AORI Patellar Retractor  Designed by Gerard A. Engh, MD

Designed to enhance exposure during total knee arthroplasty, the retractor has a deep basket and two rows of teeth to grab and hold to the lateral side of the patella.

The curved handle provides a fulcrum so that the applied force will both displace and evert the patella from the femur. The patellar retractor is placed after a routine midline, midvastus, or medial para patellar surgical approach to the knee. Once the patella is everted the patellar retractor is applied to the lateral border of the patella.

PRODUCT NO: 4690
Overall Length: 7" (17.8 cm)
Prong Width: 10 mm | 22 mm Gap | 10 mm

MIS Patella Retractor  Designed by William Robb, MD

PRODUCT NO: 3220-05
Overall Length: 9" (22.9 cm)
Patella Pad Width at Widest: 22 mm
Lower Blade Width at Widest: 16 mm
**Knee Retractors with Easy Grip Handles**

Retractors help provide excellent visibility and ligament protection during total and unicondylar knee replacement surgery.

<table>
<thead>
<tr>
<th>PRODUCT NO’S:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SS3035 [Small Hohmann Retractor]</td>
<td></td>
</tr>
<tr>
<td>Overall Length: 7&quot; (17.8 cm)</td>
<td></td>
</tr>
<tr>
<td>Blade Width: 25 mm</td>
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<tr>
<td>SS3037 [Condylar Retractor]</td>
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</tr>
<tr>
<td>Overall Length: 7&quot; (17.8 cm)</td>
<td></td>
</tr>
<tr>
<td>Blade Width: 12 mm</td>
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</tr>
<tr>
<td>SS3038 [Superior Retractor]</td>
<td></td>
</tr>
<tr>
<td>Overall Length: 8.25&quot; (21 cm)</td>
<td></td>
</tr>
<tr>
<td>Blade Width: 31 mm</td>
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</tr>
<tr>
<td>SS3042 [Soft Tissue Retractor]</td>
<td></td>
</tr>
<tr>
<td>Overall Length: 8.25&quot; (21 cm)</td>
<td></td>
</tr>
<tr>
<td>Blade Width: 36 mm</td>
<td></td>
</tr>
</tbody>
</table>

*Used during total knee surgery and is inserted between the lateral collateral ligament and bone to protect the ligament and expose the proximal tibia. The dual prongs keep the retractor from rocking and assist in the insertion. The retractor is bent so that it is out of the way of the operating surgeon.*

<table>
<thead>
<tr>
<th>PRODUCT NO:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6620</td>
<td></td>
</tr>
<tr>
<td>Overall Length: 8&quot; (20.3 cm)</td>
<td></td>
</tr>
<tr>
<td>Prong Width: 5 mm</td>
<td></td>
</tr>
<tr>
<td>11 mm Gap</td>
<td></td>
</tr>
<tr>
<td>5 mm</td>
<td></td>
</tr>
</tbody>
</table>

**Collateral Ligament Retractor**

Helps protect the lateral collateral ligament while exposing the proximal tibia

**Concave Total Knee Retractor**

Used to retract soft tissue away from the femur and tibia

Used during total knee surgery to retract soft tissue away from the femur and tibia. The blade is designed to curve around the distal femur and tibia plateau.

<table>
<thead>
<tr>
<th>PRODUCT NO’S:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6720 [Standard]</td>
<td></td>
</tr>
<tr>
<td>Overall Length: 9.625&quot; (24.4 cm)</td>
<td></td>
</tr>
<tr>
<td>Blade Width: 15 mm</td>
<td></td>
</tr>
<tr>
<td>6720-01 [Narrow]</td>
<td></td>
</tr>
<tr>
<td>Overall Length: 9.625&quot; (24.4 cm)</td>
<td></td>
</tr>
<tr>
<td>Blade Width: 9 mm</td>
<td></td>
</tr>
</tbody>
</table>
MIS Utility Knee Retractor
Designed by William Rubb, MD
Used interchangeably for medial exposure, lateral exposure and to assist in posterior exposure for the tibia
Helps to keep hands out of the field of view while providing retraction in minimally invasive knee surgery.

OrthoLucent™ Retractors
Gain Radiolucence Without Compromising Strength or Function
- Made of a lightweight carbon fiber PEEK composite material
- Ideal for total joint use with x-ray
- Steam sterilizable
- Completely radiolucent
- Flat black non-gloss finish
- No metal transfer with component contact
- Slightly higher cost than stainless steel

Roose Utility Knee Retractor
Designed by Paul Roose, DO
Used for retraction of the soft tissues laterally or medially and for anterior translation of the tibia during tibial prosthetic insertion
The curvature and width are designed for retraction of soft tissues and excellent visualization of bone structure.

Modular Weights
Weights can be used to help hold the retractors in place

OrthoLucent™ Retractors
Made of a lightweight carbon fiber PEEK composite material
Ideal for total joint use with x-ray
Steam sterilizable
Completely radiolucent
Flat black non-gloss finish
No metal transfer with component contact
Slightly higher cost than stainless steel
Goytia Stackable Hohmann Retractors

**Designed by Robin R. Goytia, MD**

*Interlocking design helps to increase depth and leverage in hip exposure, particularly of the anterior acetabulum—especially useful with large patients*

- Custom fitted holes for interlocking retractors helps provide stability
- When "stacked", the increased lever arm of the retractor helps reduce fatigue
- Ideal for use with large patients where extra depth, leverage and force is needed

**PRODUCT NO’S:**

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Overall Length</th>
<th>Blade Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>4551</td>
<td>Standard</td>
<td>9.25&quot;</td>
<td>19.5mm</td>
</tr>
<tr>
<td>4552</td>
<td>Bent</td>
<td>8.25&quot;</td>
<td>19.5mm</td>
</tr>
<tr>
<td>4553</td>
<td>Wide (Extra Deep)</td>
<td>11.5&quot;</td>
<td>42.5mm</td>
</tr>
</tbody>
</table>

Modified Hohmann Retractors

*Handle is contoured to allow better leverage and visualization*

Useful for retracting tissues around the bone. Can be held in place with weights or by hand.

**PRODUCT NO’S:**

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Overall Length</th>
<th>Blade Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>4535</td>
<td>Narrow</td>
<td>10&quot; (25.4 cm)</td>
<td>14 mm</td>
</tr>
<tr>
<td>4535-R*</td>
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<td>18 mm</td>
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<tr>
<td>4535-01</td>
<td>Extra Deep Narrow</td>
<td>11.625&quot; (29.5 cm)</td>
<td>16.4 mm</td>
</tr>
<tr>
<td>4545</td>
<td>Short-tipped Narrow</td>
<td>9.5&quot; (24.1 cm)</td>
<td>14 mm</td>
</tr>
<tr>
<td>6595</td>
<td>Wide</td>
<td>10&quot; (25.4 cm)</td>
<td>42.5 mm</td>
</tr>
<tr>
<td>6595-01</td>
<td>Extra Deep Wide</td>
<td>11.5&quot; (29.2 cm)</td>
<td>42.5 mm</td>
</tr>
</tbody>
</table>

*OrthoLucent™*

*The OrthoLucent™ version is made of a strong, lightweight carbon fiber PEEK composite material, which is completely radiolucent, helps to prevent from marring component surfaces, and can be steam sterilized.*
Bent Hohmann Retractors—Wide

<table>
<thead>
<tr>
<th>PRODUCT NO'S:</th>
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<tbody>
<tr>
<td>6590 [Wide]</td>
<td>Overall Length: 9.375&quot; (23.8 cm)</td>
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<tr>
<td></td>
<td>Handle Length: 7&quot; (17.8 cm)</td>
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<tr>
<td></td>
<td>Blade Width: 43 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.75&quot; (12.1 cm)</td>
</tr>
<tr>
<td>6590-01 [Extra Long Handle]</td>
<td>Overall Length: 11&quot; (27.9 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 9&quot; (22.3 cm)</td>
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<tr>
<td></td>
<td>Blade Width: 41 mm</td>
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<tr>
<td></td>
<td>Depth from Bend: 5.5&quot; (14 cm)</td>
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</table>

Bent Hohmann Retractors—Narrow

<table>
<thead>
<tr>
<th>PRODUCT NO'S:</th>
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<tbody>
<tr>
<td>7110 [Narrow]</td>
<td>Overall Length: 9.75&quot; (23.8 cm)</td>
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<tr>
<td></td>
<td>Handle Length: 7&quot; (17.8 cm)</td>
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<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.75&quot; (12.1 cm)</td>
</tr>
<tr>
<td>7110-R* [OrthoLucent™ Narrow]</td>
<td>Overall Length: 9.75&quot; (23.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 7&quot; (17.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.75&quot; (12.1 cm)</td>
</tr>
<tr>
<td>7110-01 [XL Handle Narrow]</td>
<td>Overall Length: 11.5&quot; (29.2 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 10&quot; (25.4 cm)</td>
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<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.75&quot; (12.1 cm)</td>
</tr>
<tr>
<td>7111 [Narrow w/Extra Grip Tip]</td>
<td>Overall Length: 9.75&quot; (23.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 7&quot; (17.8 cm)</td>
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<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.25&quot; (10.8 cm)</td>
</tr>
<tr>
<td>7115 [Short-tipped Narrow]</td>
<td>Overall Length: 8.625&quot; (21.9 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 7&quot; (17.8 cm)</td>
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<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.4&quot; (11.2 cm)</td>
</tr>
<tr>
<td>7115-01 [Short-tipped Narrow Extra Long Handle]</td>
<td>Overall Length: 11&quot; (27.9 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 10&quot; (25.4 cm)</td>
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<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.25&quot; (10.8 cm)</td>
</tr>
<tr>
<td>7115-03 [Deep Narrow]</td>
<td>Overall Length: 12.125&quot; (31.1 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 9.75&quot; (24.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 6.25&quot; (15.9 cm)</td>
</tr>
<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
</tbody>
</table>

Bent Hohmann Retractors—Narrow  Helps retract tissues at the margins of the joint

The OrthoLucent™ version is made of a strong, lightweight carbon fiber PEEK composite material, which is completely radiolucent, helps to prevent from marring component surfaces, and can be steam sterilized.

<table>
<thead>
<tr>
<th>PRODUCT NO'S:</th>
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</thead>
<tbody>
<tr>
<td>7110 [Narrow]</td>
<td>Overall Length: 9.75&quot; (23.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 7&quot; (17.8 cm)</td>
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<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.75&quot; (12.1 cm)</td>
</tr>
<tr>
<td>7110-R* [OrthoLucent™ Narrow]</td>
<td>Overall Length: 9.75&quot; (23.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 7&quot; (17.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.75&quot; (12.1 cm)</td>
</tr>
<tr>
<td>7110-01 [XL Handle Narrow]</td>
<td>Overall Length: 11.5&quot; (29.2 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 10&quot; (25.4 cm)</td>
</tr>
<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.75&quot; (12.1 cm)</td>
</tr>
<tr>
<td>7111 [Narrow w/Extra Grip Tip]</td>
<td>Overall Length: 9.75&quot; (23.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 7&quot; (17.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.25&quot; (10.8 cm)</td>
</tr>
<tr>
<td>7115 [Short-tipped Narrow]</td>
<td>Overall Length: 8.625&quot; (21.9 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 7&quot; (17.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.4&quot; (11.2 cm)</td>
</tr>
<tr>
<td>7115-01 [Short-tipped Narrow Extra Long Handle]</td>
<td>Overall Length: 11&quot; (27.9 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 10&quot; (25.4 cm)</td>
</tr>
<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 4.25&quot; (10.8 cm)</td>
</tr>
<tr>
<td>7115-03 [Deep Narrow]</td>
<td>Overall Length: 12.125&quot; (31.1 cm)</td>
</tr>
<tr>
<td></td>
<td>Handle Length: 9.75&quot; (24.8 cm)</td>
</tr>
<tr>
<td></td>
<td>Depth from Bend: 6.25&quot; (15.9 cm)</td>
</tr>
<tr>
<td></td>
<td>Blade Width: 19 mm</td>
</tr>
</tbody>
</table>

Extra Grip Tip design modification by Alfred A. Durham, MD

Short-tipped design modification by Carl DiRaimondo, MD

Modular Weights  Weights can be used to help hold the retractors in place.

<table>
<thead>
<tr>
<th>PRODUCT NO'S:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>3430-01 1.5 lbs. (688 g)</td>
<td></td>
</tr>
<tr>
<td>3430-02 2.0 lbs. (911 g)</td>
<td></td>
</tr>
<tr>
<td>3430-03 2.5 lbs. (1,133 g)</td>
<td>with attaching hook</td>
</tr>
</tbody>
</table>

Can be passed over the margin of the joint and held in place with weights or by hand.
Hohmann Retractor
Designed like the original Hohmann-style retractor

The OrthoLucent™ version is made of a strong, lightweight carbon fiber PEEK composite material, which is completely radiolucent, helps to prevent from marring component surfaces, and can be steam sterilized.

Modified Blunt Hohmann Retractor
Used for soft tissue retraction

The OrthoLucent™ version is made of a strong, lightweight carbon fiber PEEK composite material, which is completely radiolucent, helps to prevent from marring component surfaces, and can be steam sterilized.

Meckel Posterior Stabilizing Knee Retractor
Designed by Christopher M. Meckel, MD

Designed to provide enhanced anterior translation of the tibia when doing posterior stabilized total knee replacement

The 15 mm deep blade section of the retractor is used to lever the tibia forward (by resting the tip on the posterior tibia and the middle blade section block leveraging off the distal femur) after the box cut has been made in the distal femur.

Wetzel Modified Hohmann Retractor
Designed by Robert Wetzel, MD and Todd McKinley, MD

The long point is designed to be placed around, on, or through a bony structure and then levered back to retract tissue

The handle is contoured to allow better leverage and visualization. Can be held in place with weights or by hand.
Anterior Femoral Condylar Retractor
Designed by S. David Stulberg, MD

**PRODUCT NO:**
3405
Overall Length: 5" (12.7 cm)
Blade Width at Widest: 4.5 cm

Bargo Femoral Lift
Designed by Lonnie Bargo, CIFA

**PRODUCT NO:**
3649
Overall Length: 6.75" (17.1 cm)
Handle Offset: 3.5" (8.9 cm)
Handle Length: 5" (12.7 cm)
Lift Pad: 2" x 1.675" (51 mm x 41 mm)

Distal Femur Distractor
Helps distract the distal femur away from the proximal tibia

Designed to distract the distal femur away from the proximal tibia during total knee surgery. It is inserted into a pre-drilled hole in the distal femur. The bent handle allows the femur to be distracted away from the tibia. The intramedullary rod portion is fluted.

**PRODUCT NO’S:**
4220-00  [Standard Handle]
Overall Length: 12.75" (32.4 cm)
Rod Offset from Handle: 4.5" (11.4 cm)

4220-01  [Upward Bent Handle]
Overall Length: 17.5" (44.6 cm)
Rod Length from Bend: 12.75" (32.4 cm)
Rod Offset from Handle: 4.5" (11.4 cm)

Harwin Modified Cobra Retractor
Designed by Steven F. Harwin, MD, FACS

The long handle and obtuse angle provide more ergonomic leverage—especially helpful for use with obese patients.

For total knee surgery, the wide blade of the large retractor spans the prepared box and helps bring the tibia forward. The small retractor helps with retraction of the medial and lateral structures, where the wide, concave blade provides added exposure over standard bent Hohmann retractors. The serrated tip helps improve stability.

In total hip surgery, the wide, concave blade design allows for enhanced exposure—especially useful in anterior hip surgery with the placement of reamers, and to elevate and expose the proximal femur.

**PRODUCT NO’S:**
6143  [Large]
Overall Length: 14.75" (37.5 cm)
Horizontal Handle: 8" (20.3 cm)
Blade Width: 43 mm
Tongue: 25 mm x 5 mm

6143-01  [Small]
Overall Length: 12.5" (31.7 cm)
Horizontal Handle: 5" (12.7 cm)
Blade Width: 30 mm
Tongue: 25 mm x 5 mm

Anterior Femoral Condylar Retractor
Designed by S. David Stulberg, MD

**PRODUCT NO:**
6143-01  [Small]
Overall Length: 12.5" (31.8 cm)
Horizontal Handle: 5" (12.7 cm)
Blade Width: 30 mm
Tongue: 25 mm x 5 mm

**PRODUCT NO:**
6143-01  [Small]
Overall Length: 12.5" (31.8 cm)
Horizontal Handle: 5" (12.7 cm)
Blade Width: 30 mm
Tongue: 25 mm x 5 mm

WWW.INNOMED.NET
FREE TRIAL ON MOST INSTRUMENTS
Booth Knee Retractor
Designed by Robert E. Booth, Jr., MD
Designed to help protect the tibial surface and to tighten the collateral ligaments and to help assess the rotation of the femur

PRODUCT NO: 6580
Overall Length: 11.75" (29.8 cm)
Handle Length: 10.5" (26.7 cm)
Blade Depth: 2.75" (7 cm)
Blade Width: 2" (5.1 cm)

Glassman Posterior Condylar Osteophyte Retractor
Designed by Andrew Glassman, MD
Designed to provide exposure of the posterior condyle to gain access to posterior condylar osteophytes during unicompartmental and total knee arthroplasty

PRODUCT NO: 3730
Overall Length: 11.75" (29.8 cm)
Depth From 90° Bend: 3" (7.6 cm)
Length from 45° Bend: 1" (2.54 cm)
Blade Width: 1" (25.4 mm)

Chandler Retractor
Used for retracting tissue away from the bone, and helpful for posterior exposure of the tibia in MIS surgery

PRODUCT NO:
3220-01 [5/8"]
Overall Length: 9.875" (25.1 cm)
Blade Width: 5/8" (1.6 cm)
3220-02 [3/4"]
Overall Length: 9.875" (25.1 cm)
Blade Width: 3/4" (1.9 cm)
3220-04 [1”]
Overall Length: 9.875" (25.1 cm)
Blade Width: 1" (2.54 cm)
3220-02R* (Ortholucent™ 3/4”)
Overall Length: 9.875" (25.1 cm)
Blade Width: 3/4" (1.9 cm)

Bolanos Modified Chandler Retractor
Designed by Alberto Bolanos, MD
Used for retracting tissue away from the bone

PRODUCT NO: 3222
Overall Length: 7.5" (19.1 cm)
Blade Width at Widest: 1" (2.54 cm)
The Knee Retractor System holds retractors utilizing Velcro® straps. This helps eliminate obstruction of the surgeon’s operative area and frees assisting personnel. Four retractor styles are available; straps are available in two lengths. Retractors and straps are autoclavable. The Retractors can be used singularly or in combination.

Velcro® is a registered trademark of Velcro U.S.A.

Knee Retractor System

Helps free assisting personnel while providing excellent exposure

PRODUCT NO:
8100-P [Long Strap–Femur]
8120-P [Short Strap–Tibia]

MIS Modified Wide PCL Retractor with Strap

PRODUCT NO:
3515
Overall Length: 10” (25,4 cm)
Blade Width Above Prongs: 34 mm
Prong Width: 8,5 mm | 17 mm Gap | 8,5 mm

Wide PCL Retractor with Strap

PRODUCT NO:
3525
Overall Length: 10” (25,4 cm)
Blade Width Above Prongs: 57 mm
Prong Width: 8,5 mm | 17 mm Gap | 8,5 mm

Product

Single Prong Collateral Ligament Retractor with Strap

PRODUCT NO:
6650
Overall Length: 8.25” (21 cm)
Blade Width: 14 mm

Long Prong Collateral Ligament Retractor with Strap

PRODUCT NO:
6630
Overall Length: 8” (20,3 cm)
Overall Blade Width: 21 mm
Prong Width: 4,5 mm | 12 mm Gap | 4,5 mm

Stubbs Short Prong Collateral Ligament Retractor with Strap

PRODUCT NO:
6640
Overall Length: 8” (20,3 cm)
Blade Width Above Prongs: 27 mm
Prong Width: 4,8 mm | 3,4 mm Gap | 4,8 mm

MIS PCL Retractor

PRODUCT NO:
6203 [Medium]
Overall Length: 12.5” (31,8 cm)
Handle Length: 6” (15,2 cm)
Blade Width: 15 mm
Designed to expose the proximal tibia during total knee surgery for better access to the articulating surfaces. The handle is contoured to allow the surgeon a clear field of view of the operating area. Modular weights can be used to help hold the retractor in place.

Wide PCL Retractor
Designed by S. David Stulberg, MD

Helps expose the proximal tibia for better surface access

MIS Modified Wide PCL Retractor
Designed by S. David Stulberg, MD

Helps provide excellent visibility and ligament protection during Total and Unicondylar Knee Replacement Surgery

<table>
<thead>
<tr>
<th>PRODUCT NO'S:</th>
<th>Overall Length: 10&quot; (25.4 cm)</th>
<th>Blade Width Above Prongs: 34 mm</th>
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<th>17 mm Gap</th>
<th>9.5 mm</th>
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<tbody>
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<td></td>
</tr>
<tr>
<td>3515 [With Velcro Strap]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**PCL Retractors**

Designed to straddle the cruciate ligament and lie in the condylar notch, allowing the surgeon to retract the tibia away from the femur for better access.

The handle is contoured away from the surgeon’s field of view. Modular weights can be used to hold the retractor in place.

The **Coated Standard** PCL includes a special protective coating, applied to the areas of the instrument that may come into contact with component surfaces, to help prevent marring the articulating surfaces.

The **OrthoLucent™ Standard** PCL can be safely used to look behind the knee when the component(s) are in place without metal transfer or marring component surfaces when contact is made. It is made of a strong, lightweight carbon fiber PEEK composite material, which is completely radiolucent, and can be steam sterilized.

---

**Rosen Knee Tibial Retractor**

Designed for total knee and revision total knee replacements using posterior stabilized knee components, the posterior build-up on the retractor allows the surgeon to more easily translate the tibia forward for better visualization after femoral notch preparation.

**Lester Proximal Tibial TKA Retractor**

Helps expose the cut surface of the tibia to allow sizing, preparation and cleansing during TKA. Also helps protect the posterior knee soft tissue structures from injury.
Manzary Proximal Tibial Stabilizing Knee Retractor

Designed by Mojib Manzary, MD, FRCS of original design by D. Kevin Lester, MD, and Christopher M. Meckel, MD

Designed to help subluxing the tibia anteriorly in posterior stabilizing total knee replacement, helping to expose the proximal surface for preparation.

PRODUCT NO: 4531
- Overall Length: 12.75" (32.4 cm)
- Blade Width: 1.5" (3.8 cm)
- Block Dimensions: .8" x 1.5" x .5" (2 x 3.8 x 1.25 cm)

45° Knee Retractors

Designed for use around the knee.

PRODUCT NO’S:
- 6290-00-075 [Large]
  - Overall Length: 9.125" (23.2 cm)
- 6290-00-076 [Small]
  - Overall Length: 7.875" (20 cm)
- 6290-00-077 [Medium]
  - Overall Length: 9.125" (23.2 cm)
- 6290-00-078 [Medium Straight]
  - Overall Length: 9.125" (23.2 cm)

Chandran Tibial Knee Retractor

Designed by RaMa E. Chandran, MD

Designed for use in TKR, the hook on the front of the blade acts as a stop to help prevent the retractor from deep penetration behind the tibia.

PRODUCT NO: 4533
- Overall Length: 10.5" (26.7 cm)
- Depth from Bend: 3" (7.6 cm)

Narrow Right Angle Retractor

Designed for soft tissue retraction.

PRODUCT NO: C1011
- Overall Length: 8.5" (21.6 cm)
- Handle Length: 6.75" (17.1 cm)
- Blade Depth: 4.5" (11.4 cm)
- Blade Width: .375" (1 cm)
“S” Total Knee Retractors

*Designed by R. Barry Sorrells, MD*

**Helps** protect the collateral ligaments and popliteal structures while providing excellent visualization within the knee joint.

The design is self-retaining and can be used singularly and in pairs. For cruciate sparing or sacrificing prosthetic designs.

**PRODUCT NO’S:**

- **3720-00** [Wide Blade]
  - Overall Length: 6” (15.2 cm)
  - Blade Width: 20 mm

- **3720-01** [Narrow Blade]
  - Overall Length: 6” (15.2 cm)
  - Blade Width: 10 mm

---

Rosen Double Ended Army-Navy/“Z” Retractor

*Designed by Adam Rosen, D.O.*

**PRODUCT NO:**

- **4005**
  - Overall Length: 10” (25.4 cm)
  - Z End: 70 mm Deep, 11 mm Wide
  - Army Navy End: 40 mm Deep, 15 mm Wide

Can be used in a variety of positions for exposure, soft tissue protection, and when making cuts.

Helps to reduce the number of instruments on the field and to limit the need for passing instruments during the case.

---

Uni Medial/Lateral Ligament Retractor

*Designed by Kurt Kramer, PA-C*

Designed to be placed in the medial/lateral tibial recess while making the horizontal tibial cut during unicompartmental knee arthroplasty—helping to retract and protect the medial and lateral collateral ligaments.

Ambidextrous, ergonomic design allows for comfortable and natural hand positioning, helping to improve MCL/LCL protection and ease of use, especially in the obese patient.

**PRODUCT NO:**

- **3632**
  - Overall Length: 4.25” (10.8 cm)
  - Blade Width: 8.8 mm
  - Blade Depth: 2.375” (6 cm)
Blount Retractor with Small Handle
Designed by Ronald Romanelli, MD
Designed for retraction in total knee arthroplasty

**PRODUCT NO:** 4852
- **Overall Length:** 9.375" (23.8 cm)
- **Handle Length:** 4.625" (11.7 cm)
- **Blade Depth:** 1.5" (3.8 cm)
- **Blade Width at Widest:** 14 mm

Blount Knee Retractor
Designed by James B. Stiehl, MD
Designed for retraction in total knee arthroplasty

**PRODUCT NO:** 4850
- **Overall Length:** 8.5" (21.6 cm)
- **Prong Width:** 9 mm

“Z” Knee Retractor
*Helps create better access to the articulating surfaces*

Designed for retraction in total knee arthroplasty, the long narrow blade easily fits above the capsular ligament at the joint line. Can also be used for knee revision, fitting easily around the implant.

**PRODUCT NO:** 4420000
- **Overall Length:** 7.25" (18.4 cm)
- **Blades:** 11 mm Wide, 3" (7.6 cm) Deep

“Z” Knee Retractor
*Helps create better access to the articulating surfaces*

Designed to expose the femur and the tibia during knee surgery for better access to the articulating surfaces. The “Z” contouring of the retractor provides the surgeon with an open field of view and working area.

**PRODUCT NO:** 4420000
- **Overall Length:** 7.25" (18.4 cm)
- **Blades:** 11 mm Wide, 3" (7.6 cm) Deep

1.800.548.2362

JUNE 2020

KNEE EXPOSURE & POSITIONING INSTRUMENTS
Ott Fat Pad Retractor Set
Designed by Robert Wubben, MD, with modification by David Ott, MD
Designed for soft tissue retraction, the reduced phalange allows for ease of placement in the lateral gutter, and helps avoid contact with the lateral condyle.

Wubben Lateral Fat Pad Retractor for TKR
Designed by Robert Wubben, MD
Designed to hold soft tissues when inserting the TKR

PRODUCT NO:
3219-00 [Set]
3219-L [Left]
Overall Length: 10" (25.4 cm)
Blade Width: 43 mm
3219-R [Right]
Overall Length: 10" (25.4 cm)
Blade Width: 20 mm

Baldwin Lateral Soft Tissue Retractor
Designed by James L. Baldwin, MD
Designed to hold back the fat pad and soft tissues during total knee arthroplasty
The fenestrated paddle helps holds back the fat pad and soft tissues, while the two long narrow prongs help penetrate the soft tissue, and rest against the side of the tibia to help prevent rotation of the instrument.

PRODUCT NO:
6312 [Sharp Prongs]
Overall Length: 9.875" (25.1 cm)
Pad Dimensions: 38 mm x 15 mm
Prong Depth: 22 mm
6313 [Blunt Prongs]
Overall Length: 9.75" (24.8 cm)
Pad Dimensions: 38 mm x 15 mm
Prong Depth: 20 mm

WWW.INNOMED.NET
FREE TRIAL ON MOST INSTRUMENTS
A popliteal retractor specifically designed for meniscal repair or access to the posterior knee. Used when an inside out meniscal repair is indicated, the design facilitates retracting the posterior soft tissues of the popliteal fossa out of the way, allowing passage of meniscal repair needles. The retractor's compact design facilitates a minimally invasive incision. The unique shape helps capture the meniscal repair needles and direct them out of the posterior incision for easy grasping and repair. Incorporates a shiny body to help reflect inside the posterior wound and aid in seeing and retrieving the needles.

**Bicos Meniscal Repair Retractor**

*Designed by James Bicos, MD*

A popliteal retractor specifically designed for meniscal repair or access to the posterior knee. Used when an inside out meniscal repair is indicated, the design facilitates retracting the posterior soft tissues of the popliteal fossa out of the way, allowing passage of meniscal repair needles. The retractor's compact design facilitates a minimally invasive incision. The unique shape helps capture the meniscal repair needles and direct them out of the posterior incision for easy grasping and repair. Incorporates a shiny body to help reflect inside the posterior wound and aid in seeing and retrieving the needles.

**Engh Intercondylar Notch Retractors**

*Designed by Gerard A. Engh, MD*

Enhances minimally invasive exposure of the medial femoral condyle.

**McPherson Retractor Extender**

*Designed by Ed McPherson, MD*

Designed to extend a standard retractor to help provide additional leverage. Now in two sizes to accommodate most retractors.
Meyerding Spreader with Ergonomic Handle

A self-retaining soft tissue retractor for use in hip, knee, and shoulder surgery

Features an ergonomic handle for increased comfort and control.

PRODUCT NO:
6244
- Overall Length: 8.5" (21.6 cm)
- Blade Depth: 3.5" (8.9 cm)
- Blade Width: 1" (2.54 cm)

MADE EXCLUSIVELY
FOR INNOMED IN
GERMANY

Flat Gelpi Retractors with Ergonomic Handle

Designed to help retract a broader area of soft tissue or muscle

The two largest sizes feature an ergonomic handle for increased comfort and control.

PRODUCT NO'S:
- 4191 [Small]
  - Overall Length: 6.5" (16.5 cm)
  - Prong Depth: 1.25" (3.2 cm)
- 4192 [Medium]
  - Overall Length: 7.25" (18.4 cm)
  - Prong Depth: 1.75" (4.4 cm)
- 4193 [Large]
  - Overall Length: 9" (22.9 cm)
  - Prong Depth: 3" (7.6 cm)
- 4194 [Deep]
  - Overall Length: 10" (24.4 cm)
  - Prong Depth: 5" (12.7 cm)

Gelpi Retractors

The ergonomic handle version offers increased comfort and control.

PRODUCT NO'S:
- 4180 [Standard]
  - Overall Length: 7.75" (19.7 cm)
- 4181 [With Ergonomic Handle]
  - Overall Length: 8.75" (22.2 cm)
Meyerding Type Retractors with Ergonomic Handle

Designed for general use soft tissue retraction, the ergonomic handle allows for a better grip and less fatigue.
Non-glare finish featured on the metal retractor parts.

PRODUCT NO’S:

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Size</th>
<th>Overall Length</th>
<th>Blade Width</th>
<th>Blade Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>6241</td>
<td>50 x 16 mm</td>
<td>8.875 (22.5 cm)</td>
<td>15 mm</td>
<td>50 mm</td>
</tr>
<tr>
<td>6242</td>
<td>75 x 15 mm</td>
<td>9.25 (23.5 cm)</td>
<td>15 mm</td>
<td>75 mm</td>
</tr>
<tr>
<td>6243</td>
<td>75 x 25 mm</td>
<td>9.25 (23.5 cm)</td>
<td>25 mm</td>
<td>75 mm</td>
</tr>
</tbody>
</table>

Wide Rake Retractors with Ergonomic Handle

Designed for general use soft tissue retraction, the ergonomic handle allows for a better grip and less fatigue.
Non-glare finish featured on the metal retractor parts.

PRODUCT NO’S:

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Size</th>
<th>Overall Length</th>
<th>Blade Width</th>
<th>Blade Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>6051</td>
<td>Deep, Sharp</td>
<td>11.175 (28.3 cm)</td>
<td>2.375 (6 cm)</td>
<td>2.75 (7 cm)</td>
</tr>
<tr>
<td>6052</td>
<td>Deep, Blunt</td>
<td>11.175 (28.3 cm)</td>
<td>2.375 (6 cm)</td>
<td>2.75 (7 cm)</td>
</tr>
<tr>
<td>6053</td>
<td>Shallow, Sharp</td>
<td>11.175 (28.3 cm)</td>
<td>2.375 (6 cm)</td>
<td>1.875 (4.8 cm)</td>
</tr>
<tr>
<td>6054</td>
<td>Shallow, Blunt</td>
<td>11.175 (28.3 cm)</td>
<td>2.375 (6 cm)</td>
<td>1.875 (4.8 cm)</td>
</tr>
</tbody>
</table>

Rake Retractors with Ergonomic Handle

Designed for general use soft tissue retraction.

PRODUCT NO’S:

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Size</th>
<th>Overall Length</th>
<th>Blade Width</th>
<th>Blade Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>4839</td>
<td>3-Prong</td>
<td>9.5 (24.1 cm)</td>
<td>13 mm</td>
<td>14 mm</td>
</tr>
<tr>
<td>4840</td>
<td>4-Prong</td>
<td>9.5 (24.1 cm)</td>
<td>19 mm</td>
<td>14 mm</td>
</tr>
</tbody>
</table>
Femoral Tibial Coated Spreader Bar
Designed to separate the femur and tibia when implant components are in place
The end is coated to help protect from scratching component surfaces.

Lombardi Gap Balancing Femoral Tibial Spreader
Designed to help separate the femur and tibia during total knee procedures, with the pads being parallel when measured at 20 mm of separation
The calibrated handle helps to accurately gauge the gap, and makes it possible for two spreaders to be used to assist in balancing ligaments.

Lombardi Gap Balancing Femoral Tibial Spreader with Easy Release Locking Mechanism
Spreaders designed by Adolph V. Lombardi Jr., MD. Locking mechanism designed by Munish C. Gupta, MD

PRODUCT NO'S:
1878-LR [Large] Overall Length: 9.625" (24.4 cm) Pads: 22 mm x 13 mm Opens to 45 mm
1877-LR [Small] Overall Length: 7" (17.8 cm) Pads: 22 mm x 13 mm Opens to 35 mm

Femoral Tibial Coated Spreader Bar
PRODUCT NO: 1820 Overall Length: 13" (33 cm) Coated Surface: 4" (10.2 cm) Blade Width: 13 mm

Horizontal Grooved Pads
1878 [Large] Overall Length: 9.25" (23.5 cm) Pads: 22 mm x 13 mm Opens to 50 mm
1877 [Small] Overall Length: 7" (17.8 cm) Pads: 22 mm x 13 mm Opens to 35 mm

Diamond Cut Pads
1878-D [Large] Overall Length: 9.25" (23.5 cm) Pads: 22 mm x 13 mm Opens to 50 mm
1877-D [Small] Overall Length: 7" (17.8 cm) Pads: 22 mm x 13 mm Opens to 35 mm

FREE TRIAL ON MOST INSTRUMENTS
Lombardi Femoral Tibial Spreader with Easy Release Locking Mechanism

Spreader designed by Adolph V. Lombardi Jr., MD
Locking mechanism designed by Munish C. Gupta, MD

Thin pads help to separate the femur and tibia during total knee procedures
Locking ratchet mechanism helps prevent accidental release, and provides for controlled adjustment and easy release.

**New!**

Lombardi Femoral Tibial Spreader

Designed by Adolph V. Lombardi Jr., MD

Thin pads help to separate the femur and tibia during total knee procedures

**PRODUCT NO’S:**

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Size</th>
<th>Overall Length</th>
<th>Pads</th>
<th>Opens to</th>
</tr>
</thead>
<tbody>
<tr>
<td>1875-LR</td>
<td>Large</td>
<td>9.25” (23.5 cm)</td>
<td>22 mm x 13 mm</td>
<td>45 mm</td>
</tr>
<tr>
<td>1876-LR</td>
<td>Small</td>
<td>7” (17.8 cm)</td>
<td>22 mm x 13 mm</td>
<td>35 mm</td>
</tr>
</tbody>
</table>

**Diamond Cut Pads**

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Size</th>
<th>Overall Length</th>
<th>Pads</th>
<th>Opens to</th>
</tr>
</thead>
<tbody>
<tr>
<td>1875-D-LR</td>
<td>Large</td>
<td>9.25” (23.5 cm)</td>
<td>22 mm x 13 mm</td>
<td>45 mm</td>
</tr>
<tr>
<td>1876-D-LR</td>
<td>Small</td>
<td>7” (17.8 cm)</td>
<td>22 mm x 13 mm</td>
<td>35 mm</td>
</tr>
</tbody>
</table>

Sorrells Tibia Protector Plates

Designed by R. Barry Sorrells, MD

Designed to protect the surface of the tibia

**PRODUCT NO’S:**

<table>
<thead>
<tr>
<th>Product No.</th>
<th>Size</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1130</td>
<td>Large</td>
<td>65 x 40 mm</td>
</tr>
<tr>
<td>1135</td>
<td>Small</td>
<td>65 x 40 mm</td>
</tr>
<tr>
<td>1130</td>
<td>Large</td>
<td>75 x 45 mm</td>
</tr>
</tbody>
</table>
Calibrated Femoral Tibial Spreaders

Helps separate the femur and tibia during total knee replacement surgery

Locking Mechanism Version
Locking ratchet mechanism helps prevent accidental release, and provides for controlled adjustment and easy release.

Speed Lock Version
Helps allow precise control and prevent unintended release.

Coated Pad Version
Helps protect component surfaces when implants are in place, and are slightly contoured to add stability against the curved articulating implant surfaces.

Product NO:

LARGE

1860 [Large w/Grooved Pads]
Overall Length: 12" (30,5 cm)
Pads: 25 x 16 mm
Opens to 65 mm

1865-LR [Large w/Round Pads & Locking Mechanism]
Overall Length: 7" (17,8 cm)
Pads: 25 x 25 mm
Opens to 39 mm

PRODUCT NO’S:

SMALL

1850 [Small w/Grooved Pads]
Overall Length: 7" (17,8 cm)
Pads: 23 x 12 mm
Opens to 39 mm

1850-D [Small w/Diamond Cut Pads]
Overall Length: 7" (17,8 cm)
Pads: 23 x 12 mm
Opens to 39 mm

1850-LR [Small with Grooved Pads and Locking Mechanism]
Overall Length: 7" (17,8 cm)
Pads: 23 x 12 mm
Opens to 39 mm

1850-01 [Small w/Coated Pads]
Overall Length: 7" (17,8 cm)
Pads: 18 x 15 mm
Opens to 39 mm

1855 [Medium w/Grooved Pads]
Overall Length: 10" (25,4 cm)
Pads: 23 x 14 mm
Opens to 50 mm

1855-D [Medium w/Diamond Cut Pads]
Overall Length: 10" (25,4 cm)
Pads: 23 x 14 mm
Opens to 50 mm

1855-SL [Medium w/Speed Lock* & Grooved Pads]
Overall Length: 10" (25,4 cm)
Pads: 23 x 14 mm
Opens to 50 mm

1850 [Small w/Grooved Pads]
Overall Length: 7" (17,8 cm)
Pads: 23 x 12 mm
Opens to 39 mm

1850-D [Small w/Diamond Cut Pads]
Overall Length: 7" (17,8 cm)
Pads: 23 x 12 mm
Opens to 39 mm

1850-LR [Small with Grooved Pads and Locking Mechanism]
Overall Length: 7" (17,8 cm)
Pads: 23 x 12 mm
Opens to 39 mm

1855 [Medium w/Grooved Pads]
Overall Length: 10" (25,4 cm)
Pads: 23 x 14 mm
Opens to 50 mm

1855-D [Medium w/Diamond Cut Pads]
Overall Length: 10" (25,4 cm)
Pads: 23 x 14 mm
Opens to 50 mm

1855-SL [Medium w/Speed Lock* & Grooved Pads]
Overall Length: 10" (25,4 cm)
Pads: 23 x 14 mm
Opens to 50 mm

1860 [Large w/Grooved Pads]
Overall Length: 12" (30,5 cm)
Pads: 25 x 16 mm
Opens to 65 mm

PRODUCT NO’S:

MEDIUM

1855 [Medium w/Grooved Pads]
Overall Length: 10" (25,4 cm)
Pads: 23 x 14 mm
Opens to 50 mm

1855-D [Medium w/Diamond Cut Pads]
Overall Length: 10" (25,4 cm)
Pads: 23 x 14 mm
Opens to 50 mm

1855-SL [Medium w/Speed Lock* & Grooved Pads]
Overall Length: 10" (25,4 cm)
Pads: 23 x 14 mm
Opens to 50 mm

1865 [Small w/Round Pads]
Overall Length: 7" (17,8 cm)
Pads: 25 x 25 mm
Opens to 39 mm

*Speed lock modification designed by Nasim A. Rana, MD

PRODUCT NO:

LARGE

1860 [Large w/Grooved Pads]
Overall Length: 12" (30,5 cm)
Pads: 25 x 16 mm
Opens to 65 mm

1850 [Small w/Grooved Pads]
Overall Length: 7" (17,8 cm)
Pads: 23 x 12 mm
Opens to 39 mm
Scott Femoral Tibial Tensor/Spreadsers

Designed by Richard Scott, MD

Used before determining femoral component rotation to help properly tense the medial and lateral ligaments and help assure a stable, balanced flexion gap

Four Pad Configurations Available

Original with narrow pads, designed to be used before making the femoral and tibial cuts

Three new wide pad styles, designed for use after the cuts have been made

Narrow Fixed Pads

Wide Fixed Pads

Wide Block Pads

Round Pads

An important part of surgical technique during total knee arthroplasty is the establishment of a symmetric balanced flexion gap. This can be achieved by tensing the medial and lateral ligaments with laminar spreaders and rotating the femoral component until a rectangular space is formed. The calibrated Tensor/Spreader allows the surgeon to choose a reproducible amount of tension across the medial or lateral flexion space.

In the varus knee, any medial release necessary to balance the knee in extension is performed first. In the valgus knee, the flexion gap can be balanced before the extension gap if the lateral retinaculum (not the lateral collateral ligament) is all that needs releasing to correct the deformity.

The spreader can be used before or after tibial preparation and also during revision surgery after a well-aligned tibial platform has been established.

The knee is flexed 90 degrees. Any medial retractor is removed. The medial gap is tensed with a plain or calibrated laminar spreader that is opened until the medial collateral ligament is fully tensed. The calibrated tensor is applied laterally and opened to the desired tension on the indicator. The femoral component is rotated until a rectangular gap is formed based off the tibial cut or an external tibial alignment device (if the tibial resection has not yet been performed).

**PRODUCT NO'S:**

1995 [Narrow Fixed Pads]
- Overall Length: 7” (17.8 cm)
- Blade Width: 7 mm
- Opens to: 40 mm

1996 * [Wide Fixed Pads]
- Overall Length: 7” (17.8 cm)
- Pads: 22 mm x 13 mm
- Opens to: 40 mm

1997 [Wide Block Pads]
- Overall Length: 7” (17.8 cm)
- Pads: 23 mm x 12 mm
- Opens to: 40 mm

1998 [Round Pads]
- Overall Length: 7” (17.8 cm)
- Pads: 25 mm x 25 mm
- Opens to: 40 mm

*Pad Modification designed by Raymond H. Kim, MD

US Patent #8,162,951 B2

Ortho Self-Retaining Retractors

Used to separate the femur and tibia during knee replacement procedures, where the calibrated design can help to balance ligaments

**PRODUCT NO'S:**

<table>
<thead>
<tr>
<th>Flat Outside Pads</th>
<th>Serrated Outside Pads</th>
</tr>
</thead>
<tbody>
<tr>
<td>1842 [Small Flat]</td>
<td>1842-01 [Small Serrated]</td>
</tr>
</tbody>
</table>
- Overall Length: 6.5” (16.5 cm)
- Blade Width: 7 mm
- Blade Thickness: 1.7 mm

| 1843 [Medium Flat] | 1843-01 [Medium Serrated] |
- Overall Length: 9.25” (23.5 cm)
- Blade Width: 10 mm
- Blade Thickness: 1.7 mm

Features a no-teeth design, available with flat or serrated outside blades

Can also be used for spine surgery where the calibrated ratchet can be used to help accurately measure the size of an opening – useful in procedures to help assess bone graft needs

Also useful in foot & ankle surgery

Calibrated ratchet (in mm) is helpful in ligament balancing

1.800.548.2362 JUNE 2020 KNEE EXPOSURE & POSITIONING INSTRUMENTS 23
Slotted base allows the leg to be easily flexed or extended during knee surgery
- Slots are also designed to allow the foot piece to be rotated
- The complete unit is steam and gas sterilizable
- Supplied with a sterilizable table clamp which can be clamped over the sterile drape to the O.R. table side bar
- Three (3) Sterile Pads/Wraps are included with each new purchase (See below for Pad/Wrap information)

PRODUCT NO’S:
- Base Dimensions: 21” x 11” (53.4cm x 27.9cm)
- 2630-11 [Robb Leg Positioner]
- Optional & Replacement Parts:
  - 2630-FP [Aluminum Footpiece Only]
  - 2629-00 [Case of 10 Sterile Pads/Wraps]
  - 2595 [Table Clamp]

Leg Positioner
Sterile Protective Pad & Wrap
Disposable, latex-free sterile foam pad and cohesive wrap helps protect patient from pressure sores, abrasions and possible neurological impairment while securing foot into the boot

PRODUCT NO:
- 2629-00 [Case of 10 Sets]
- 2629-L [1 Set]

Each set includes 1 Pad and 1 Wrap.
Stulberg Leg Positioner
Designed by S. David Stulberg, MD

Provides stable positioning of the knee during surgery

- Allows the leg to be manipulated into the desired position and securely locked in place
- Includes the necessary adjustments to tilt, rotate, and flex or extend the knee
- Extension/flexion adjustments can be made with the quick release of the ratchet
- In use, the base plate is clamped onto the operating table with the vertical side bar, the base plate is draped, and the sterile support plate lowered into the base plate
- The patient’s foot is wrapped into the foot support with a sterile bandage (additional padding may be used for thin tibias)
- The complete unit is steam and gas sterilizable
- Three (3) Sterile Pads/Wraps are included with each new purchase (See below for Pad/Wrap information)

Foot/Ankle Support
Support Plate
Base Plate

Loosening the Tilt Bar allows the knee to be tilted in either direction. Tightening the bar locks the Yoke System in the desired position.

Tilt Bar

The Ratchet allows the Yoke Assembly to be moved in a precise gradual manner, the length of the Track. For faster adjustments, downward pressure on the Ratchet Handle releases the Yoke Assembly which then can be easily slid the length of the Track.

Ratchet

Loosening the Rotation Bar allows the knee to be rotated in either direction. Tightening the bar locks the Yoke System in the desired direction.

Rotation Bar

Usage guide available on our website.

PRODUCT NO’S:
Base Dimensions: 20” x 10.5” (50.8 cm x 26.7 cm)
2620-10 [Stulberg Leg Positioner]
Optional & Replacement Parts:
2620-FP [Aluminum Footpiece Only]
2629-00 [Case of 10 Sterile Pads/Wraps]

(See below for Pad/Wrap information)

Three (3) Sterile Pads/Wraps are included with each new purchase.
Modified 90° Leg Stabilizer
Designed by Gregory Fanelli, MD

Useful in total knee surgery to hold the leg in position
Helps to open up the knee joint when pressure is applied to the lower leg. Pad and sterilizable table clamp included.

PRODUCT NO:
2725
Post Height: 11.375" (28.9 cm)
Pad Length: 9" (22.9 cm)
Pad Diameter: 3" (7.6 cm)

Replacement Parts:
9120 [Table Clamp]
8840-P [Pad]

Kirschenbaum Foot Positioner
Designed by Ira Kirschenbaum, MD

Helps eliminate the use of sand bags under the drape during total knee surgery

The foot rest is dome shaped for optimal foot contact and positioning the leg in flexion, and can be rotated. The unit can be used under the drape by attaching it to a standard table attachment or it can be sterilized for use on top of the drape. It can be attached to the table with the optional sterilizable table clamp. Supplied with a removable, sterilizable silicone foot pad.

Stulberg Sliding Bolster
Designed by S. David Stulberg, MD

Helps eliminate the need for a sand bag during total knee surgery
The base plate is attached to the table and the sterile sliding bolster is placed on top of the sterile drape. The bolster can be adjusted for different angles of knee flexion during surgery.

PRODUCT NO:
2730
Base Dimensions: 20" x 10.5" (50.8 cm x 26.7 cm)
**Stanton Arthroscopic Leg Holder**

Designed by John Stanton, MD

- Designed to securely hold legs of various sizes for arthroscopic surgery
- Sliding leg holder can be adjusted for small calves or to accommodate large thighs
- Locking pin prevents sides from spreading apart
- Strap can be placed high or low through the slots in the side plates to accommodate large/small limbs
- Strap is strongly secured with a toothed clamp
- Support rod, when clamped into a standard table clamp, helps to prevent rotation

**PRODUCT NO**: 4045
Dimensions: 16.5” L x 8.5” H x 3.5” W
(42 cm L x 21.6 cm H x 9 cm W)
Fits Legs: From 4” to 11” (10 cm to 28 cm)

**Replacement Parts**
- 4045-S [Strap]
  - Overall Length: 28” (71.2 cm)

**Protein Meal**

**George Arthroscopic Knee Positioner**

Designed by Michael S. George, MD

Provides lateral as well as superior support which allows valgus stress to open the medial compartment

Shape does not squeeze the thigh, making the need for a thigh tourniquet optional. If desired, the unit can easily be rotated out of the way without disrupting the sterile field. Using with a standard operating table clamp, the unit can easily be raised or lowered to accommodate all thigh sizes.

**PRODUCT NO**: 2735
Overall Height: 22” (55.9 cm)
Post Height: 12” (30.5 cm)
Pad Width: 3” (7.6 cm)

**Replacement Parts**
- 2735-P [Pad]
**Chefr Leg Holder**  
*Designed by John Chefr, MD*

**Supports the lower extremity for prepping before knee or hip surgery**

Useful for all lower extremity procedures and is particularly helpful for supporting the leg with the patient positioned in the lateral position. By holding the foot/ankle in an externally rotated position, the knee can be locked into extension which helps eliminate the need for manual support.

May also be used to support the limb for surgical patients in the supine position such as for knee and foot/ankle procedures.

**Product No's:**

<table>
<thead>
<tr>
<th>Replacement Parts:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2270</td>
<td></td>
</tr>
<tr>
<td>4150-PD3</td>
<td>[Set of 3 Small Pads]</td>
</tr>
</tbody>
</table>

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**Durham Leg Positioner**  
*Designed by Al Durham, MD*

**Placed against the thigh, helping to hold the leg upright in knee surgery**

Supplied with a sterilizable table clamp. The pad is made of semi-dense foam to help prevent pressure points and is sealed with a washable coating.

**Product No's:**

<table>
<thead>
<tr>
<th>Replacement Parts:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4105</td>
<td></td>
</tr>
<tr>
<td>9120</td>
<td>[Table Clamp]</td>
</tr>
<tr>
<td>4105-P</td>
<td>[Pad]</td>
</tr>
</tbody>
</table>

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**Patient Self Stress Assembly Set**  
*Designed by Kyle Cook, RTR and David Mauerhan, MD*

**Designed to help position a patient for X-ray evaluation to help determine candidacy for Unicondylar Knee Arthroplasty**

**Product No's:**

<table>
<thead>
<tr>
<th>Individual Instruments:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2741-00</td>
<td>[Set]</td>
</tr>
<tr>
<td>2741-01</td>
<td>[Triangle Positioner]</td>
</tr>
<tr>
<td>2741-02</td>
<td>[Contoured Cube]</td>
</tr>
</tbody>
</table>

**Dimensions:**

- Triangle Positioner: 24" x 9" x 9" (61 cm x 23 cm x 23 cm)
- Contoured Cube: 11" x 9" x 6" (28 cm x 23 cm x 15.2 cm)
Sanders Extremity Positioning Tubes

*Designed to support the knee and ankle during lower extremity surgery*

Designed by Richard A. Sanders, MD

The 4" (10.2 cm) tube elevates the foot and ankle for ankle fracture surgery.

The 6" (15.2 cm) tube lifts the knee off the operating table and allows for approximately 30° of knee flexion. Very useful for closure of total knee incisions, supporting fractures of the distal femur, and tibia plateau fractures.

The tubes are made of aluminum, allowing them to be autoclaved. They help eliminate the need for rolled sheet bolsters.

<table>
<thead>
<tr>
<th>PRODUCT NO'S:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2740-01 [Small]</td>
</tr>
<tr>
<td>Diameter: 4&quot; (10.2 cm)</td>
</tr>
<tr>
<td>Width: 8&quot; (20.3 cm)</td>
</tr>
<tr>
<td>2740-02 [Large]</td>
</tr>
<tr>
<td>Diameter: 6&quot; (15.2 cm)</td>
</tr>
<tr>
<td>Width: 8&quot; (20.3 cm)</td>
</tr>
</tbody>
</table>

Lower Extremity Leg Positioner

*Designed to lift the knee for lower extremity casting applications*

Supplied with one autoclavable silicone pad. Positioner is radiolucent and gas or steam sterilizable.

<table>
<thead>
<tr>
<th>PRODUCT NO'S:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2745</td>
</tr>
<tr>
<td>Dimensions: 5.5&quot; x 9.5&quot; x 9.25&quot; (14 x 24 x 23.5 cm)</td>
</tr>
<tr>
<td>Replacement Parts:</td>
</tr>
<tr>
<td>2760-P [Silicone Pad]</td>
</tr>
</tbody>
</table>

Sanders Tube Holder

*Designed to help stabilize the Sanders Extremity Positioning Tubes (#2740-01 & -02)*

The tube holder will help stabilize the tubes when used for lower extremity positioning for lower extremity surgery. Also, by using the tubes with the Stulberg Sliding Bolster (#2730), the knee can be placed in less flexion during the initial incision and wound closure.

<table>
<thead>
<tr>
<th>PRODUCT NO:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2740-03</td>
</tr>
<tr>
<td>Dimensions: 8&quot; x 4&quot; x 1.625&quot; (20.3 x 10.2 x 4.1 cm)</td>
</tr>
</tbody>
</table>
Tibial Nailing

Tibia Reduced For:
- Open Reduction and Internal Fixation (ORIF)
- Application of uni- or multi-plane external fixator
- Knee ligament repairs and/or reconstruction

Fromm Femur & Tibia Triangles

- Designed by S.E. Fromm, MD
- Extra Small Triangle designed by S.E. Fromm, MD & Kenneth Merriman, MD

Used for femur and tibia positioning during nailing, repairs and fractures

PRODUCT NO’S:

- 2760-00 [Set of 3] Angles: Top 30°, Two Bottom 75°
- 2760-01 [11"] Base: 6” (15.2 cm), Height: 11” (27.9 cm)
- 2760-02 [14"] Base: 7” (17.8 cm), Height: 14” (35.6 cm)
- 2760-03 [16"] Base: 9” (22.9 cm), Height: 16” (40.7 cm)

Sold Separately – Not In Set:
- 2760-XS [8.5"] Base 5” (12.7 cm), Height: 8.5” (21.6 cm)

Replacement Parts:
- 2760-P [Silicone Pad]
- 2760-S [Straps]

Retrograde Femoral Nailing

Triangle holds femur reduced (prevents sagging)

Adjustable Knee & Tibial Positioner

Designed by Ashutosh Chaudhari, MD

Adjustable design allows for use in procedures around the knee such as tibial nailing, tibial condyle plating, patella fracture fixation, supracondylar fracture plating, supracondylar fracture nailing, and total knee replacement

Radiolucent. Steam sterilizable.

PRODUCT NO’S:

- 2770-00 [Set] Includes Positioner, Pad, and Two Short Straps
- 2770-01 [Positioner] Overall Length (Folded): 28” (71.1 cm)
  Maximum Triangle Height: 14” (35.6 cm)
  Thickness (Flat): 8” (4.6 cm)
  Overall Length (Flat): 34.75” (149 cm)
- 2770-P [Silicone Pad] Dimensions: 12” x 5.5” (30.5 cm x 14 cm)
- 2790-S [Short Straps] Pkg of 10

Fromm Femur & Tibia Triangles

Designed by S.E. Fromm, MD

Extra Small Triangle designed by S.E. Fromm, MD & Kenneth Merriman, MD

Used for femur and tibia positioning during nailing, repairs and fractures

PRODUCT NO’S:

- 2760-00 [Set of 3] Angles: Top 30°, Two Bottom 75°
- 2760-01 [11"] Base: 6” (15.2 cm), Height: 11” (27.9 cm)
- 2760-02 [14"] Base: 7” (17.8 cm), Height: 14” (35.6 cm)
- 2760-03 [16"] Base: 9” (22.9 cm), Height: 16” (40.7 cm)

Sold Separately – Not In Set:
- 2760-XS [8.5"] Base 5” (12.7 cm), Height: 8.5” (21.6 cm)

Replacement Parts:
- 2760-P [Silicone Pad]
- 2760-S [Straps]

R120-SP [Straps for XS] Pkg of 10

Tibia Reduced For:
- Open Reduction and Internal Fixation (ORIF)
- Application of uni- or multi-plane external fixator
- Knee ligament repairs and/or reconstruction

Retrograde Femoral Nailing

Triangle holds femur reduced (prevents sagging)

Designed to position and hold the femur and tibia during intramedullary nailing of the tibia, ligament repairs and extremity fractures.

Allows knee to be fixed greater than 90° to allow reaming and nail insertion without displacing fracture. The triangles are available in four heights: 8.5", 11", 14", and 16". The three smaller triangles are designed to fit inside the larger triangle for storage. They are supplied with an autoclavable silicone cushioning pad and velcro* straps. The triangles are also radiolucent and gas or steam sterilizable.
Use in Knee Surgery

Berger Block Positioner
Designed by Richard Berger, MD

Designed for lower extremity positioning with dual height options

**PRODUCT NO'S:**

| 2750-00  | [Set] | Dimensions with Pads: 4.75" x 6.75" x 8" (12.1 cm x 17.1 cm x 20.3 cm) |
| 2750-01  | [Positioner Only] | Dimensions: 4.125" x 6.125" x 8" (10.5 cm x 15.6 cm x 20.3 cm) |
| 2750-P   | [Positioner Pad Only] | [Brown Strap Only] (2) Included in Set |

**Optional Items:**

| 2750-S   | [Brown Straps] Pkg of 10 |

**Measurements in this Catalog**

All effort has been made to ensure the accuracy of the measurements listed in this catalog, however, some small differences may exist between actual and listed measurements.

**Measurements of overall length** are the linear distance from one end of the product to the furthest opposite end, as shown in these examples:

**Measurements of blade width** are the linear distance from one side of the product to the opposite side, typically at the widest point, as shown in this example.

Hyperflex Foot Positioner Assembly
Designed by Morteza Meftah, MD and Ira Kirschenbaum, MD

Designed to help secure the foot for positioning of the knee in the hyperflex position

**PRODUCT NO'S:**

| 2589-00  | [Complete Assembly] |
| 2589-01  | [Foot Positioner] Overall Length: 18" (45.7 cm) |
| 2590-B   | [Positioner Bar] Overall Length: 19" (49.3 cm) |
| 2730-P   | [Pad & Two Straps] |
| 4150-PS  | [Post Screw] |

**Optional Parts:**

| 2590-S   | [Black Straps] Pkg of 10 |

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FREE TRIAL on most instruments
Instruments are available for a no-charge two-week evaluation — includes FREE UPS Ground Shipping*

*When shipped to a hospital or medical center; additional charge applies for expedited shipping. Free trial offer excludes implant extraction instruments, which are available as rentals. There is a pad replacement charge with the hip positioners.

Booth Knee Retractor
Designed by Robert E. Booth, Jr., MD

Designed to help protect the tibial surface and to tighten the collateral ligaments and to help assess the rotation of the femur

PRODUCT NO: 6580
Overall Length: 11.75" (29.8 cm)
Handle Length: 10.5" (26.7 cm)
Blade Depth: 2.75" (7 cm)
Blade Width: 2" (5.1 cm)