

INNOV<sup>✓</sup>ASIS

▶ EXCELLA III-D<sup>®</sup>

Deformity System



# Excella III-D<sup>®</sup> Deformity System

## ► INDICATIONS FOR USE

The Innovasis<sup>®</sup> Excella III-D<sup>®</sup> Spinal Deformity System, when used as a posterior pedicle screw system, is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar and sacral spine: Degenerative disc disease (DDD—defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies), degenerative spondylolisthesis with objective evidence of neurologic impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, pseudoarthrosis and failed previous fusion.

The Innovasis<sup>®</sup> Excella III-D<sup>®</sup> Spinal Deformity System, is also indicated for treatment of severe spondylolisthesis (Grades 3 & 4) of the L5-S1 vertebra in skeletally mature patients receiving fusion by autogenous bone graft, having implants attached to the lumbosacral spine and/or ilium with removal of the implants after attainment of a solid fusion. Levels of pedicle screw fixation for these patients are L3-sacrum/ilium.

When used as a posterior non-pedicle screw fixation system, the Innovasis Excella III-D<sup>®</sup> Spinal Deformity System is intended for the treatment of degenerative disc disease (DDD—defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies), spinal stenosis, spondylolisthesis, spinal deformities (i.e., scoliosis, kyphosis, and/or lordosis, Scheuermann's disease), fracture, pseudoarthrosis, tumor resection, and/or failed previous fusion. Overall levels of fixation are T1-sacrum/ilium.

When used as an anterolateral thoracolumbar system, the Innovasis Excella III-D<sup>®</sup> Spinal Deformity System is intended for anterolateral screw fixation for the following indications: Degenerative disc disease (DDD—defined as discogenic back pain with degeneration of the disc confirmed by history and radiographic studies), spinal stenosis, spondylolisthesis, spinal deformities (i.e., scoliosis, kyphosis, and/or lordosis), fracture or dislocation of the thoracolumbar spine, pseudoarthrosis, tumor resection, and/or failed previous fusion. Levels of screw fixation are T8-L5.

### **WARNING:**

The safety and effectiveness of pedicle screw systems have been established only for spinal conditions with significant mechanical instability or deformity requiring fusion with instrumentation. These conditions are significant mechanical instability or deformity of the thoracic, lumbar, and sacral spine secondary to severe spondylolisthesis (grade 3 and 4) of the L5-S1 vertebra, degenerative spondylolisthesis with objective evidence of neurological impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudoarthrosis). The safety and effectiveness of these devices for any other conditions are unknown.



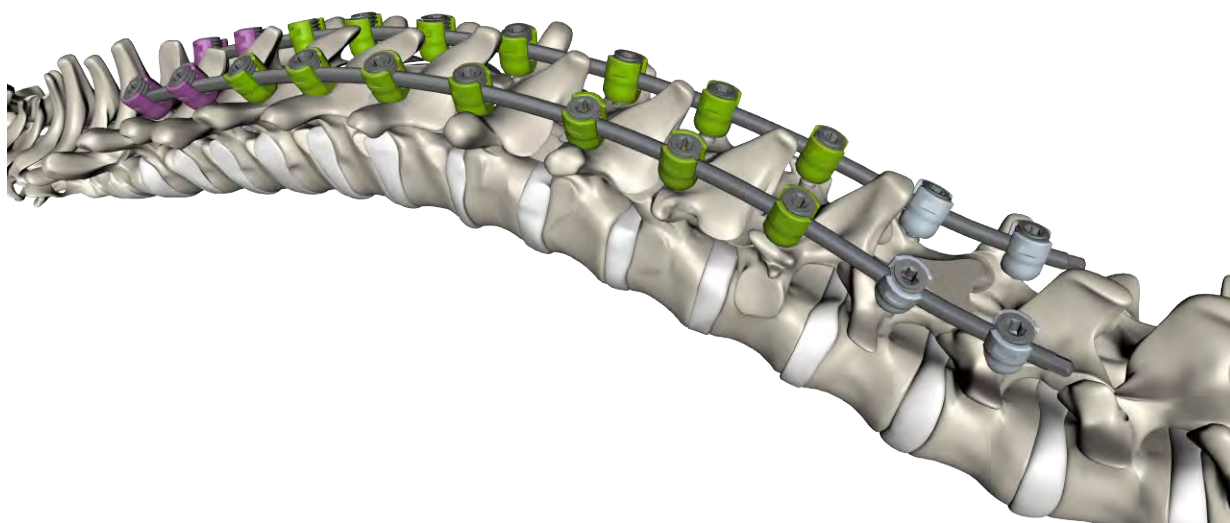
## Excella III-D<sup>®</sup> Deformity System

**⚠ Note:** The Excella III-D<sup>®</sup> Spinal Deformity System has not been evaluated for safety and compatibility in the MR environment. The Excella III-D<sup>®</sup> Spinal Deformity System has not been tested for heating or migration in the MR environment. The safety of the Excella III-D<sup>®</sup> Spinal Deformity System in the MR environment is unknown.

**⚠ CAUTION:** Federal Law (U.S.A.) restricts these devices to sale by or on order of a physician.

### ▶ **PRODUCT OVERVIEW**

The Excella III-D<sup>®</sup> Spinal System is a thoracolumbar system composed of polyaxial pedicle screws, rods, hooks, rod-to-rod connectors, locking caps and transverse cross links. All implants are manufactured from biocompatible materials and are color coded for visual identification. The system is designed with multiple options to address complex, multi-level deformity cases and accommodate various patient anatomies.



# IMPLANT OVERVIEW

## PEDICLE SCREWS

### ▶ Implant Sizes

Screw Diameter	Length (5mm increments)	Color
4.0 mm	25-45 mm	Seafoam
4.75 mm	25-55 mm	Lavender
5.5 mm	25-55 mm	Green
6.5 mm	25-60 mm	Platinum
7.5 mm	30-60 mm	Blue
8.5mm	30-60mm	Gray

### ▶ EXCELLA® HEAD DESIGN

- Head is polyaxial, giving 360° of rotation
- Top loading for easy rod insertion
- 30° angulation about axis of screw
- Provides maximum interface contact between the rod and screw head

### ▶ EXCELLA® THREAD DESIGN

- Aggressive, course thread
- Double lead thread speeds insertion time
- Self-tapping
- Tapered tip to ease insertion

### ▶ LOCKING CAP

- Buttress thread ensures proper clamp strength and resists backout.
- Same cap is used for pedicle screws, hooks, iliac screws and lateral connectors.



### ⚠ WARNING:

Locking cap MUST be installed top side up. This is identified by the tapered hexalobe and by the part and lot numbers etched on the top surface.

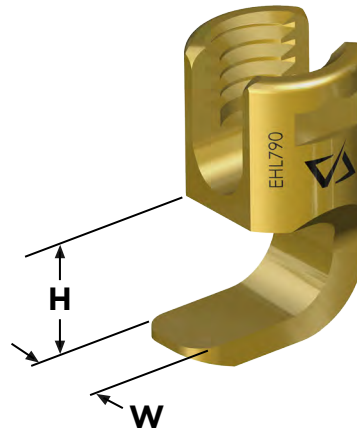


# IMPLANT OVERVIEW

## HOOKS

### ▶ Implant Sizes

Type	Size (W x H)	Color
Angled Left	7mm x 7.5mm	Blue
Angled Right	7mm x 7.5mm	Blue
Lamina Ext. Body	7mm x 7.5mm	Gold
Lamina	7mm x 6mm	Gold
Lamina	7mm x 7.5mm	Gold
Lamina	7mm x 9mm	Gold
Lamina	9mm x 6mm	Green
Lamina	9mm x 7.5mm	Green
Lamina	9mm x 9mm	Green
Pedicle	9mm x 7.5mm	Green
Pedicle	9mm x 9mm	Green



## RODS

### ▶ RODS

- Curved rods reduce the need to contour
- Rods are 5.5mm in diameter
- Straight are provided in a variety of lengths from 35mm to 500mm
- Curved rods are provided in a variety of lengths from 35mm to 125mm
- 500mm rods are provided in Titanium and Cobalt Chrome.
- 600mm rods are provided in Cobalt Chrome.



# IMPLANT OVERVIEW

## CROSS CONNECTORS

▶ **Implant Sizes**

Type	Length	Color
Fixed	20mm	Grey
Fixed	25mm	Grey
Fixed	30mm	Grey
Fixed	35mm	Grey
Variable	39-45mm	Grey
Variable	45-57mm	Grey
Variable	57-81mm	Grey



## ROD-TO-ROD CONNECTORS

▶ **Implant Sizes**

Type	Opening	Color
Parallel	Closed-Closed	Green
Parallel	Closed-Open	Platinum
Parallel	Open-Closed	Lavender
Axial	Open-Closed	Blue
Axial	Closed-Closed	Gold



# IMPLANT OVERVIEW

## REDUCTION HEAD PEDICLE SCREWS

▶ **Implant Sizes**

Screw Diameter	Length (5mm increments)	Color
5.5 mm	30-50 mm	Green
6.5 mm	30-50 mm	Platinum
7.5 mm	30-50 mm	Blue

- Head is polyaxial, giving 360° of rotation
- 30° angulation about axis of screw
- Reduction head screws capable of 15mm of rod reduction.
- Extended tabs easily removed after rod reduction is complete.

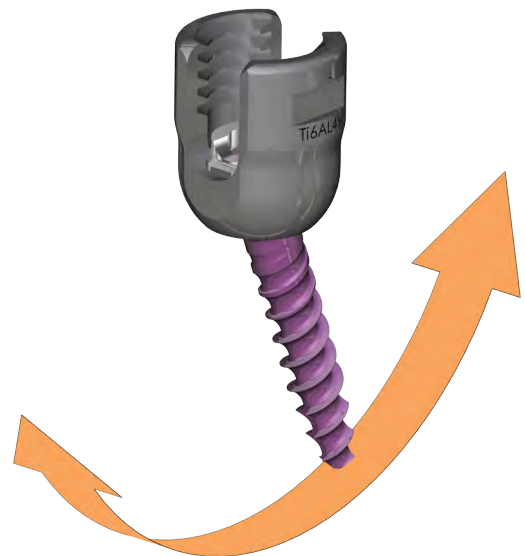


## UNIPLANAR PEDICLE SCREWS

▶ **Implant Sizes**

Screw Diameter	Length (5mm increments)	Color
4.0 mm	25-45 mm	Seafoam
4.75 mm	25-45 mm	Lavender
5.5 mm	25-55 mm	Green
6.5 mm	25-55 mm	Platinum

- Pedicle screw head is uniplanar, giving 60° of angulation in the cranial-caudal direction.
- Designed to provide medial-lateral rigidity.
- Screw shank is color coded for quick implant identification.



## IMPLANT OVERVIEW

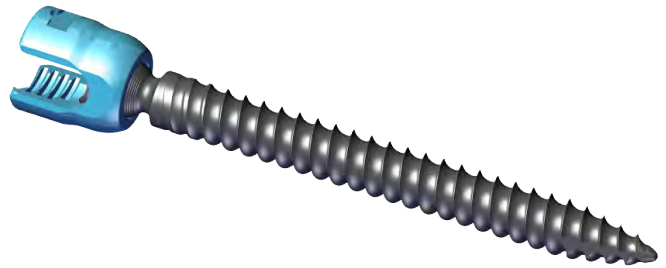
### ILIAC SCREWS

▶ **7.5mm Iliac screws**

Part #	Length	Color
E2L7570	70 mm	Blue
E2L7580	80 mm	Blue
E2L7590	90 mm	Blue
E2L75100	100mm	Blue

▶ **8.5mm Iliac Screws**

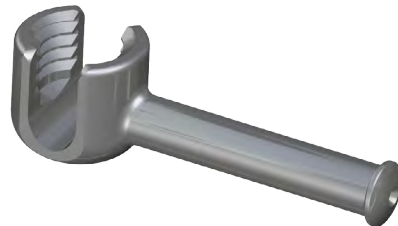
Part #	Length	Color
E2L8570	70 mm	Grey
E2L8580	80 mm	Grey
E2L8590	90 mm	Grey
E2L85100	100mm	Grey



### LATERAL CONNECTORS

▶ **Lateral Connectors**

Part #	Length
OC5525	25 mm
OC5535	35 mm
OC5545	45 mm





# INSTRUMENTS OVERVIEW

## SCREW INSTRUMENTS



LS-170 Pedicle Screw Driver



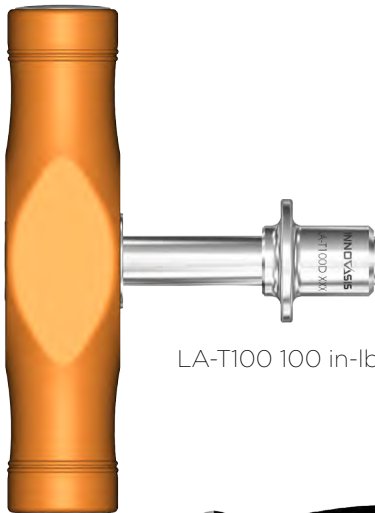
LS-288 Uniplanar Pedicle Screw Driver



LS-160 Locking Cap Starter Driver



LS-043 Double Ended Starter Driver



LA-T100 100 in-lb Torque Wrench



LA-184 Universal Ratchet Handle



LS-172 Reduction Head Tab Remover



# INSTRUMENTS OVERVIEW

## HOOK PLACEMENT INSTRUMENTS



LS-200 Facet Finder



LS-201 Lamina Finder

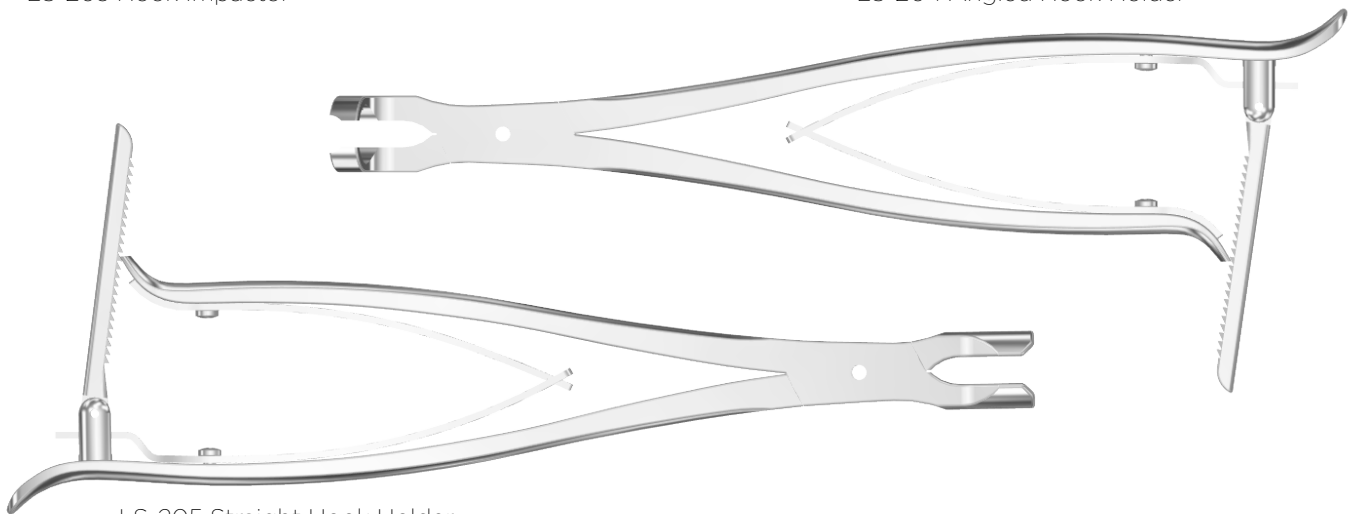


LS-202 Pedicle Finder



LS-203 Hook Impactor

LS-204 Angled Hook Holder



LS-205 Straight Hook Holder



# INSTRUMENTS OVERVIEW

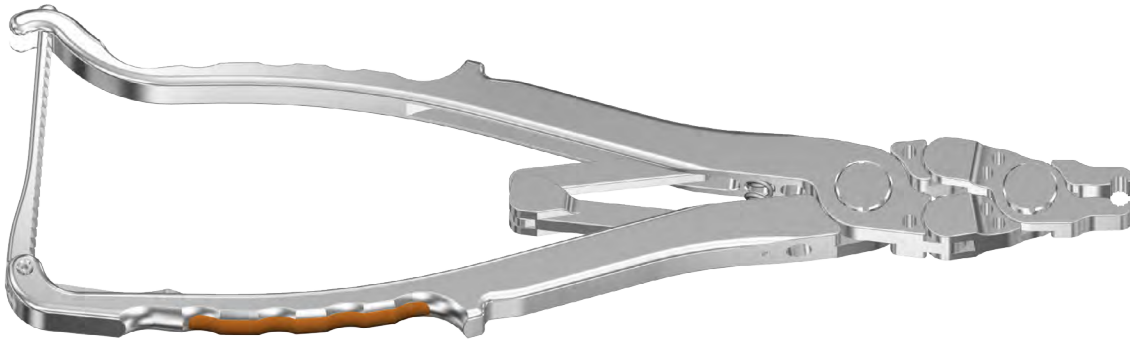
## ROD MANIPULATION INSTRUMENTS



LS-279 Flexible Rod Template

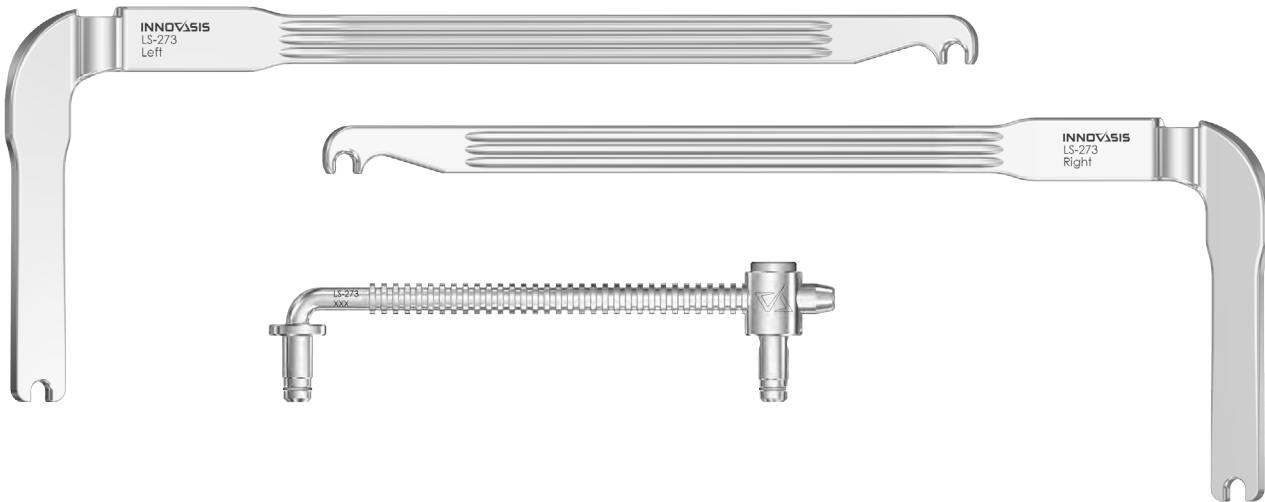


LS-157 Hex Rod Wrench



LS-274 Rod Gripper

LS-273 5.5mm Coronal/ In Situ Bender



# INSTRUMENTS OVERVIEW

## DEFORMITY VERTEBRAL DEROTATION INSTRUMENTS



LS-246 Deformity Reduction Jack



LS-247 Derotation Tube



LS-248 Lateral Derotation Connector



LS-249 Derotation Fixture Clamp



## SURGICAL TECHNIQUE

### APPROACH

A preoperative plan should be developed to determine the optimum approach and implant construct. The appropriate hooks and screws must be selected based on patient anatomy, deformity type and method of correction.

Before the procedure the patient is placed under general anesthesia and positioned prone. The operative area is carefully cleaned and an incision is made at the appropriate levels. A standard posterior approach to the spine is preferred.

### PEDICLE SCREW PLACEMENT

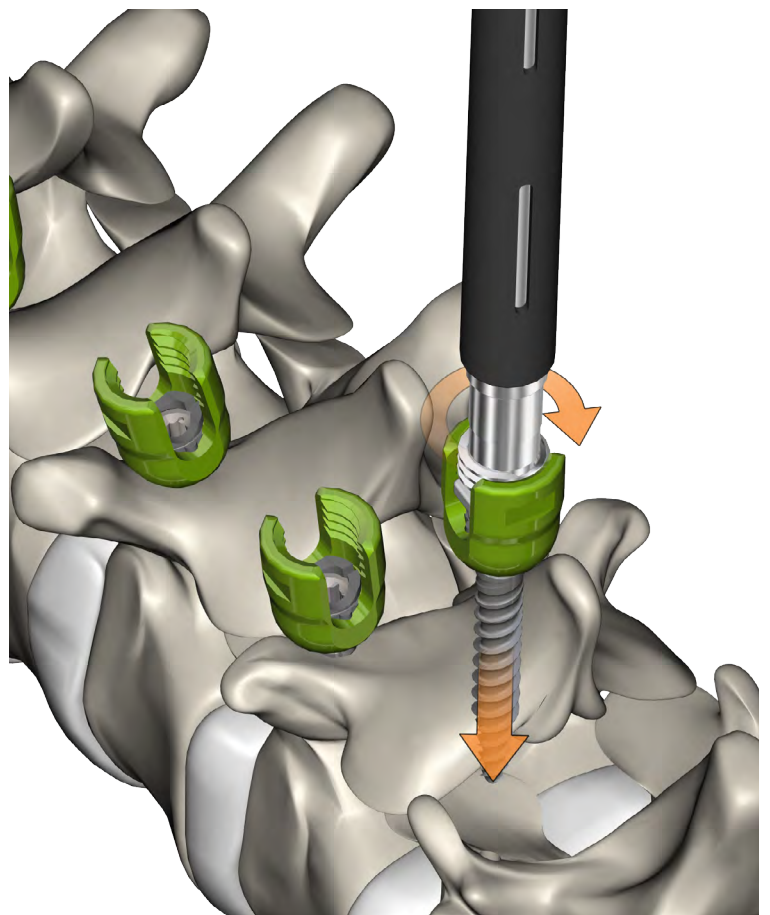
Locate pedicles and remove bone and/or soft tissue, as needed, using standard instruments.

Excella III-D<sup>®</sup> screws are self-tapping, however pedicles may be tapped if desired, using taps from the instrument set.

Using instruments from the Excella III-D<sup>®</sup> Deformity System, prepare the pedicle for the screw insertion by perforating the pedicle cortex and opening the pedicle pathway.

Load the Pedicle Screw Driver with the correct screw size and drive the screw into the prepared pedicle.

**⚠** *Note: The Excella Pedicle Driver must be used for placing Excella pedicle screws. The Excella Pedicle Driver can be identified by its black soft tissue shield.*



## SURGICAL TECHNIQUE

### HOOK PLACEMENT

Pedicle Hooks are typically used at the T10 Level and higher. The hook blade is placed up-going and sits flush against the facet and pedicle.

The Pedicle Finder is used to prepare a pedicle for hook placement. Use the instrument to open the facet capsule and locate the pedicle.

If necessary, a portion of the inferior facet process may be removed to aid in hook placement.

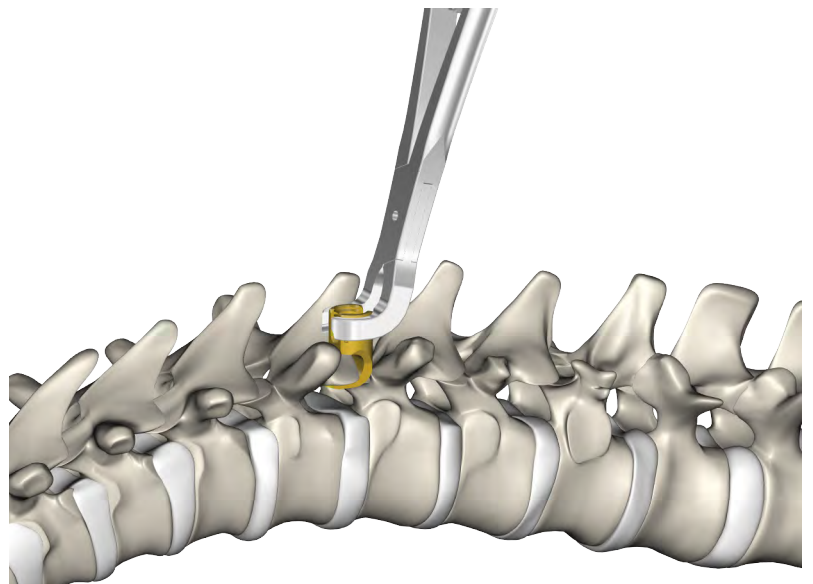
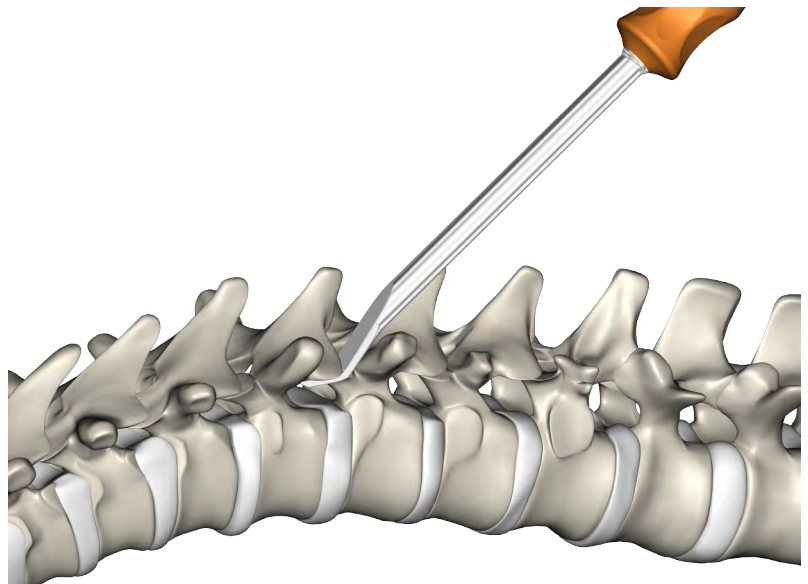
Once the pedicle is clearly identified, insert the appropriately sized hook using the Straight or Angled Hook Holder. The Hook Impactor may also be used to aid in the insertion of the hook.

Lamina Hooks may be used in the thoracic spine and can be combined with a Pedicle Hook to form a claw construct.

The Lamina Finder is utilized to separate the ligamentum flavum from the lamina.

Insert the appropriate Lamina Hook using the Straight or Angled Hook Holder.

**⚠** *Note: Hook position should be monitored to ensure that the hooks remain in the correct position throughout the procedure.*



# SURGICAL TECHNIQUE

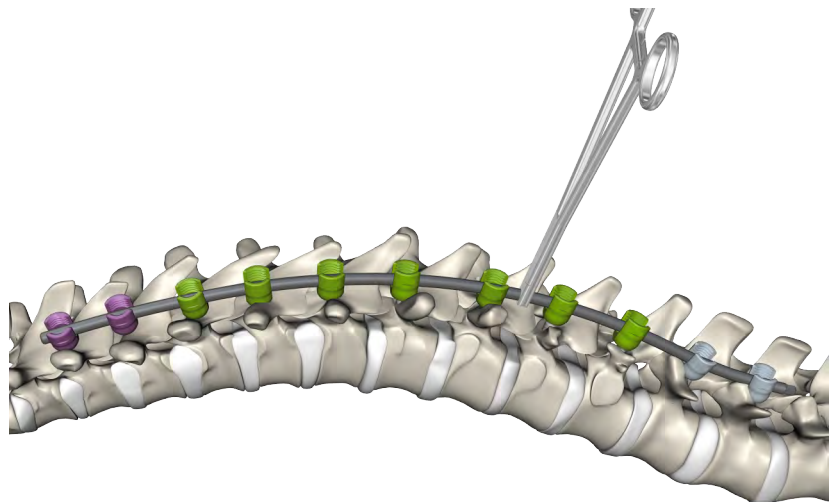
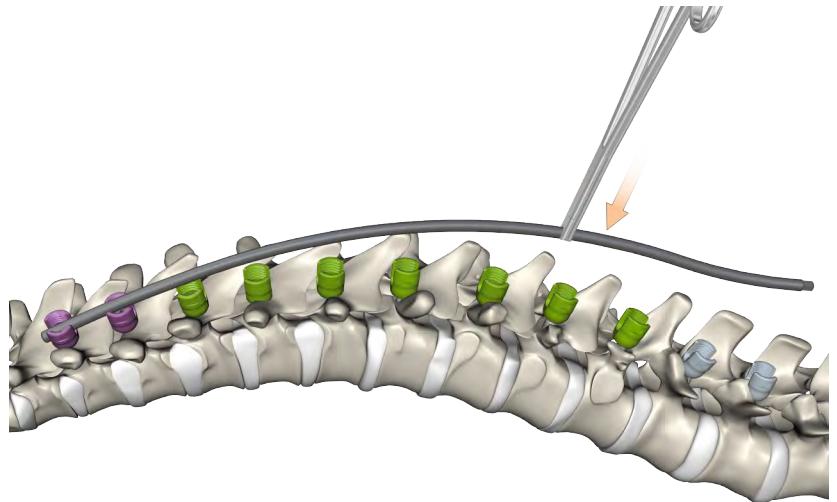
## ROD INSERTION

Once the hooks and screws are in place the Rod Template is used to determine the proper length and contour of the rod.

Alternatively, the rod may be contoured to the desired sagittal alignment without the use of the rod template.

The rod is contoured to match the rod template using the Rod Bender.

The contoured rod is inserted into the screws and hooks beginning from either end of the construct. The rod should be inserted into the implants that require little or no rod reduction first. The Rod Holder may be used to hold the rod during insertion.



## SURGICAL TECHNIQUE

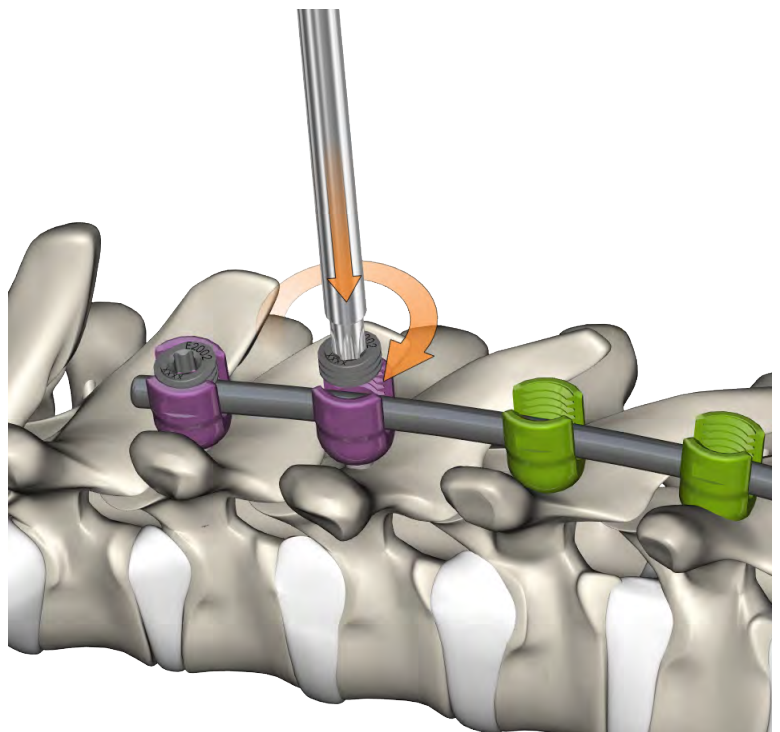
### LOCKING CAP INSERTION

Locking caps are inserted into the implant using the Starter Driver. Caps are inserted first into implants with which the rod seats well in the implant and little to no reduction is required. Locking caps are typically inserted in the order of reduction needed, with the screw requiring small reduction first to the more difficult reductions last.

The Rod Pusher may be used to assist in the insertion of the rod.

Once a locking cap is inserted into an implant it is provisionally tightened. Final tightening will occur later in the procedure.

**⚠** *Note: Verify the Locking Caps are oriented with the engraving upward and visible to ensure that the caps are inserted in the correct orientation.*





# SURGICAL TECHNIQUE

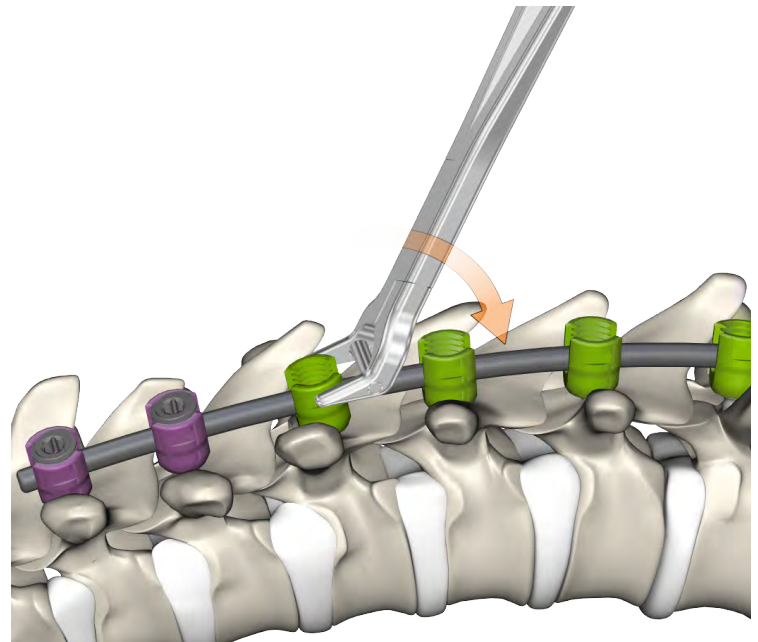
## ROD REDUCTION

The Excella III-D<sup>®</sup> Deformity System has several options for rod reduction. The rod reduction instruments are designed to seat the rod into the implant.

### ▶ OPTION A: IMPLANT ROCKER

To use the Implant Rocker, place instrument on the implant and ratchet the handle closed. Tilt the Implant Rocker to persuade the rod into the implant until a Locking Cap can be inserted.

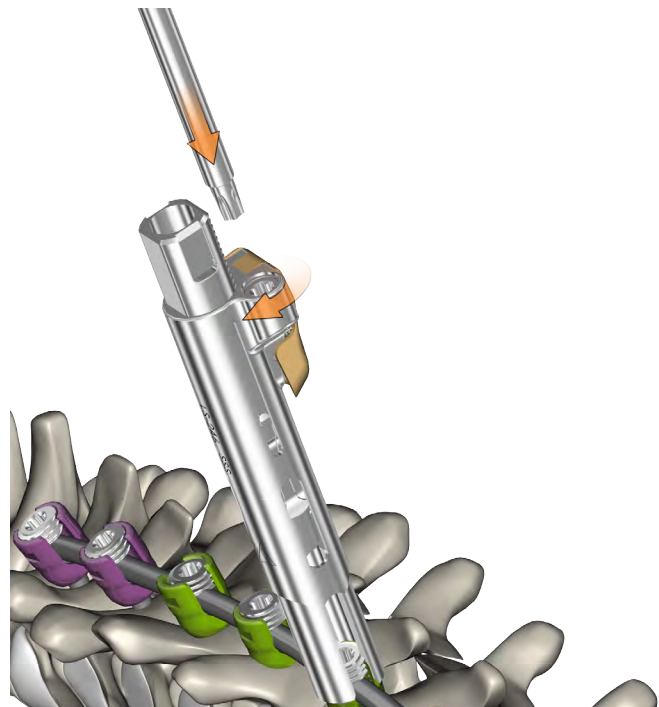
Insert a locking cap and remove the Implant Rocker from the screw or hook.



### ▶ OPTION B: REDUCTION JACK

Place the Reduction Jack over the implant head and push it down until the instrument touches the rod. Once the instrument is in place a thumb wheel on the side of the Reduction Jack is turned to reduce the rod into the implant head. The instrument will provide up to 30mm of reduction.

Once the rod is fully seated into the implant head a Locking Cap can be inserted through the cannula of the Reduction Jack and provisionally tightened.



## SURGICAL TECHNIQUE

### REDUCTION HEAD PEDICLE SCREWS

The Excella III-D<sup>®</sup> Reduction Head screw can be used during a reduction procedure. Reduction head screws are inserted in the same manner and with the same instruments as the Excella III-D<sup>®</sup> pedicle screws.

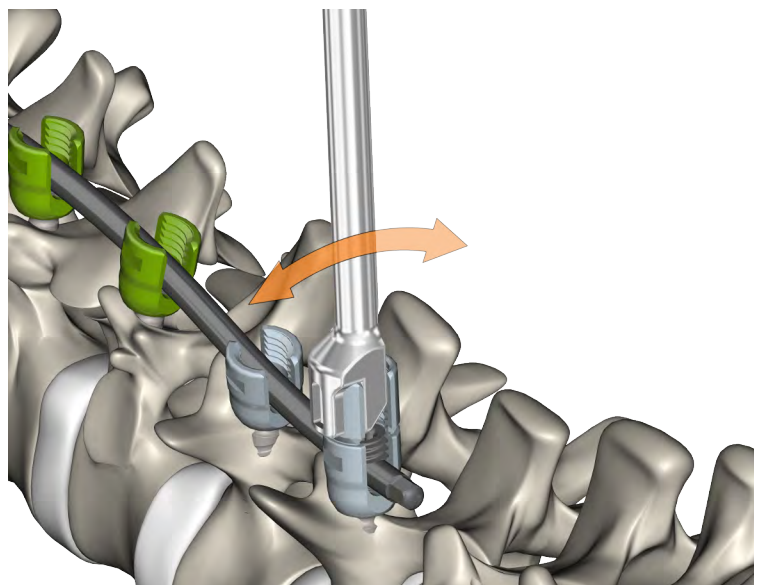
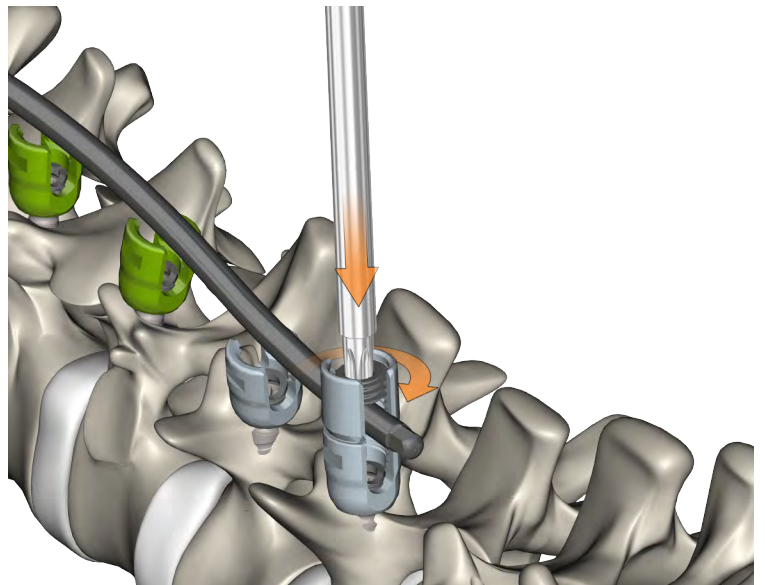
Once in place the Reduction Head will perform rod reduction by placing the rod and inserting a Locking Cap into the screw head. Tighten the cap until the rod is fully seated in the screw head.

After the rod has been reduced the tabs of the Reduction Head screw are removed using the Tab Removal instrument.

Place the Tab Removal instrument over the screw and remove the tab using a back and forth bending motion.

The second tab is removed in the same manner.

**⚠** *Note: Remove the detached tab from the instrument prior to engaging the second tab for removal.*



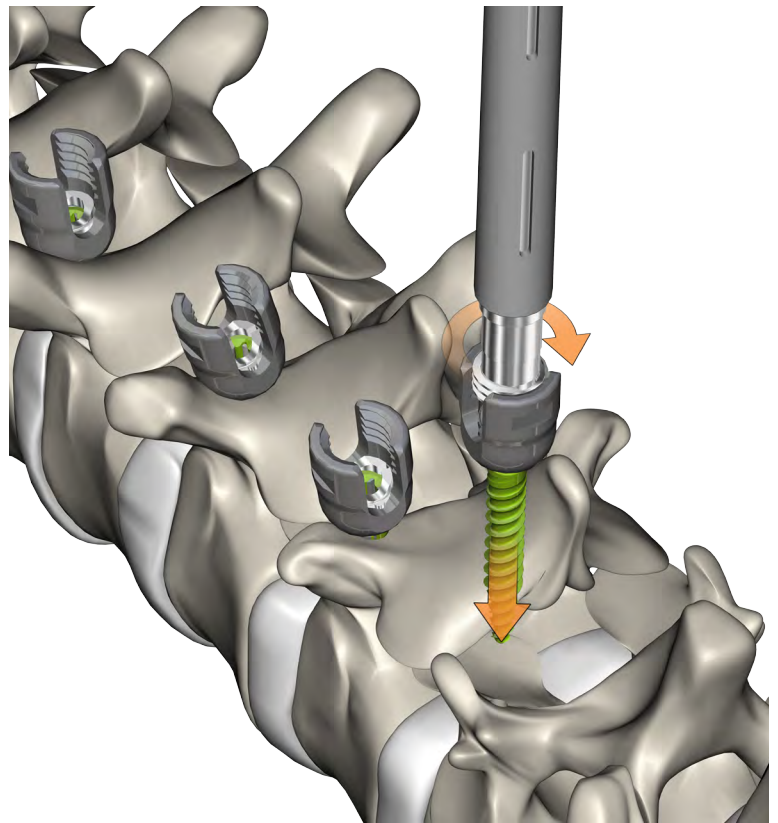
## SURGICAL TECHNIQUE

### UNIPLANAR PEDICLE SCREWS

Uniplanar pedicle screws are often used at the apex of the deformity in the thoracic spine. Uniplanar pedicle screws allow cranial-caudal angulation to simplify rod introduction while providing medial-lateral rigidity during derotation maneuvers.

Using the same technique as the Excella III-D pedicle screws, attach the uniplanar screws to the Uniplanar Pedicle Driver and place them at the desired levels prior to performing deformity correction.

**⚠ Note:** *The Uniplanar Pedicle Driver must be used for placing uniplanar pedicle screws. The Uniplanar Pedicle Driver can be identified by its light grey soft tissue shield.*



# SURGICAL TECHNIQUE

## DEFORMITY CORRECTION

### ▶ GLOBAL DEROTATION

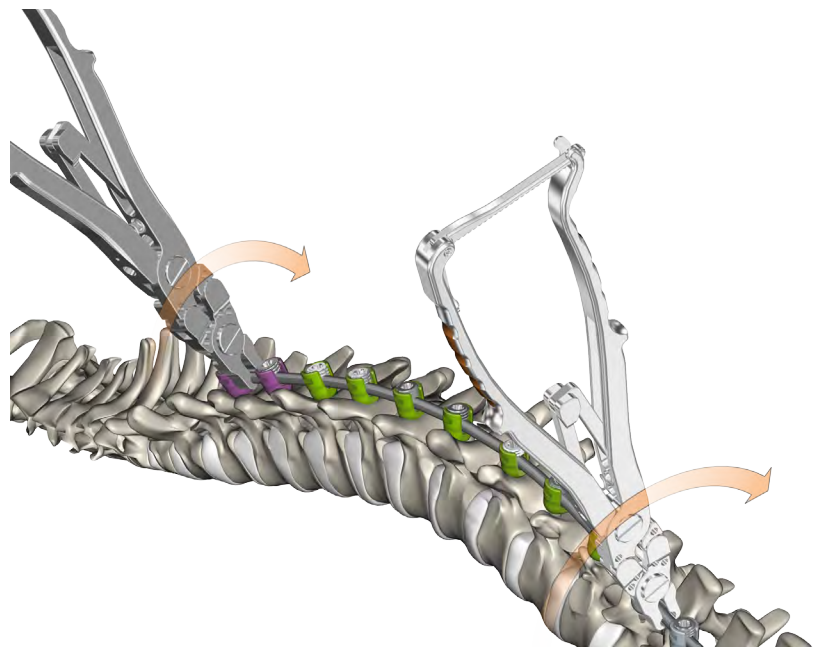
Global derotation maneuvers are used to translate a coronal plane deformity into the naturally curved sagittal plane by rotating the rod 90° within the construct.

After the rod is inserted and the locking caps are in place, the rod can be rotated into its final position. To rotate the rod, two Rod Grippers are used at opposite ends of the construct. The rotation should be performed slowly to avoid neurological injury and maintain proper rod placement.

**⚠ Note:** The Hex Wrench can also be used to aid in rod rotation. The Hex Wrench can be placed on the end of the rod which has a matching hex feature.

Once the rod is in the final position, compression and/or distraction may be performed.

The second rod is then inserted to stabilize the construct. Verify the hook positions and make any necessary adjustments prior to final tightening of all the locking caps.



# SURGICAL TECHNIQUE

## DEFORMITY CORRECTION

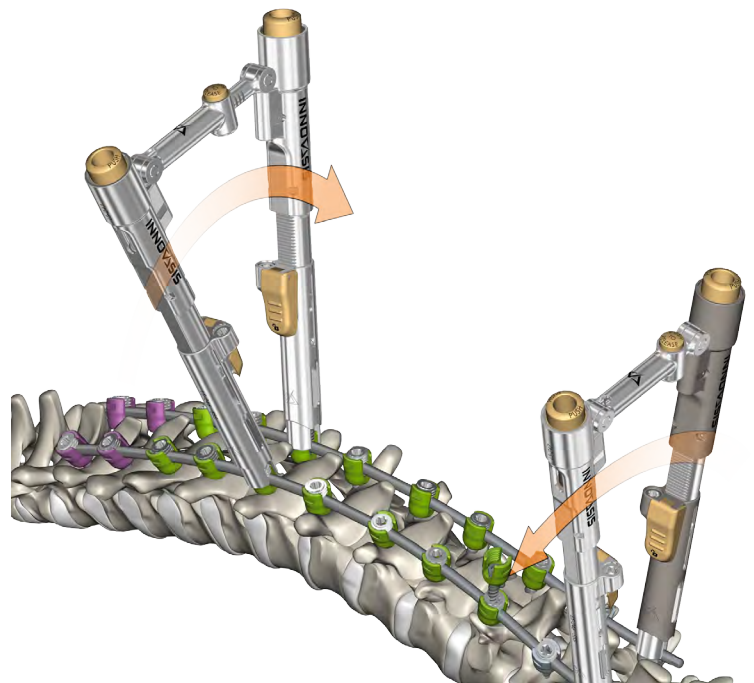
### ▶ SEGMENTAL DEROTATION

The Excella III-D<sup>®</sup> Vertebral Derotation Instruments can be used for axial rotation in scoliosis surgery. Segmental derotation can be performed with one or both rods in place.

Derotation instruments are placed onto the screws on both sides of the same vertebral body. The derotation instruments are linked together to evenly distribute the force of the correction over the two screws.

Axial derotation of vertebral bodies relative to each other is achieved by holding one pair of Derotation instruments stationary while the other pair is used to rotate the vertebral body relative to the stationary vertebral body.

The correction is held by tightening the Locking Caps through the cannulated derotation instruments.



## DEFORMITY CORRECTION

### ▶ COUPLED AXIAL DEROTATION

Coupled axial derotation is typically performed with one rod in place to maximize the correction. The technique is similar to segmental derotation however multiple levels are corrected at a time.

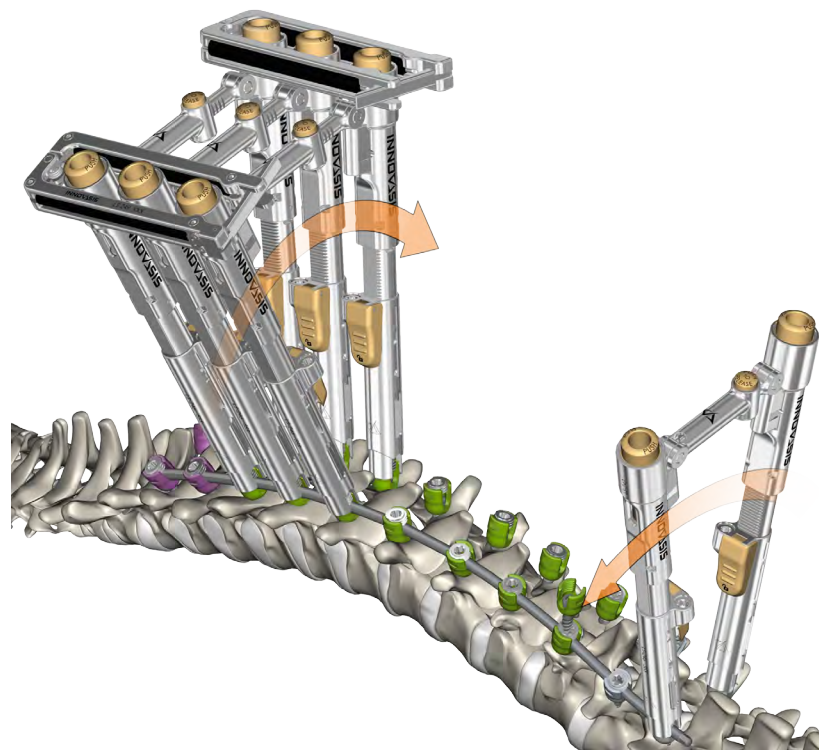
Derotation instruments are placed onto the screws on both sides of the same vertebral body and across multiple levels. The instruments are boxed together to evenly distribute the force of the correction over all coupled screws.

Axial derotation is achieved by holding a single segment outside of the boxed levels and rotating the coupled levels relative to the stationary segment.

The correction is held by tightening the Locking Caps through the cannulated derotation instruments.

This technique is typically used to correct a thoracic rib hump.

Once the derotation has been achieved the second rod is inserted and the Locking Caps are final tightened.



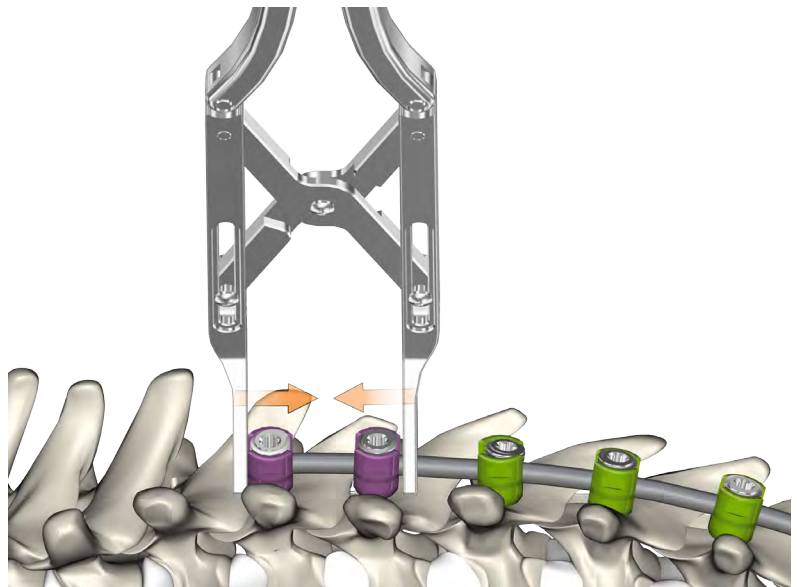
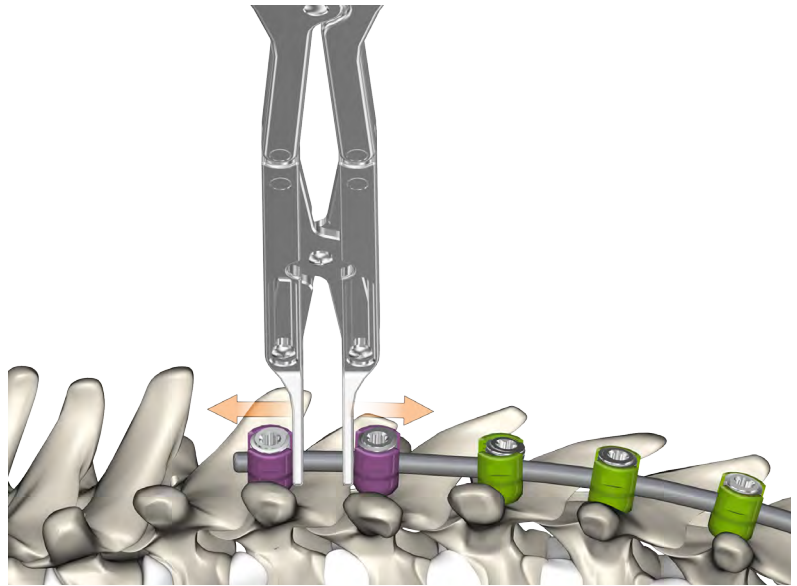
# SURGICAL TECHNIQUE

## COMPRESSION OR DISTRACTION

After the rod is secured in the implants, compression and/or distraction may be performed.

The Compressor or Distractor is used by tightening one of the Locking Caps, to establish a rigid point for the procedure.

Once compression or distraction is completed the second Locking Cap is final tightened to 100 in-lbs using the T-handled Torque Wrench.



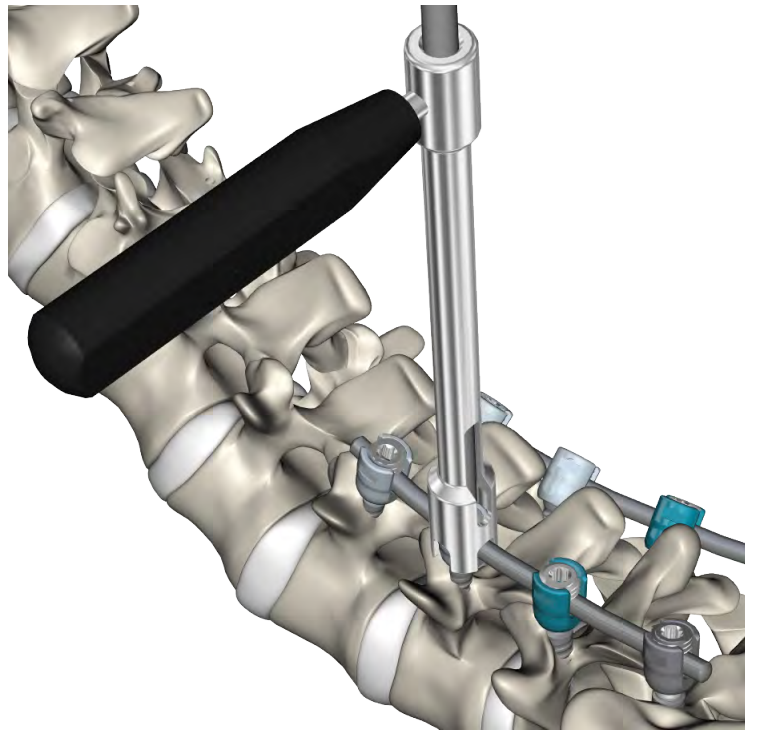
## SURGICAL TECHNIQUE

### FINAL TIGHTENING

Final tightening is performed once the spine is fixed in a satisfactory position. Using the anti-torque and the T-handled Torque Wrench tighten each locking cap until an audible click is heard.

The locking caps are final tightened to 11.3 Nm (100 in-lbs.)

- ⚠ *Note: The anti-torque must be used for final tightening.*
- ⚠ *Note: Gently rock the anti-torque in the cranial-caudal direction while tightening the locking cap. This will ensure the rod is seated in the tulip. Failure to seat the rod may result in loosening of the construct when the patient moves.*





## SURGICAL TECHNIQUE

### CROSS CONNECTOR PLACEMENT

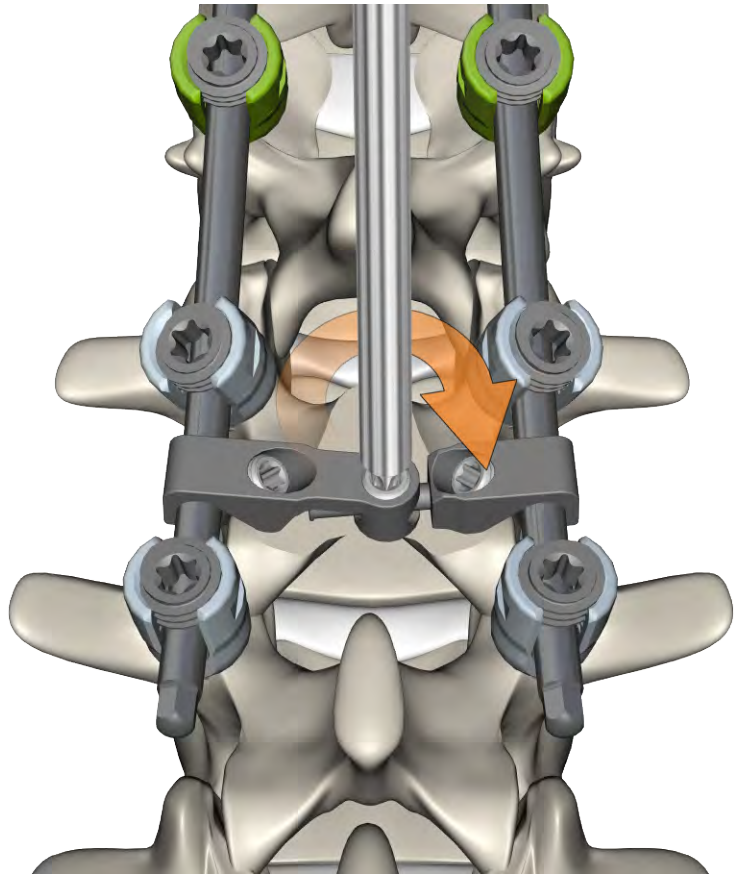
The Excella<sup>®</sup> cross link is designed to be used as a construct stabilizer to increase rotational stiffness.

Select a cross link of the appropriate length and place onto the rod within the construct in the desired location.

The cross link is final tightened to 40 in-lbs using the light gray Torque Limiting handle.

The center screw of variable length cross links is also final tightened to 40 in-lbs.

**⚠** *Note: If the screws have come out of the cross link body during transit or washing, replace them using the cross link driver. The cone shaped set screws go in the outer positions, and the flat set screw goes in the middle position.*



## SURGICAL TECHNIQUE

### ILIAC SCREW PLACEMENT

#### ▶ ILIAC WING PREPARATION

After placement of the appropriate pedicle and sacral screws, the iliac wing and posterior superior iliac spine (PSIS) are exposed by the surgeon's preferred method.

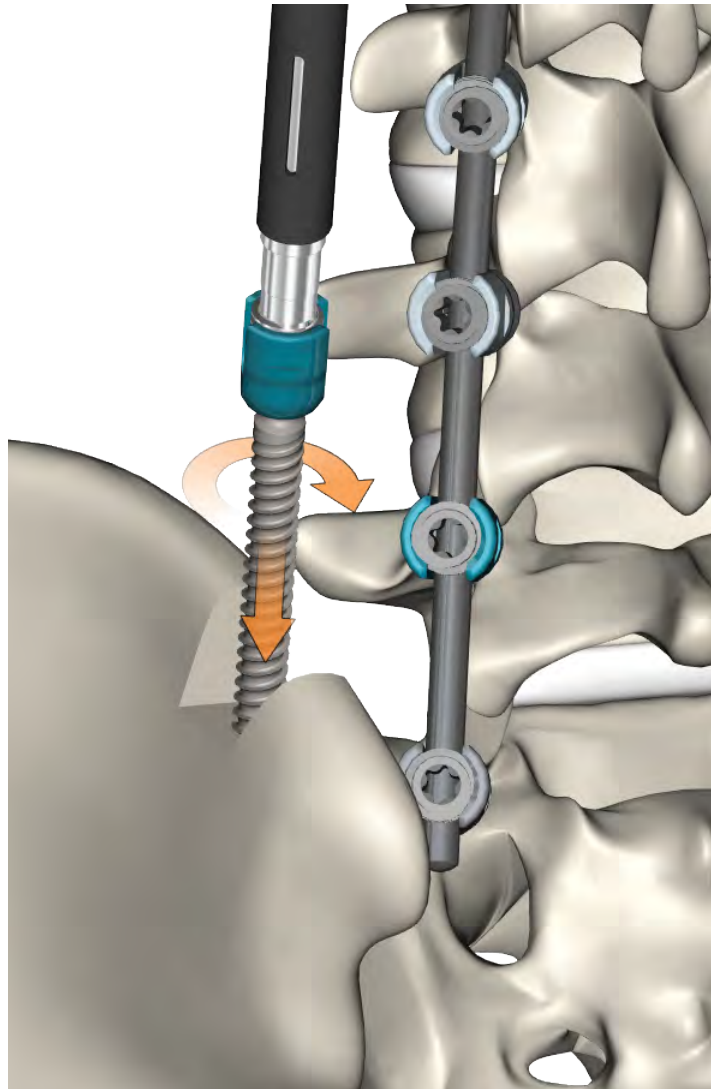
#### ▶ ILIAC SCREW PLACEMENT

Prior to placement of the screw, create a notch in the iliac wing to countersink the head of the screw to prevent prominence.

**⚠ Note:** Iliac screws are self tapping; however, it is highly recommended that the hole is tapped prior to screw insertion.

Select the largest diameter screw possible to ensure adequate fixation. This may range from 7.5mm to 8.5mm in diameter and up to 100mm in length.

Insert the Iliac Screw using the standard Pedicle Screw Driver.



## SURGICAL TECHNIQUE

### LATERAL CONNECTOR PLACEMENT

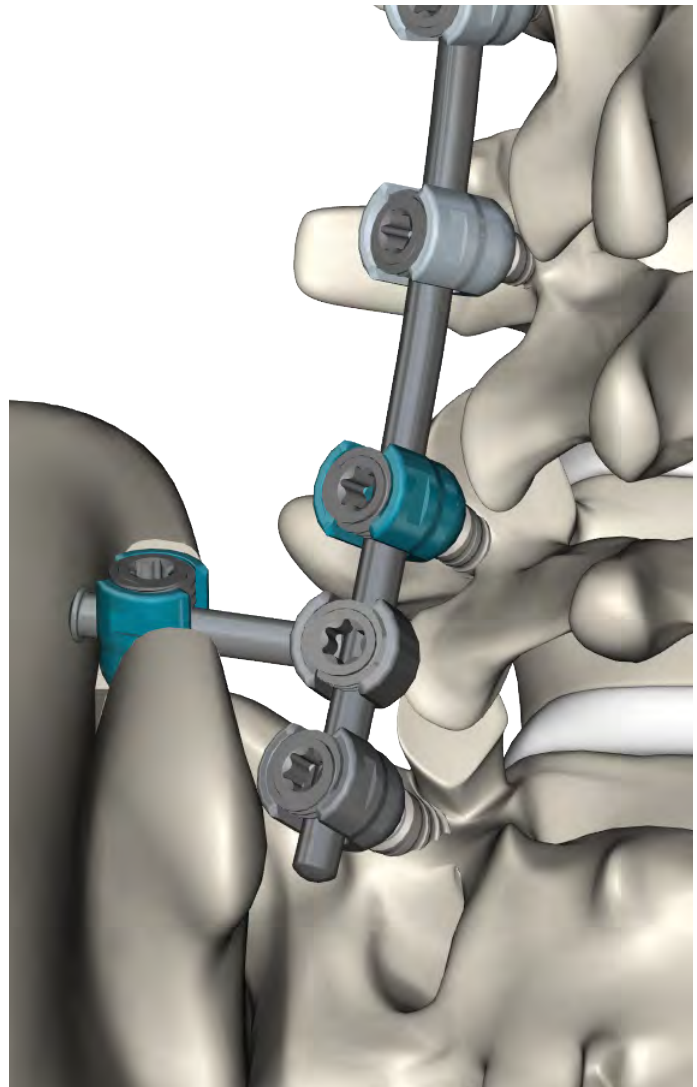
Lateral connectors may be used to link a screw that is lateral to the rod.

The lateral connector may be preloaded onto the longitudinal rod. Alternatively it may be passed under the paraspinous muscles.

The post of the lateral connector may need to be cut and contoured to ensure minimal prominence.

Place the Lateral Connector onto the rod and secure it in place with a Locking Cap. Do not final tighten the Locking Cap.

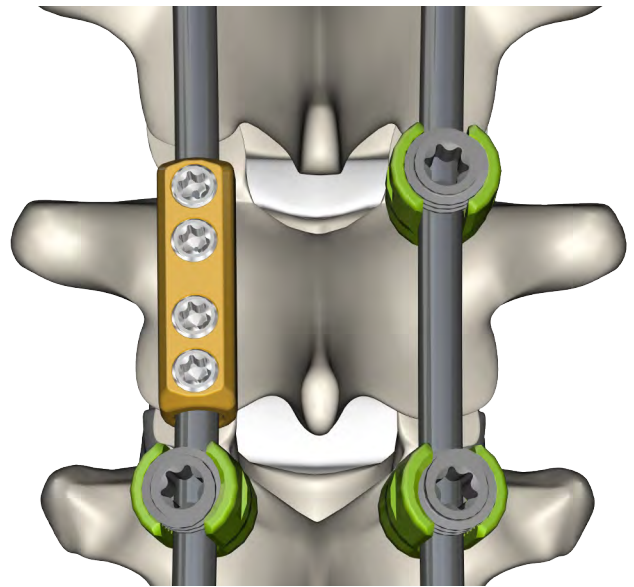
The Lateral Connector is then seated into the Iliac Screw and secured with a Locking Cap. Both locking caps are then final tightened to 100 in-lbs.



## ROD-TO-ROD CONNECTIONS

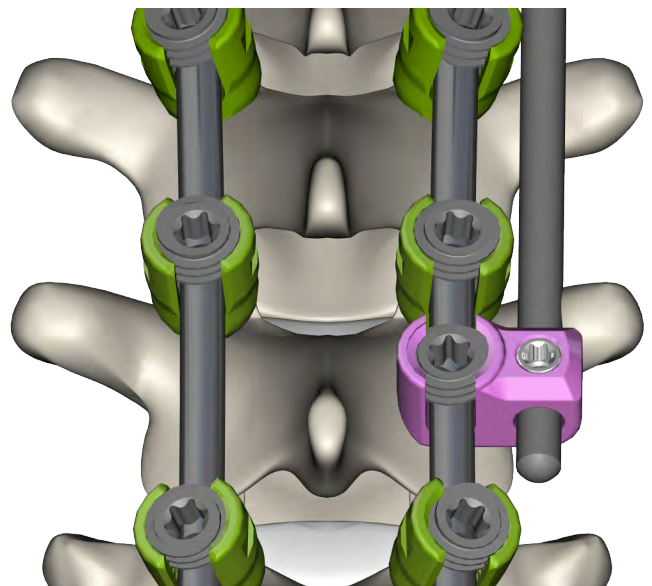
### ▶ AXIAL CONNECTORS

The axial connectors may be used to join 5.5mm and/or 6.0mm diameter titanium and cobalt chrome rods. The implant is final tightened at 40 in-lbs using the light gray Torque Limiting wrench.



### ▶ PARALLEL CONNECTORS

The parallel rod connectors may be used to join 5.5mm and/or 6.0mm diameter rods that are parallel to one another. The implants come in closed-closed and closed-open styles. The closed-open style requires a Locking Cap in the open portion. The Locking Cap is final tightened at 100 in-lbs using the T-handle Torque Limiting wrench. The smaller set screws are final tightened at 40 in-lbs using the light gray Torque Limiting wrench.



## IMPLANT REMOVAL

### ▶ PEDICLE AND ILIAC SCREWS

Excella III-D<sup>®</sup> implants are removed in the same manner they are installed.

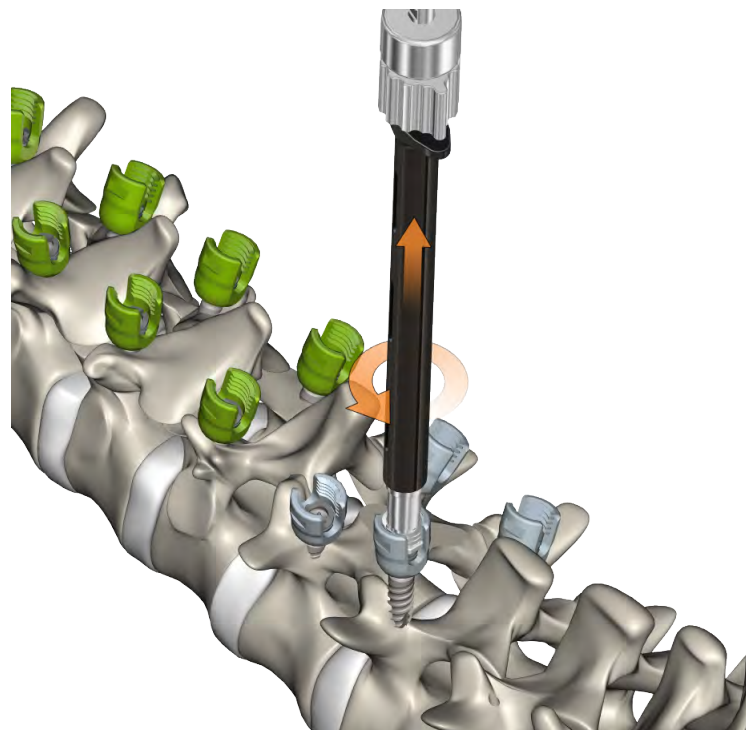
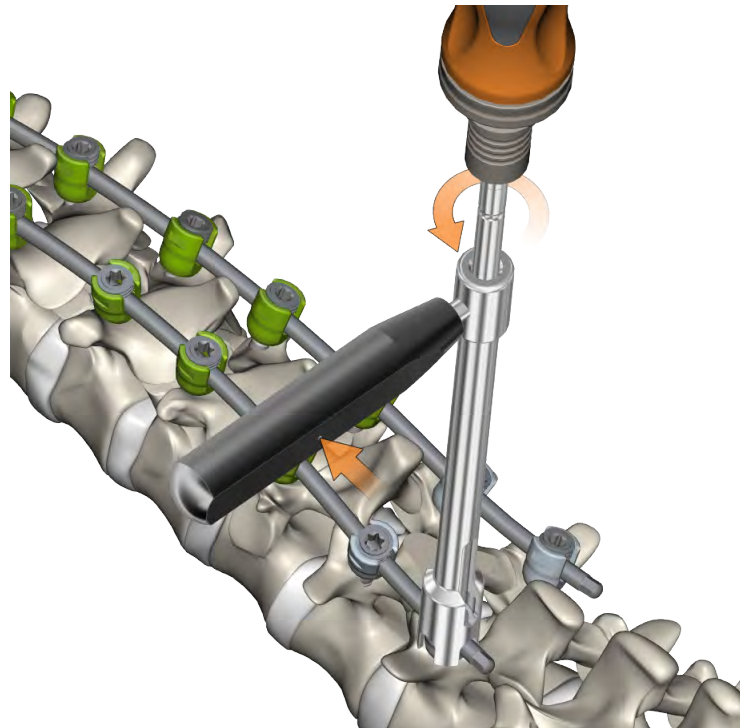
The locking caps should be loosened using the Anti-torque, Universal Ratchet Handle and the Locking Cap Driver.

**⚠ Note:** *Torque wrenches and Starter Drivers should never be used to loosen locking caps or connector screws.*

Once the locking caps have been extracted the rods should be removed.

After the rods have been removed the pedicle screws can be removed by attaching the Pedicle Driver to the screws and rotating counterclockwise. The Universal Ratchet Handle should be used for this procedure.

Rod-to-rod connectors are removed using the Cross Link Driver and Universal Ratchet Handle.



# SURGICAL TECHNIQUE

## IMPLANTS

### Pedicle Screws

ITEM	PART NO.	DESCRIPTION
1	E2S4025	POLYAXIAL PEDICLE SCREW, 4.0mm X 25mm EXCELLA-II
2	E2S4030	POLYAXIAL PEDICLE SCREW, 4.0mm X 30mm EXCELLA-II
3	E2S4035	POLYAXIAL PEDICLE SCREW, 4.0mm X 35mm EXCELLA-II
4	E2S4040	POLYAXIAL PEDICLE SCREW, 4.0mm X 40mm EXCELLA-II
5	E2S4045	POLYAXIAL PEDICLE SCREW, 4.0mm X 45mm EXCELLA-II
6	E2S47525	POLYAXIAL PEDICLE SCREW, 4.75mm X 25mm, EXCELLA-II
7	E2S47530	POLYAXIAL PEDICLE SCREW, 4.75mm X 30mm, EXCELLA-II
8	E2S47535	POLYAXIAL PEDICLE SCREW, 4.75mm X 35mm, EXCELLA-II
9	E2S47540	POLYAXIAL PEDICLE SCREW, 4.75mm X 40mm, EXCELLA-II
10	E2S47545	POLYAXIAL PEDICLE SCREW, 4.75mm X 45mm, EXCELLA-II
11	*E3S5525	POLYAXIAL PEDICLE SCREW, 5.5mm X 25mm, EXCELLA III-D
12	E3S5530	POLYAXIAL PEDICLE SCREW, 5.5mm X 30mm, EXCELLA III-D
13	E3S5535	POLYAXIAL PEDICLE SCREW, 5.5mm X 35mm, EXCELLA III-D
14	E3S5540	POLYAXIAL PEDICLE SCREW, 5.5mm X 40mm, EXCELLA III-D
15	E3S5545	POLYAXIAL PEDICLE SCREW, 5.5mm X 45mm, EXCELLA III-D
16	E3S5550	POLYAXIAL PEDICLE SCREW, 5.5mm X 50mm, EXCELLA III-D
17	E3S5555	POLYAXIAL PEDICLE SCREW, 5.5mm X 55mm, EXCELLA III-D
18	E3S6525	POLYAXIAL PEDICLE SCREW, 6.5mm X 25mm, EXCELLA III-D
19	E3S6530	POLYAXIAL PEDICLE SCREW, 6.5mm X 30mm, EXCELLA III-D
20	E3S6535	POLYAXIAL PEDICLE SCREW, 6.5mm X 35mm, EXCELLA III-D
21	E3S6540	POLYAXIAL PEDICLE SCREW, 6.5mm X 40mm, EXCELLA III-D
22	E3S6545	POLYAXIAL PEDICLE SCREW, 6.5mm X 45mm, EXCELLA III-D
23	E3S6550	POLYAXIAL PEDICLE SCREW, 6.5mm X 50mm, EXCELLA III-D
24	E3S6555	POLYAXIAL PEDICLE SCREW, 6.5mm X 55mm, EXCELLA III-D
25	E3S6560	POLYAXIAL PEDICLE SCREW, 6.5mm X 60mm, EXCELLA III-D
26	E3S7530	POLYAXIAL PEDICLE SCREW, 7.5mm X 30mm, EXCELLA III-D
27	E3S7535	POLYAXIAL PEDICLE SCREW, 7.5mm X 35mm, EXCELLA III-D
28	E3S7540	POLYAXIAL PEDICLE SCREW, 7.5mm X 40mm, EXCELLA III-D
29	E3S7545	POLYAXIAL PEDICLE SCREW, 7.5mm X 45mm, EXCELLA III-D
30	E3S7550	POLYAXIAL PEDICLE SCREW, 7.5mm X 50mm, EXCELLA III-D
31	E3S7555	POLYAXIAL PEDICLE SCREW, 7.5mm X 55mm, EXCELLA III-D
32	E3S7560	POLYAXIAL PEDICLE SCREW, 7.5mm X 60mm, EXCELLA III-D
33	*E3S8530	POLYAXIAL PEDICLE SCREW, 8.5mm X 30mm, EXCELLA III-D
34	E3S8535	POLYAXIAL PEDICLE SCREW, 8.5mm X 35mm, EXCELLA III-D
35	E3S8540	POLYAXIAL PEDICLE SCREW, 8.5mm X 40mm, EXCELLA III-D
36	E3S8545	POLYAXIAL PEDICLE SCREW, 8.5mm X 45mm, EXCELLA III-D
37	*E3S8550	POLYAXIAL PEDICLE SCREW, 8.5mm X 50mm, EXCELLA III-D
38	*E3S8555	POLYAXIAL PEDICLE SCREW, 8.5mm X 55mm, EXCELLA III-D
39	*E3S8560	POLYAXIAL PEDICLE SCREW, 8.5mm X 60mm, EXCELLA III-D

\*Available upon request.



# SURGICAL TECHNIQUE

## IMPLANTS

### Uniplanar Pedicle Screws

ITEM	PART NO.	DESCRIPTION
40	E3U4025	UNIPLANAR PEDICLE SCREW, 4.0mm X 25mm EXCELLA III-D
41	E3U4030	UNIPLANAR PEDICLE SCREW, 4.0mm X 30mm EXCELLA III-D
42	E3U4035	UNIPLANAR PEDICLE SCREW, 4.0mm X 35mm EXCELLA III-D
43	E3U4040	UNIPLANAR PEDICLE SCREW, 4.0mm X 40mm EXCELLA III-D
44	E3U4045	UNIPLANAR PEDICLE SCREW, 4.0mm X 45mm EXCELLA III-D
45	E3U47525	UNIPLANAR PEDICLE SCREW, 4.75mm X 25mm, EXCELLA III-D
46	E3U47530	UNIPLANAR PEDICLE SCREW, 4.75mm X 30mm, EXCELLA III-D
47	E3U47535	UNIPLANAR PEDICLE SCREW, 4.75mm X 35mm, EXCELLA III-D
48	E3U47540	UNIPLANAR PEDICLE SCREW, 4.75mm X 40mm, EXCELLA III-D
49	E3U47545	UNIPLANAR PEDICLE SCREW, 4.75mm X 45mm, EXCELLA III-D
50	E3U5525	UNIPLANAR PEDICLE SCREW, 5.5mm X 25mm, EXCELLA III-D
51	E3U5530	UNIPLANAR PEDICLE SCREW, 5.5mm X 30mm, EXCELLA III-D
52	E3U5535	UNIPLANAR PEDICLE SCREW, 5.5mm X 35mm, EXCELLA III-D
53	E3U5540	UNIPLANAR PEDICLE SCREW, 5.5mm X 40mm, EXCELLA III-D
54	E3U5545	UNIPLANAR PEDICLE SCREW, 5.5mm X 45mm, EXCELLA III-D
55	E3U5550	UNIPLANAR PEDICLE SCREW, 5.5mm X 50mm, EXCELLA III-D
56	E3U5555	UNIPLANAR PEDICLE SCREW, 5.5mm X 55mm, EXCELLA III-D
57	E3U6525	UNIPLANAR PEDICLE SCREW, 6.5mm X 25mm, EXCELLA III-D
58	E3U6530	UNIPLANAR PEDICLE SCREW, 6.5mm X 30mm, EXCELLA III-D
59	E3U6535	UNIPLANAR PEDICLE SCREW, 6.5mm X 35mm, EXCELLA III-D
60	E3U6540	UNIPLANAR PEDICLE SCREW, 6.5mm X 40mm, EXCELLA III-D
61	E3U6545	UNIPLANAR PEDICLE SCREW, 6.5mm X 45mm, EXCELLA III-D
62	E3U6550	UNIPLANAR PEDICLE SCREW, 6.5mm X 50mm, EXCELLA III-D
63	E3U6555	UNIPLANAR PEDICLE SCREW, 6.5mm X 55mm, EXCELLA III-D



# SURGICAL TECHNIQUE

## IMPLANTS

### Iliac Screws

ITEM	PART NO.	DESCRIPTION
64	E2L7570	ILIAC SCREW, 7.5mm X 70mm, EXCELLA-II
65	E2L7580	ILIAC SCREW, 7.5mm X 80mm, EXCELLA-II
66	E2L7590	ILIAC SCREW, 7.5mm X 90mm, EXCELLA-II
67	E2L75100	ILIAC SCREW, 7.5mm X 100mm, EXCELLA-II
68	E2L8570	ILIAC SCREW, 8.5mm X 70mm, EXCELLA-II
69	E2L8580	ILIAC SCREW, 8.5mm X 80mm, EXCELLA-II
70	E2L8590	ILIAC SCREW, 8.5mm X 90mm, EXCELLA-II
71	E2L85100	ILIAC SCREW, 8.5mm X 100mm, EXCELLA-II

### Reduction Head Screws

ITEM	PART NO.	DESCRIPTION
72	RE35530	REDUCTION POLYAXIAL PEDICLE SCREW, 5.5mm X 30mm, EXCELLA III-D
73	RE35535	REDUCTION POLYAXIAL PEDICLE SCREW, 5.5mm X 35mm, EXCELLA III-D
74	RE35540	REDUCTION POLYAXIAL PEDICLE SCREW, 5.5mm X 40mm, EXCELLA III-D
75	RE35545	REDUCTION POLYAXIAL PEDICLE SCREW, 5.5mm X 45mm, EXCELLA III-D
76	RE35550	REDUCTION POLYAXIAL PEDICLE SCREW, 5.5mm X 50mm, EXCELLA III-D
77	RE36530	REDUCTION POLYAXIAL PEDICLE SCREW, 6.5mm X 30mm, EXCELLA III-D
78	RE36535	REDUCTION POLYAXIAL PEDICLE SCREW, 6.5mm X 35mm, EXCELLA III-D
79	RE36540	REDUCTION POLYAXIAL PEDICLE SCREW, 6.5mm X 40mm, EXCELLA III-D
80	RE36545	REDUCTION POLYAXIAL PEDICLE SCREW, 6.5mm X 45mm, EXCELLA III-D
81	RE36550	REDUCTION POLYAXIAL PEDICLE SCREW, 6.5mm X 50mm, EXCELLA III-D
82	RE37530	REDUCTION POLYAXIAL PEDICLE SCREW, 7.5mm X 30mm, EXCELLA III-D
83	RE37535	REDUCTION POLYAXIAL PEDICLE SCREW, 7.5mm X 35mm, EXCELLA III-D
84	RE37540	REDUCTION POLYAXIAL PEDICLE SCREW, 7.5mm X 40mm, EXCELLA III-D
85	RE37545	REDUCTION POLYAXIAL PEDICLE SCREW, 7.5mm X 45mm, EXCELLA III-D
86	RE37550	REDUCTION POLYAXIAL PEDICLE SCREW, 7.5mm X 50mm, EXCELLA III-D

### Lateral Connectors

ITEM	PART NO.	DESCRIPTION
87	OC5525	CONNECTOR, LATERAL, 5.5MM X 25MM
88	OC5535	CONNECTOR, LATERAL, 5.5MM X 35MM
89	OC5545	CONNECTOR, LATERAL, 5.5MM X 45MM

### Rod-to-Rod Connectors

ITEM	PART NO.	DESCRIPTION
90	RC55601	CONNECTOR, ROD, PARALLEL, DOMINO
91	RC55602	CONNECTOR, ROD, PARALLEL, TULIP, OPEN
92	RC55603	CONNECTOR, ROD, PARALLEL, TULIP, CLOSED
93	RC55604	CONNECTOR, ROD, AXIAL, TULIP
94	RC55605	CONNECTOR, ROD, AXIAL, LONG





# SURGICAL TECHNIQUE

## IMPLANTS

### Cross Links

ITEM	PART NO.	DESCRIPTION
95	UCL2020	5.5/6.0mm CROSS LINK ASSEMBLY, 20mm
96	UCL2525	5.5/6.0mm CROSS LINK ASSEMBLY, 25mm
97	UCL3030	5.5/6.0mm CROSS LINK ASSEMBLY, 30mm
98	UCL3535	5.5/6.0mm CROSS LINK ASSEMBLY, 35mm
99	UCL3945	5.5/6.0mm CROSS LINK ASSEMBLY, 39-45mm
100	UCL4557	5.5/6.0mm CROSS LINK ASSEMBLY, 45-57mm
101	UCL5781	5.5/6.0mm CROSS LINK ASSEMBLY, 57-81mm

### Rods

ITEM	PART NO.	DESCRIPTION
102	E3RC55500	ROD, CoCr, 5.5mm X 500mm, EXCELLA III-D
103	SR55500	ROD, STRAIGHT, 5.5mm X 500mm
104	E3RC55600	ROD, CoCr, 5.5mm X 600mm, EXCELLA III-D

### Locking Caps

ITEM	PART NO.	DESCRIPTION
105	E2002	LOCKING CAP

### Hooks

ITEM	PART NO.	DESCRIPTION
106	E3HA775L	HOOK, ANGLED LEFT, 7mm X 7.5mm, EXCELLA III-D
107	E3HA775R	HOOK, ANGLED RIGHT, 7mm X 7.5mm, EXCELLA III-D
108	E3HE975	HOOK, LAMINA EXT BODY, 9mm X 7.5mm, EXCELLA III-D
109	E3HL760	HOOK, LAMINA, 7mm X 6mm, EXCELLA III-D
110	E3HL775	HOOK, LAMINA, 7mm X 7.5mm, EXCELLA III-D
111	E3HL790	HOOK, LAMINA, 7mm X 9mm, EXCELLA III-D
112	E3HL960	HOOK, LAMINA, 9mm X 6mm, EXCELLA III-D
113	E3HL975	HOOK, LAMINA, 9mm X 7.5mm, EXCELLA III-D
114	E3HL990	HOOK, LAMINA, 9mm X 9mm, EXCELLA III-D
115	E3HP975	HOOK, PEDICLE, 9mm X 7.5mm, EXCELLA III-D
116	E3HP990	HOOK, PEDICLE, 9mm X 9mm, EXCELLA III-D



# SURGICAL TECHNIQUE


## INSTRUMENTS

ITEM	PART NO.	DESCRIPTION	STD QTY
1	LA-184	Universal Ratchet Handle, Custom	2
2	LS-170	Pedicle Screw Driver, Solid	2
3	LA-T100	Torque Wrench, 100 in-lbs.	1
4	LS-043	Double Ended Starter Driver	2
5	LS-172	Reduction Head Tab Remover	1
6	LS-157	Rod Wrench, 4.5mm Hex	1
7	LS-279	Flexible Rod Template	1
8	LS-274	Rod Gripper, Dual Action, 5.5mm	2
9	LS-200	Facet Finder	1
10	LS-201	Lamina Finder	1
11	LS-202	Pedicle Finder	1
12	LS-203	Hook Impactor	1
13	LS-204	Angled Hook Holder	1
14	LS-205	Straight Hook Holder	1
15	LS-273	Coronal / In Situ Bender, 5.5mm R&L Set	1
16	LS-246	Deformity Reduction Jack	8
17	LS-247	Derotation Tube	8
18	LS-248	Lateral Derotation Connector	4
19	LS-249	Derotation Fixture Clamp	2
20	LS-288	Uniplanar Pedicle Screw Driver	2



# INNOV<sup>ASIS</sup>

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