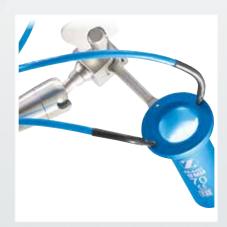


Tube Retractor System

Reference Guide













The Viewline Tube Retractor System and Posterior MIS Instrument Set facilitate exposure, retraction, decompression and disc preparation for MIS TLIF/PLIF/PLF and microdiscectomy procedures. The Viewline Tube Retractor System is designed with a 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 Vital MIS Minimally Invasive Pedicle Screw System, TrellOss™ Porous Ti Interbody Platform, TM Ardis® Interbody System, CopiOs® Bone Void Filler, Puros® Demineralized Bone Matrix and WalterLorenz® Surgical Assist Arm.



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ZimVie Spine does not practice medicine. This technique was developed in conjunction with health care professionals. This document is intended for surgeons and is not intended for laypersons. Each surgeon should exercise his or her own independent judgment in the diagnosis and treatment of an individual patient, and this information does not purport to replace the comprehensive training surgeons have received. As with all surgical procedures, the technique used in each case will depend on the surgeon's medical judgment as the best treatment for each patient. Results will vary based on health, weight, activity and other variables. Not all patients are candidates for this product and/or procedure.

Surgical Technique



Figure 1

Step 1: Retractor Arm Attachment

- 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 (Figure 1).



Figure 2

Step 2: Targeting

• Identify the appropriate entry point and incision length for the tube:

Procedure	General Incision Guidance*
Decompression	2 cm off midline
PLIF	3-5 cm off midline
TLIF, Pedicle Screw Placement 4-6 cm off midline	
*Note: Will vary based on patier	nt 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, 8 mm) over K-wire and remove K-wire (if applicable) (Figure 2).

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





Step 3: Dilation

- Slide dilator #2 (silver, 13 mm) over dilator #1.
- Slide dilator #3 (turquoise, 18 mm) over dilator #2.
- Slide dilator #4 (blue, 22 mm) over dilator #3
- Slide dilator #5 (grey, 26 mm) over dilator #4. (Figure 3).

Note: Tubes come in 18 mm, 22 mm and 26 mm diameters. If using 18 mm diameter tube, stop dilating after dilator #3 (turquoise, 18 mm). If using 22 mm diameter tube, stop dilating after dilator #4 (blue, 22 mm). If using 26 mm tube, use dilator #5 (grey, 26 mm).



Figure 4

Step 4: Tube Retractor Insertion

- Use length markings on dilator to determine appropriate tube length.
- Slide tube down appropriate dilator until fully seated (dilator #5 in 26 mm tube shown) (Figure 4).

■ Surgical Technique (Continued)



Figure 5

Step 5: Accessory Arm Attachment

- Loosen accessory arm by rotating black "knob" counterclockwise.
- Attach accessory arm to retractor tube assembly and tighten arm on to the tube.
- Turn black "knob" clockwise to fully tighten arm (Figure 5).



Figure 6

Step 6: Dilator Removal

• Once tube is positioned and accessory arm is fully tightened, remove dilators (Figure 6).



Figure 7

Step 7: Light Source Attachment

• Attach bifurcated light cable to retractor tube (Figure 7).

■ Kit Contents

Viewline Tube Retractor System Kit A Kit Number: 07.01969.400-A

DESCRIPTION	QTY	PART NUMBER
Retractor Tubes, Ø18 mm x 40 mm	1	ZS-0409
Retractor Tubes, Ø18 mm x 50 mm	1	ZS-0410
Retractor Tubes, Ø18 mm x 60 mm	1	ZS-0411
Retractor Tubes, Ø18 mm x 70 mm	1	ZS-0412
Retractor Tubes, Ø18 mm x 80 mm	1	ZS-0413
Retractor Tubes, Ø18 mm x 90 mm	1	ZS-0414
Retractor Tubes, Ø18 mm x 100 mm	1	ZS-0415
Retractor Tubes, Ø18 mm x 110 mm	1	ZS-0416
Retractor Tubes, Ø18 mm x 120 mm	1	ZS-0417
Retractor Tubes, Ø22 mm x 40 mm	1	ZS-0419
Retractor Tubes, Ø22 mm x 50 mm	1	ZS-0420
Retractor Tubes, Ø22 mm x 60 mm	1	ZS-0421
Retractor Tubes, Ø22 mm x 70 mm	1	ZS-0422
Retractor Tubes, Ø22 mm x 80 mm	1	ZS-0423
Retractor Tubes, Ø22 mm x 90 mm	1	ZS-0424
Retractor Tubes, Ø22 mm x 100 mm	1	ZS-0425
Retractor Tubes, Ø22 mm x 110 mm	1	ZS-0426
Retractor Tubes, Ø22 mm x 120 mm	1	ZS-0427
Retractor Tubes, Ø26 mm x 40 mm	1	ZS-0429
Retractor Tubes, Ø26 mm x 50 mm	1	ZS-0430
Retractor Tubes, Ø26 mm x 60 mm	1	ZS-0431
Retractor Tubes, Ø26 mm x 70 mm	1	ZS-0432
Retractor Tubes, Ø26 mm x 80 mm	1	ZS-0433
Retractor Tubes, Ø26 mm x 90 mm	1	ZS-0434
Retractor Tubes, Ø26 mm x 100 mm	1	ZS-0435
Retractor Tubes, Ø26 mm x 110 mm	1	ZS-0436
Retractor Tubes, Ø26 mm x 120 mm	1	ZS-0437
Sterilization Tray - Tubes	1	ZS-0708-02

Viewline Tube Retraction System Kit B Kit Number: 07.01969.400-B

DESCRIPTION	QTY	PART NUMBER
Rotating Table Clamp for Articulating Arm	1	ZS-0021
Articulating Accessory Arm Angled Column w/Rack Clamp	1	ZS-0060
Light Cable, Strong Curve	1	ZS-0048
K-wire, 1.4 mm X 9", single use (6/pack)	1	ZS-0300
Dilator #1, 8 mm	1	ZS-0310
Dilator #2, 13 mm	1	ZS-0312
Dilator #3, 18 mm	1	ZS-0314
Dilator #4, 22 mm	1	ZS-0316
Dilator #5, 26 mm	1	ZS-0318
Sterilization Tray - Accessories	1	ZS-0708-01

Viewline Posterior Instrument Kit A Kit Number: 07.01971.401-A

DESCRIPTION	QTYPA	RT NUMBER
Epstein Curette, Bayonetted, 3.6 mm, fwd angled cup	1	ZS-0026
Curette, Bayonetted, 3.6 mm, fwd straight cup	1	ZS-0028
Curette, Bayonetted, 3.6 mm, rev angled cup	1	ZS-0030
Epstein Curette, Bayonetted, 5.2 mm, fwd angled cup	1	ZS-0032
Curette, Bayonetted, 5.2 mm, fwd straight cup	1	ZS-0034
Curette, Bayonetted, 5.2 mm, rev angled cup	1	ZS-0036
Epstein Curette, Bayonetted, 7.5 mm, fwd angled cup	1	ZS-0039
Curette, Bayonetted, 7.5 mm, fwd straight cup	1	ZS-0040
Curette, Bayonetted, 7.5 mm, rev angled cup	1	ZS-0041
Ring Curette, Bayonetted, angled, 8 mm	1	ZS-0038
Dissector, Straight, Bayonetted, 150 mm	1	ZS-0050
Woodson Probe, Bayonetted, 150 mm	1	ZS-0052
Nerve Hook, Micro, Bayonetted, 150 mm, 1 mm, 2.5 offset	1	ZS-0054

Viewline Posterior Instrument Kit A (Continued) Kit Number: 07.01971.401-A

DESCRIPTION	QTY PAR	T NUMBER
Nerve Hook, Straight, Bayonetted, 150 mm, 2.5 mm, 4.0 mm offset	1	ZS-0056
Short Ball Probe, Bayonetted, Straight 7 mm, 150 mm	1	ZS-0058
Short Ball Probe, Bayonetted, Angled 7mm, 150 mm	1	ZS-0061
Annulotomy Knife Handle, Bayonetted	1	ZS-0062
Penfield # 2, Bayonetted, Push/Pull, 2 mm, 150 mm	1	ZS-0070
Penfield # 4, Push/Pull, Bayonetted, 4 mm, 150 mm	1	ZS-0072
Osteotome, Straight, 1/4 in. (6 mm) width, 300mm length	1	ZS-0080
Osteotome, Straight, 3/8 in. (10 mm) width, 300 mm length	1	ZS-0082
Sucker, 8 French, 150 mm WL	1	ZS-0090
Sucker, 10 French, 150 mm WL	1	ZS-0092
Retractor Sucker, 150 mm WL, 7 mm, wide blade	1	ZS-0096
Sucker Cleaning Wires, 165 mm length	2	ZS-0091
Nerve Root Retractor, Bayonetted, Straight, 3 mm	1	ZS-0099
Nerve Root Retractor, Bayonetted, Straight, 5 mm	1	ZS-0100
Nerve Root Retractor, 45° angle, 5 mm, 150 mm WL	1	ZS-0102
Nerve Root Retractor, Bayonetted, Straight, 9 mm	1	ZS-0104
Nerve Root Retractor, 45° angle, 9 mm, 150 mm WL	1	ZS-0106
Tray for Ancillary Instruments	1	ZS-0910

Viewline Posterior Disc Prep Kit Kit Number: 07.01971.401-B

DESCRIPTION	QTY	PART NUMBER
Kerrison, Bayonetted, Up, 9" (230 mm) x 2 mm, 40°, 155 mm WL	1	ZS-0731
Kerrison, Bayonetted, Up, 9" (230 mm) x 3 mm, 40°, 155 mm WL	1	ZS-0732
Kerrison, Bayonetted, Up, 9" (230 mm) x 4 mm, 40°, 155 mm WL	1	ZS-0733
Kerrison, Bayonetted, Up, 9" (230 mm) x 5 mm, 40°, 155 mm WL	1	ZS-0734
Pituitary Rongeur, Bayonetted, Straight, 9" (230 mm) 2 mm x 10 mm, 150 mm WL	1	ZS-0005
Pituitary Rongeur, Bayonetted, Straight, 9" (230 mm) 3 mm x 10 mm, 150 mm WL	1	ZS-0006
Pituitary Rongeur, Bayonetted, Straight, 9" (230 mm) 4 mm x 10 mm, 150 mm WL	1	ZS-0007
Pituitary Rongeur, Bayonetted, Up, 9" (230 mm) 2 mm x 10 mm, 150 mm WL	1	ZS-0008
Pituitary Rongeur, Bayonetted, Up, 9" (230 mm) 3 mm x 10 mm, 150 mm WL	1	ZS-0009
Pituitary Rongeur, Bayonetted, Up, 9" (230 mm) 2 mm x 6 mm, 150 mm WL	1	ZS-0016
Pituitary Rongeur, Bayonetted, Up, 9" (230 mm) 3 mm x 6 mm, 150 mm WL	1	ZS-0017
Pituitary Rongeur w/ Tooth, 7" (175 mm) 3 mm x 10 mm, 150 mm WL	1	ZS-0013
Pituitary Rongeur, Micro, Straight, 7" (175 mm) 2 mm x 6 mm, 150 mm WL	1	ZS-0014
Kerrison Rongeur Sterilization Tray	1	ZS-0900

Instruments



Rotating Table Clamp	PART NUMBER
	ZS-0021



Articulating Accessory Arm	PART NUMBER
	ZS-0060

K-wire	PART NUMBER
	ZS-0300



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



Retractor Tubes - 18 mm diameter	PART NUMBER
40 mm length	ZS-0409
50 mm length	ZS-0410
60 mm length	ZS-0411
70 mm length	ZS-0412
80 mm length	ZS-0413
90 mm length	ZS-0414
100 mm length	ZS-0415
110 mm length	ZS-0416
120 mm length	ZS-0417



Retractor Tubes - 22 mm diameter	PART NUMBER
40 mm length	ZS-0419
50 mm length	ZS-0420
60 mm length	ZS-0421
70 mm length	ZS-0422
80 mm length	ZS-0423
90 mm length	ZS-0424
100 mm length	ZS-0425
110 mm length	ZS-0426
120 mm length	ZS-0427



Retractor Tubes - 26 mm diameter	PART NUMBER
40 mm length	ZS-0429
50 mm length	ZS-0430
60 mm length	ZS-0431
70 mm length	ZS-0432
80 mm length	ZS-0433
90 mm length	ZS-0434
100 mm length	ZS-0435
110 mm length	ZS-0436
120 mm length	ZS-0437



LED Light Cable	PART NUMBER	
	ZS-0045	



LED Light Source	PART NUMBER	
	7S-0051	

For more information, visit ZimVie.com

ZimVie Spine 10225 Westmoor Drive Westminster, CO 80021 ZimVie.com



TeDan Surgical Innovations, LLC 12615 West Airport Boulevard Suite #200 Sugar Land, TX 77478 +1 713.726.0886



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