RETRACTORS, TABLE MOUNTED

POLY-TRACT UPPER ABDOMINAL RETRACTOR
The Poly-Tract Surgical Retractor in its simplest form consists of a “U” frame that is assembled by clamping two bow shaped members to the siderails of the operating table and horizontally connecting these bows with a transverse rod across the patient. The rod provides a wide surface for clamps that hold various retractors at any desired angle, vertical elevation or horizontal pull (Fig. 1). This illustration shows one “U” frame as used for exposure of the crura of the diaphragm where the esophagus enters the abdomen. The center Mayo-type retractor is strongly pulling the xyphoid cephalad and elevating it by torsion exerted on the retractor handle from the round member of the “U” frame. The malleable retractors are adjusted both at the friction knob where the handle joins the blade, and at the clamp on the round member of the “U” frame to give both cephalad and lateral retraction. The depth and tilt are also adjusted at this clamp. This retraction is accomplished with the horizontal member of the “U” frame one inch above the anterior chest surface. This low placement moves the frame and retractors out of the operative field. The surgeon and his assistants are free to place themselves in optimum position without crowding. The retraction is optimum and free of the faltering waver of human fatigue. Wound trauma is avoided by the steady still pull. Superb exposure of the liver, portal vein, common duct, duodenum, pancreas, spleen, stomach and transverse colon is obtained by readjustment of these same retractor elements.

166100 Poly-Tract Upper Abdominal Retractor Set

The system illustrated at left, catalog number 166100, consists of the following parts:

**SET COMPONENTS:**

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>166005</td>
<td>Poly-Tract Upright Bow 2</td>
</tr>
<tr>
<td>166010</td>
<td>Poly-Tract Transverse Connecting Rod 1</td>
</tr>
<tr>
<td>166070</td>
<td>Poly-Tract Malleable and Swivel Blade Holder 2</td>
</tr>
<tr>
<td>166080</td>
<td>Poly-Tract Mayo Retractor 1</td>
</tr>
<tr>
<td>166090</td>
<td>Poly-Tract Universal Clamp 3</td>
</tr>
<tr>
<td>166095</td>
<td>Malleable Blade 2&quot; (5 cm) wide 2</td>
</tr>
<tr>
<td>166025</td>
<td>Wrench 1</td>
</tr>
<tr>
<td>166000</td>
<td>Poly-Clamp single 2</td>
</tr>
</tbody>
</table>
RETRACTORS, TABLE MOUNTED

FOWLER UPPER ABDOMINAL RETRACTOR SYSTEM

Most common uses
- Gastric stapling
- Hiatal hernia
- Vagotomy, gastrectomy
- Splenectomy
- Hepatic resection
- Biliary tract procedures, obese patients

Major features
- Offset in upright bars provides greater latitude in positioning of patient’s arms. They can be out-stretched rather than squeezed along body.
- Offset permits higher placement of transverse rod and retractor blades.
- All parts and components of the Fowler retractor are fully interchangeable with Gomez and Poly-Tract systems. You can extend a Fowler Retractor for full abdominal procedures by adding Gomez or Poly-Tract components.

166140  Fowler Upper Abdominal Retractor System

SET COMPONENTS: SET QUANTITY:
166141  Fowler Offset Upright Bows  2
166143  Transverse Rod with Torsion Clamp Assembly  1
166146  Heavy Mayo Retractor Blade, 3 1/2" (9 cm) wide x 2 1/2" (6.4 cm) deep  1
166000  Poly-Clamp, single  2

Optional accessories:
166142  Accessory Rod Fowler retractor 16" (41 cm)
166070  Poly-Tract Malleable Blade Holder
166096  Poly-Tract Malleable Blade 3" (7.6 cm)
166000  Poly-Clamp single to mount side arm
166090  Poly-Tract Universal Clamp
RETRACTORS, TABLE MOUNTED

POLY-TRACT FULL ABDOMINAL RETRACTOR
The Poly-Tract Surgical Retractor System provides exposure of
the abdominal aorta from above the renal arteries to the lower
external iliac vessels. SET-UP A second “U” frame, identical to
that shown in Fig. 1 for upper abdominal exposure, is attached
to the side rails of the table at mid-thigh level. To those two
frames, longitudinal round members are attached on either
side as shown in Fig. 2. The “U” frames and longitudinal rods
are mounted just above the anterior surface of the body, avoid-
ing the surgical field. Mayo-Type retractors are positioned at
the xiphoid, pubis, and mid-left abdominal wall. Two Mayo
retractors are then placed along the right abdominal wall
exerting both lateral pull and elevating torsion to provide an
enlarged right sided space in which to stow the small bowel
and ascending colon (Figs. 2, 3, 4).

After the incision is made in the posterior peritoneum freeing
the mesentery from the aorta up to the superior mesenteric
vessels, the cecum and ascending colon along with the small
bowel and its mesentery is retracted into the right side of the
peritoneal cavity by the wide malleable retractors.

Exposure of the upper field is completed by placing an
adjustable malleable retractor to retain the transverse colon,
root of mesentery and transverse portion of the duodenum
above the origin of the renal vessels. Exposure of the iliac
vessels is accomplished with a similar retractor, shifting it to
expose each iliac as required. Maximum upper retraction is
obtained with the lower retractors relaxed. After the upper
field is completed, these retractors are eased off and the lower
retractors tightened. Better exposure is accomplished with
less tissue pressure by these accommodations. (One less
Mayo-Type and malleable retractor are required if these
are shifted cephalad to caudal as needed).

Although 9 retractors are shown in the illustration, the proce-
dure can be carried out using 7 by shifting one Mayo and one
malleable cephalad to caudal as needed.

166110 Poly-Tract Full Abdominal Retractor, consists of
the following parts:

SET COMPONENTS: SET QUANTITY:
166005 Poly-Tract Standard Upright Bow 19 1/2” (49.5 cm) 4
166010 Poly-Tract Transverse Rod 4
166020 Poly-Tract Longitudinal Rod, with secured Clamp Block 24” (61 cm) 2
166060 Poly-Tract Clamp Block 2
166070 Poly-Tract Blade Holder 3
166080 Poly-Tract Mayo Retractor 4
166095 Poly-Tract Malleable Blade 2” (5 cm) 3
166096 Poly-Tract Malleable Blade 3” (7.6 cm) 3
166097 Poly-Tract Malleable Blade 4” (10 cm) 3
166090 Poly-Tract Universal Clamp 1
166025 Wrench 1
166082 Swivel Mayo Blade 1
166002 Poly-Clamp, set of 4 1
RETRACTORS, TABLE MOUNTED

POLY-TRACT COMBINED IMA AND ABDOMINAL SET
In cooperation with cardio-thoracic surgeons, the Poly-Tract Retractor has been designed to provide superior exposure of the internal mammary arteries. This exposure allows fully visualized dissection of these vessels for their entire length and provides access for an assistant working across from the surgeon.

SET-UP: The “U” frames are placed low over the patient as described for the abdomen. The upper “U” frame is placed at the level of the patient’s larynx; the lower, midway between umbilicus and pubis. Longitudinal rods are attached as in the abdominal application (Fig. 2). A large rake retractor is fitted to one side by a torsion clamp and provides modest lateral retraction with strong downward pressure pulling its half of the sternum to the edge of the mediastinum and depressing it. On the side to be dissected two micro-adjustable rake retractor engage the sternal edge and elevate it by torsion. They also provide finely adjusted lateral retraction. Counter pressure on the cartilaginous portion of anterior thoracic wall by a pressure plate bows this flexible portion of the chest wall inward and allows the sternal segment to rotate into the vertical position. Modest rotation of the table toward this side completes the exposure. The rotary retraction should start at the distal end and progress step-wise as needed to the manubrium. In this way the cartilaginous wall will smoothly flex without disruption of the perichondrium. For cardiac surgery the Poly-Tract system allows improved exposure through the standard longitudinal sternal splitting incision. Exposure provided by Finochietto rack and pinion type retractors displaces both the right and left anterior chest wall equally, failing to expose the left ventricle adequately while over-exposing the right lung.

The Poly-Tract Retractor will retract the anterior chest wall far to the left, exposing the entire left border of the heart with the right chest wall displaced only enough to expose the cava.

166115 Poly-Tract Combined IMA and Abdominal Set

SET COMPONENTS: SET QUANTITY:
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>166005</td>
<td>Poly-Tract Upright Bow</td>
<td>4</td>
</tr>
<tr>
<td>166010</td>
<td>Poly-Tract Transverse Rod</td>
<td>2</td>
</tr>
<tr>
<td>166020</td>
<td>Poly-Tract Longitudinal Rod</td>
<td>2</td>
</tr>
<tr>
<td>166060</td>
<td>Poly-Tract Clamp Block</td>
<td>2</td>
</tr>
<tr>
<td>166070</td>
<td>Poly-Tract Malleable Blade Holder</td>
<td>3</td>
</tr>
<tr>
<td>166080</td>
<td>Poly-Tract Mayo Retractor</td>
<td>4</td>
</tr>
<tr>
<td>166095</td>
<td>Poly-Tract Malleable Blade 2” (5 cm)</td>
<td>3</td>
</tr>
<tr>
<td>166096</td>
<td>Poly-Tract Malleable Blade 3” (7.6 cm)</td>
<td>3</td>
</tr>
<tr>
<td>166097</td>
<td>Poly-Tract Malleable Blade 4” (10 cm)</td>
<td>3</td>
</tr>
<tr>
<td>166090</td>
<td>Poly-Tract Universal Clamp</td>
<td>7</td>
</tr>
<tr>
<td>166025</td>
<td>Wrench</td>
<td>2</td>
</tr>
<tr>
<td>166040</td>
<td>Micro Adjust Rake &amp; Clamp Assembly</td>
<td>2</td>
</tr>
<tr>
<td>166050</td>
<td>Counter Pressure Plate &amp; Clamp Assembly</td>
<td>1</td>
</tr>
<tr>
<td>166002</td>
<td>Poly-Clamp, set of 4</td>
<td>1</td>
</tr>
</tbody>
</table>
A common procedure of eviscerating the small intestine in a bag or in lap sponges onto the right anterior abdominal wall is shown in Figure 3. This results in venous obstruction with resultant edema, cyanosis and petechial hemorrhage into the bowel wall and mesentery. Damage may be reflected clinically by circulatory volume loss and several days of postoperative ileus. Adequate retraction allows displacement of the small bowel within the peritoneal cavity reducing the chance of injury to the bowel and its vasculature.

The illustration to the left shows how the Poly-Tract allows exposure of an abdominal aneurysm without evisceration of the small bowel onto the anterior abdominal wall. This type exposure is superior to hand retraction, often compromised by personnel placement and strength. It allows all hands in the field to be engaged in the work. Intimate exposure for dissection, sponging and suctioning are now the chores of the assistants. None are immobilized on retractors.

Retraction and elevation of right abdominal wall allows adequate space to "stow" small bowel and mesentery in right side of body cavity (Figure 4).
RETRACTORS, TABLE MOUNTED

GOMEZ RETRACTOR SYSTEM


SET COMPONENTS: SET QUANTITY:
166124  Gomez Upright Bow Extra Long, 30” (76.2 cm) 4
166010  Poly-Tract Transverse Rod 2
166020  Poly-Tract Longitudinal Rod, with secured Clamp Block 24” (61 cm) 2
166060  Poly-Tract Clamp Block 2
166070  Poly-Tract Blade Holder 1
166090  Poly-Tract Universal Clamp 5
166085  Maileable Finder Retractor, 5” (12.7 cm) 1
166123  Heavy Mayo Retractor-sternal 2 1/2” (6.3 cm) wide x 2 1/2” (6.3 cm) deep 2
166125  Subcostal Retractor 4 1/2” (11.5 cm) wide x 5 1/2” (14 cm) deep 2
166025  Wrench 1
166002  Poly-Clamp, set of 4 1 set
**RETRACTORS, TABLE MOUNTED**

**IMPROVED GOMEZ RETRACTOR SET**

<table>
<thead>
<tr>
<th>Component Code</th>
<th>Description</th>
<th>Set Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>166150</td>
<td>Improved Gomez Retractor Set, with Fowler Bows and Poly-Clamp table clamps.</td>
<td></td>
</tr>
<tr>
<td>166141</td>
<td>Fowler Offset Upright Bows</td>
<td>1 pair</td>
</tr>
<tr>
<td>166010</td>
<td>Poly-Tract Transverse Rod</td>
<td>2</td>
</tr>
<tr>
<td>166020</td>
<td>Poly-Tract Longitudinal Rod, with secured Clamp Block 24&quot; (61 cm)</td>
<td>2</td>
</tr>
<tr>
<td>166123</td>
<td>Heavy Mayo Retractor 2 1/2&quot; (6.3 cm) wide x 2 1/2&quot; (6.3 cm) deep</td>
<td>2</td>
</tr>
<tr>
<td>166124</td>
<td>Gomez Bow Extra Long Upright</td>
<td>2</td>
</tr>
<tr>
<td>166125</td>
<td>Subcostal Retractor 4 1/2&quot; (11.5 cm) wide x 5 1/2&quot; (14 cm) deep</td>
<td>2</td>
</tr>
<tr>
<td>166060</td>
<td>Poly-Tract Clamp Block</td>
<td>2</td>
</tr>
<tr>
<td>166070</td>
<td>Poly-Tract Blade Holder</td>
<td>1</td>
</tr>
<tr>
<td>166085</td>
<td>Malleable Finger Retractor 5&quot; (12.7 cm)</td>
<td>1</td>
</tr>
<tr>
<td>166090</td>
<td>Poly-Tract Universal Clamp</td>
<td>5</td>
</tr>
<tr>
<td>166002</td>
<td>Poly-Clamp, set of 4</td>
<td>1 set</td>
</tr>
<tr>
<td>166025</td>
<td>Wrench</td>
<td>1</td>
</tr>
</tbody>
</table>

*Pilling Week Surgical*

Phone Toll Free: 800-523-6507  Fax: 800-332-2308
RETRACTORS, TABLE MOUNTED

BARIATRIC RETRACTOR SYSTEM*

The Pilling Weck Surgical Bariatric Upper Abdominal Retractor was designed to provide maximum exposure, reducing the need for hand-held retraction during upper abdominal procedures performed on normal and bariatric patients. Heavy duty 5/8" diameter uprights, variable position crossbar, and side arms provide stable initial positioning. This stability minimizes retractor “creep.” The Bariatric Upper Abdominal Retractor comes complete with 1 sternal retractor, 1 liver retractor, and 2 Mayo blades. Most other Pilling Weck Surgical blades, blade holders, universal clamps, and retractor components are interchangeable with the Pilling Weck Surgical Bariatric Upper Abdominal Retractor, making it valuable for both normal and bariatric patients. The Wishbone Retractor System Accessories will also fit onto the Bariatric Retractor System. Most 166000 series components are interchangeable with 163000 series retractors, (not Swivels), ask Pilling Weck Surgical for details.

163020 Bariatric Upper Abdominal Retractor Set
Max spread 28”, minimum spread 20”

SET COMPONENTS: SET QUANTITY:
163100 Pilling Table Clamp 2
163110 Table Upright, 24" (61 cm) with Dual Disc Clamp 2
163111 Bariatric Crossbar 1
163117 Bariatric Side Arm 2
163108 Closed Universal Clamp 3
163109 Open Universal Clamp 2
163400 Blade Holder, Swivel, 6" (15.2 cm) with handle 2
163401 Blade Holder, Swivel, 9" (23 cm) with knob 1
163239 Sternal Retractor 3" (7.6 cm) x 3" (7.6 cm) 1
163422 Mayo Blade, Wide, Swivel 3 1/2" (8.9 cm) x 2 3/4" (7 cm) 2
163436 Liver Retractor, Lechner-Harrington 1 5/8" (4.1 cm) x 5" (12.7 cm) x 10" (25.4 cm) 1

* Patent No. 4,971,037 and 4,993,862
RETRACTORS, TABLE MOUNTED

WISHBONE RETRACTOR SYSTEM*

- A single post table-mounted self-retaining retractor designed for any major abdominal vascular procedures of the aorta, iliacs and their branches.
- Allows use of multiple blades of various configurations, eliminating the need for second or third assistants.
- Non-wavering, non-tiring, self-retaining retraction provides better exposure, speeding the procedure with less post-operative pain.
- Far more versatile than the traditional types of self-retaining retractors. Less restrictive than enclosed ring and frame type retractors.
- Can be easily set up and positioned by the surgeon and one assistant. The rail clamp may be attached to the table rail over the patient drapes.
- Disc Clamps on the Table Upright and Crossbar are easily tightened and provide greater force and stability than other systems.
- Closed and Open Universal Clamps that attach the retractor blades to the “Wishbone” frame both feature a unique captive design. Clamps are easily cleaned ultrasonically without disassembling them.
- Open distal end of the “Split Wishbone” allows easier tunneling if grafting is required below the ilio-femoral junction. “Split (two piece) Wishbone” frame allows simplified handling and assembly and will fit standard sterilizing trays.
- Basic system is supplied with a wide assortment of retractor blades for various purposes. Special blade requirements may be ordered economically from your Pilling Weck Surgical Representative.
- All components are constructed of heat-treated 400 series stainless steel. There are no plastic washers or small parts.

ABDOMINAL VASCULAR RETRACTOR WITH SPLIT WISHBONE

163000 Abdominal Vascular Retractor with Split Wishbone

SET COMPONENTS: SET QUANTITY:

<table>
<thead>
<tr>
<th>SET COMPONENTS</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>163100 Pilling Weck Surgical Table Clamp</td>
<td>1</td>
</tr>
<tr>
<td>163102 Table Upright, 20” (cm) with attached Disc Clamp</td>
<td>1</td>
</tr>
<tr>
<td>163103 Crossbar with attached Disc Clamp</td>
<td>1</td>
</tr>
<tr>
<td>163104 Wishbone-Split, left and right</td>
<td>1</td>
</tr>
</tbody>
</table>

* Patent No. 4,971,037 and 4,993,862
## RETRACTORS, TABLE MOUNTED

### ABDOMINAL VASCULAR RETRACTOR WITH SPLIT WISHBONE (continued)

<table>
<thead>
<tr>
<th>Set Components</th>
<th>Set Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>163108 Closed Universal Clamp</td>
<td>6</td>
</tr>
<tr>
<td>163109 Open Universal Clamp</td>
<td>2</td>
</tr>
<tr>
<td>163200 Splanchnic Retractor 2&quot; (5 cm) x 4 1/2&quot; (11.4 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163201 Splanchnic Retractor 2&quot; (5 cm) x 6&quot; (15.2 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163203 Renal Vein Retractor 1&quot; (2.5 cm) x 7&quot; (16.8 cm)</td>
<td>2</td>
</tr>
<tr>
<td>163211 Mayo Retractor, standard 2 5/8&quot; (6.7 cm) x 2 1/4&quot; (5.7 cm)</td>
<td>2</td>
</tr>
<tr>
<td>163213 Richardson Retractor, swivel 1&quot; (2.5 cm) x 1 3/4&quot; (4.4 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163400 Blade Holder, swivel, with handle 6&quot; (15.2 cm)</td>
<td>2</td>
</tr>
<tr>
<td>163401 Blade Holder, swivel, with knob 9&quot; (22.8 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163406 Fence Blade, swivel, 4&quot; (10.1 cm) x 6&quot; (15.2 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163420 Mayo Blade, swivel, 2 5/8&quot; (6.7 cm) x 2 1/4&quot; (5.7 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163422 Mayo Blade, wide, swivel, 3 1/2&quot; (8.9 cm) x 2 3/4&quot; (7 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163434 Deaver Blade, swivel, 2 3/4&quot; (7 cm) x 5&quot; (12.7 cm)</td>
<td>1</td>
</tr>
</tbody>
</table>
# Retractors, Table Mounted

**Abdominal Vascular Set**

**Crossbar with Adjustable Disc Clamp**

(Similar Set-up to 163000 Set)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Set Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>163005</td>
<td>Abdominal Vascular Set*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crossbar with Adjustable Disc Clamp</td>
<td></td>
</tr>
</tbody>
</table>

**Set Components:**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>163100</td>
<td>Pilling Weck Surgical Table Clamp with attached Disc Clamp</td>
<td>1</td>
</tr>
<tr>
<td>163102</td>
<td>Table Upright, 20” with attached Disc Clamp</td>
<td>1</td>
</tr>
<tr>
<td>163118</td>
<td>Crossbar with attached Adjustable Disc Clamp - allows 4 positions</td>
<td>1</td>
</tr>
<tr>
<td>163104</td>
<td>Wishbone-Split, left and right</td>
<td>1</td>
</tr>
<tr>
<td>163108</td>
<td>Closed Universal Clamp</td>
<td>6</td>
</tr>
<tr>
<td>163109</td>
<td>Open Universal Clamp</td>
<td>2</td>
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<tr>
<td>163200</td>
<td>Splanchnic Retractor 2” (5 cm) x 4 1/2” (11.4 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163201</td>
<td>Splanchnic Retractor 2” (5 cm) x 6” (15.2 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163203</td>
<td>Renal Vein Retractor 1” (2.5 cm) x 6” (15.2 cm)</td>
<td>2</td>
</tr>
<tr>
<td>163211</td>
<td>Mayo Retractor, standard 2 5/8” (6.7 cm) x 2 1/4” (5.7 cm)</td>
<td>2</td>
</tr>
<tr>
<td>163213</td>
<td>Richardson Retractor, swivel 1” (2.5 cm) x 1 3/4” (4.4 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163400</td>
<td>Blade Holder, swivel, with handle 6” (15.2 cm)</td>
<td>2</td>
</tr>
<tr>
<td>163401</td>
<td>Blade Holder, swivel, with knob 9” (22.8 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163406</td>
<td>Fence Blade, swivel 4” (10.1 cm) x 6” (15.2 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163420</td>
<td>Mayo Blade, swivel 2 3/4” (7 cm) x 2” (5 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163422</td>
<td>Mayo Blade, wide, swivel 3 1/2” (8.9 cm) x 2 3/4” (7 cm)</td>
<td>1</td>
</tr>
<tr>
<td>163424</td>
<td>Deaver Blade, swivel 2 3/4” (7 cm) x 4 1/2” (11.4 cm)</td>
<td>1</td>
</tr>
</tbody>
</table>

* Patent No. 4,971,037 and 4,993,862
## RETRACTORS, TABLE MOUNTED

**PILLING MINI-WISHBONE RETRACTOR SYSTEM**

163010  Pilling Weck Surgical Mini-Wishbone Retractor, Fixed Arms, which are approximately 9 3/4" (25 cm) apart.

**SET COMPONENTS:**

<table>
<thead>
<tr>
<th>SET NUMBER</th>
<th>DESCRIPTION</th>
<th>SET QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>163010</td>
<td>Pilling Weck Surgical Table Clamp</td>
<td>1</td>
</tr>
<tr>
<td>163102</td>
<td>Table Upright 20&quot; (51 cm) with Disc Clamp</td>
<td>1</td>
</tr>
<tr>
<td>163103</td>
<td>Crossbar with Disc Clamp</td>
<td>1</td>
</tr>
<tr>
<td>163112</td>
<td>Pilling Weck Surgical Mini-Wishbone Arm Set left and right</td>
<td>1</td>
</tr>
<tr>
<td>163115</td>
<td>Mini-Wishbone Closed Clamp</td>
<td>2</td>
</tr>
<tr>
<td>163116</td>
<td>Mini-Wishbone Open Clamp</td>
<td>2</td>
</tr>
<tr>
<td>163247</td>
<td>Richardson Mini with Microadjustable Clamp</td>
<td>1</td>
</tr>
</tbody>
</table>

* Patent No. 4,971,037 and 4,993,862
RETRACTORS, TABLE MOUNTED

PILLING MINI-WISHBONE* RETRACTOR PARTIAL SET

163015  Pilling Weck Surgical Mini-Wishbone Retractor Partial Set
This set is for hospitals that already own a full size Wishbone Retractor System and do not require an additional table clamp, table upright, or crossbar with disc clamp.

SET COMPONENTS:

| A | 163112 | Pilling Weck Surgical Mini-Wishbone Arm Set left and right | 1 |
| B | 163115 | Mini-Wishbone Closed Clamp | 2 |
| C | 163116 | Mini-Wishbone Open Clamp | 2 |
| D | 163240 | Richardson Retractor Mini 1" (2.5 cm) x 1" (2.5 cm) | 1 |
| E | 163241 | Richardson Retractor Mini 3/4" (1.9 cm) x 1 1/2" (3.8 cm) | 1 |
| F | 163242 | Richardson Retractor Mini 1" (2.5 cm) x 2" (5 cm) | 1 |
| G | 163243 | Richardson Mini Swivel 3/4" (1.9 cm) x 1 1/2" (3.8 cm) | 1 |
| H | 163244 | Richardson Mini Swivel 1" (2.5 cm) x 1 1/2" (3.8 cm) | 1 |
| I | 163245 | Rake Retractor Mini 7/8" (2.2 cm) x 1 1/2" (3.8 cm) | 1 |
| J | 163246 | Rake Retractor Mini 7/8" (2.2 cm) x 1" (2.5 cm) | 1 |
| K | 163247 | Richardson Mini Microadjustable Clamp | 1 |

* Patent No. 4,971,037 and 4,993,862
RETRACTORS, TABLE MOUNTED

PILLING MINI-WISHBONE RETRACTOR SET,*
ADJUSTABLE ARMS

163012 Pilling Weck Surgical Mini-Wishbone Retractor
Set, Adjustable arms. The Wishbone arms
may be adjusted to four different widths, from
approximately 8 1/4” (21 cm) to 13” (33 cm)
across the distal tips of the Wishbone.

SET COMPONENTS: SET QUANTITY:
163100 Pilling Weck Surgical Table Clamp 1
163102 Table Upright 20” (51 cm) with
Disc Clamp 1
163112 Pilling Mini-Wishbone Arm Set
left and right 1
163115 Mini-Wishbone Closed Clamp 2
163116 Mini-Wishbone Open Clamp 2
163118 Crossbar with Adjustable
Disc Clamp 1
163247 Richardson mini with
Microadjustable Clamp 1

* Patent No. 4,971,037 and 4,993,862
Gomez and Poly-Tract Accessories

MISCELLANEOUS PARTS

166012 Longitudinal Rod, 28" w/torsion Clamp
166020 Poly-Tract Longitudinal Rod, with secured Clamp, Block 24" (61 cm)
166024 X-Long Rod 32" (81 cm)
166025 Wrench
166030 Poly-Tract standard Rake-Clamp
166040 Micro Rake and Clamp
166050 Poly-Tract Counter Pressure Plate and Clamp Assembly
166070 Poly-Tract Blade Holder
166072 Black Washer for Blade Holder
166080 Poly-Tract Mayo Retractor 2 1/2" w x 2" d (6.35 cm x 5.08 cm)
166081 Long Lip Heavy Mayo Blade 2 1/2" w x 3 1/2" D (6.35 cm x 8.89 cm)
166082 Swivel Mayo Blade (requires use of Blade Holder 166070)
166085 Gomez Malleable Finger Retractor, 5" (12.7 cm) (requires use of Blade Holder 166070)
166087 Wilkinson-Gomez Malleable Finger Retractor, 7" (18 cm) (requires use of Blade Holder 166070)
166088 Wilkinson graduated Finger Retractor 4 5/8" to 7" (11.7 cm to 17.7 cm) (requires use of Blade Holder 166070)
166090 Poly-Tract Universal Clamp-Open
166091 Spring for 166090
RETRACTORS, TABLE MOUNTED

Gomez and Poly-Tract Accessories (continued)

166092 Poly-Tract Universal Clamp-Closed

166095 Poly-Tract Malleable Blade
2" w x 6 3/4" d (5.08 cm x 17.14 cm)
(requires use of Blade Holder 166070)

166096 Poly-Tract Malleable Blade
3" w x 6 3/4" d (7.6 cm x 17.1 cm)
(requires use of Blade Holder 166070)

166097 Poly-Tract Malleable Blade
4" w x 6 3/4" d (10 cm x 17.1 cm)
(requires use of Blade Holder 166070)

166121 Sternal Retractor, 2 3/4" (7 cm) wide
x 4 3/8" (11.1 cm) deep

166122 Subcostal Retractor, blade 4 1/8" (10.5 cm)
wide x 8 1/4" (21 cm) deep

166123 Heavy Mayo Retractor, blade 2 3/4" (6.8 cm)
x 2 1/4" (5.6 cm) deep
RETRACTORS, TABLE MOUNTED

Gomez and Poly-Tract Accessories (continued)

166124  Gomez Upright Bow Extra Long

166125  Subcostal Retractor, blade 4 1/8" (10.5 cm) wide x 5 1/2" (14 cm) deep

166141  Fowler Offset Uprights

166142  Accessory Rod for Fowler Retractor, 16" (41 cm)

166146  Fowler Mayo Blade 3 1/2" w x 2 1/2" d (8.8 cm x 6.3 cm)

166147  Deep Mayo Blade 2 3/4" (7 cm) wide x 4 1/2" (11.4 cm) deep

166170  Deaver Retractor Blade 1" (2.5 cm) wide

166171  Deaver Retractor Blade 2" (5 cm) wide
RETRACTORS, TABLE MOUNTED

Gomez and Poly-Tract Accessories

(continued)

166172 Jumbo Deaver Retractor
3” (7.6 cm) wide x 8” (20 cm) deep

166175 Doherty GHL Liver Retractor,
4 1/2” w x 8” d (11.4 cm x 20.3 cm)
(requires use of Blade Holder 166070)

166176 Doherty-Harrington Retractor,
5 1/2” w x 8 1/4” D (13.9 cm x 20.9 cm)
(requires use of Blade Holder 166070)

166180 Doherty Spring Closing Hook

166181 Doherty Hook with hinged shank
Gomez and Poly-Tract Accessories
(continued)

POLY-CLAMP, SET OF 4
166002

POLY-CLAMP SINGLE
166000 The Pilling Poly-Clamp is a highly versatile
operating table rail clamp for use with the Gomez,
Poly-Tract Fowler, and other retractor systems, as
well as with other equipment to be attached to the
operating room table.

The Poly-Clamp has been designed to fit the
side rail of any currently manufactured U.S. or
European operating room table. Because of its
versatility, the Poly-Clamp offers many benefits not
found in traditional rail clamps: The Poly-Clamp
fits over cloth or paper drapes and improves sterile
technique by eliminating the cutting of holes in
paper drapes, or the making of special cloth
drapes. The Poly-Clamp provides convenience to
the surgeon since it can be attached to the table at
any time before or during the procedure.

The Poly-Clamp accepts both rectangular bars up
to 1/4" (6 mm) thick x 1" (25 mm) wide and round
bars of 1/2" (13 mm) diameter, allowing more
types of retractors and accessories to be attached
to the table. The Poly-Clamp operating room rail
clamp is available individually or in sets of four.

STERILIZATION TRAY
This stainless steel tray is designed to accommodate all the
component parts of any of our Retractor Systems.
101075 32" x 7" x 7" (81 cm x 18 cm x 18 cm)

RETRACTOR “LIGHT BEAM”
163701 This malleable fiberoptic light bundle can illumina-
te the many difficult-to-access surgical sites in
the abdomen and pelvis. The captive clamp will
attach to either a 1/2" (1.3 cm) round bar of a
Pilling Wishbone, Gomez, Poly-Tract, or Omni-
Tract, or most other table mounted retractor
systems. It will also fit 1/4" flat bars found on
Finochietto retractors, Strong T-Bar, and most
sternal and rib retractors. The unit is autoclavable
using standard or flash steam cycles. It uses a
continuous 4.4 mm fiberoptic bundle and has
a total length of 9 feet (2.7 meters). It can be
operated from fiberoptic light sources which
accept Pilling fiberoptic cables.

Poly-Tract and Omni-Tract are registered trademarks
of Minnesota Scientific Co.
RETRACTORS, TABLE MOUNTED

Wishbone Retractor Accessories

BLADE HOLDER SWIVEL

163400 Blade Holder Swivel 6" (15.2 cm) with handle
163401 Blade Holder Swivel 9" (22.8 cm) with knob

CLOSED UNIVERSAL CLAMP

163108 Closed Universal Clamp

CROSS BAR WITH ADJUSTABLE DISC CLAMP

163118 Cross Bar with Adjustable Disc Clamp

CROSS BAR WITH DISC CLAMP

163103 Cross Bar with Disc Clamp

DEAVER BLADE

163424 Deaver Blade, Swivel
2 3/4" (7 cm) x 5" (12.7 cm)
RETRACTORS, TABLE MOUNTED

Wishbone Retractor Accessories
(continued)

DEAVER RETRACTORS
163227  3” (7.6 cm) x 4” (10 cm)
163228  4” (10 cm) x 5 1/2” (14 cm)
163229  2 3/4” (7 cm) x 4 1/2” (11.4 cm)
163230  2” (5 cm) x 5” (12.7 cm)
163231  1 1/2” (3.8 cm) x 6” (15.2 cm)
163234  1” (2.5 cm) x 5” (12.7 cm)
RETRACTORS, TABLE MOUNTED

Wishbone Retractor Accessories (continued)

DOHERTY-GML BLADE

163435  Doherty-GML Blade 4 1/4" (10.8 cm) x 3" (7.6 cm)

FENCE BLADE

163407  Fence Blade, Swivel
          4" (10 cm) x 5" (12.7 cm)

FINGER FENCE BLADE

163412  Finger Fence Blade, Swivel, Malleable
          6" (15.2 cm)

HOE RETRACTORS

163223  Hoe Retractor
          2" (5 cm) x 1" (2.5 cm)
163224  Hoe Retractor
          2" (5 cm) x 1 1/2" (3.8 cm)
163225  Hoe Retractor
          2" (5 cm) x 2" (5 cm)
163226  Hoe Retractor, set of three
RETRACTORS, TABLE MOUNTED

Wishbone Retractor Accessories
(continued)

163425
163426
163427
163428
163429
163430

KELLY BLADES

163425  Kelly Blade, Swivel 1 1/2" (3.8 cm) x 2" (5 cm)
163426  Kelly Blade, Swivel 2" (5 cm) x 2 1/2" (6.3 cm)
163427  Kelly Blade, Swivel 2 1/2" (6.3 cm) x 3" (7.6 cm)
163428  Kelly Blade, Swivel 3" (7.6 cm) x 3 1/2" (8.9 cm)
163429  Kelly Blade, Swivel 3" (7.6 cm) x 4 1/2" (11.4 cm)
163430  Kelly Blade, Swivel, set of 5
RETRACTORS, TABLE MOUNTED

Wishbone Retractor Accessories (continued)

KELLY RETRACTORS

163217  1 1/2" (3.8 cm) x 2" (5 cm) x 9 3/4" (24.8 cm)
163218  2" (5 cm) x 2 1/2" (6.3 cm) x 9 3/4" (24.8 cm)
163219  2 1/2" (6.3 cm) x 3" (7.6 cm) x 9 3/4" (24.8 cm)
163220  3" (7.6 cm) x 3 1/2" (8.9 cm) x 9 3/4" (24.8 cm)
163221  3" (7.6 cm) x 4 1/2" (11.4 cm) x 9 3/4" (24.8 cm)
163222  Kelly Retractor, Set of 5

LECHNER-HARRINGTON LIVER BLADE

163436  Lechner-Harrington Liver Blade
5" (12.7 cm) x 3 1/2" (8.9 cm)
### RETRACTORS, TABLE MOUNTED

**Wishbone Retractor Accessories (continued)**

#### MALLEABLE BLADES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>163431</td>
<td>Malleable Blade, Swivel</td>
<td>2&quot; (5 cm) x 6 1/2&quot; (16.5 cm)</td>
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<tr>
<td>163432</td>
<td>Malleable Blade, Swivel</td>
<td>3&quot; (7.6 cm) x 6 1/2&quot; (16.5 cm)</td>
</tr>
<tr>
<td>163433</td>
<td>Malleable Blade, Swivel</td>
<td>4&quot; (10.2 cm) x 6 1/2&quot; (16.5 cm)</td>
</tr>
</tbody>
</table>

#### MAYO BLADES

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>163420</td>
<td>Mayo Blade, Swivel</td>
<td>2 3/4&quot; (7 cm) x 2 1/4&quot; (5.7 cm)</td>
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<tr>
<td>163422</td>
<td>Mayo Blade, Swivel</td>
<td>3 1/2&quot; (8.9 cm) x 2 3/4&quot; (7 cm)</td>
</tr>
<tr>
<td>163423</td>
<td>Mayo Blade, Swivel, Wide</td>
<td>3 1/2&quot; (8.9 cm) x 4&quot; (10 cm)</td>
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</tbody>
</table>

#### MAYO RETRACTOR STANDARD

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Dimensions</th>
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<tbody>
<tr>
<td>163211</td>
<td>Mayo Retractor Standard</td>
<td>2 5/8&quot; (6.7 cm) x 2 1/4&quot; (5.7 cm)</td>
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#### MAYO RETRACTOR WIDE

<table>
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<tr>
<th>Code</th>
<th>Description</th>
<th>Dimensions</th>
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</thead>
<tbody>
<tr>
<td>163212</td>
<td>Mayo Retractor Wide</td>
<td>3 1/2&quot; (8.9 cm) x 2 3/4&quot; (7 cm)</td>
</tr>
</tbody>
</table>

#### MICRO ADJUSTABLE BLADE HOLDER

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>163402</td>
<td>Micro Adjustable Blade Holder</td>
<td>8&quot; (20.3 cm)</td>
</tr>
</tbody>
</table>

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**Pilling Week Surgical**

Phone Toll Free: 800-523-6507  Fax: 800-332-2308
RETRACTORS, TABLE MOUNTED

Wishbone Retractor Accessories (continued)

MISCELLANEOUS PARTS

163600 Handle for Table Clamp for 163100
163601 Handle for Disc Clamp 163102
163602 Top for Disc Clamp for 163102
163603 Handle for 163108, 163109
163604 1/2” (1.3 cm) Clamp and Bolt Assy for 163108
163605 Clamp 3” 8” (1 cm) for 163108, 163109
163606 Clamp Body for 163109
163607 Spring for 163109
163608 Clamp Bottom for 163109
163609 Handle for 163400
163610 6” (15.2 cm) Rod for 163400
163611 Knob for 163401
163612 9 1/4” (23.5 cm) Rod for 163401
163614 Mounting Block For 163400
163615 Long Bolt and 1/2” (1.3 cm) Clamp for 163402
163616 Threaded Blade Holder for 163402

OPEN UNIVERSAL CLAMP

163109 Open Universal Clamp

PILLING TABLE CLAMP

163100 Pilling Table Clamp
Fits over drapes, and accepts 1/2” (1.3 cm) and 5/8” (1.6 cm) rods, and also 1” (2.5 cm) and 1 1/4” (3.2 cm) rectangular bars.

RENAL VEIN BLADE

163408 Renal Vein Blade, Swivel
1” (2.5 cm) x 4 1/2” (11.4 cm)
163409 Renal Vein Blade, Swivel
1” (2.5 cm) x 6” (15.2 cm)

RENAL VEIN RETRACTOR

163203 Renal Vein Retractor
1” (2.5 cm) x 6” (15.2 cm)
163204 Renal Vein Retractor
1” (2.5 cm) x 4” (10 cm)
RETRACTORS, TABLE MOUNTED

Wishbone Retractor Accessories (continued)

RENAL VEIN RETRACTOR HEAVY ARCH

163205 Renal Vein Retractor Heavy Arch
1” (2.5 cm) x 6” (15.2 cm)

RETRACTOR “LIGHT BEAM”

163701 This malleable fiberoptic light bundle can illuminate the many difficult-to-access surgical sites in the abdomen and pelvis. The captive clamp will attach to either a 1/2” (1.3 cm) round bar of a Pilling Wishbone, Gomez, Poly-Tract, or Omni-Tract, or most other table mounted retractor systems. It will also fit 1/4” flat bars found on Finochietto retractors, Strong T-Bar, and most sternal and rib retractors. The unit is autoclavable using standard or flash steam cycles. It uses a continuous 4.4 mm fiberoptic bundle and has a total length of 9 feet (2.7 meters). It can be operated from fiberoptic light sources which accept Pilling fiberoptic cables.

Poly-Tract and Omni-Tract are registered trademarks of Minnesota Scientific Co.

RICHARDSON RETRACTOR, SWIVEL

163213 Richardson Retractor, Swivel
1” (2.5 cm) x 1 3/4” (4.5 cm)
163214 Richardson Retractor, Swivel
1” (2.5 cm) x 1” (2.5 cm)

SPLIT WISHBONE ARMS

163105 Left Arm for Split Wishbone
163106 Right Arm for Split Wishbone
RETRACTORS, TABLE MOUNTED

Wishbone Retractor Accessories (continued)

SPLANCHNIC BLADES

- **163410** Splanchnic Blade, Swivel
  2” (5 cm) x 4 1/2” (11.4 cm)
- **163411** Splanchnic Blade, Swivel
  2” (5 cm) x 6” (15.2 cm)

SPLANCHNIC RETRACTORS

- **163200** Splanchnic Retractor
  2” (5 cm) x 4 1/2” (11.4 cm)
- **163201** Splanchnic Retractor
  2” (5 cm) x 6” (15.2 cm)

STAINLESS STEEL TRAY

- **101058** Stainless Steel Tray for our large table mounted retractor systems, 10 1/2” (26.7 cm) x 20” (51 cm) x 3 1/2” (8.9 cm) mesh bottom and lid.
Wishbone Retractor Accessories
(continued)

STERILIZATION TRAY
This stainless steel tray is designed to accommodate all the component parts of any of our Retractor Systems.

101075  32" x 7" x 7" (81 cm x 18 cm x 18 cm)

STERNAL RETRACTOR

163239  Sternal Retractor
3" (7.6 cm) x 3" (7.6 cm)
RETRACTORS, TABLE MOUNTED

WILKINSON ABDOMINAL RETRACTOR SET
Eliminates Need for a Second Assistant
Ring and Extension Arms Attach to Side Rails
Can be moved Up, Down, to the Side or Tilted

Set Comes Complete with:
1 Ring Frame with Attachment Arms
4 Blade Holders
2 Spreader Blades
1 Balfour Center Blade
1 Malleable Blade
1 Supra Pubic Blade

WILKINSON RING FRAME
With Attachment Arms

486150 13 1/2" (34.2 cm)

WILKINSON BLADE HOLDER
Positive Blade Locking Mechanism for Attachment to Ring Frame with Simple Spring Action

486152

WILKINSON BALFOUR TYPE CENTER BLADE
Blade 38 mm x 88 mm

486156
RETRACTORS, TABLE MOUNTED

WILKINSON ABDOMINAL RETRACTOR (continued)

WILKINSON SPREADER BLADE
486154 Blade 69 x 63.5 mm

WILKINSON MALLEABLE BLADE
486160 Blade 196.85 x 69 mm

WILKINSON DEAVER BLADE
486164 Large 139 x 64 mm
486166 Small 139 x 38.1 mm
ELEVATORS

CUSHING BLUNT ELEVATOR
358344 7 1/4" (18.4 cm)
Blade Blunt 5.80 mm

CUSHING WIDE ELEVATOR
358340 7 1/2" (19 cm)
Blade Sharp 8.20 mm

FREER DOUBLE ENDED ELEVATOR
Curved, Sharp and Blunt Blades
36500 7 1/2" (19 cm) Narrow 5 mm
36501 7 1/2" (19 cm) Wide 6.5 mm

HOUSE RETRACTOR
Blade A 18 x 7 mm
Blade B 23 x 9 mm
29350 6" (15.2 cm)

KEY PERIOSTEAL ELEVATOR
586250 7" (17.7 cm) 1/8" (3.1 mm) Jaw
586251 7" (17.7 cm) 1/4" (6.3 mm) Jaw
586252 7.5" (19.0 cm) 1/2" (12.7 mm) Jaw
586253 8" (20.3 cm) 3/4" (19 mm) Jaw
586254 8 1/4" (20.9 cm) 1" (25.4 mm) Jaw

LANGENBECK NARROW ELEVATOR
Blunt Narrow Blade 7 mm
586100 7 1/4" (18.4 cm)

SISSON DOUBLE ENDED ELEVATOR
Straight Blunt Ended 6 mm
Curve Sharp Ended 7 mm
60170 7 1/4" (18.4 cm)

DAVIS NERVE SEPARATOR AND SPATULA
654220 7 1/2" (19 cm). Tip 20 mm x 6 mm