Nexxt Spine
GROW WITH US

Surgical Technique Guide

MIS

INERTIA® CONNEXX™
MINIMALLY INVASIVE

Nexxt Spine, LLC
14425 Bergen Blvd, Suite B
Noblesville, IN 46060
(317) 436-7801
Info@NexxtSpine.com

71-051, Rev A

Table of Contents

INERTIA® CONNEXX™ MINIMALLY INVASIVE MODULAR PEDICLE SCREW SYSTEM

The INERTIA® CONNEXX™ Minimally Invasive Modular Pedicle Screw System is a modular comprehensive system for posterior thoracolumbar stabilization, designed to ensure ease of use and intraoperative flexibility through a customizable solution for degenerative, deformity, and tumor/trauma applications via a percutaneous or mini-open (Wiltse) approach using cannulated pedicle screws, Set Screws, and guided Rod placement.

INERTIA® CONNEXX™ enhances efficiency through a modular platform, dual Rod diameter capabilities to tailor construct stiffness, and provide variable solutions for minimally invasive procedures, while providing the surgeon multiple extended tower lengths to match patient anatomy and limit bulk in the working corridor.

INERTIA® CONNEXX™ has been designed and evolved from valuable feedback from our surgeon development team, and Nexxt Spine would like to take the opportunity to thank them for their contributions and efforts to make the INERTIA® CONNEXX™ Minimally Invasive Modular Pedicle Screw System one of the most versatile systems for posterior thoracolumbar fixation and stabilization.

Indications for Use

GENERAL DESCRIPTION

The INERTIA® CONNEXX™ Modular Pedicle Screw System consists of Rods, pedicle screws and Set Screws. Rods are available in either straight or pre-contoured (curved) forms in a variety of lengths. Pedicle screws are available in modular polyaxial or non-modular uniplanar designs having double lead standard or cortical/cancellous thread forms in a variety of diameter-length combinations. Set screws are used to fasten the Rod and Pedicle Screw. All implant components are manufactured from titanium alloy (Ti-6AL-4V ELI) per ASTM F136.

INDICATIONS

The INERTIA® CONNEXX™ Modular Pedicle Screw System is intended for immobilization and stabilization of the posterior non-cervical spine (T1-S2/Ilium) in skeletally mature patients as an adjunct to fusion for the following indications: degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies), spondylolisthesis, trauma (i.e., fracture or dislocation), spinal stenosis, curvatures (i.e., scoliosis, kyphosis, or lordosis), tumor, pseudarthrosis, and/or failed previous fusion.

When used for posterior non-cervical Pedicle Screw fixation in pediatric patients, the INERTIA® CONNEXX™ Modular Pedicle Screw System implants are indicated as an adjunct to fusion to treat adolescent idiopathic scoliosis. The INERTIA® CONNEXX™ Pedicle Screw is to be used with autograft and/or allograft. Pediatric Pedicle Screw fixation is limited to a posterior approach

CONTRAINDICATIONS

Use of the INERTIA® CONNEXX™ System and spinal fixation surgery are contraindicated when there was recent or local active infection near or at the site of the proposed implantation. Any conditions that preclude the possibility of fusion are relative contraindications. These include but are not limited to: cancer, fever, mental illness, alcoholism or drug abuse, osteoporosis or osteopenia, neurotrophic diseases, obesity, pregnancy and foreign body sensitivity. Biological factors such as smoking, use of nonsteroidal anti-inflammatory agents, the use of anticoagulants, etc. all have a negative effect on bony union. Contraindications may be relative or absolute and must be carefully weighed against the patient's entire evaluation. See also the WARNINGS, PRECAUTIONS AND POTENTIAL RISKS sections of this insert.

IMPORTANT NOTE TO OPERATING SURGEON PRECAUTION

The implantation of Pedicle Screw spinal systems should be performed only by experienced spinal surgeons with specific training in the use of this Pedicle Screw Spinal System because this is a technically demanding procedure presenting a risk of serious injury to the patient.

The INERTIA® CONNEXX™ Modular Pedicle Screw System is designed to provide biomechanical stabilization as an adjunct to fusion in skeletally mature patients. Spinal fixation should only be undertaken after the surgeon has had hands on training in this method of spinal fixation and has become thoroughly knowledgeable about spinal anatomy and biomechanics. A surgical technique is available for instructions on the important aspects of this surgical procedure and can be requested from Nexxt Spine LLC at the address or phone number above.

Preoperative instructions to the patient are essential. The patient should be made aware of the limitations of the implant and potential adverse effects of the surgery. The patient should be instructed to limit postoperative activity, as this will reduce the risk of bent, broken or loose implant components. The patient must be made aware that implant components may bend, break or loosen even though restrictions in activity are followed.

Postoperative evaluation of the fusion and implant status is necessary. The surgeon may remove the implant once a solid fusion is obtained. The patient must be informed of the potential of this secondary surgical procedure and the associated risks.

CLEANING/REPROCESSING OF NEXXT SPINE SURGICAL INSTRUMENTS

All implants and instruments must first be cleaned using established hospital methods before sterilization and introduction into a sterile surgical field. Refer to the Nexxt Spine Reprocessing Instructions for Reusable Instruments document available at www.NexxtSpine.com/Resources/Indications-For-Use or by calling 317-436-7801 for a copy of the detailed cleaning instructions.

STERILIZATION

The INERTIA® CONNEXX™ Modular Pedicle Screw System implants can be supplied sterile or nonsterile. All sterile products are labeled "STERILE" and supplied in protective sterile barrier packaging. Do not use sterile products if the packaging has been damaged or previously opened. Do not re-sterilize or autoclave sterile implants. If not specifically labeled sterile, components are nonsterile.

Nonsterile components are supplied clean and not sterile. All implants and instruments should be cleaned and sterilized prior to surgery. Prior to sterilization, verify that all instruments are in their open and unlocked position within the instrument tray(s). AORN recommended practices for in hospital sterilization should be followed. The use of an FDA cleared sterilization wrap is recommended.

Sterilization testing of components has shown the following recommendations for sterilization are effective to an SAL of 10-6:

Method:	Steam
Cycle:	Prevaccum
Temperature:	270°F (132°C)
Exposure Time:	4 minutes
Drying Time:	60 minutes

NOTE: Instruments that may have been exposed to Creutzfeldt-Jakob disease (CJD) should be treated according to the hospital's prior decontamination protocol. Nexxt Spine recommends contacting the Center for Disease Control and the World Health Organization for the most recent information on CJD transmission and deactivation.

Warnings and Precautions

1. The safety and effectiveness of this device has not been established for use as part of a growing Rod construct. This device is only intended to be used when definitive fusion is being performed at all instrumented levels.

2. The use of Pedicle Screw fixation in the pediatric population may present additional risks when patients are of smaller stature and skeletally immature. Pediatric patients may have smaller spinal structures (pedicle diameter or length) that may preclude the use of pedicle screws or increase the risk of Pedicle Screw malpositioning and neurological or vascular injury. Patients who are not skeletally mature undergoing spinal fusion procedures may have reduced longitudinal spinal growth, or may be at risk for rotational spinal deformities (the "crankshaft phenomenon") due to continued differential growth of the anterior spine.
Other adverse events related to Pedicle Screw fixation, such as screw or Rod bending, breakage, or loosening, may also occur in pediatric patients, and pediatric patients may be at increased risk for device-related injury because of their smaller stature.

3. The implantation of Pedicle Screw spinal systems in pediatric patients should be performed only by experienced spinal surgeons with specific training in the use of this Pedicle Screw Spinal System in pediatric patients because this is a technically demanding procedure presenting a risk of serious injury to the patient. Preoperative and operating procedures, including knowledge of surgical techniques, good reduction, and proper selection and placement of the implants are important considerations in the successful utilization of the system in pediatric patients.
The selection of the proper size, shape and design of the implant for each patient is crucial to the safe use of this device in pediatric patients.

4. The safety and effectiveness of Pedicle Screw spinal 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 (grades 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 (pseudarthrosis). The safety and effectiveness of these devices for any other conditions are unknown.

5. PATIENT SELECTION. Proper patient selection is critical to the success of the procedure. Only patients who satisfy the criteria set forth under the INDICATIONS section of this document AND who do not have any of the conditions set forth under the CONTRAINDICATIONS section of this document should be considered for spinal fixation surgery using the INERTIA® CONNEXX™ System. In addition, patients who smoke have been shown to have an increased incidence of pseudarthrosis. Based upon the fatigue testing results, the physician/surgeon should consider the levels of implantation, patient weight, patient activity level, other patient conditions, etc. which may impact the performance of the system.

6. PATIENT EDUCATION. Preoperative instructions to the patient are essential. The patient should be made aware of the limitations of the implant and potential risks of the surgery. The patient should be instructed to limit postoperative activity, as this will reduce the risk of bent, broken or loose implant components. The patient must be made aware that implant components may bend, break or loosen even though restrictions in activity are followed.

7. HANDLING. Implant components should be handled and stored appropriately to protect them from unintentional damage. The surgeon should avoid introducing notches or scratches into the Rod or screw surfaces as these may induce premature failure of the component. Excessive reverse bending of Rods can cause metal stressing resulting in a lower fatigue life for the Rod.

8. IMPLANT SELECTION. The INERTIA® CONNEXX™ System components are available in a variety of sizes to ensure proper fit of the implanted device. The potential for the success of the fusion is increased by selecting the correct size of the implant. These devices are not intended to be used as the sole support for the spine.

9.INSTRUMENT USAGE INERTIA® CONNEXX™ System instruments are to be used for implantation of the INERTIA® CONNEXX™ System components. Failure to use the dedicated instruments may compromise the integrity of the implanted device. Care should be taken to ensure that the correct component-specific instruments are used properly. Failure to do so may compromise the integrity of the implanted device and lead to premature device failure and subsequent patient injury.

10. MR ENVIRONMENT The INERTIA® CONNEXX™ System has not been evaluated for safety and compatibility in the MR environment. The INERTIA® System has not been tested for heating migration or image artifact in the MR environment. The safety of the INERTIA® System in the MR environment is unknown. Scanning a patient who has this device may result in patient injury.

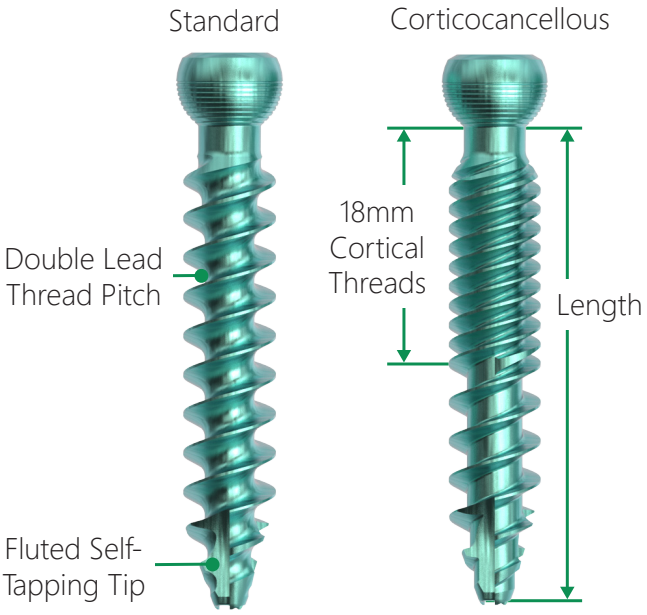
11. MIXED METALS. The INERTIA® CONNEXX™ System is available in titanium alloy. It is imperative that this metal does not come into contact in vivo with other dissimilar metals. Accelerated corrosion may occur when two dissimilar metals are used together when building a construct.

12. SINGLE USE ONLY. These devices are provided as single use only implants and are not to be reused or reimplanted regardless of an apparent undamaged condition.

13. DELAYED UNION OR NONUNION. The INERTIA® CONNEXX™ System is designed to assist in providing an adequate biomechanical environment for fusion. It is not intended to be and must not be used as the sole support for the spine. If a delayed union or nonunion occurs the implant may fail due to metal fatigue. Patients should be fully informed of the risk of implant failure.

PRODUCT SPECS & FEATURES

Shanks



T25 Drive

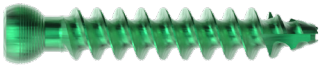
Ømm by Color

- Shank material Ti-6Al-4V ELI per ASTM F136
- Fully compatible with INERTIA® CONNEXX™ product portfolio to accommodate a variety of minimally invasive, open, mid-line, and hybrid techniques
- Standardized T25 drive feature for all Shanks and Set Screws to reduce instrument need

Standard Sizes

Diameter (mm) x Length (mm)

Cannulated

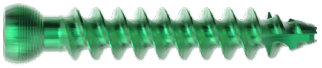


Ø	30	35	40	45	50	55
5.5	✓	✓	✓	✓	✓	✓
6.5	✓	✓	✓	✓	✓	✓
7.5	✓	✓	✓	✓	✓	✓

Made to Order Sizes

Ø5.0-11.5mm x 20-140mm

Cannulated



Ø	20-80	20-100	40-120
5.0-6.0	✓		
6.5-7.5	✓	✓	
8.5+			✓

Cannulated Corticocancellous

Ø	25-80	25-100	40-120
5.0-6.0	✓		
6.5-7.5	✓	✓	
8.5+			✓

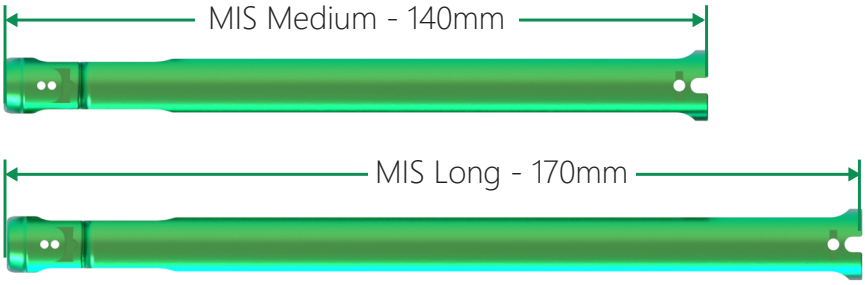
Key: Standard ✓ Made to Order ✓

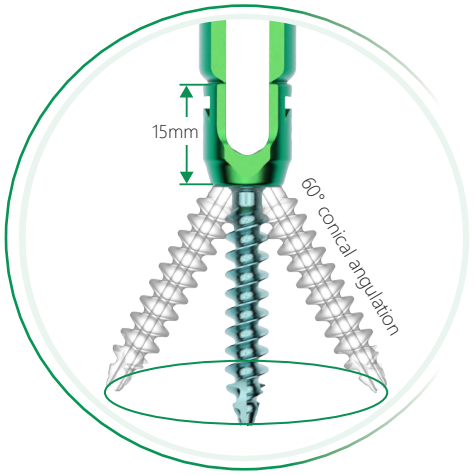
Set Screws

- Set Screw composed of Ti-6Al-4V ELI per ASTM F136.
- T25 Drive Socket.
- "Click On" attachment feature securely mates driver to Set Screw.
- Set screw will automatically disengage from driver when locked at correct depth and compressing on Rod.

Housings

- All Polyaxial Housings are fully compatible with all Shanks, with the exception of preassembled uniplanar Housings.
- MIS Housings provide 20mm of non-instrument assisted reduction.





Spine Rods

- Spine Rods are available in Bullet Tip and Pre-Bent.
- Ambidirectional attachment allows surgeon to attach spinal Rod in either a lordotic or kyphotic orientation to match patient anatomy.

Curved

Ø	35-110	115-150
5.5	✓	✓
6.0	✓	✓

Straight

Ø	200	300	400
5.5	✓	✓	✓
6.0	✓	✓	✓

Diameter (mm) x Length (mm)

Key: Standard ✓ Made to Order ✓

Implant Traceability

- All Shanks, Set Screws, Extended Tabs, and Standard Housings include a removable tracking tab marked with lot code information and UDI to simplify tracking of implants.
- Implants can also include a UDI, part number, and lot code etched onto the surface.

NOTE:
Removable tracking tabs are not an implant and should be disposed or provided to hospital materials management for tracking purposes if appropriate.

SURGICAL STEPS

The surgical technique shown in this document is for illustrative and demonstrative purposes only. The technique actually employed will always depend upon the medical judgment of the surgeon exercised before and during surgery as to the best mode of treatment for each patient. Please see Instructions for Use for the complete list of indications, warnings, precautions, and other important information concerning the use and guidance of the INERTIA® CONNEXX™ Minimally Invasive Modular Pedicle Screw System.

1. PATIENT POSITIONING

Place the patient on the operating table in a prone position (Figure 1.1). Prepare and drape in a conventional manner that will allow for implant placement and anatomical marking. The fluoroscope should have easy access to the surgical field for both A/P and lateral views.

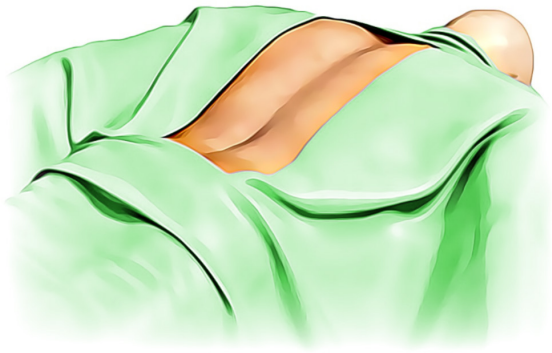


Figure 1.1
Position patient in a traditional manner as deemed by the surgeon

Patient's position should be checked radiographically to determine the direction of the pedicles relative to the horizontal plane, as well verifying that the pedicles are symmetrical to each other with the spinous process centered between them (Figure 1.2). The superior endplate should be parallel and be visualized as a crisp solid line with no obliquity.

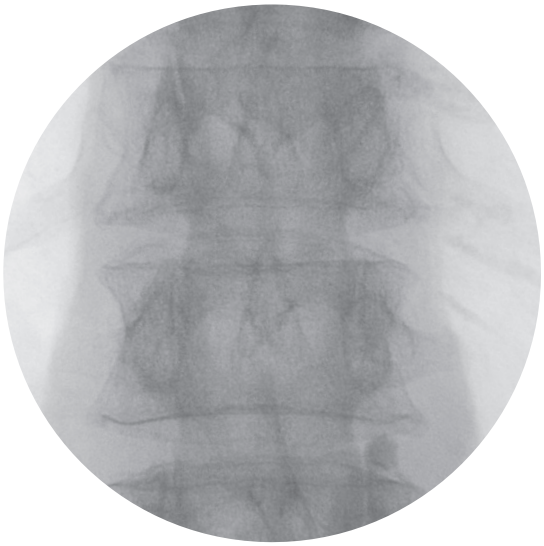


Figure 1.2
Symmetrical pedicles and centered spinous process

2. INCISION PLANNING

Fluoroscopically locate the pedicle's lateral border by placing a Guidewire in a cephalad/caudal orientation on the skin.

With a sterile pen, mark a vertical line "A", on the skin. Position the Guidewire perpendicular to "A" and with a slightly superior bias over the pedicle. Confirm fluoroscopically and mark with a horizontal line on the skin, line "B". Repeat marking line "B" for each vertebral body to be instrumented, first ensuring to reposition the C-arm for proper A/P view of each level. The intersection of lines "A" and "B" marks the optimal pedicle entry (Figure 2.1).

Due to the depth of soft tissue and muscle, draw a second vertical line 2cm–3cm lateral to line "A." This is line "C", and delineates the incision site (Figure 2.2). An oblique view directly down the pedicle can also be utilized to identify the ideal skin entry point.

Note: *Greater obesity requires greater lateral distance.*

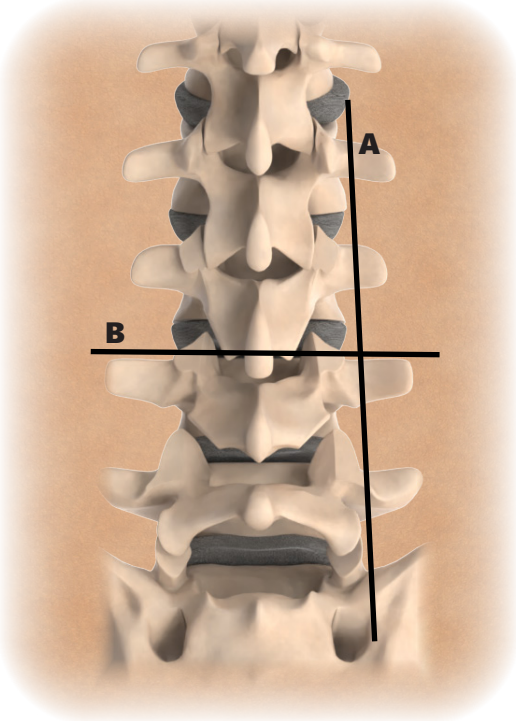


Figure 2.1
Marking lines 'A' and 'B' intersect for pedicle entry point

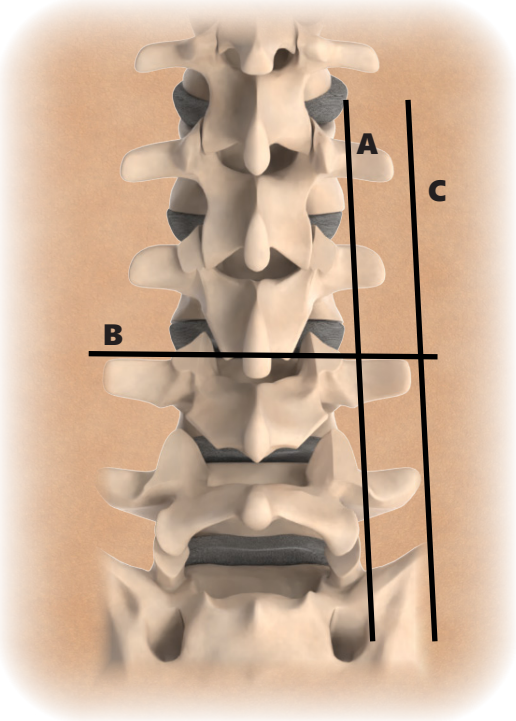


Figure 2.2
Marking line 'C' and 'B' intersect for incision point

3. PEDICLE ACCESS AND APPROACH

Create a 2cm long vertical skin incision through the fascia at the previous noted intersection of the "B" and "C" skin markings if percutaneous Rod placement technique is to be employed. This will be the entry point for the Pedicle Targeting Needle.

Utilizing A/P fluoroscopy, advance Pedicle Targeting Needle through incision to appropriate pedicle (Figure 3.1).

NOTE: *If "mini-open" (modified Wiltse approach) Rod placement is desired, make a 3.0cm incision connecting the pedicles. Incise the skin and the facial layer. Use blunt dissection to locate the pedicle entry point.*

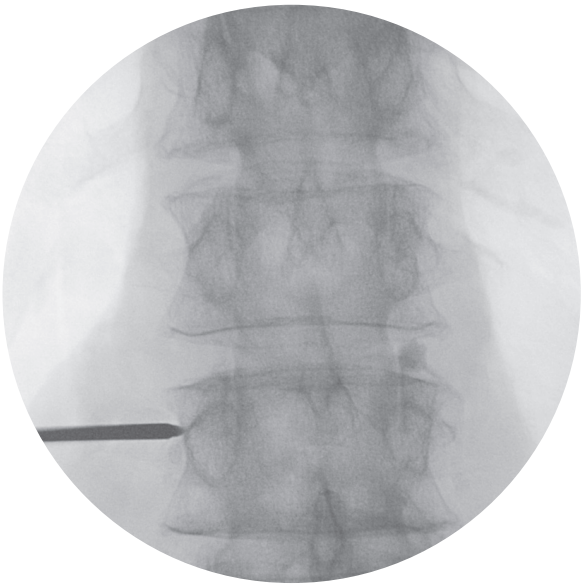


Figure 3.1
Confirming instrument position before plunge

Insert the Pedicle Targeting Needle through the incision. Using A/P fluoroscopy, confirm the needle position at the lateral border of the pedicle.

Using a mallet, advance the needle slightly to dock it into the bone and stabilize. Reference a lateral fluoroscopic image to confirm that the cephalad/caudal trajectory matches the pedicular anatomy (Figure 3.2).

NOTE: *The surgeon can locate the transverse process with the distal tip of the Pedicle Targeting Needle and walk the distal tip medial until the distal tip is located lateral to the center of the pedicle.*

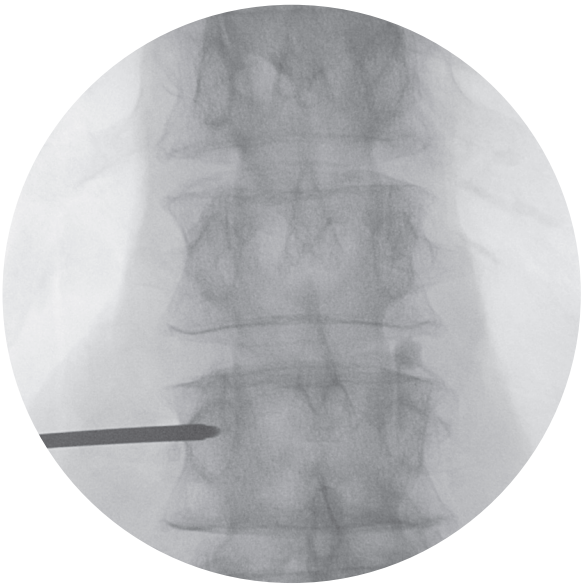


Figure 3.2
Needle plunged and stylet still inserted

4. K-WIRE INSERTION

Continue advancing the Pedicle Targeting Needle under A/P fluoroscopy. As the tip of the needle approaches the middle of the pedicle cylinder, it should be approximately one third into the vertebral body when viewed on a lateral image. Advance the needle to the desired depth, but no further than half the depth of the vertebral body.

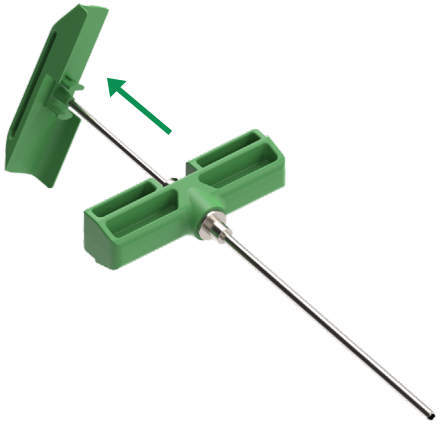


Figure 4.1
Removing inner trocar by rotating and pulling

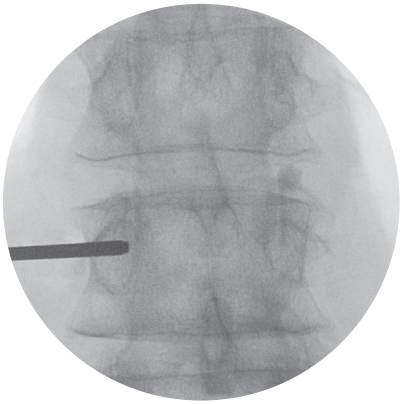


Figure 4.2
Needle plunged and stylet removed

Remove the inner trocar of the Pedicle Targeting Needle by turning the top handle 90° to the cannula handle (Figure 4.1). Carefully advance the Guidewire past the tip of the Pedicle Targeting Needle and firmly into cancellous bone (Figure 4.2). Ideal placement of the guidewire tip is approximately two-thirds of the depth of the vertebral body. Remove the Pedicle Targeting Needle while maintaining the position of the Guidewire (Figure 4.3).

NOTE: *Guidewire markings should be visible (on proximal body) when advancing through the Pedicle Targeting Needle, as the markings and proximal end of Dilator 1 will be used to determine screw length.*

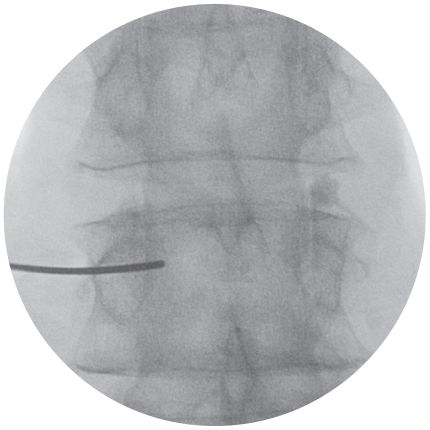


Figure 4.3
K-wire inserted and needle removed

4. K-WIRE INSERTION (cont.)

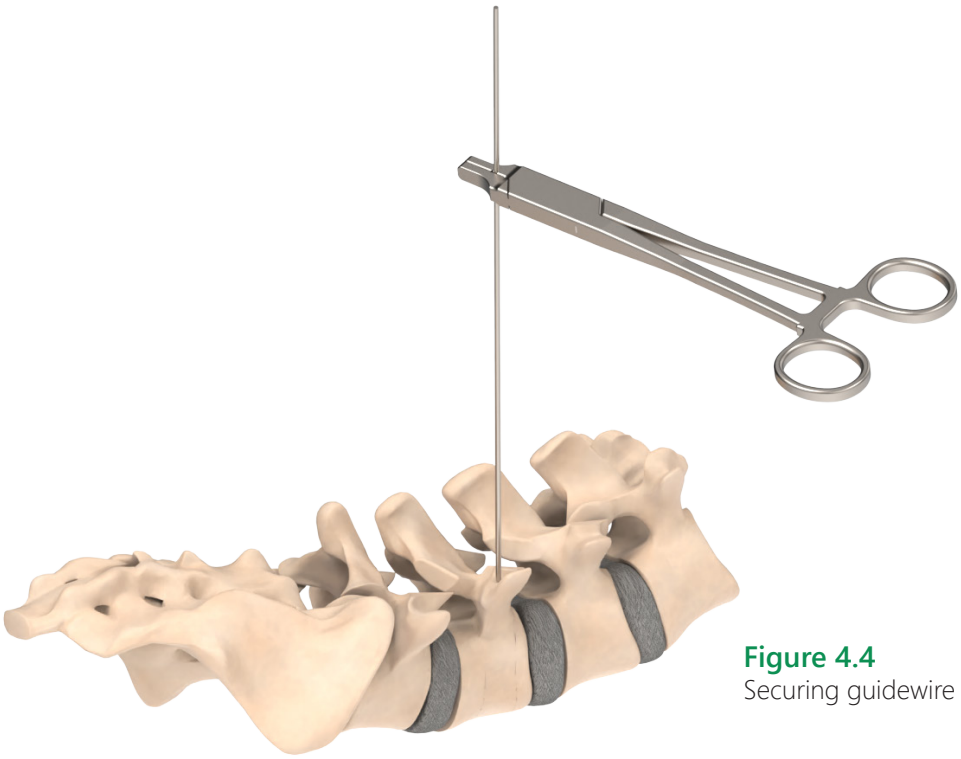


Figure 4.4
Securing guidewire within anatomy

Remove Pedicle Targeting Needle while securing Guidewire and ensuring it stays secured within patient anatomy (Figure 4.4).

Repeat these steps for all pedicles that are intended for screw placement.

NOTE: *Do not advance or remove the Guidewire while placing instruments over the Guidewire during the procedure. Bending of the Guidewire should be avoided as it could cause a kink and/or break.*

NOTE: *Guidewire advancement should be monitored using fluoroscopy. Failure to do so may cause the guidewire, or part of it, to advance through the bone and into a location that may cause damage to underlying structures.*

5. DILATOR PLACEMENT

Insert Dilator 1 over Guidewire and twist the dilator back and forth while advancing down the Guidewire until it docks against posterior boney elements (Figure 5.1). Verify that the dilator is placed firmly against the bone by utilizing lateral fluoroscopy.

NOTE: *Dilators 2 and 3 are fabricated from radiopaque plastic which has been designed to show on fluoroscopy the distal tip location in relation to the posterior boney elements. Dilator 1 is aluminum.*

NOTE: *Use lateral fluoroscopy to properly manage the k-wire during pedicle preparation to confirm placement and avoid anterior advancement of the k-wire.*

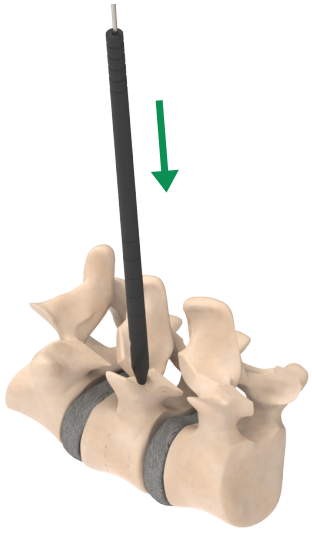


Figure 5.1
Dilator 1 inserted over K-wire

Guide Dilator 2 over the Guidewire, then over Dilator 1. Advance Dilator 2 through the soft tissue until it is seated against the pedicle (Figure 5.2).

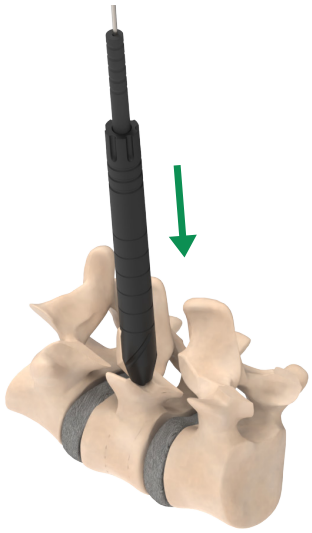


Figure 5.2
Dilator 2 inserted over Dilator 1

Guide Dilator 3 over the Guidewire, then over Dilator 2. Advance Dilator 3 through the soft tissue until it is seated against the pedicle (Figure 5.3).

NOTE: *The Dilator Pusher Handle can be utilized to assist full seating of the Dilator 2 and 3*

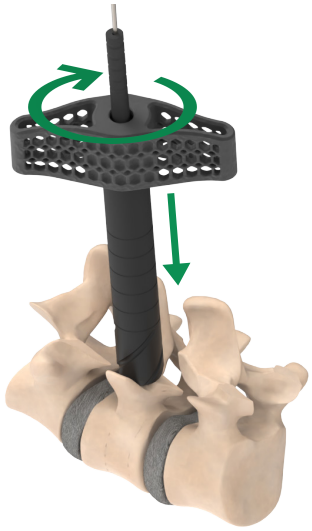


Figure 5.3
Dilator 3 inserted over Dilator 2 with help of Dilator Pusher Handle

6. PEDICLE TAPPING AND PREPARATION

Prior to preparing the pedicle for screw placement, remove Dilator 1, leaving the Guidewire, Dilator 2, and Dilator 3 in position.

NOTE: *Dilator 2 provides the working corridor for the TAP and optional 9mm Bone Awl. Dilator 3 provides the working corridor for the INERTIA® CONNEXX MIS Extended Tab implant (Figure 6.1).*

Figure 6.1a
Dilators 2-3 are a window for Taps

Figure 6.1a
Dilator 3 is a window for Extended Tabs

Select the preferred Ratcheting Handle, and attach to an appropriately sized Tap by inserting the proximal end of the Tap into the distal end of the handle. Compress the spring loaded quick-connect ring of the handle to assemble (Figure 6.2).

Figure 6.2
Ratcheting T-handle attachment process onto Tap

6. PEDICLE TAPPING AND PREPARATION (cont.)

Set the ratchet to the preferred drive position. Guide the Tap and Ratcheting Handle over the Guidewire into Dilator 2, then advance until it is seated against the pedicle. Rotate clockwise until the desired tapping depth has been achieved. Confirm placement using fluoroscopy.

NOTE: *The thread length of all Taps is 50mm and can be used as a reference when determining screw length. In addition, the depth markings on the Tap, as measured from the top of Dilator 2, can also be used to estimate screw length.*

NOTE: *Thread length measurements can be done by evaluating the location of the non-threaded zone of the Tap which runs from 30mm to 40mm (Figure 6.3).*

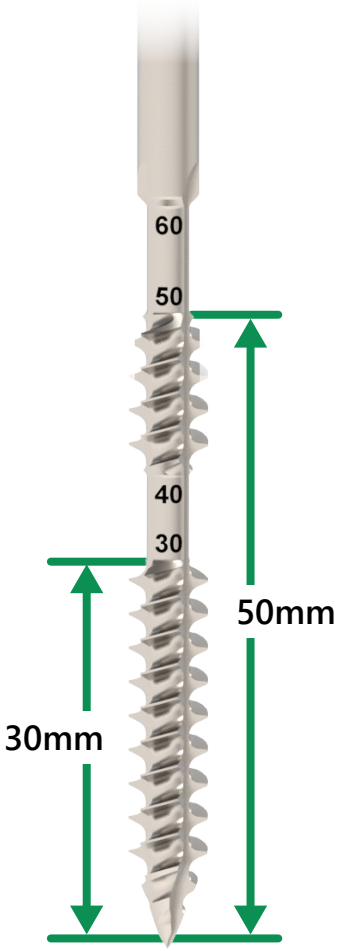


Figure 6.3
Tap with depth laser markings

CAUTION: Use lateral fluoroscopy to properly manage the Guidewire during pedicle preparation to confirm proper placement and avoid anterior advancement of the Guidewire (Figure 6.4)

NOTE: *Taps are designed to be line-to-line with corresponding screw diameter.*

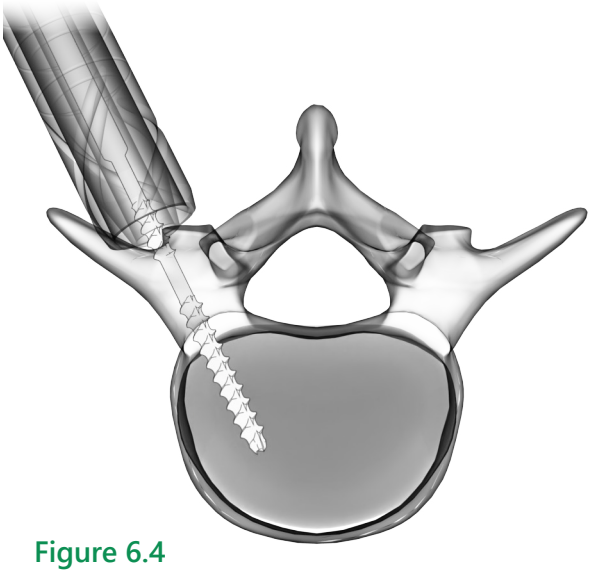
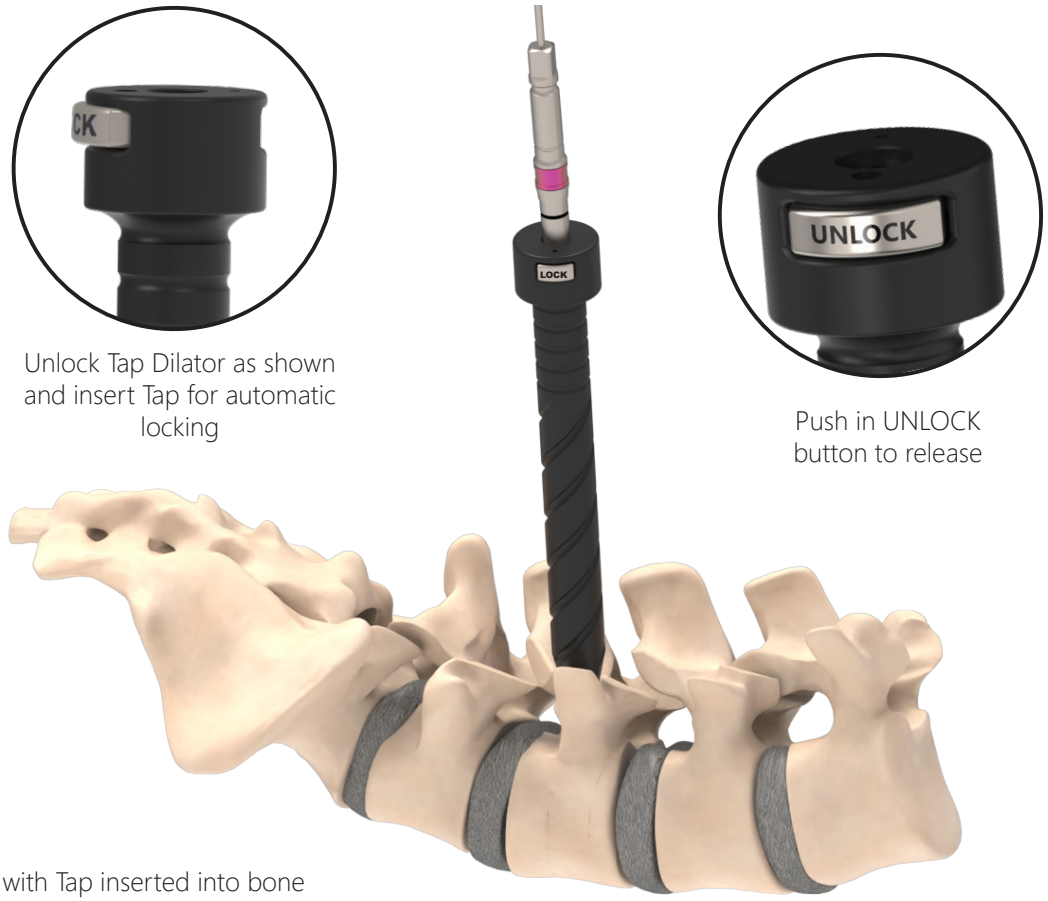


Figure 6.4
Tap with 10mm thread window feature encased in pedicle

7. INTEGRATED TAP-DILATOR (OPTIONAL)



Unlock Tap Dilator as shown and insert Tap for automatic locking

Push in UNLOCK button to release

Figure 7.1
Tap Dilator with Tap inserted into bone

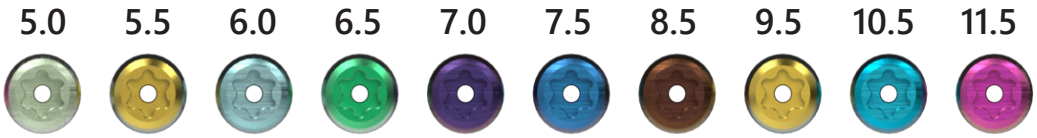
Insert Tap with assembled handle into Tap/Sleeve, press button on face of Tap/Sleeve to begin attachment. Tap/Sleeve engages with proximal shelf and button locks into place once fully attached. Insert Tap with Tap/Sleeve over Guidewire and into surgical site (Figure 7.1). Firmly press Tap down onto patient bone. Confirm full seating with lateral fluoroscopy. Press unlock button, apply downward pressure, and Tap to desired depth.

CAUTION: The Dilator 3 is not designed to sequentially dilate with the Tap/Dilator Combo.

8. MODULAR EXTENDED HOUSING SCREW PREP

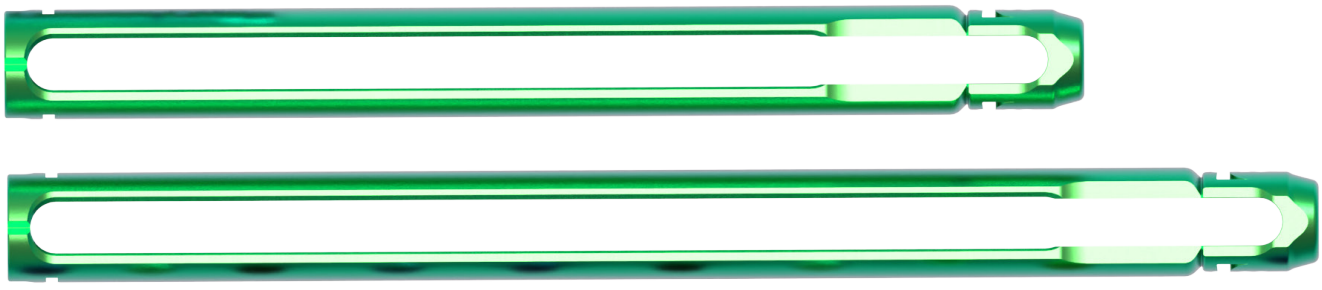
Once the pedicle has been prepared, select the preferred Shank diameter and length per the pathology's requirements. Shank diameters may be determined by the caddy in which they reside whereas the Shank length may be determined via unique anodization colors (Figure 8.1). To verify Shank diameter and length, use the measurement features integrated into the Shank caddies.

Figure 8.1 - Cannulated Ømm by Color



There are two Modular Extended Housing lengths to accommodate different patient pathologies. Generally, the shorter Modular Extended Housings are used for the thoracic region, or patients with a low physical habitus, with the longer Modular Extended Housings for the lumbar spine (Figure 8.2).

Figure 8.2 - MIS Medium and Long Tabs



NOTE: *It may be preferred in longer constructs to use the longer Modular Extended Housings to reach the anterolisthesed segment of a spondylolisthesis. It is ideal to have approximately 50% of the Modular Extended Housings above the surface of the skin.*

NOTE: *Medium Extended Tab Housings should not be utilized if skin level noted on Dilator 2 or 3 is noted at 70mm or higher.*

8. MODULAR EXTENDED HOUSING SCREW PREP (cont)

Attach the appropriate Modular Extended Housing onto the screw Shank's spherical ball geometry by applying a downward force to provisionally connect the two components.

Utilizing the Tulip Assembly Tool, place the provisionally assembled Shank and Housing into the tool. The elongated Rod of the instrument should sit in the saddle of the Housing, while the distal portion of the Housing is seated in the mating "cup". Ensure that the Shank is not captured, and is free to rotate and toggle before final seating. Compress the handles of the instrument until the alignment arrow is anywhere within the LOCKED zone to fully seat and secure the components together (Figure 8.3, 8.4).

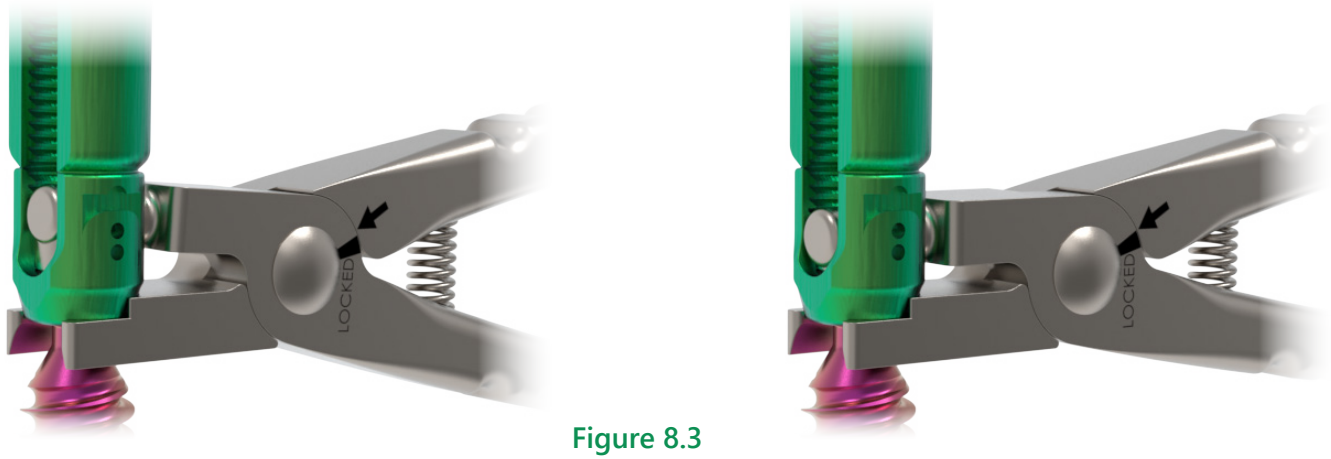


Figure 8.3
Demonstration of locking movement

TIP: After locking the components, surgeon should pull the Shank upward and rotate slightly to confirm that components have been securely connected. The surgeon can also verify the implant has been appropriately locked by visualizing the silver cap position within the Modular Housing. Visually confirm the components are securely locked (Figure 8.5).

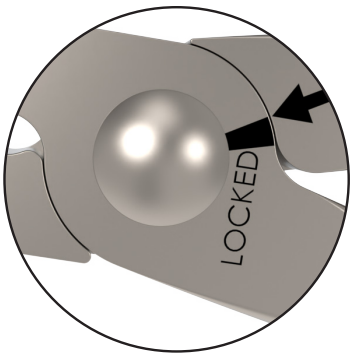


Figure 8.4
Marked arrow can be anywhere within the LOCKED zone for full seating

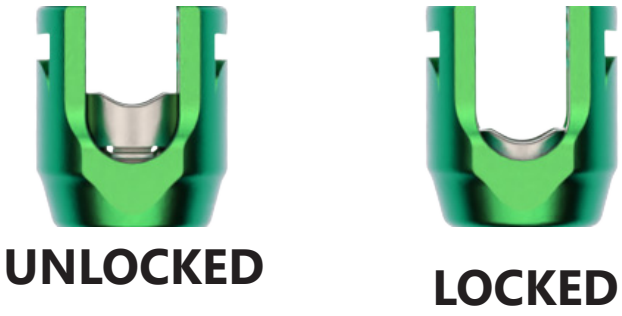


Figure 8.5
Cap in the unlocked and locked position

NOTE: *Housings are single use and cannot be reused once locked.*

9. MODULAR EXTENDED HOUSING SCREW INSERTION

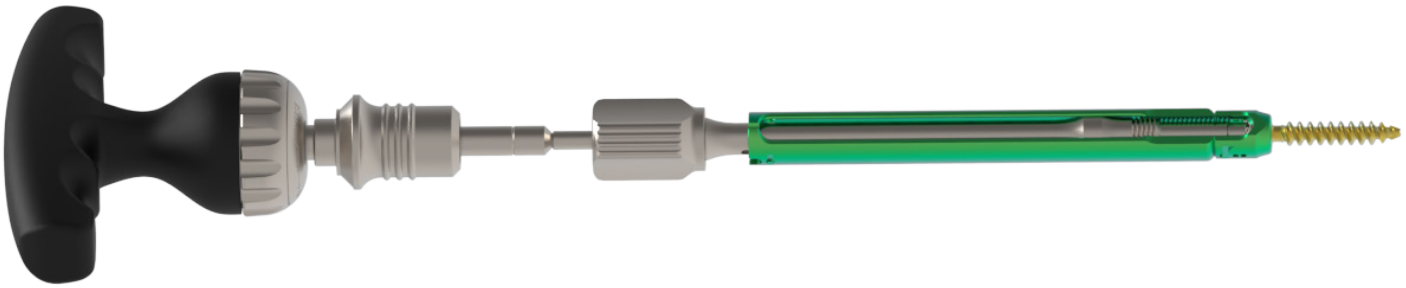


Figure 9.1
Assembled screw inserter with T-Handle, Extended Tab, and Shank

Select the preferred Ratcheting Handle, and attach to the Cannulated Screw Inserter by inserting the proximal end of the Cannulated Screw Inserter into the distal end of the handle. Compress the spring loaded quick-connect ring of the handle to assemble. Set the ratchet to the preferred drive position.

Insert the Cannulated Screw Inserter assembly into the screw assembly and engage the T25 distal tip with the mating feature of the Modular Screw Shank. Rotate the assembly knob on the Cannulated Screw Inserter in a clockwise direction to assemble the instrument to the screw assembly (Figure 9.1). Confirm the screw assembly is firmly attached and that there is no toggle of the screw Shank. Do not over tighten.

9. MODULAR EXTENDED HOUSING SCREW INSERTION (cont.)

Remove Dilator 2, then guide the Extended Tab Assembly over the Guidewire and down Dilator 3 till the distal tip of the implant assembly makes contact with the bone. Rotate the assembled Cannulated Screw Inserter clockwise until the desired depth of the Modular Screw Shank is achieved (Figure 9.2). Verify via lateral fluoroscopy during screw insertion to verify trajectory and implant placement depth (Figure 9.3).

NOTE: *Surgeon can verify final depth of Modular Shank in relation to Dilator 3 by referring to laser line on the Modular Housing and the proximal surface of the dilator.*

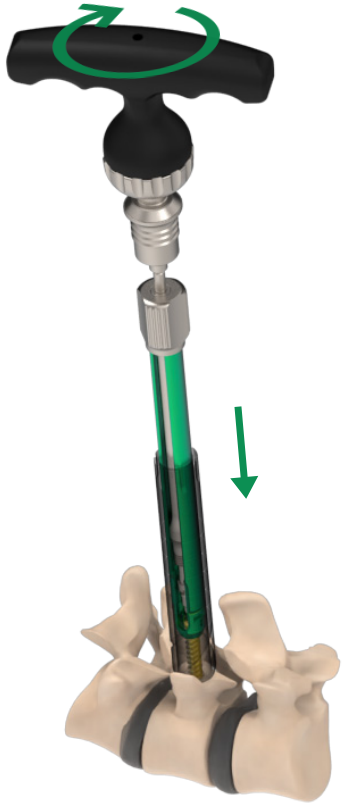


Figure 9.2
Rotating assembly clockwise down K-wire until Shank depth achieved

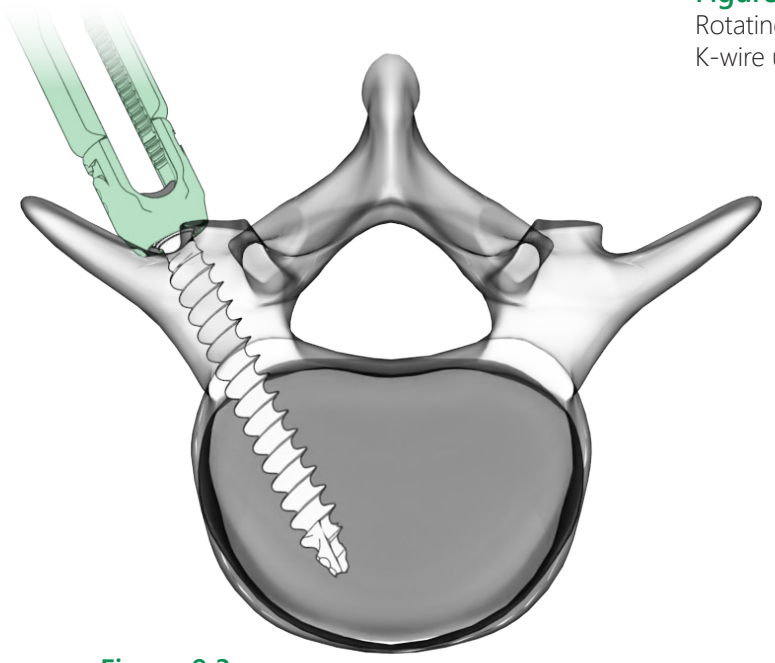


Figure 9.3
Example assembly driven into the pedicle body

9. MODULAR EXTENDED HOUSING SCREW INSERTION (cont.)

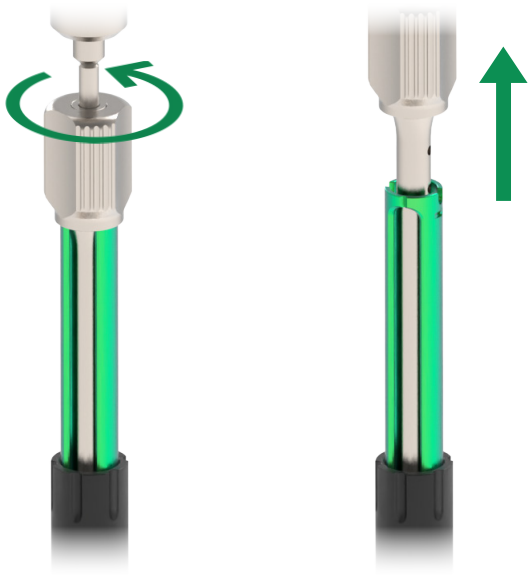


Figure 9.4
Rotate lower knob counter-clockwise to release instrument from Shank

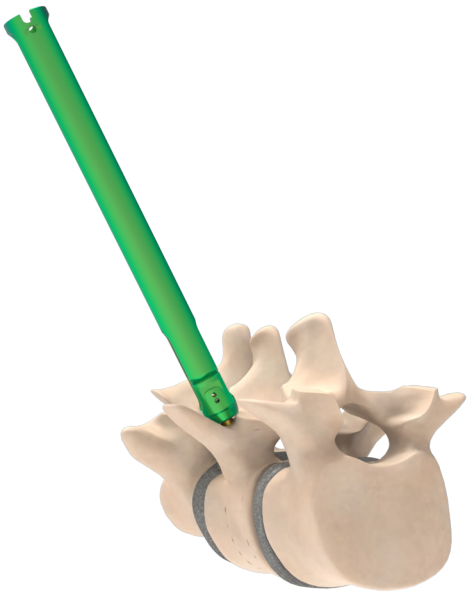


Figure 9.5
Shank assembly with Screw Inserter and Dilator removed

After final placement and verification of screw placement disassemble the Cannulated Screw Inserter from the Modular Extended Housing by rotating the knob counterclockwise. Pull upward on the instrument while managing the Guidewire, to remove from the placed screw assembly (Figure 9.4). The In-Situ Driver can be utilized after removal of the Cannulated Screw Inserter to easily advance or withdraw the implanted screw assembly.

Manually remove the Guidewire and Dilator 3 (Figure 9.5).

Place the remaining screws per a similar technique.

NOTE: *If excessive bone growth on the anterior face of the facet is noted on fluoroscopy which may inhibit seating of the Housing, or bleeding bone required for posterior lateral fusion, the Decorticating Tool can be placed down Dilator 3 over the Guidewire and rotated by hand to remove bone. The Decorticating Tool can be assembled to any of the static or ratcheting cannulated handles for use. It is not recommended to use the Decorticating Tool with power or to remove excessive bone as this may weaken the bone Shank interface.*

10. ROD PREPARATION

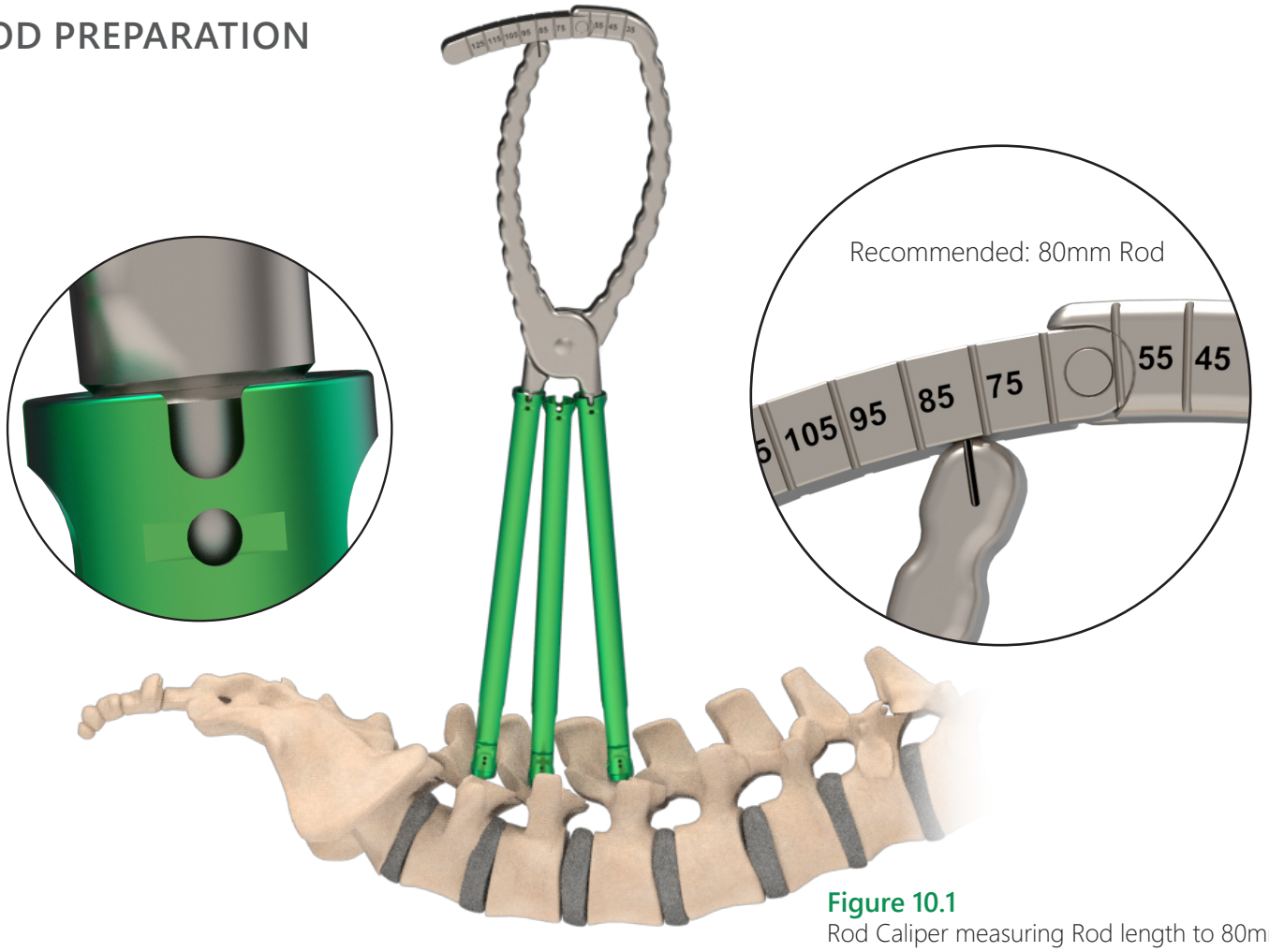


Figure 10.1
Rod Caliper measuring Rod length to 80mm

The INERTIA® CONNEXX™ Modular Screw System offers multiple Rod diameters, lengths, and materials. Surgeons should select the Rod that is appropriate for their patient's needs. The INERTIA® CONNEXX™ Minimally Invasive Modular Screw System provides either 5.5mm or 6.0mm (special order) titanium alloy Rods.

The Rod Caliper should be utilized to determine the length of Rod needed for the final construct. Insert the arms of the Rod Caliper into the proximal ends of the inferior and superior Extended Housings, and advance the arms down until fully seated (Figure 10.1). Surgeon can utilize lateral fluoroscopy to verify placement of Rod Caliper as well. It may be necessary to angle the Rod Caliper cephalad and caudal to fully seat the distal end of the measurement tool into the Modular Extended Housings.

NOTE: *The length noted on the Rod Caliper is the true length of the Rod required. No additional length is needed to allow for overhang of the Modular Extended Housing for full Set Screw seating. (e.g., 50mm indication = select a 50mm Rod).*

10. ROD PREPARATION (cont.)

NOTE: *Full seating of the Rod Caliper is confirmed when the laser markings at the top of the arms are positioned at the top of both Modular Extended Housings. For Short Modular Housings please utilize the dashed line for verification.*

Figure 10.2
French Rod bender

If patient anatomy requires additional lordosis greater than normal lordotic MIS Rods, use the French Rod Bender to prepare and contour the Rods with progressive bends until obtaining a shape appropriate for the construct (Figure 10.2). Pre-contoured Rods simplify the initial approximation without inducing additional stress into the Rod.

NOTE: *If any additional Rod contouring is performed, Rod length will differ from Rod measurement due to change in curvature. Excessive or repeated bending of Rods may reduce strength and result in construct failure.*

11. ROD INSERTION

The Fascial Wand may be used prior to Rod insertion to create a pathway for passing the Rod through the slots of the Modular Extended Housings. Pass the Fascial Wand through the most cranial Modular Extended Housing or incision, then advance it through each Modular Extended Housing until the most caudal Modular Extended Housing has been reached (Figure 11.1). Slowly pull the instrument back which will dissect the tissue with the distal hook of the instrument.

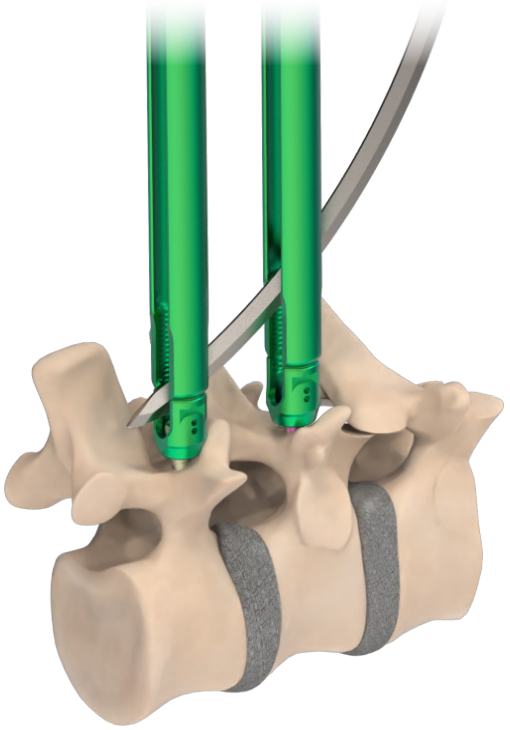


Figure 11.1
Fascial Wand advancing through first Extended Tab

NOTE: *Before using the Fascial Wand for Rod placement, utilize the Housing Alignment Tool to ensure that all of the slots in the Modular Extended Housings align and do not encumber the passing of the Rod (Figure 11.2).*

Figure 11.2
Housing Alignment tool rotates the openings of the Extended Tabs to face each other

11. ROD INSERTION (cont.)

Select the appropriate length Rod as determined by the Rod Caliper and remove from the Rod Caddy. Insert the distal tip of the MIS Rod Inserter into the mating recess of the Rod and rotate threaded knob clockwise to secure distal thread of MIS Rod Inserter to Rod (Figure 11.3).

NOTE: *The Rod can be placed in the MIS Rod Inserter in both a lordotic curvature, or reversed for kyphotic curvature, depending on patient's anatomy.*

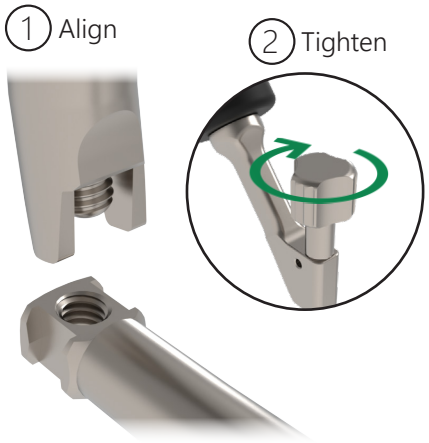


Figure 11.3
Assembly process to attach MIS Rod

Introduce the MIS Rod Inserter in a cranial to caudal orientation with the handle facing in the cranial direction.

Insert the pointed end of the Rod into the most cranial Extended Housing Rod slot opening until it passes below the fascia and into the Modular Housing.

The MIS Rod Inserter will be almost parallel to the patient during this phase of Rod passage. When the distal tip of the Rod enters the distal part of the Modular Housing, begin to rotate the MIS Rod Inserter handle which will push the Rod through each of the remaining Extended Housings. (Figure 11.4).

Figure 11.4
Rod Inserter can be lifted straight up after insertion

11. ROD INSERTION (cont.)

OPTIONAL ROD PLACEMENT – MINI OPEN:

The Mini-Open or Wiltse Rod Holder can be utilized if the surgical approach allows for the use of the instrument. With the distal tips of the instrument open, attach and clamp to the mid portion of the selected Rod. The instrument will allow for dropping between the Modular Extended Housings (Figure 11.5)

Figure 11.5
Wiltse Rod Holder inserting Rod between Extended Tabs

OPTIONAL ROD CONFIRMATION:

Use the Rod Confirmation instrument to ensure Rod is properly placed within screws. Indicator lines on the instrument will show if no Rod is present, Rod is present and requires "XXmm" of reduction but can be captured with a Set Screw as the Modular Housing has 20mm of built in reduction, and if the Rod is present but will require a secondary instrument to persuade the Rod down (Figure 11.6)

Figure 11.6
Rod confirmation with 10mm markings visible

12. SET SCREW INSERTION

With the Set Screw in the caddy, engage the distal end of the Set Screw Driver into the Set Screw (Figure 12.1). The Set Screw Driver has been designed to capture the Set Screw and release once it has been fully seated onto the Rod (Figure 12.2).

NOTE: *Removable tracking tabs are not an implant and should be disposed or provided to hospital materials management for tracking purposes if appropriate.*

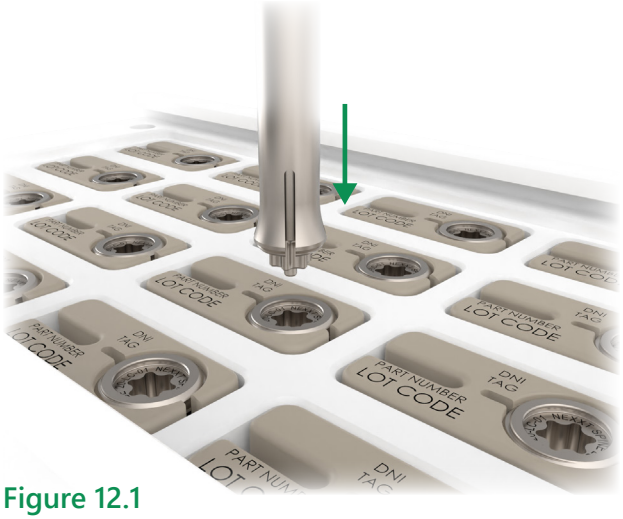


Figure 12.1
Set Screw Driver "Click On" from the caddy

Align the Set Screw Driver with the screw head and introduce the Set Screw. Turn the Set Screw until it comes into contact with the Rod (Figure 12.3). Do not final tighten. Repeat this procedure for inserting all Set Screws.

Figure 12.2
Set Screw Driver retention feature prevents dropping Set Screw in-situ by only releasing after compression on Rod

NOTE: *Markings on Set Screw Driver will indicate if the Rod is fully reduced, requires reduction provided by the Modular Extended Housing, or if a secondary reduction instrument is required.*

NOTE: *Set Screw insertion requires minimal effort to seat within the Modular Extended Housing. Do not force placement as this may damage the threads of the Set Screw. If the Set Screw is difficult to rotate, the Rod may not be seated properly and Rod reduction or contouring may be required.*

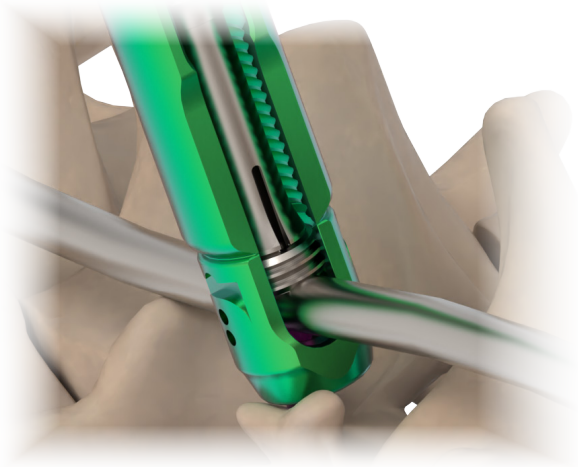


Figure 12.3
Rotating the Set Screw Driver until compression on Rod automatically releases the Set Screw

13. ROD REDUCTION

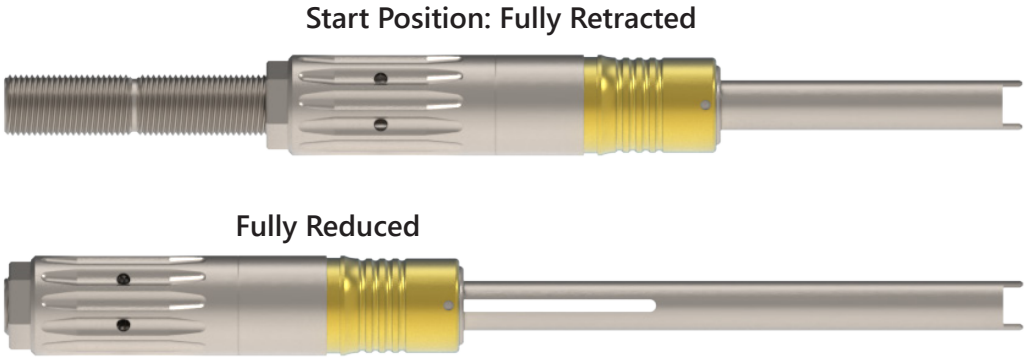


Figure 13.1
Rod Reduction tool states

Reduction greater than 20mm requires the use of the MIS Tower Reducer (Figure 13.1). Rotate the reduction knob on the instrument counterclockwise prior to assembly to Modular Extended Housing.

Insert the MIS Tower Reducer while lining up the distal slot in the main Housing of the instrument. Push the MIS Tower Reducer down (axially) until the spring clips of the instrument engage with the proximal features of the Modular Extended Housing, and verify engagement by pulling (axially) up on the instrument. Pulling up on gold sleeve will release instrument.

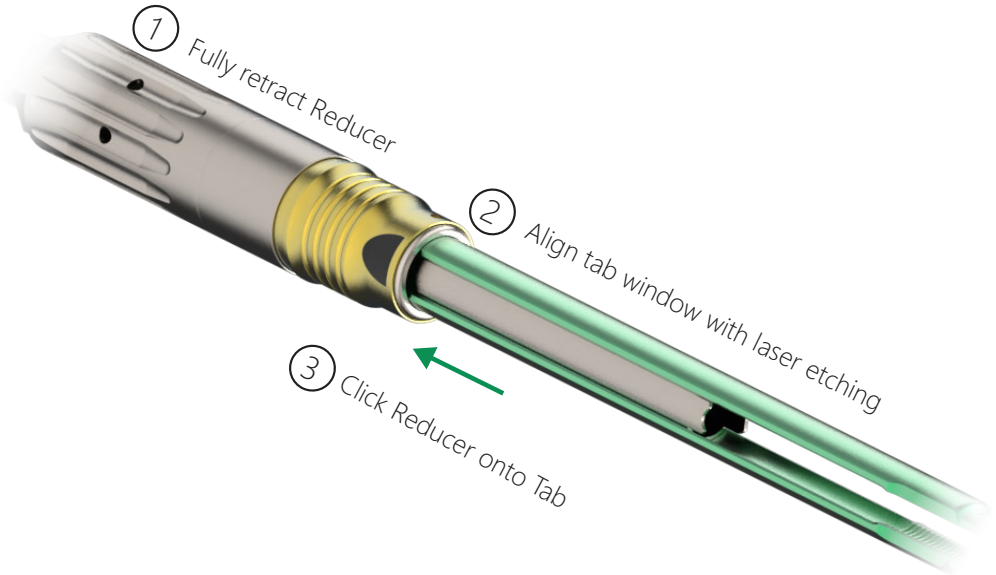


Figure 13.2
Tab window and laser etch aligned

13. ROD REDUCTION (cont.)

Rotate the reduction knob clockwise until the Rod is fully reduced (13.3). The Reducer Deep Socket or Universal T-Handle can be utilized if additional force is required to obtain full reduction.

When the Rod is fully reduced, connect ¼ square handle of choice to the Set Screw Driver and thread into the Modular Extended Housing. (Figure 13.4) Stop insertion of Set Screw when the indicator line on the Set Screw driver is flush with the threaded reduction shaft.

To remove MIS Tower Reducer, rotate reduction knob counterclockwise several turns to remove load on the reduction mechanism. Pull upwards on the gold sleeve and pull the instrument out of the Modular Extended Housing (Figure 13.5).

NOTE: *The Set Screw Drive Shaft attachments options include the following:*

- *¼ Square Ratcheting Handles*
- *Universal T-Handle*
- *¼ Square Acorn Handle*

NOTE: *Reduce the middle levels and inferior/superior levels of a long construct simultaneously for easier Rod seating.*

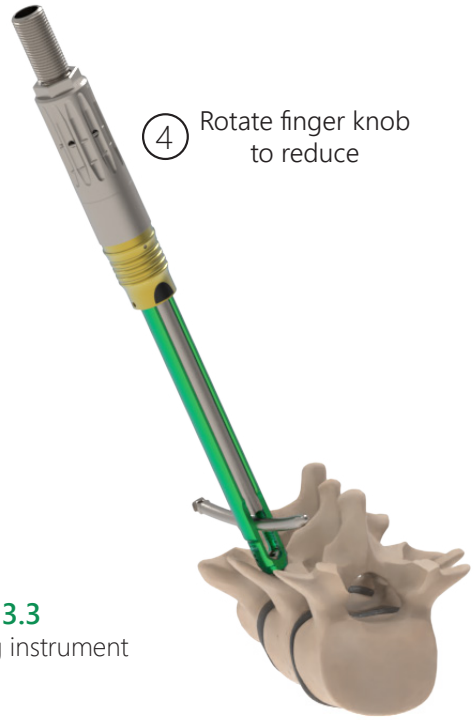


Figure 13.3
Reducing instrument

Figure 13.4
Tightening Set Screw through Rod Reducer

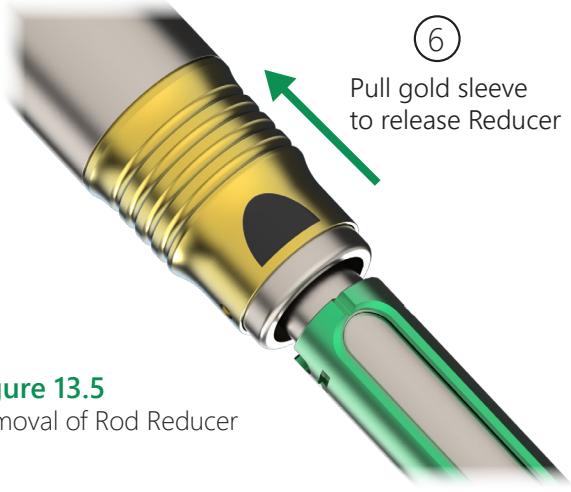


Figure 13.5
Removal of Rod Reducer

14: COMPRESSION AND DISTRACTION

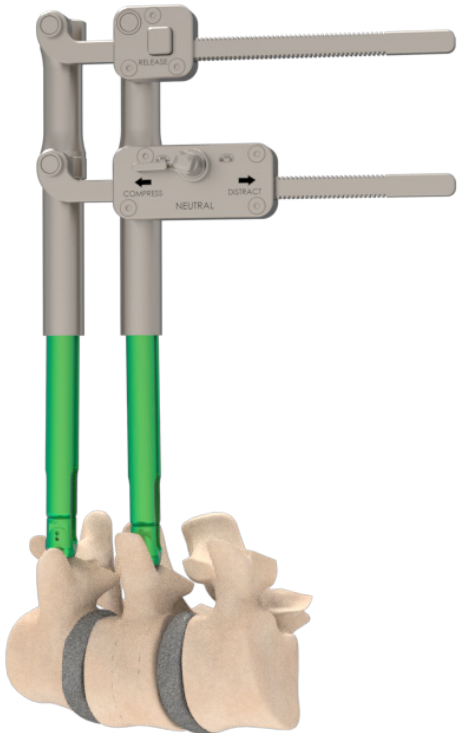


Figure 14.1
Compressor and Distractor assembly attached to Extended Tabs

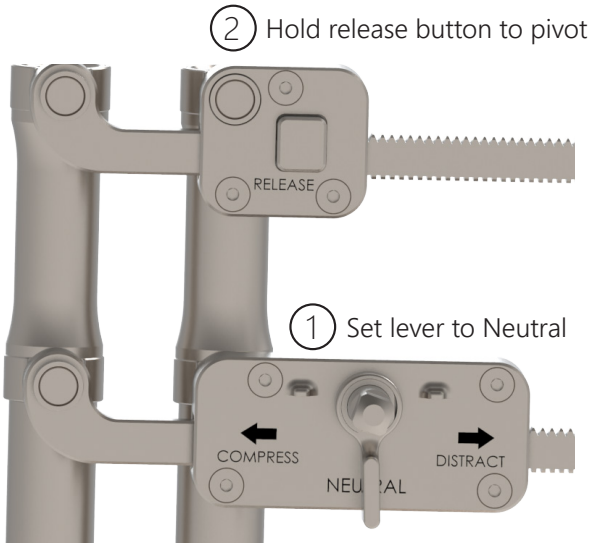


Figure 14.2
Instructions on loading onto Housings

If compression or distraction is desired, provisionally tighten a Set Screw on one side of the motion segment, leaving the adjacent Set Screw loose to allow movement along the Rod. The Compression/Distraction Rack does not require assembly and comes pre-assembled for use in surgery.
Slide the Compression/Distraction Rack over the sequential Extended Tab Housings. (Figure 14.1). Ensure that the lower fulcrum switch is placed in "NEUTRAL" before assembly to the Housings (Figure 14.2).

NOTE: *Compression/Distraction Rack provides a stop feature when placing the instrument on the Housing, as well as a visualization window to ensure that the instrument is fully seated on both Housings.*

Surgeon can set the upper fulcrum point position, depending on Housing spacing by depressing the button which will allow the rack to slide freely. Release the button to set the final position.

14. COMPRESSION AND DISTRACTION (cont.)

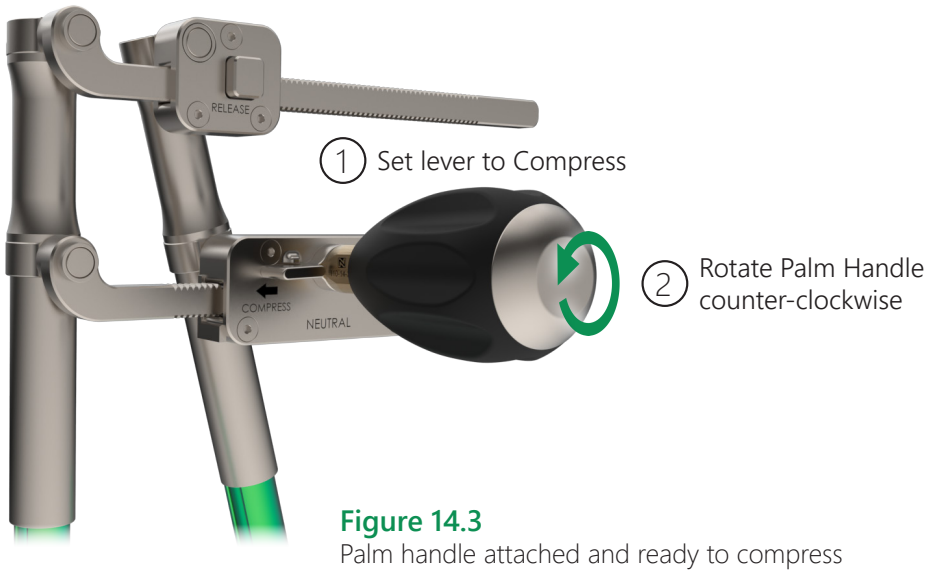


Figure 14.3
Palm handle attached and ready to compress

TO COMPRESS

Begin with the guide tubes slightly "toed in" to each other at the top of the rack to establish the pivot point. Slide the bottom fulcrum switch to "COMPRESS" and verify that the upper fulcrum is secured in place (Figure 14.3).

Attach the ¼ Square Acorn Handle to the mating knob on the lower fulcrum and rotate the handle counterclockwiste.

When appropriate compression has been achieved, insert Set Screw Driver into the tube and provisionally tighten. Place the lower fulcrum switch into the "NEUTRAL" position and remove from Extended Tab Housings.

Final tighten provisionally tightened Set Screw per STEP 15: Final Tightening.

14. COMPRESSION AND DISTRACTION (cont.)

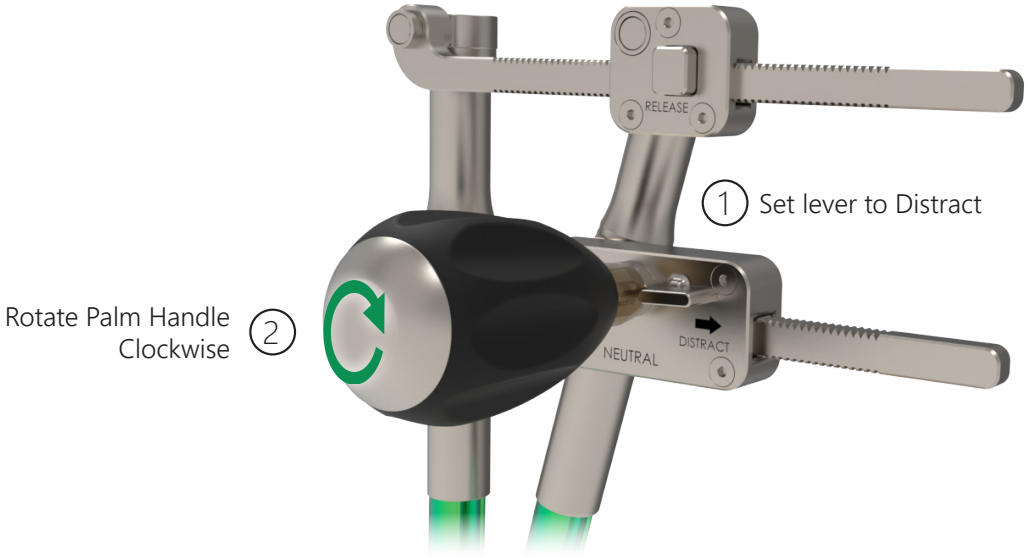


Figure 14.4
Palm handle attached and ready to Distract

TO DISTRACT

Begin with the guide tubes slightly "toed out" to each other at the top of the rack to establish the pivot point. Slide the bottom fulcrum switch to "DISTRACT" and verify that the upper fulcrum is secured in place (Figure 14.4).

Attach the ¼ Square Acorn Handle to the mating knob on the lower fulcrum and rotate the handle clockwise.

When appropriate distraction has been achieved, insert Set Screw Driver into the tube and provisionally tighten. Place the lower fulcrum switch into the "NEUTRAL" position and remove from Extended Tab Housings.

Final tighten provisionally tightened Set Screw per STEP 15: Final Tightening.

15. FINAL TIGHTENING

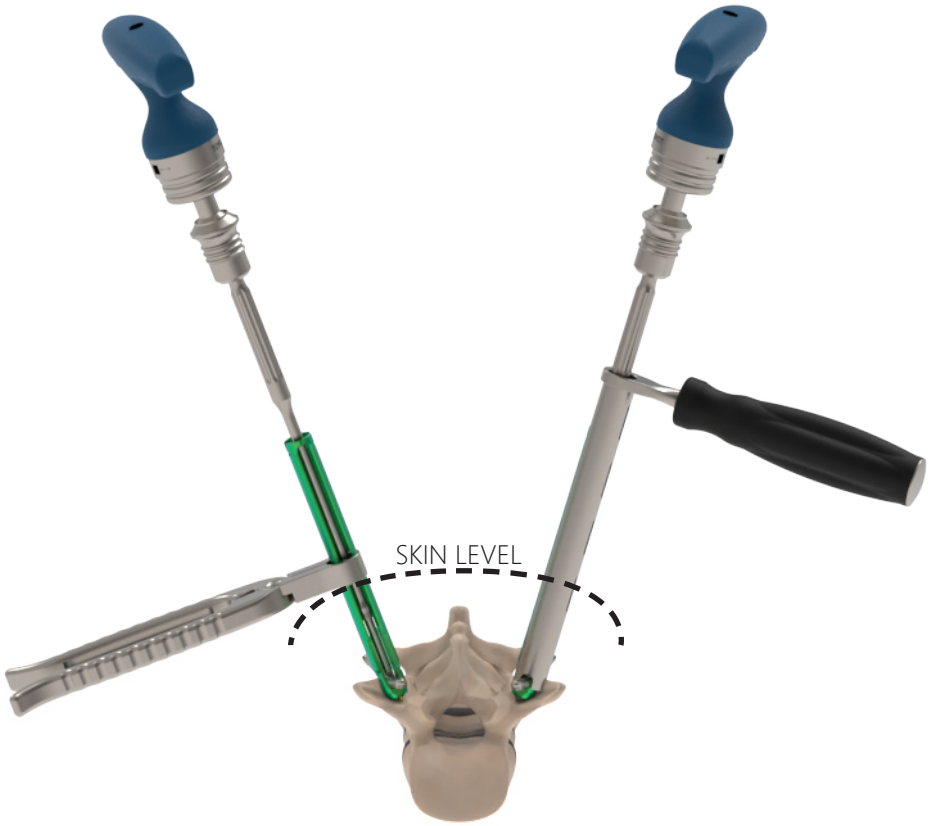


Figure 15.1
Two methods of counter-torque for final tightening

All Set Screws must be tightened to a torque of 90 in-lbs. to affect a secure construct.

Attach the 90 in-lbs. Torque Limiting Handle to the Set Screw Driver. Slide the Counter-torque over the Extended Tab Housing until the instrument bottoms out and rests on the Rod (Figure 15.1). Insert the Set Screw Driver through the Counter-torque and seat securely into the Extended Tab Housing. Turn the Torque Limiting Handle clockwise until the breakaway torque is reached. Final tightening is achieved when the Torque Limiting Handle audibly clicks. Repeat on each screw.

NOTE: *Ensure the Rod is placed appropriately and has adequate overhang prior to final tightening. Ensure that all levels on the construct are fully reduced and lock screws are delivered prior to final tightening.*

WARNING: Do not final tighten construct without the Counter-torque instrument as this may cause the Extended Tab Housing to deform and prematurely disassociate the Extended Tabs.

16. TAB REMOVAL

After construct is final tightened, insert Tab Removal Tool into desired screw with handle orientated medial/lateral and clipping jaws engaged with proximal end of Extended Tabs (Fig. 16.1). Apply squeezing pressure until proximal ring separates (Fig 16.2). Apply medial/lateral force to remove Extended Tab from tulip. Repeat on alternate side of construct.

NOTE: *After separating proximal tulip connection, maintain squeeze pressure to retain one tulip after medial/lateral motion. Release tab from Tab Removal Tool by relaxing squeeze pressure.*

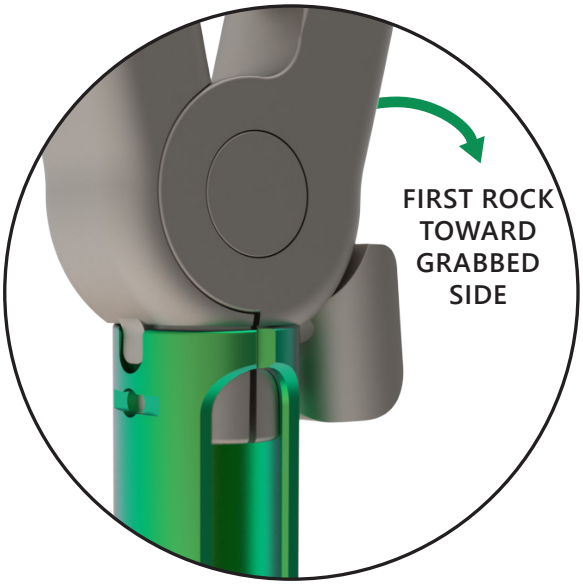


Figure 16.1
MIS Tab Remover Tool seated in notch of Extended Tab

Figure 16.2
MIS Tab Remover squeeze and rocking motion

17. RESCUE TOWER PROCEDURE

If the Extended Tabs prematurely disassociates during the procedure, the OPEN Rod Reducer may be used as a rescue tower.

Push Dilator 3 over the Housing to clear a path for the Rescue Tower Guide Rod.

Insert the Rescue Tower Guide Rod down Dilator 3 and into the Housing by aligning the top of the instrument with the Housing as shown. (Figure 17.1). Push down and thread instrument after mating. Remove Dilator 3.

Figure 17.1
The instrument top is designed to reflect the orientation of the Housing

Slide a fully retracted Open Reducer down the Rescue Tower Guide Rod until the Open Reducer connects with the Housing. Remove the Rescue Tower Guide Rod and resume the procedure with the standard Set Screw Driver.

① Dilator 3 used to gain access to Housing

② Rescue Tower Guide Rod inserted into Housing

③ **Open** Reducer mates with Housing as Rescue Tower

IMPLANT PART NUMBERS

Parts designated with * are OPTIONAL ORDER. Green cells indicate Standard Order.

Set Screw

Standard P/N	Description
20-LC-01	Set Screw

Extended Tab

Standard P/N	Description
20-ETL-01	Extended Tab L 170mm
20-ETM-01	Extended Tab M 140mm

Spinal Rods

Standard P/N	Description
Ø5.5mm x XXXmm Curved Rod	
20-RC55-035	Ø5.5mm x 35mm
20-RC55-040	Ø5.5mm x 40mm
20-RC55-045	Ø5.5mm x 45mm
20-RC55-050	Ø5.5mm x 50mm
20-RC55-055	Ø5.5mm x 55mm
20-RC55-060	Ø5.5mm x 60mm
20-RC55-065	Ø5.5mm x 65mm
20-RC55-070	Ø5.5mm x 70mm
20-RC55-075	Ø5.5mm x 75mm
20-RC55-080	Ø5.5mm x 80mm
20-RC55-085*	Ø5.5mm x 85mm
20-RC55-090	Ø5.5mm x 90mm
20-RC55-095*	Ø5.5mm x 95mm
20-RC55-100	Ø5.5mm x 100mm
20-RC55-105*	Ø5.5mm x 105mm
20-RC55-110	Ø5.5mm x 110mm
20-RC55-115*	Ø5.5mm x 115mm
20-RC55-120*	Ø5.5mm x 120mm
20-RC55-125*	Ø5.5mm x 125mm
20-RC55-130*	Ø5.5mm x 130mm
20-RC55-135*	Ø5.5mm x 135mm
20-RC55-140*	Ø5.5mm x 140mm
20-RC55-145*	Ø5.5mm x 145mm
20-RC55-150*	Ø5.5mm x 150mm

Standard P/N	Description
Ø5.5mm x XXXmm Straight Rod	
20-RS55-200*	Ø5.5mm x 200mm
20-RS55-300*	Ø5.5mm x 300mm
20-RS55-400*	Ø5.5mm x 400mm

Cannulated Shanks

Standard P/N	Description
Ø5.0mm x XXmm Shanks	
20-SCS-5020*	Ø5.0mm x 20mm
20-SCS-5025*	Ø5.0mm x 25mm
20-SCS-5030*	Ø5.0mm x 30mm
20-SCS-5035*	Ø5.0mm x 35mm
20-SCS-5040*	Ø5.0mm x 40mm
20-SCS-5045*	Ø5.0mm x 45mm
20-SCS-5050*	Ø5.0mm x 50mm
20-SCS-5055*	Ø5.0mm x 55mm
20-SCS-5060*	Ø5.0mm x 60mm
20-SCS-5065*	Ø5.0mm x 65mm
20-SCS-5070*	Ø5.0mm x 70mm
20-SCS-5075*	Ø5.0mm x 75mm
20-SCS-5080*	Ø5.0mm x 80mm

Standard P/N	Description
Ø5.5mm x XXmm Shanks	
20-SCS-5520*	Ø5.5mm x 20mm
20-SCS-5525*	Ø5.5mm x 25mm
20-SCS-5530	Ø5.5mm x 30mm
20-SCS-5535	Ø5.5mm x 35mm
20-SCS-5540	Ø5.5mm x 40mm
20-SCS-5545	Ø5.5mm x 45mm
20-SCS-5550	Ø5.5mm x 50mm
20-SCS-5555*	Ø5.5mm x 55mm
20-SCS-5560*	Ø5.5mm x 60mm
20-SCS-5565*	Ø5.5mm x 65mm
20-SCS-5570*	Ø5.5mm x 70mm
20-SCS-5575*	Ø5.5mm x 75mm
20-SCS-5580*	Ø5.5mm x 80mm

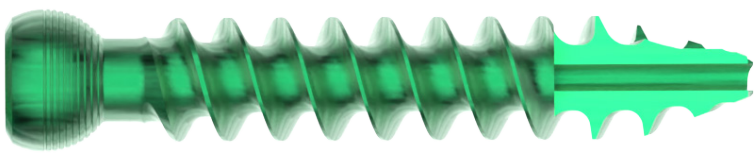
Standard P/N	Description
Ø6.0mm x XXmm Shanks	
20-SCS-6020*	Ø6.0mm x 20mm
20-SCS-6025*	Ø6.0mm x 25mm
20-SCS-6030*	Ø6.0mm x 30mm
20-SCS-6035*	Ø6.0mm x 35mm
20-SCS-6040*	Ø6.0mm x 40mm
20-SCS-6045*	Ø6.0mm x 45mm
20-SCS-6050*	Ø6.0mm x 50mm
20-SCS-6055*	Ø6.0mm x 55mm
20-SCS-6060*	Ø6.0mm x 60mm
20-SCS-6065*	Ø6.0mm x 65mm
20-SCS-6070*	Ø6.0mm x 70mm
20-SCS-6075*	Ø6.0mm x 75mm
20-SCS-6080*	Ø6.0mm x 80mm

Standard P/N	Description
Ø6.5mm x XXmm Shanks	
20-SCS-6520*	Ø6.5mm x 20mm
20-SCS-6525*	Ø6.5mm x 25mm
20-SCS-6530*	Ø6.5mm x 30mm
20-SCS-6535	Ø6.5mm x 35mm
20-SCS-6540	Ø6.5mm x 40mm
20-SCS-6545	Ø6.5mm x 45mm
20-SCS-6550	Ø6.5mm x 50mm
20-SCS-6555	Ø6.5mm x 55mm
20-SCS-6560*	Ø6.5mm x 60mm
20-SCS-6565*	Ø6.5mm x 65mm
20-SCS-6570*	Ø6.5mm x 70mm
20-SCS-6575*	Ø6.5mm x 75mm
20-SCS-6580*	Ø6.5mm x 80mm
20-SCS-6585*	Ø6.5mm x 85mm
20-SCS-6590*	Ø6.5mm x 90mm
20-SCS-6595*	Ø6.5mm x 95mm
20-SCS-65100*	Ø6.5mm x 100mm

Standard P/N	Description
Ø7.0mm x XXmm Shanks	
20-SCS-7020*	Ø7.0mm x 20mm
20-SCS-7025*	Ø7.0mm x 25mm
20-SCS-7030*	Ø7.0mm x 30mm
20-SCS-7035*	Ø7.0mm x 35mm
20-SCS-7040*	Ø7.0mm x 40mm
20-SCS-7045*	Ø7.0mm x 45mm
20-SCS-7050*	Ø7.0mm x 50mm
20-SCS-7055*	Ø7.0mm x 55mm
20-SCS-7060*	Ø7.0mm x 60mm
20-SCS-7065*	Ø7.0mm x 65mm
20-SCS-7070*	Ø7.0mm x 70mm
20-SCS-7075*	Ø7.0mm x 75mm
20-SCS-7080*	Ø7.0mm x 80mm
20-SCS-7085*	Ø7.0mm x 85mm
20-SCS-7090*	Ø7.0mm x 90mm
20-SCS-7095*	Ø7.0mm x 95mm
20-SCS-70100*	Ø7.0mm x 100mm

Standard P/N	Description
Ø7.5mm x XXmm Shanks	
20-SCS-7520*	Ø7.5mm x 20mm
20-SCS-7525*	Ø7.5mm x 25mm
20-SCS-7530*	Ø7.5mm x 30mm
20-SCS-7535	Ø7.5mm x 35mm
20-SCS-7540	Ø7.5mm x 40mm
20-SCS-7545	Ø7.5mm x 45mm
20-SCS-7550	Ø7.5mm x 50mm
20-SCS-7555	Ø7.5mm x 55mm
20-SCS-7560*	Ø7.5mm x 60mm
20-SCS-7565*	Ø7.5mm x 65mm
20-SCS-7570*	Ø7.5mm x 70mm
20-SCS-7575*	Ø7.5mm x 75mm
20-SCS-7580*	Ø7.5mm x 80mm
20-SCS-7585*	Ø7.5mm x 85mm
20-SCS-7590*	Ø7.5mm x 90mm
20-SCS-7595*	Ø7.5mm x 95mm
20-SCS-75100*	Ø7.5mm x 100mm

Standard P/N	Description
Ø8.5mm x XXmm Shanks	
20-SCS-8540*	Ø8.5mm x 40mm
20-SCS-8545*	Ø8.5mm x 45mm
20-SCS-8550*	Ø8.5mm x 50mm
20-SCS-8555*	Ø8.5mm x 55mm
20-SCS-8560*	Ø8.5mm x 60mm
20-SCS-8565*	Ø8.5mm x 65mm
20-SCS-8570*	Ø8.5mm x 70mm
20-SCS-8575*	Ø8.5mm x 75mm
20-SCS-8580*	Ø8.5mm x 80mm
20-SCS-8585*	Ø8.5mm x 85mm
20-SCS-8590*	Ø8.5mm x 90mm
20-SCS-8595*	Ø8.5mm x 95mm
20-SCS-85100*	Ø8.5mm x 100mm
20-SCS-85105*	Ø8.5mm x 105mm
20-SCS-85110*	Ø8.5mm x 110mm
20-SCS-85115*	Ø8.5mm x 115mm
20-SCS-85120*	Ø8.5mm x 120mm



Shank shown in partial cross section to illustrate cannula

Cannulated Corticocancellous

Standard P/N	Description
Ø5.0mm x XXmm Shanks	
20-SCC-5025*	Ø5.0mm x 25mm
20-SCC-5030*	Ø5.0mm x 30mm
20-SCC-5035*	Ø5.0mm x 35mm
20-SCC-5040*	Ø5.0mm x 40mm
20-SCC-5045*	Ø5.0mm x 45mm
20-SCC-5050*	Ø5.0mm x 50mm
20-SCC-5055*	Ø5.0mm x 55mm
20-SCC-5060*	Ø5.0mm x 60mm
20-SCC-5065*	Ø5.0mm x 65mm
20-SCC-5070*	Ø5.0mm x 70mm
20-SCC-5075*	Ø5.0mm x 75mm
20-SCC-5080*	Ø5.0mm x 80mm

Standard P/N	Description
Ø5.5mm x XXmm Shanks	
20-SCC-5525*	Ø5.5mm x 25mm
20-SCC-5530*	Ø5.5mm x 30mm
20-SCC-5535*	Ø5.5mm x 35mm
20-SCC-5540*	Ø5.5mm x 40mm
20-SCC-5545*	Ø5.5mm x 45mm
20-SCC-5550*	Ø5.5mm x 50mm
20-SCC-5555*	Ø5.5mm x 55mm
20-SCC-5560*	Ø5.5mm x 60mm
20-SCC-5565*	Ø5.5mm x 65mm
20-SCC-5570*	Ø5.5mm x 70mm
20-SCC-5575*	Ø5.5mm x 75mm
20-SCC-5580*	Ø5.5mm x 80mm

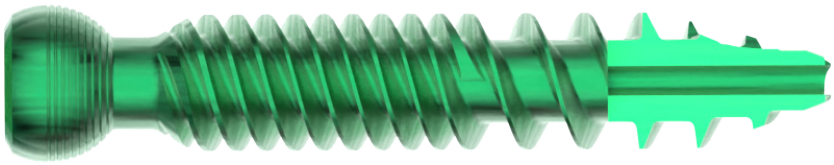
Standard P/N	Description
Ø6.0mm x XXmm Shanks	
20-SCC-6025*	Ø6.0mm x 25mm
20-SCC-6030*	Ø6.0mm x 30mm
20-SCC-6035*	Ø6.0mm x 35mm
20-SCC-6040*	Ø6.0mm x 40mm
20-SCC-6045*	Ø6.0mm x 45mm
20-SCC-6050*	Ø6.0mm x 50mm
20-SCC-6055*	Ø6.0mm x 55mm
20-SCC-6060*	Ø6.0mm x 60mm
20-SCC-6065*	Ø6.0mm x 65mm
20-SCC-6070*	Ø6.0mm x 70mm
20-SCC-6075*	Ø6.0mm x 75mm
20-SCC-6080*	Ø6.0mm x 80mm

Standard P/N	Description
Ø6.5mm x XXmm Shanks	
20-SCC-6525*	Ø6.5mm x 25mm
20-SCC-6530*	Ø6.5mm x 30mm
20-SCC-6535*	Ø6.5mm x 35mm
20-SCC-6540*	Ø6.5mm x 40mm
20-SCC-6545*	Ø6.5mm x 45mm
20-SCC-6550*	Ø6.5mm x 50mm
20-SCC-6555*	Ø6.5mm x 55mm
20-SCC-6560*	Ø6.5mm x 60mm
20-SCC-6565*	Ø6.5mm x 65mm
20-SCC-6570*	Ø6.5mm x 70mm
20-SCC-6575*	Ø6.5mm x 75mm
20-SCC-6580*	Ø6.5mm x 80mm
20-SCC-6585*	Ø6.5mm x 85mm
20-SCC-6590*	Ø6.5mm x 90mm
20-SCC-6595*	Ø6.5mm x 95mm
20-SCC-65100*	Ø6.5mm x 100mm

Standard P/N	Description
Ø7.0mm x XXmm Shanks	
20-SCC-7025*	Ø7.0mm x 25mm
20-SCC-7030*	Ø7.0mm x 30mm
20-SCC-7035*	Ø7.0mm x 35mm
20-SCC-7040*	Ø7.0mm x 40mm
20-SCC-7045*	Ø7.0mm x 45mm
20-SCC-7050*	Ø7.0mm x 50mm
20-SCC-7055*	Ø7.0mm x 55mm
20-SCC-7060*	Ø7.0mm x 60mm
20-SCC-7065*	Ø7.0mm x 65mm
20-SCC-7070*	Ø7.0mm x 70mm
20-SCC-7075*	Ø7.0mm x 75mm
20-SCC-7080*	Ø7.0mm x 80mm
20-SCC-7085*	Ø7.0mm x 85mm
20-SCC-7090*	Ø7.0mm x 90mm
20-SCC-7095*	Ø7.0mm x 95mm
20-SCC-70100*	Ø7.0mm x 100mm

Standard P/N	Description
Ø7.5mm x XXmm Shanks	
20-SCC-7525*	Ø7.5mm x 25mm
20-SCC-7530*	Ø7.5mm x 30mm
20-SCC-7535*	Ø7.5mm x 35mm
20-SCC-7540*	Ø7.5mm x 40mm
20-SCC-7545*	Ø7.5mm x 45mm
20-SCC-7550*	Ø7.5mm x 50mm
20-SCC-7555*	Ø7.5mm x 55mm
20-SCC-7560*	Ø7.5mm x 60mm
20-SCC-7565*	Ø7.5mm x 65mm
20-SCC-7570*	Ø7.5mm x 70mm
20-SCC-7575*	Ø7.5mm x 75mm
20-SCC-7580*	Ø7.5mm x 80mm
20-SCC-7585*	Ø7.5mm x 85mm
20-SCC-7590*	Ø7.5mm x 90mm
20-SCC-7595*	Ø7.5mm x 95mm
20-SCC-75100*	Ø7.5mm x 100mm

Standard P/N	Description
Ø8.5mm x XXmm Shanks	
20-SCC-8540*	Ø8.5mm x 40mm
20-SCC-8545*	Ø8.5mm x 45mm
20-SCC-8550*	Ø8.5mm x 50mm
20-SCC-8555*	Ø8.5mm x 55mm
20-SCC-8560*	Ø8.5mm x 60mm
20-SCC-8565*	Ø8.5mm x 65mm
20-SCC-8570*	Ø8.5mm x 70mm
20-SCC-8575*	Ø8.5mm x 75mm
20-SCC-8580*	Ø8.5mm x 80mm
20-SCC-8585*	Ø8.5mm x 85mm
20-SCC-8590*	Ø8.5mm x 90mm
20-SCC-8595*	Ø8.5mm x 95mm
20-SCC-85100*	Ø8.5mm x 100mm
20-SCC-85105*	Ø8.5mm x 105mm
20-SCC-85110*	Ø8.5mm x 110mm
20-SCC-85115*	Ø8.5mm x 115mm
20-SCC-85120*	Ø8.5mm x 120mm



Shank shown in partial cross section to illustrate cannula

INSTRUMENT PART NUMBERS

In-Situ Driver

Standard P/N	Description
I20-10-02	In-Situ Driver, T25

Jamshidi Needle

Standard P/N	Description
RAN-1115N	Jamshidi Needle

OPEN Reducer / Rescue

Standard P/N	Description
I20-10-05	Open Inline Reducer / Rescue Tower

Set Screw Driver

Standard P/N	Description
I20-10-06	Set Screw Inserter

Universal T Handle

Standard P/N	Description
I20-10-07*	Universal T-Handle

Short Set Screw Driver

Standard P/N	Description
I20-10-09	S. Set Screw Inserter

Rescue Tower Guide Rod

Standard P/N	Description
I20-21-01	Rescue Tower Guide Rod

Tap Dilator

Standard P/N	Description
I20-14-25	Tap Dilator

Cannulated Decorticating Tool

Standard P/N	Description
I20-14-31	Decorticating Tool

Rod Confirmation

Standard P/N	Description
I20-16-05	Rod Confirmation

Cannulated Taps

Standard P/N	Description
I20-14-45*	4.5mm Cann. Tap
I20-14-55	5.5mm Cann. Tap
I20-14-65	6.5mm Cann. Tap
I20-14-75	7.5mm Cann. Tap

Dilator Set

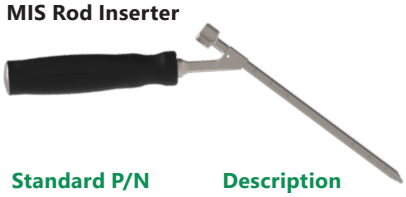
Standard P/N	Description
I20-14-10	Dilator 1
I20-14-20	Dilator 2
I20-14-30	Dilator 3

INSTRUMENT PART NUMBERS (cont)

Fascial Wand

Standard P/N	Description
I20-16-02	Fascial Wand

MIS Rod Inserter



Standard P/N	Description
I20-16-06	MIS Rod Inserter

Rod Measuring Caliper

Standard P/N	Description
I20-16-04	Rod Measuring Caliper

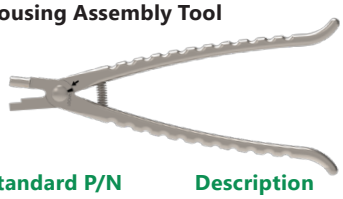
Cannulated Screw Inserter

Standard P/N	Description
I20-16-01	Cannulated Screw Inserter

Reducer Deep Socket

Standard P/N	Description
I20-18-02	Reducer Deep Socket

Housing Assembly Tool



Standard P/N	Description
I20-16-07	Tulip Assembly Tool

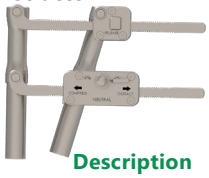
MIS Tower Reducer

Standard P/N	Description
I20-18-01	MIS Tower Reducer

Pear Handle 1/4" Square

Standard P/N	Description
I10-14-37	Quick 1/4" SQ Pear

Compressor/Distractor



Standard P/N	Description
I20-18-03	Compression/ Distraction Assembly

Tower Turner

Standard P/N	Description
I20-16-03	Tower Turner

90LB Square Handle

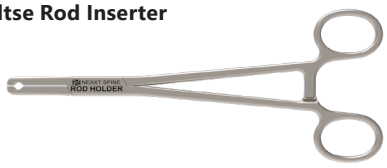
Standard P/N	Description
I10-01-11	Torque Limiting, 90lb, 1/4" Square

Ratchet T-Handle

Standard P/N	Description
I10-01-25	Ratcheting T-Handle, 1/4" Square

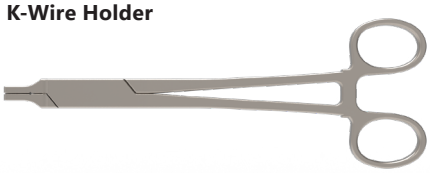
INSTRUMENT PART NUMBERS (cont)

Wiltse Rod Inserter



Standard P/N	Description
I10-08-06	Wiltse Rod Inserter

K-Wire Holder

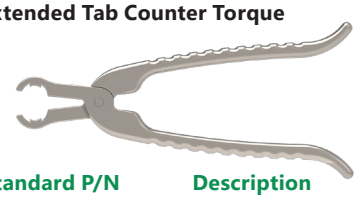


Standard P/N	Description
I10-14-01	K-Wire Holder

K-Wire

Standard P/N	Description
I10-14-191	K Wire - Trocar Thrd.
I10-14-193*	K Wire - Blunt Thrd.

Extended Tab Counter Torque

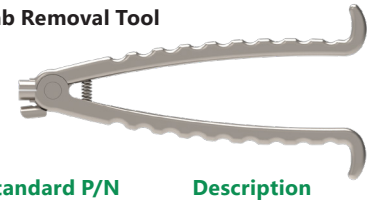


Standard P/N	Description
I20-20-01	Extended Tab Counter Torque

MIS Counter Torque

Standard P/N	Description
I20-20-02	MIS Counter Torque

Tab Removal Tool



Standard P/N	Description
I20-20-06	Tab Removal Tool

Dilator Pusher-Rotator

Standard P/N	Description
I20-14-33	Dilator Pusher Rotator

5.5mm Rod Bender

Standard P/N	Description
I10-30-04	5.5mm Rod Bender

1/4" Square Adapter

Standard P/N	Description
I92-01-02*	1/4" Square Adapter

Cannulated Awl 9mm

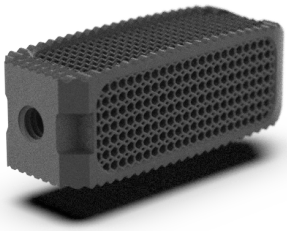
Standard P/N	Description
I10-14-02*	9mm Cannulated Awl

Set Screw Inserter Sping Tip

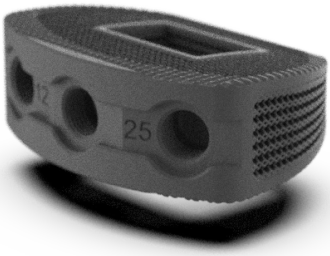
Standard P/N	Description
I20-10-10	Set Screw Inserter Tip

COMPATIBLE PRODUCT LINE

MATRIXX® TLIF Oblique

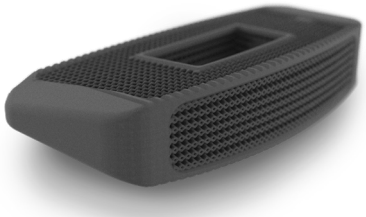


MATRIXX® ALIF



MATRIXX® TLIF / rTLIF

MATRIXX® Lateral



Nexxt Spine, LLC
14425 Bergen Blvd, Suite B
Noblesville, IN 46060
(317) 436-7801
Info@NexxtSpine.com
NexxtSpine.com

For indications, contraindications, warnings, precautions, potential adverse effects and patient counseling information, see the package insert or contact your local representative; visit NexxtSpine.com for additional product information.

71-051, Rev A