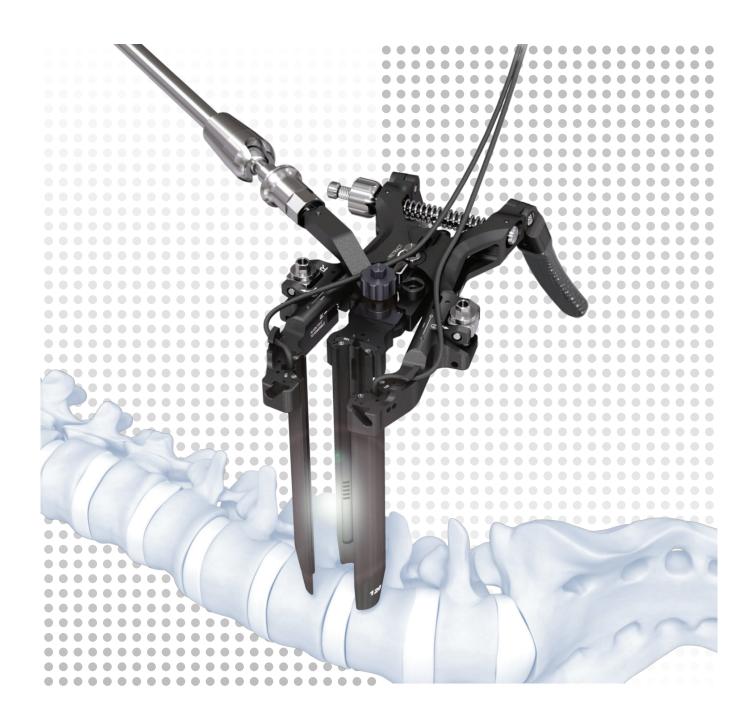
INSIGHT™

Lateral Access System

Surgical Technique and Product Information







[Image intensifier control

▲ Warnings and Precautions

This description alone does not provide sufficient background for direct use of DePuy Synthes products. Instruction by a surgeon experienced in handling these products is highly recommended.

Processing, Reprocessing, Care and Maintenance

For general guidelines, function control and dismantling of multi-part instruments, as well as processing guidelines for implants, please contact your local sales representative or refer to:

http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance

For general information about reprocessing, care and maintenance of Synthes reusable devices, instrument trays and cases, as well as processing of Synthes non-sterile implants, please consult the Important Information leaflet (SE_023827) or refer to:

http://emea.depuysynthes.com/hcp/reprocessing-care-maintenance

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INSIGHT™ Lateral Access System

The INSIGHT™ Lateral Access System is a modular system designed to support a minimally invasive approach to the spine.

X-Ray Visibility:

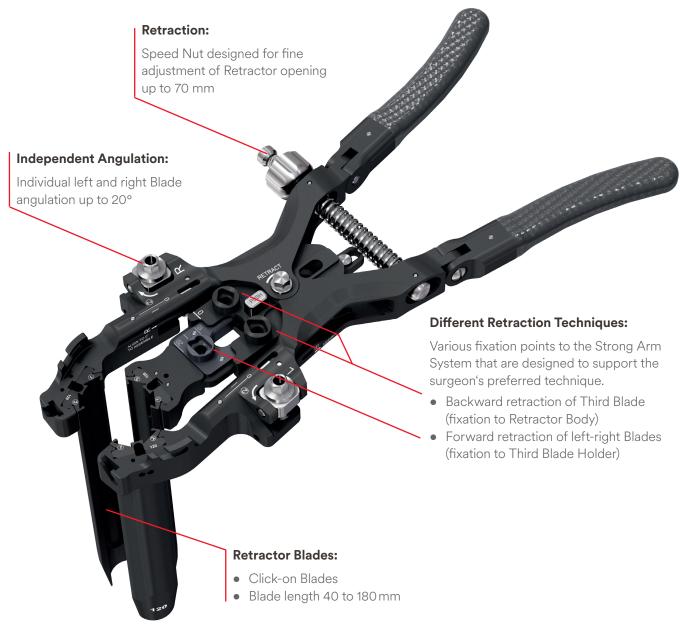
- Semi radiolucent (aluminum) parts to facilitate fluoroscopic visualization
- Radiolucent carbon fiber handles to reduce interference during anterior/posterior fluoroscopy



Accessories:

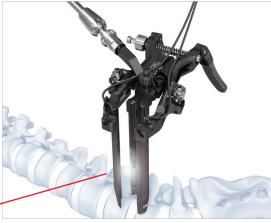
- Winglets designed provide further anterior/ posterior soft tissue retraction
- Blade extensions designed to provide additional Blade length in situ
- Disc Anchor Blade designed to provide Retractor stability





Light System:

- Light accessory to facilitate additional illumination of the surgical field.
- Disposable light with adjustable depth



Description of Retractor Parts



retraction

6. Light slot

4. Angulation nut (right)

5. Accessory grooves

7. Right Blade holder8. Left and right Blade

retraction

13. PUSH button

12. Angulation nut (left)

AO Spine Principles

The four principles to be considered as the foundation for proper spine patient management underpin the design and delivery of the Curriculum: Stability, Alignment, Biology, Function.^{1,2}

AO Principles^{1,2}

1.



Stability

Stabilization to achieve a specific therapeutic outcome.

2.



Alignment

Balancing the spine in three dimensions.

3.



Biology

Etiology, pathogenesis, neural protection, and tissue healing.

4.



Function

Preservations and restoration of function to prevent disability.

Preparation

1. Patient Positioning

Instruments	
03.809.942	Table Clamp for Universal Arm
03.816.800 or	Strong Arm
03.809.941	Universal Arm

For the lateral approach, the patient is placed and taped in the lateral decubitus position as illustrated (1).

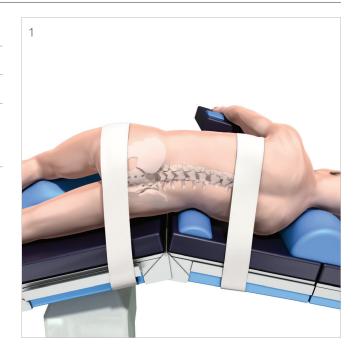
- Ensure that the position of the operative level is perpendicular to the floor for easier orientation of fluoroscopy and approach by confirming:
- In Lateral fluoroscopy, the endplates are parallel with superimposed pedicles.
- In A/P fluoroscopy, the endplates are parallel, the pedicles reside in the cranial portion of the vertebral body and the spinous process is equidistant to both pedicles.

For further information, please refer to the dedicated implant surgical techniques.

 If neuromonitoring is being used, refer to the respective neuromonitoring surgical technique.

▲ Precaution:

 A thorough education and a comprehensive understanding of the respective anatomy as well as practical experience in performing the lateral approach to the thoracolumbar spine is a prerequisite for use of this system.

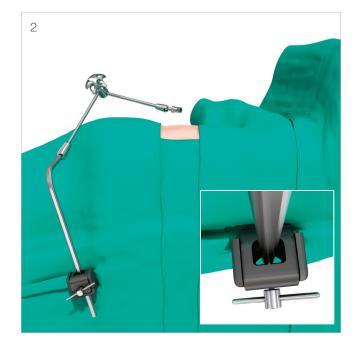


2. Set Up Strong Arm System

Install Table Clamp onto the preferred side of the operating table by loosening it and attaching it onto the table rail. Insert the Strong Arm or Universal Arm with flat side facing away from the table (2). Secure Table Clamp by tightening it.

▲ Precaution:

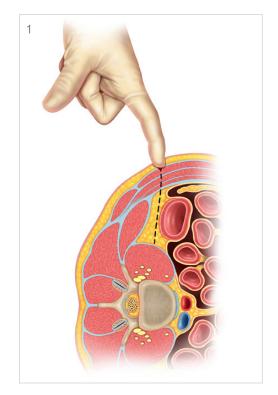
 Ensure that the rotation of the Strong Arm or Universal Arm is securely locked by the Table Clamp.

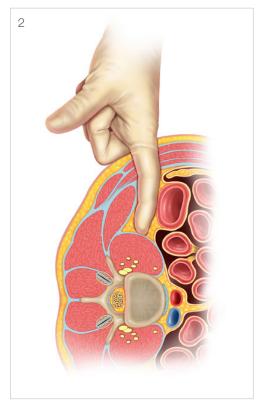


Access and Exposure

1. Approach to the Lumbar Spine

- Locate and mark the correct operative level and associated incision site under lateral fluoroscopy and make a skin incision. Incision should be large enough to accommodate the Retractor and subsequent retraction. Retract the subcutaneous tissue and bluntly dissect through the abdominal muscle layers and incise the transversalis fascia to enter the retroperitoneal space (1). Move the peritoneum anterior with forefinger and continue with blunt dissection to gently palpate down to the psoas by following the anterior border of the quadratus lumborum (2)
- Before puncturing the psoas, fluoroscopy is recommended to ensure targeting the area of interest of the affected disc space. The anterior third of the psoas muscle is the most likely safe zone for avoiding the neural elements of the lumbar plexus.³





2. Approach the Disc Space

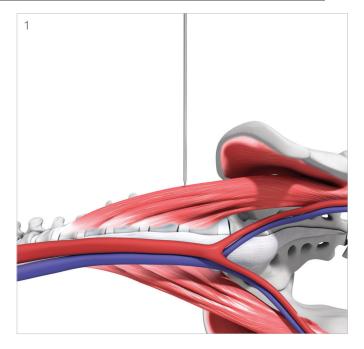
02.809.002 Kirschner Wire Ø 3.0 mm with blunt tip, length 285 mm, Stainless Steel

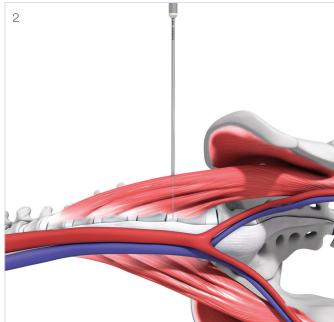
In case no neuromonitoring is used, the 3.0mm Kirschner Wire can be utilized to identify the disc space under fluoroscopy.

▲ Warnings:

- In order to avoid neural structures it is recommended to use neuromonitoring (detection of motoric nerves). Additionally, use direct visual control (detection of sensoric nerves).
- Map out a safe corridor through the psoas muscle to the operating level by stimulating with a neuromonitoring probe (1). Once achieved, continue to perform a blunt dissection of the psoas muscle under direct visual control.
- In addition, lateral and A/P fluoroscopy should be utilized to place the neuromonitoring probe/ Kirschner Wire through the psoas and into the annulus of the desired intervertebral disc space.
 - Ensure the neuromonitoring probe or Kirschner Wire remains securely in position until the Retractor is in place by having it sufficiently anchored in the disc space.

For further information, please refer to the dedicated implant surgical techniques and to the respective neuromonitoring surgical technique.





3. Insert Dilators

Instruments	
03.816.806	Dilator, Ø 6mm eccentric, small for INSIGHT Lateral Access System
03.816.810	Dilator, Ø 10 mm eccentric, small for INSIGHT Lateral Access System
03.816.816	Dilator, Ø 16 mm eccentric, small for INSIGHT Lateral Access System
02.809.002	Kirschner Wire Ø 3.0 mm with blunt tip, length 285 mm, Stainless Steel

The eccentric Dilators allow for dilation away from any sensitive structures (e.g. posterior nerves). Slide the small dilator (rounded tip first) over the Kirschner Wire in the orientation of preferred direction of dilation. Continue with the remaining two Dilators with the groove facing the preferred direction of dilation (midline or eccentric (1)).

• With the eccentric dilation technique the Retractor will be positioned a maximum of 8 mm off-center.

 Use fluoroscopy (lateral and A/P) to determine location of Dilators. Also ensure that Dilators rest firmly against the vertebral body wall in order to determine skin depth. Keep downward pressure on the Dilators until the Strong Arm or Universal Arm has been fixed to the Retractor.

▲ Warning:

 Do not stimulate against any instruments in the surgical field.

Determine the appropriate Retractor Blade length from the markings on the Dilators and round up to the next available Blade length.

 When determining the Blade length, consider the surrounding anatomy (iliac crest, ribs, etc).







Retraction

1. Preparation

Instruments	
03.816.001	Retractor Body
03.816.010	Screwdriver, for INSIGHT Lateral Access System
03.816.002	Blade Holder, left, for No. 03.816.001
03.816.003	Blade Holder, right, for No. 03.816.001
03.816.004	Third Blade Holder, for No. 03.816.001
03.816.040- 03.816.180	Blade, length 40–180 mm (in 10 mm increments)

Assemble the Retractor by attaching the Blade Holders to the Retractor Body (see chapter "Cleaning Positions / Assembly" p. 29).

Open the Retractor by compressing the handles and turning the Speed Nut (1) and attach the appropriate Blades ((2) top loading click-on connection).

If a Disc Anchor will be used, a Disc Anchor Blade of corresponding length should be attached to the Third Blade Holder (see chapter "Accessories, Additional Stability" instruction p. 24).

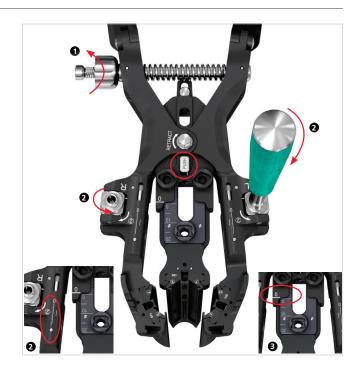
 The Disc Anchor Blade can only be attached to the Third Blade Holder.





Place Retractor In Zero Position:

Close the Retractor by releasing Speed Nut ①). Return angulation of left and right Blades to the zero position by turning the angulation nuts with the Screwdriver for INSIGHT Lateral Access System accordingly ②). Set the Third Blade to zero position by pushing the PUSH button and/or turning the RETRACT nut in the appropriate direction at the same time (③) until the "0" on the Third Blade aligns with the "0" on the Retractor Body.



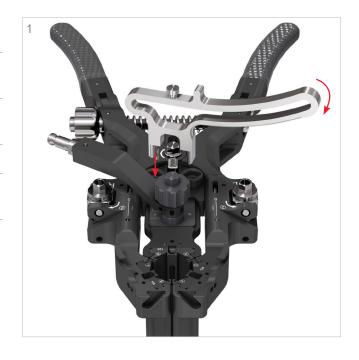
Attach Connector

Instruments

03.816.801	Connector, for Strong Arm No. 03.816.800
03.816.010	Screwdriver, for INSIGHT Lateral Access System
Optional	
03.816.019	Wrench, for INSIGHT Lateral Access System

Attach the Connector to the respective point on the Retractor (A or B, see next page) and tighten with the Screwdriver or Wrench depending on tightening preference (1). The Connector can only be attached in the illustrated positions and orientations (from the left and right side) to avoid subsequent conflict with angulation mechanism.

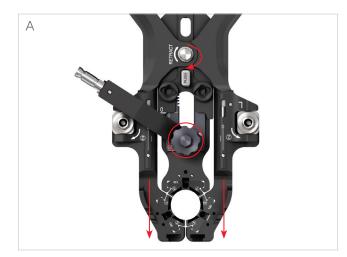
For the role of the different attachment options, see next page.



Forward/Backward Retraction Options Retract Forward

If forward retraction is desired (A), attach the Connector to the Third Blade Holder connection point.

Subsequent clockwise rotation of the RETRACT nut results in forward retraction of the Retractor Body (with left and right Blade Holders) relative to the fixed Third Blade Holder.



Or



If backward retraction is desired (B), attach the Connector to either one of the attachment points on the Retractor Body.

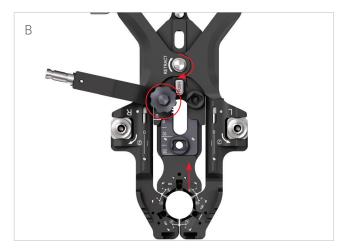
Subsequent clockwise rotation of the RETRACT nut results in backward retraction of the Third Blade Holder relative to a fixed Retractor Body (with left and right Blade Holder).

▲ Precaution:

• Do not place any accessories before retraction.







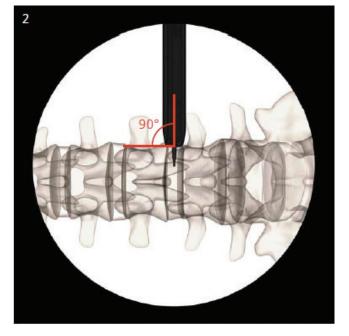




2. Slide Retractor over the Dilators

- Use fluoroscopic imaging to determine the position of the Dilators (1). Slide the Retractor with the Blades and Connector attached over the Dilators.
 - The handles of the Retractor can be placed either anterior or posterior depending on surgeon preferences.
- ① Use fluoroscopic imaging to determine the position of the Retractor. Retractor Blades should rest against the disc space and/or vertebral endplates in a perpendicular orientation to the disc space (2). Maintain the Dilators and Retractor in place until the Strong Arm or Universal Arm has been fixed to the Retractor.

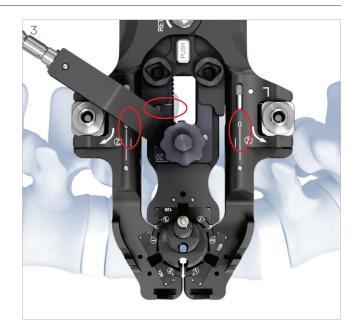




▲ Precaution:

In order to reduce tissue creep:

- Retractor Blades must be in zero position (3)
- The Retractor Blades should be placed against the disc space and/or the vertebral endplates.
- Use fluoroscopic images to determine:
 - The position of the Retractor.
 - Identify presence of osteophytes.
 - Do not apply excessive force when inserting Retractor.

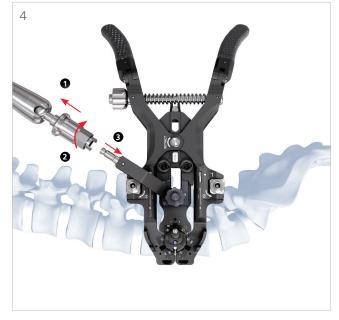


Attach Retractor to Strong Arm or Universal Arm

Attach Connector to Strong Arm or Universal Arm (①, ②, ③) and tighten the stabilizing system by turning the knob on the arm (4).

▲ Precaution:

 Do not maneuver operating-table after fixing the Retractor with the Strong Arm or Universal Arm system as this may lead to movement of the Retractor in the surgical field.



3. Retract Lateral

Open the Retractor in the cranial-caudal direction to the desired position by compressing the handles and turning the Speed Nut (1). Use fluoroscopic images to determine the position of the Retractor. Remove the Dilators.

 Leave any neuromonitoring probe or Kirschner Wire in place for orientation whilst opening the retractor.

▲ Precaution:

 Use caution when removing the Dilators so as not to dislodge any neuromonitoring probe/s or Kirschner Wire from the disc space.



4. Retract Forward/Backward

Instrument

03.816.010 Screwdriver, for INSIGHT Lateral Access System

To perform either forward or backward retraction (see A and B in chapter "Forward/Backward Retraction Options" instruction pg. 15), turn the RETRACT nut clockwise with the Screwdriver (1). Use fluoroscopic imaging during retraction to determine and confirm the

▲ Precautions:

position.

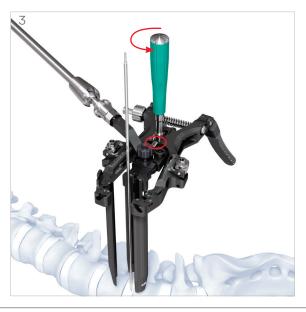
- The Retractor should not be placed either too anterior or too posterior to reduce the risk of damage to adjacent structures.
- Always retract under direct visual control.

Release Forward/Backward Retraction

To release the forward or backward retraction, push the button with corresponding laser etching PUSH (2) while turning the RETRACT nut counterclockwise using the Screwdriver (3).







5. Blade Angulation

O3.816.010 Screwdriver, for INSIGHT Lateral Access System

If additional exposure of the surgical site is needed or if the exposure needs to be centralised around a neuromonitoring probe or Kirschner Wire, use the Screwdriver to independently angle the right or left Blade and turn it in the direction of the arrow etched on the Retractor (1). Use fluoroscopic imaging during change of angulation to determine the position of the Blades. In order to reduce the angulation, turn the Screwdriver in the other direction.

Remove any neuromonitoring probe/s or Kirschner Wire.

▲ Precautions:

- Avoid retraction or angulation of the Blades to the extent that the segmental vessels are exposed or tissue is over retracted.
- To angle the Blades, only turn the Screwdriver finger-tight to avoid applying excessive force on the retracted tissue.

For further information, please refer to the dedicated implant technique guide for the subsequent procedure.



Bone Screw

To further improve the stability of the Retractor and avoid soft tissue creeping in between the Blades and the Vertebral Body Bone Screw(s) can be added to the cranial and/or the caudal Blade. This will attach the Retractor Blade to the vertebral body and prevent the Retractor from migrating during challenging cases.

The cranial and caudal Blades each have two dovetail channels that allow the insertion of the Bone Screw (available as sterile item). The dovetail channels are etched with the numbers "1" and "2" to help remember the insertion location. Carefully push soft tissue away from the surgical exposure before placing the Bone Screw. Insert the Bone Screw with the corresponding Screwdriver.

 Bone Screw protrudes up to 25 mm from the tip of the Blade.

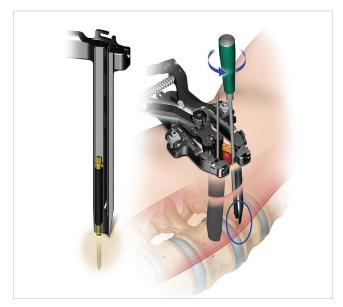
▲ Precaution:

 Do not reposition the Retractor or perform further retraction after the Bone Screw(s) are placed or remove the Bone Screw(s) prior to repositioning the Retractor.

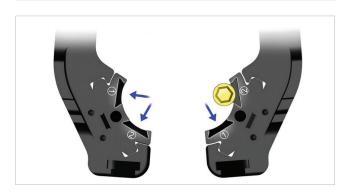
▲ Warning:

 Care should be taken to avoid the segmental vasculature of the vertebral body when placing the Bone Screw.





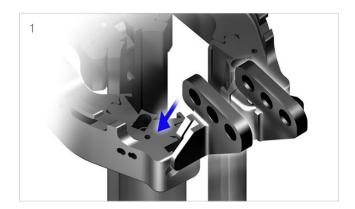


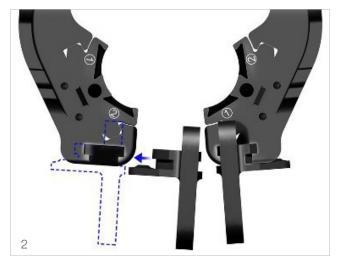


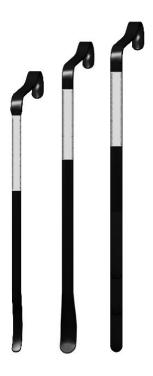
6. 4th Blade (optional instruments)

To reduce tissue creep and/or improve visualization it can be beneficial to install the optional 4th Blade to the Retractor. There are three different lengths, two shapes and two widths available to achieve an optimal fit.

- 1. Clip the Connectors into right and left Retractor Arm (1). If the need for the 4th Blade is evident in advance, it is advised to perform this step during the Retractor assembly before the surgery starts.
- 2. Select the 4th Blade length and width depending on the lengths of the other Retractor Blades and the gap between the cranial and caudal Blade. The curved Blades are designed to be positioned around the ALL to protect the vasculature, while the straight Blades are designed to stay proximal to the vertebral body. (2)



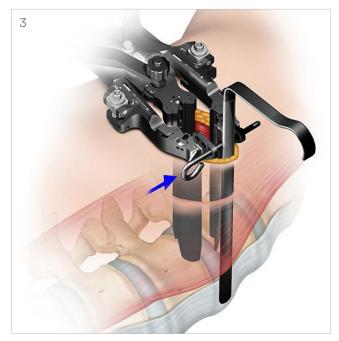




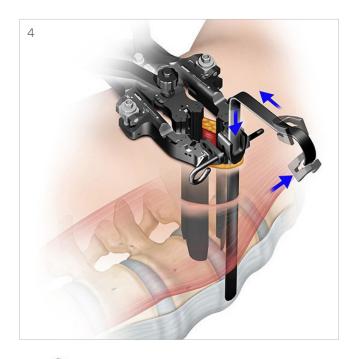
- **3.** Position the 4th Blade as needed until the desired visualization of the disc is achieved.
- **4.** Insert the Yoke through the holes of the Connectors to secure the 4th Blade. The pressure of the soft tissue will keep the 4th Blade and the Yoke in position. (3)
- **5.** To prevent any migration of the 4th Blade, the Optional Fixation Clamp can be slid over the 4th Blade handle and clicked onto the Yoke. (4)

▲ Warning:

• Ensure the 4th blade tip does not compromise nearby major vessels and/or abdominal organs.









7. Subsequent Levels

Remove the Retractor (see chapter "Removal" p. 30). Repeat patient positioning and neuromonitoring steps for subsequent levels.

 Patient position may need to be adjusted (through table adjustment) in order to perform subsequent levels (see chapter "Patient Positioning", described on p. 8).

Accessories

Light System

Instruments	
03.816.080- 03.816.180	Blade, length 80–180 mm (in 10 mm increments)
03.816.700	Reusable Light, for INSIGHT Lateral Access System
03.816.705	Bifurcated Light Cable
03.816.709 or	Adapter, for Light and Cable
03.816.710S	Disposable Light, for INSIGHT Lateral Access System, sterile
03.816.706	Light Cable
03.816.709	Adapter, for Light and Cable
Optional	
03.816.701	Wolf Adapter, for Light Source
03.816.702	Storz Adapter, for Light Source
03.816.703	Olympus Adapter, for Light Source
03.816.704	ACMI Adapter, for Light Source

Screw the appropriate Light Source Adapter (Wolf, Storz, Olympus or ACMI) onto the appropriate light cable and screw the Light Adapter(s) to the other end(s) of the cable.

Reusable Light



Disposable Light



Slide the Reusable Light (1) or Disposable Light (2) into the light slots. Secure the light underneath the provided hooks. Connect the light cable to the light source. Turn on the light source.

Precautions and Warnings

- Do not bend fiber optic cables/lights under a radius of 5 cm.
- Do not apply pressure on the light cable/lights using a sharp object.
- Exchange reusable light/cables if it collects fluid inside, appears broken or damaged.
- Avoid damaging the fiber surfaces at the ends of the light cable, as this will reduce the light output level.
- Do not use higher wattage than indicated for the light cables and reusable light (300 W).
- Depending on light source, temperature of the light, cables and/or adapters may exceed 43°C.
 Therefore avoid contact to user, patient, temperature-sensitive objects and flammable materials such as textiles (curtains) or near cotton swabs or pads that have been soaked with flammable fluids with these parts.
- The Reusable Light/Disposable Light should only be used with the associated light cables.
- Never leave the light system unattended when light is being transmitted from a light source.
- Never look directly into the highly intense light since this could cause severe injuries to the eyes.
- The light instruments containing fiber optics should not be ultrasonically cleaned.





Additional Stability

Instruments	
03.816.280- 03.816.380	Disc Anchor Blades, for Third Blade Holder length 80 mm–180 mm (10 mm increments)
03.816.012	Instrument for Disc Anchor Blade
03.816.013	Inner Shaft, for Instrument for Disc Anchor Blade
03.816.014	Turning Knob, for Instrument for Disc Anchor Blade
03.816.015	Push Button, for Instrument for Disc Anchor Blade

Attach the appropriate Disc Anchor Blade on the Third Blade Holder instead of a Common Blade. Assemble the instrument for Disc Anchor Blade.

When inserting the assembled instrument into the Disc Anchor Blade, ensure that it is in the disengaged position (with the arrows at the distal end pointing together) (1). Slide the instrument down the groove and push down until the Disc Anchor rests in the desired position (2).

 Check position under fluoroscopy (A/P and lateral) before and while advancing (A/P) the Disc Anchor into the intervertebral disc in order to confirm that its trajectory does not lead to bone or adjacent (anterior or posterior) structure damage. Always confirm the absence of nerves before inserting the Disc Anchor.





To retract the Disc Anchor, slide the instrument (in the disengaged position) (1) down the groove until it sits on the Disc Anchor component (3).

Rotate the turning knob to the engaged position (counterclockwise) to engage the Disc Anchor component (4). Retract the Disc Anchor component by pulling up the instrument (5). Disengage the instrument by turning the knob to the disengaged position (clockwise) (6).

▲ Precaution:

 Do not retract the Third Blade Holder once the Disc Anchor is in place. As the Disc Anchor component is permanently attached to the respective Blade it must be cleaned according to its specific handling guidelines.









Additional Retraction

Instruments	
03.816.030	Accessories Instrument
03.816.033	Blade Extension
03.816.036	Winglet, right
03.816.037	Winglet, left
03.816.080- 03.816.180	Blade, length 80–180 mm (in 10 mm increments)
03.816.025	Scoop, for INSIGHT Lateral Access System

To lengthen the Blades and to reduce tissue creep, a Blade Extension (2) can be used with the Accessories Instrument (1).

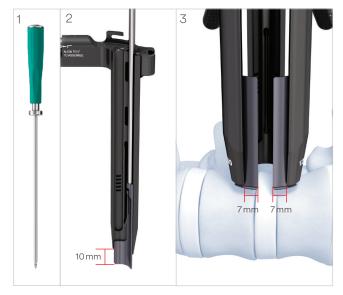
To reduce lateral tissue creep, Winglets can be used. Each Winglet is designed to provide additional Blade width (3).

Screw the accessory fully onto the Accessories Instrument.

The groove number on the Blade corresponds to numbers **1/2** on back of the accessory (4).

▲ Precaution:

 Use the Scoop with the Blade Extension and/or Winglet to retract soft tissue. This is to reduce the risk of soft tissue damage due to compression by the Blade Extension and Winglet.









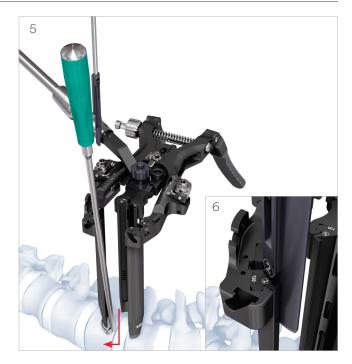
The Scoop is used to retract soft tissue. Glide the Scoop down on the concave side of the Blades to the site of tissue creep. Push the soft tissue behind the Blade (5).

Then slide the accessory down the respective accessory groove (6).

Turn the handle of the Scoop counterclockwise (7) into the Retractor opening until it no longer resides behind the Blade and can be removed. Unscrew the accessories instrument from the extension.

▲ Precautions:

- Do not reposition the Retractor or perform further retraction after accessories are placed.
- When inserting and removing subsequent instruments (curettes, trials, etc.) ensure that they do not conflict with the Retractor Blades or accessories, noting that manipulation (including accessory removal) may be required to avoid conflict.





Removal

Instruments	
03.816.030	Accessories Instrument
03.816.010 Access	Screwdriver, for INSIGHT Lateral System
03.816.012	Instrument for Disc Anchor Blade
03.816.013	Inner Shaft, for Instrument for Disc Anchor Blade
03.816.014	Turning Knob, for Instrument for Disc Anchor Blade
03.816.015	Push Button, for Instrument for Disc Anchor Blade

Switch off the Light Source and remove the light. Then remove/retract all remaining accessories/Disc Anchor component with the corresponding instruments (1).

▲ Precaution:

 Before the Retractor can be removed, all accessories (Blade extensions and winglets) have to be removed (1), the Disc Anchor has to be retracted and the Retractor must be placed in the zero position.

The Retractor has to be placed in the zero position as follows (2):

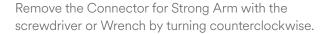
- Close the left and right Blades by loosening the Speed Nut on the Retractor Body (1).
- Turn the angulation nuts on the left and right Blade holder with the Screwdriver to bring the Blades back into the zero position (2). Turn in the opposite direction of the etched arrows.
- Push the button etched with "PUSH" while turning the RETRACT nut counterclockwise (s) to bring the Third Blade Holder into its original zero position.
- Loosen the Strong Arm by turning the knob on it counterclockwise and detach Connector from Strong Arm or Universal Arm.
- Remove the Retractor from the surgical field.





Removal After Surgery

Instruments	
03.816.011	Blade Removal Tool
03.816.016	Sleeve, for Blade Removal Tool No. 03.816.011
03.816.010	Screwdriver, for INSIGHT Lateral Access System
Optional	
03.816.019	Wrench, for INSIGHT Lateral Access System



For cleaning, reprocessing and storage, disassemble the Blades from the Retractor using the Blade removal tool. Assemble the sleeve for Blade removal tool onto the Blade removal tool ensuring that the sleeve is fully pulled back.

Engage the assembled Blade removal tool into the Blade – Blade holder connection (1).

Advance the sleeve for the Blade removal tool until the Blade is engaged (2).

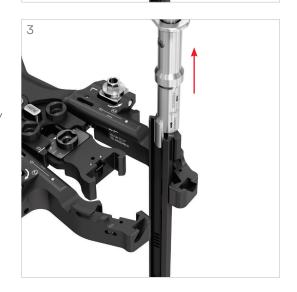
Alternatively, the flat spring can be compressed by hand without the sleeve.

Pull the Blade out (3). Retract the sleeve for the Blade removal tool in order to release the Blade.

Disassemble the Blade Holders from the Retractor Body according to the disassembling instructions.







Instruments

03.809.941	Universal Arm	
03.809.942	Table Clamp for Universal Arm	
03.816.001	Retractor Body	
03.816.002	Blade Holder, left, for No. 03.816.001	
03.816.003	Blade Holder, right, for No. 03.816.001	waste.
03.816.004	Third Blade Holder, for No. 03.816.001	

03.816.010	Screwdriver, for INSIGHT Lateral Access System
03.816.011	Blade Removal Tool
03.816.016	Sleeve, for Blade Removal Tool No. 03.816.011
03.816.012	Instrument for Disc Anchor Blade
03.816.013	Inner Shaft, for Instrument for Disc Anchor Blade
03.816.014	Turning Knob, for Instrument for Disc Anchor Blade
03.816.015	Push Button, for Instrument for Disc Anchor Blade
03.816.019	Wrench, for INSIGHT Lateral Access System
03.816.020	Holder, for INSIGHT Lateral Access System
03.816.025	Scoop, for INSIGHT Lateral Access System
03.816.030	Accessories Instrument

03.816.033	Blade Extension	
03.816.036	Winglet, right	
03.816.037	Winglet, left	
03.816.800	Strong Arm	
03.816.801	Connector, for Strong Arm No. 03.816.800	
03.816.806	Dilator, Ø 6mm, eccentric, small, for INSIGHT Lateral Access System	
03.816.810	Dilator Ø 10mm, eccentric, medium, for INSIGHT Lateral Access System	्ा हा छ । छ । छ । छ । छ । छ । छ । -
03.816.816	Dilator Ø 16mm, eccentric, large, for INSIGHT Lateral Access System	IS I ME I ME I ME I ME I ANTERIOR ···
03.816.040- 03.816.090	Blade, length 40 mm-90 mm (10 mm increments)	IN I IN I IN I IN INTERIOR
03.816.100- 03.816.180	Blade, length 100 mm–180 mm (10 mm increments)	8

03.816.280- 03.816.380	Disc Anchor Blade for Third Blade Holder, length 80 mm–180 mm (10 mm increments)
03.816.700	Reusable Light, for INSIGHT Lateral Access System
03.816.701	Wolf Adapter, for Light Source
03.816.702	Storz Adapter, for Light Source
03.816.703	Olympus Adapter, for Light Source
03.816.704	ACMI Adapter, for Light Source
03.816.705	Bifurcated Light Cable
03.816.706	Light Cable
03.816.709	Adapter, for Light and Cable
03.816.710S	Disposable Light, for INSIGHT Lateral Access System, sterile

4th Blade Retractor (optional)

03.816.000	Targeting Device
03.816.411	4th Blade, curved end, narrow, short
03.816.412	4th Blade, curved end, narrow, medium
03.816.413	4th Blade, curved end, narrow, long
03.816.414	4th Blade, curved end, wide, short
03.816.415	4th Blade, curved end, wide, medium
03.816.416	4th Blade, curved end, wide, long
03.816.420	Yoke for 4th Blade, long
03.816.421	Yoke for 4th Blade, short
03.816.422	Fixation Clamp for 4th Blades
03.816.423	Connector for Yoke, right
03.816.424	Connector for Yoke, left
03.816.444	4th Blade, straight, short
03.816.445	4th Blade, straight, medium
03.816.446	4th Blade, straight, long
03.816.602	Stylet, Ø 4 mm
03.816.610	Dilator, Ø 4/10 mm, eccentric
03.816.616	Dilator, Ø 4/16 mm, concentric
03.816.620S	Bone Screw for Blade Fixation
03.816.621	Screwdriver for Bone Screw for Blade Fixation
03.816.803	Adapter for Rigid Arm

Trays and Vario Cases

The trays with the instruments for the INSIGHT Lateral Access System can be assembled to the needs of the surgeon. They can be stored in Vario Cases with corresponding height.

68.809.040 (without instruments)	Tray, for Retractor and Dilators for INSIGHT Lateral Access System
68.809.041 (without instruments)	Tray, for Blades and Scoop for INSIGHT Lateral Access System
68.809.042 (without instruments)	Tray, for Accessories and Blades, length 40–90 mm, for INSIGHT Lateral Access System
68.809.043 (without instruments)	Tray, for Disc Anchor Blades, for INSIGHT Lateral Access System
68.809.044 (without instruments)	Tray, for Lighting Instruments, for INSIGHT Lateral Access System
689.510	Vario Case, Framing, size 1/1, height 88 mm
689.511	Vario Case, Framing, size 1/1, height 126 mm
689.507	Lid (Stainless Steel), size 1/1, for Vario Case
68.809.048 (without instruments)	Vario Case for Strong Arm System, with Lid, without Contents

Indications and Contraindications

Please refer to the corresponding Instructions for Use for specific information on Intended use, Indications, Contraindications, Warnings and Precautions, Potential Adverse Events, Undesirable Side Effects and Residual Risks. Instructions for Use are available at www.e-ifu.com and/or www.depuysynthes.com/ifu.

Bibliography

- 1. Aebi M, Thalgott JK, Webb JK (1998): AO ASIF Principles in Spine Surgery. Berlin: Springer.
- 2. Aebi M, Arlet V, Webb JK (2007). AOSPINE Manual(2 vols.), Stuttgart, New York: Thieme
- **3.** Moro T, Kikuchi S, Konno S, Yaginuma H (2003): An Anatomic Study of the Lumbar Plexus with Respect to Retroperitoneal Endoscopic Surgery. Spine: 28 (5), pp 423–428.

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