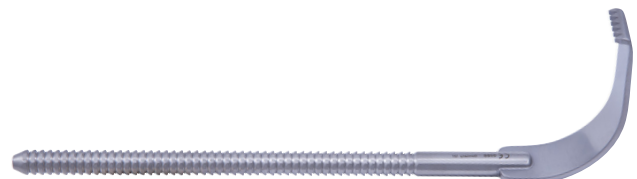
| CODE    | DIMENSIONS             |            |
|---------|------------------------|------------|
| 50-4597 | $\frac{3}{4}$ x 1 in   | 19 x 25 mm |
| 50-4598 | $\frac{3}{4}$ x 2 in   | 19 x 51 mm |
| 50-4599 | 1 x 1 $\frac{1}{4}$ in | 25 x 32 mm |



50-4639

### Bookwalter® Scoville Hook

| CODE    | DESCRIPTION | DIMENSIONS        |       |
|---------|-------------|-------------------|-------|
| 50-4639 | Small       | 2 in              | 51 mm |
| 50-4640 | Large       | $3\frac{1}{4}$ in | 83 mm |



50-4641

### Bookwalter®-Meyerding Retractor Blade

| CODE    | DESCRIPTION | DIMENSIONS                         |            |
|---------|-------------|------------------------------------|------------|
| 50-4641 | Small       | $\frac{2}{3}$ x 2 $\frac{1}{3}$ in | 17 x 60 mm |
| 50-4642 | Medium      | 1 x 3 $\frac{1}{3}$ in             | 25 x 85 mm |
| 50-4643 | Large       | 2 x 3 $\frac{3}{4}$ in             | 51 x 95 mm |

## Abdominal (Bookwalter® Blades)



50-4561

### Bookwalter® Malleable Retractor Blade

Stainless Steel Matte Finish

| CODE      | WIDTH X LENGTH |              |
|-----------|----------------|--------------|
| 50-4561   | 2 x 6 in       | 51 x 152 mm  |
| 50-4562   | 1½ x 6 in      | 38 x 152 mm  |
| 50-4567   | 3 x 6 in       | 76 x 152 mm  |
| BW1043016 | 2 x 10 in      | 51 x 254 mm  |
| BW1043029 | 3 x 10 in      | 76 x 254 mm  |
| BW1045069 | 4 x 8 in       | 101 x 203 mm |



50-4673

### Bookwalter® Retractor Blade

Malleable with Lip

| CODE    | DESCRIPTION | DIMENSIONS |             |
|---------|-------------|------------|-------------|
| 50-4673 | Small       | 2 x 6 in   | 51 x 152 mm |
| 50-4672 | Medium      | 1½ x 6 in  | 38 x 152 mm |



50-4694

### Bookwalter® Retractor Blade

Malleable with Lip

| CODE    | DESCRIPTION | DIMENSIONS |             |
|---------|-------------|------------|-------------|
| 50-4694 | Short       | 1 x 4 in   | 25 x 102 mm |
| 50-4674 | Large       | 3 x 6 in   | 76 x 152 mm |



50-4669

### Bookwalter® Retractor Blade

Super Malleable with Lip

| CODE    | DESCRIPTION | DIMENSIONS |             |
|---------|-------------|------------|-------------|
| 50-4669 | Small       | 1½ x 6 in  | 38 x 152 mm |
| 50-4670 | Medium      | 2 x 6 in   | 51 x 152 mm |
| 50-4671 | Large       | 3 x 6 in   | 76 x 152 mm |

## Abdominal (Bookwalter® Blades )



### Bookwalter® -Magrina Retractor Blade

| CODE    | DESCRIPTION              | DIMENSIONS |             |
|---------|--------------------------|------------|-------------|
| 50-4691 | Super Malleable with Lip | 1 x 4 in   | 25 x 102 mm |



50-5580

### Bookwalter® Radiolucent Titanium Blade

Low Glare Gold Coating

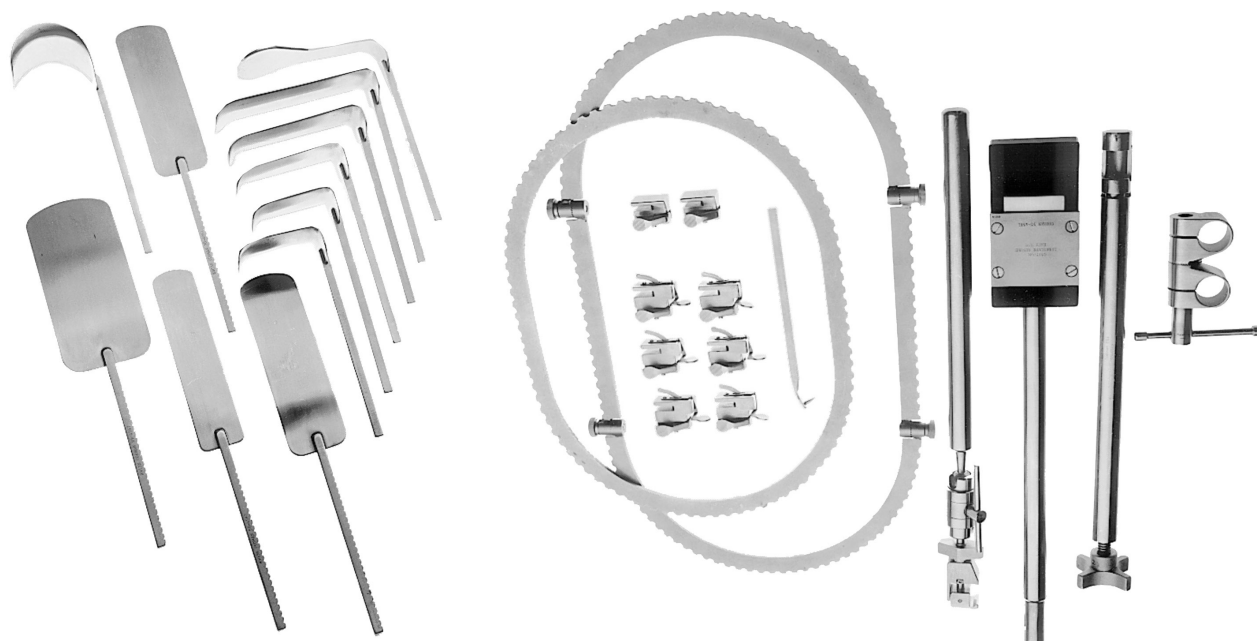
| CODE    | DESCRIPTION    | DIMENSIONS (W X L) |             | CODE    | DESCRIPTION    | DIMENSIONS (W X L) |             |
|---------|----------------|--------------------|-------------|---------|----------------|--------------------|-------------|
| 50-5580 | Titanium Blade | 1 x 4 in           | 25 x 102 mm | 50-5585 | Titanium Blade | 2 x 4 in           | 51 x 102 mm |
| 50-5581 | Titanium Blade | 1 x 5 in           | 25 x 127 mm | 50-5586 | Titanium Blade | 2 x 5 in           | 51 x 127 mm |
| 50-5582 | Titanium Blade | 1 x 6 in           | 25 x 152 mm | 50-5587 | Titanium Blade | 2 x 6 in           | 51 x 152 mm |
| 50-5583 | Titanium Blade | 1 x 7 in           | 25 x 178 mm | 50-5588 | Titanium Blade | 2 x 7 in           | 51 x 178 mm |
| 50-5584 | Titanium Blade | 1 x 8 in           | 25 x 203 mm | 50-5589 | Titanium Blade | 2 x 8 in           | 51 x 203 mm |



### Bookwalter® Lightweight Post Coupling

| CODE    | DESCRIPTION               |
|---------|---------------------------|
| 50-4554 | For a 1 in (25 mm) System |

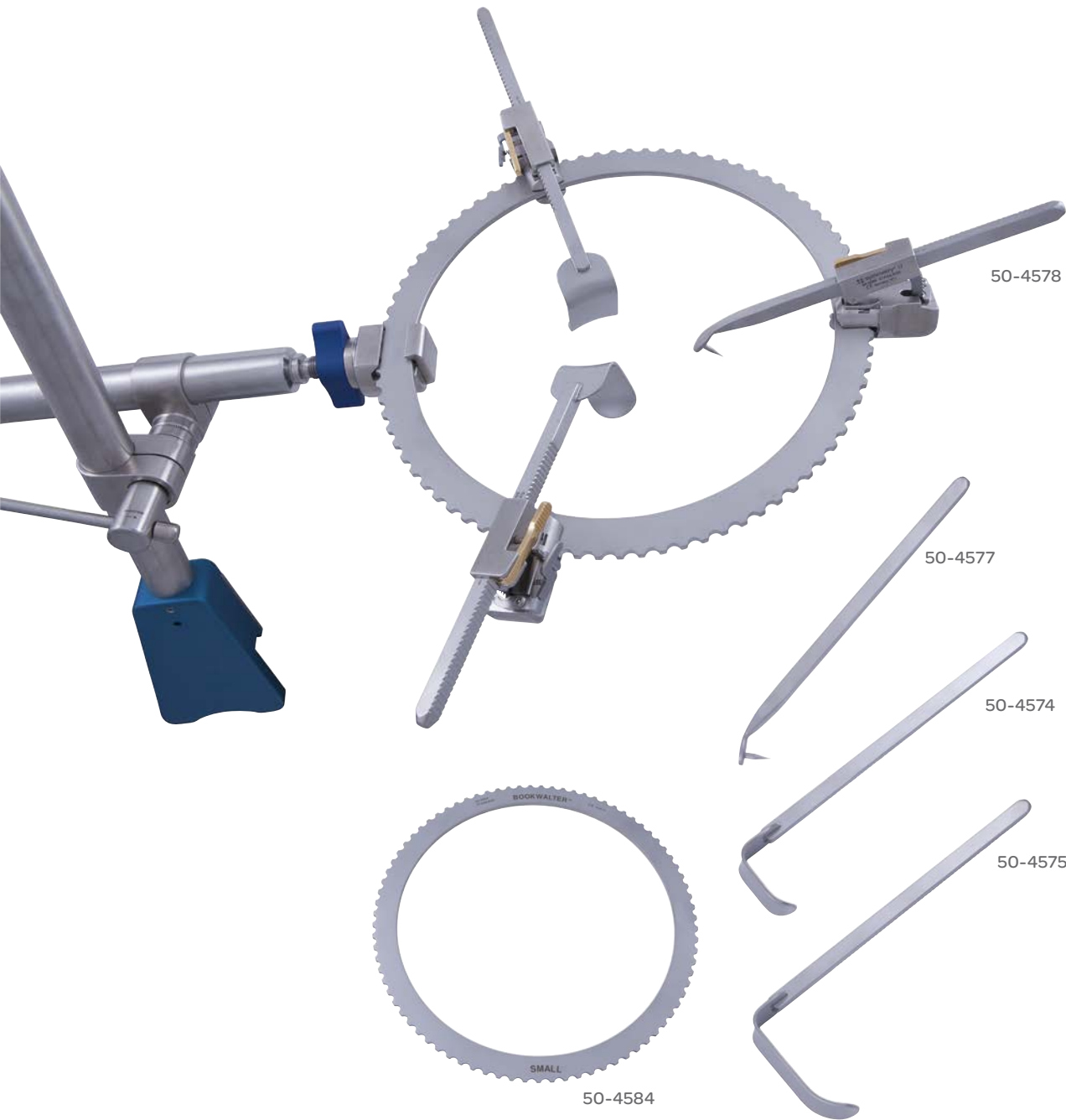
## Abdominal (Bookwalter® Kits)



### Bookwalter® Retractor Kit II

| CODE        | DESCRIPTION                                        | LENGTH     |             | QTY |
|-------------|----------------------------------------------------|------------|-------------|-----|
| 50-4542     | Includes Part Numbers and Quantities Listed Below: |            |             |     |
| 50-4581     | Table Post                                         | 12 in      | 304 mm      | 1   |
| 50-4554     | Post Coupling                                      |            |             | 1   |
| 50-4552     | Horizontal Bar                                     | 14 ¼ in    | 365 mm      | 1   |
| 50-4582     | Horizontal Flex Bar                                |            |             | 1   |
| 50-4557     | Medium Oval Ring                                   |            |             | 1   |
| 50-4583     | Segmented Ring                                     |            |             | 1   |
| 50-4579     | Ratchet Mechanisms                                 |            |             | 2   |
| 50-4580     | Tilt Ratchet Mechanisms                            |            |             | 6   |
| 50-4566     | Harrington Retractors                              |            |             | 1   |
| 50-4576     | Balfour Retractors                                 |            |             | 1   |
| 50-4568     | Kelly Retractors                                   | 2 x 3 in   | 51 x 76 mm  | 2   |
| 50-4569     | Kelly Retractors                                   | 2 x 4 in   | 51 x 102 mm | 1   |
| 50-4570     | Kelly Retractors                                   | 2 x 5 in   | 51 x 127 mm | 1   |
| 50-4571     | Kelly Retractors                                   | 2 x 6 in   | 51 x 152 mm | 1   |
| 50-4562     | Malleable Retractors                               | 1 ½ x 6 in | 38 x 152 mm | 1   |
| 50-4561     | Malleable Retractors                               | 2 x 6 in   | 51 x 152 mm | 2   |
| 50-4567     | Malleable Retractors                               | 3 x 6 in   | 76 x 152 mm | 1   |
| 50-4577     | Gelpi Retractor                                    |            |             | 1   |
| ACCESSORIES |                                                    |            |             |     |
| 50-4507     | Table Fixation and Ring Case                       |            |             | 1   |
| 50-4508     | Blade and Accessories Case                         |            |             | 1   |

Abdominal (Bookwalter® Kits)

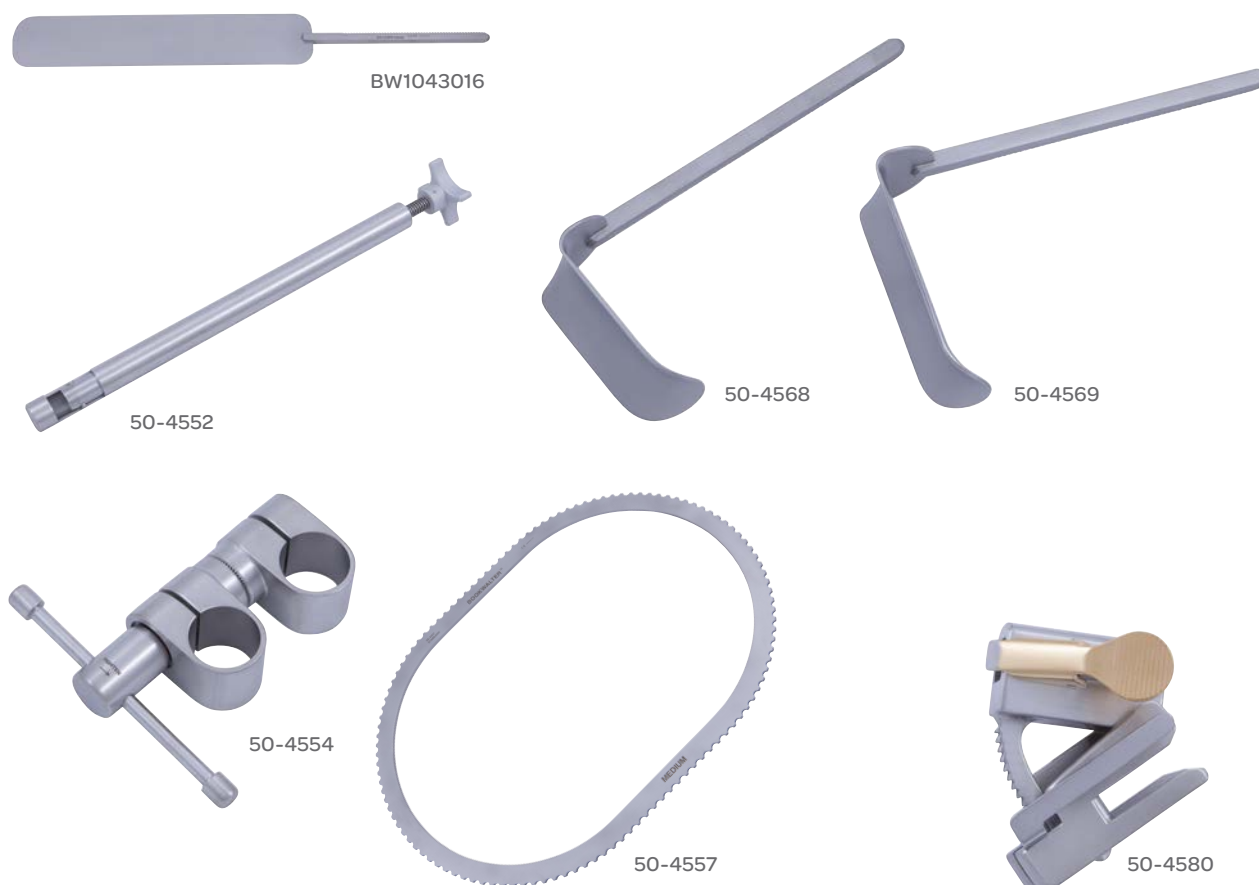


Bookwalter® Small Incision Kit

| CODE    | DESCRIPTION                         | LENGTH    |            |
|---------|-------------------------------------|-----------|------------|
| 50-4578 | Includes Part Numbers Listed Below: |           |            |
| 50-4584 | Round Ring                          | 8 ½ in    | 216 mm     |
| 50-4577 | Retractor Gelpi Blade               |           |            |
| 50-4574 | Kelly Retractor Blades              | 1 x 1½ in | 25 x 38 mm |
| 50-4575 | Kelly Blade                         | 1 x 2½ in | 25 x 64 mm |



## Abdominal (Bookwalter® Kits)



## Bookwalter® Obese Patient Retractor System, 18 Inch (458 mm) Table Post

| CODE       | DESCRIPTION                         | DIMENSIONS |              | QTY |
|------------|-------------------------------------|------------|--------------|-----|
| BW1046BKIT | Includes Part Numbers Listed Below: |            |              |     |
| BW0144005  | Table Post Obese Patients           | 18 in      | 458 mm       | 1   |
| BW1043016  | Malleable Blade                     | 2 x 10 in  | 51 x 254 mm  | 1   |
| BW1043029  | Malleable Blade                     | 3 x 10 in  | 76 x 254 mm  | 1   |
| BW1045069  | Malleable Blade                     | 4 x 8 in   | 102 x 203 mm | 1   |
| BW1045000  | Kelly Blade                         | 2 x 8 in   | 51 x 203 mm  | 1   |
| BW1271017  | Balfour Blade                       | 3½ x 2¾ in | 89 x 70 mm   | 1   |
| BW1045176  | Harrington Blade                    | 3½ x 10 in | 89 x 254 mm  | 1   |
| BW0338014  | Ratchet Extender                    |            |              | 1   |
| BW0338015  | Twister Ratchet                     |            |              | 1   |
| 50-4552    | Horizontal Bar                      | 14¼ in     | 365 mm       | 1   |
| 50-4554    | Post Coupling                       | 1 x 1 in   | 25 x 25 mm   | 1   |
| 50-4557    | Retractor, Oval Ring Medium         |            |              | 1   |
| 50-4568    | Kelly Retractor Blades              | 2 x 3 in   | 51 x 76 mm   | 1   |
| 50-4569    | Kelly Retractor Blades              | 2 x 4 in   | 51 x 102 mm  | 1   |
| 50-4580    | Tilting Ratchets                    |            |              | 6   |

## Abdominal (Bookwalter® Kits)



### Bookwalter® Obese Patient Accessory Kit, 18 Inch (458 mm) Table Post

| CODE      | DESCRIPTION                         | DIMENSIONS   |              | QTY |
|-----------|-------------------------------------|--------------|--------------|-----|
| BW1046BRT | Includes Part Numbers Listed Below: |              |              |     |
| BW0144005 | Table Post                          |              |              | 1   |
| BW1043016 | Malleable Blade                     | 2 x 10 in    | 51 x 254 mm  | 1   |
| BW1043029 | Malleable Blade                     | 3 x 10 in    | 76 x 254 mm  | 1   |
| BW1045069 | Malleable Blade                     | 4 x 8 in     | 102 x 203 mm | 1   |
| BW1045000 | Kelly Blade                         | 2 x 8 in     | 51 x 203 mm  | 1   |
| BW1271017 | Balfour Blade                       | 3 ½ x 2 ¾ in | 89 x 70 mm   | 1   |
| BW1045176 | Harrington Blade                    | 3 ½ x 10 in  | 89 x 254 mm  | 1   |
| BW0338014 | Ratchet Extender                    |              |              | 1   |
| BW0338015 | Twister Ratchet                     |              |              | 1   |



### Bookwalter® Obese Patient Accessory Kit, 24 Inch (610 mm) Table Post

| CODE      | DESCRIPTION                         | DIMENSIONS |              | QTY |
|-----------|-------------------------------------|------------|--------------|-----|
| BW1045BRT | Includes Part Numbers Listed Below: |            |              |     |
| BW0144003 | Table Post                          | 24 in      | 610 mm       | 1   |
| BW1043016 | Malleable Blade                     | 2 x 10 in  | 51 x 254 mm  | 1   |
| BW1043029 | Malleable Blade                     | 3 x 10 in  | 76 x 254 mm  | 1   |
| BW1045069 | Malleable Blade                     | 4 x 8 in   | 102 x 203 mm | 1   |
| BW1045000 | Kelly Blade                         | 2 x 8 in   | 51 x 203 mm  | 1   |
| BW1271017 | Balfour Blade                       | 3½ x 2¾ in | 89 x 70 mm   | 1   |
| BW1045176 | Harrington Blade                    | 3½ x 10 in | 89 x 254 mm  | 1   |
| BW0338014 | Ratchet Extender                    |            |              | 1   |
| BW0338015 | Twister Ratchet                     |            |              | 1   |

## Abdominal (Bookwalter® Kits)



### Bookwalter® Obese Patient Retractor System, 24 Inch (610 mm) Table Post

| CODE       | DESCRIPTION                         | LENGTH       |              | QTY |
|------------|-------------------------------------|--------------|--------------|-----|
| BW1045BKIT | Includes Part Numbers Listed Below: |              |              |     |
| BW0144003  | Table Post                          | 24 in        | 610 mm       | 1   |
| BW1043016  | Malleable Blade                     | 2 x 10 in    | 51 x 254 mm  | 1   |
| BW1043029  | Malleable Blade                     | 3 x 10 in    | 76 x 254 mm  | 1   |
| BW1045069  | Malleable Blade                     | 4 x 8 in     | 102 x 203 mm | 1   |
| BW1045000  | Kelly Blade                         | 2 x 8 in     | 51 x 203 mm  | 1   |
| BW1271017  | Balfour Blade                       | 3 ½ x 2 ¾ in | 89 x 70 mm   | 1   |
| BW1045176  | Harrington Blade                    | 3 ½ x 10 in  | 89 x 254 mm  | 1   |
| BW0338014  | Ratchet Extender                    |              |              | 1   |
| BW0338015  | Twister Ratchet                     |              |              | 1   |
| 50-4552    | Horizontal Bar                      | 14 ¼ in      | 365 mm       | 1   |
| 50-4554    | Post Coupling                       | 1 x 1 in     | 25 x 25 mm   | 1   |
| 50-4557    | Medium Oval Ring                    |              |              | 1   |
| 50-4568    | Kelly Blade                         | 2 x 3 in     | 51 x 76 mm   | 1   |
| 50-4569    | Kelly Blade                         | 2 x 4 in     | 51 x 102 mm  | 1   |
| 50-4580    | Tilt Ratchets                       |              |              | 6   |



### Bookwalter® Richardson Blade Kit

| CODE    | DESCRIPTION                                    | LENGTH    |            |
|---------|------------------------------------------------|-----------|------------|
| 50-4596 | Includes One of the<br>Following Three Blades: |           |            |
| 50-4597 | Blade                                          | ¾ x 1 in  | 19 x 25 mm |
| 50-4598 | Blade                                          | ¾ x 2 in  | 19 x 51 mm |
| 50-4599 | Blade                                          | 1 x 1¼ in | 25 x 32 mm |

## Abdominal (Bookwalter® Ratchets)

### Bookwalter® Flat Ratchet

| CODE    | DESCRIPTION                                                                | QTY                          |
|---------|----------------------------------------------------------------------------|------------------------------|
| 50-4579 | Basic Ratchet provides simple retraction at 0° angle to the surgical site. | 1/ Each<br>Sold Individually |



### Bookwalter® Tilt Ratchet

| CODE    | DESCRIPTION                                                | QTY                          |
|---------|------------------------------------------------------------|------------------------------|
| 50-4580 | Tilt ratchet articulates the blade into the surgical site. | 1/ Each<br>Sold Individually |



### Bookwalter Rotilt® Ratchet

| CODE    | DESCRIPTION                                                                                                                                                   | QTY                          |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 50-4589 | The Rotilt Ratchet twists the blade in 7 indexed positions along a 60° arch and has the ability to independently articulate the blade into the surgical site. | 1/ Each<br>Sold Individually |



## Abdominal (Bookwalter® Ratchets)

### Bookwalter® Self-Retaining Low Profile Locking Rotilt Ratchet

| CODE   | DESCRIPTION                               | QTY                          |
|--------|-------------------------------------------|------------------------------|
| 504695 | Self-Retaining Low Profile Locking Rotilt | 1/ Each<br>Sold Individually |



### Bookwalter® Self-Retaining Tilt Ratchet

| CODE    | DESCRIPTION                                                                                                                                                                            | QTY                          |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 50-4686 | Like the 50-4580 this ratchet articulates the blade into the surgical site, it also has an additional self-retention latch that holds the ratchet onto the Bookwalter® Retractor Ring. | 1/ Each<br>Sold Individually |



### Bookwalter® Self-Retaining Low Profile Locking Rotilt Ratchet

| CODE    | DESCRIPTION                                                                                                                                                                                                                                                                          | QTY                          |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 50-4696 | The Bookwalter® Self-Retaining Low Profile Locking RoTilt Ratchet bring all of the best features of all other ratchets into one mechanism. The low profile design, inclusive of the capacity to tilt, rotate and self-retention it is the one ratchet to build your Bookwalter® Set. | 1/ Each<br>Sold Individually |



### Bookwalter® Twister Ratchet

| CODE      | DESCRIPTION     | QTY                          |
|-----------|-----------------|------------------------------|
| BW0338015 | Twister Ratchet | 1/ Each<br>Sold Individually |



## Abdominal (Bookwalter® Ratchets)

### Bookwalter® Ratchet Extender



| CODE      | DESCRIPTION      |
|-----------|------------------|
| BW0338014 | Ratchet Extender |

## Abdominal (Bookwalter® Rings)



504810

### Bookwalter® Adaptable Ring System

Table Mounted

| CODE    | DESCRIPTION                                                                                                                                 |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 50-4810 | System Includes the Horizontal Bar and Dual Ball Joint Hinge System as well as the Small Round, Medium Round and Medium Oval Ring Segments. |
| 50-4811 | Small Round Ring Sements                                                                                                                    |
| 50-4812 | Medium Round Ring Segments                                                                                                                  |
| 50-4813 | Medium Oval Ring Segments                                                                                                                   |

### Bookwalter® Adaptable Ring System Bridge



| CODE    | DESCRIPTION          |
|---------|----------------------|
| 50-4687 | For use with 50-4810 |

### Bookwalter® Segmented Elliptical Ring

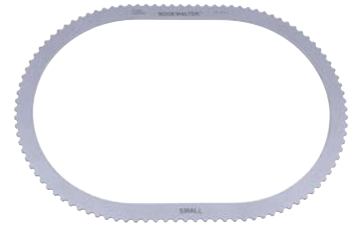


| CODE    | DESCRIPTION     | DIMENSIONS   |              |
|---------|-----------------|--------------|--------------|
| 50-4595 | Elliptical Ring | 14 ½ x 15 in | 368 x 380 mm |

## Abdominal (Bookwalter® Rings)

### Bookwalter® Oval Ring

| CODE    | DESCRIPTION | DIMENSIONS     |              |
|---------|-------------|----------------|--------------|
| 50-4558 | Small       | 8 x 12 ¼ in    | 203 x 311 mm |
| 50-4557 | Medium      | 10 ½ x 14 ½ in | 267 x 368 mm |
| 50-4556 | Large       | 12 x 18 ½ in   | 305 x 470 mm |



50-4558

### Bookwalter® Round Ring

Table Mounted

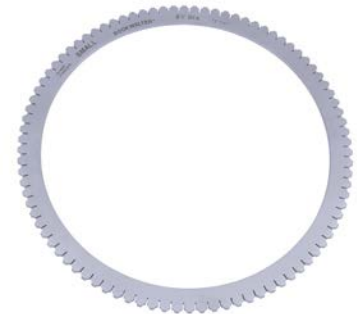
| CODE    | DESCRIPTION | DIAMETER |        |
|---------|-------------|----------|--------|
| 50-4584 | Small       | 8 ½ in   | 216 mm |
| 50-4559 | Medium      | 10 ½ in  | 267 mm |
| 50-4560 | Large       | 12 ½ in  | 318 mm |



50-4559

### Bookwalter® Suture Ring

| CODE    | DESCRIPTION  | DIAMETER |        |
|---------|--------------|----------|--------|
| 50-4684 | Small, Round | 9 ½ in   | 241 mm |



### Bookwalter® Round Ring Segmented

| CODE    | DESCRIPTION              | DIAMETER |        |
|---------|--------------------------|----------|--------|
| 50-4635 | Small, 1 Pair            | 8 ½ in   | 216 mm |
| 50-4634 | Medium, 1 Pair           | 10 ½ in  | 267 mm |
| 50-4633 | Large, with Suture Slots | 16 in    | 406 mm |



50-4635



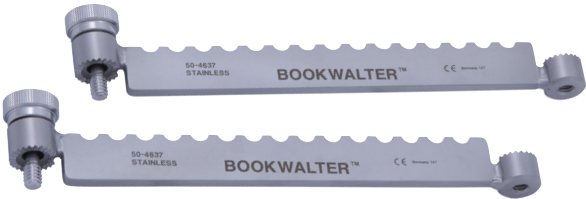
Abdominal (Bookwalter® Rings)



50-4587

Bookwalter® Segmented Retractor Ring

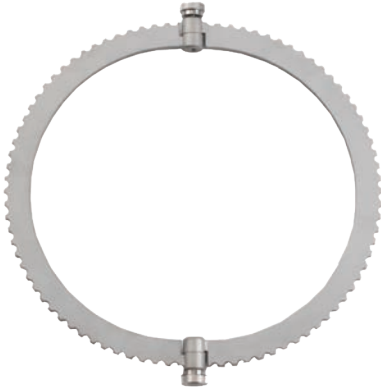
| CODE    | DESCRIPTION                                                               | DIMENSIONS     |              |
|---------|---------------------------------------------------------------------------|----------------|--------------|
| 50-4587 | Small, Consists of One 8 ½ in Round Ring and Two 4 in Straight Segments   | 8 ½ x 14 in    | 216 x 356 mm |
| 50-4583 | Medium, Consists of One 10 ½ in Round Ring and Two 8 in Straight Segments | 10 ½ x 19 ½ in | 267 x 495 mm |
| 50-4588 | Large, Consists of One 12 ½ in Round Ring and Two 6 in Straight Segments  | 12 ½ x 19 ½ in | 318 x 495 mm |



50-4637

Bookwalter® Segmented Ring (Straight Segments)

| CODE    | DESCRIPTION                  | LENGTH |        |
|---------|------------------------------|--------|--------|
| 50-4636 | Straight Ring Segment (Pair) | 4 in   | 102 mm |
| 50-4637 | Straight Ring Segment (Pair) | 6 in   | 152 mm |
| 50-4638 | Straight Ring Segment (Pair) | 8 in   | 203 mm |



Bookwalter® Universal Ring Segmented Ring Screw

| CODE     | DESCRIPTION          | LENGTH   |       |
|----------|----------------------|----------|-------|
| 58-0093X | Screw Only, One Each | 15/16 in | 24 mm |



## Abdominal (Bookwalter® Table Posts)



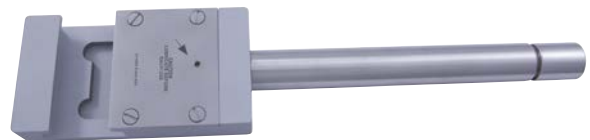
### Bookwalter® Post Holder

| CODE    | DESCRIPTION                        | LENGTH      |
|---------|------------------------------------|-------------|
| 50-4680 | For Use with the Gooseneck 50-4681 | 4 in 102 mm |



### Bookwalter® Table Post

| CODE    | LENGTH       |
|---------|--------------|
| 50-4581 | 12 in 304 mm |



### Bookwalter® Table Post

| CODE    | LENGTH      |
|---------|-------------|
| 50-4683 | 8 in 203 mm |

### Bookwalter® Table Post

| CODE      | LENGTH       |
|-----------|--------------|
| BW0144003 | 24 in 608 mm |



### Bookwalter® Table Post

| CODE      | LENGTH       |
|-----------|--------------|
| BW0144005 | 18 in 457 mm |

## Abdominal (Bookwalter® Table Posts)

### Bookwalter® Lightweight Table Post

| CODE    | LENGTH |        |
|---------|--------|--------|
| 50-4688 | 12 in  | 304 mm |
| 50-4697 | 16 in  | 406 mm |

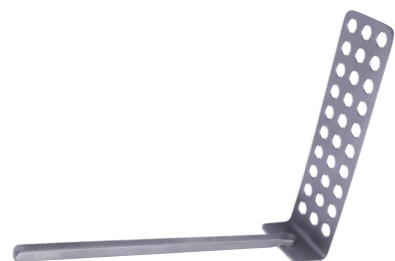


50-4688

## Abdominal (Universal Blades)

### Universal Ring Big Boy Retractor Blade

| CODE    | DESCRIPTION | LENGTH     |
|---------|-------------|------------|
| 58-0020 | Fenestrated | 2 x 6 ½ in |
| 58-0021 | Fenestrated | 3 x 6 ½ in |



58-0021

### Universal Ring Deaver Retractor Blade

| CODE     | DESCRIPTION | DIMENSIONS   |              |
|----------|-------------|--------------|--------------|
| 58-0103  |             | 1 x 3 ½ in   | 25 x 89 mm   |
| 58-0104  |             | 1 x 5 in     | 25 x 127 mm  |
| 58-0102  |             | 2 x 6 ½ in   | 51 x 165 mm  |
| 58-0104T | Titanium    | 2/3 x 2 ¼ in | 16.9 x 57 mm |
| 58-0103T | Titanium    | 1 x 5 in     | 25 x 127 mm  |
| 58-0101T | Titanium    | 2 x 3 ½ in   | 51 x 89 mm   |
| 58-0102T | Titanium    | 3 x 6 ½ in   | 76 x 165 mm  |



58-0101T

### Universal Ring Harrington Retractor Blade

| CODE    | DIMENSIONS   |              |
|---------|--------------|--------------|
| 58-0035 | 2/3 x 2 ¼ in | 16.9 x 57 mm |
| 58-0037 | 3 x 10 ½ in  | 76 x 267 mm  |



58-0035

## Abdominal (Bookwalter® Kits)

### Bookwalter® Retractor Kit III

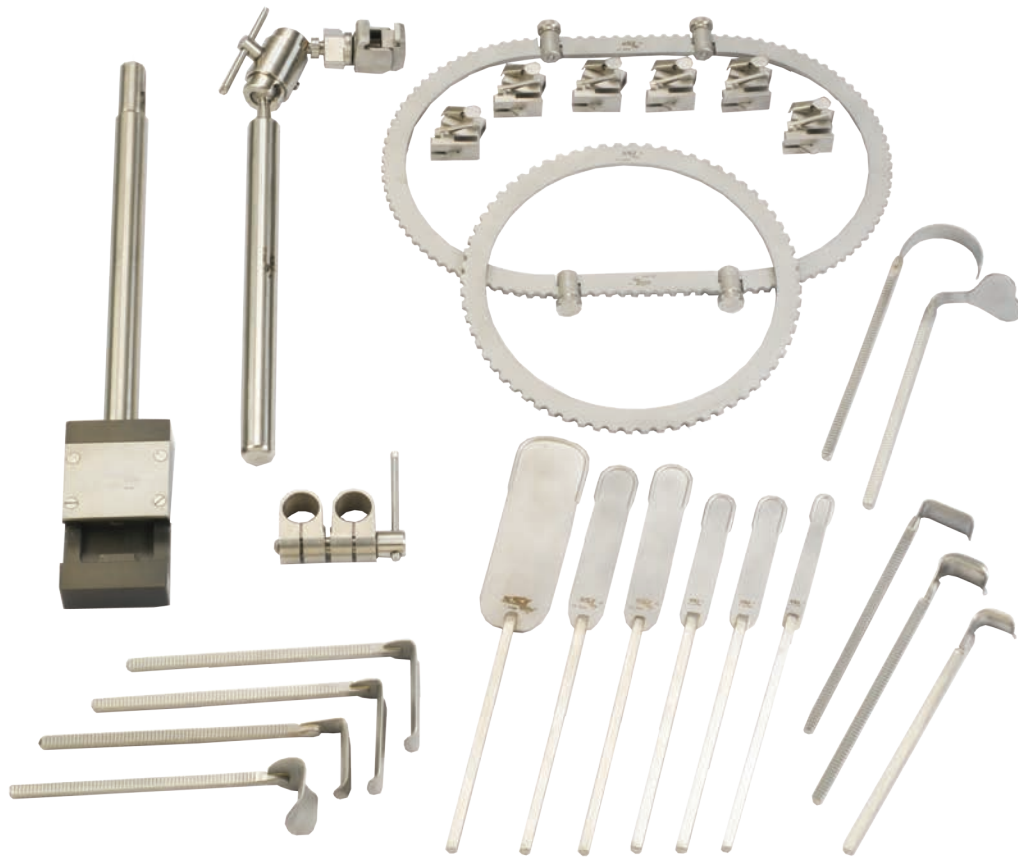
| CODE     | NAME                                                    | QTY |
|----------|---------------------------------------------------------|-----|
| 50-5710  | Bookwalter® Retractor Kit III Includes Following Items: |     |
| 50-4688  | Bookwalter® Lightweight Table Post, 12 in               | 1   |
| 50-4554  | Bookwalter® Post Coupler,                               | 1   |
| 50-4582  | Bookwalter® Lightweight Horizontal Flex Bar             | 1   |
| 50-4583  | Bookwalter® Medium Segmented Ring                       | 1   |
| 50-4636  | Bookwalter® Straight Ring Segment, 4 in, Pair           | 1   |
| 50-4580  | Bookwalter® Tilting Ratchet                             | 4   |
| 50-4686  | Bookwalter® Self-Retaining Tilting Ratchet              | 4   |
| 50-4568  | Bookwalter® 2x3 Kelly Retractor Blade                   | 2   |
| 50-4569  | Bookwalter® 2x4 Kelly Retractor Blade                   | 2   |
| 50-4570  | Bookwalter® 2x5 Kelly Retractor Blade                   | 1   |
| 50-4571  | Bookwalter® 2x6 Kelly Retractor Blade                   | 1   |
| 50-4566  | Bookwalter® Harrington Retractor Blade                  | 1   |
| 50-4577  | Bookwalter® Balfour Retractor                           | 1   |
| 50-4672  | Bookwalter® 1 ½x6 Malleable Retractor Blade             | 1   |
| 50-4673  | Bookwalter® 2x6 Malleable Retractor Blade               | 2   |
| 50-4674  | Bookwalter® 3x6 Malleable Retractor Blade               | 1   |
| BW033015 | Bookwalter® Twister Ratchet                             | 1   |

## Abdominal (Bookwalter® Kits)

### Bookwalter® III Obese Patient Kit

| CODE      | NAME                                                                          | QTY |
|-----------|-------------------------------------------------------------------------------|-----|
| 50-5720   | Bookwalter® III Obese Patient Kit Includes Following Items:                   |     |
| 50-4697   | Bookwalter® Lightweight Table Post, 16 in                                     | 1   |
| 50-4554   | Bookwalter® Post Coupling                                                     | 2   |
| 50-4553   | Bookwalter® Lightweight Extension Bar, 12 in                                  | 1   |
| 50-4618   | Bookwalter® Lightweight Horizontal Bar                                        | 1   |
| 50-4588   | Bookwalter® Large Segmented Ring                                              | 1   |
| 50-4636   | Bookwalter® Straight Ring Segment, 4 in, Pair                                 | 1   |
| 50-4637   | Bookwalter® Straight Ring Segment, 6 in, Pair                                 | 1   |
| 50-4580   | Bookwalter® Tilting Ratchet                                                   | 4   |
| 50-4686   | Bookwalter® Self-Retaining Tilting Ratchet                                    | 6   |
| 50-4571   | Bookwalter® 2x6 Kelly Retractor Blade                                         | 2   |
| BW1045000 | Bookwalter® 2x8 Kelly Retractor Blade                                         | 2   |
| BW1045176 | Bookwalter® Harrington Retractor Blade                                        | 1   |
| BW1271017 | Bookwalter® Balfour Retractor                                                 | 1   |
| 67-7502   | Bookwalter® 1½ x 11 Opti-Length® Malleable Retractor Blade with Malleable Lip | 1   |
| 67-7504   | Bookwalter® 2 x 11 Opti-Length® Malleable Retractor Blade with Malleable Lip  | 1   |
| 67-7499   | Bookwalter® 3 x 11 Opti-Length® Malleable Retractor Blade with Malleable Lip  | 1   |
| 67-7500   | Bookwalter® 4 x 11 Opti-Length® Malleable Retractor Blade with Malleable Lip  | 1   |
| BW0338014 | Bookwalter® Ratchet Extender                                                  | 2   |
| BW0338015 | Bookwalter® Twister Ratchet                                                   | 1   |

## Abdominal (Kits)



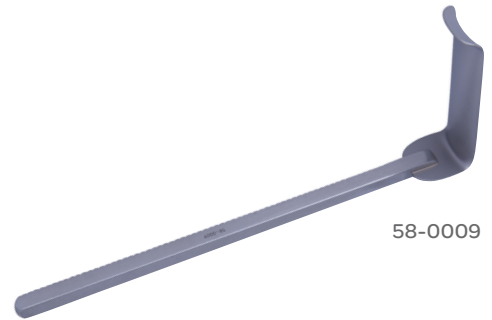
### Universal Ring Pediatric System

| CODE     | DESCRIPTION               | LENGTH                                        | QUANTITY |
|----------|---------------------------|-----------------------------------------------|----------|
| 58-0145  | Ring Pediatric System     |                                               |          |
| 58-0001  | 12 in (305 mm) Table Post |                                               | 1        |
| 58-0003  | Post Coupling             |                                               | 1        |
| 58-0005  | Horizontal Flex Bar       |                                               | 1        |
| 58-0065  | Tilt Ratchets             |                                               | 6        |
| 58-0062  | Small Round Ring          |                                               | 1        |
| 58-0058S | Small Segmented Ring      |                                               | 1        |
| 58-4501  | Richardson Blade          | $\frac{3}{4} \times 1$ in                     | 1        |
| 58-4502  | Richardson Blade          | $\frac{3}{4} \times 1\frac{1}{4}$ in          | 1        |
| 58-0029  | Kelly Blade               | $1 \times 1\frac{1}{2}$ in                    | 1        |
| 58-0027  | Kelly Blade               | $2 \times 1\frac{1}{2}$ in                    | 1        |
| 58-0009  | Kelly Blade               | $1 \times 3$ in                               | 2        |
| 58-0044  | Malleable Blade           | $2 \times 6$ in                               | 1        |
| 58-0041  | Malleable Blade           | $\frac{1}{2} \times 4$ in                     | 2        |
| 58-0042  | Malleable Blade           | $1 \times 5$ in                               | 2        |
| 58-0040  | Malleable Blade           | $\frac{3}{4} \times 4$ in                     | 1        |
| 58-0036  | Baby Harrington           | $\frac{1}{2} \times 2\frac{1}{2} \times 2$ in | 1        |
| 58-0103  | Deaver Blade              | $\frac{2}{3} \times 2\frac{1}{4}$ in          | 1        |

## Abdominal (Universal Blades)

### Universal Ring Kelly Retractor Blade

| CODE     | DESCRIPTION | DIMENSIONS     |                  |
|----------|-------------|----------------|------------------|
| 58-0025  |             | 1 x 3 in       | 51 x 76 mm       |
| 58-0018A | Aluminum    | 2 x 5 in       | 51 x 127 mm      |
| 58-0016A | Aluminum    | 2 x 6 in       | 51 x 152 mm      |
| 58-0032A | Aluminum    | 2 x 6 in       | 51 x 152 mm      |
| 58-0009  |             | 2½ x 5 x 3½ in | 64 x 127 x 89 mm |
| 58-0017T | Titanium    | 2½ x 8 x 3½ in | 64 x 203 x 89 mm |
| 58-0016T | Titanium    | 3 x 10½ in     | 76 x 267 mm      |



58-0009

### Universal Ring Meyering Retractor Blade

Without Teeth

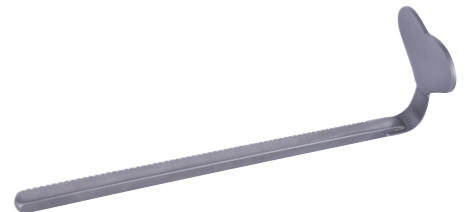
| CODE     | DESCRIPTION | DIMENSIONS |             |
|----------|-------------|------------|-------------|
| 58-0048T | Titanium    | 2 x 4 in   | 51 x 102 mm |
| 58-0051T | Titanium    | 2½ x 3 in  | 64 x 76 mm  |



58-0048T

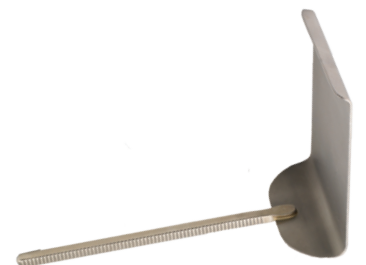
### Universal Ring Pediatric Harrington Retractor Blade

| CODE    | DESCRIPTION                               | DIMENSIONS |             |
|---------|-------------------------------------------|------------|-------------|
| 58-0036 | Ring Pediatric Harrington Retractor Blade | 2 x 8 in   | 51 x 203 mm |



### Universal Ring Retractor Blade

| CODE     | DESCRIPTION  | DIMENSIONS |            |
|----------|--------------|------------|------------|
| 58-0073  | Fence, Rigid | 2 x 3¾ in  | 51 x 95 mm |
| 58-0044T | Titanium     | 3½ x 3¾ in | 89 x 95 mm |

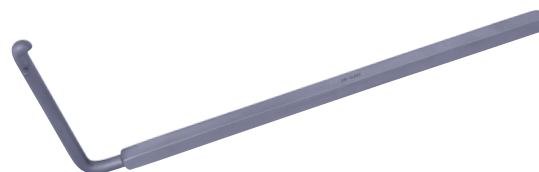


58-0073

## Abdominal (Universal Blades)

### Universal Ring Scoville Retractor Blade

| CODE    | DESCRIPTION |
|---------|-------------|
| 58-0106 | Large       |

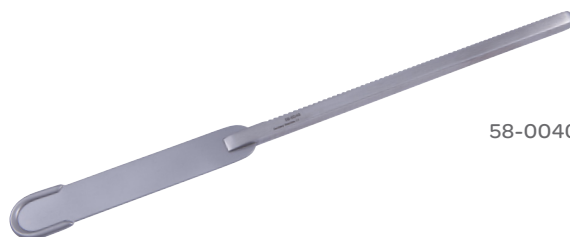


### Universal Ring Yu-Holtgrew Retractor Blade

| CODE    | DESCRIPTION | DIMENSIONS            |
|---------|-------------|-----------------------|
| 58-0022 | Rigid       | 4 x 5 in 102 x 127 mm |

### Universal Ring Retractor Blade

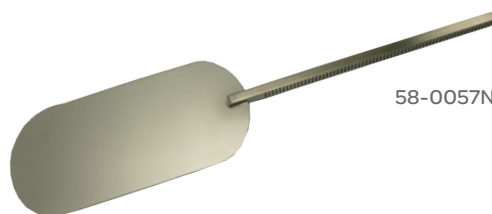
| CODE    | DESCRIPTION         | LENGTH                 |
|---------|---------------------|------------------------|
| 58-0042 | Malleable, With Lip | 1 x 5 in 25 x 127 mm   |
| 58-0045 | Malleable, With Lip | 2 x 8 in 51 x 203 mm   |
| 58-0049 | Malleable, With Lip | 1 x 5 in 25 x 127 mm   |
| 58-0054 | Malleable, With Lip | 6 x 9 in 152 x 228 mm  |
| 58-0056 | Malleable, With Lip | 4 x 10 in 102 x 254 mm |



58-0040

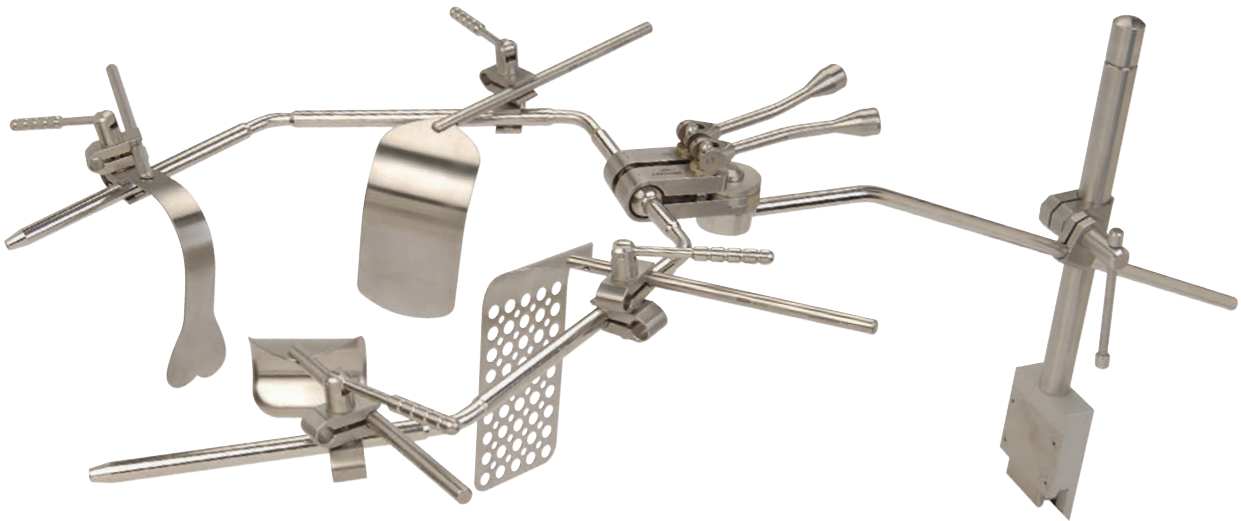
### Universal Ring Retractor Blade

| CODE     | DESCRIPTION       | LENGTH                 |
|----------|-------------------|------------------------|
| 58-0057N | Malleable, No Lip | 6 x 9 in 152 x 229 mm  |
| 58-0044N | Malleable, No Lip | 6 x 12 in 152 x 305 mm |



58-0057N

## Abdominal (Vision)



### Vision Retractor System

| CODE    | DESCRIPTION                    | DIMENSIONS   |              | QTY |
|---------|--------------------------------|--------------|--------------|-----|
| 59-8850 | Includes the Following Items:  |              |              |     |
| 59-8802 | Table Clamp with Vertical Post |              |              | 1   |
| 59-8803 | Retractor Clamp                |              |              | 6   |
| 59-8805 | Vision Frame                   |              |              | 1   |
| 59-8807 | Mayo Swivel                    | 2 ¾ x 2 in   | 70 x 51 mm   | 2   |
| 59-8809 | Deaver Swivel                  | 2 ¾ x 4 ½ in | 70 x 114 mm  | 1   |
| 59-8811 | Harrington "Sweetheart"        | 2 x 5 in     | 51 x 127 mm  | 1   |
| 59-8813 | Kelly Swivel "Modified"        | 3 x 2 ½ in   | 76 x 64 mm   | 1   |
| 59-8814 | Kelly Swivel "Modified"        | 3 x 4 in     | 76 x 102 mm  | 1   |
| 59-8815 | Malleable Swivel, Perforated   | 2 x 6 in     | 51 x 152 mm  | 1   |
| 59-8816 | Malleable Swivel, Perforated   | 3 x 6 ½ in   | 76 x 165 mm  | 1   |
| 59-8818 | Fence Swivel, Perforated       | 4 x 6 in     | 102 x 152 mm | 1   |
| 59-8821 | Splanchnic Swivel              | 2 x 6 in     | 51 x 152 mm  | 1   |
| 59-8801 | Post Coupling                  |              |              | 1   |
| 59-8828 | Sterilization Case             |              |              | 1   |

### Symmetry Surgical Instrument Repair Services

#### KEY BENEFITS:

- Full instrument restoration
- 24-Hour turnaround for emergency repairs are available by request, but must be scheduled with our repair department and noted on the repair request form
- Free quotes
- Free evaluations

Questions about requesting a repair? Send it to [repairs@symmetrysurgical.com](mailto:repairs@symmetrysurgical.com). Our Repair Centers honor the warranties on all of our products. Customer satisfaction is our top priority!



## Appendectomy



Richardson Appendectomy Retractor

| CODE    | DESCRIPTION      | DIMENSIONS (W X D)              | LENGTH                    |
|---------|------------------|---------------------------------|---------------------------|
| 50-4131 | Ring-Grip Handle | $\frac{3}{4}$ x 2 in 19 x 51 mm | 9 $\frac{1}{4}$ in 235 mm |



Richardson Appendectomy Retractor

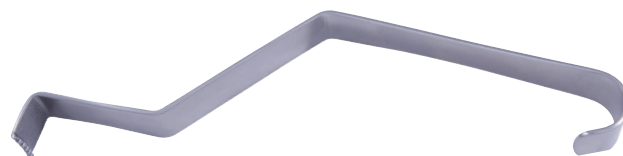
| CODE     | DESCRIPTION     | DIMENSIONS (W X D)                | LENGTH                    |
|----------|-----------------|-----------------------------------|---------------------------|
| 50-4130C | Standard Handle | $1\frac{3}{16}$ x 2 in 20 x 51 mm | 9 $\frac{1}{4}$ in 235 mm |



Rigby Appendectomy Retractor

| CODE    | DESCRIPTION            | LENGTH                   |
|---------|------------------------|--------------------------|
| 24-4218 | Appendectomy Retractor | 7 $\frac{1}{2}$ in 190mm |

## Cardiac (Aorta)



55-8008

Crawford Aorta Retractor

| CODE    | DESCRIPTION | LENGTH                    |
|---------|-------------|---------------------------|
| 55-8008 | Small       | 7 $\frac{1}{2}$ in 191 mm |
| 55-8009 | Large       | 12 in 305 mm              |

## Cardiac (Aortic Valves)



Liddicoat Aortic Valve Retractor

50-8012

| CODE    | DESCRIPTION | LENGTH |        |
|---------|-------------|--------|--------|
| 50-8011 | Small       | 9½ in  | 241 mm |
| 50-8012 | Large       | 9½ in  | 241 mm |

## Cardiac (Atrial)



50-8006

Cooley Atrial Retractor

| CODE    | DESCRIPTION | LENGTH |        |
|---------|-------------|--------|--------|
| 50-8006 | Right       | 10 in  | 254 mm |
| 50-8005 | Left        | 12 in  | 305 mm |



Cooley Atrial Retractor

| CODE    | DESCRIPTION         | DIMENSIONS |            |
|---------|---------------------|------------|------------|
| 50-8007 | Modified with Teeth | 1¾ x 1¾ in | 44 x 44 mm |

## Cardiac (Atrial Valves)



50-8005

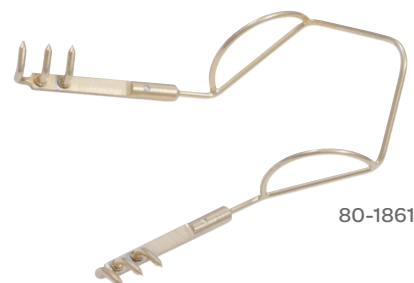
Cooley Atrial Valve Retractor

| CODE    | DESCRIPTION   | DIMENSIONS (W X D) |            |
|---------|---------------|--------------------|------------|
| 55-8005 | Left          | 2 x ¾ in           | 50 x 10 mm |
| 55-8001 | Right, Small  | 1 x ¾ in           | 25 x 20 mm |
| 55-8002 | Right, Medium | 1 ⅝ x 1 ⅛ in       | 40 x 30 mm |
| 55-8003 | Right, Large  | 2 x 1 ⅜ in         | 50 x 35 mm |

## Cardiac (Epicardial)

### I.M.A. Epicardial Retractor (Gold Coated)

| CODE    | DESCRIPTION | LENGTH             |       |
|---------|-------------|--------------------|-------|
| 80-1864 | Mini        | 1 in               | 25 mm |
| 80-1861 | Small       | 1 $\frac{1}{8}$ in | 28 mm |
| 80-1862 | Medium      | 1 $\frac{1}{2}$ in | 38 mm |
| 80-1863 | Large       | 2 $\frac{1}{8}$ in | 54 mm |

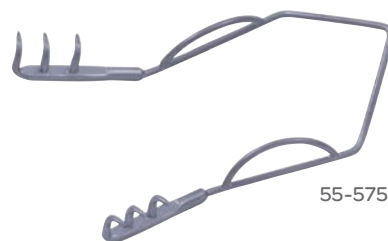


80-1861

### Parsonnet Epicardial Retractor

3 x 3 Prong, Sharp

| CODE    | DESCRIPTION                           | LENGTH              |       |
|---------|---------------------------------------|---------------------|-------|
| 37-4035 | Self-Retaining,<br>Light Spring Steel | 1 $\frac{1}{2}$ in  | 38 mm |
| 55-5750 | Small                                 | 1 $\frac{1}{8}$ in  | 29 mm |
| 55-5751 | Medium                                | 1 $\frac{7}{16}$ in | 37 mm |
| 55-5752 | Large                                 | 1 $\frac{3}{8}$ in  | 47 mm |



55-5751

## Cardiac (Bookwalter®)

### Bookwalter® I.M.A. Crossbar

| CODE    | DESCRIPTION                                       | DIMENSIONS         |       |
|---------|---------------------------------------------------|--------------------|-------|
| 50-4601 | Small                                             | 1 $\frac{1}{8}$ in | 29 mm |
| 50-4675 | "T" bar for Use with the<br>BW I.M.A. Kit 50-4600 |                    |       |



50-4675

### Bookwalter® I.M.A. Retractor Blade

| CODE    | DESCRIPTION           | LENGTH |        |
|---------|-----------------------|--------|--------|
| 50-4603 | I.M.A Retractor Blade | 12 in  | 304 mm |



## Cardiac (Bookwalter®)

### Bookwalter® I.M.A. Retractor Storage Case

| CODE    | DESCRIPTION                   |
|---------|-------------------------------|
| 50-4604 | I.M.A. Retractor Storage Case |



### Bookwalter® I.M.A. Ratchet

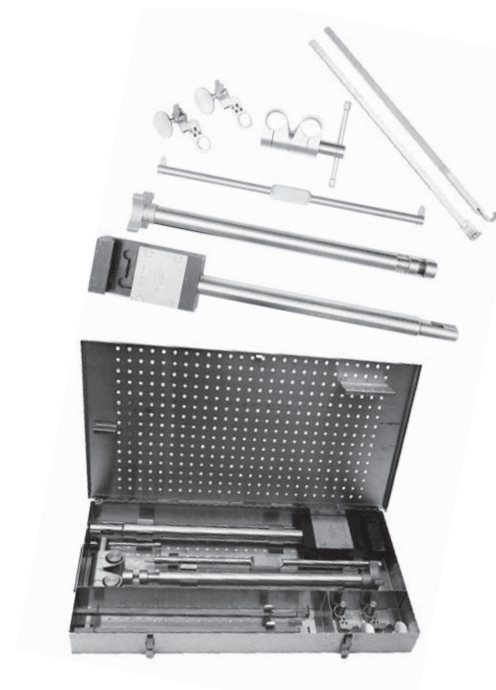
| CODE    | DESCRIPTION    |
|---------|----------------|
| 50-4602 | I.M.A. Ratchet |



### Bookwalter® I.M.A. Retractor System

Provides the Tools to Elevate and Retract the Sternum for Efficient Dissection of the Internal Mammary Art

| CODE    | DESCRIPTION                         | LENGTH              | QTY |
|---------|-------------------------------------|---------------------|-----|
| 50-4600 | Includes Part Numbers Listed Below: |                     |     |
| 50-4552 | Horizontal Bar                      | 14 ¼ in 365 mm      | 1   |
| 50-4554 | Coupler                             | 1 x 1 in 25 x 25 mm | 1   |
| 50-4581 | Table Post                          | 12 in 305 mm        | 1   |
| 50-4601 | I.M.A. Cross Bar                    | 12 in 305 mm        | 1   |
| 50-4602 | I.M.A. Ratchet                      |                     | 2   |
| 50-4603 | I.M.A. Rake Retractor, Sharp        |                     | 2   |
| 50-4604 | I.M.A. Retractor Case               |                     | 1   |



## Carotid (Self-Retaining)



55-9050

### Henly Carotid Retractor

Modified Weitlaner with Three Center Blades

| CODE    | DESCRIPTION              | DIMENSIONS (D X W) |            |
|---------|--------------------------|--------------------|------------|
| 55-9050 | Complete Set             |                    |            |
| 55-9051 | 6½ in Long               |                    |            |
| 55-9052 | Small Blade For 55-9050  | ¾ x ⅝ in           | 19 x 16 mm |
| 55-9053 | Medium Blade for 55-9050 | 1 x ⅝ in           | 25 x 16 mm |
| 55-9054 | Large Blade for 55-9050  | 1¼ x ⅝ in          | 32 x 16 mm |



### Henly Self-Retaining Carotid Retractor

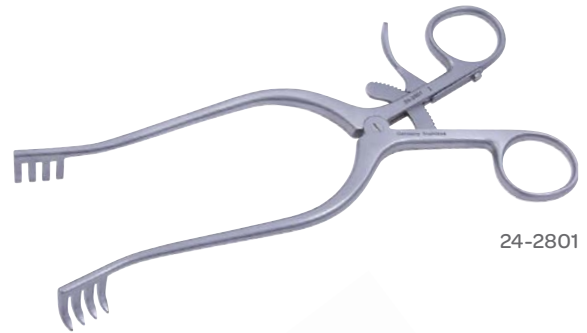
| CODE      | DESCRIPTION                                                    | DIMENSIONS (D X W) |            |
|-----------|----------------------------------------------------------------|--------------------|------------|
| 55-8999   | Set with 3 Removable Side Blades and 3 Removable Center Blades |                    |            |
| 55-8999A  | Frame Only for 55-8999, 2⅜ in 61 mm Spread                     | ¾ x ⅝ in           | 19 x 16 mm |
| 55-8999-1 | Side Blade                                                     | 1 x ⅞ in           | 25 x 23 mm |
| 55-8999-2 | Side Blade                                                     | 2 x ⅞ in           | 51 x 23 mm |
| 55-8999-3 | Side Blade                                                     | 3 x ⅞ in           | 76 x 23 mm |
| 55-8999-4 |                                                                | ¾ x ⅝ in           | 19 x 16 mm |
| 55-8999-5 |                                                                | 1 x ⅝ in           | 25 x 16 mm |
| 55-8999-6 |                                                                | 1¼ x ⅝ in          | 31 x 16 mm |
| 55-8999-7 |                                                                | 3 x ⅝ in           | 76 x 16 mm |
| 55-8999-8 |                                                                | 2 x ⅝ in           | 51 x 16 mm |

## Cerebellar

### Adson Cerebellar Retractor

Length: 7  $\frac{3}{4}$  in (197 mm)

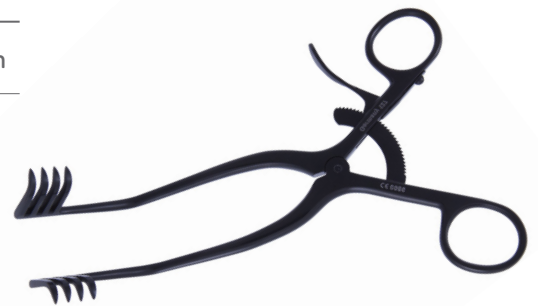
| CODE    | DESCRIPTION     | PRONGS       |
|---------|-----------------|--------------|
| 24-2801 | Straight Arms   | 4 x 4, Sharp |
| 24-2803 | Straight Arms   | 4 x 4, Sharp |
| 50-1180 | Straight Shaft  | 4 x 4, Sharp |
| 50-1182 | Straight Shaft  | 4 x 4, Sharp |
| 24-2802 | Angled Arms     | 4 x 4, Sharp |
| 50-1181 | Angular Shaft   | 4 x 4, Sharp |
| 50-1362 | 65° Shank Angle | 4 x 4, Sharp |



24-2801

### Malis® Cerebellar Retractor

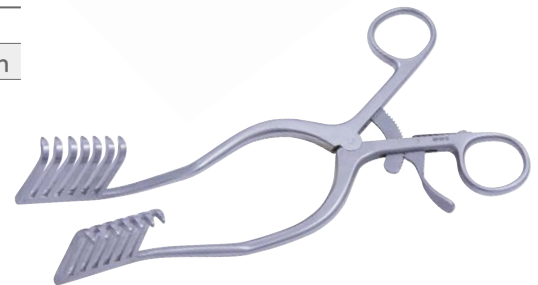
| CODE    | DESCRIPTION                  | PRONGS       | DIMENSIONS         |        |
|---------|------------------------------|--------------|--------------------|--------|
| 50-1465 | Self Retaining, Angular Arms | 4 x 4, Sharp | 7 $\frac{1}{2}$ in | 191 mm |



### Miskimon Cerebellar Retractor

Sharp

| CODE    | DESCRIPTION | PRONGS | LENGTH             |        |
|---------|-------------|--------|--------------------|--------|
| 50-1363 |             | 7 x 7  | 7 $\frac{1}{2}$ in | 191 mm |
| 24-2810 | Angled Arms | 7 x 7  | 8 $\frac{3}{4}$ in | 222 mm |



## Cheek

### Cheek Retractor

| CODE    | DESCRIPTION | DIMENSIONS (W X L)                      |             |
|---------|-------------|-----------------------------------------|-------------|
| 72-0240 | With Swivel | 1 $\frac{11}{16}$ x 8 $\frac{3}{16}$ in | 43 x 209 mm |



## Deltoid



### Deltoid Retractor

| CODE    | DESCRIPTION             | BLADE                                            | LENGTH                     |
|---------|-------------------------|--------------------------------------------------|----------------------------|
| 77-1015 | Brown Deltoid Retractor | 2 $\frac{3}{8}$ x 2 $\frac{9}{16}$ in 60 x 65 mm | 10 $\frac{7}{8}$ in 275 mm |

## Endaural



### Endaural Retractor

| CODE    | DESCRIPTION |
|---------|-------------|
| 61-0601 | T Model     |



### Snitman Endaural Retractor

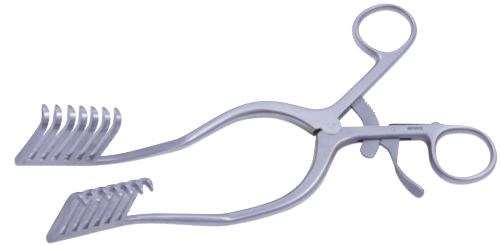
| CODE    | DESCRIPTION    | PRONGS                                    | LENGTH                     |
|---------|----------------|-------------------------------------------|----------------------------|
| 50-1236 | Self-Retaining | $\frac{9}{16}$ x $\frac{3}{8}$ 14 x 10 mm | 4 $\frac{3}{16}$ in 106 mm |

## ENT(Mastoid)

## Miskimon Cerebellar Retractor

7 x 7 Prongs, Sharp, Angled Arms

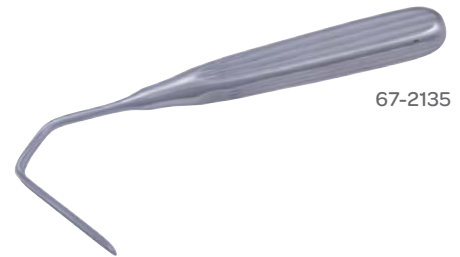
| CODE    | BLADE DEPTH | LENGTH       |
|---------|-------------|--------------|
| 24-2810 | 1¼ in 32 mm | 8¾ in 222 mm |



## ENT(Nasal)

## Aufricht Nasal Retractor

| CODE    | LENGTH       |
|---------|--------------|
| 67-2136 | 7⅞ in 182 mm |
| 67-2135 | 7½ in 191 mm |



67-2135

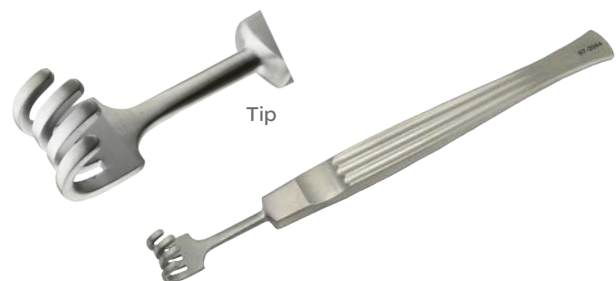
## Converse Nasal Retractor

| CODE    | LENGTH       |
|---------|--------------|
| 63-4022 | 4¾ in 112 mm |



## Cottle Nasal Retractor

| CODE    | PRONGS   | LENGTH       |
|---------|----------|--------------|
| 67-2044 | 4, Blunt | 5⅞ in 130 mm |





## ENT (Nasal)



Halle Nasal Speculum

| CODE    | BLADE LENGTH |       | TOTAL LENGTH |        |
|---------|--------------|-------|--------------|--------|
| 79-6669 | 1 ¼ in       | 32 mm | 6 in         | 152 mm |



Vienna Nasal Speculum

| CODE    | BLADE LENGTH |       | TOTAL LENGTH |        |
|---------|--------------|-------|--------------|--------|
| 79-6675 | 1 in         | 25 mm | 5 ¼ in       | 133 mm |

## Fiber Optic



67-2399FS

Ferriera Style Retractor

With Fiber Optic Light Guide and Suction, Smooth Tip

| CODE      | DIMENSIONS (D X W) |
|-----------|--------------------|
| 67-2338FS | 14 x 90 mm         |
| 67-2121FS | 16 x 80 mm         |
| 67-2340FS | 16x150 mm          |
| 67-2512FS | 25 x 120 mm        |
| 67-2339FS | 25 x 150 mm        |
| 67-2331FS | 25 x 190 mm        |

## Fiber Optic



## Tebbetts Style Retractor

Serrated Tip, with Fiber Optic Light Guide and Suction

67-2423FS

| CODE      | DESCRIPTION | BLADE LENGTH |        |
|-----------|-------------|--------------|--------|
| 67-2422FS | 24 x 90 mm  | 4 in         | 100 mm |
| 67-2420FS | 24 x 100 mm | 4 in         | 100 mm |
| 67-2425FS | 25 x 100 mm | 4 in         | 100 mm |
| 67-2427FS | 23 x 150 mm | 4 in         | 100 mm |
| 67-2121FS | 16 x 80 mm  |              |        |
| 67-2229FS | 30 x 90 mm  |              |        |
| 67-2230FS | 30 x 100 mm |              |        |
| 67-2231FS | 30 x 150 mm |              |        |
| 67-2423FS | 36 x 190 mm |              |        |

## Gall Bladders



## Foss Gall Bladder Retractor

| CODE    | DESCRIPTION            | DIMENSIONS  |             |
|---------|------------------------|-------------|-------------|
| 23-6300 | Gall Bladder Retractor | 1¾ x 14½ in | 44 x 368 mm |



23-6292

## Murphy Gall Bladder Retractor

| CODE    | TOTAL LENGTH |        | BLADE WIDTH |       |
|---------|--------------|--------|-------------|-------|
| 23-6290 | 11 in        | 279 mm | 1¾ in       | 44 mm |
| 23-6292 | 11 in        | 279 mm | 2 in        | 51 mm |

## General Purpose (Finger Retractors)



50-1070

### Meyering Finger Retractor

| CODE    | DESCRIPTION | DIMENSIONS |        |
|---------|-------------|------------|--------|
| 50-1070 | A           | 7 1/8 in   | 181 mm |
| 50-1071 | B           | 7 in       | 178 mm |
| 50-1072 | C           | 7 in       | 178 mm |
| 50-1073 | D           | 7 in       | 178 mm |
| 50-1074 | E           | 7 in       | 178 mm |
| 50-1075 | F           | 7 in       | 178 mm |



### Meyering Finger Retractor

| CODE    | DESCRIPTION                  | DIMENSIONS |        |
|---------|------------------------------|------------|--------|
| 50-4485 | Double-Ended, with Skin Hook | 7 in       | 178 mm |



20-1001

### Meyering Finger Retractor

| CODE    | DESCRIPTION | DIMENSIONS |        |
|---------|-------------|------------|--------|
| 20-1001 | #1          |            |        |
| 20-1002 | #2          | 7 1/8 in   | 181 mm |
| 20-1003 | #3          | 7 1/8 in   | 181 mm |
| 20-1004 | #4          | 7 1/8 in   | 181 mm |
| 20-1005 | #5          | 7 1/8 in   | 181 mm |
| 20-1006 | #6          | 7 1/8 in   | 181 mm |



22-2603

### Volkman Finger Retractor

| CODE    | DESCRIPTION    | LENGTH   |        |
|---------|----------------|----------|--------|
| 22-2602 | 2 Prong, Sharp | 4 1/8 in | 105 mm |
| 22-2603 | 3 Prong, Sharp | 4 1/8 in | 105 mm |
| 22-2604 | 4 Prong, Sharp | 4 1/8 in | 105 mm |
| 22-2606 | 6 Prong, Sharp | 4 1/8 in | 105 mm |
| 22-2702 | 2 Prong, Blunt | 4 1/8 in | 105 mm |
| 22-2703 | 3 Prong, Blunt | 4 1/8 in | 105 mm |
| 22-2704 | 4 Prong, Blunt | 4 1/8 in | 105 mm |
| 22-2706 | 6 Prong, Blunt | 4 1/8 in | 105 mm |

## General Purpose (Hand-Held)

### Deaver Pediatric Retractor

Flexible



23-7217

| CODE    | WIDTH | DIMENSIONS |        |
|---------|-------|------------|--------|
| 23-7217 | 17 mm | 8 in       | 203 mm |
| 23-7225 | 25 mm | 8 in       | 203 mm |



22-1015

### Farabeuf Pediatric Retractor

| CODE    | DESCRIPTION            | DIMENSIONS                       |        |
|---------|------------------------|----------------------------------|--------|
| 22-1012 | Double-Ended, Set of 2 | 4 <sup>7</sup> / <sub>8</sub> in | 124 mm |
| 22-1015 | Double-Ended, Set of 2 | 6 in                             | 152 mm |



### B.E. Glass Abdominal Retractor

| CODE    | DESCRIPTION         | WIDTH                            |       | LENGTH |        | TOTAL LENGTH                     |        |
|---------|---------------------|----------------------------------|-------|--------|--------|----------------------------------|--------|
| 24-3380 | Abdominal Retractor | 3 <sup>1</sup> / <sub>4</sub> in | 85 mm | 6 in   | 155 mm | 9 <sup>3</sup> / <sub>4</sub> in | 245 mm |



### Blair (Rollet) Retractor

| CODE    | DESCRIPTION    | WIDTH | LENGTH                           |        |
|---------|----------------|-------|----------------------------------|--------|
| 63-4010 | 4 Prong, Sharp | 6 mm  | 5 <sup>1</sup> / <sub>4</sub> in | 133 mm |

## General Purpose (Hand-Held)

### Boley Retractor



| CODE    | DESCRIPTION      | BLADES (W X D)                        |            | LENGTH                    |
|---------|------------------|---------------------------------------|------------|---------------------------|
| 50-5608 | #1, Double-Ended | $\frac{1}{2} \times \frac{1}{2}$ in   | 13 x 13 mm | 6 $\frac{1}{4}$ in 159 mm |
|         |                  | $\frac{7}{16} \times \frac{7}{16}$ in | 11 x 11 mm |                           |

### Children's Hospital Retractor



| CODE    | DESCRIPTION         | BLADE (W X D)                          |            | LENGTH                    |
|---------|---------------------|----------------------------------------|------------|---------------------------|
| 50-4100 | Small, Double-Ended | $\frac{7}{16} \times \frac{7}{8}$ in   | 11 x 22 mm | 5 $\frac{1}{2}$ in 140 mm |
|         |                     | $\frac{9}{16} \times 1 \frac{3}{8}$ in | 14 x 35 mm |                           |

### Children's Hospital Retractor



| CODE    | DESCRIPTION            | BLADE (W X D)                       |            | LENGTH                    |
|---------|------------------------|-------------------------------------|------------|---------------------------|
| 50-5645 | S-Shaped, Double-Ended | $\frac{1}{4} \times \frac{3}{4}$ in | 6 x 19 mm  | 4 $\frac{7}{8}$ in 124 mm |
|         |                        | $\frac{1}{2} \times \frac{3}{4}$ in | 13 x 19 mm |                           |

### Collins Retractor



| CODE    | DESCRIPTION  | LENGTH                    | QTY      |
|---------|--------------|---------------------------|----------|
| 22-1215 | Double-Ended | 6 $\frac{1}{2}$ in 165 mm | Set of 2 |

### Converse Alar Retractor

10 mm and 14 mm wide



| CODE    | DESCRIPTION         | LENGTH                    |
|---------|---------------------|---------------------------|
| 67-2010 | Double-Ended, Sharp | 4 $\frac{3}{4}$ in 120 mm |

## General Purpose (Hand-Held)



### Cottle Alar Retractor

| CODE    | DESCRIPTION           | LENGTH       |
|---------|-----------------------|--------------|
| 67-2115 | Tapered End, 16–13 mm | 6½ in 165 mm |



### Cottle Retractor

Double Prong, One Ball Tip



67-2021

| CODE    | DESCRIPTION       | LENGTH       |
|---------|-------------------|--------------|
| 67-2021 | Right Prong Sharp | 5⅞ in 149 mm |
| 67-2022 | Left Prong Sharp  | 5⅞ in 149 mm |



### Cottle Tenaculum Hook

| CODE    | DESCRIPTION | DIMENSIONS   |
|---------|-------------|--------------|
| 20-4016 | Angled      | 6½ in 160 mm |



### Cottle-Neivert Retractor

| CODE    | DESCRIPTION                  | WIDTH | LENGTH       |
|---------|------------------------------|-------|--------------|
| 67-2052 | Double-Ended, 2 Prong, Blunt | 10 mm | 8¼ in 209 mm |



20-0930

### Crile Retractor

| CODE    | DESCRIPTION  | LENGTH       |
|---------|--------------|--------------|
| 20-0930 | Double-Ended | 4½ in 108 mm |
| 50-4105 | Double-Ended | 4½ in 108 mm |

## General Purpose (Hand-Held)



32-3633

### Cushing Retractor

| CODE    | JAW LENGTH | LENGTH       | CODE    | JAW LENGTH | LENGTH       |
|---------|------------|--------------|---------|------------|--------------|
| 32-3633 | 10 mm      | 11 in 279 mm | 32-3634 | 11 mm      | 14 in 356 mm |



### Darrach Retractor

| CODE    | DESCRIPTION | WIDTH | LENGTH         |
|---------|-------------|-------|----------------|
| 77-6005 | Retractor   | 9 mm  | 10 ¼ in 260 mm |



50-4316

### Deaver Abdominal Retractor

| CODE    | HANDLE       | LENGTH       |
|---------|--------------|--------------|
| 50-4316 | #1 Ring Grip | 12 in 304 mm |
| 50-4317 | #2 Ring Grip | 13 in 330 mm |
| 50-4319 | #3 Ring Grip | 12 in 304 mm |
| 50-4320 | #4 Ring Grip | 12 in 304 mm |
| 50-4321 | #5 Ring Grip | 12 in 304 mm |



### Deaver Retractor

| CODE    | DESCRIPTION   | DIMENSIONS (W X D)     |
|---------|---------------|------------------------|
| 23-7522 | Hollow Handle | 2 ½ x 4 in 64 x 100 mm |

## General Purpose (Hand-Held)



50-4307

### Deaver Retractor

Standard Handle

| CODE    | DESCRIPTION | WIDTH |       | LENGTH |        |
|---------|-------------|-------|-------|--------|--------|
| 50-4303 | #1          | 1 in  | 25 mm | 12 in  | 305 mm |
| 50-4304 | #2          | 1 in  | 25 mm | 12 in  | 305 mm |
| 50-4306 | #3          | 1½ in | 38 mm | 12 in  | 305 mm |
| 50-4307 | #4          | 2 in  | 51 mm | 12 in  | 305 mm |
| 50-4308 | #5          | 3 in  | 76 mm | 12 in  | 305 mm |



23-7211

### Deaver Retractor

| CODE    | DESCRIPTION      | WIDTH |        | LENGTH |        |
|---------|------------------|-------|--------|--------|--------|
| 23-7211 | Ring-Grip Handle | 1 in  | 25 mm  | 12 in  | 305 mm |
| 23-7212 | Ring-Grip Handle | 1 in  | 25 mm  | 12 in  | 305 mm |
| 23-7213 | Ring-Grip Handle | 1½ in | 38 mm  | 12 in  | 305 mm |
| 23-7214 | Ring-Grip Handle | 2 in  | 51 mm  | 12 in  | 305 mm |
| 23-7215 | Ring-Grip Handle | 3 in  | 76 mm  | 12 in  | 305 mm |
| 23-7216 | Ring-Grip Handle | 4 in  | 102 mm | 12 in  | 305 mm |
| 23-7218 | Ring-Grip Handle | 2 in  | 51 mm  | 15 in  | 305 mm |
| 23-7221 | Ring-Grip Handle | 1 in  | 25 mm  | 16 in  | 405 mm |



### Deaver Abdominal Retractor

| CODE    | DESCRIPTION         | DIMENSIONS |             |
|---------|---------------------|------------|-------------|
| 23-7244 | Abdominal Retractor | 1 x 10 in  | 25 x 254 mm |



## General Purpose (Hand-Held)

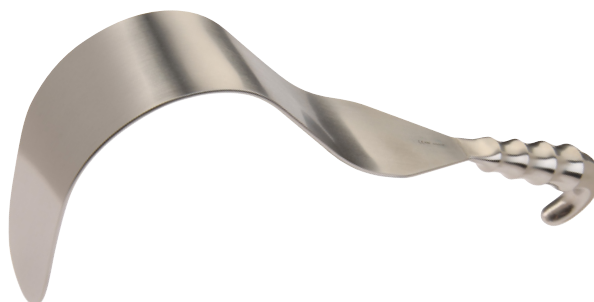


50-4307

### Deaver Retractor

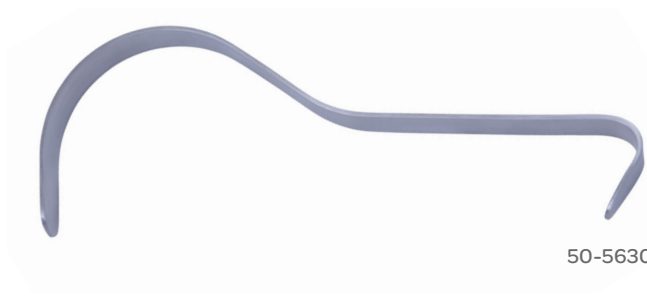
Standard Handle

| CODE    | DESCRIPTION | WIDTH |       | LENGTH |        |
|---------|-------------|-------|-------|--------|--------|
| 50-4303 | #1          | 1 in  | 25 mm | 12 in  | 305 mm |
| 50-4304 | #2          | 1 in  | 25 mm | 12 in  | 305 mm |
| 50-4306 | #3          | 1½ in | 38 mm | 12 in  | 305 mm |
| 50-4307 | #4          | 2 in  | 51 mm | 12 in  | 305 mm |
| 50-4308 | #5          | 3 in  | 76 mm | 12 in  | 305 mm |



### Deaver Abdominal Retractor

| CODE    | BLADE LENGTH   | HANDLE LENGTH |        |
|---------|----------------|---------------|--------|
| 32-3635 | 2½ in (640 mm) | 14½ in        | 368 mm |



50-5630

### Deaver Abdominal Retractor

| CODE    | DEPTH |       | WIDTH |       | DIMENSIONS |        |
|---------|-------|-------|-------|-------|------------|--------|
| 50-5629 | 2½ in | 63 mm | ¾ in  | 10 mm | 8 in       | 203 mm |
| 50-5630 | 2½ in | 63 mm | ⅝ in  | 15 mm | 8 in       | 203 mm |
| 50-5631 | 2½ in | 63 mm | 1 in  | 25 mm | 8 in       | 203 mm |

## General Purpose (Hand-Held)



Delee Universal Retractor

| CODE    | LENGTH       |
|---------|--------------|
| 52-2340 | 9½ in 241 mm |
| 50-5575 | 9½ in 241 mm |



20-6453

Flexible Neck Retractor

| CODE    | DESCRIPTION    | LENGTH       | CODE    | DESCRIPTION    | LENGTH       |
|---------|----------------|--------------|---------|----------------|--------------|
| 20-6452 | 2 Prong, Sharp | 6¼ in 159 mm | 20-6552 | 2 Prong, Blunt | 6¼ in 159 mm |
| 20-6453 | 3 Prong, Sharp | 6¼ in 159 mm | 20-6553 | 3 Prong, Blunt | 6¼ in 159 mm |



Fomon Hook Retractor

| CODE    | DESCRIPTION            | TIP WIDTH | LENGTH       | DIMENSIONS                       |
|---------|------------------------|-----------|--------------|----------------------------------|
| 67-2025 | Both Prong Ball Tipped | 13 mm     | 6¾ in 171 mm | 10¼ x 2 x 2½ in 260 x 51 x 64 mm |



22-2001

Freeman Rake Retractor

| CODE    | WIDTH       | LENGTH      |
|---------|-------------|-------------|
| 22-2001 | 1½ in 38 mm | 7 in 178 mm |
| 22-2004 | ¾ in 22 mm  | 7 in 178 mm |

## General Purpose (Hand-Held)



23-3752

### Goelet General Purpose Retractor

| CODE    | DESCRIPTION  | DIMENSIONS |        |
|---------|--------------|------------|--------|
| 50-4095 | Double-Ended | 7 ½ in     | 191 mm |
| 23-3752 | Double-Ended | 7 ½ in     | 191 mm |



### Gorney Rake Spring Neck Retractor

| CODE    | DESCRIPTION    | LENGTH |       |
|---------|----------------|--------|-------|
| 20-2011 | 4 Prong, Sharp | 3 in   | 76 mm |



23-6381

### Hibbs Retractor

| CODE     | DESCRIPTION            | DIMENSIONS (W X D) |            | DIMENSIONS |        |
|----------|------------------------|--------------------|------------|------------|--------|
| 23-6381  | Sharp Teeth            | 1 x 3 in           | 25 x 76 mm | 9 in       | 228 mm |
| 23-6382  | Sharp Teeth            | 1 x 3 ¼ in         | 25 x 82 mm | 9 in       | 228 mm |
| 50-2558C | Double Ended, Set of 2 | ¾ x 2 in           | 19 x 51 mm | 9 ¼ in     | 235 mm |



22-7204

### Israel Retractor

| CODE    | DESCRIPTION | PRONGS  | BLADES (W X D) |            | LENGTH |        |
|---------|-------------|---------|----------------|------------|--------|--------|
| 50-4246 | Blunt       | 4 Prong | 1 ¾ x 1 ¾ in   | 44 x 44 mm | 7 ¾ in | 197 mm |
| 22-7204 | Blunt       | 4 Prong | 1 ½ x 1 ½ in   | 38 x 38 mm | 10 in  | 254 mm |
| 22-7205 | Blunt       | 5 Prong | 2 x 1 ¾ in     | 51 x 44 mm | 10 in  | 254 mm |
| 22-7206 | Blunt       | 6 Prong | 2 ¾ x 2 in     | 60 x 51 mm | 10 in  | 254 mm |

## General Purpose (Hand-Held)



23-4701

### Kelly Retractor

| CODE    | DESCRIPTION      | BLADE (W X L) |            | LENGTH  |        |
|---------|------------------|---------------|------------|---------|--------|
| 23-4701 | Standard Handle  | 1½ x 2 in     | 35 x 51 mm | 10 ¼ in | 260 mm |
| 23-4702 | Standard Handle  | 2 x 2½ in     | 51 x 64 mm | 10 ¼ in | 260 mm |
| 23-4703 | Standard Handle  | 2½ x 3 in     | 64 x 76 mm | 10 ¼ in | 260 mm |
| 23-4711 | Lamb Handle      | 1¼ x 2 in     | 32 x 51 mm | 10 ¼ in | 260 mm |
| 23-4712 | Lamb Handle      | 2 x 2½ in     | 51 x 64 mm | 10 ¼ in | 260 mm |
| 23-4713 | Lamb Handle      | 2½ x 3 in     | 64 x 76 mm | 10 ¼ in | 260 mm |
| 23-4714 | Lamb Handle      | 3 x 3½ in     | 76 x 89 mm | 10 ¼ in | 260 mm |
| 23-4715 | Ring-Grip Handle | 1½ x 2 in     | 38 x 51 mm | 10 ¼ in | 260 mm |
| 23-4716 | Ring-Grip Handle | 2 x 2½ in     | 51 x 64 mm | 10 ¼ in | 260 mm |
| 23-4717 | Ring-Grip Handle | 2½ x 3 in     | 63 x 76 mm | 10 ¼ in | 260 mm |
| 23-4718 | Ring-Grip Handle | 3 x 3½ in     | 76 x 89 mm | 10 ¼ in | 260 mm |

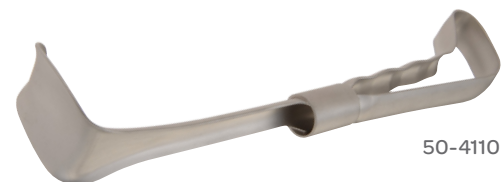


50-4117

### Kelly Retractor

Ring-Grip Handle

| CODE    | DESCRIPTION | BLADE (W X D) |            | LENGTH |        |
|---------|-------------|---------------|------------|--------|--------|
| 50-4115 | Small       | 1½ x 2 in     | 38 x 51 mm | 9 ¼ in | 235 mm |
| 50-4116 | Medium      | 2 x 2½ in     | 51 x 64 mm | 9 ¼ in | 235 mm |
| 50-4117 | Large       | 2½ x 3 in     | 64 x 76 mm | 10 in  | 254 mm |
| 50-4118 | XL          | 3 x 3½ in     | 76 x 89 mm | 10 in  | 254 mm |



50-4110

### Kelly Retractor

Standard Handle

| CODE    | DESCRIPTION | BLADE (W X D) |            | LENGTH |        |
|---------|-------------|---------------|------------|--------|--------|
| 50-4110 | Small       | 1½ x 2 in     | 38 x 51 mm | 9 ¼ in | 235 mm |
| 50-4111 | Medium      | 2 x 2½ in     | 51 x 64 mm | 9 ½ in | 241 mm |
| 50-4112 | Large       | 2½ x 3 in     | 64 x 76 mm | 10 in  | 254 mm |

## General Purpose (Hand-Held)



### Knapp Retractor

20-5516

| CODE    | DESCRIPTION | PRONGS  | WIDTH | LENGTH      |
|---------|-------------|---------|-------|-------------|
| 20-5516 | Sharp       | 4 Prong | 6 mm  | 5 in 127 mm |
| 20-5517 | Blunt       | 4 Prong | 6 mm  | 5 in 127 mm |



23-0710

### Langenbeck Retractor

| CODE    | DESCRIPTION   | BLADE (W X D)                      |            | LENGTH            |        |
|---------|---------------|------------------------------------|------------|-------------------|--------|
| 23-0710 | Hollow Handle | $\frac{3}{8}$ x $1\frac{1}{2}$ in  | 10 x 38 mm | $8\frac{3}{4}$ in | 222 mm |
| 50-4255 | #1            | $\frac{3}{8}$ x $1\frac{5}{8}$ in  | 10 x 41 mm | $8\frac{1}{4}$ in | 210 mm |
| 50-4256 | #2            | $\frac{1}{2}$ x $1\frac{5}{8}$ in  | 13 x 41 mm | $8\frac{1}{4}$ in | 210 mm |
| 23-0713 | Hollow Handle | $\frac{1}{2}$ x $1\frac{1}{16}$ in | 13 x 43 mm | $8\frac{3}{4}$ in | 222 mm |
| 23-0716 | Hollow Handle | $\frac{5}{8}$ x $1\frac{1}{16}$ in | 16 x 43 mm | $8\frac{3}{4}$ in | 222 mm |



50-4291

### Mathieu Retractor

3 Prong Blade, Double-Ended

| CODE    | DESCRIPTION | PRONG WIDTH            | DIMENSIONS (W X D)                         | TOTAL LENGTH             |
|---------|-------------|------------------------|--------------------------------------------|--------------------------|
| 50-4291 | Blunt       | $\frac{3}{8}$ in 10 mm | $\frac{1}{4}$ x $\frac{3}{4}$ in 6 x 19 mm | $5\frac{1}{8}$ in 20 mm  |
| 50-4290 | Sharp       | $\frac{3}{8}$ in 10 mm | $\frac{1}{4}$ x $\frac{3}{4}$ in 6 x 19 mm | $6\frac{1}{2}$ in 165 mm |



23-6301

### Mathieu Retractor

| CODE    | DESCRIPTION                  | PRONG WIDTH            | BLADE WIDTH           | BLADE DEPTH            | LENGTH                   |
|---------|------------------------------|------------------------|-----------------------|------------------------|--------------------------|
| 50-4290 | Double-Ended, 3 Prong, Sharp | $\frac{3}{8}$ in 10 mm | $\frac{1}{4}$ in 6 mm | $\frac{3}{4}$ in 19 mm | $6\frac{1}{2}$ in 165 mm |

## General Purpose (Hand-Held)

### Mayo Abdominal Retractor



| CODE                   | LENGTH       |
|------------------------|--------------|
| 23-6346 2 3/4 in 70 mm | 10 in 254 mm |

### Miller Rake Retractor



22-2043

| CODE    | DESCRIPTION    | LENGTH          |
|---------|----------------|-----------------|
| 22-2043 | 9 Prong, Sharp | 5 1/4 in 140 mm |
| 22-2044 | 9 Prong, Blunt | 5 1/4 in 140 mm |

### Murphy Retractor



22-5004

| CODE    | DESCRIPTION    | LENGTH          |
|---------|----------------|-----------------|
| 22-5004 | 4 Prong, Sharp | 7 3/4 in 197 mm |
| 50-8072 | 4 Prong, Sharp | 7 3/4 in 197 mm |
| 22-5006 | 6 Prong, Sharp | 7 3/4 in 197 mm |
| 22-5103 | 3 Prong, Blunt | 7 3/4 in 197 mm |
| 22-5104 | 4 Prong, Blunt | 7 3/4 in 197 mm |
| 22-5106 | 6 Prong, Blunt | 7 3/4 in 197 mm |

### Oldberg Retractor



57-5253

| CODE    | DESCRIPTION | TIP WIDTH | LENGTH          |
|---------|-------------|-----------|-----------------|
| 57-5250 | Plain       | 9 mm      | 8 1/4 in 209 mm |
| 57-5253 | 3 Prong     | 13 mm     | 8 1/4 in 209 mm |
| 57-5254 | 4 Prong     | 15 mm     | 8 1/4 in 209 mm |
| 57-5256 | 6 Prong     | 19 mm     | 8 1/4 in 209 mm |

## General Purpose (Hand-Held)



67-2050

### Neivert Knife Guide & Retractor

| CODE    | DESCRIPTION                   | TIP WIDTH | LENGTH        | DIMENSIONS    |
|---------|-------------------------------|-----------|---------------|---------------|
| 67-2051 | Double-Ended with 2 Ball Tips | 10 mm     | 7 ½ in 190 mm | 6 ½ in 165 mm |
| 67-2050 | Double-Ended                  | 10 mm     | 7 ½ in 190 mm | 6 ½ in 165 mm |



### Obwegeser Retractor

| CODE    | DESCRIPTION | DIMENSIONS                 | LENGTH          |
|---------|-------------|----------------------------|-----------------|
| 68-1006 | Curved Down | 3/8 x 1 1/16 in 10 x 42 mm | 8 3/4 in 222 mm |



50-4253

### Ollier Retractor

| CODE    | DESCRIPTION    | LENGTH        |
|---------|----------------|---------------|
| 22-7002 | 4 Prong, Blunt | 8 ½ in 216 mm |
| 50-4253 | 4 Prong, Blunt | 9 in 229 mm   |



50-4091

### Parker Retractor

Double-Ended

| CODE    | DESCRIPTION | LENGTH        | QTY      |
|---------|-------------|---------------|----------|
| 22-1413 | Small       | 5 in 127 mm   | Set of 2 |
| 50-4090 | Small       | 5 ½ in 140 mm | Set of 2 |
| 22-1418 | Large       | 7 in 176 mm   | Set of 2 |



### Parker Mott Retractor

| CODE    | DESCRIPTION  | LENGTH        | QTY      |
|---------|--------------|---------------|----------|
| 22-1516 | Double-Ended | 6 ½ in 166 mm | Set of 2 |

## General Purpose (Hand-Held)



### Pelvic Retractor

| CODE    | DESCRIPTION      | TIP WIDTH | LENGTH                                   |
|---------|------------------|-----------|------------------------------------------|
| 77-1014 | Pelvic Retractor | 24 mm     | 10 <sup>3</sup> / <sub>4</sub> in 273 mm |



### Ragnell Retractor

| CODE    | DESCRIPTION  | BLADE (W X D)                                                                                 | LENGTH      |
|---------|--------------|-----------------------------------------------------------------------------------------------|-------------|
| 50-2608 | Double-Ended | $\frac{1}{8} \times \frac{1}{4}$ in 3 x 6 mm<br>$\frac{1}{4} \times \frac{5}{8}$ in 6 x 16 mm | 6 in 152 mm |
| 20-0525 | Double-Ended | $\frac{1}{8} \times \frac{1}{4}$ in 3 x 6 mm                                                  | 6 in 152 mm |
| 20-0526 | Double-Ended | $\frac{1}{8} \times \frac{3}{16}$ in 3 x 5 mm                                                 | 6 in 152 mm |



### Rake Retractor

| CODE    | DESCRIPTION    | LENGTH                                  |
|---------|----------------|-----------------------------------------|
| 22-5806 | 6 Prong, Sharp | 9 <sup>1</sup> / <sub>2</sub> in 241 mm |



### Ribbon Retractor

Double-Ended, Malleable

| CODE    | WIDTH                   | LENGTH       | CODE    | WIDTH                   | LENGTH       |
|---------|-------------------------|--------------|---------|-------------------------|--------------|
| 22-0006 | $\frac{1}{4}$ in 6 mm   | 8 in 203 mm  | 22-0253 | $1\frac{1}{4}$ in 32 mm | 13 in 330 mm |
| 22-0012 | $\frac{1}{2}$ in 13 mm  | 8 in 203 mm  | 22-0254 | $1\frac{1}{2}$ in 38 mm | 13 in 330 mm |
| 22-0017 | $\frac{5}{8}$ in 16 mm  | 8 in 203 mm  | 22-0255 | 2 in 51 mm              | 13 in 330 mm |
| 22-0025 | 1 in 25 mm              | 8 in 203 mm  | 22-0256 | $2\frac{1}{2}$ in 64 mm | 13 in 330 mm |
| 22-0027 | 1 in 25 mm              | 10 in 254 mm | 22-0257 | 3 in 76 mm              | 13 in 330 mm |
| 22-0035 | $1\frac{3}{4}$ in 44 mm | 10 in 254 mm | 22-0258 | 4 in 102 mm             | 13 in 330 mm |
| 22-0251 | $\frac{3}{4}$ in 19 mm  | 13 in 330 mm | 22-0259 | 5 in 127 mm             | 13 in 330 mm |
| 22-0252 | 1 in 25 mm              | 13 in 330 mm |         |                         |              |



## General Purpose (Hand-Held)



50-4212

### Ribbon Malleable Retractor

| CODE    | DESCRIPTION  | BLADE WIDTH |       | LENGTH |        |
|---------|--------------|-------------|-------|--------|--------|
| 50-5637 | Double-Ended | ½ in        | 13 mm | 8 in   | 203 mm |
| 50-5639 | Double-Ended | ¾ in        | 19 mm | 8 in   | 203 mm |
| 50-4210 | Double-Ended | 1 in        | 25 mm | 13 in  | 330 mm |
| 50-4212 | Double-Ended | 1½ in       | 38 mm | 13 in  | 330 mm |
| 50-4214 | Double-Ended | 2 in        | 51 mm | 13 in  | 330 mm |



23-4501

### Richardson Retractor

| CODE    | DESCRIPTION     | BLADE (W x D) |            | LENGTH |        |
|---------|-----------------|---------------|------------|--------|--------|
| 23-4501 | Standard Handle | ¾ x 1 in      | 19 x 25 mm | 9 ½ in | 241 mm |
| 23-4502 | Standard Handle | 1 x 1¼ in     | 25 x 32 mm | 9 ½ in | 241 mm |
| 23-4503 | Standard Handle | 1½ x 1½ in    | 38 x 38 mm | 9 ½ in | 241 mm |
| 23-4504 | Standard Handle | ¾ x 2 in      | 19 x 51 mm | 9 ½ in | 241 mm |
| 23-4505 | Standard Handle | 1⅝ x 2½ in    | 41 x 64 mm | 9 ½ in | 241 mm |



23-4514

### Richardson Retractor

| CODE    | DESCRIPTION | BLADE (W x D) |            | LENGTH |        |
|---------|-------------|---------------|------------|--------|--------|
| 23-4511 | Lamb Handle | ¾ x 1 in      | 19 x 25 mm | 9 ½ in | 241 mm |
| 23-4512 | Lamb Handle | 1 x 1¼ in     | 25 x 32 mm | 9 ½ in | 241 mm |
| 23-4514 | Lamb Handle | ¾ x 2 in      | 19 x 51 mm | 9 ½ in | 241 mm |

## General Purpose (Hand-Held)



50-4122

### Richardson Retractor

| CODE     | DESCRIPTION      | SIZE   | BLADE (W X D)                        |             | LENGTH             |        |
|----------|------------------|--------|--------------------------------------|-------------|--------------------|--------|
| 23-4515  | Ring-Grip Handle | Small  | $\frac{3}{4}$ x 1 in                 | 19 x 25 mm  | 9 $\frac{1}{2}$ in | 241 mm |
| 23-4516  | Ring-Grip Handle | Medium | 1 x 1 $\frac{1}{4}$ in               | 25 x 32 mm  | 9 $\frac{1}{2}$ in | 241 mm |
| 23-4517  | Ring-Grip Handle | Large  | 1 $\frac{1}{2}$ x 1 $\frac{1}{2}$ in | 38 x 38 mm  | 9 $\frac{1}{2}$ in | 241 mm |
| 23-4518  | Ring-Grip Handle | Small  | $\frac{3}{4}$ in x 2 in              | 19 x 51 mm  | 9 $\frac{1}{2}$ in | 241 mm |
| 23-4520  | Ring-Grip Handle | Medium | 1 $\frac{3}{16}$ x 4 in              | 30 x 100 mm | 9 $\frac{1}{2}$ in | 241 mm |
| 50-4120  | Standard Handle  | Small  | $\frac{3}{4}$ x 1 in                 | 19 x 25 mm  | 9 $\frac{1}{4}$ in | 235 mm |
| 50-4121  | Standard Handle  | Medium | 1 x 1 $\frac{1}{4}$ in               | 25 x 32 mm  | 9 $\frac{1}{4}$ in | 235 mm |
| 50-4122  | Standard Handle  | Large  | 1 $\frac{1}{2}$ x 1 $\frac{3}{4}$ in | 38 x 44 mm  | 9 $\frac{1}{2}$ in | 241 mm |
| 50-4123C | Ring-Grip Handle | Small  | $\frac{3}{4}$ x 1 in                 | 19 x 25 mm  | 9 $\frac{1}{2}$ in | 241 mm |
| 50-4124C | Ring-Grip Handle | Medium | 1 x 1 $\frac{1}{4}$ in               | 32 mm       | 9 $\frac{1}{2}$ in | 241 mm |
| 50-4125C | Ring-Grip Handle | Large  | 1 $\frac{1}{4}$ x 1 $\frac{1}{2}$ in | 38 mm       | 9 $\frac{1}{2}$ in | 241 mm |



23-4550

### Richardson-Eastman Retractor

Double-Ended

| CODE     | DESCRIPTION                  | BLADE (W X D)                          |            | LENGTH              |        |
|----------|------------------------------|----------------------------------------|------------|---------------------|--------|
| 23-4550  | Set of Two                   | $\frac{7}{8}$ x $\frac{5}{16}$ in      | 22 x 8 mm  | 10 in               | 254 mm |
| 23-4551  | Small Only                   | 1 $\frac{1}{2}$ x 1 $\frac{5}{8}$ in   | 38 x 41 mm | 10 in               | 254 mm |
| 23-4552  | Large Only                   | 1 $\frac{3}{16}$ x 1 $\frac{3}{16}$ in | 44 x 64 mm | 10 $\frac{1}{2}$ in | 267 mm |
| 50-4135C | Set of Two (Small and Large) | 1 $\frac{3}{4}$ x 2 $\frac{1}{2}$ in   | 44 x 64 mm | 10 in               | 254 mm |

### Roux Retractor

Double-Ended



22-1614

| CODE    | BLADE (W X D)                        |            | LENGTH             |        |
|---------|--------------------------------------|------------|--------------------|--------|
| 22-1614 | $\frac{7}{8}$ x 1 $\frac{1}{8}$ in   | 22 x 29 mm | 5 $\frac{1}{2}$ in | 140 mm |
| 22-1615 | 1 x 1 $\frac{1}{2}$ in               | 25 x 38 mm | 6 in               | 152 mm |
| 22-1616 | 1 $\frac{1}{4}$ x 1 $\frac{3}{4}$ in | 32 x 45 mm | 6 $\frac{1}{2}$ in | 166 mm |

## General Purpose (Hand-Held)



23-1501

### Sauerbruch Retractor

| CODE    | DESCRIPTION | BLADE (W X D)                       |            | LENGTH |        |
|---------|-------------|-------------------------------------|------------|--------|--------|
| 23-1501 | #1          | $\frac{3}{4}$ x $1\frac{3}{4}$ in   | 19 x 44 mm | 9 in   | 229 mm |
| 23-1502 | #2          | $\frac{15}{16}$ x $2\frac{1}{8}$ in | 24 x 54 mm | 9 in   | 229 mm |
| 23-1503 | #3          | $\frac{13}{16}$ x $2\frac{7}{8}$ in | 21 x 73 mm | 9 in   | 229 mm |



Tip

### Schoenborn Retractor

| CODE    | BLADE (W X D)                              | LENGTH      |
|---------|--------------------------------------------|-------------|
| 20-4460 | $\frac{1}{2}$ x $\frac{1}{4}$ in 13 x 6 mm | 8 in 203 mm |



50-4261

### Senn Retractor

Double-Ended

| CODE    | DESCRIPTION    | PRONG (W)              | BLADE (W X D)                              | LENGTH                   |
|---------|----------------|------------------------|--------------------------------------------|--------------------------|
| 20-0508 | 3 Prong, Sharp | $\frac{5}{16}$ in 8 mm | $\frac{1}{4}$ x $\frac{3}{4}$ in 6 x 19 mm | $6\frac{1}{4}$ in 159 mm |
| 50-4260 | 3 Prong, Sharp | $\frac{5}{16}$ in 8 mm | $\frac{1}{4}$ x $\frac{3}{4}$ in 6 x 19 mm | $6\frac{7}{8}$ in 175 mm |
| 20-0509 | 3 Prong, Blunt | $\frac{5}{16}$ in 8 mm | $\frac{1}{4}$ x $\frac{3}{4}$ in 6 x 19 mm | $6\frac{1}{4}$ in 159 mm |
| 50-4261 | 3 Prong, Blunt | $\frac{5}{16}$ in 8 mm | $\frac{1}{4}$ x $\frac{3}{4}$ in 6 x 19 mm | $6\frac{7}{8}$ in 175 mm |

## General Purpose (Hand-Held)



32-3661

### Sofield Hand-Held Retractor

Double Ended

| CODE    | DESCRIPTION          | DIMENSIONS                 |
|---------|----------------------|----------------------------|
| 32-3667 | For use with 32-3660 | 5 ½ in 140 mm              |
| 32-3661 | Sofield Retractor    | 63 x 13 mm and 38 x 13 mm  |
| 32-3662 | Sofield Retractor    | 70 x 13 mm and 44 x 13 mm  |
| 32-3664 | Sofield Retractor    | 89 x 16 mm and 57 x 16 mm  |
| 32-3665 | Sofield Retractor    | 102 x 19 mm and 70 x 19 mm |
| 32-3666 | Sofield Retractor    | 114 x 19 mm and 76 x 19 mm |



22-1553

### Sofield Retractor

Double Ended

| CODE    | DESCRIPTION       | DIMENSIONS                 |
|---------|-------------------|----------------------------|
| 22-1551 | Sofield Retractor | 63 x 13 mm and 38 x 13 mm  |
| 22-1552 | Sofield Retractor | 70 x 13 mm and 44 x 13 mm  |
| 22-1553 | Sofield Retractor | 83 x 16 mm and 51 x 16 mm  |
| 22-1554 | Sofield Retractor | 89 x 16 mm and 57 x 16 mm  |
| 22-1555 | Sofield Retractor | 102 x 19 mm and 70 x 19 mm |
| 22-1556 | Sofield Retractor | 114 x 19 mm and 76 x 19 mm |



### St. Marks Retractor

| CODE    | DESCRIPTION              | DIMENSIONS  |
|---------|--------------------------|-------------|
| 502-002 | With Lip, 51–64 mm Taper | 5 in 127 mm |

## General Purpose (Hand-Held)



### St. Marks Pelvic Retractor

| CODE      | DESCRIPTION                                  | HANDLE     | BLADE        | LENGTH        |
|-----------|----------------------------------------------|------------|--------------|---------------|
| 50-9023   | With Lip                                     |            | 5 in 127 mm  | 13 in 330 mm  |
| 50-9028   | With Lip                                     | Angled 15° | 11 in 279 mm | 13 in 330 mm  |
| 50-9024   | With Lip                                     | Angled     | 5 in 127 mm  |               |
| 50-9027   | With Lip                                     | Angled 15° | 9 in 229 mm  | 11½ in 292 mm |
| 50-9025   | With Lip                                     | Angled 15° | 7 in 178 mm  | 13¾ in 350 mm |
| 50-9020   | Tapered, with Lip                            | Angled     | 7 in 178 mm  | 13¾ in 350 mm |
| 50-9020FO | Tapered, with Lip;<br>Fiber Optic Attachment | Angled     | 7 in 178 mm  | 13¾ in 350 mm |
| 50-9025FO | With Lip, Fiber Optic<br>Attachment          | Angled 15° | 7 in 178 mm  | 13⅞ in 340 mm |
| 50-9027FO | With Lip, Fiber Optic<br>Attachment          | Angled 15° | 9 in 229 mm  | 13⅞ in 340 mm |
| 50-9026   | Without Lip                                  |            | 7 in 178 mm  | 11 in 279 mm  |



### St. Marks Pelvic Retractor

With Ratchet and Swivel Blades

| CODE    | LENGTH       |
|---------|--------------|
| 50-9021 | 11 in 279 mm |



32-3628

### Turner-Doyen Retractor Blade

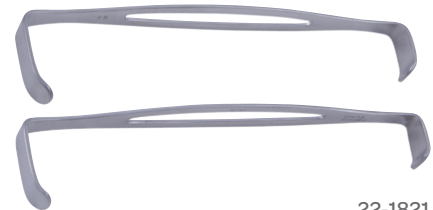
| CODE    | WIDTH       | DEPTH        | TOTAL LENGTH  |
|---------|-------------|--------------|---------------|
| 32-3628 | 2⅜ in 60 mm | 5½ in 140 mm | 11½ in 292 mm |

## General Purpose (Hand-Held)



### University Of Minnesota Retractor & Tongue Depressor

| CODE    | DESCRIPTION     | DIMENSIONS |        |
|---------|-----------------|------------|--------|
| 72-0210 | Cheek Retractor | 5½ in      | 140 mm |



22-1821

### Us Army Retractor

| CODE    | DESCRIPTION            | DIMENSIONS |        |
|---------|------------------------|------------|--------|
| 22-1821 | Double-Ended, Set of 2 | 8¼ in      | 209 mm |
| 50-4071 | Double-Ended, Set of 2 | 8¼ in      | 209 mm |



50-4226CO

### Volkman Retractor

| CODE      | DESCRIPTION    | BLADE (W X D)               | LENGTH       |
|-----------|----------------|-----------------------------|--------------|
| 22-3402   | 2 Prong, Sharp | Standard Pattern            | 8¾ in 222 mm |
| 22-3403   | 3 Prong, Sharp | Standard Pattern            | 8¾ in 222 mm |
| 22-3404   | 4 Prong, Sharp | Standard Pattern            | 8¾ in 222 mm |
| 22-3406   | 6 Prong, Sharp | Standard Pattern            | 8¾ in 222 mm |
| 22-3502   | 2 Prong, Blunt | Standard Pattern            | 8¾ in 222 mm |
| 22-3503   | 3 Prong, Blunt | Standard Pattern            | 8¾ in 222 mm |
| 22-3504   | 4 Prong, Blunt | Standard Pattern            | 8¾ in 222 mm |
| 22-3506   | 6 Prong, Blunt | Standard Pattern            | 8¾ in 222 mm |
| 50-4220CO | 2 Prong, Sharp | 7/16 x 11/16 in 11 x 17 mm  | 8¾ in 222 mm |
| 50-4221CO | 3 Prong, Sharp | 11/16 x 11/16 in 11 x 17 mm | 8¾ in 222 mm |
| 50-4222CO | 4 Prong, Sharp | 15/16 x 11/16 in 24 x 17 mm | 8¾ in 222 mm |
| 50-4223CO | 6 Prong, Sharp | 1½ x 11/16 in 17 x 38 mm    | 8¾ in 222 mm |
| 50-4225CO | 2 Prong, Blunt | 7/16 x 11/16 in 11 x 17 mm  | 8¾ in 222 mm |
| 50-4226CO | 3 Prong, Blunt | 11/16 x 11/16 in 17 x 17 mm | 8¾ in 222 mm |
| 50-4227CO | 4 Prong, Blunt | 15/16 x 11/16 in 24 x 17 mm | 8¾ in 222 mm |
| 50-4228CO | 6 Prong, Blunt | 1½ x 11/16 in 38 x 17 mm    | 8¾ in 222 mm |

## General Purpose (Lighted)



67-2490

### Fiber Optic Retractor

| CODE    | DESCRIPTION       | DIMENSIONS                                          |
|---------|-------------------|-----------------------------------------------------|
| 67-2490 | Judy's Skini Mini | $\frac{15}{32} \times 3 \frac{3}{8}$ in 12 x 85 mm  |
| 67-2492 | Judy's Skini Mini | $\frac{15}{32} \times 4 \frac{3}{4}$ in 12 x 120 mm |

## General Purpose (Self-Retaining)



32-3654

### Henly Retractor Blade

| CODE    | DESCRIPTION                                       | DIMENSIONS                                       |
|---------|---------------------------------------------------|--------------------------------------------------|
| 32-3652 | 3 Pair Side Blades, 4 Center Blades               |                                                  |
| 32-3654 | Center                                            | $\frac{5}{8} \times \frac{3}{4}$ in 16 x 19 mm   |
| 32-3655 | Center                                            | $\frac{5}{8} \times 1$ in 16 x 25 mm             |
| 32-3656 | Center                                            | $\frac{5}{8} \times 1 \frac{1}{4}$ in 16 x 32 mm |
| 32-3657 | Left/Right, Pair                                  | 1 x 1 in 25 x 25 mm                              |
| 32-3658 | Left/Right, Pair                                  | 1 x 2 in 25 x 51 mm                              |
| 32-3659 | Left/Right, Pair                                  | $\frac{7}{8} \times 3$ in 22 x 76 mm             |
| 32-3653 | Body Only: $3 \frac{3}{16}$ in, Max Opening 80 mm |                                                  |



### Gelpi Perineal Retractor

| CODE    | DESCRIPTION    | TOTAL OPENING            | LENGTH                    |
|---------|----------------|--------------------------|---------------------------|
| 50-1210 | Self-Retaining | $3 \frac{3}{4}$ in 95 mm | $7 \frac{1}{4}$ in 184 mm |

## General Purpose (Self-Retaining)



24-4013

### Gelpi Retractor

| CODE    | DESCRIPTION | LENGTH        | CODE    | DESCRIPTION     | LENGTH | WIDTH  |
|---------|-------------|---------------|---------|-----------------|--------|--------|
| 24-4013 |             | 3 ½ in 89 mm  | 24-4017 | Tips Bent 90°   | 6 ¾ in | 171 mm |
| 24-4015 |             | 4 ½ in 114 mm | 24-4057 | With Ball Stops | 7 ½ in | 191 mm |
| 24-4018 |             | 6 ¾ in 121 mm |         |                 |        |        |



50-8160

### Darling Popliteal Retractor

| CODE    | DESCRIPTION           | DIMENSIONS    |
|---------|-----------------------|---------------|
| 55-8998 | Left                  | 6 ¼ in 159 mm |
| 55-8997 | Right                 | 6 ¼ in 159 mm |
| 50-8160 | Self-Retaining, Left  | 6 ¼ in 159 mm |
| 50-8161 | Self-Retaining, Right | 6 ¼ in 159 mm |



24-1007

### Alm Self-Retaining Retractor

| CODE    | DESCRIPTION         | LENGTH       |
|---------|---------------------|--------------|
| 24-1007 | 4 x 4 Prongs, Sharp | 2 ¾ in 70 mm |
| 24-1010 | 4 x 4 Prongs, Sharp | 4 in 102 mm  |
| 24-1008 | 4 x 4 Prongs, Blunt | 2 ¾ in 70 mm |
| 24-1011 | 4 x 4 Prongs, Blunt | 4 in 102 mm  |



## General Purpose (Self-Retaining)



80-1813

### Alm Retractor-Microvasc Modified Alm Retractor

Black Anodized

| CODE    | DESCRIPTION   | LENGTH        |
|---------|---------------|---------------|
| 80-1812 | 4 x 4 Prong   | 8 ¼ in 210 mm |
| 80-1813 | 12 x 12 Prong | 8 ¼ in 210 mm |



### Alms Wound Retractor

| CODE    | DESCRIPTION       | PRONG DEPTH | TOTAL OPENING | LENGTH     |
|---------|-------------------|-------------|---------------|------------|
| 50-4265 | Semi-Sharp Prongs | ⅛ in 3 mm   | 2 in 51 mm    | 3 in 76 mm |



### Bellucci Retractor

| CODE    | DESCRIPTION                              | LENGTH        |
|---------|------------------------------------------|---------------|
| 24-2625 | Arms Angled Downward, 3 x 3 Prong, Sharp | 5 ½ in 130 mm |



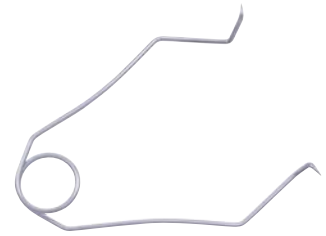
61-0605

### Bellucci-Wullstein Retractor

| CODE    | DESCRIPTION                          | LENGTH      |
|---------|--------------------------------------|-------------|
| 61-0606 | Solid Blade on Left, 2 Prong, Blunt  | 5 in 140 mm |
| 61-0605 | Solid Blade on Right, 2 Prong, Blunt | 5 in 140 mm |

## General Purpose (Self-Retaining)

### Farr Spring Retractor



24-0307

| CODE    | PRONG      | LENGTH       |
|---------|------------|--------------|
| 24-0307 | 1 in 25 mm | 5½ in 140 mm |
| 24-0306 | 1 in 25 mm | 9 in 229 mm  |

### Heiss Retractor

4 x 4 Prongs, Cross-Action



24-0911

| CODE    | DESCRIPTION | LENGTH      | CODE    | DESCRIPTION | LENGTH      |
|---------|-------------|-------------|---------|-------------|-------------|
| 24-0909 | Sharp       | 4 in 102 mm | 24-0910 | Blunt       | 4 in 102 mm |
| 24-0911 | Sharp       | 4 in 102 mm | 24-0912 | Blunt       | 4 in 102 mm |



### Hinterman Retractor

| CODE    | DESCRIPTION       | LENGTH      |
|---------|-------------------|-------------|
| 78-5599 | With K-Wire Guide | 7 in 177 mm |

### Horizontal Retractor



| CODE    | DESCRIPTION       | LENGTH        |
|---------|-------------------|---------------|
| 24-3500 | 4 x 2 Sharp Prong | 12¼ in 310 mm |

## General Purpose (Self-Retaining)



### Kolbel Retractor

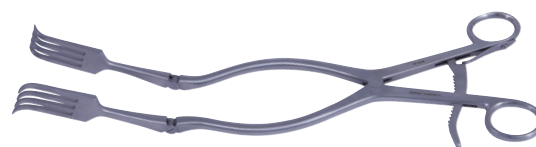
| CODE    | DESCRIPTION              | LENGTH      |
|---------|--------------------------|-------------|
| 24-4175 | 2 x 2 in, Prongs, Angled | 7 in 177 mm |



24-4167

### Kolbel Retractor

| CODE    | DESCRIPTION                        | DIMENSIONS (W X D) |                                                                       |
|---------|------------------------------------|--------------------|-----------------------------------------------------------------------|
| 24-4166 | Frame Only for Snap Closure Blades |                    |                                                                       |
| 24-4167 | Kolbel Snap on Retractor Blades    | 36 x 36 in         | 1 <sup>7</sup> / <sub>16</sub> in, 1 <sup>7</sup> / <sub>16</sub> in  |
| 24-4168 | Kolbel Snap on Retractor Blades    | 36 x 53 in         | 1 <sup>7</sup> / <sub>16</sub> in, 2 <sup>1</sup> / <sub>16</sub> in  |
| 24-4169 | Kolbel Snap on Retractor Blades    | 36 x 68 in         | 1 <sup>7</sup> / <sub>16</sub> in, 2 <sup>11</sup> / <sub>16</sub> in |
| 24-4170 | Kolbel Snap on Retractor Blades    | 36 x 85 in         | 1 <sup>7</sup> / <sub>16</sub> in, 3 <sup>3</sup> / <sub>8</sub> in   |
| 24-4172 | Kolbel Snap on Retractor Blades    | 20 x 36 in         | 1 <sup>3</sup> / <sub>16</sub> in, 1 <sup>7</sup> / <sub>16</sub> in  |
| 24-4173 | Kolbel Snap on Retractor Blades    | 20 x 53 in         | 1 <sup>3</sup> / <sub>16</sub> in, 2 <sup>1</sup> / <sub>16</sub> in  |
| 24-4176 | Kolbel Snap on Retractor Blades    | 20 x 68 in         | 1 <sup>3</sup> / <sub>16</sub> in, 2 <sup>11</sup> / <sub>16</sub> in |
| 24-4178 | Kolbel Snap on Retractor Blades    | 20 x 85 in         | 1 <sup>3</sup> / <sub>16</sub> in, 3 <sup>3</sup> / <sub>8</sub> in   |



### Oberhill Retractor

| CODE    | DESCRIPTION           | LENGTH       |
|---------|-----------------------|--------------|
| 24-3449 | 4 Prong Hinged Blades | 13 in 330 mm |



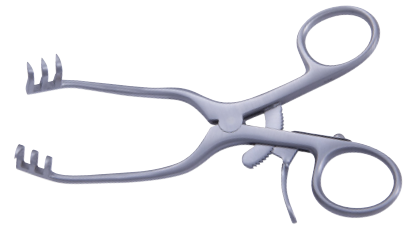
66-6651

### Perkins Retractor

Solid Blades with Spikes

| CODE    | DESCRIPTION            | SPREAD      |
|---------|------------------------|-------------|
| 66-6650 | 3 Sharp Prong on Left  | 5 in 127 mm |
| 66-6651 | 3 Sharp Prong on Right | 5 in 127 mm |

## General Purpose (Self-Retaining)



### Schuknecht Retractor

| CODE    | DESCRIPTION                            | DIMENSIONS |        |
|---------|----------------------------------------|------------|--------|
| 24-2620 | Double Curved Arms, 3 x 3 Prong, Sharp | 5 1/8 in   | 130 mm |



### Seeburger Retractor

| CODE    | DESCRIPTION | DIMENSIONS |        |
|---------|-------------|------------|--------|
| 22-0101 |             | 5 1/2 in   | 140 mm |



### Spring Retractor

| CODE    | DESCRIPTION           | LENGTH   |        |
|---------|-----------------------|----------|--------|
| 24-0300 | 1 x 1 Prong, Sharp    | 2 1/2 in | 64 mm  |
| 24-0301 | 1 x 1 Prong, Sharp    | 3 1/2 in | 89 mm  |
| 24-0352 | 1 x 1 Prong, Sharp    | 4 1/8 in | 105 mm |
| 24-0302 | 1 x 1 Prong, Sharp    | 4 1/2 in | 114 mm |
| 24-0327 | 1 x 1 Prong, Sharp    |          |        |
| 24-0303 | 3 x 3 Prongs, Blunt   | 3 1/2 in | 89 mm  |
| 24-0304 | 3 x 3 Prongs, Blunt   | 4 1/2 in | 114 mm |
| 50-4350 | Prong 3/8 in, (10 mm) | 3 1/8 in | 79 mm  |



### Tissue Retractors

Blunt

| CODE    | DESCRIPTION  | PRONG (W X D) |            | TOTAL OPENING |       | LENGTH   |        |
|---------|--------------|---------------|------------|---------------|-------|----------|--------|
| 50-1223 | 3 x 3 Prongs | 1/2 x 5/8 in  | 13 x 16 mm | 2 1/2 in      | 64 mm | 5 1/4 in | 133 mm |
| 50-1224 | 1 x 1 Prong  | 1/2 in        | 13 mm      | 2 1/2 in      | 64 mm | 5 1/4 in | 133 mm |

## General Purpose (Hand-Held)



### Volkmann Retractor

| CODE    | DESCRIPTION                | DIMENSIONS                       |        |
|---------|----------------------------|----------------------------------|--------|
| 22-3604 | 4 Prong Sharp, USA Pattern | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |

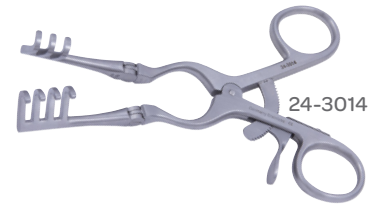


### Volkman Retractor

50-4226CO

| CODE      | DESCRIPTION    | BLADE (W X D)                           |            | LENGTH                           |        |
|-----------|----------------|-----------------------------------------|------------|----------------------------------|--------|
| 22-3402   | 2 Prong, Sharp | Standard Pattern                        |            | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 22-3403   | 3 Prong, Sharp | Standard Pattern                        |            | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 22-3404   | 4 Prong, Sharp | Standard Pattern                        |            | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 22-3406   | 6 Prong, Sharp | Standard Pattern                        |            | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 22-3502   | 2 Prong, Blunt | Standard Pattern                        |            | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 22-3503   | 3 Prong, Blunt | Standard Pattern                        |            | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 22-3504   | 4 Prong, Blunt | Standard Pattern                        |            | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 22-3506   | 6 Prong, Blunt | Standard Pattern                        |            | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 50-4220CO | 2 Prong, Sharp | $\frac{7}{16} \times \frac{11}{16}$ in  | 11 x 17 mm | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 50-4221CO | 3 Prong, Sharp | $\frac{11}{16} \times \frac{11}{16}$ in | 11 x 17 mm | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 504222CO  | 4 Prong, Sharp | $\frac{15}{16} \times \frac{11}{16}$ in | 24 x 17 mm | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 50-4223CO | 6 Prong, Sharp | $1\frac{1}{2} \times \frac{11}{16}$ in  | 17 x 38 mm | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 50-4225CO | 2 Prong, Blunt | $\frac{7}{16} \times \frac{11}{16}$ in  | 11 x 17 mm | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 50-4226CO | 3 Prong, Blunt | $\frac{11}{16} \times \frac{11}{16}$ in | 17 x 17 mm | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 504227CO  | 4 Prong, Blunt | $\frac{15}{16} \times \frac{11}{16}$ in | 24 x 17 mm | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |
| 50-4228CO | 6 Prong, Blunt | $1\frac{1}{2} \times \frac{11}{16}$ in  | 38 x 17 mm | 8 <sup>3</sup> / <sub>4</sub> in | 222 mm |

## General Purpose (Self-Retaining)



### Weitlaner-Beckman Retractor

| CODE    | DESCRIPTION                     | LENGTH |        |
|---------|---------------------------------|--------|--------|
| 24-3013 | 3 x 4 Prong, Sharp, Hinged Arms | 5 ½ in | 140 mm |
| 24-3016 | 3 x 4 Prong, Sharp, Hinged Arms | 6 ½ in | 165 mm |
| 24-3020 | 3 x 4 Prong, Sharp, Hinged Arms | 8 ½ in | 215 mm |
| 24-3023 | 3 x 4 Prong, Sharp, Hinged Arms | 9 ½ in | 241 mm |
| 24-3014 | 3 x 4 Prong, Blunt, Hinged Arms | 5 ½ in | 140 mm |
| 24-3017 | 3 x 4 Prong, Blunt, Hinged Arms | 6 ½ in | 165 mm |
| 24-3024 | 3 x 4 Prong, Blunt, Hinged Arms | 8 in   | 215 mm |
| 24-3021 | 3 x 4 Prong, Blunt, Hinged Arms | 9 ½ in | 241 mm |



### Weitlaner Retractor

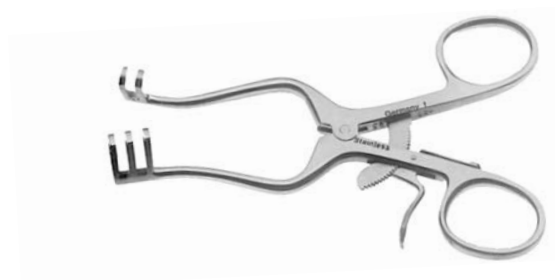
| CODE    | DESCRIPTION         | LENGTH |        |
|---------|---------------------|--------|--------|
| 24-2210 | 2 x 3 Prongs, Sharp | 4 ½ in | 114 mm |
| 24-2213 | 3 x 4 Prongs, Sharp | 5 ½ in | 140 mm |
| 24-2216 | 3 x 4 Prongs, Sharp | 6 ½ in | 165 mm |
| 24-2220 | 3 x 4 Prongs, Sharp | 8 in   | 203 mm |
| 24-2224 | 3 x 4 Prongs, Sharp | 9 in   | 229 mm |
| 24-2211 | 2 x 3 Prongs, Blunt | 4 ½ in | 114 mm |
| 24-2214 | 3 x 4 Prongs, Blunt | 5 ½ in | 140 mm |
| 24-2217 | 3 x 4 Prongs, Blunt | 6 ½ in | 165 mm |
| 24-2221 | 3 x 4 Prongs, Blunt | 8 in   | 203 mm |
| 24-2225 | 3 x 4 Prongs, Blunt | 9 in   | 229 mm |



### Weitlaner Pediatric Retractor

| CODE    | DESCRIPTION        | DIMENSIONS |        |
|---------|--------------------|------------|--------|
| 61-0610 | 3 x 3 Prong, Blunt | 4 ½ in     | 115 mm |

## General Purpose (Self-Retaining)



### Weitlaner Retractor

| CODE    | DESCRIPTION        | TOTAL OPENING |       | LENGTH |        |
|---------|--------------------|---------------|-------|--------|--------|
| 50-5647 | 2 x 3 Prong, Blunt | 2 ¼ in        | 57 mm | 4 ½ in | 114 mm |

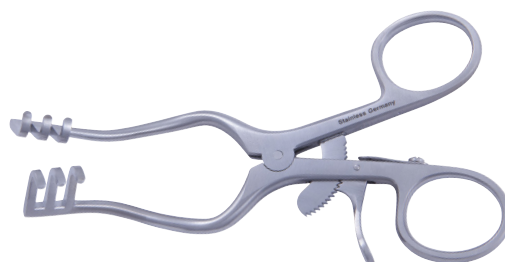


50-1194

### Weitlaner Retractor

Self-Retaining Prongs

| CODE    | DESCRIPTION         | TOTAL OPENING |        | LENGTH |        |
|---------|---------------------|---------------|--------|--------|--------|
| 50-5646 | 2 X 3 Prongs, Sharp | 2 ¼ in        | 57 mm  | 4 ½ in | 114 mm |
| 50-1194 | 3 x 4 Prongs, Sharp | 2 ¼ in        | 57 mm  | 5 ½ in | 140 mm |
| 50-1196 | 3 x 4 Prongs, Sharp | 4 in          | 102 mm | 6 ½ in | 165 mm |
| 50-1198 | 3 x 4 Prongs, Sharp | 5 in          | 127 mm | 7 ½ in | 191 mm |
| 50-1200 | 3 X 4 Prongs, Sharp | 5 ¾ in        | 146 mm | 9 in   | 229 mm |
| 50-5647 | 2 X 3 Prongs, Blunt | 2 ¼ in        | 57 mm  | 4 ½ in | 114 mm |
| 50-1195 | 3 x 4 Prongs, Blunt | 2 ¼ in        | 57 mm  | 5 ½ in | 140 mm |
| 50-1197 | 3 x 4 Prongs, Blunt | 4 in          | 102 mm | 6 ½ in | 165 mm |
| 50-1199 | 3 x 4 Prongs, Blunt | 5 in          | 127 mm | 7 ½ in | 191 mm |
| 50-1201 | 3 X 4 Prongs, Blunt | 5 ¾ in        | 146 mm | 9 in   | 229mm  |



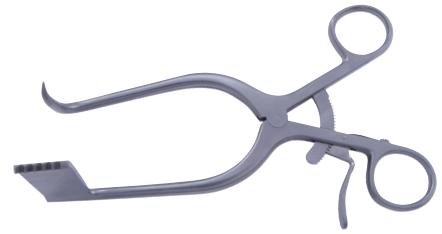
24-2614

### Weitlaner-Wullstein Retractor

Arms Angled Downward

| CODE    | DESCRIPTION        | DIMENSIONS |        |
|---------|--------------------|------------|--------|
| 24-2613 | 3 x 3 Prong, Sharp | 5 ⅛ in     | 130 mm |
| 24-2614 | 3 x 3 Prong, Blunt | 5 ⅛ in     | 130 mm |

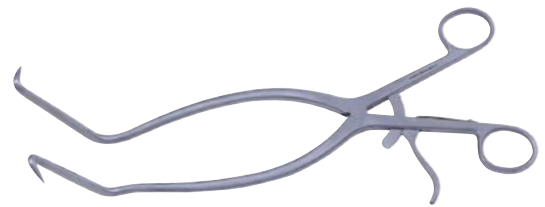
## General Purpose (Self-Retaining)



57-2952

### Williams Micro Dissectomy Retractor

| CODE    | DESCRIPTION | DIMENSIONS | TOTAL LENGTH |        |
|---------|-------------|------------|--------------|--------|
| 57-2951 | Left Hook   | 50 x 10 mm | 6 in         | 152 mm |
| 57-2952 | Left Hook   | 50 x 20 mm | 6 in         | 152 mm |
| 57-2961 | Left Hook   | 60 x 10 mm | 6 in         | 152 mm |
| 57-2971 | Left Hook   | 70 x 10 mm | 6 in         | 152 mm |
| 57-2972 | Left Hook   | 70 x 20 mm | 6 in         | 152 mm |
| 57-2851 | Right Hook  | 50 x 10 mm | 6 in         | 152 mm |
| 57-2852 | Right Hook  | 50 x 20 mm | 6 in         | 152 mm |
| 57-2862 | Right Hook  | 60 x 20 mm | 6 in         | 152 mm |
| 57-2871 | Right Hook  | 70 x 10 mm | 6 in         | 152 mm |
| 57-2872 | Right Hook  | 70 x 20 mm | 6 in         | 152 mm |



### Wiltse-Gelpi Retractor

Deep Blades

| CODE    | DESCRIPTION         | LENGTH       |
|---------|---------------------|--------------|
| 24-4760 | 1 x 1 Prongs, Sharp | 11 in 279 mm |

## Hysterectomy



50-5566

### Heaney Hysterectomy Retractor

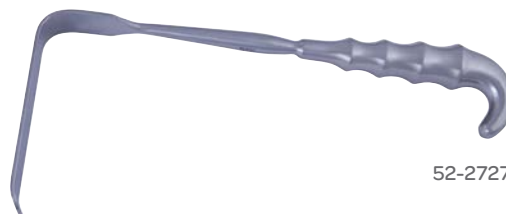
| CODE    | DIMENSIONS (W X D) |            | DIMENSIONS |        |
|---------|--------------------|------------|------------|--------|
| 50-5566 | 1 1/8 x 2 7/8 in   | 29 x 73 mm | 6 1/2 in   | 165 mm |
| 50-5567 | 1 1/8 x 3 1/4 in   | 29 x 82 mm | 6 1/2 in   | 165 mm |
| 52-2751 | 1 x 1 3/4 in       | 25 x 45 mm | 6 3/4 in   | 171 mm |
| 52-2752 | 1 1/8 x 2 7/8 in   | 29 x 73 mm | 6 3/4 in   | 171 mm |
| 52-2753 | 1 1/8 x 3 1/4 in   | 29 x 85 mm | 6 3/4 in   | 171 mm |



## Hysterectomy

### Heaney-Simon Hysterectomy Retractor

| CODE    | DIMENSIONS (W X L) |             |
|---------|--------------------|-------------|
| 50-5570 | 1 x 4 ½ in         | 25 x 114 mm |
| 52-2727 | 1 x 4 ½ in         | 25 x 114 mm |



52-2727

## Laparoscopic

### Fan Retractor

| CODE    | DESCRIPTION                                    | LENGTH        |
|---------|------------------------------------------------|---------------|
| 24-1800 | Pressure Lock Handle, 60° Opening 10 mm, 60 mm | 9 ½ in 241 mm |
| 32-1800 | Pressure Lock Handle, 60° Opening 10 mm, 60 mm | 12 ¾ 320 mm   |
| 38-1800 | Pressure Lock Handle, 60° Opening 10 mm, 60 mm | 15 in 381 mm  |
| 45-1800 | Pressure Lock Handle, 60° Opening 10 mm, 60 mm | 17 ¾ 450 mm   |



24-1800

### Fan Retractor

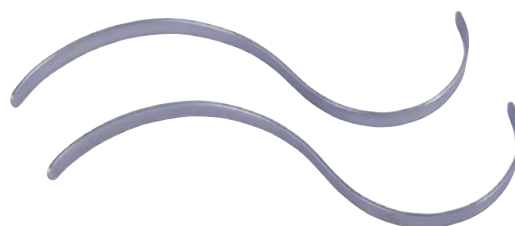
| CODE    | DESCRIPTION  |
|---------|--------------|
| 90-9800 | Curved, 5 mm |



### Hasson "S" Retractor

Set of Two

| CODE    | WIDTH |        | LENGTH |        |
|---------|-------|--------|--------|--------|
| 90-6003 | ¼ in  | 6.3 mm | 6 in   | 152 mm |
| 90-6002 | ⅜ in  | 10 mm  | 6 ¾ in | 171 mm |
| 90-6004 | ½ in  | 13 mm  | 6 in   | 152 mm |
| 90-6008 | ½ in  | 13 mm  | 7 in   | 177 mm |
| 90-6005 | ⅜ in  | 10 mm  | 7 ⅛ in | 180 mm |
| 90-6006 | ⅝ in  | 15 mm  | 7 ⅞ in | 180 mm |
| 90-6007 | ¾ in  | 19 mm  | 7 ⅞ in | 180 mm |



90-6002

## Laparoscopic (Bookwalter®)

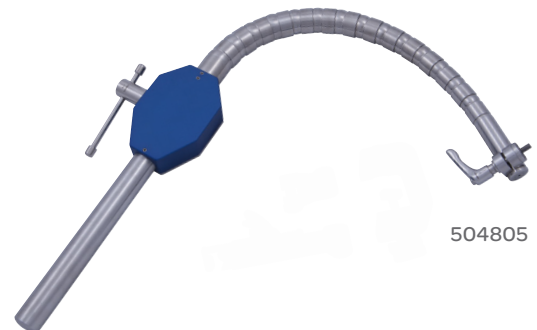
### Bookwalter® Telescopic Laparoscopic Holder

| CODE    | DESCRIPTION                                                                                          |
|---------|------------------------------------------------------------------------------------------------------|
| 50-4685 | Telescopic with Instrument holder for instruments, trocars and laparoscopic retractors 5 mm - 17 mm. |



### Bookwalter® Universal Flex Arm System

| CODE    | DESCRIPTION                                                                            |
|---------|----------------------------------------------------------------------------------------|
| 50-4805 | Bookwalter® Universal Flex Arm System Includes Arm and One Each of the Adapters Below. |
| 50-4806 | Ring Adapter For Bookwalter® Flex Arm                                                  |
| 50-4807 | Lap Instrument Adapter (Spring) For Bookwalter® Flex Arm                               |
| 50-4808 | Camera Lens Adapter For Bookwalter® Flex Arm                                           |
| 50-4809 | Camera Housing Adapter For Bookwalter® Flex Arm                                        |



### Laparoscopic Support Set

| CODE    | DESCRIPTION                                                      | QTY |
|---------|------------------------------------------------------------------|-----|
| 50-5730 | Laparoscopic Support Set Includes the Following:                 |     |
| 50-4683 | Bookwalter® Table Post, 8 in                                     | 1   |
| 50-4554 | Bookwalter® Post Coupling                                        | 1   |
| 50-4805 | Bookwalter® Universal Flex Arm, Includes 4 Adapters Listed Below | 1   |
| 50-4806 | Bookwalter® Flex Arm Ring Adapter                                | 1   |
| 50-4807 | Bookwalter® Flex Arm Laparoscopic Instrument Adapter             | 1   |
| 50-4808 | Bookwalter® Flex Arm Camera Lens Adapter                         | 1   |
| 50-4809 | Bookwalter® Flex Arm Camera Housing Adapter                      | 1   |
| 68-1593 | Fan Retractor, 5mm, Articulating, 3 Fingers                      | 1   |
| 68-1594 | Fan Retractor, 10mm, Articulating, 5 Fingers                     | 1   |

## Lung



50-8153

### Allison Lung Retractor

| CODE    | DESCRIPTION  | LENGTH |        |
|---------|--------------|--------|--------|
| 50-8152 | Adult, Small | 10½ in | 267 mm |
| 50-8153 | Adult, Large | 12½ in | 318 mm |



59-0100

### Ultra™ Side Loading Retractor

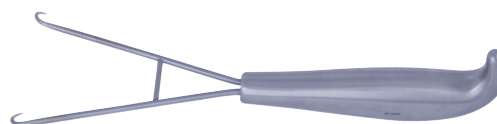
| CODE    | DESCRIPTION                                                      | LENGTH     |              |
|---------|------------------------------------------------------------------|------------|--------------|
| 59-0101 | Longitudinal, Table Mounted, with Double Hinge                   | 14 x 15 in | 356 x 381 mm |
| 59-0100 | Transverse 4¾ in (120 mm) Rack, Table Mounted, with Double Hinge | 2¾ x 2 in  | 70 x 51 mm   |



### Bookwalter® I.M.A. Crossbar

| CODE    | DESCRIPTION          | LENGTH |        |
|---------|----------------------|--------|--------|
| 50-4601 | Table Mounted, Small | 12 in  | 305 mm |

## Mastectomy



### Berens Mastectomy Retractor

| CODE    | DESCRIPTION | LENGTH |        |
|---------|-------------|--------|--------|
| 22-3600 | Square      | 7⅞ in  | 200 mm |

## Mouth Gags



72-0515

### Sluder Jansen/Schink Mouth Gag

| CODE    | DESCRIPTION | LENGTH |        |
|---------|-------------|--------|--------|
| 72-0515 | Adult       | 4 ¼ in | 108 mm |

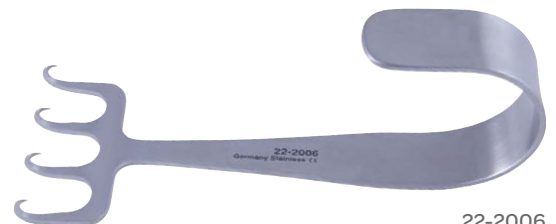
## Neuro (Flap)



22-2003

### Freeman Flap Retractor

| CODE    | BLADE WIDTH | LENGTH |        |
|---------|-------------|--------|--------|
| 22-2002 | 12 mm       | 8 in   | 220 mm |
| 22-2003 | 25 mm       | 8 in   | 220 mm |



22-2006

### Maxwell Flap Retractor

| CODE    | WIDTH | LENGTH |        |
|---------|-------|--------|--------|
| 22-2007 | 22 mm | 4 in   | 101 mm |
| 22-2006 | 38 mm | 4 in   | 101 mm |

Neuro (Hand-Held)



22-0057

Davis Brain Spatula

Malleable

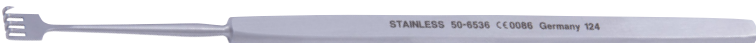
| CODE    | DESCRIPTION            | LENGTH                    |
|---------|------------------------|---------------------------|
| 22-0057 | $\frac{3}{8}$ in 10 mm | 7 in 177 mm               |
| 22-0070 | $\frac{7}{8}$ in 22 mm | 8 $\frac{3}{4}$ in 222 mm |

Neuro (Lachrymal Sac)



Agricola Lachrymal Sac Retractor

| CODE    | DESCRIPTION        | LENGTH                   |
|---------|--------------------|--------------------------|
| 60-1416 | 3 x 3 Prong, Sharp | 1 $\frac{1}{2}$ in 40 mm |



Rollet Lachrymal Sac Retractor

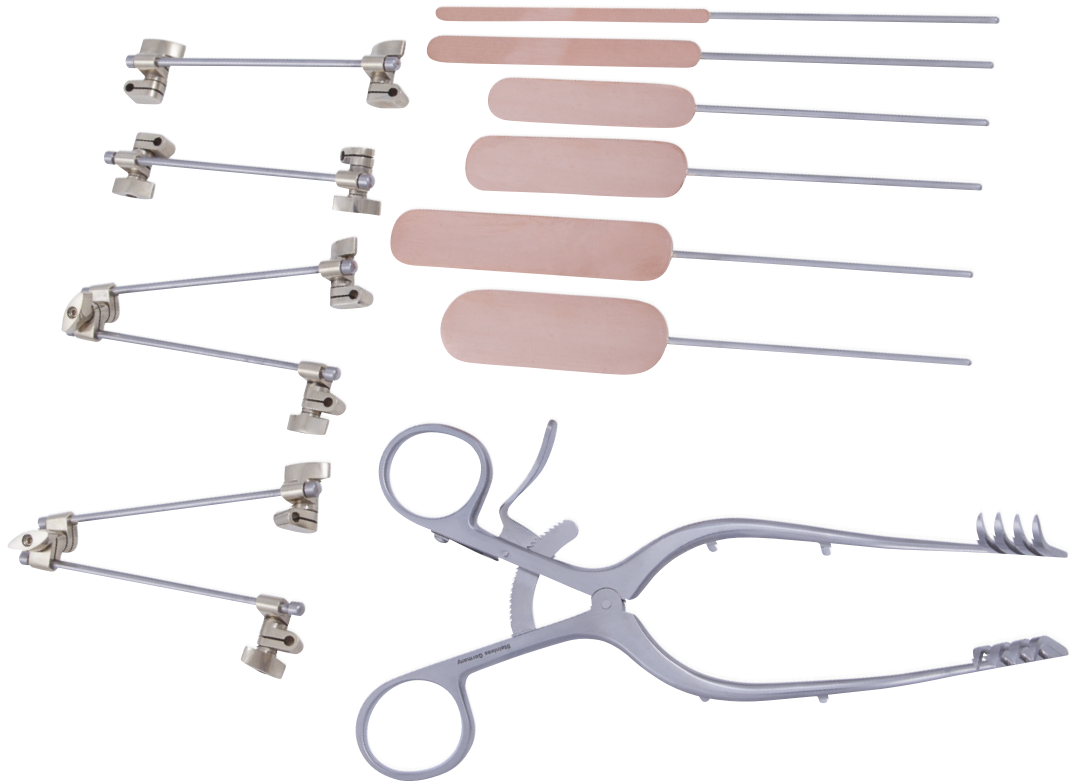
| CODE    | DESCRIPTION     | LENGTH                    |
|---------|-----------------|---------------------------|
| 50-6536 | 4 Prongs, Sharp | 5 $\frac{1}{4}$ in 133 mm |



Stevenson Lachrymal Sac Retractor

| CODE    | DESCRIPTION                |
|---------|----------------------------|
| 60-1413 | Curved Teeth, 20 mm Spread |

## Neuro (Posterior Fossa)



### Jannetta Posterior Fossa Retractor

57-9000

| CODE    | DESCRIPTION               | DETAIL         | DIMENSIONS |        |
|---------|---------------------------|----------------|------------|--------|
| 57-9000 | Complete Set Including:   |                |            |        |
| 57-9024 | Double Round Bar          | 3 Swivels      | 4 in       | 260 mm |
| 57-9028 | Malleable Retractor Blade | 15 x 70 mm     | 6 ½ in     | 165 mm |
| 57-9030 | Malleable Retractor Blade | 20 x 75 mm     | 6 ¾ in     | 171 mm |
| 57-9032 | Malleable Retractor Blade | 25 x 75 mm     | 6 ¾ in     | 171 mm |
| 57-9034 | Malleable Retractor Blade | 10 x 95 mm     | 7 ½ in     | 190 mm |
| 57-9036 | Malleable Retractor Blade | 20 x 95 mm     | 7 ½ in     | 190 mm |
| 57-9038 | Malleable Retractor Blade | 5 x 95 mm      | 7 ½ in     | 190 mm |
| 57-9022 | Retractor Body            | with 4 Posts   | 4 in       | 100 mm |
| 57-9026 | Round Bar                 | with 2 Swivels | 4 in       | 100 mm |

Neuro (Self-Retaining)



Malis® Brain Retractor Kit

Black Anodized, Attaches to the Malis® Cerebellar Retractor (50-1465)

| CODE    | DESCRIPTION                                                             | QTY | LENGTH |        | WIDTH             |       |
|---------|-------------------------------------------------------------------------|-----|--------|--------|-------------------|-------|
| 50-1460 | Includes One Each of the Five Blades and Three Extensions Listed Below: |     |        |        |                   |       |
|         | Blade                                                                   | 1   | 3 in   | 76 mm  | $\frac{3}{8}$ in  | 10 mm |
|         | Blade                                                                   | 1   | 3 in   | 76 mm  | $\frac{9}{16}$ in | 14 mm |
|         | Blade                                                                   | 1   | 3 in   | 76 mm  | $\frac{5}{8}$ in  | 16 mm |
|         | Blade                                                                   | 1   | 3 in   | 76 mm  | $\frac{3}{4}$ in  | 19 mm |
|         | Blade                                                                   | 1   | 3 in   | 76 mm  | $\frac{3}{8}$ in  | 10 mm |
|         | Retractor Extension                                                     | 1   | 2 in   | 51 mm  |                   |       |
|         | Retractor Extension                                                     | 1   | 3 in   | 76 mm  |                   |       |
|         | Retractor Extension                                                     | 1   | 4 in   | 102 mm |                   |       |
| 50-1454 | Double Connector                                                        | 2   |        |        |                   |       |

## Neuro (Greenberg®)



### Greenberg® Maxi-Vise Adapter

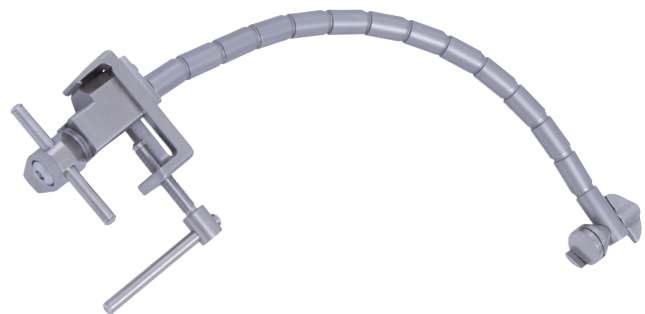
Double the holding diameter of arms from 4mm to 8mm.  
Useful for holding suction devices and other various micro-surgical instruments.

| CODE    | DESCRIPTION                                                    |
|---------|----------------------------------------------------------------|
| 50-1515 | Attaches to the Greenberg® Flexible Arms (50-1509 and 50-1511) |



### Greenberg® Instrument Holder

| CODE    | DESCRIPTION                                                                        |
|---------|------------------------------------------------------------------------------------|
| 50-1523 | Small, Holds Shafts Up to $\frac{5}{16}$ in (8mm) In Diameter and Flat Instruments |
| 50-1524 | Large, Holds Shafts Up to 1 in (25mm) In Diameter and Flat Instruments             |
| 50-1525 | Extra Large, Holds Shafts Up to 2 in (51mm) In Diameter and Flat Instruments       |



### Greenberg® Long Arm

| CODE    | DESCRIPTION                          |
|---------|--------------------------------------|
| 50-1509 | Attaches to Primary or Secondary Bar |



Neuro (Greenberg®)



Greenberg® Micro Instrument HolderCollateral Retractor

| CODE    | DESCRIPTION                                                                   |
|---------|-------------------------------------------------------------------------------|
| 50-1529 | Flexbar Arm Used to Hold Microinstruments, Holds Up to 1⁄8 in (3 mm) Diameter |



Greenberg® Short

| CODE    | DESCRIPTION                              | LENGTH   |        |
|---------|------------------------------------------|----------|--------|
| 50-1511 | Attaches to Primary Bar or Secondary Arm | 6 1⁄2 in | 165 mm |



Greenberg®

| CODE    | DESCRIPTION                              | LENGTH |        |
|---------|------------------------------------------|--------|--------|
| 50-1516 | Attaches to Primary Bar or Secondary Arm | 12 in  | 305 mm |

## Neuro (Greenberg®)



### Greenberg® Primary Bar

| CODE    | DESCRIPTION             | LENGTH |        |
|---------|-------------------------|--------|--------|
| 50-1507 | Attaches to Skull Clamp | 6 in   | 152 mm |



### Greenberg® Secondary Bar

| CODE    | DESCRIPTION             | LENGTH |        |
|---------|-------------------------|--------|--------|
| 50-1508 | Attaches to Primary Bar | 12 in  | 305 mm |



### Greenberg® Short Coupler

| CODE    | DESCRIPTION                                      | LENGTH |        |
|---------|--------------------------------------------------|--------|--------|
| 50-1522 | Can Be Used as Mount for the Greenberg® Handrest | 5½ in  | 140 mm |

## Neuro (Greenberg®)



50-1530

### Greenberg® Retractor Blade

Tapered

| CODE    | TAPERED BLADE WIDTH                  | BLADE LENGTH |      |        |
|---------|--------------------------------------|--------------|------|--------|
| 50-1534 | $\frac{1}{16} \times \frac{1}{4}$ in | 1.6 x 19 mm  | 9 in | 229 mm |
| 50-1533 | $\frac{3}{32} \times \frac{3}{8}$ in | 2 x 10 mm    | 9 in | 229 mm |
| 50-1532 | $\frac{1}{8} \times \frac{1}{2}$ in  | 3 x 13 mm    | 9 in | 229 mm |
| 50-1531 | $\frac{5}{32} \times \frac{5}{8}$ in | 4 x 16 mm    | 9 in | 229 mm |
| 50-1530 | $\frac{1}{4} \times \frac{3}{4}$ in  | 6 x 19 mm    | 9 in | 229 mm |



### Greenberg® Sterilizing Case

Includes Four Compartments for Various Components

| CODE              | DESCRIPTION              | WIDTH              |        | DEPTH               |        | LENGTH         | QTY |
|-------------------|--------------------------|--------------------|--------|---------------------|--------|----------------|-----|
| 50-1514           | Universal Retractor Case | 10 in              | 254 mm | 2 $\frac{1}{8}$ in  | 60 mm  | 17 in (432 mm) | 1   |
| Compartment Sizes |                          |                    |        |                     |        |                |     |
|                   | Compartment # 1          | 7 $\frac{3}{4}$ in | 197 mm | 10 $\frac{3}{4}$ in | 264 mm |                |     |
|                   | Compartment # 2          | 2 $\frac{1}{8}$ in | 54 mm  | 17 in               | 432 mm |                |     |
|                   | Compartment # 3          | 4 $\frac{5}{8}$ in | 117 mm | 6 $\frac{3}{4}$ in  | 171 mm |                |     |
|                   | Compartment # 4          | 3 $\frac{1}{8}$ in | 79 mm  | 6 $\frac{3}{4}$ in  | 171 mm |                |     |

## Neuro (Greenberg®)



### Greenberg® Hand Rest

| CODE    | DESCRIPTION                                                               | LENGTH |        |
|---------|---------------------------------------------------------------------------|--------|--------|
| 50-1512 | Attaches to Short Coupler (50-1509) or Secondary Bar (50-1508 or 50-1516) | 10 in  | 254 mm |



### Greenberg® Universal & Handrest Kit

| CODE    | DESCRIPTION                | LENGTH |       |
|---------|----------------------------|--------|-------|
| 50-1500 | Universal and Handrest Kit | 3½ in  | 89 mm |



### Greenberg® Pattie Tray

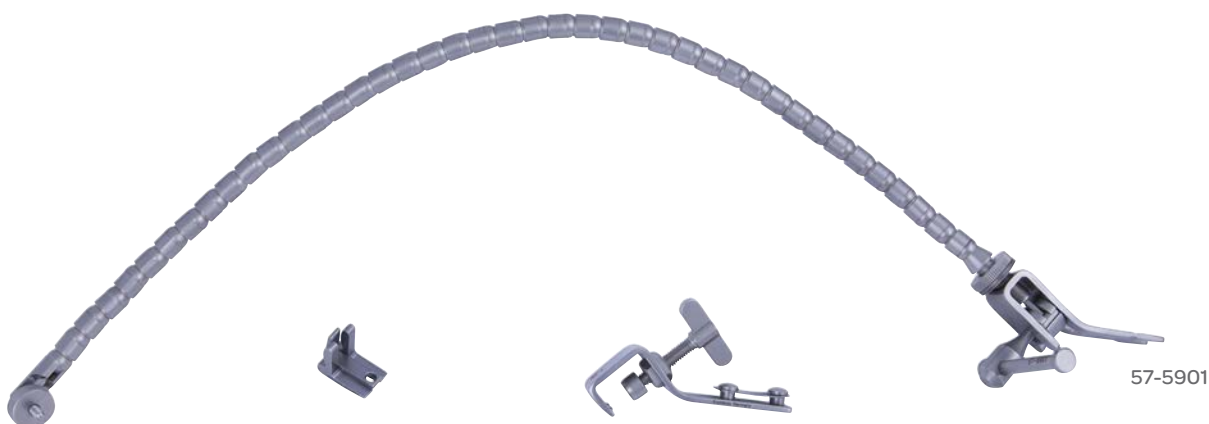
| CODE    | DESCRIPTION                                       | LENGTH |        |
|---------|---------------------------------------------------|--------|--------|
| 50-1513 | Attaches to Long (50-1509) or Short Arm (50-1511) | 6¼ in  | 171 mm |

## Neuro



### Ultra Greenberg® Style Cranial Pattie Tray

| CODE    | DESCRIPTION | LENGTH        |
|---------|-------------|---------------|
| 59-7905 | Titanium    | 6 ¼ in 171 mm |



57-5901

### Leyla Brain Retractor

| CODE    | DESCRIPTION                         |
|---------|-------------------------------------|
| 57-5910 | Flexible Tension Arm                |
| 57-5941 | Rigid Holding Arm                   |
| 57-5901 | Self-Retaining, One Armed           |
| 57-5902 | Self-Retaining, Two Armed           |
| 57-5930 | Spatula Support                     |
| 57-5921 | Fixation Base                       |
| 57-5922 | Fixation Base                       |
| 57-5943 | Ball Joint Clamp                    |
| 57-5942 | Coupling Head to Hold Flexible Arms |

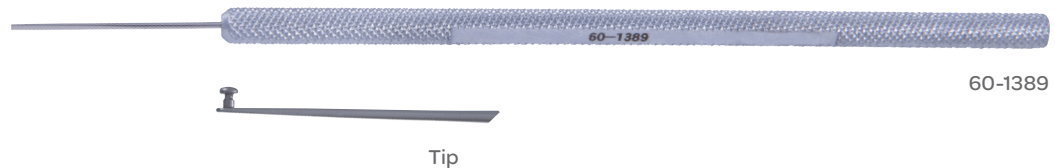
## Neuro



## Malis® Double Connector

| CODE    | DESCRIPTION          |
|---------|----------------------|
| 50-1454 | For Use with 50-1460 |

## Ophthalmology (Hand-Held)



60-1389

Tip

## Graether Retractor

Collar Button on Handle

| CODE    | DESCRIPTION | LENGTH                           |        |
|---------|-------------|----------------------------------|--------|
| 60-1389 | Straight    | 4 <sup>3</sup> / <sub>4</sub> in | 120 mm |
| 60-1390 | Angled      | 4 <sup>3</sup> / <sub>4</sub> in | 120 mm |

## Ophthalmology (Hand-Held)



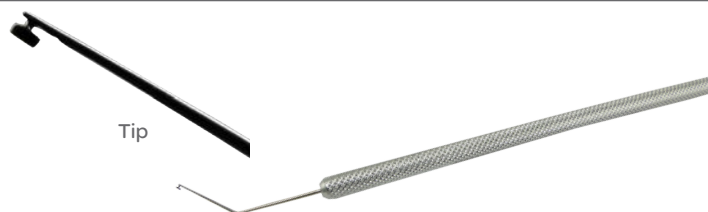
60-1937

### Guyton-Park Speculum

Horizontal Suture Posts

| CODE    | DESCRIPTION                    | LENGTH                           |       |
|---------|--------------------------------|----------------------------------|-------|
| 60-1937 | 14 mm Wide, Fenestrated Blades | 3 <sup>3</sup> / <sub>8</sub> in | 86 mm |
| 60-1938 | 14 mm Wide, Solid Blades       | 3 <sup>3</sup> / <sub>8</sub> in | 86 mm |

## Ophthalmology (Lens Capsule)



Tip

### Mackool Lens Capsule Retractor

| CODE    | DESCRIPTION                                                  | LENGTH                           |        |
|---------|--------------------------------------------------------------|----------------------------------|--------|
| 60-1943 | 1 mm Hook Suspended 0.5 mm From End of Tip, 45° Angled Shaft | 4 <sup>3</sup> / <sub>4</sub> in | 120 mm |

## Ophthalmology (Lid)

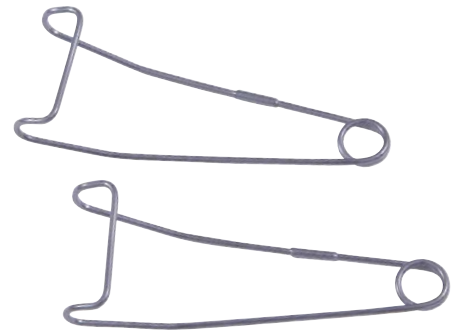


60-1404

### Desmarres Lid Retractor

| CODE    | SIZE   | WIDTH | LENGTH                           |        |
|---------|--------|-------|----------------------------------|--------|
| 60-1404 | Size 0 | 11 mm | 5 <sup>1</sup> / <sub>2</sub> in | 140 mm |
| 60-1405 | Size 1 | 13 mm | 5 <sup>1</sup> / <sub>2</sub> in | 140 mm |
| 60-1406 | Size 2 | 15 mm | 5 <sup>1</sup> / <sub>2</sub> in | 140 mm |
| 60-1407 | Size 3 | 16 mm | 5 <sup>1</sup> / <sub>2</sub> in | 140 mm |
| 60-1403 | Size 4 | 18 mm | 5 <sup>1</sup> / <sub>2</sub> in | 140 mm |

## Ophthalmology (Lid)



### Jaffe Lid Retractor

| CODE    | WIDTH     |
|---------|-----------|
| 60-1408 | 9 mm Wide |



### Hardy™ Lip Retractor

| CODE    |
|---------|
| 80-1337 |

## Ophthalmology (Orbital)



### Schepens Orbital Retractor

| CODE    | DESCRIPTION                                                  | LENGTH      |
|---------|--------------------------------------------------------------|-------------|
| 60-5008 | Smooth 14 x 57 mm, Blade with Notched End, 4.5 mm Wide Notch | 6 in 152 mm |



## Ophthalmology (Orbital)

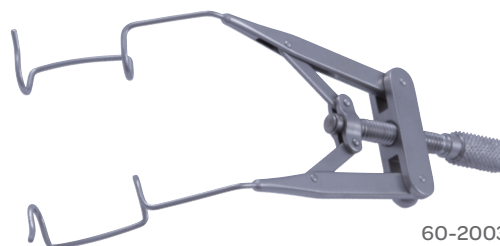


63-4003

### Sewall Orbital Retractor

| CODE    | BLADE    | LENGTH                                  |
|---------|----------|-----------------------------------------|
| 63-4003 | 7x52 mm  | 6 <sup>3</sup> / <sub>4</sub> in 170 mm |
| 63-4004 | 9x51 mm  | 6 <sup>3</sup> / <sub>4</sub> in 170 mm |
| 63-4005 | 11x50 mm | 6 <sup>3</sup> / <sub>4</sub> in 170 mm |

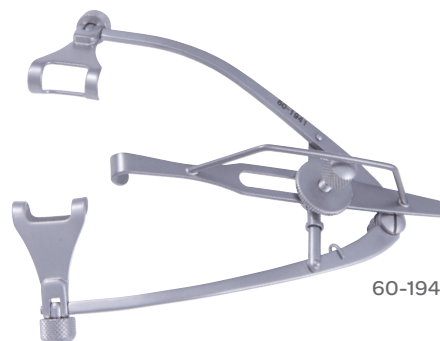
## Ophthalmology (Self-Retaining)



60-2003

### Lieberman Open Wire Speculum

| CODE    | DESCRIPTION         | DIMENSION                        |
|---------|---------------------|----------------------------------|
| 60-2003 | K-Wire, Open Blades | 17 mm                            |
| 60-2004 | V-Wire, Open Blades | 17 mm                            |
| 60-2005 | Closed Blades       | 8 <sup>1</sup> / <sub>2</sub> in |



60-1941

### Mauernsee-Park Speculum

Fenestrated Blades

| CODE    | BLADE SPREAD | BLADE WIDTH | LENGTH                                 |
|---------|--------------|-------------|----------------------------------------|
| 60-1941 | 43 mm        | 14 mm       | 3 <sup>1</sup> / <sub>4</sub> in 83 mm |

## Orthopaedic (Bones)



77-1240

### Aufranc Cobra Retractor

| CODE    | DESCRIPTION                 | LENGTH  |        |
|---------|-----------------------------|---------|--------|
| 77-1242 | 10 mm, Serrated Blunt Tip   | 10 ½ in | 265 mm |
| 77-1240 | 10 mm, Serrated Pointed Tip | 10 ½ in | 265 mm |
| 77-1243 | 10 mm, Smooth Blunt Tip     | 10 ½ in | 265 mm |
| 77-1241 | 10 mm, Smooth Pointed Tip   | 10 ½ in | 265 mm |



### Aufricht Retractor

| CODE      | DESCRIPTION                                         | LENGTH    |  |
|-----------|-----------------------------------------------------|-----------|--|
| 67-2137FO | 7 mm Wide, with Fiber Optic Light Guide and Suction | 5 x 95 mm |  |



77-1204

### Bennett Bone Retractor

| CODE    | WIDTH | LENGTH |        |
|---------|-------|--------|--------|
| 77-1204 | 45 mm | 9 ½ in | 240 mm |
| 77-1206 | 65 mm | 9 ½ in | 240 mm |



### Capsule Retractor

| CODE    | DESCRIPTION                | LENGTH |        |
|---------|----------------------------|--------|--------|
| 77-1005 | 3 Prong, Sharp, 22 mm Wide | 10 in  | 250 mm |

## Orthopaedic (Bones)



### Cobra Retractor

37-4106

| CODE    | DESCRIPTION | TIP     |        |
|---------|-------------|---------|--------|
| 37-4106 | Blunt       | 10 ¼ in | 260 mm |
| 37-4105 | Sharp       | 10 ¼ in | 260 mm |



77-1050

### Hohmann Mini Retractor

| CODE    | WIDTH | LENGTH |        |
|---------|-------|--------|--------|
| 77-1050 | 6 mm  | 6 ¼ in | 160 mm |
| 77-1052 | 8 mm  | 6 ¼ in | 160 mm |



77-1240

### Hohmann Retractor

| CODE    | DESCRIPTION                     | LENGTH |        |
|---------|---------------------------------|--------|--------|
| 77-1122 | 15 mm Wide, without Finger Ring | 6 in   | 150 mm |
| 77-1008 | 8 mm Wide with Finger Ring      | 8 ½ in | 215 mm |
| 77-1110 | 10 mm Wide with Finger Ring     | 8 ¾ in | 220 mm |
| 77-1120 | 16 mm Wide with Finger Ring     | 9 ½ in | 240 mm |
| 77-1118 | 18 mm Wide with Finger Ring     | 9 ½ in | 240 mm |
| 77-1167 | 22 mm Wide with Finger Ring     | 11 in  | 280 mm |
| 77-1124 | 24 mm Wide, with Finger Ring    | 9 ½ in | 240 mm |
| 77-1125 | 25 mm Wide with Finger Ring     | 9 ½ in | 240 mm |
| 77-1142 | 42 mm Wide with Finger Ring     | 9 ½ in | 240 mm |
| 77-1165 | 62 mm Wide with Finger Ring     | 10 in  | 250 mm |



### Murphy-Lane Bone Retractor

| CODE    | LENGTH       |
|---------|--------------|
| 77-1193 | 12 in 304 mm |

## Ophthalmology (Hand)



20-1776

### Hayes Hand Retractor

| CODE    | WIDTH | LENGTH |        |
|---------|-------|--------|--------|
| 20-1776 | 3 mm  | 6 ¼ in | 160 mm |
| 20-1777 | 6 mm  | 6 ¼ in | 160 mm |



### House Hand Retractor

| CODE    | DESCRIPTION    | LENGTH |        |
|---------|----------------|--------|--------|
| 61-0600 | Hand Retractor | 6 in   | 150 mm |



### Kasdan Hand Retractor

| CODE    | DESCRIPTION  | LENGTH |        |
|---------|--------------|--------|--------|
| 20-0540 | Double-Ended | 6 ¼ in | 160 mm |

## Orthopaedic (Hand-Held)



### McElroy Angulated Retractor

| CODE    | DESCRIPTION                                   | LENGTH |        |
|---------|-----------------------------------------------|--------|--------|
| 77-1191 | T-Handle Retractor, 5 in (120 mm) Blade Depth | 7 in   | 178 mm |

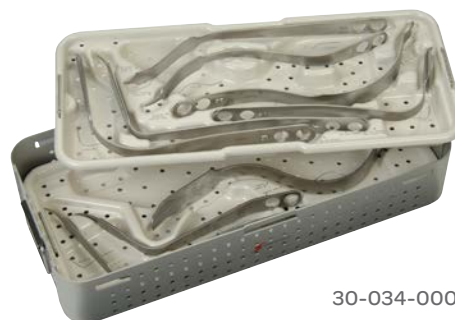
## Orthopaedic (Hip)



30-038-000

### Complete Charnley Retractor Set

| CODE       | DESCRIPTION                                     | QTY |
|------------|-------------------------------------------------|-----|
| 30-038-000 | Charnley Retractor Set, Includes the Following: |     |
| 13-045-008 | Standard Charnley Retractor Frame               | 1   |
| 13-045-001 | Standard Charnley Retractor                     | 2   |
| 13-045-002 | Large Standard Charnley Retractor               | 2   |
| 13-045-003 | Serrated Charnley Retractor Blade               | 2   |
| 13-045-004 | Threaded Locking Screw                          | 6   |
| 13-045-000 | Optional Frame: Small Charnley Retractor Frame  | 1   |



30-034-000

### Complete Hip Retractor System

| CODE       | DESCRIPTION                                   |
|------------|-----------------------------------------------|
| 30-034-000 | Hip Retractor System, includes the following: |
| 13-023-000 | Hip Retractor, 25 mm Blade Part               |
| 13-024-000 | Hip Retractor, Blunt Tip                      |
| 13-025-000 | Offset Retractor, 32 mm Blade                 |
| 13-026-000 | Long Hohmann                                  |
| 13-027-000 | Long Hohmann, Curved, Short Blade             |
| 13-028-000 | Long Hohmann, Curved, Long Blade              |
| 13-029-000 | Small Hohmann                                 |
| 13-031-000 | Femoral Elevator                              |
| 11-078-000 | Hybrid Case                                   |



77-1251

### Blount Hip Retractor

| CODE    | DESCRIPTION  | LENGTH |        |
|---------|--------------|--------|--------|
| 77-1251 | Single Prong | 10 in  | 250 mm |
| 77-1252 | Double Prong | 10 in  | 250 mm |

## Orthopaedic (Hip)



### Charnley Initial Incision Retractor

24-2000

| CODE      | DESCRIPTION       |
|-----------|-------------------|
| 24-2000   | Complete set      |
| 24-2000C  | Chain             |
| 24-2000CW | Chain with Weight |



### Charnley Retractor Blade

| CODE     | DESCRIPTION   | LENGTH | DEPTH |
|----------|---------------|--------|-------|
| 24-2019A | Short Angled  | 1 in   | 1 in  |
| 24-2014  | Short Angled  | 1 in   | 2 in  |
| 24-2004A | Short Angled  | 1 in   | 2½ in |
| 24-2022A | Short Angled  | 1 in   | 3 in  |
| 24-2009A | Short Angled  | 1 in   | 4 in  |
| 24-2010A | Long Angled   | 1 in   | 4 in  |
| 24-2005A | Long Angled   | 1 in   | 2½ in |
| 24-2016A | Long Angled   | 1 in   | 3 in  |
| 24-2010A | Long Angled   | 1 in   | 4 in  |
| 24-2012  | Short Rounded | 1 in   | 1¼ in |
| 24-2004  | Short Rounded | 1 in   | 2½ in |
| 24-2009  | Short Rounded | 1 in   | 4 in  |
| 24-2009M | Short Rounded | 1 in   | 6 in  |
| 24-2011  | Long Rounded  | 1 in   | 1½ in |
| 24-2017  | Long Rounded  | 1 in   | 1½ in |
| 24-2005  | Long Rounded  | 1 in   | 2½ in |
| 24-2010  | Long Rounded  | 1 in   | 4 in  |

## Orthopaedic (Hip)



13-023-000

### Minimally Invasive Hip Retractor

| CODE       | SIZE       | DESCRIPTION                      |
|------------|------------|----------------------------------|
| 13-023-000 | #1, Curved | 25 mm Blade Pointed Tip          |
| 13-024-000 | #2, Curved | Blunt Tip                        |
| 13-025-000 | #3, Offset | 32 mm Blade                      |
| 13-026-000 | #4         | Long Hohmann                     |
| 13-027-000 | #5         | Long Hohmann, Short Curved Blade |
| 13-029-000 | #7         | Long Hohmann, Narrow Blade       |
| 13-030-000 | #8         | Small Hohmann                    |

## Orthopaedic (Hip & Shoulder)



### Meyering Hip & Shoulder Skid

| CODE    | LENGTH       |
|---------|--------------|
| 77-1190 | 13 in 329 mm |

## Orthopaedic (Humeral)



### Bristow-Bankart Humeral Retractor

| CODE    | DESCRIPTION    | DIMENSIONS  |
|---------|----------------|-------------|
| 77-1011 | 2 Prong, Blunt | 25 x 102 mm |

## Orthopaedic (Humeral Head)



### Humeral Head Retractor

| CODE    | WIDTH | LENGTH                           |        |
|---------|-------|----------------------------------|--------|
| 77-1013 | 18 mm | 8 <sup>3</sup> / <sub>4</sub> in | 200 mm |

## Orthopaedic (Knee)



13-035-000

### Minimally Invasive Knee Retractor

| CODE       | SIZE | DESCRIPTION                    |
|------------|------|--------------------------------|
| 30-032-000 |      | System includes the following: |
| 13-035-000 | #1   | Small Hohmann                  |
| 13-036-000 | #2   | Large Hohmann                  |
| 13-037-000 | #3   | Condylar Retractor             |
| 13-038-000 | #4   | Superior Retractor             |
| 13-039-000 | #5   | Patellar Retractor             |
| 13-040-000 | #6   | Collateral Retractor, Left     |
| 13-041-000 | #7   | Collateral Retractor, Right    |
| 13-042-000 | #8   | Soft Tissue Retractor          |



### Worland PCL Retractor

| CODE       | DESCRIPTION | LENGTH                            |        |
|------------|-------------|-----------------------------------|--------|
| 13-001-000 | 13 mm Tip   | 12 <sup>1</sup> / <sub>2</sub> in | 316 mm |



## Orthopaedic (Knee)



78-5998

### Doane "Z" Knee Retractor

| CODE    | DESCRIPTION  | DIMENSIONS      | LENGTH |
|---------|--------------|-----------------|--------|
| 78-5998 | Double-Ended | 11 x 57 x 69 mm | 152 mm |
| 78-5999 | Double-Ended | 11 x 63 x 76 mm | 152 mm |



77-1189

### Hohmann Knee Retractor

| CODE    | DESCRIPTION | LENGTH       |
|---------|-------------|--------------|
| 77-1189 | Up 90°      | 16 in 405 mm |
| 77-1188 | Up 120°     | 16 in 405 mm |



77-5621

### Smillie Knee Retractor

| CODE    | DESCRIPTION W X D        | LENGTH        |
|---------|--------------------------|---------------|
| 77-5610 | 13 x 18 mm               | 5 ½ in 140 mm |
| 77-5611 | 13 x 25 mm               | 5 ½ in 140 mm |
| 77-5621 | 13 x 55mm, Double Curved | 5 ½ in 140 mm |
| 77-5601 | 19 x 30 mm               | 5 ½ in 140 mm |
| 77-5602 | 19 x 45 mm               | 5 ½ in 140 mm |
| 77-5603 | 19 x 60 mm               | 5 ½ in 140 mm |

## Orthopaedic (Shoulder)



77-1006

### Fukuda Shoulder Retractor

| CODE    | DESCRIPTION | LENGTH |        |
|---------|-------------|--------|--------|
| 77-1006 | 38 x 81 mm  | 7 in   | 178 mm |
| 77-1007 | 32 x 81 mm  | 7 in   | 178 mm |

## Plastic Surgery (Brow Lift)



22-2008

### Corneal Brow Lift Retractor

| CODE    | DESCRIPTION    | LENGTH |        |
|---------|----------------|--------|--------|
| 22-2008 | 7 Prong        | 7 in   | 178 mm |
| 20-2010 | 7 Prong, Sharp | 7 in   | 178 mm |

## Plastic Surgery (Hand)



Tip



20-6103

### Plastic/Hand Surgery Retractor

| CODE    | DESCRIPTION    | LENGTH |        |
|---------|----------------|--------|--------|
| 20-6101 | 1 Prong, Blunt | 6 ¾ in | 170 mm |
| 20-6102 | 2 Prong, Blunt | 6 ¾ in | 170 mm |
| 20-6103 | 3 Prong, Blunt | 6 ¾ in | 170 mm |
| 20-6104 | 4 Prong, Blunt | 6 ¾ in | 170 mm |

## Plastic Surgery (Hand)

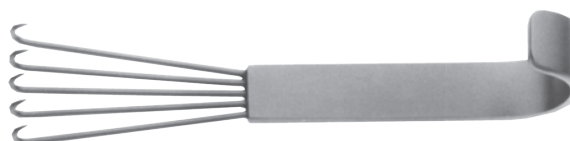


20-6004

### Plastic/Hand Surgery Retractor

| CODE    | DESCRIPTION    | WIDTH | LENGTH                           |        |
|---------|----------------|-------|----------------------------------|--------|
| 20-6001 | 1 Prong, Sharp | 9 mm  | 6 <sup>3</sup> / <sub>4</sub> in | 170 mm |
| 20-6002 | 2 Prong, Sharp | 5 mm  | 6 <sup>3</sup> / <sub>4</sub> in | 170 mm |
| 20-6003 | 3 Prong, Sharp | 8 mm  | 6 <sup>3</sup> / <sub>4</sub> in | 170 mm |
| 20-6004 | 4 Prong, Sharp | 11 mm | 6 <sup>3</sup> / <sub>4</sub> in | 170 mm |

## Plastic Surgery (Hand-Held)



### Anderson Bear Claw Retractor

| CODE    | DESCRIPTION | LENGTH                           |        |
|---------|-------------|----------------------------------|--------|
| 22-2005 | 5 Prong     | 4 <sup>3</sup> / <sub>4</sub> in | 120 mm |

## Prostatic



51-9504

### Young Prostatic Retractor

| CODE    | DESCRIPTION           | DIMENSIONS                                                       |            | LENGTH                           |        |
|---------|-----------------------|------------------------------------------------------------------|------------|----------------------------------|--------|
| 51-9501 | Lateral Notched Blade | <sup>7</sup> / <sub>16</sub> x 2 in                              | 11 x 50 mm | 8 <sup>1</sup> / <sub>4</sub> in | 210 mm |
| 51-9503 | Notched Blade         | 1 x 1 in                                                         | 25 x 25 mm | 8 <sup>1</sup> / <sub>4</sub> in | 210 mm |
| 51-9504 | Bifurcated Blade      | 1 <sup>3</sup> / <sub>4</sub> x 1 <sup>1</sup> / <sub>2</sub> in | 44 x 38 mm | 8 <sup>1</sup> / <sub>4</sub> in | 210 mm |

## Rectal (Hand-Held)



### Barr Anal Retractor

| CODE    | DESCRIPTION                | DIMENSIONS     |            | LENGTH      |
|---------|----------------------------|----------------|------------|-------------|
| 50-7325 | Self-Retaining with Blades | 2 3/4 x 7/8 in | 70 x 22 mm | 8 in 200 mm |

## Rectal (Self-Retaining)

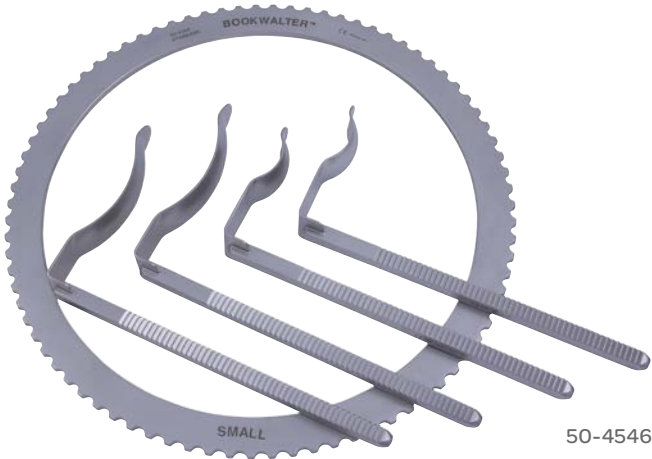


50-7615

### Brinkerhoff Rectal Speculum

| CODE    | DESCRIPTION | DIMENSIONS     |            | LENGTH   |        |
|---------|-------------|----------------|------------|----------|--------|
| 50-7613 | Small       | 1/2 in x 1 in  | 12 x 25 mm | 4 1/2 in | 114 mm |
| 50-7615 | Medium      | 5/8 x 1 in     | 15 x 25 mm | 4 1/2 in | 114 mm |
| 50-7619 | Large       | 3/4 x 1 1/4 in | 19 x 31 mm | 4 1/2 in | 114 mm |

# Rectal (Bookwalter®)



## Bookwalter® Rectal Accessory Kit

Kit Includes: 1 Ring and 2 Blades

| CODE    | DESCRIPTION                     | DIAMETER      | BLADE          | DIMENSIONS            |
|---------|---------------------------------|---------------|----------------|-----------------------|
| 50-4546 | Kit Includes the Following:     |               |                |                       |
| 50-4584 | Bookwalter® Round Rings, Small  | 8 ½ in 216 mm |                |                       |
| 50-4585 | Bookwalter® Rectal Blade, Small |               | 2 7⁄8 in 73 mm | 3 x 7 in 76 x 178 mm  |
| 50-4586 | Bookwalter® Rectal Blade, Large |               | 3 7⁄8 in 98 mm | 4 x 6 in 101 x 152 mm |

Note: Use of this product requires a Bookwalter® Table Post, Bookwalter® Coupler, Bookwalter® Horizontal Bar, and Bookwalter® Ratchet (not included in this accessory set.)

# Rectal



## Hill-Ferguson Rectal Retractor

| CODE    | DIMENSIONS              | LENGTH        |
|---------|-------------------------|---------------|
| 50-9604 | 7⁄8 x ¼ in 22 x 6 mm    | 8 in 200 mm   |
| 50-9605 | 1⁄8 x 3 in 3 x 76 mm    | 8 ½ in 215 mm |
| 50-9606 | 3 x 1 3⁄8 in 76 x 35 mm | 8 ½ in 215 mm |
| 50-9607 | 1 ½ in 38 mm            | 8 ½ in 215 mm |

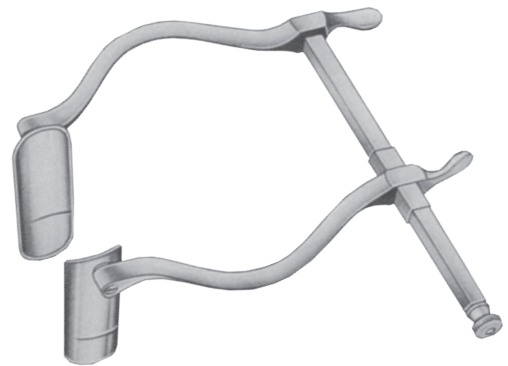
## Rectal



50-9621

## Sawyer Retractor

| CODE    | DESCRIPTION | BLADE DIMENSIONS                                                 |            | LENGTH |        |
|---------|-------------|------------------------------------------------------------------|------------|--------|--------|
| 50-9621 | Retractor   | 1 <sup>1</sup> / <sub>8</sub> x 3 in                             | 28 x 76 mm | 11 in  | 280 mm |
| 50-9622 | Retractor   | 1 <sup>1</sup> / <sub>2</sub> x 3 <sup>1</sup> / <sub>2</sub> in | 38 x 89 mm | 11 in  | 280 mm |



## Smith-Buie Rectal Retractor

| CODE    | DESCRIPTION                        | LENGTH                                  |
|---------|------------------------------------|-----------------------------------------|
| 50-7420 | Self-Retaining, with Swivel Blades | 4 <sup>1</sup> / <sub>2</sub> in 115 mm |

## Redundant Wall



## Redundant Wall Retractor

| CODE    | DESCRIPTION    | BLADE DIMENSIONS                   |             |
|---------|----------------|------------------------------------|-------------|
| 52-0790 | Wall Retractor | <sup>3</sup> / <sub>4</sub> x 5 in | 19 x 127 mm |

Renal (Sinus)



Gilvernet Renal Retractor

| CODE   | DESCRIPTION | LENGTH         | CODE   | DESCRIPTION | LENGTH         |
|--------|-------------|----------------|--------|-------------|----------------|
| 5150-A | 9 mm        | 11 ¼ in 286 mm | 5150-C | 15 mm       | 11 ¼ in 285 mm |
| 5150-B | 11 mm       | 11 ¼ in 286 mm | 5150-D | 18 mm       | 11 ¼ in 285 mm |

Renal (Vein)



Wylie Renal Retractor

| CODE    | DESCRIPTION     | BLADE WIDTH          |
|---------|-----------------|----------------------|
| 54-1795 | Renal Retractor | 1 x 4 in 25 x 102 mm |
| 54-1797 | Renal Retractor | 1 x 7 in 25 x 178 mm |

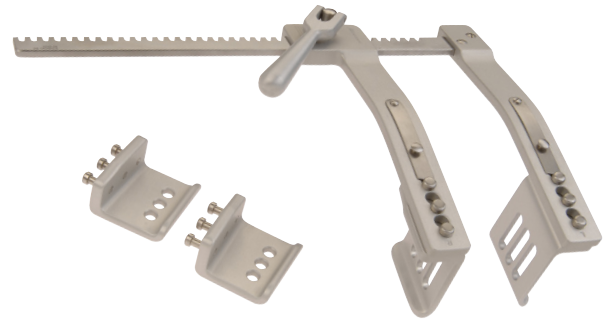
Renal



Universal Ring Wiley Renal Retractor Blade

| CODE     | DESCRIPTION           | DIMENSIONS            |
|----------|-----------------------|-----------------------|
| 58-0084  | Renal Retractor Blade | 1 x 7 in 25 x 178 mm  |
| 58-0084L | Renal Retractor Blade | 1 x 11 in 25 x 279 mm |

## Rib (Self-Retaining)



50-8033

### Burford-Finochietto Rib Retractor

| CODE    | DESCRIPTION                                                       | TOTAL OPENING |        | BLADE                                                                                                                    | ARM LENGTH        |        | LENGTH |        |
|---------|-------------------------------------------------------------------|---------------|--------|--------------------------------------------------------------------------------------------------------------------------|-------------------|--------|--------|--------|
| 50-8133 | Child Model, Self Retaining with Rack and Pinion Action, Aluminum | 6 in          | 152 mm | Large: $1\frac{5}{8} \times 1\frac{7}{8}$ in<br>41 x 48 mm<br>Small: $1\frac{5}{8} \times 1\frac{3}{8}$ in<br>41 x 35 mm | 6 in              | 152 mm | 6 in   | 152 mm |
| 50-8033 | Self-Retaining, Two Sets of Detachable Blades, Curved Arms        | 10 in         | 254 mm | Large: $2\frac{1}{2} \times 2\frac{5}{8}$ in<br>64 x 67 mm<br>Small: $2\frac{1}{2} \times 1\frac{3}{4}$ in<br>64 x 44 mm | $9\frac{1}{2}$ in | 241 mm | 10 in  | 254 mm |
| 50-8031 | Self-Retaining, Two Sets of Detachable Blades, Curved Arms        | 10 in         | 254 mm | Large: $2\frac{1}{2} \times 2\frac{4}{5}$ in<br>64 x 71 mm<br>Small: $2\frac{1}{2} \times 1\frac{3}{5}$ in<br>64 x 41 mm | $9\frac{3}{4}$ in | 248 mm | 10 in  | 254 mm |

## Rib



54-2101

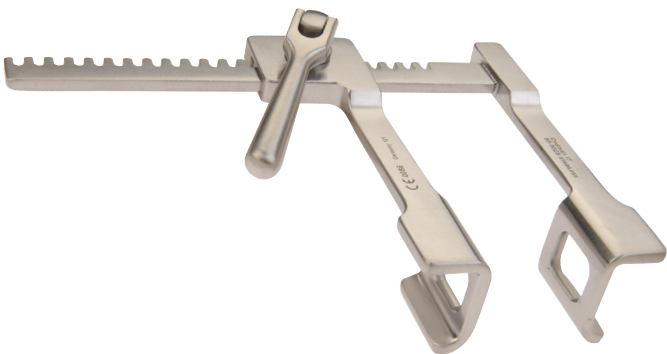
### Cooley Rib Retractor

Aluminum Arms and Blades

| CODE    | DESCRIPTION | BLADE LENGTH      |       | BLADE DEPTH       |       | SPREAD            |        | ARM LENGTH        |        |
|---------|-------------|-------------------|-------|-------------------|-------|-------------------|--------|-------------------|--------|
| 54-2101 | Pediatric   | 1 in              | 25 mm | $\frac{5}{8}$ in  | 16 mm | $4\frac{3}{4}$ in | 121 mm | $3\frac{1}{8}$ in | 79 mm  |
| 54-2100 | Adult       | $1\frac{3}{8}$ in | 35 mm | $1\frac{3}{8}$ in | 35 mm | 7 in              | 178 mm | $4\frac{1}{4}$ in | 108 mm |



Rib



Finochietto Rib Retractor

50-5625

Self-Retaining with Rack and Pinion Action

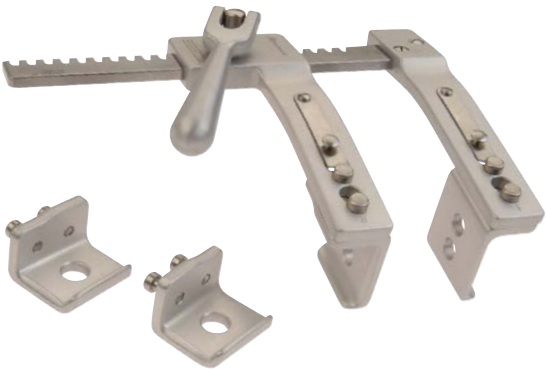
| CODE    | DESCRIPTION | TOTAL OPENING |        | BLADE (W X D) |            | ARM LENGTH |        | LENGTH |        |
|---------|-------------|---------------|--------|---------------|------------|------------|--------|--------|--------|
| 50-5625 | Infant      | 2½ in         | 64 mm  | ¾ x 1 ⅜ in    | 19 x 30 mm | 3 in       | 76 mm  | 2½ in  | 64 mm  |
| 50-8022 | Pediatric   | 6½ in         | 165 mm | 1 ¾ x 1 ¾ in  | 44 x 44 mm | 6 in       | 152 mm | 6 in   | 152 mm |



Haight-Finochietto Rib Retractor

Self-Retaining with Rack and Pinion Action

| CODE    | DESCRIPTION   | TOTAL OPENING |        | BLADE (W X D) |            | ARM LENGTH |       | LENGTH |        |
|---------|---------------|---------------|--------|---------------|------------|------------|-------|--------|--------|
| 50-8028 | Rib Retractor | 4 in          | 102 mm | 1 ¼ x 1 ⅜ in  | 32 x 30 mm | 3 ¼ in     | 83 mm | 4 in   | 102 mm |



Rib Retractor

Infant, Self-Retaining with Rack and Pinion Action, Aluminum

| CODE    | ARM LENGTH | BLADE WIDTH |       | BLADE DEPTH |       | LENGTH |       |
|---------|------------|-------------|-------|-------------|-------|--------|-------|
| 50-5625 | 3 in 76 mm | ¾ in        | 19 mm | 1 ⅜ in      | 21 mm | 2½ in  | 64 mm |

## Rib



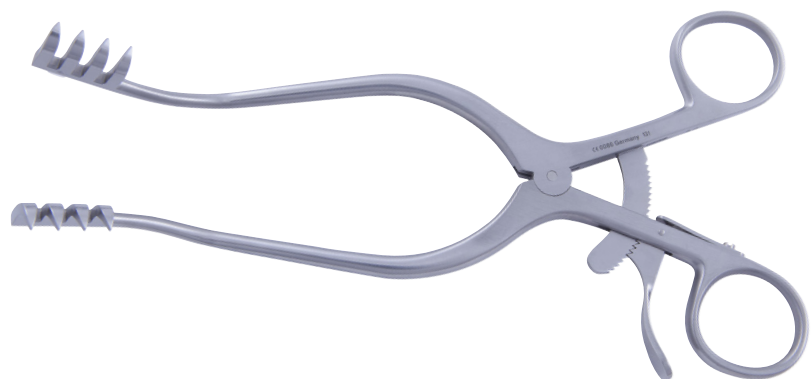
50-8065

## Tuffier Rib Retractors

Self-Retaining

| CODE    | DESCRIPTION      | LENGTH       |              |
|---------|------------------|--------------|--------------|
| 50-8065 | Roughened Blades | 3 x 2 1/2 in | 76 x 64 mm   |
| 50-8064 | Serrated Blades  | 4 3/4 x 6 in | 146 x 152 mm |

## Scalp

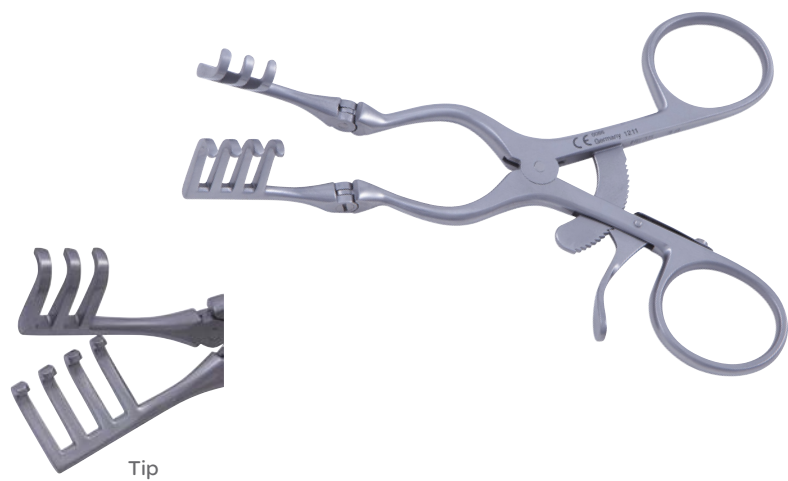


## Anderson-Adson Scalp Retractor

Angular Arms

| CODE    | DESCRIPTION        | BLADE WIDTH |       | BLADE DEPTH |       | TOTAL OPENING |        | LENGTH          |
|---------|--------------------|-------------|-------|-------------|-------|---------------|--------|-----------------|
| 50-1186 | 4 x 4 Sharp Prongs | 3/4 in      | 19 mm | 5/8 in      | 16 mm | 4 1/2 in      | 114 mm | 7 1/2 in 191 mm |

Scalp



Cone Scalp Retractor

| CODE    | DESCRIPTION                                         | LENGTH          |
|---------|-----------------------------------------------------|-----------------|
| 50-1166 | Self-Retaining with Hinged Arms, 3 x 4 Prong, Blunt | 5 3/4 in 146 mm |



24-2670

Contour Scalp Retractor

| CODE    | DESCRIPTION                          | LENGTH          |
|---------|--------------------------------------|-----------------|
| 24-2670 | Angled Arms , 3 x 4 Prong, Blunt     | 5 1/2 in 139 mm |
| 24-2671 | Angled Arms , 3 x 4 Prong, Sharp     | 5 1/2 in 139 mm |
| 50-1220 | 5/8 x 5/8 in, Total Opening 2 1/2 in | 5 1/2 in 139 mm |

## Scalp

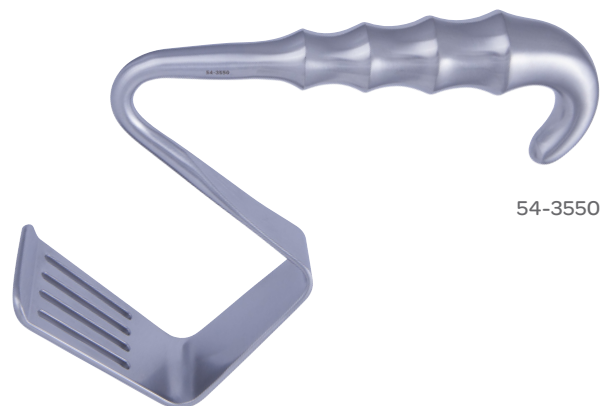


24-1310

## Jansen Scalp Retractor

| CODE    | DESCRIPTION                        | LENGTH             |        |
|---------|------------------------------------|--------------------|--------|
| 24-1310 | 3 x 3 Prong, Sharp                 | 4 in               | 100 mm |
| 24-1320 | 3 x 3 Prong, Blunt                 | 4 in               | 100 mm |
| 24-1321 | 4 x 4 Prong, Blunt                 | 4 $\frac{3}{8}$ in | 112 mm |
| 50-1226 | 4 x 4 Prong, Blunt, Self Retaining | 4 $\frac{5}{8}$ in | 117 mm |

## Scapula



54-3550

## Davidson Scapular Retractor

| CODE    | HANDLE LENGTH |        | BLADE WIDTH        |       | BLADE DEPTH |       |
|---------|---------------|--------|--------------------|-------|-------------|-------|
| 54-3550 | 6 in          | 152 mm | 2 in               | 51 mm | 3 in        | 76 mm |
| 50-8096 | 6 in          | 152 mm | 3 $\frac{1}{2}$ in | 89 mm | 3 in        | 76 mm |

Septum



79-7011

Killian Septum Specula & Killian Septum Speculum  
Self-Retaining

| CODE    | BLADES | LENGTH |        |
|---------|--------|--------|--------|
| 79-7011 | 51 mm  | 5 ¼ in | 133 mm |
| 79-7012 | 63 mm  | 5 ¼ in | 133 mm |
| 79-7013 | 76 mm  | 5 ¼ in | 133 mm |
| 63-6265 | 51 mm  | 6 in   | 152 mm |
| 63-6266 | 64 mm  | 6 in   | 152 mm |
| 63-6267 | 76 mm  | 6 in   | 152 mm |
| 63-6268 | 90 mm  | 6 in   | 152 mm |

Spine (Crockard™)



Crockard™ Transoral Instrument Case

| CODE    | DIMENSIONS                            |
|---------|---------------------------------------|
| 50-1664 | 18 x 10 ½ x 7 ¼ in 457 x 266 x 184 mm |

## Spine (Crockard™)



### Crockard™ Transoral Instrument Set

| CODE    | DESCRIPTION                               | QTY |
|---------|-------------------------------------------|-----|
| 50-1651 | 1 Crockard™ Transoral Retractor Body      | 1   |
| 50-1652 | 1 Large Tongue Retractor Blade            | 1   |
| 50-1653 | 1 Small Tongue Retractor Blade            | 1   |
| 50-1654 | 2 Crockard™ 90 Degree Retractor Blade     | 2   |
| 50-1655 | 2 Crockard™ Curved Retractor              | 2   |
| 50-1656 | 2 Crockard™ Connector Blades              | 2   |
| 50-1657 | 1 Crockard™ Suction Tube Short            | 1   |
| 50-1658 | 1 Crockard™ Suction Tube Long             | 1   |
| 50-1659 | 1 Crockard™ Hard Palate Retractor         | 1   |
| 50-1660 | 1 Pharyngeal Retractor Small              | 1   |
| 50-1661 | 1 Pharyngeal Retractor Large              | 1   |
| 50-1662 | 1 Crockard™ Odontoid Peg Grasping Forceps | 1   |
| 50-1663 | 1 Crockard™ Ligament Grasping Forceps     | 1   |
| 50-1664 | 1 Crockard™ Sterilizing and Storage Case  | 1   |

Spine (Crockard™)



Crockard™ Hard Palate Retractor

| CODE    | DESCRIPTION           | LENGTH     |
|---------|-----------------------|------------|
| 50-1659 | Hard Palate Retractor | 90 x 75 mm |



Crockard™ Mid-Facial Osteotomy Retractor Plate

| CODE    | DESCRIPTION                          | LENGTH      |
|---------|--------------------------------------|-------------|
| 50-1668 | Mid-Facial Osteotomy Retractor Plate | 6 in 152 mm |

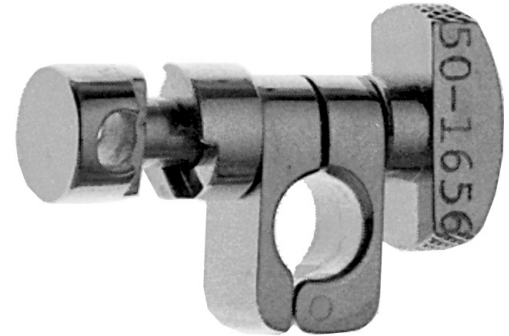


50-1660

Crockard™ Pharyngeal Retractor

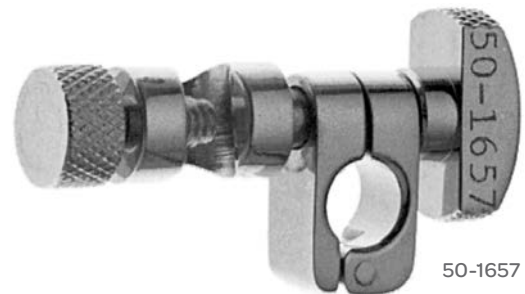
| CODE    | DESCRIPTION |
|---------|-------------|
| 50-1660 | Small       |
| 50-1661 | Large       |

## Spine (Cervical)



### Crockard™ Pharyngeal Retractor

| CODE    | DESCRIPTION                         |
|---------|-------------------------------------|
| 50-1656 | Crockard™ Retractor Blade Connector |



50-1657

### Crockard™ Suction Tube Holder

| CODE    | DESCRIPTION |
|---------|-------------|
| 50-1657 | Short       |
| 50-1658 | Long        |



50-1653

### Crockard™ Tongue Retractor Blade

| CODE    | DESCRIPTION |
|---------|-------------|
| 50-1653 | Small       |
| 50-1652 | Large       |



Spine (Cervical)



Crockard™ Transoral Retractor Body

| CODE    | DESCRIPTION              |
|---------|--------------------------|
| 50-1651 | Transoral Retractor Body |



Cervical Retractor Set

| CODE    | DESCRIPTION                                        | LENGTH                 |
|---------|----------------------------------------------------|------------------------|
| 50-1390 | Small, Self-Retaining with 7 Pairs of Blunt Blades | 6 x 3 ¾ in 152 x 95 mm |



Cervical Retractor

| CODE    | DESCRIPTION                                                                             | LENGTH     |
|---------|-----------------------------------------------------------------------------------------|------------|
| 50-1380 | Large, Self-Retaining with Seven Pairs of Sharp Blades<br>Total Opening: 4 ½ in (114mm) | 10in 254mm |
| 57-5660 | Hinged Frame, 90 mm Spread                                                              |            |
| 57-5662 | Hinged Frame Only, Hinged Arms, 90 mm Spread                                            |            |
| 57-5661 | Hinged Frame Only, Rigid Arms                                                           |            |
| 57-5659 | Rigid Frame                                                                             |            |
| 57-5550 | One Prong, Blunt                                                                        |            |

## Spine (Cervical)



50-1383

### Cervical Retractor Blade

Sharp, Four Prong, for use with 50-1380

| CODE    | DESCRIPTION |
|---------|-------------|
| 50-1381 | 25 mm Blade |
| 50-1382 | 30 mm Blade |
| 50-1383 | 35 mm Blade |
| 50-1384 | 40 mm Blade |
| 50-1385 | 45 mm Blade |
| 50-1386 | 50 mm Blade |
| 50-1387 | 55 mm Blade |



50-1392

### Cervical Retractor Blade

Blunt, for use with 50-1390

| CODE    | DESCRIPTION |
|---------|-------------|
| 50-1391 | 25 mm       |
| 50-1392 | 30 mm       |
| 50-1393 | 35 mm       |
| 50-1394 | 40 mm       |
| 50-1395 | 45 mm       |
| 50-1396 | 50 mm       |
| 50-1397 | 55 mm       |

## Spine (Cervical)



57-5511

### Cervical Retractor Blades, Medial with Teeth

Carbon Fiber Radiolucent Blades, Ball Snap Closure, for Use with Cervical Retractors: 57-5659, 57-5660, 57-5661 and 57-5662.

| CODE    | DESCRIPTION |
|---------|-------------|
| 57-5510 | 40 x 23 mm  |
| 57-5511 | 45 x 23 mm  |
| 57-5512 | 50 x 23 mm  |
| 57-5513 | 55 x 23 mm  |
| 57-5514 | 60 x 23 mm  |
| 57-5515 | 65 x 23 mm  |

### Cervical Retractor Blades, Lateral with Teeth

Carbon Fiber Radiolucent Blades, Ball Snap Closure

| CODE    | DESCRIPTION |
|---------|-------------|
| 57-5516 | 40 x 23 mm  |
| 57-5517 | 45 x 23 mm  |
| 57-5518 | 50 x 23 mm  |
| 57-5520 | 55 x 23 mm  |
| 57-5521 | 60 x 23 mm  |
| 57-5519 | 65 x 23 mm  |

## Spine (Cervical)



57-5523

### Cervical Retractor Blades, Longitudinal Blades, Blunt

Carbon Fiber Radiolucent Blades, Ball Snap Closure

| CODE    | DESCRIPTION |
|---------|-------------|
| 57-5522 | 40 x 23 mm  |
| 57-5523 | 45 x 23 mm  |
| 57-5524 | 50 x 23 mm  |
| 57-5525 | 55 x 23 mm  |
| 57-5526 | 60 x 23 mm  |
| 57-5527 | 65 x 23 mm  |



57-5530

### Cervical Retractor Blades

Stainless Steel, Ball Snap Closure, Longitudinal Blades, Blunt

| CODE    | DESCRIPTION |
|---------|-------------|
| 57-5530 | 40 x 23 mm  |
| 57-5531 | 45 x 23 mm  |
| 57-5532 | 50 x 23 mm  |
| 57-5533 | 55 x 23 mm  |
| 57-5534 | 60 x 23 mm  |

### Cervical Retractor Blades

Stainless Steel, Ball Snap Closure, Fenestrated Blades, Blunt

| CODE    | DESCRIPTION |
|---------|-------------|
| 57-5535 | 50 x 25 mm  |
| 57-5536 | 60 x 25 mm  |

## Spine (Cervical)



57-5665

### Cervical Retractor Blade

Stainless Steel, Ball Snap Closure, for use with 57-5759, 57-5760, 57-5761 and 57-5762

| CODE     | DESCRIPTION                          |
|----------|--------------------------------------|
| 57-5665  | Medial Blades with Teeth 40 x 23 mm  |
| 57-5666  | Medial Blades with Teeth 45 x 23 mm  |
| 57-5667  | Medial Blades with Teeth 50 x 23 mm  |
| 57-5668  | Medial Blades with Teeth 55 x 23 mm  |
| 57-5669  | Medial Blades with Teeth 60 x 23 mm  |
| 57-5665L | Lateral Blades with Teeth 40 x 23 mm |
| 57-5666L | Lateral Blades with Teeth 45 x 23 mm |
| 57-5667L | Lateral Blades with Teeth 50 x 23 mm |
| 57-5668L | Lateral Blades with Teeth 55 x 23 mm |
| 57-5669L | Lateral Blades with Teeth 60 x 23 mm |



50-1356

### Cervical Retractor Body

| CODE    | DESCRIPTION |
|---------|-------------|
| 50-1356 | Small       |
| 50-1346 | Large       |

## Spine (Cervical)



### Cervical Retractor

| CODE    | DESCRIPTION            | LENGTH     |
|---------|------------------------|------------|
| 57-5602 | Double-Hinge Retractor | 45 x 23 mm |

## Spine (Decompression)



57-5205

### Cushing Decompression Retractor

| CODE    | DESCRIPTION | LENGTH      |
|---------|-------------|-------------|
| 57-5205 | Fenestrated | 8 in 203 mm |

## Spine (Dural)

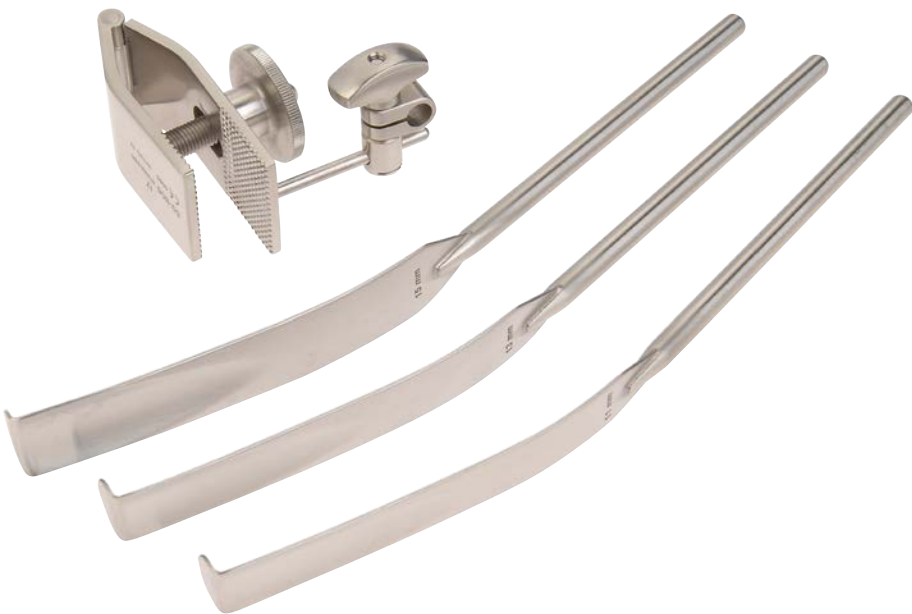


46-3012

### 90° Dural Suction Retractor

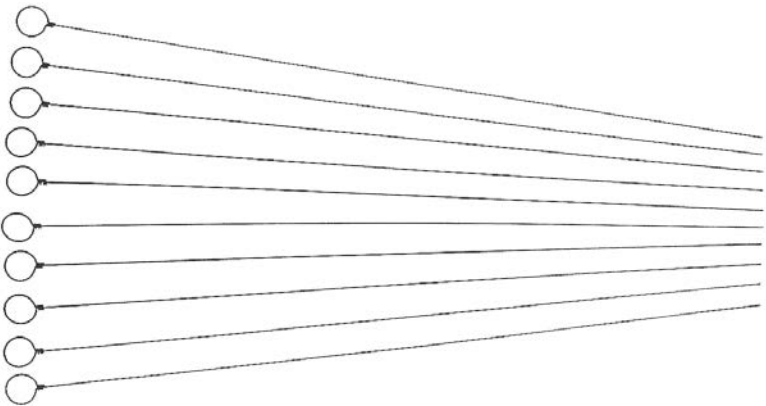
| CODE    | WORKING DISTANCE                        | TIP WIDTH                             | TIP DEPTH                           |
|---------|-----------------------------------------|---------------------------------------|-------------------------------------|
| 46-3012 | 4 <sup>3</sup> / <sub>4</sub> in 120 mm | <sup>9</sup> / <sub>32</sub> in 8 mm  | <sup>1</sup> / <sub>4</sub> in 6 mm |
| 46-3013 | 4 <sup>3</sup> / <sub>4</sub> in 120 mm | <sup>3</sup> / <sub>8</sub> in 9.5 mm | <sup>1</sup> / <sub>4</sub> in 6 mm |
| 46-3014 | 5 <sup>3</sup> / <sub>4</sub> in 146 mm | <sup>1</sup> / <sub>4</sub> in 6 mm   | <sup>1</sup> / <sub>4</sub> in 6 mm |
| 46-3015 | 5 <sup>3</sup> / <sub>4</sub> in 146 mm | <sup>3</sup> / <sub>8</sub> in 9.5 mm | <sup>1</sup> / <sub>4</sub> in 6 mm |

Spine (Dural)



Dural Retractor

| CODE    | DESCRIPTION                                                                                  | LENGTH          |
|---------|----------------------------------------------------------------------------------------------|-----------------|
| 50-1105 | Self-Retaining with Three Malleable Blades, 4 in 102 mm<br>Blade Widths: 11 mm, 13 mm, 15 mm | 8 1/4 in 210 mm |



Wire Styles

| CODE    | DESCRIPTION                                                 |
|---------|-------------------------------------------------------------|
| 46-4000 | Used with Dural Suction Retractors for Cleaning and Storage |

## Spine (Hand-Held)



### Blade Retractor With Lip

57-5498

Add "M" to Code Number for Blade without Lip

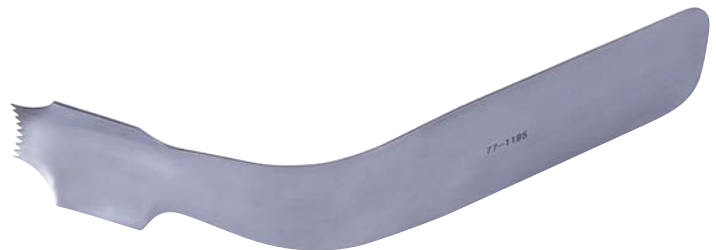
| CODE    | DESCRIPTION | LENGTH |        |
|---------|-------------|--------|--------|
| 57-5497 | 13 mm       | 7 ½ in | 191 mm |
| 57-5498 | 18 mm       | 7 ½ in | 191 mm |
| 57-5499 | 20 mm       | 7 ½ in | 191 mm |
| 57-5500 | 23 mm       | 7 ½ in | 191 mm |



63-4017

### Converse Blade Retractor

| CODE    | DESCRIPTION | LENGTH |       |
|---------|-------------|--------|-------|
| 63-4017 | 9 x 18 mm   | 3 ¾ in | 95 mm |
| 63-4018 | 12 x 21 mm  | 3 ¾ in | 95 mm |
| 63-4019 | 12 x 38 mm  | 3 ¾ in | 95 mm |
| 63-4020 | 12 x 53 mm  | 3 ¾ in | 95 mm |



### Goldstein Neck Retractor

| CODE    | DESCRIPTION    | LENGTH |        |
|---------|----------------|--------|--------|
| 77-1195 | Neck Retractor | 8 ½ in | 215 mm |



## Spine (Hand-Held)



50-1085

### Taylor Spinal Retractor

| CODE    | DESCRIPTION | DIMENSIONS                       |        |
|---------|-------------|----------------------------------|--------|
| 57-5407 | 32 x 75mm   | 6 <sup>3</sup> / <sub>4</sub> in | 171 mm |
| 57-5408 | 20 x 75mm   | 6 <sup>3</sup> / <sub>4</sub> in | 171 mm |
| 57-5410 | 32 x 100mm  | 6 <sup>3</sup> / <sub>4</sub> in | 171 mm |
| 57-5413 | 31 x 152mm  | 6 <sup>3</sup> / <sub>4</sub> in | 171 mm |
| 50-1085 | 30 x 76mm   | 7 <sup>1</sup> / <sub>4</sub> in | 184 mm |
| 50-1086 | 32 x 102mm  | 7 <sup>1</sup> / <sub>4</sub> in | 184 mm |

## Spine (Hand-Held Retractor Set)



### Sofield Hand Held Retractor Set

| CODE    | DESCRIPTION            | BLADE LENGTH | HANDLE LENGTH                     |        |
|---------|------------------------|--------------|-----------------------------------|--------|
| 32-3660 | Double-Ended, Set of 6 |              |                                   |        |
| 32-3667 |                        | Clip         | 5 in                              | 127 mm |
| 32-3666 |                        | 114 x 13mm   | 7 <sup>1</sup> / <sub>2</sub> in  | 191mm  |
| 32-3665 |                        | 102 x 19mm   | 8 in                              | 203mm  |
| 32-3664 |                        | 89 x 16mm    | 8 <sup>1</sup> / <sub>16</sub> in | 204mm  |
| 32-3662 |                        | 70 x 13mm    | 8 <sup>1</sup> / <sub>8</sub> in  | 206mm  |
| 32-3661 |                        | 63 x 13mm    | 8 <sup>1</sup> / <sub>4</sub> in  | 210mm  |

## Spine (Hemilaminectomy)



### Valin Hemilaminectomy Retractor Set

Self-Retaining with Rack and Pinion Action

| CODE    | DESCRIPTION                                                                                               | TOTAL OPENING |        |
|---------|-----------------------------------------------------------------------------------------------------------|---------------|--------|
| 50-1120 | Includes the Following: 50-1121: Body, 13-1004C: 2 in Retractor Hook, 13-1008: 1 x 2 ½ in Retractor Blade | 4 ½ in        | 114 mm |

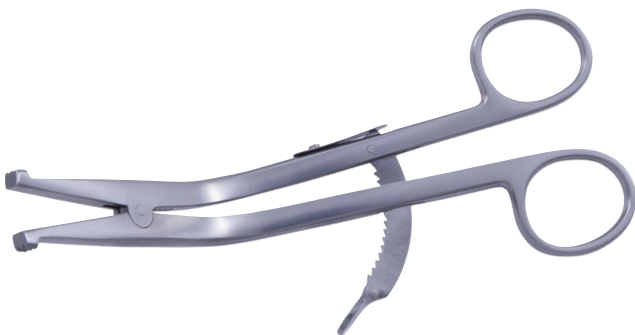


24-4590

### Markham-Meyerding Hemilaminectomy Retractor

| CODE    | DESCRIPTION           | DIMENSIONS |              |
|---------|-----------------------|------------|--------------|
| 24-4591 | Blades On Left Arm    | 25 x 30mm  | 7 ¼ in 184mm |
| 24-4590 | Blades On Right Arm   | 25 x 30mm  | 7 ¼ in 184mm |
| 50-1205 | Self-Retaining, Left  | 25 x 51mm  | 7 in 178 mm  |
| 50-1206 | Self-Retaining, Right | 25 x 51mm  | 7 in 178 mm  |

Spine (Lamina)



Cloward Lamina Retractor

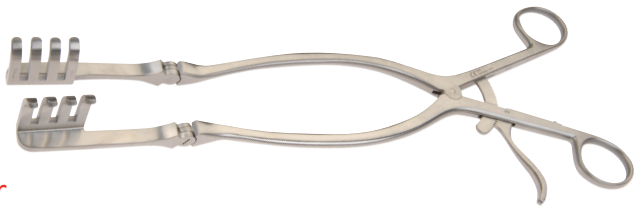
| CODE    | DESCRIPTION  |
|---------|--------------|
| 57-5575 | With Ratchet |

Spine (Laminectomy)



Badgley Laminectomy Retractor  
Self-Retaining

| CODE    | TOTAL OPENING |        | BLADE                |
|---------|---------------|--------|----------------------|
| 50-1255 | 6 3/8 in      | 162 mm | 1 3/4 x 2 in 44 x 51 |



50-1160

Beckman-Adson Laminectomy Retractor  
Self-Retaining with Hinged Arms

| CODE    | DESCRIPTION | BLADE        |            | TOTAL OPENING |        | LENGTH |        |
|---------|-------------|--------------|------------|---------------|--------|--------|--------|
| 50-1161 | Sharp       | 1 in         | 25 mm      | 5 in          | 127 mm | 12 in  | 305 mm |
| 50-1160 | Blunt       | 1 x 1 1/4 in | 25 x 32 mm | 5 in          | 127 mm | 12 in  | 305 mm |
| 50-1162 | Blunt       | 1 x 1 in     | 25 x 25 mm | 5 1/2 in      | 140 mm | 12 in  | 305 mm |

## Spine (Laminectomy)



50-1167

### Cone Laminectomy Retractor

Self-Retaining, Hinged Arms

| CODE    | DESCRIPTION         | LENGTH                           |        |
|---------|---------------------|----------------------------------|--------|
| 50-1167 | 3 x 4 Prongs, Sharp | 6 <sup>3</sup> / <sub>8</sub> in | 162 mm |
| 50-1168 | 3 x 4 Prongs, Sharp | 8 in                             | 203 mm |



50-1190

### Meyerding Laminectomy Retractor

Self-Retaining

| CODE    | BLADE                                                 | TOTAL OPENING                    |       | LENGTH                           |        |
|---------|-------------------------------------------------------|----------------------------------|-------|----------------------------------|--------|
| 50-1190 | 1 in x 2 <sup>1</sup> / <sub>4</sub> in    25 x 57 mm | 3 <sup>3</sup> / <sub>4</sub> in | 95 mm | 6 <sup>1</sup> / <sub>2</sub> in | 165 mm |
| 50-1191 | 1 in x 2 in    25 x 51 mm                             | 3 <sup>3</sup> / <sub>4</sub> in | 95 mm | 6 <sup>1</sup> / <sub>2</sub> in | 165 mm |
| 50-1192 | 1 in x 1 <sup>3</sup> / <sub>4</sub> in    25 x 41 mm | 3 <sup>3</sup> / <sub>4</sub> in | 95 mm | 6 <sup>1</sup> / <sub>2</sub> in | 165 mm |



50-1065

### Meyerding Laminectomy Retractor

| CODE    | DESCRIPTION       | BLADE                                |            | LENGTH                           |        |
|---------|-------------------|--------------------------------------|------------|----------------------------------|--------|
| 50-1065 | Small, Hand Held  | <sup>5</sup> / <sub>8</sub> x 2 in   | 16 x 51 mm | 9 in                             | 229 mm |
| 50-1066 | Medium, Hand Held | 1 x 3 in                             | 25 x 76 mm | 9 <sup>1</sup> / <sub>2</sub> in | 241 mm |
| 50-1067 | Large, Hand Held  | 2 x 3 <sup>1</sup> / <sub>2</sub> in | 51 x 89 mm | 9 <sup>1</sup> / <sub>2</sub> in | 241 mm |

## Spine (Laminectomy)



### Poppen-Gelpi Laminectomy Retractor

| CODE    | DESCRIPTION    | TOTAL OPENING |       | LENGTH |        |
|---------|----------------|---------------|-------|--------|--------|
| 50-1212 | Self-Retaining | 2½ in         | 64 mm | 5½ in  | 140 mm |



### Seletz-Gelpi Laminectomy Retractor

With Arms Bent at Right Angles

| CODE    | DESCRIPTION    | ARM LENGTH | TOTAL OPENING |       | LENGTH |       |
|---------|----------------|------------|---------------|-------|--------|-------|
| 50-1211 | Self-Retaining | 2¾ in      | 65 mm         | 3¾ in | 95 mm  | 6¼ in |

## Spine (Lumbar)

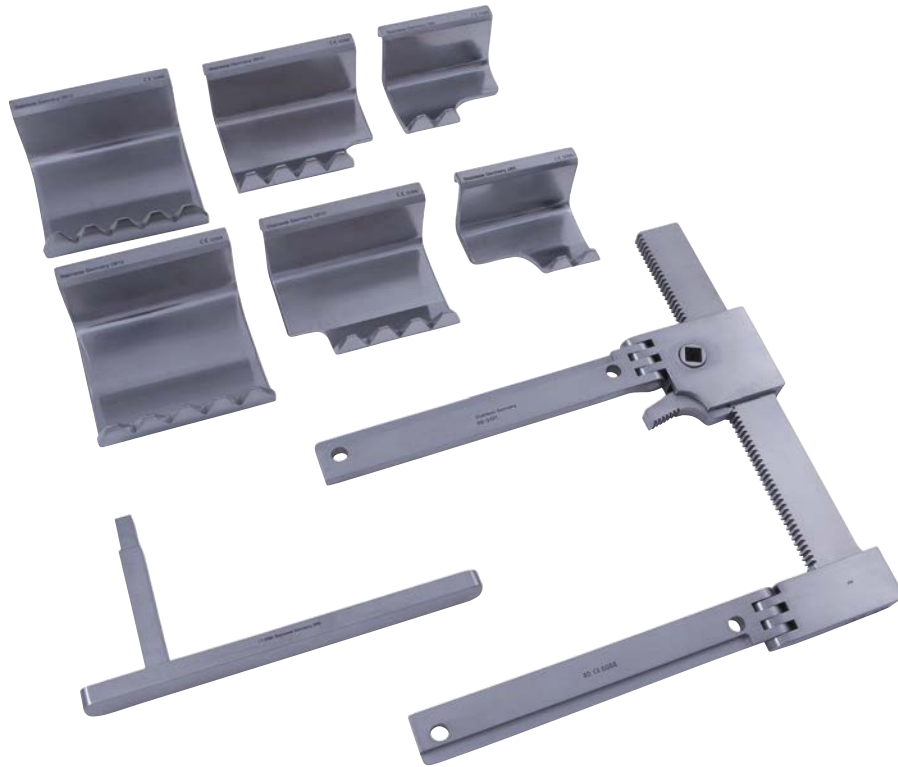


### Caspar Lumbar Speculum

57-5646

| CODE    | DESCRIPTION |
|---------|-------------|
| 57-5646 | 40 mm       |
| 57-5647 | 45 mm       |
| 57-5648 | 50 mm       |
| 57-5649 | 55 mm       |
| 57-5650 | 60 mm       |

## Spine (Karlin™)



## Karlin™ Crank Frame Spinal Retractor Set

| CODE    | DESCRIPTION                                                                                                                                                                                                                                                                                                     | LENGTH                |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 46-3190 | Designed for posterior Lumbar and Thoracic spine surgery. Arm design allows the blades to be pre-positioned in the wound prior to attachment. Blades are interchangeable. Multiple blades may be used on each retractor arm. Maximum width opening 5½ in (140 mm)<br>Crank Frame Spinal Retractor Set Includes: | 2¼ x 2½ in 57 x 64 mm |
| 46-3191 | Crank Frame Retractor Body                                                                                                                                                                                                                                                                                      |                       |
| 46-3192 | Crank Frame Retractor Ratchet                                                                                                                                                                                                                                                                                   |                       |
| 46-3193 | Blade with Sacral Cutout, Left                                                                                                                                                                                                                                                                                  | 1¼ x 1½ in 31 x 38 mm |
| 46-3194 | Blade with Sacral Cutout, Right                                                                                                                                                                                                                                                                                 | 1¼ x 1½ in 31 x 38 mm |
| 46-3195 | Blade with Sacral Cutout, Left                                                                                                                                                                                                                                                                                  | 2¼ x 1¾ in 57 x 44 mm |
| 46-3196 | Blade with Sacral Cutout, Right                                                                                                                                                                                                                                                                                 | 3 x 2½ in 57 x 44 mm  |
| 46-3197 | Blade, Left/Right (2 Blades in Set, 1 with re-order)                                                                                                                                                                                                                                                            | 1¼ x 1½ in 76 x 64 mm |

## Spine (Karlin™)



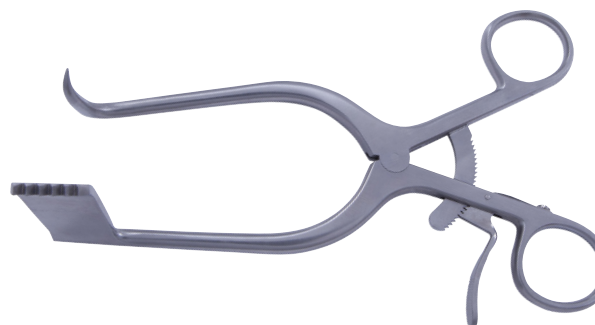
46-3202

### Karlin™ Crank Frame Retractor Blade

Left and Right Pair, Offset

| CODE    | DESCRIPTION | DIMENSIONS                         |
|---------|-------------|------------------------------------|
| 46-3199 |             | $\frac{3}{4}$ x 1 $\frac{1}{4}$ in |
| 46-3200 |             | $\frac{3}{4}$ x 1 $\frac{3}{4}$ in |
| 46-3201 |             | $\frac{3}{4}$ x 2 $\frac{1}{4}$ in |
| 46-3202 |             | $\frac{3}{4}$ x 3 in               |
| 46-3203 |             | $\frac{3}{4}$ x 3 $\frac{1}{4}$ in |
| 46-3204 |             | $\frac{3}{4}$ x 4 in               |
| 46-3205 | Not Offset  | 2 x 4 in                           |

## Spine (Micro Discectomy)



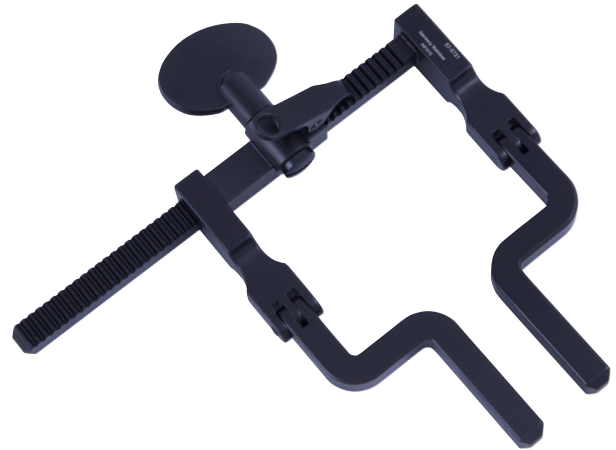
57-2952

### Micro Discectomy Retractor

Self-Retaining

| CODE    | DESCRIPTION | LENGTH     | TOTAL LENGTH |
|---------|-------------|------------|--------------|
| 57-2951 | Left Hook   | 50 x 10 mm | 6 in 152 mm  |
| 57-2952 | Left Hook   | 50 x 20 mm | 6 in 152 mm  |
| 57-2961 | Left Hook   | 60 x 10 mm | 6 in 152 mm  |
| 57-2962 | Left Hook   | 60 x 20 mm | 6 in 152 mm  |
| 57-2971 | Left Hook   | 70 x 10 mm | 6 in 152 mm  |
| 57-2972 | Left Hook   | 70 x 20 mm | 6 in 152 mm  |
| 57-2851 | Right Hook  | 50 x 10 mm | 6 in 152 mm  |
| 57-2852 | Right Hook  | 50 x 20 mm | 6 in 152 mm  |
| 57-2861 | Right Hook  | 60 x 10 mm | 6 in 152 mm  |
| 57-2862 | Right Hook  | 60 x 20 mm | 6 in 152 mm  |
| 57-2871 | Right Hook  | 70 x 10 mm | 6 in 152 mm  |
| 57-2872 | Right Hook  | 70 x 20 mm | 6 in 152 mm  |

## Spine (McCulloch)



57-5721

### McCulloch Hinged Retractor

Black Finish Blades are for use with Black Finish Frames

| CODE     | DESCRIPTION              |
|----------|--------------------------|
| 57-5721  | Frame Only, Black Finish |
| 57-5721T | Frame Only, Titanium     |



57-5720

### McCulloch Rigid Retractor

Frame Only

| CODE     | DESCRIPTION                                    | LENGTH |
|----------|------------------------------------------------|--------|
| 57-5720  | Black blades Must be used with the Black Frame | 50 mm  |
| 57-5720T | Titanium                                       | 60 mm  |



## Spine (McCulloch)



57-5739

### McCulloch Hook Blade

Sold Individually

| CODE       | BLADE WIDTH  | HOOK DEPTH        |       |
|------------|--------------|-------------------|-------|
| 57-5738    | Black Finish | $\frac{3}{4}$ in  | 20 mm |
| 57-5739    | Black Finish | $1\frac{1}{8}$ in | 30 mm |
| 57-5740 mm | Black Finish | $1\frac{1}{2}$ in | 40 mm |
| 57-5741    | Black Finish | $1\frac{7}{8}$ in | 50 mm |
| 57-5742    | Black Finish | $2\frac{3}{8}$ in | 60 mm |
| 57-5743    | Black Finish | $2\frac{3}{4}$ in | 70 mm |
| 57-5751    | Black Finish | $3\frac{1}{8}$ in | 80 mm |



57-5750T

### McCulloch Hook Blade

| CODE     | DESCRIPTION | HOOK DEPTH        |       |
|----------|-------------|-------------------|-------|
| 57-5739T | Titanium    | $1\frac{1}{8}$ in | 30 mm |
| 57-5740T | Titanium    | $1\frac{1}{2}$ in | 40 mm |
| 57-5741T | Titanium    | $1\frac{7}{8}$ in | 50 mm |
| 57-5742T | Titanium    | $2\frac{3}{8}$ in | 60 mm |
| 57-5743T | Titanium    | $2\frac{3}{4}$ in | 70 mm |
| 57-5750T | Titanium    | $3\frac{1}{8}$ in | 80 mm |

## Spine (McCulloch)



57-5746

### McCulloch Multi-Hooked Blade

Sold Individually

| CODE    | DESCRIPTION  | HOOK DEPTH        |       |
|---------|--------------|-------------------|-------|
| 57-5744 | Black Finish | $\frac{3}{4}$ in  | 20 mm |
| 57-5745 | Black Finish | $1\frac{1}{8}$ in | 30 mm |
| 57-5746 | Black Finish | $1\frac{1}{2}$ in | 40 mm |
| 57-5747 | Black Finish | $1\frac{7}{8}$ in | 50 mm |
| 57-5748 | Black Finish | $2\frac{3}{8}$ in | 60 mm |
| 57-5749 | Black Finish | $2\frac{3}{4}$ in | 70 mm |
| 57-5753 | Black Finish | $3\frac{1}{8}$ in | 80 mm |
| 57-5752 | Black Finish | $3\frac{1}{2}$ in | 90 mm |



57-5745T

### McCulloch Multi-Hooked Blade

| CODE     | DESCRIPTION | HOOK DEPTH        |       |
|----------|-------------|-------------------|-------|
| 57-5744T | Titanium    | $\frac{3}{4}$ in  | 20 mm |
| 57-5745T | Titanium    | $1\frac{1}{8}$ in | 30 mm |
| 57-5746T | Titanium    | $1\frac{1}{2}$ in | 40 mm |
| 57-5747T | Titanium    | $1\frac{7}{8}$ in | 50 mm |
| 57-5748T | Titanium    | $2\frac{3}{8}$ in | 60 mm |
| 57-5749T | Titanium    | $2\frac{3}{4}$ in | 70 mm |



57-5793

### McCulloch Thin Muscle Blade

Black Finish, Sold individually

| CODE    | BLADE W X D                                    |
|---------|------------------------------------------------|
| 57-5793 | $1\frac{1}{16}$ x $1\frac{1}{2}$ in 17 x 40 mm |
| 57-5794 | $1\frac{1}{16}$ x $1\frac{7}{8}$ in 17 x 50 mm |
| 57-5795 | $1\frac{1}{16}$ x $1\frac{3}{8}$ in 17 x 60 mm |
| 57-5796 | $1\frac{1}{16}$ x $2\frac{3}{4}$ in 17 x 70 mm |

## Spine (McCulloch)



### McCulloch Narrow Muscle Retractor Blade

57-5732

1 Pair

| CODE    | DESCRIPTION  | HOOK DEPTH        |        |
|---------|--------------|-------------------|--------|
| 57-5732 | Black Finish | $\frac{3}{4}$ in  | 30 mm  |
| 57-5733 | Black Finish | $1\frac{1}{8}$ in | 40 mm  |
| 57-5734 | Black Finish | $1\frac{1}{2}$ in | 50 mm  |
| 57-5735 | Black Finish | $1\frac{7}{8}$ in | 60 mm  |
| 57-5736 | Black Finish | $2\frac{3}{8}$ in | 70 mm  |
| 57-5737 | Black Finish | $2\frac{3}{4}$ in | 80 mm  |
| 57-5772 | Black Finish | $3\frac{1}{8}$ in | 90 mm  |
| 57-5773 | Black Finish | $3\frac{1}{2}$ in | 100 mm |
| 57-5774 | Black Finish | $4\frac{1}{4}$ in | 110 mm |
| 57-5775 | Black Finish | $4\frac{5}{8}$ in | 120 mm |



### McCulloch Narrow Muscle Retractor Blade

57-5781T

1 Pair

| CODE     | DESCRIPTION | HOOK DEPTH        |       |
|----------|-------------|-------------------|-------|
| 57-5732T | Titanium    | $\frac{3}{4}$ in  | 30 mm |
| 57-5733T | Titanium    | $1\frac{1}{8}$ in | 40 mm |
| 57-5734T | Titanium    | $1\frac{1}{2}$ in | 50 mm |
| 57-5735T | Titanium    | $1\frac{7}{8}$ in | 60 mm |
| 57-5736T | Titanium    | $2\frac{3}{8}$ in | 70 mm |
| 57-5737T | Titanium    | $2\frac{3}{4}$ in | 80 mm |
| 57-5781T | Titanium    | $3\frac{1}{8}$ in | 90 mm |

## Spine (McCulloch)



57-5790

### McCulloch Single Cervical Blade

| CODE       | DESCRIPTION    |
|------------|----------------|
| 57-5790-40 | 2 Teeth, 40 mm |
| 57-5790    | 2 Teeth, 50 mm |
| 57-5791    | 2 Teeth, 60 mm |
| 57-5792    | 2 Teeth, 70 mm |



57-5726

### McCulloch Wide Muscle Retractor Blade

2.7 mm Wide

| CODE    | DESCRIPTION  | BLADE DEPTH       |        |
|---------|--------------|-------------------|--------|
| 57-5726 | Black Finish | $\frac{3}{4}$ in  | 30 mm  |
| 57-5727 | Black Finish | $1\frac{1}{8}$ in | 40 mm  |
| 57-5728 | Black Finish | $1\frac{1}{2}$ in | 50 mm  |
| 57-5729 | Black Finish | $1\frac{7}{8}$ in | 60 mm  |
| 57-5730 | Black Finish | $2\frac{3}{8}$ in | 70 mm  |
| 57-5731 | Black Finish | $2\frac{3}{4}$ in | 80 mm  |
| 57-5783 | Black Finish | $3\frac{1}{8}$ in | 90mm   |
| 57-5784 | Black Finish | $3\frac{1}{2}$ in | 100 mm |
| 57-5785 | Black Finish | $4\frac{1}{4}$ in | 110 mm |
| 57-5786 | Black Finish | $4\frac{5}{8}$ in | 120 mm |

## Spine (McCulloch)



57-5730T

### McCulloch Wide Muscle Retractor Blade

1 Pair

| CODE     | DESCRIPTION | BLADE DEPTH       |       |
|----------|-------------|-------------------|-------|
| 57-5726T | Titanium    | $\frac{3}{4}$ in  | 30 mm |
| 57-5727T | Titanium    | $1\frac{1}{8}$ in | 40 mm |
| 57-5728T | Titanium    | $1\frac{1}{2}$ in | 50 mm |
| 57-5729T | Titanium    | $1\frac{7}{8}$ in | 60 mm |
| 57-5730T | Titanium    | $2\frac{3}{8}$ in | 70 mm |
| 57-5731T | Titanium    | $2\frac{3}{4}$ in | 80 mm |
| 57-5783T | Titanium    | $3\frac{1}{8}$ in | 90 mm |

## Spine (Nerve Root)



57-5762

### McCulloch Nerve Root Retractor

| CODE    | LENGTH                  |
|---------|-------------------------|
| 57-5761 | $\frac{3}{4}$ in 30 mm  |
| 57-5762 | $1\frac{1}{8}$ in 40 mm |

## Spine (Nerve Root)



### Campbell Nerve Root Retractor

| CODE    | DESCRIPTION     | BLADE WIDTH      |       | LENGTH             |        |
|---------|-----------------|------------------|-------|--------------------|--------|
| 50-1326 | Malleable Shaft | $\frac{3}{8}$ in | 10 mm | 8 $\frac{1}{2}$ in | 216 mm |



57-9006

### Caspar Nerve Root Retractor

| CODE    | BLADE WIDTH |       | LENGTH             |        |
|---------|-------------|-------|--------------------|--------|
| 57-9006 | 6 mm        | 6 mm  | 9 $\frac{1}{2}$ in | 241 mm |
| 57-9008 | 8 mm        | 8 mm  | 9 $\frac{1}{2}$ in | 241 mm |
| 57-9010 | 10 mm       | 10 mm | 9 $\frac{1}{2}$ in | 241 mm |



### D'Errico Nerve Root Retractor

| CODE    | DESCRIPTION | BLADE WIDTH      |      | LENGTH |        |
|---------|-------------|------------------|------|--------|--------|
| 20-1814 | Bayonet     | $\frac{1}{4}$ in | 6 mm | 9 in   | 229 mm |



### Flexible Nerve Root Retractor

| CODE    | DESCRIPTION          | BLADE LENGTH |       | BLADE WIDTH       |      | LENGTH             |        |
|---------|----------------------|--------------|-------|-------------------|------|--------------------|--------|
| 50-1209 | Nerve Root Retractor | 1 in         | 25 mm | $\frac{5}{16}$ in | 8 mm | 8 $\frac{1}{2}$ in | 216 mm |

Spine (Nerve Root)



Holsher Nerve Root Retractor

| CODE    | DESCRIPTION          | BLADE WIDTH |      | LENGTH   |        |
|---------|----------------------|-------------|------|----------|--------|
| 50-1331 | Nerve Root Retractor | 5⁄16 in     | 7 mm | 9 3⁄4 in | 248 mm |



50-1315

Love Nerve Root Retractor

| CODE    | DESCRIPTION | BLADE WIDTH |      | SHAFT LENGTH | LENGTH   |        |
|---------|-------------|-------------|------|--------------|----------|--------|
| 50-1315 | Straight    | 1⁄4 in      | 6 mm | 4 in 102 mm  | 7 5⁄8 in | 194 mm |
| 50-1316 | 90° Angle   | 1⁄4 in      | 6 mm | 4 in 102 mm  | 3 3⁄4 in | 95 mm  |
| 50-1317 | 135° Angle  | 1⁄4 in      | 6 mm | 4 in 102 mm  | 3 1⁄4 in | 83 mm  |



50-1291

Scoville Nerve Root Retractor  
90° Angle

| CODE    | BLADE WIDTH |       | SHAFT LENGTH    | HANDLE LENGTH |        |
|---------|-------------|-------|-----------------|---------------|--------|
| 50-1291 | 5⁄16 in     | 8 mm  | 4 1⁄4 in 108 mm | 5 in          | 127 mm |
| 50-1293 | 1⁄2 in      | 13 mm | 4 1⁄4 in 108 mm | 5 in          | 127 mm |

## Spine (Nerve Root)



### Smith Nerve Root Suction Retractor

| CODE    | DESCRIPTION                                  | SHAFT LENGTH |        | TIP WIDTH |      | TIP DEPTH |      |
|---------|----------------------------------------------|--------------|--------|-----------|------|-----------|------|
| 50-1275 | With Obturator and Thumb Control for Suction | 5 ¼ in       | 133 mm | ¼ in      | 6 mm | ⅛ in      | 3 mm |



### Weary Nerve Root Retractor

| CODE    | BLADE WIDTH | SHAFT LENGTH |        | HANDLE LENGTH |        |
|---------|-------------|--------------|--------|---------------|--------|
| 50-1310 | ⅞ in 11 mm  | 5 ¾ in       | 146 mm | 5 ¾ in        | 146 mm |

## Spine (Self-Retaining)



50-1050

### Blade Retractor

| CODE    | WIDTH | LENGTH     | HANDLE LENGTH |        | CODE    | WIDTH | LENGTH     | HANDLE LENGTH |        |
|---------|-------|------------|---------------|--------|---------|-------|------------|---------------|--------|
| 50-1050 | 18 mm | 3 in 76 mm | 4 ½ in        | 114 mm | 50-1053 | 23 mm | 3 in 76 mm | 4 ½ in        | 114 mm |
| 50-1052 | 20 mm | 3 in 76 mm | 4 ½ in        | 114 mm |         |       |            |               |        |



## Spine (Bookwalter®)



### Bookwalter® Spinal Retractor Kit, 12 inch Post (305mm)

| CODE    | DESCRIPTION                                                                 | LENGTH         |              |
|---------|-----------------------------------------------------------------------------|----------------|--------------|
| 50-4631 | Bookwalter® Spinal Retractor Kit                                            |                |              |
| 50-4581 | Table Post                                                                  | 12 in          | 304 mm       |
| 50-4582 | Horizontal Flex Bar                                                         |                |              |
| 50-4635 | Small, 1 Pair                                                               | 8 ½ in         | 216 mm       |
| 50-4636 | Straight Ring Segment (Pair)                                                | 4 in           | 102 mm       |
| 50-4637 | Straight Ring Segment (Pair)                                                | 6 in           | 152 mm       |
| 50-4638 | Straight Ring Segment (Pair)                                                | 8 in           | 203 mm       |
| 50-4580 | Case Holds Six-Each Tilting Ratchet Mechanisms                              |                |              |
| 50-4639 | Bookwalter® Scoville Hook, Small                                            | 2 in           | 50 mm        |
| 50-4640 | Bookwalter® Scoville Hook, Large                                            | 3 ¼ in         | 83 mm        |
| 50-4641 | Bookwalter® -Meyerding Retractor Blade, Small                               | ⅔ x 2 ⅓ in     | 17 x 60 mm   |
| 50-4642 | Bookwalter® -Meyerding Retractor Blade, Medium                              | 1 x 3 ½ in     | 25 x 85 mm   |
| 50-4643 | Bookwalter® -Meyerding Retractor Blade, Large                               | 2 x 3 ¾ in     | 50 x 95 mm   |
| 50-4645 | Bookwalter® Rake Retractor-Medium, Rake Retractor, 4 Prong                  | ⅓ x ¾ in       | 8 ⅔ x 19 mm  |
| 50-4646 | Bookwalter® Rake Retractor-Large, Rake Retractor, 6 Prong                   | ⅓ x 1 in       | 8 ⅔ x 25 mm  |
| 50-4644 | Bookwalter® Rake Retractor-Deep, Rake Retractor, 3 Prong                    | ¾ x ⅔ in       | 19 x 17 mm   |
| 50-4647 | Bookwalter® Spinal Retractor, Storage/Sterilizing Case; Depth 4 in (100 mm) | 19 ½ x 13 ½ in | 500 x 340 mm |

## Spine (Bookwalter®)

### Bookwalter® Anterior Lumbar Retractor System

| CODE    | DESCRIPTION                                                                | QTY |
|---------|----------------------------------------------------------------------------|-----|
| 50-5740 | Bookwalter® Anterior Lumbar Spinal Kit Includes the Following:             |     |
| 50-4688 | Bookwalter® Lightweight Table Post, 12 in                                  | 1   |
| 50-4554 | Bookwalter® Table Post Coupling                                            | 1   |
| 50-4582 | Bookwalter® Lightweight Horizontal Flex Bar                                | 1   |
| 50-4583 | Bookwalter® Segmented Ring, Medium                                         | 1   |
| 50-4588 | Bookwalter® Segmented Ring, Large                                          | 1   |
| 50-4696 | Bookwalter® Self-Retaining Rotilt Ratchet                                  | 6   |
| 50-5580 | Bookwalter® 1x4 Radiolucent Titanium Retractor Blade                       | 2   |
| 50-5581 | Bookwalter® 1x5 Radiolucent Titanium Retractor Blade                       | 2   |
| 50-5587 | Bookwalter® 2x6 Radiolucent Titanium Retractor Blade                       | 2   |
| 50-5588 | Bookwalter® 2x7 Radiolucent Titanium Retractor Blade                       | 2   |
| 50-5589 | Bookwalter® 2x8 Radiolucent Titanium Retractor Blade                       | 2   |
| 67-7504 | Bookwalter® 2x11 Opti-Length® Malleable Retractor Blade with Malleable Lip | 1   |

## Kits (Anterior Cervical Fusion)



59-0600



59-0000

### Ultra™ ReVeal ACF Distraction System

Tray One of Three

| CODE    | DESCRIPTION                            | COLOR       | LENGTH                     | QTY |
|---------|----------------------------------------|-------------|----------------------------|-----|
| 59-0000 | Complete System: Tray One of Three     |             |                            | 1   |
| 59-0030 | ACF Blade, Blunt                       | Silver      | 1 1/8 in 30 mm             | 2   |
| 59-0031 | ACF Blade, Blunt                       | Blue        | 1 3/8 in 35 mm             | 2   |
| 59-0032 | ACF Blade, Blunt                       | Red         | 1 5/8 in 40 mm             | 2   |
| 59-0033 | ACF Blade, Blunt                       | Green       | 1 3/4 in 45 mm             | 2   |
| 59-0034 | ACF Blade, Blunt                       | Violet      | 2 in 50 mm                 | 2   |
| 59-0035 | ACF Blade, Blunt                       | Black       | 2 1/8 in 55 mm             | 2   |
| 59-0036 | ACF Blade, Blunt                       | Gold        | 2 3/8 in 60 mm             | 2   |
| 59-0037 | ACF Blade, Blunt                       | Navy        | 2 1/2 in 65 mm             | 2   |
| 59-0038 | ACF Blade, Blunt                       | Light Green | 2 3/4 in 70 mm             | 2   |
| 59-0039 | ACF Blade, Blunt                       | Orange      | 3 in 75 mm                 | 2   |
| 59-0080 | ACF Micro Blade, Blunt                 | Blue        | 9/16 x 1 3/8 in 14 x 35 mm | 2   |
| 59-0081 | ACF Micro Blade, Blunt                 | Red         | 9/16 x 1 5/8 in 14 x 40 mm | 2   |
| 59-0082 | ACF Micro Blade, Blunt                 | Green       | 9/16 x 1 3/4 in 14 x 45 mm | 2   |
| 59-0083 | ACF Micro Blade, Blunt                 | Violet      | 9/16 x 2 1/8 in 14 x 50 mm | 2   |
| 59-0084 | ACF Micro Blade, Blunt                 | Black       | 9/16 x 2 1/8 in 14 x 55 mm | 2   |
| 59-0085 | ACF Micro Blade, Blunt                 | Gold        | 9/16 x 2 1/8 in 14 x 50 mm | 2   |
| 59-0090 | ACF Micro Blade, Short Teeth           | Blue        | 9/16 x 1 3/8 in 14 x 35 mm | 2   |
| 59-0091 | ACF Micro Blade, Short Teeth           | Red         | 9/16 x 1 5/8 in 14 x 40 mm | 2   |
| 59-0092 | ACF Micro Blade, Short Teeth           | Green       | 9/16 x 1 3/4 in 14 x 45 mm | 2   |
| 59-0093 | ACF Micro Blade, Short Teeth           | Violet      | 9/16 x 2 1/8 in 14 x 50 mm | 2   |
| 59-0094 | ACF Micro Blade, Short Teeth           | Black       | 9/16 x 2 1/8 in 14 x 55 mm | 2   |
| 59-0095 | ACF Micro Blade, Short Teeth           | Gold        | 9/16 x 2 3/8 in 14 x 60 mm | 2   |
| 59-0106 | ACF Color Coded Depth Gauge            |             |                            | 1   |
| 59-0105 | Blade Loading Locking Retractor Handle |             |                            | 2   |

## Kits (Anterior Cervical Fusion)



### Ultra™ ReVeal ACF Removal Body Tray

Tray Two of Three

| CODE    | DESCRIPTION                                               | COLOR  | LENGTH          | QTY |
|---------|-----------------------------------------------------------|--------|-----------------|-----|
| 59-0000 | Complete System, Continued:<br>Tray Two of Three          |        |                 | 1   |
| 59-0050 | ACF Blade, Short Teeth                                    | Silver | 1 1/8 in 30 mm  | 1   |
| 59-0051 | ACF Blade, Short Teeth                                    | Blue   | 1 3/8 in 35 mm  | 1   |
| 59-0052 | ACF Blade, Short Teeth                                    | Red    | 1 5/8 in 40 mm  | 1   |
| 59-0053 | ACF Blade, Short Teeth                                    | Green  | 1 3/4 in 45 mm  | 1   |
| 59-0054 | ACF Blade, Short Teeth                                    | Violet | 2 in 50 mm      | 1   |
| 59-0055 | ACF Blade, Short Teeth                                    | Black  | 2 1/8 in 55 mm  | 1   |
| 59-0056 | ACF Blade, Short Teeth                                    | Gold   | 2 3/8 in 60 mm  | 1   |
| 59-0057 | ACF Blade, Short Teeth                                    | Navy   | 2 1/2 in 65 mm  | 1   |
| 59-0070 | ACF Blade, Long Teeth                                     | Silver | 1 1/8 in 30 mm  | 1   |
| 59-0071 | ACF Blade, Long Teeth                                     | Blue   | 1 3/8 in 35 mm  | 1   |
| 59-0072 | ACF Blade, Long Teeth                                     | Red    | 1 5/8 in 40 mm  | 1   |
| 59-0073 | ACF Blade, Long Teeth                                     | Green  | 1 3/4 in 45 mm  | 1   |
| 59-0074 | ACF Blade, Long Teeth                                     | Violet | 2 in 50 mm      | 1   |
| 59-0075 | ACF Blade, Long Teeth                                     | Black  | 2 1/8 in 55 mm  | 1   |
| 59-0076 | ACF Blade, Long Teeth                                     | Gold   | 2 3/8 in 60 mm  | 1   |
| 59-0077 | ACF Blade, Long Teeth                                     | Navy   | 2 1/2 in 65 mm  | 1   |
| 59-0101 | Side-Loading Longitudinal Retractor,<br>with Double Hinge |        |                 | 1   |
| 59-0100 | Side-Loading Transverse Retractor,<br>with Double Hinge   |        | 4 3/4 in 120 mm | 1   |
| 59-0113 | Screw Driver                                              |        |                 | 2   |
| 59-0109 | Twist Drill                                               |        |                 | 2   |

## Kits (Anterior Cervical Fusion)



### Ultra™ ReVeal ACF Cervical Retractor Tray

Tray Three of Three

| CODE    | DESCRIPTION                                                                          | QTY |
|---------|--------------------------------------------------------------------------------------|-----|
| 59-0000 | Complete System, Continued: Tray Three of Three                                      | 1   |
| 59-0131 | Bone Graft Holder                                                                    | 1   |
| 59-0117 | Distractor Single Level, Left with 3 <sup>15</sup> / <sub>16</sub> in (100 mm) Rack  | 1   |
| 59-0118 | Distractor Single Level, Right with 3 <sup>15</sup> / <sub>16</sub> in (100 mm) Rack | 1   |
| 59-0116 | Distractor Multiple Level, Left with 4 <sup>3</sup> / <sub>4</sub> in (120 mm) Rack  | 1   |
| 59-0115 | Distractor Multiple Level, Right with 4 <sup>3</sup> / <sub>4</sub> in (120 mm) Rack | 1   |
| 59-0111 | Drill Guide, Left for 59-0116/59-0117                                                | 1   |
| 59-0110 | Drill Guide, Right for 59-0118/59-0115                                               | 1   |
| 59-0120 | ACF Caliper                                                                          | 1   |
| 59-0124 | ACF Bone Graft Harvesting Forcep, <sup>3</sup> / <sub>11</sub> in (7 mm)             | 1   |
| 59-0121 | ACF Bone Tamp, <sup>1</sup> / <sub>8</sub> in (3 mm)                                 | 1   |
| 59-0122 | ACF Bone Tamp, <sup>1</sup> / <sub>5</sub> in (5 mm)                                 | 1   |
| 59-0123 | ACF Bone Tamp, <sup>5</sup> / <sub>16</sub> in (8 mm)                                | 1   |

## Kits (Cervical Retractor)



### Ultra™ ReVeal LoPro Retractor Tray

59-3000

| CODE    | DESCRIPTION                                    | LENGTH                                 |            | QUANTITY |
|---------|------------------------------------------------|----------------------------------------|------------|----------|
| 59-3000 | System Includes the Following:                 |                                        |            |          |
| 59-2001 | Cervical Retractor Frame, Right                |                                        |            | 1        |
| 59-2002 | Cervical Retractor Frame, Left                 |                                        |            | 1        |
| 59-2003 | Cervical Retractor Frame, Offset               |                                        |            | 1        |
| 59-2006 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 1$ in              | 22 x 25 mm | 2        |
| 59-2007 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 1\frac{1}{8}$ in   | 22 x 30 mm | 2        |
| 59-2008 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 1\frac{3}{8}$ in   | 22 x 35 mm | 2        |
| 59-2009 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 1\frac{5}{8}$ in   | 22 x 40 mm | 2        |
| 59-2010 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 1\frac{3}{4}$ in   | 22 x 45 mm | 2        |
| 59-2011 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 2\frac{1}{8}$ in   | 22 x 50 mm | 2        |
| 59-2012 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 2\frac{1}{8}$ in   | 22 x 55 mm | 2        |
| 59-2013 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 2\frac{3}{8}$ in   | 22 x 60 mm | 2        |
| 59-2014 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 2\frac{1}{2}$ in   | 22 x 65 mm | 2        |
| 59-2015 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 2\frac{3}{4}$ in   | 22 x 70 mm | 2        |
| 59-2016 | Cervical Retractor Blade, Pronged              | $\frac{7}{8} \times 3$ in              | 22 x 75 mm | 2        |
| 59-2017 | Cervical Retractor Blade, Blunt                | $\frac{7}{8} \times 1$ in              | 22 x 25 mm | 2        |
| 59-2018 | Cervical Retractor Blade, Blunt                | $\frac{7}{8} \times 1\frac{1}{8}$ in   | 22 x 30 mm | 2        |
| 59-2019 | Cervical Retractor Blade, Blunt                | $\frac{7}{8} \times 1\frac{3}{8}$ in   | 22 x 35 mm | 2        |
| 59-2020 | Cervical Retractor Blade, Blunt                | $\frac{7}{8} \times 1\frac{5}{8}$ in   | 22 x 40 mm | 2        |
| 59-2021 | Cervical Retractor Blade, Blunt                | $\frac{7}{8} \times 1\frac{3}{4}$ in   | 22 x 45 mm | 2        |
| 59-2023 | Cervical Retractor Blade, Blunt                | $\frac{7}{8} \times 2\frac{1}{8}$ in   | 22 x 50 mm | 2        |
| 59-2024 | Cervical Retractor Blade, Blunt                | $\frac{7}{8} \times 2\frac{1}{8}$ in   | 22 x 55 mm | 2        |
| 59-2025 | Cervical Retractor Blade, Blunt                | $\frac{7}{8} \times 2\frac{3}{8}$ in   | 22 x 60 mm | 2        |
| 59-2026 | Cervical Retractor Blade, Bi-Leveled Pronged   | $1\frac{1}{16} \times 1\frac{1}{8}$ in | 27 x 30 mm | 4        |
| 59-2028 | Cervical Retractor Blade, Bi-Leveled Pronged   | $1\frac{1}{16} \times 1\frac{5}{8}$ in | 27 x 40 mm | 4        |
| 59-2035 | Cervical Retractor Blade, Bi-Leveled Pronged   | $1\frac{1}{16} \times 1\frac{3}{4}$ in | 27 x 45 mm | 4        |
| 59-2027 | Cervical Retractor Blade, Bi-Leveled Blunt     | $1\frac{1}{16} \times 1\frac{1}{8}$ in | 27 x 30 mm | 2        |
| 59-2029 | Cervical Retractor Blade, Bi-Leveled Blunt     | $1\frac{1}{16} \times 1\frac{5}{8}$ in | 27 x 40 mm | 2        |
| 59-2036 | Cervical Retractor Blade, Bi-Leveled Blunt     | $1\frac{1}{16} \times 1\frac{3}{4}$ in | 27 x 45 mm | 2        |
| 59-2037 | Micro Discectomy Adaptor for ACF Retractor Set |                                        |            | 1        |
| 59-2038 | Spike Blade                                    | $2\frac{3}{4}$ in                      | 70 mm      | 1        |
| 59-2039 | T-Shaped Blade                                 | $2\frac{3}{4}$ in                      | 70 mm      | 1        |
| 59-2004 | Inner Spine Ligament                           |                                        |            | 1        |
| 59-2005 | Blade Holding Retractor                        |                                        |            | 2        |
| 59-2040 | Case                                           |                                        |            | 1        |



## Kits (Cervical Retractor)



### Ultra™ ReVeal Lumbar Instrument

Tray One of Three

59-1000S

| CODE     | DESCRIPTION                                            | DIMENSIONS             |            | QUANTITY |
|----------|--------------------------------------------------------|------------------------|------------|----------|
| 59-1000S | Ultra™ ReVeal Lumbar System<br>Includes the Following: |                        |            | 1        |
| 59-1104  | Scoville Lumbar Retractor, Double Hinged               | 7 $\frac{7}{8}$ in     | 200 mm     | 1        |
| 59-1100  | Lumbar Retractor Body for Multiple Blades              |                        |            | 1        |
| 59-1103  | Side-Loading Lumbar Retractor Blade Holder             |                        |            | 4        |
| 59-1102  | Lumbar Retractor Adjustable Blade Holder               |                        |            | 4        |
| 59-1001  | Lumbar Retractor T-Handle                              |                        |            | 1        |
| 59-1105  | Side-Loading Locking Retractor Handle                  |                        |            | 2        |
| 59-1080  | Hook, Sharp Toothed Shaft                              | 1 $\frac{5}{8}$ in     | 40 mm      | 1        |
| 59-1081  | Hook, Sharp Toothed Shaft                              | 2 in                   | 50 mm      | 1        |
| 59-1082  | Hook, Sharp Toothed Shaft                              | 2 $\frac{3}{8}$ in     | 60 mm      | 1        |
| 59-1083  | Hook, Sharp Toothed Shaft                              | 2 $\frac{3}{4}$ in     | 70 mm      | 1        |
| 59-1084  | Lumbar Spine T-Bar                                     | 1 x 1 $\frac{5}{8}$ in | 25 x 40 mm | 1        |
| 59-1085  | Lumbar Spine T-Bar                                     | 1 x 2 in               | 25 x 50 mm | 1        |
| 59-1086  | Lumbar Spine T-Bar                                     | 1 x 2 $\frac{3}{8}$ in | 25 x 60 mm | 1        |
| 59-1087  | Lumbar Spine T-Bar                                     | 1 x 2 $\frac{3}{4}$ in | 25 x 70 mm | 1        |

### Ultra™ ReVeal Lumbar Instrument System

Tray Two of Three

| CODE    | DESCRIPTION          | DIMENSIONS                             |             | QUANTITY |
|---------|----------------------|----------------------------------------|-------------|----------|
| 59-1030 | Blade Angled Out 15° | $\frac{10}{11}$ x 1 $\frac{3}{8}$ in   | 23 x 35 mm  | 4        |
| 59-1031 | Blade Angled Out 15° | $\frac{10}{11}$ x 1 $\frac{3}{4}$ in   | 23 x 45 mm  | 4        |
| 59-1032 | Blade Angled Out 15° | $\frac{10}{11}$ x 2 $\frac{1}{8}$ in   | 23 x 55 mm  | 4        |
| 59-1033 | Blade Angled Out 15° | $\frac{10}{11}$ x 2 $\frac{1}{2}$ in   | 23 x 65 mm  | 4        |
| 59-1034 | Blade Angled Out 15° | $\frac{10}{11}$ x 3 in                 | 23 x 75 mm  | 4        |
| 59-1035 | Blade Angled Out 15° | $\frac{10}{11}$ x 3 $\frac{3}{8}$ in   | 23 x 85 mm  | 4        |
| 59-1036 | Blade Angled Out 15° | $\frac{10}{11}$ x 3 $\frac{15}{16}$ in | 23 x 100 mm | 4        |
| 59-1037 | Blade Angled Out 15° | $\frac{10}{11}$ x 4 $\frac{3}{4}$ in   | 23 x 120 mm | 4        |

## Kits (Cervical Retractor)

### Ultra™ ReVeal Lumbar Instrument System

Tray Three of Three

| CODE    | DESCRIPTION                | DIMENSIONS                                                         |             | QUANTITY |
|---------|----------------------------|--------------------------------------------------------------------|-------------|----------|
| 59-1050 | Blade Angled Out 15°       | 1 <sup>3</sup> / <sub>4</sub> x 2 in                               | 45 x 50 mm  | 2        |
| 59-1051 | Blade Angled Out 15°       | 1 <sup>3</sup> / <sub>4</sub> x 2 <sup>3</sup> / <sub>8</sub> in   | 45 x 60 mm  | 2        |
| 59-1052 | Blade Angled Out 15°       | 1 <sup>3</sup> / <sub>4</sub> x 2 <sup>3</sup> / <sub>4</sub> in   | 45 x 70 mm  | 2        |
| 59-1053 | Blade Angled Out 15°       | 1 <sup>3</sup> / <sub>4</sub> x 3 <sup>1</sup> / <sub>8</sub> in   | 45 x 80 mm  | 2        |
| 59-1056 | Blade Angled Out 15°       | 2 <sup>3</sup> / <sub>8</sub> x 2 in                               | 60 x 50 mm  | 2        |
| 59-1057 | Blade Angled Out 15°       | 2 <sup>3</sup> / <sub>8</sub> x 2 <sup>3</sup> / <sub>8</sub> in   | 60 x 60 mm  | 2        |
| 59-1058 | Blade Angled Out 15°       | 2 <sup>3</sup> / <sub>8</sub> x 2 <sup>3</sup> / <sub>4</sub> in   | 60 x 70 mm  | 2        |
| 59-1059 | Blade Angled Out 15°       | 2 <sup>3</sup> / <sub>8</sub> x 3 <sup>1</sup> / <sub>2</sub> in   | 60 x 80 mm  | 2        |
| 59-1060 | Blade Angled Out 15°       | 2 <sup>3</sup> / <sub>8</sub> x 3 <sup>15</sup> / <sub>16</sub> in | 60 x 100 mm | 2        |
| 59-1061 | Blade Angled Out 15°       | 2 <sup>3</sup> / <sub>8</sub> x 4 <sup>3</sup> / <sub>4</sub> in   | 60 x 120 mm | 2        |
| 59-1070 | Blade Sacral Cutout, Right | 1 <sup>1</sup> / <sub>4</sub> x 1 <sup>5</sup> / <sub>8</sub> in   | 30 x 40 mm  | 1        |
| 59-1071 | Blade Sacral Cutout, Left  | 1 <sup>1</sup> / <sub>4</sub> x 1 <sup>5</sup> / <sub>8</sub> in   | 30 x 40 mm  | 1        |
| 59-1072 | Blade Sacral Cutout, Right | 2 <sup>3</sup> / <sub>8</sub> x 1 <sup>3</sup> / <sub>4</sub> in   | 60 x 45 mm  | 1        |
| 59-1073 | Blade Sacral Cutout, Left  | 2 <sup>3</sup> / <sub>8</sub> x 1 <sup>3</sup> / <sub>4</sub> in   | 60 x 45 mm  | 1        |
| 59-1700 | Case                       |                                                                    |             | 1        |

## Splanchnic



23-7040

### Harrington Splanchnic Retractor

| CODE    | BLADE       | LENGTH                            |        |
|---------|-------------|-----------------------------------|--------|
| 23-7040 | 42 x 127 mm | 12 <sup>1</sup> / <sub>2</sub> in | 316 mm |
| 23-7062 | 62 x 127 mm | 12 <sup>1</sup> / <sub>2</sub> in | 316 mm |



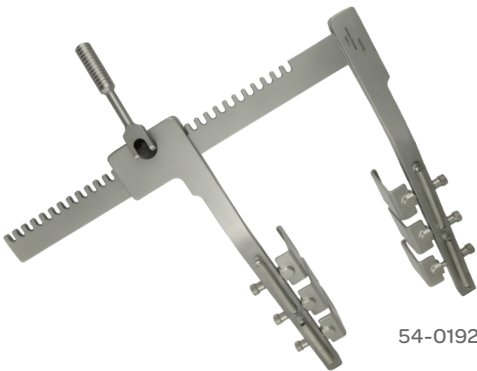
23-7106

### Harrington-Pemberton Retractor

| CODE    | DESCRIPTION | SIZE                                                             |             | LENGTH                            |        |
|---------|-------------|------------------------------------------------------------------|-------------|-----------------------------------|--------|
| 23-7040 | Retractor   | 1 <sup>5</sup> / <sub>8</sub> x 5 in                             | 41 x 127 mm | 12 <sup>1</sup> / <sub>2</sub> in | 318 mm |
| 23-7106 | Retractor   | 2 <sup>1</sup> / <sub>2</sub> x 7 <sup>1</sup> / <sub>8</sub> in | 64 x 181 mm | 12 <sup>1</sup> / <sub>2</sub> in | 318 mm |



Sternal



54-0192

Ankeney Sternal Retractor

| CODE    | DESCRIPTION                                                                                                                |
|---------|----------------------------------------------------------------------------------------------------------------------------|
| 54-0192 | Self-Retaining with Rack and Pinion Action. Complete with Six Detachable Swivel Blades and One Pair of Springs on Each Arm |
| 54-0194 | Set of Six Blades                                                                                                          |



30-9025

Castaneda Instrument Kit

| CODE    | DESCRIPTION                                    | DIMENSION |               |
|---------|------------------------------------------------|-----------|---------------|
| 30-9025 | Kit Includes the Following:                    |           |               |
| 30-9000 | Multi-Purpose Clamp, Angled 30°                |           |               |
| 30-9001 | Multi-Purpose Clamp, Angled 50°                |           |               |
| 30-9002 | Partial Occlusion Clamp, Spoon Shape           |           |               |
| 30-9003 | Anastomosis Clamp, Small                       |           |               |
| 30-9004 | Anastomosis Clamp, Medium                      |           |               |
| 30-9005 | Anastomosis Clamp, Large, Castaneda Retractors | 4 5⁄16 in | 110 mm        |
| 50-8060 | Sternal Retractor, Small                       |           |               |
| 50-8061 | Sternal Retractor, Large                       |           |               |
| 30-8500 | Vascular Forceps, Titanium, 2/Each             | 6 in      | 152 mm        |
| 19-8150 | Mixer Clamp, Smooth Jaw                        | 5 1⁄4 in  | 133 mm        |
| 21-8010 | Castaneda Instrument Case                      | 11x7x2 in | 279x178x51 mm |

## Sternal



## Collins Radiopaque Sternal Blades

| CODE    | DESCRIPTION                                                                    |
|---------|--------------------------------------------------------------------------------|
| 50-8080 | Arm length 8 $\frac{3}{4}$ (222 mm), Total Opening 8 $\frac{1}{8}$ in (206 mm) |



## Cooley Sternal Retractor

54-1009

| CODE    | ARM LENGTH         |        | BLADE LENGTH       |        | BLADE DEPTH        |       | SPREAD             |        |
|---------|--------------------|--------|--------------------|--------|--------------------|-------|--------------------|--------|
| 54-1009 | 3 $\frac{1}{8}$ in | 79 mm  | $\frac{3}{4}$ in   | 20 mm  | $\frac{1}{2}$ in   | 14 mm | 4 in               | 100 mm |
| 54-1003 | 5 $\frac{3}{4}$ in | 145 mm | 2 in               | 50 mm  | 1 $\frac{3}{8}$ in | 35 mm | 8 $\frac{1}{4}$ in | 209 mm |
| 54-1006 | 8 $\frac{1}{2}$ in | 215 mm | 4 $\frac{3}{8}$ in | 110 mm | 1 $\frac{3}{8}$ in | 35 mm | 9 $\frac{3}{8}$ in | 238 mm |



## Favaloro-Morse Sternal Retractor

With Two Pair of Fixed Sternal Blades

| CODE    | ARM LENGTH |        | BLADE LENGTH       |       | BLADE DEPTH        |       | SPREAD |        |
|---------|------------|--------|--------------------|-------|--------------------|-------|--------|--------|
| 54-1860 | 6 in       | 150 mm | 1 $\frac{1}{2}$ in | 40 mm | 1 $\frac{1}{2}$ in | 40 mm | 8 in   | 200 mm |



## Himmelstein Sternal Retractor

Self-Retaining with Ratchet Action and Flexible Arms

| CODE    | TOTAL OPENING |        | BLADE WIDTH        |       | BLADE DEPTH        |       | ARM LENGTH         |        | LENGTH |        |
|---------|---------------|--------|--------------------|-------|--------------------|-------|--------------------|--------|--------|--------|
| 50-1133 | 5 in          | 127 mm | 1 $\frac{1}{8}$ in | 35 mm | 1 $\frac{1}{4}$ in | 32 mm | 5 $\frac{1}{4}$ in | 133 mm | 5 in   | 127 mm |

Sternal



Morse Sternal Retractor

50-8066

Child and Adult Self-Retaining with Rack and Pinion Action

| CODE    | TOTAL OPENING |        | BLADE WIDTH |       | BLADE DEPTH |       | ARM LENGTH |        | LENGTH |        |
|---------|---------------|--------|-------------|-------|-------------|-------|------------|--------|--------|--------|
| 50-8066 | 6 ¼ in        | 159 mm | ¾ in        | 19 mm | ¾ in        | 19 mm | 6 in       | 152 mm | 6 ¼ in | 159 mm |
| 50-8067 | 8 in          | 203 mm | 1 ⅛ in      | 29 mm | 1 in        | 25 mm | 7 ½ in     | 191 mm | 8 in   | 203 mm |



Pacifico Sternal Retractor

Self-Retaining

| CODE    | TOTAL OPENING |        | UPPER & LOWER BLADE WIDTH |       | LOWER BLADE DEPTH |       | ARM LENGTH |        | LENGTH |        |
|---------|---------------|--------|---------------------------|-------|-------------------|-------|------------|--------|--------|--------|
| 50-8085 | 8 in          | 203 mm | ¾ in                      | 19 mm | 1 ½ in            | 38 mm | 6 in       | 152 mm | 8 in   | 203 mm |

Thoracotomy



Heitmiller Mini Thoracotomy Retractor

| CODE    | DESCRIPTION                |
|---------|----------------------------|
| 54-2340 | Mini Thoracotomy Retractor |

## Thymus



### Thymus Retractor

| CODE    | DESCRIPTION  | LENGTH                                  |
|---------|--------------|-----------------------------------------|
| 20-0707 | Double-Ended | 6 <sup>3</sup> / <sub>4</sub> in 170 mm |

## Thymus (Hand-Held)



23-0306

### Lahey Retractor

| CODE     | DESCRIPTION       | BLADE (W X D)                                | LENGTH                                  |
|----------|-------------------|----------------------------------------------|-----------------------------------------|
| 23-0306  | Retractor         | 6 x 3 mm                                     | 7 <sup>3</sup> / <sub>4</sub> in 197 mm |
| 50-4040C | Thyroid Retractor | <sup>1</sup> / <sub>4</sub> x 1 in 6 x 25 mm | 8 <sup>1</sup> / <sub>8</sub> in 206 mm |

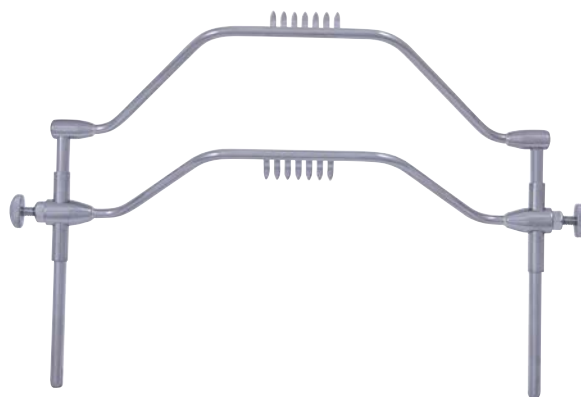
## Thyroid



### Green Thyroid Retractor

| CODE    | DESCRIPTION       | LENGTH                                  |
|---------|-------------------|-----------------------------------------|
| 23-3512 | Fenestrated Blade | 8 <sup>1</sup> / <sub>2</sub> in 215 mm |

## Thyroid



Mahorner Thyroid Retractor

| CODE    | DESCRIPTION | LENGTH        |
|---------|-------------|---------------|
| 24-0888 | 7 Prong     | 10½ in 267 mm |



20-1782

McBurney Thyroid Retractor

| CODE    | DESCRIPTION | LENGTH       |
|---------|-------------|--------------|
| 20-1782 | Fenestrated | 7½ in 191 mm |

## Tonsil



Hurd Tonsil Dissector & Pillar Retractor

| CODE    | TIP SIZE   | LENGTH       |
|---------|------------|--------------|
| 65-6600 | ½ in 13 mm | 8¾ in 222 mm |

## Tracheal



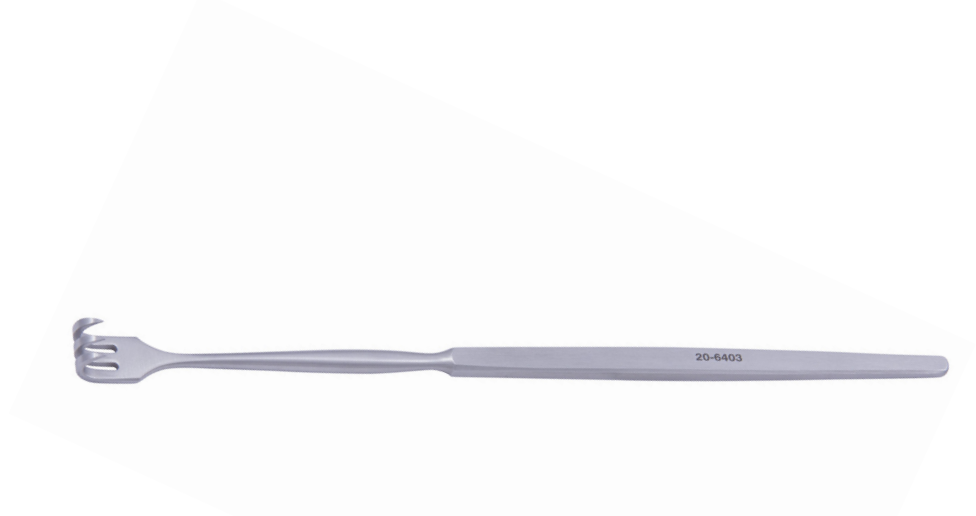
## Jackson Tracheal Retractor

| CODE    | DESCRIPTION  | LENGTH                                  |
|---------|--------------|-----------------------------------------|
| 20-0708 | Double-Ended | 6 <sup>3</sup> / <sub>4</sub> in 170 mm |



## News Tracheal Hook

| CODE    | DESCRIPTION  | LENGTH      |
|---------|--------------|-------------|
| 20-4015 | Single Prong | 6 in 150 mm |



## Tracheal Retractor

| CODE    | DESCRIPTION    | DIMENSIONS                              |
|---------|----------------|-----------------------------------------|
| 20-6403 | 3 Prong, Sharp | 6 <sup>1</sup> / <sub>4</sub> in 160 mm |

## Uvula



### Goodyear Uvula Retractor

| CODE    | WIDTH | LENGTH       |
|---------|-------|--------------|
| 71-6348 | 15 mm | 7½ in 190 mm |



### Love Uvula Retractor

| CODE    | DESCRIPTION | LENGTH       |
|---------|-------------|--------------|
| 71-6318 | 18 mm       | 6½ in 165 mm |
| 71-6320 | 20 mm       | 6½ in 165 mm |



71-6318

### Love Uvula Retractor

| CODE    | WIDTH | LENGTH       |
|---------|-------|--------------|
| 71-6318 | 18 mm | 6½ in 165 mm |
| 71-6320 | 20 mm | 6½ in 165 mm |

## Vaginal (Bookwalter®)



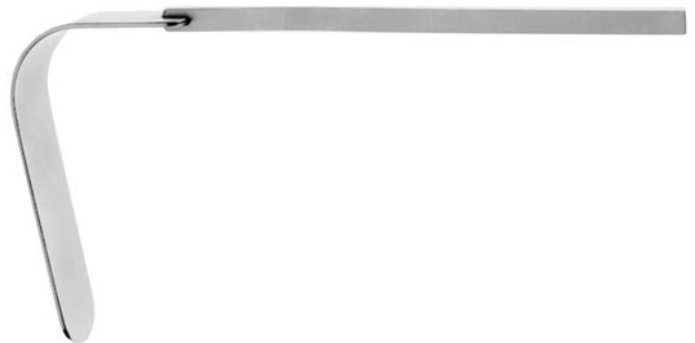
### Bookwalter®-Magrina Deaver Blade

| CODE    | DESCRIPTION | DIMENSIONS |             |
|---------|-------------|------------|-------------|
| 50-4592 | Small       | 1 x 3 ½ in | 25 x 89 mm  |
| 50-4593 | Large       | 1 x 5 in   | 25 x 127 mm |



### Bookwalter®-Magrina Lateral Blade

| CODE    | DESCRIPTION | LENGTH   |            |
|---------|-------------|----------|------------|
| 50-4591 | 45°         | 1 x 3 in | 25 x 76 mm |



### Bookwalter®-Magrina Posterior Blade

| CODE    | DESCRIPTION     | LENGTH     |             |
|---------|-----------------|------------|-------------|
| 50-4594 | Posterior Blade | 1 x 4 ½ in | 25 x 114 mm |



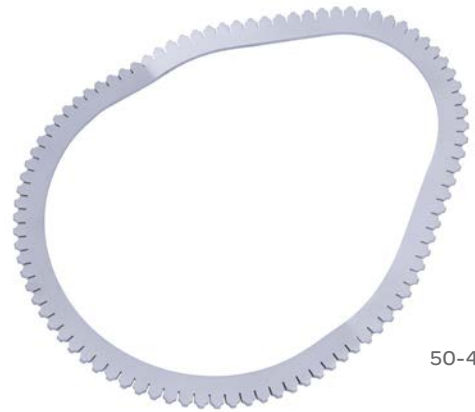
Vaginal (Bookwalter®)



Bookwalter®-Magrina Retractor System

| CODE    | NAME                                                 | QTY |
|---------|------------------------------------------------------|-----|
| 50-4692 | Vaginal Retractor Kit Includes Following Items:      |     |
| 50-4688 | Bookwalter® Lightweight Table Post, 12 in            | 1   |
| 50-4554 | Bookwalter® Post Coupler                             | 1   |
| 50-4582 | Bookwalter® Lightweight Horizontal Flex Bar          | 1   |
| 50-4689 | Bookwalter®-Magrina Segmented Ring with Suture Slots | 1   |
| 50-4586 | Bookwalter® Self-Retaining Tilting Ratchet           | 6   |
| 50-4694 | Bookwalter® 1x4 Malleable Lateral Retractor Blade    | 2   |
| 50-4592 | Bookwalter®-Magrina Deaver Blade, Small              | 1   |
| 50-4593 | Bookwalter®-Magrina Deaver Blade, Large              | 1   |
| 50-4594 | Bookwalter®-Magrina Posterior Retractor Blade        | 1   |

## Vaginal (Bookwalter®)



50-4690

### Bookwalter®-Magrina Pelvic Rings

| CODE    | DESCRIPTION                            | LENGTH      |              |
|---------|----------------------------------------|-------------|--------------|
| 50-4590 | Fixed Basic Ovoid Ring                 | 8 x 10 ½ in | 203 x 267 mm |
| 50-4690 | Fixed Ovoid Ring with Suture Slots     | 8 x 10 ½ in | 203 x 267 mm |
| 50-4689 | Segmented Ovoid Ring with Suture Slots | 8 x 10 ½ in | 203 x 267 mm |



52-2601

### Breisky Vaginal Retractor

Slight Curve

| CODE    | No. | LENGTH         |             |
|---------|-----|----------------|-------------|
| 52-2601 | #1  | ¾ x 4 in       | 19 x 102 mm |
| 52-2602 | #2  | 1 x 4 in       | 25 x 102 mm |
| 52-2603 | #3  | 1¼ x 4 in      | 32 x 102 mm |
| 52-2604 | #4  | 1⅜ x 4 in      | 35 x 102 mm |
| 52-2605 | #5  | 1⅝ x 4 in      | 41 x 102 mm |
| 52-2606 | #6  | 1⅞ x 4 ¾ in    | 29 x 121 mm |
| 52-2607 | #7  | 1⅜ x 5⅞ in     | 35 x 130 mm |
| 52-2609 | #9  | 1⅜ x 6¼ in     | 35 x 159 mm |
| 52-2610 | #10 | 1 x 6 11/16 in | 25 x 170 mm |

Vaginal



52-2332

Eastman Vaginal Retractor

| CODE    | No. | LENGTH           |             |
|---------|-----|------------------|-------------|
| 52-2331 | #1  | 1 3⁄8 x 3 in     | 35 x 76 mm  |
| 52-2332 | #2  | 1 3⁄8 x 3 1⁄2 in | 35 x 89 mm  |
| 52-2333 | #3  | 1 5⁄8 x 4 in     | 41 x 102 mm |



50-5570

Heaney-Simon Vaginal Retractor

| CODE    | BLADE                    | LENGTH           |
|---------|--------------------------|------------------|
| 50-5570 | 1 x 4 1⁄2 in 25 x 114 mm | 10 1⁄4 in 260 mm |
| 52-2727 | 1 x 4 1⁄2 in 25 x 114 mm | 11 in 279 mm     |

## Vaginal



50-5540

## Jackson Vaginal Retractor

| CODE    | SIZE   | BLADE                                |             | LENGTH             |        |
|---------|--------|--------------------------------------|-------------|--------------------|--------|
| 52-2301 | #1     | 1 $\frac{3}{8}$ x 3 in               | 35 x 76 mm  | 7 $\frac{1}{4}$ in | 184 mm |
| 52-2302 | #2     | 1 $\frac{3}{8}$ x 3 $\frac{1}{2}$ in | 35 x 89 mm  | 7 $\frac{1}{4}$ in | 184 mm |
| 52-2303 | #3     | 1 $\frac{1}{2}$ x 4 in               | 38 x 102 mm | 7 $\frac{1}{4}$ in | 184 mm |
| 50-5540 | Small  | 1 $\frac{1}{2}$ x 3 in               | 38 x 76 mm  | 6 $\frac{3}{4}$ in | 171 mm |
| 50-5541 | Medium | 1 $\frac{1}{2}$ x 3 $\frac{1}{2}$ in | 38 x 89 mm  | 6 $\frac{3}{4}$ in | 171 mm |
| 50-5542 | Large  | 1 $\frac{1}{2}$ x 4 in               | 38 x 102 mm | 6 $\frac{3}{4}$ in | 171 mm |



52-0799I

## Lateral Vaginal Wall Retractor

| CODE     | DESCRIPTION | BLADE                  |            | LENGTH              |        |
|----------|-------------|------------------------|------------|---------------------|--------|
| 52-0799I | Insulated   | 1 x 2 $\frac{1}{2}$ in | 25 x 64 mm | 10 $\frac{3}{4}$ in | 270 mm |
| 52-0799E | Ebonized    | 1 x 2 $\frac{1}{2}$ in | 25 x 64 mm | 10 $\frac{3}{4}$ in | 270 mm |
| 52-0799  |             | 1 x 2 $\frac{1}{2}$ in | 25 x 64 mm | 10 $\frac{3}{4}$ in | 270 mm |

## Vaginal



52-2020

### Sims Vaginal Retractor

Hollow Grip Retractor

| CODE    | DESCRIPTION | LENGTH     |            |
|---------|-------------|------------|------------|
| 52-2020 | Small       | 2½ x 1 in  | 64 x 25 mm |
| 52-2021 | Medium      | 3 x 1¼ in  | 76 x 32 mm |
| 52-2022 | Large       | 3½ x 1½ in | 89 x 38 mm |



### Weinberg Vagotomy Retractor

| CODE    | DESCRIPTION  | DIMENSIONS |            | LENGTH        |             |
|---------|--------------|------------|------------|---------------|-------------|
| 23-5917 | Double-Ended | 2 x 2½ in  | 51 x 38 mm | 3½ in x 6¼ in | 89 x 159 mm |
|         |              |            |            | 9½ in         | 241 mm      |

## Vascular



## Garrett Multi Purpose Peripheral Vascular Retractor

| CODE    | DESCRIPTION                          | TOTAL OPENING |       | BLADE WIDTH |       | BLADE DEPTH |       | LENGTH |        |
|---------|--------------------------------------|---------------|-------|-------------|-------|-------------|-------|--------|--------|
| 50-8015 | Self-Retaining,<br>with Three Blades | 3½ in         | 89 mm | 1½ in       | 38 mm | 1¼ in       | 32 mm | 7¼ in  | 184 mm |



## Ochsner Vascular Retractor

With Swiveling Blades, Self-Retaining and Flexible Arms

| CODE    | TOTAL OPENING | BLADE WIDTH |       | BLADE DEPTH |       | ARM LENGTH  | LENGTH      |
|---------|---------------|-------------|-------|-------------|-------|-------------|-------------|
| 50-8016 | 5½ in 140 mm  | 1 in        | 25 mm | 2 in        | 51 mm | 3¼ in 83 mm | 8 in 203 mm |

## Vascular (Vision)

### Complete Expanded Vision Vascular System

| CODE    | DESCRIPTION                   | DIMENSIONS   |              | QTY |
|---------|-------------------------------|--------------|--------------|-----|
| 59-8865 | Includes The Following Items: |              |              |     |
| 59-8802 | Table Clamp w/ Vertical Post  |              |              | 1   |
| 59-8803 | Retractor Clamp               |              |              | 10  |
| 59-8804 | Extension Arm, Hinged         |              |              | 1   |
| 59-8805 | Vision Frame                  |              |              | 1   |
| 59-8807 | Mayo Swivel                   | 2 ¾ x 2 in   | 70 x 51 mm   | 2   |
| 59-8808 | Mayo Swivel                   | 3 ½ x 2 in   | 89 x 51 mm   | 1   |
| 59-8809 | Deaver Swivel                 | 2 ¾ x 4 ½ in | 70 x 114 mm  | 1   |
| 59-8811 | Harrington "Sweetheart"       | 2 x 5 in     | 51 x 127 mm  | 1   |
| 59-8815 | Malleable Swivel, Perforated  | 3 x 6 in     | 76 x 152 mm  | 1   |
| 59-8816 | Malleable Swivel, Perforated  | 3 x 6 ½ in   | 76 x 165 mm  | 1   |
| 59-8818 | Fence Swivel, Perforated      | 4 x 6 in     | 102 x 152 mm | 1   |
| 59-8820 | Splanchnic Swivel             | 2 x 6 in     | 51 x 152 mm  | 1   |
| 59-8821 | Splanchnic Swivel             | 2 x 6 in     | 51 x 152 mm  | 1   |
| 59-8824 | Renal Swivel                  | 1 x 6 in     | 25 x 151 mm  | 2   |
| 59-8801 | Post Coupling                 |              |              | 1   |
| 59-8828 | Sterilization Case            |              |              | 1   |

Note: Individual components are available, in single quantities, by referencing their unique product code upon ordering.



55-9075

### Vascular Spring

| CODE    | DESCRIPTION | LENGTH                           |        |
|---------|-------------|----------------------------------|--------|
| 55-9075 | Small       | 3 <sup>1</sup> / <sub>2</sub> in | 88 mm  |
| 55-9074 | Large       | 5 <sup>1</sup> / <sub>4</sub> in | 133 mm |

## Vein



20-1708

## Cushing Vein Retractor

| CODE    | DESCRIPTION        | BLADE      | LENGTH                           |        |
|---------|--------------------|------------|----------------------------------|--------|
| 50-1020 | Vein Retractor     | 13 x 10 mm | 9 in                             | 229 mm |
| 50-1022 | Vein Retractor     | 9 x 6 mm   | 7 <sup>3</sup> / <sub>4</sub> in | 197 mm |
| 20-1750 | Fenestrated Handle | 11 mm      | 9 in                             | 229 mm |
| 20-1752 | Fenestrated Handle | 11 mm      | 14 in                            | 356 mm |

## Vessel



Tip

## Malis® Vessel Supporter

| CODE    | DESCRIPTION                                     | LENGTH                           |        |
|---------|-------------------------------------------------|----------------------------------|--------|
| 80-1534 | Titanium Handle, Stainless Steel Shaft, 2 Prong | 7 <sup>3</sup> / <sub>8</sub> in | 187 mm |