The Viewline Tube Retraction System and Posterior MIS Instrument Set facilitate exposure, retraction, decompression and disc preparation for MIS TLIF/PLIF/PLF and microdiscectomy procedures. The Viewline Tube Retraction System offers state-of-the-art design with bright, white LED light delivered through dual light ports for increased visualization and a rotating accessory arm to maximize working space. In addition, the Viewline System’s comprehensive range of radiolucent tube options help streamline your MIS procedures.

The Viewline family of retractors and MIS instruments is part of a complete, customizable posterior MIS solution including the PathFinder NXT® Minimally Invasive Pedicle Screw System, Ardis® Interbody System, TM Ardis® Interbody System, CopiOs® Bone Void Filler and Puros® Demineralized Bone Matrix.
Step 1
Mount the sterile Rotating Table Clamp to the bed rail. The Rotating Table Clamp will directly attach to most standard operating tables.

Slide the Articulating Accessory Arm into Rotating Table Clamp and fully tighten at desired height and angle. (Fig. 1)
**Targeting**

**Step 2**
Identify the appropriate entry point and incision length for the Tube:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>General Incision Guidance*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decompression</td>
<td>2cm off midline</td>
</tr>
<tr>
<td>PLIF</td>
<td>3-5cm off midline</td>
</tr>
<tr>
<td>TUF, Pedicle Screw Placement</td>
<td>4-6cm off midline</td>
</tr>
</tbody>
</table>

*Note: Will vary based on patient anatomy.

After incision has been made, place K-wire (if desired) to identify location and initial entry point.

**NOTE:** Use of Fluoroscopic imaging may be used to aid in K-wire placement.

Place Dilator #1 (Silver, 8mm) over K-wire and remove K-wire (if applicable). (Fig. 2)

**NOTE:** Dilator #1 can be used to target the entry point.

**Dilation**

**Step 3**
Slide Dilator #2 (Silver, 13mm) over Dilator #1.
Slide Dilator #3 (Turquoise, 18mm) over Dilator #2.
Slide Dilator #4 (Blue, 22mm) over Dilator #3.
Slide Dilator #5 (Grey, 26mm) over Dilator #4. (Fig. 3)

**NOTE:** Tubes come in 18mm, 22mm and 26mm diameters. If using 18mm Diameter Tube, stop dilating after Dilator #3 (Turquoise, 18mm). If using 22mm Diameter Tube, stop dilating after Dilator #4 (Blue, 22mm). If using 26mm Tube, use Dilator #5 (Grey, 26mm).

**Tube Retractor Insertion**

**Step 4**
Use length markings on Dilator to determine appropriate Tube length.
Slide Tube down appropriate Dilator until fully seated. (Dilator #5 in 26mm Tube shown; Fig. 4)

**Instruments**

- **K-Wire**
  - ZS-0300

- **Dilators**
  - ZS-0310 #1 Dilator
  - ZS-0312 #2 Dilator
  - ZS-0314 #3 Dilator
  - ZS-0316 #4 Dilator
  - ZS-0318 #5 Dilator

- **Retractor Tubes**
  - ZS-0409 – ZS-0427: 18mm Diameter Tubes, 40mm – 120mm Lengths
  - ZS-0419 – ZS-0427: 22mm Diameter Tubes, 40mm – 120mm Lengths
  - ZS-0429 – ZS-0437: 26mm Diameter Tubes, 40mm – 120mm Lengths
**Accessory Arm Attachment**

**Step 5**
Loosen Accessory Arm by rotating black “knob” counterclockwise.

Attach Accessory Arm to Retractor Tube and tighten arm to the Tube.

Turn black “knob” clockwise to fully tighten arm. (Fig. 5)

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**Dilator Removal**

**Step 6**
Once Tube is positioned and Accessory Arm is fully tightened, remove Dilators. (Fig. 6)

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**Light Source Attachment**

**Step 7**
Attach bifurcated light cable to Retractor Tube. (Fig. 7)

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**Instruments**

- LED Light Cable, Strong Curve
  ZS-0048

- LED Light Source
  ZS-0051
## Tray Layouts

### Viewline Tube Retraction System

**07.01969.401**

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Description</th>
<th>Kit Quantity</th>
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</thead>
<tbody>
<tr>
<td>ZS-0409</td>
<td>Retractor Tubes, 18mm Diameter X 40mm</td>
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<tr>
<td>ZS-0410</td>
<td>Retractor Tubes, 18mm Diameter X 50mm</td>
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<tr>
<td>ZS-0411</td>
<td>Retractor Tubes, 18mm Diameter X 60mm</td>
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<tr>
<td>ZS-0412</td>
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<tr>
<td>ZS-0415</td>
<td>Retractor Tubes, 18mm Diameter X 100mm</td>
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<tr>
<td>ZS-0416</td>
<td>Retractor Tubes, 18mm Diameter X 110mm</td>
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<td>ZS-0417</td>
<td>Retractor Tubes, 18mm Diameter X 120mm</td>
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<td>ZS-0419</td>
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<td>ZS-0420</td>
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<td>ZS-0421</td>
<td>Retractor Tubes, 22mm Diameter X 60mm</td>
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<td>ZS-0422</td>
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<td>ZS-0021</td>
<td>Rotating Table Clamp for Articulating Arm</td>
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<tr>
<td>ZS-0060</td>
<td>Articulating Accessory Arm Angled Column w/Rack Clamp</td>
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<td>ZS-0048</td>
<td>Light Cable, Strong Curve</td>
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<td>ZS-0051</td>
<td>LED Light Source</td>
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<td>ZS-0300</td>
<td>K-wire, 1.4mm X 9”, single use (6/pack)</td>
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<td>ZS-0310</td>
<td>Dilator #1, 8mm Silver</td>
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<td>Dilator #2, 13mm</td>
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<td>ZS-0314</td>
<td>Dilator #3, 18mm</td>
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<td>ZS-0316</td>
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<td>ZS-0318</td>
<td>Dilator #5, 26mm</td>
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<tr>
<td>ZS-0708-01</td>
<td>Sterilization Tray - Accessories</td>
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<tr>
<td>ZS-0708-02</td>
<td>Sterilization Tray - Tubes</td>
<td>1</td>
</tr>
</tbody>
</table>
# Viewline Posterior Instrument Set

**Catalog Number** | **Description** | **Kit Quantity**
--- | --- | ---
ZS-0731 | Kerrison, Micro HDL, Bayonetted, 9" (230mm) X 2mm, up, 40°, 155mm wrk/lngth | 1
ZS-0732 | Kerrison, Micro HDL, Bayonetted, 9" (230mm) X 3mm, up, 40°, 155mm wrk/lngth | 1
ZS-0733 | Kerrison, Micro HDL, Bayonetted, 9" (230mm) X 4mm, up, 40°, 155mm wrk/lngth | 1
ZS-0734 | Kerrison, Micro HDL, Bayonetted, 9" (230mm) X 5mm, up, 40°, 155mm wrk/lngth | 1
ZS-0005 | Pituitary Rongeur, Bayonetted, straight, 9" (230mm) 2mm x 10mm, 150mm wrk/lngth | 1
ZS-0006 | Pituitary Rongeur, Bayonetted, straight, 9" (230mm) 3mm x 10mm, 150mm wrk/lngth | 1
ZS-0007 | Pituitary Rongeur, Bayonetted, straight, 9" (230mm) 4mm x 10mm, 150mm wrk/lngth | 1
ZS-0008 | Pituitary Rongeur, Bayonetted, up, 9" (230mm) 2mm x 10mm, 150mm wrk/lngth | 1
ZS-0009 | Pituitary Rongeur, Bayonetted, up, 9" (230mm) 3mm x 10mm, 150mm wrk/lngth | 1
ZS-0010 | Pituitary Rongeur, Bayonetted, up, 9" (230mm) 4mm x 10mm, 150mm wrk/lngth | 1
ZS-0011 | Pituitary Rongeur, Micro, straight, 9" (230mm) 2mm x 10mm, 150mm wrk/lngth | 1
ZS-0012 | Pituitary Rongeur, Micro, straight, 9" (230mm) 3mm x 10mm, 150mm wrk/lngth | 1
ZS-0013 | Pituitary Rongeur w/ tooth, 9" (230mm) 2mm x 10mm, 150mm wrk/lngth | 1
ZS-0014 | Pituitary Rongeur, Micro, straight, 7" (175mm) 2mm x 6mm, 150mm wrk/lngth | 1
ZS-0015 | Kerrison Rongeur Sterilization Tray | 1
ZS-0016 | Epstein Curette, Bayonetted, 3.6mm, fwd angled cup | 1
ZS-0017 | Curette, Bayonetted, 3.6mm, fwd straight cup | 1
ZS-0018 | Curette, Bayonetted, 3.6mm, rev angled cup | 1
ZS-0019 | Epstein Curette, Bayonetted, 5.2mm, fwd angled cup | 1
ZS-0020 | Curette, Bayonetted, 5.2mm, fwd straight cup | 1
ZS-0021 | Curette, Bayonetted, 5.2mm, rev angled cup | 1
ZS-0022 | Epstein Curette, Bayonetted, 7.5mm, fwd angled cup | 1
ZS-0023 | Curette, Bayonetted, 7.5mm, fwd straight cup | 1
ZS-0024 | Curette, Bayonetted, 7.5mm, rev angled cup | 1
ZS-0025 | Ring Curette, Bayonetted, angled, 8mm | 1
ZS-0026 | Dissector, Straight, Bayonetted, 150mm | 1
ZS-0027 | Woodson Probe, Bayonetted, 150mm | 1
ZS-0028 | Nerve Hook, Micro, Bayonetted, 150mm, 1mm, 2.5 offset | 1
ZS-0029 | Nerve Hook, Straight, Bayonetted, 150mm, 2.5mm, 4.0mm offset | 1
ZS-0030 | Short Ball Probe, Bayonetted, Straight 7mm, 150mm | 1
ZS-0031 | Short Ball Probe, Bayonetted, Angled 7mm, 150mm | 1
ZS-0032 | Annulotomy Knife Handle, Bayonetted | 1
ZS-0033 | Penfield # 2, Bayonetted, Push/Pull, 2mm, 150mm | 1
ZS-0034 | Penfield # 4, Push/Pull, Bayonetted, 4mm, 150mm | 1
ZS-0035 | Osteotome, Straight, 1/4in. (6mm) width, 300mm length | 1
ZS-0036 | Osteotome, Straight, 3/8in. (10mm) width, 300mm length | 1
ZS-0037 | Sucker, 8 French, 150mm working length | 1
ZS-0038 | Sucker, 10 French, 150mm working length | 1
ZS-0039 | Retractor Sucker, 150mm working length, 7mm, wide blade | 1
ZS-0040 | Sucker Cleaning Wires, 165mm length | 2
ZS-0041 | Nerve Root Retractor, Bayonetted, Straight, 3mm | 1
ZS-0042 | Nerve Root Retractor, Bayonetted, Straight, 5mm | 1
ZS-0043 | Nerve Root Retractor, 45° angle, 5mm, 150mm working length | 1
ZS-0044 | Nerve Root Retractor, Bayonetted, Straight, 9mm | 1
ZS-0045 | Nerve Root Retractor, 45° angle, 9mm, 150mm working length | 1
ZS-0046 | Tray for Ancillary Instruments | 1
Disclaimer:

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