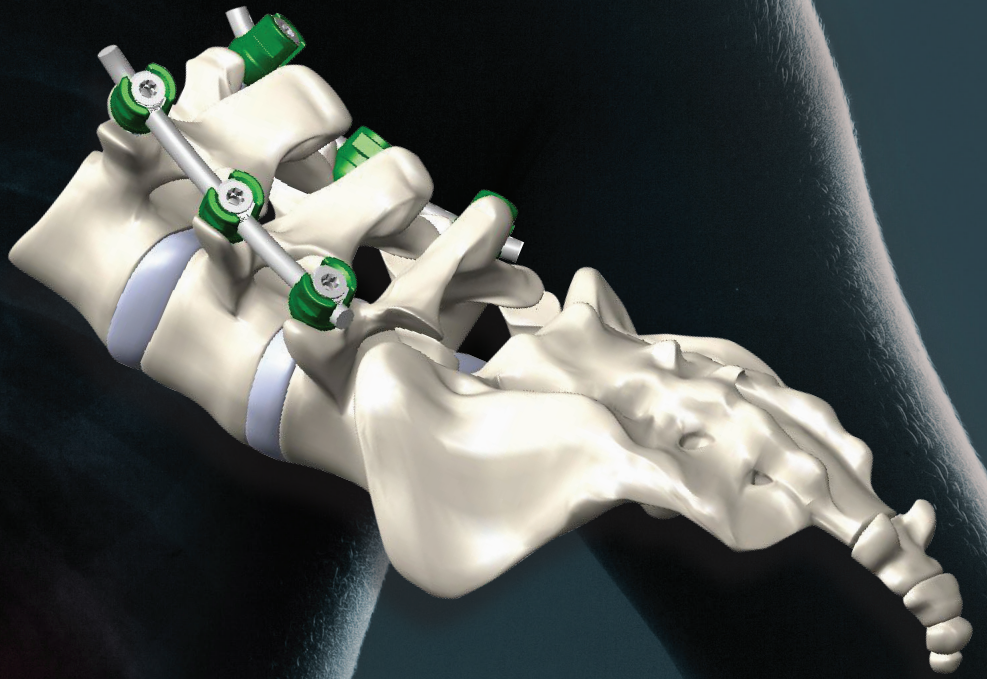


# **SURGICAL TECHNIQUE GUIDE**



**SPINE**



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**CAUTION: Federal Law (USA) restricts these devices to sale by or on the order of a physician. Rx Only.**

## Device Description

Pedicle Screw Fixation System is an implant device made from a titanium alloy TI 6Al 4V-ELI. It is to be implanted from the posterior approach. The system consists of rods, poly-axial screws and set screws. The screws are available in diameters of Ø4.50mm, Ø5.50mm, Ø6.50mm, and Ø7.50mm and in lengths of 20mm-60mm. Standard and Reduction Pedicle Screws are both available in these sizes. Titanium rods are available in Ø5.50mm diameter and either straight in lengths from 100mm-300mm or precontoured in lengths from 30mm-125mm. Set screws are used to fasten the rods and poly-axial screws. Implants are provided sterile in individual packaging.

Special instruments are used to implant the pedicle system. Instruments are provided as non-sterile and require sterilization prior to use.

## INDICATIONS & CONTRAINDICATIONS

### Indications

The OrthoCircle Spine Pedicle Screw System is a thoracolumbosacral (T1-S1) spinal fixation system containing devices intended for use as a posterior pedicle screw fixation system. Pedicle screw fixation is limited to skeletally mature patients. These devices are indicated as an adjunct to fusion for all the following indications: degenerative disc disease (defined as discogenic back pain 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, and/or lordosis), tumor, and/or failed previous fusion (pseudoarthrosis).

### Contraindications

1. Infection, systemic or localized, particularly in or adjacent to the spine or spinal structures
2. Poor bone quality or quantity that does not allow adequate fixation of the implant
3. Metal sensitivity/allergies to the implant material (titanium alloy)
4. Active infectious process or significant risk of infection
5. Fever or leukocytosis
6. Suspected or documented sensitivity or allergies to the implant materials
7. Presence of congenital abnormalities, vague spinal anatomy, tumors, or any other condition which prevents secure implant screw fixation and/or decreases the useful life of the device
8. Rapid joint disease, bone absorption, and/or severe osteoporosis
9. Conditions that preclude successful fusion (i.e. cancer, kidney dialysis, or osteopenia)
10. Any patient unwilling to cooperate with post-operative instructions
11. Prior fusions at the level(s) to be treated
12. Morbid Obesity
13. Pregnancy

### Warnings

- 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 neurologic impairment, fracture, spinal tumor, and failed previous fusion (pseudoarthrosis). The safety and effectiveness of these devices for any other conditions are unknown.
- This device system is not intended to be the sole means of spinal support. Its use without a bone graft or in cases that develop into a non-union will not be successful. No spinal implant can withstand the loads of the body without maturation of a solid fusion mass, and in this case, bending, loosening or fracture of the implant will eventually occur. The proper selection and compliance of the patient will greatly affect the results.
- Even with the use of spinal implants, a successful result in terms of pain, function, or fusion is not always achieved in every surgical case.

## Cautions and Precautions

### CAUTIONS

- Mixing of dissimilar metals can accelerate the corrosion process. Stainless steel and titanium components must NOT be used together.
- Do not use components of the Pedicle Screw System with components from any other manufacturer.
- As with all orthopedic implants, none of the Pedicle Screw System components should ever be reused under any circumstances.

### Precautions

**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.**

When used in the following conditions, the surgeon must weigh the risks versus potential benefits.

- History of Smoking
- Morbid obesity
- Mental illness
- Alcoholism or drug abuse
- Pregnancy
- Severe osteopenia
- Any condition having inadequate tissue coverage over the operative site
- Any circumstances not described under Indications for Use
- Patients unwilling or unable to follow post-operative instructions

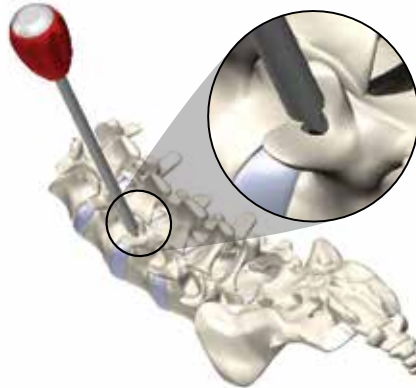
### MRI Safety Information

The OrthoCircle Spine Pedicle Screw System has not been evaluated for safety and compatibility in the MR environment. It has not been tested for heating, migration, or image artifact in the MR environment. The safety of OrthoCircle Spine Pedicle Screw System in the MR environment is unknown. Scanning a patient who has this device may result in patient injury.

## PREPARE THE PEDICLE FOR THE SCREW

### Step 1: Prepare the Pedicle

Once the pedicle is identified, use the **Pedicle Awl** to breach the cortical exterior of the vertebrae.

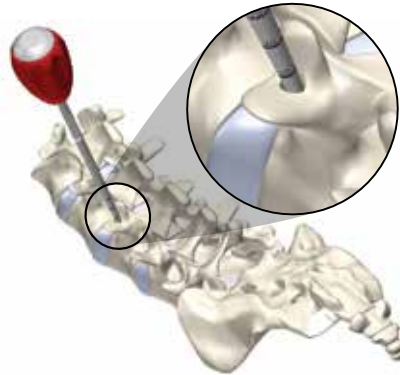


### Step 2: Create the Pedicle Canal

Open the pedicle canal using one of the available **Pedicle Probes**.

Advance the **Pedicle Probe** through the pedicle and into the vertebral body until desired screw depth is reached.

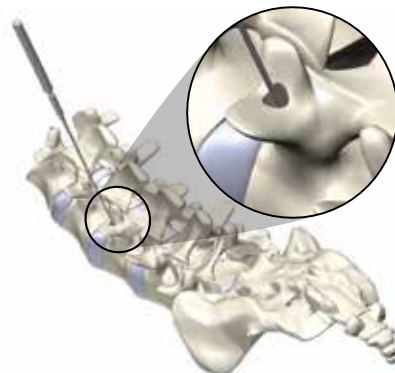
Depth markings are located on the **Pedicle Probe** to determine hole depth and hence suggested screw length.



### Step 3: Confirm Integrity of Pedicle

Remove the **Pedicle Probe** and use either the **Straight and/or Curved Pedicle Sounder** to feel the medial, lateral and anterior walls as well as the base of the hole created by the **Pedicle Probe**.

If a breached pedicle wall is observed, use the **Pedicle Probe** to create a hole at a different trajectory to avoid a cortical breach.



### INSTRUMENTS



Pedicle Awl | 101.134



Pedicle Probe - Straight | 101.107



Pedicle Probe - Curved | 101.108



Pedicle Probe - Duckbill | 101.106



Sounder - Straight | 101.109



Sounder - Curved | 101.110

## PREPARE THE PEDICLE SCREW FOR INSERTION

### INSTRUMENTS



Palm Handle | 101.105



In-Line Handle - Ratcheting | 101.101



T-Handle - Ratcheting | 101.102



Tap - 4.5mm | 101.111



Tap - 5.5mm | 101.112



Tap - 6.5mm | 101.113



Tap - 7.5mm | 101.114



Locking Driver Shaft | 101.104

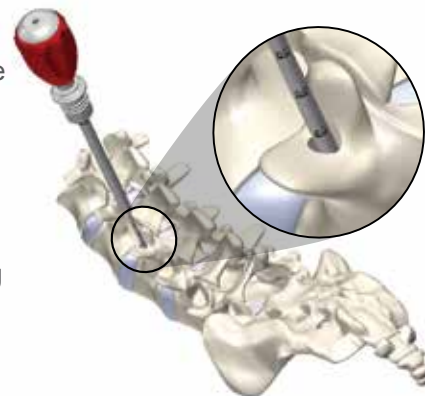
Locking Driver Sleeve | 101.133

### Step 4: Tap the Pedicle Hole

Based on the previously taken measurements, determine the desired **Pedicle Screw** diameter and length.

Attach the corresponding **Tap** to one of the provided **Handles** and advance the **Tap** through the pedicle by turning the handle clockwise.

The **Taps** have markings every 10mm to indicate depth. After reaching the desired depth, remove the **Tap** by rotating it counter-clockwise until it completely threads out of the pedicle.



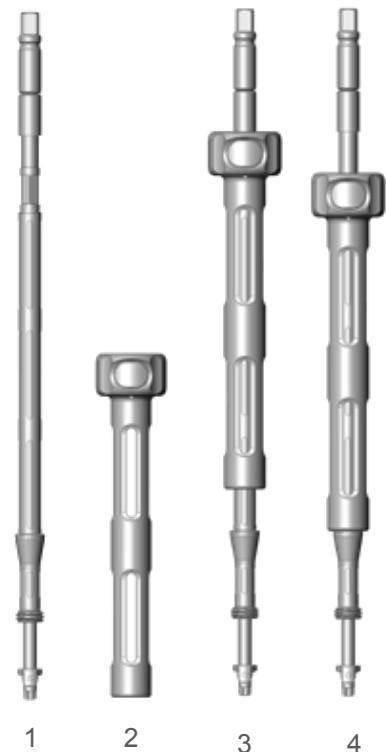
### Step 5a: Assemble the Locking Screw Driver

The **Locking Screw Driver** consists of a driver shaft (1) and a driver sleeve (2). The driver shaft is a two part instrument that should slide back and forth freely.

To assemble the **Locking Screw Driver**, press the button on the outer sleeve and slide the end farthest from the button over the proximal end of the driver shaft until it aligns with the fixed, proximal shoulder of the driver shaft. Release the button and the driver is now fixed in its unlocked position (3), ready for a handle to be attached. Check to make sure the driver is "unlocked" by securing the driver shaft with one hand and spinning the sleeve with the other. If the sleeve rotates freely while the driver shaft is in a fixed position, the unlocked position is confirmed.

The proximal end of the **Locking Screw Driver** can now be coupled to one of the provided **Handles**.

Move the **Locking Screw Driver** to the locked position (4) by pressing the button on the outer sleeve and sliding it away from the handle until it contacts the distal shoulder of the driver shaft. When the driver is in its locked position, the outer sleeve and attachment shaft should be locked together, allowing only the drive feature to spin with the handle.



Unlocked Position Locked Position

## PREPARE THE PEDICLE SCREW FOR INSERTION

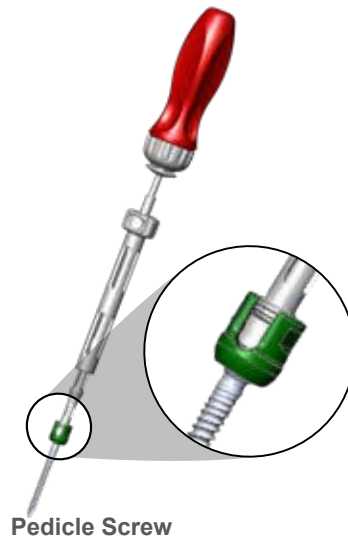
### Step 5b: Attach the Pedicle Screw to the Locking Screw Driver

#### Driver

With the **Locking Screw Driver** in the locked position (4), align the simulated rod of the **Locking Screw Driver** with the rod slot of the desired (**Reduction**) **Pedicle Screw**.

Insert the tip of the **Locking Screw Driver** through the tulip head until it engages with the drive feature of the bone screw.

Thread the **Locking Screw Driver** into the tulip head of the (**Reduction**) **Pedicle Screw** by turning the outer sleeve clockwise until tight. The **Locking Screw Driver** is now securely attached to the tulip head.

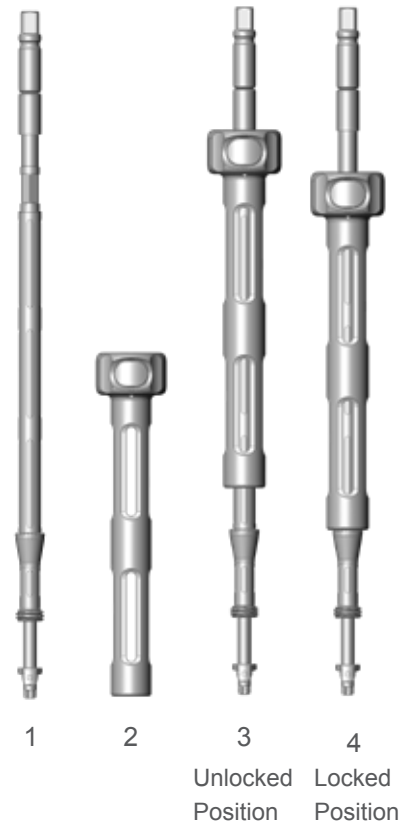
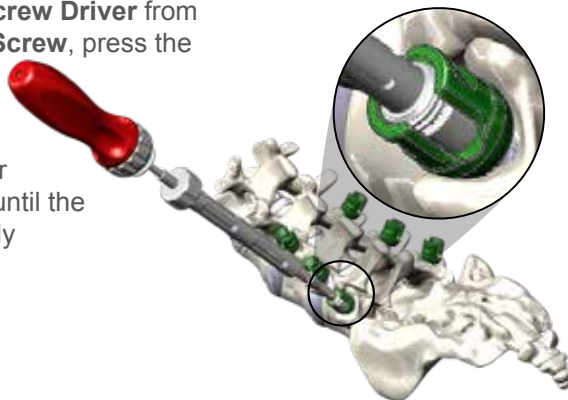


### Step 6: Insert the Pedicle Screw

Once the (**Reduction**) **Pedicle Screw** is attached to the **Locking Screw Driver Shaft**, press the button on the outer sleeve and slide the sleeve towards the handle until it aligns with the proximal shoulder of the attachment shaft. The **Locking Screw Driver** is now in the unlocked position and ready to screw the **Pedicle Screw** into the prepared hole.

Thread the screw into the prepared pedicle by turning the **Handle** clockwise until the (**Reduction**) **Pedicle Screw** is properly inserted into the pedicle.

To remove the **Locking Screw Driver** from the (**Reduction**) **Pedicle Screw**, press the button on the outer sleeve and slide it toward the screw to the locked position (4). Turn the outer sleeve counter-clockwise until the **Locking Screw Driver** fully detaches from the implant.



### IMPLANTS



#### Pedicle Screw

- Ø4.50, Ø5.50, Ø6.50, Ø7.50 diameters
- Lengths 20-60mm available
- Reduction Pedicle Screws available



## INSERT THE PEDICLE SCREW INTO THE PEDICLE

### INSTRUMENTS



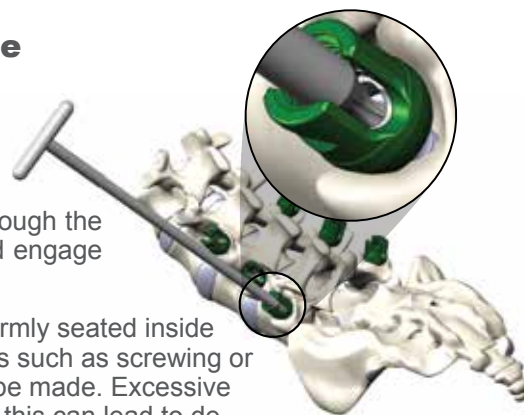
Bone Screw Adjuster | 101.129

### Step 7: Adjust the Pedicle Screw (Optional)

If minor modifications to the depth of the **Pedicle Screw** are desired, the **Bone Screw Adjuster** can be used.

Insert the **Bone Screw Adjuster** through the tulip head of the **Pedicle Screw** and engage the drive feature of the Bone Screw.

Once the **Bone Screw Adjuster** is firmly seated inside the **Bone Screw**, minor modifications such as screwing or unscrewing the **Pedicle Screw** can be made. Excessive unscrewing should be avoided since this can lead to decreased stability of the **Pedicle Screw** inside the bone.



## PREPARE AND INSERT THE SPINAL ROD

### Instruments



Rod Template | 101.131



Rod Trial - 30mm | 101.135

Rod Trial - 40mm | 101.136

Rod Trial - 50mm | 101.137

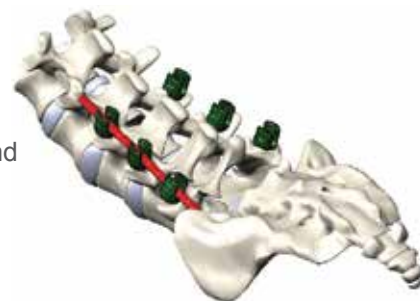
Rod Trial - 60mm | 101.138



French Bender | 101.116

### Step 8: Choose Rod Length

Once the screws are inserted, use either the **Rod Template** or one of the **Rod Trials** to determine the length and shape of **Spinal Rod** that is required for the screw construct.



### IMPLANTS



#### Straight Spinal Rod

- Ø5.50 diameter
- Grade 5 Titanium Alloy
- Lengths 100-300mm available



#### Curved Spinal Rod

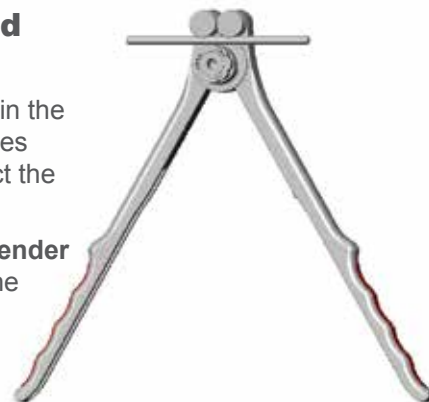
- Ø5.50 diameter
- Grade 5 Titanium Alloy
- Lengths 30-125mm available

### Step 9: Bend the Spinal Rod (Optional)

Place the rod between the three rollers in the **French Bender** and squeeze the handles together. Turn the knob in order to select the desired radius.

Use the selector knob on the **French Bender** to choose the desired bend radius for the spinal rod.

The **French Bender** has three bending options; Small, Medium, and Large.

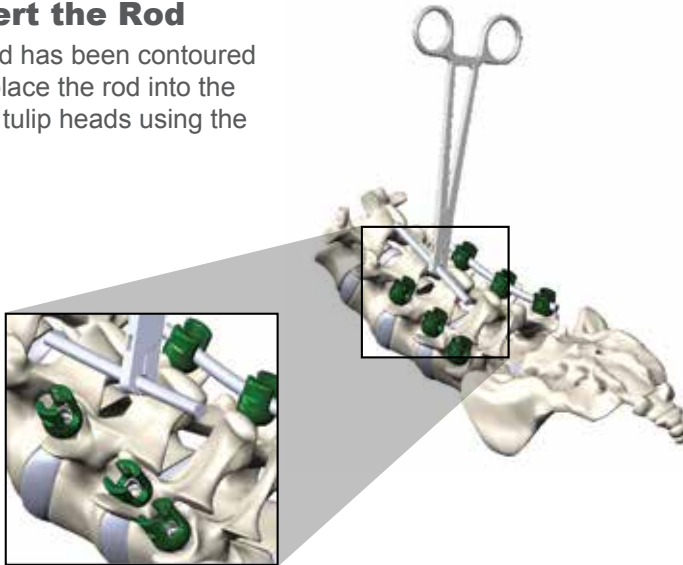




## PREPARE AND INSERT THE SPINAL ROD

### Step 10: Insert the Rod

Once the spinal rod has been contoured to the desired fit, place the rod into the previously aligned tulip heads using the **Rod Holder**.



### INSTRUMENTS



Rod Holder | 101.120

# ROD REDUCTION

## INSTRUMENTS



Inline Persuader | 101.118



Pistol Persuader | 101.117



Rod Fork | 101.115



Rod Pusher | 101.119



Set Screw Driver | 101.103

### Step 11a: Rod Reduction (using Inline or Pistol Persuaders)

Capture the **Spinal Rod** inside the U-shaped groove of the **Persuader** and push the **Persuader** onto the **Pedicle Screw** until it clicks into place.

Squeeze the handle on the **Persuader** until the rod is in its desired position.

The **Persuader** is now secured to the **Pedicle Screw** and the **Spinal Rod** is fully persuaded into the **Pedicle Screw**.

Insert the **Set Screw** through the cannula of the **Persuader** and provisionally tighten the **Pedicle Screw** construct. Fully depress the release lever on the **Persuader** and remove it from the **Pedicle Screw**. Fully Lock the construct in place. **DO NOT USE THE INLINE OR PISTOL PERSUADER TO COUNTER TORQUE DURING FINAL TIGHTENING.**

### Step 11b: Rod Reduction (using Rod Fork)

Slide the prongs of the **Rod Fork** into the slots on the sides of the tulip head until they are centered in the slot.

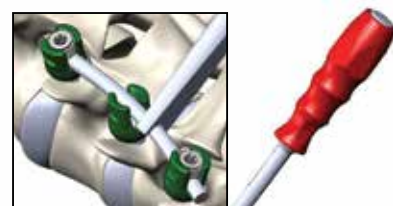
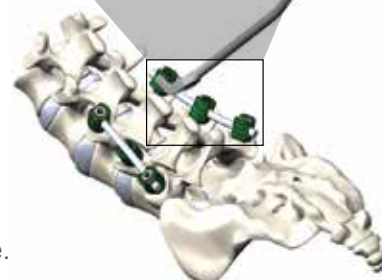
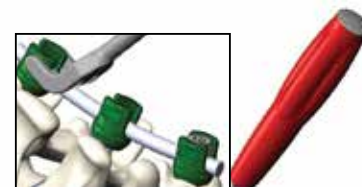
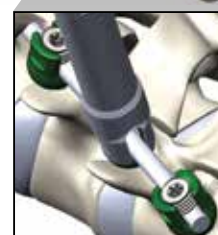
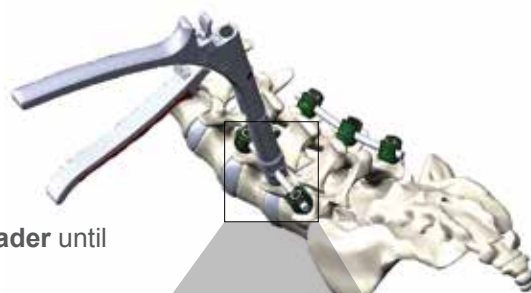
Pull the **Rod Fork** away from the **Pedicle Screw** to persuade the **Spinal Rod**.

Once the **Spinal Rod** is sitting properly in the tulip head, place the **Set Screw** and provisionally tighten the **Pedicle Screw** construct. Fully Lock the construct in place.

### Step 11c: Rod Reduction (using Rod Pusher)

Place the spinal rod in the semicircular recess at the distal end of the **Rod Pusher**. Persuade the spinal rod into the **Pedicle Screw** by applying force to the **Rod Pusher**.

Once the spinal rod is sitting properly in the **Pedicle Screw**, place the **Set Screw** and provisionally tighten the **Pedicle Screw** construct. Fully Lock the construct in place.

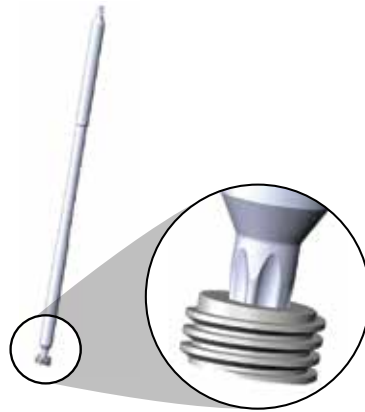


## INSERT THE SET SCREW

### Step 12: Place the Set Screw

Push either end of the **Set Screw Driver** into the drive feature of the **Set Screw** until the **Set Screw Driver** retains the **Set Screw**.


The **Set Screw Driver** can now be used to insert the **Set Screw** and provisionally tighten the construct.



### INSTRUMENTS

 **SET SCREW DRIVER** | 101.103

### IMPLANTS

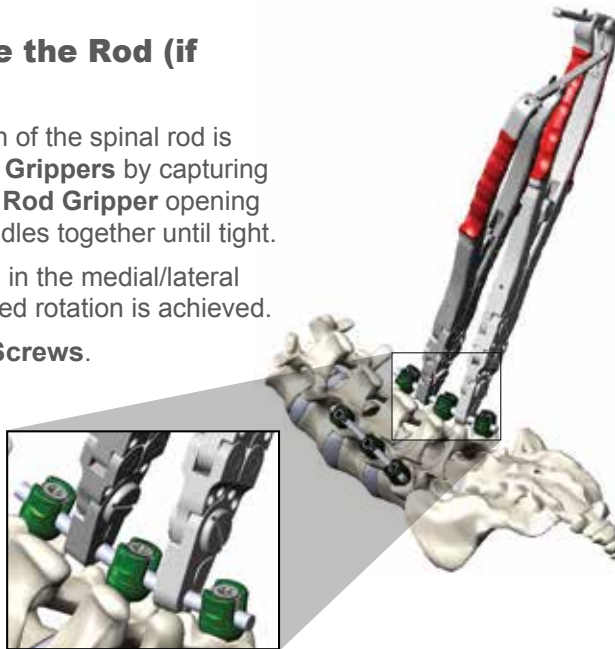
 **SET SCREW** | Grade 5 Titanium Alloy

### Step 13a: Rotate the Rod (if necessary)

If medial/lateral rotation of the spinal rod is necessary, attach **Rod Grippers** by capturing the **Spinal Rod** in the **Rod Gripper** opening and squeezing the handles together until tight.

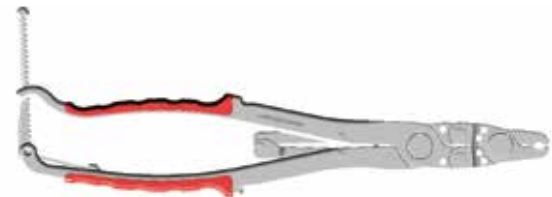
Rotate the **Spinal Rod** in the medial/lateral direction until the desired rotation is achieved.

Final tighten the **Set Screws**.



## MANIPULATE THE ROD

### INSTRUMENTS



**Rod Gripper** | 101.125



**Insitu Bender - Right** | 101.128



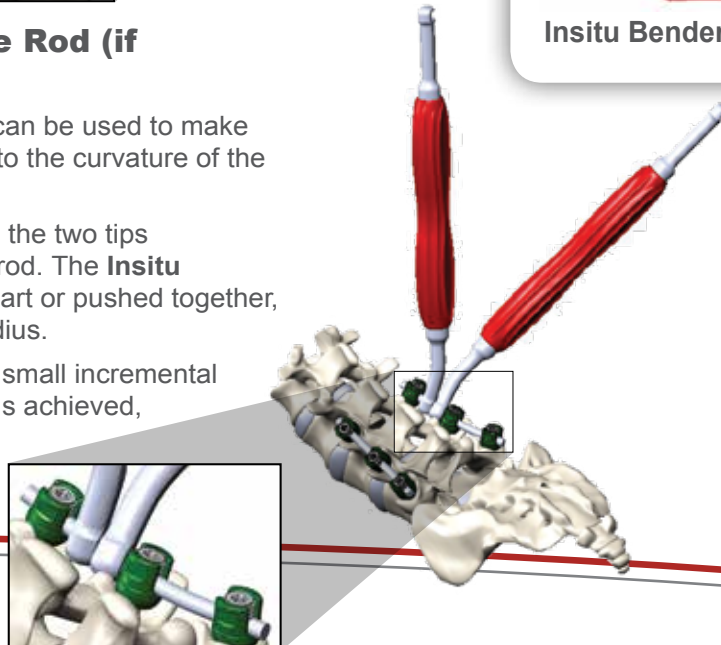
**Insitu Bender - Left** | 101.127

### Step 13b: Manipulate the Rod (if necessary)

The right and left **Insitu Benders** can be used to make final corrections and adjustments to the curvature of the **Spinal Rod**.

The bending of the rod occurs with the two tips positioned near each other on the rod. The **Insitu Benders** are then either pulled apart or pushed together, depending on the desired bend radius.

These bends should be done over small incremental distances. Once the desired bend is achieved, final tighten the **Set Screws**.





# MANIPULATE THE CONSTRUCT

## INSTRUMENTS



**Compressor** | 101.122



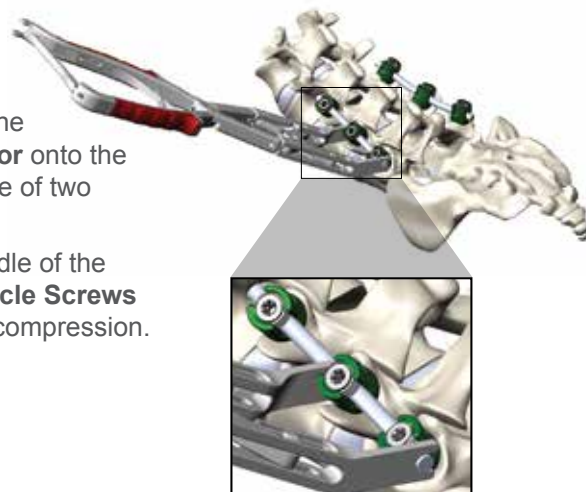
**Distractor** | 101.123

### Step 14: Manipulate the Construct (if necessary)

#### Option 1: Compression

If compression of the construct is desired, place the semicircular recess on the distal end of the **Compressor** onto the spinal rod and on the outside of two adjacent **Pedicle Screws**.

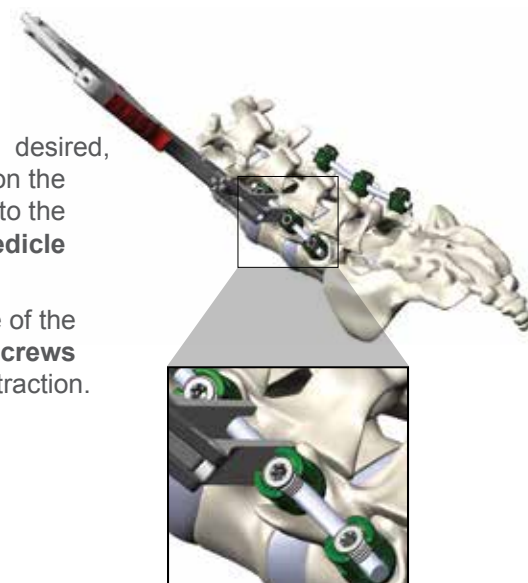
Squeeze the ratcheting handle of the **Compressor** until the **Pedicle Screws** display the desired level of compression.



#### Option 2: Distraction

If distraction of the construct is desired, place the semicircular recess on the distal end of the **Distractor** onto the spinal rod and between two **Pedicle Screws**.

Squeeze the ratcheting handle of the **Distractor** until the **Pedicle Screws** display the desired level of distraction.



## Step 15: Final Tightening

Final tightening is conducted once all implants are in place and the **Set Screws** are provisionally tightened. To lock a **Set Screw** in place, connect the **Final Tightening Driver** to the **Final Torque Handle**.

Slide the **Counter Torque Wrench** over the implant being tightened and engage the **Spinal Rod** with the grooves at the distal end of the **Counter Torque Wrench**.

Pass the **Final Tightening Driver** through the **Counter Torque Wrench** and engage the drive feature of the **Set Screw**.

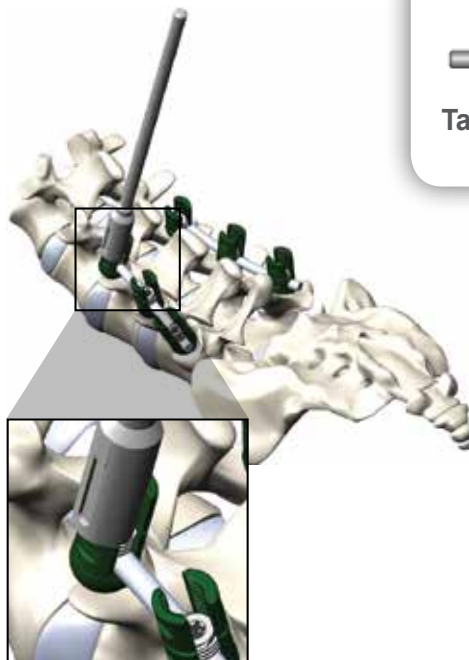
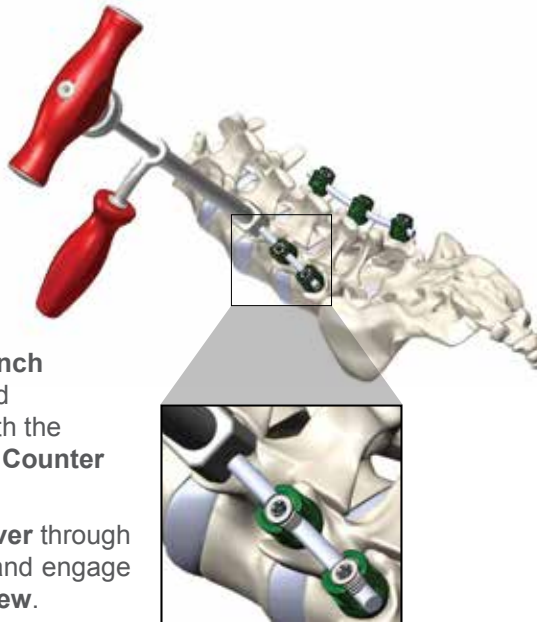
To avoid unwanted torsion of the construct, apply a counter torque with the **Counter Torque Wrench** in place while using the **Final Tightening Driver**.

Tighten the **Set Screw** with a clockwise rotation until the **Final Torque Handle** clicks once (do not continue to tighten). The click indicates that a tightening torque of x9 N-m has been reached.

The implant is now considered to be in its locked position meaning it is fully tightened. Repeat in the same manner with all other implants in the construct.

## Step 16: Break Tabs (if necessary)

Following final tightening of the implant, reduction tabs can be removed using the **Tab Breaker**.



## INSTRUMENTS

**Final Tightening Driver** | 101.126



**Final Torque Handle** | 101.121



**Counter Torque Wrench** | 101.124



**Tab Breaker** | 101.132

## REMOVE THE SET SCREW

### INSTRUMENTS



Final Tightening Driver | 101.126



T-Handle - Ratcheting | 101.102



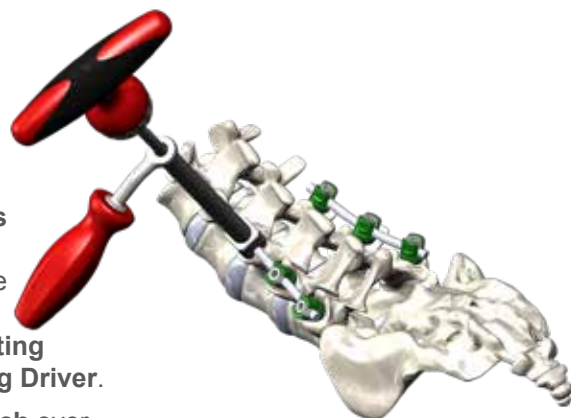
Counter Torque Wrench | 101.124



Set Screw Driver | 101.103

### Step 17: Unlock the Implant (if necessary)

If a revision of the construct is required or preferred after Final Tightening, then the **Set Screws** need to be removed. Before the **Set Screws** can be removed, the implant needs to be unlocked. Begin by connecting the **Ratcheting T-Handle** to the **Final Tightening Driver**.



Slide the **Counter-Torque Wrench** over the implant which is to be unlocked. Engage the grooves at the distal end of the **Counter-Torque Wrench** with the **Spinal Rod**.

Pass the **Final Tightening Driver** through the cannula of the **Counter-Torque Wrench** and engage the drive feature of the **Set Screw**.

To avoid unwanted torsion to the construct, apply a counter torque with the **Counter-Torque Wrench** while loosening the **Set Screw** with the **Final Tightening Driver**.

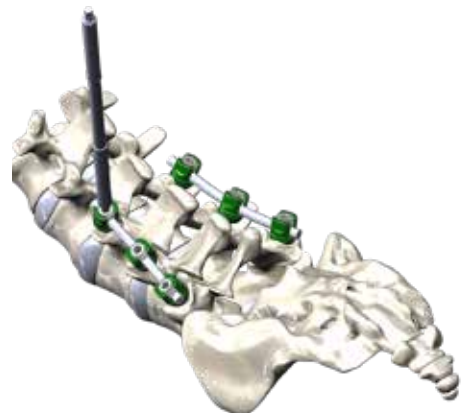
Loosen the **Set Screw** with a counter-clockwise rotation until the implant is unlocked and the **Set Screw** is no longer difficult to rotate. Do not fully remove the **Set Screw** from the **Tulip Head** at this time.

Repeat in the same manner with all other implants in the construct.

### Step 18: Remove the Set Screw (if necessary)

Place the **Set Screw Driver** into the drive feature of the **Set Screw** and apply pressure so that the **Set Screw** is secured to the **Set Screw Driver**. Continue unscrewing the **Set Screw** by rotating the **Set Screw Driver** counter-clockwise. Once the **Set Screw** is fully unscrewed from the **Tulip Head**, remove the **Set Screw** from the surgical site while still being secured to the **Set Screw Driver**.

Repeat in the same manner with all other **Set Screws** in the construct.

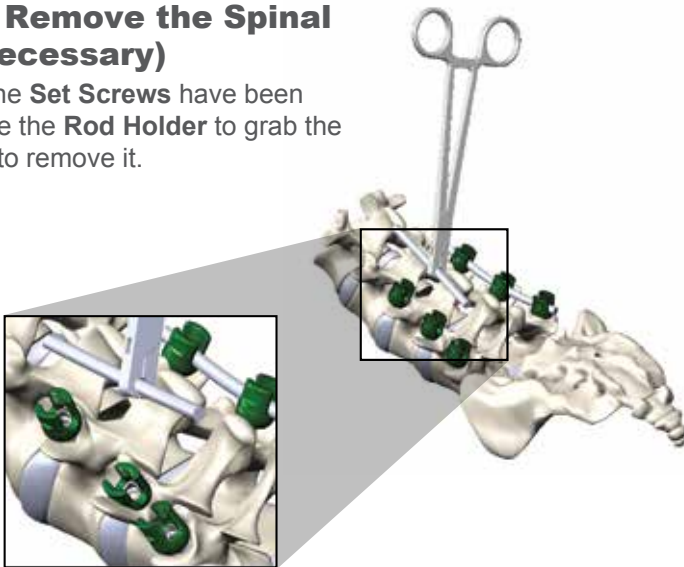




## REMOVE THE SPINAL ROD AND PEDICLE SCREW

### Step 19: Remove the Spinal Rod (if necessary)

Once all of the **Set Screws** have been removed, use the **Rod Holder** to grab the **Spinal Rod** to remove it.



### INSTRUMENTS



Rod Holder | 101.120



Bone Screw Adjuster | 101.129

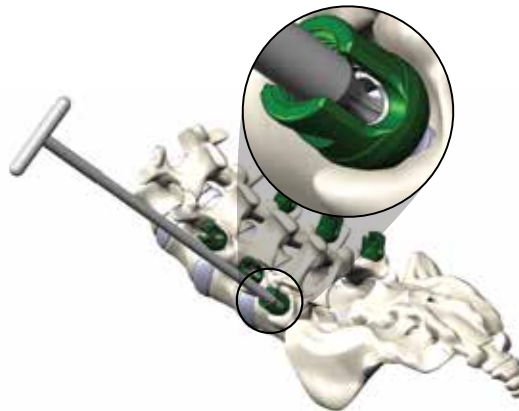
### Step 20: Removal of Pedicle Screws (if necessary)

While it is recommended not to remove **Pedicle Screws**, it might be clinically required.

Insert the **Bone Screw Adjuster** through the **Tulip Head** and engage the drive feature of the **Bone Screw**.

Once the **Bone Screw Adjuster** is firmly seated inside the **Bone Screw**, unscrew the **Bone Screw** by rotating the **Bone Screw Adjuster** counter-clockwise until the **Bone Screw** is completely outside the bone.

Depending on bone quality and also whether a new **Bone Screw** trajectory is required, it might be advisable to choose a larger diameter **Bone Screw**.



# IMPLANT OVERVIEW

## Non-Reduction Pedicle Screw

- Screw diameters Ø4.50, Ø5.50, Ø6.50, Ø7.50 available
- Lengths 20-60mm available
- All Pedicle Screws are individually sterile packed with one (1) associated set screw



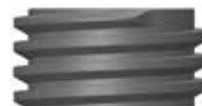
## Reduction Pedicle Screw

- Screw diameters Ø4.50, Ø5.50, Ø6.50, Ø7.50 available
- Lengths 20-60mm available
- All Reduction Pedicle Screws are individually sterile packed with one (1) associated set screw



## Set Screw

- Grade 5 Titanium Alloy
- Additional Set Screws are individually sterile packed in set of one (1)



## Straight Rod

- Ø5.50 diameter
- Grade 5 Titanium Alloy
- Lengths 100-300mm available
- All Straight Spinal Rods are sterile packed in sets of two (2)







## Curved Rod

- Ø5.50 diameter
- Grade 5 Titanium Alloy
- Lengths 30-125mm available
- All Curved Spinal Rods are sterile packed in sets of two (2)







## IMPLANTS: TI-6AL-4V NON-REDUCTION PEDICLE SCREW

Product Code	Diameter (mm)	Length (mm)	
PNR45020.S11	Ø4.50	20	
PNR45025.S11	Ø4.50	25	
PNR45030.S11	Ø4.50	30	
PNR45035.S11	Ø4.50	35	
PNR45040.S11	Ø4.50	40	
PNR45045.S11	Ø4.50	45	
PNR45050.S11	Ø4.50	50	
PNR45055.S11	Ø4.50	55	
PNR45060.S11	Ø4.50	60	
PNR55020.S11	Ø5.50	20	
PNR55025.S11	Ø5.50	25	
PNR55030.S11	Ø5.50	30	
PNR55035.S11	Ø5.50	35	
PNR55040.S11	Ø5.50	40	
PNR55045.S11	Ø5.50	45	
PNR55050.S11	Ø5.50	50	
PNR55055.S11	Ø5.50	55	
PNR55060.S11	Ø5.50	60	
PNR65020.S11	Ø6.50	20	
PNR65025.S11	Ø6.50	25	
PNR65030.S11	Ø6.50	30	
PNR65035.S11	Ø6.50	35	
PNR65040.S11	Ø6.50	40	
PNR65045.S11	Ø6.50	45	
PNR65050.S11	Ø6.50	50	
PNR65055.S11	Ø6.50	55	
PNR65060.S11	Ø6.50	60	
PNR75020.S11	Ø7.50	20	
PNR75025.S11	Ø7.50	25	
PNR75030.S11	Ø7.50	30	
PNR75035.S11	Ø7.50	35	
PNR75040.S11	Ø7.50	40	
PNR75045.S11	Ø7.50	45	
PNR75050.S11	Ø7.50	50	
PNR75055.S11	Ø7.50	55	
PNR75060.S11	Ø7.50	60	



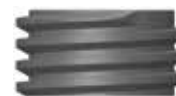
## IMPLANTS: TI-6AL-4V REDUCTION PEDICLE SCREW

Product Code	Diameter (mm)	Length (mm)	
PR45020.S11	Ø4.50	20	
PR45025.S11	Ø4.50	25	
PR45030.S11	Ø4.50	30	
PR45035.S11	Ø4.50	35	
PR45040.S11	Ø4.50	40	
PR45045.S11	Ø4.50	45	
PR45050.S11	Ø4.50	50	
PR45055.S11	Ø4.50	55	
PR45060.S11	Ø4.50	60	
Product Code	Diameter (mm)	Length (mm)	
PR55020.S11	Ø5.50	20	
PR55025.S11	Ø5.50	25	
PR55030.S11	Ø5.50	30	
PR55035.S11	Ø5.50	35	
PR55040.S11	Ø5.50	40	
PR55045.S11	Ø5.50	45	
PR55050.S11	Ø5.50	50	
PR55055.S11	Ø5.50	55	
PR55060.S11	Ø5.50	60	
Product Code	Diameter (mm)	Length (mm)	
PR65020.S11	Ø6.50	20	
PR65025.S11	Ø6.50	25	
PR65030.S11	Ø6.50	30	
PR65035.S11	Ø6.50	35	
PR65040.S11	Ø6.50	40	
PR65045.S11	Ø6.50	45	
PR65050.S11	Ø6.50	50	
PR65055.S11	Ø6.50	55	
PR65060.S11	Ø6.50	60	
Product Code	Diameter (mm)	Length (mm)	
PR75020.S11	Ø7.50	20	
PR75025.S11	Ø7.50	25	
PR75030.S11	Ø7.50	30	
PR75035.S11	Ø7.50	35	
PR75040.S11	Ø7.50	40	
PR75045.S11	Ø7.50	45	
PR75050.S11	Ø7.50	50	
PR75055.S11	Ø7.50	55	
PR75060.S11	Ø7.50	60	

## IMPLANTS: TI-6AL-4V SET SCREW

### Product Code

SSC1.011



## IMPLANTS: TI-6AL-4V STRAIGHT SPINAL ROD

Product Code	Diameter (mm)	Length (mm)	
RSTI100.S11	Ø5.50	100	
RSTI110.S11	Ø5.50	110	
RSTI120.S11	Ø5.50	120	
RSTI130.S11	Ø5.50	130	
RSTI140.S11	Ø5.50	140	
RSTI150.S11	Ø5.50	150	
RSTI160.S11	Ø5.50	160	
RSTI170.S11	Ø5.50	170	
RSTI180.S11	Ø5.50	180	
RSTI190.S11	Ø5.50	190	
RSTI200.S11	Ø5.50	200	
RSTI210.S11	Ø5.50	210	
RSTI220.S11	Ø5.50	220	
RSTI230.S11	Ø5.50	230	
RSTI240.S11	Ø5.50	240	
RSTI250.S11	Ø5.50	250	
RSTI260.S11	Ø5.50	260	
RSTI270.S11	Ø5.50	270	
RSTI280.S11	Ø5.50	280	
RSTI290.S11	Ø5.50	290	
RSTI300.S11	Ø5.50	300	













## IMPLANTS: TI-6AL-4V CURVED SPINAL ROD

Product Code	Diameter (mm)	Length (mm)	
RCTI030.S11	Ø5.50	30	
RCTI035.S11	Ø5.50	35	
RCTI040.S11	Ø5.50	40	
RCTI045.S11	Ø5.50	45	
RCTI050.S11	Ø5.50	50	
RCTI055.S11	Ø5.50	55	
RCTI060.S11	Ø5.50	60	
RCTI065.S11	Ø5.50	65	
RCTI070.S11	Ø5.50	70	
RCTI075.S11	Ø5.50	75	
RCTI080.S11	Ø5.50	80	
RCTI085.S11	Ø5.50	85	
RCTI090.S11	Ø5.50	90	
RCTI095.S11	Ø5.50	95	
RCTI100.S11	Ø5.50	100	
RCTI125.S11	Ø5.50	125	



## INSTRUMENTS


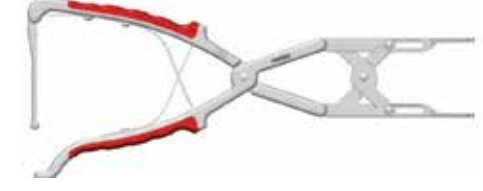
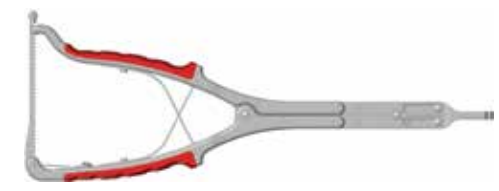
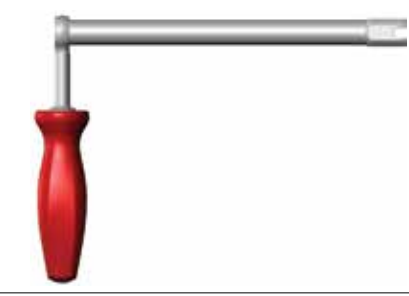
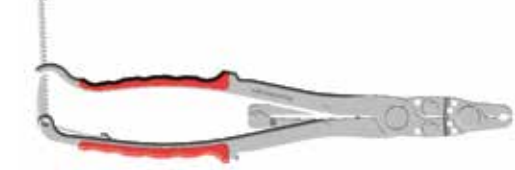



Product Code	Description	
101.101	Inline Handle - Ratcheting	
101.102	T-Handle - Ratcheting	
101.103	Set Screw Driver	
101.104	Locking Driver Shaft	
101.133	Locking Driver Sleeve	
101.105	Palm Handle	
101.106	Pedicle Probe - Duckbill	
101.107	Pedicle Probe - Straight	
101.108	Pedicle Probe - Curved	
101.109	Sounder - Straight	
101.110	Sounder - Curved	

## INSTRUMENTS (CONTINUED)


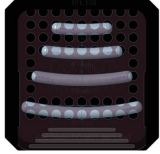





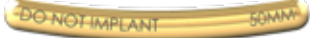

Product Code	Description	
101.111	Tap - 4.5mm	
101.112	Tap - 5.5mm	
101.113	Tap - 6.5mm	
101.114	Tap - 7.5mm	
101.115	Rod Fork	
101.116	French Bender	
101.117	Pistol Persuader	
101.118	Inline Persuader	
101.119	Rod Pusher	
101.120	Rod Holder	



## INSTRUMENTS (CONTINUED)

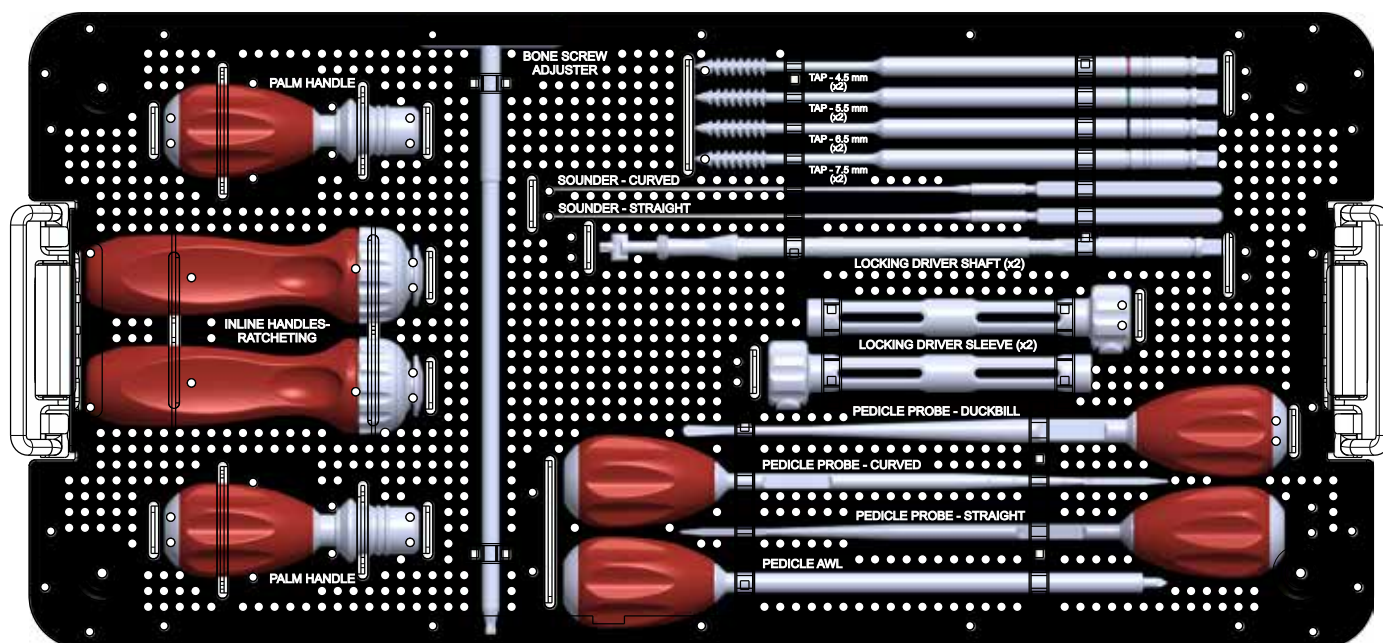
Product Code	Description	
101.121	Final Torque Handle	
101.122	Compressor	
101.123	Distractor	
101.124	Counter Torque Wrench	
101.125	Rod Gripper	
101.126	Final Tightening Driver	
101.127	Insitu Bender - Left	
101.128	Insitu Bender - Right	

## INSTRUMENTS (CONTINUED)

Product Code	Description	
101.129	Bone Screw Adjuster	
101.130	Rod Trial Caddy	
101.131	Rod Template	
101.132	Tab Breaker	
101.134	Pedicle Awl	
101.135	Rod Trial - 30mm	
101.136	Rod Trial - 40mm	
101.137	Rod Trial - 50mm	
101.138	Rod Trial - 60mm	

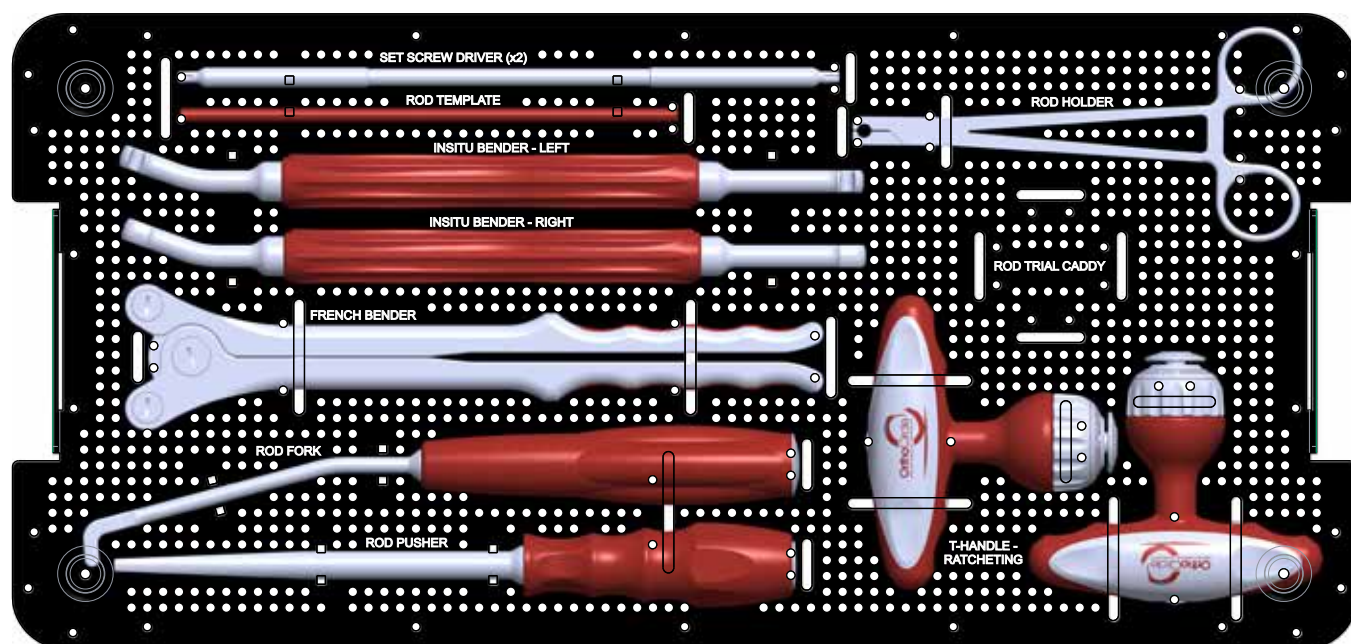
## INSTRUMENT TRAY CONFIGURATIONS – LEVEL 1

Product Code	Product Description	Quantity
<b>Level 1</b>		
101.101	Inline Handle - Ratcheting	2
101.104	Locking Driver Shaft	2
101.105	Palm Handle	2
101.106	Pedicle Probe - Duckbill	1
101.107	Pedicle Probe - Straight	1
101.108	Pedicle Probe - Curved	1
101.109	Sounder - Straight	1
101.110	Sounder - Curved	1
101.111	Tap - 4.5mm	2
101.112	Tap - 5.5mm	2
101.113	Tap - 6.5mm	2
101.114	Tap - 7.5mm	2
101.129	Bone Screw Adjuster	1
101.133	Locking Driver Sleeve	2
101.134	Pedicle Awl	1



## INSTRUMENT TRAY CONFIGURATIONS – LEVEL 2

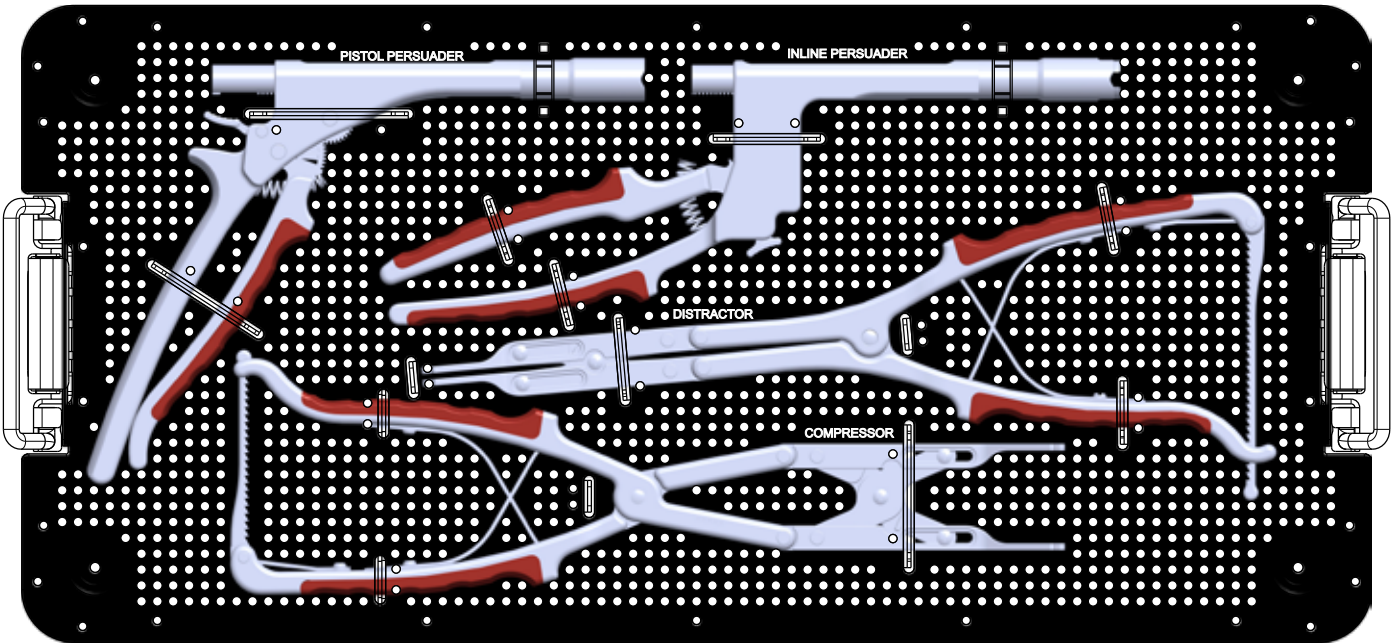
Product Code	Product Description	Quantity
<b>Level 2</b>		
101.102	T-Handle - Ratcheting	2
101.103	Set Screw Driver	2
101.115	Rod Fork	1
101.116	French Bender	1
101.119	Rod Pusher	1
101.120	Rod Holder	1
101.127	Insitu Bender - Left	1
101.128	Insitu Bender - Right	1
101.131	Rod Template	1
101.135	Rod Trial - 30mm	1
101.136	Rod Trial - 40mm	1
101.137	Rod Trial - 50mm	1
101.138	Rod Trial - 60mm	1





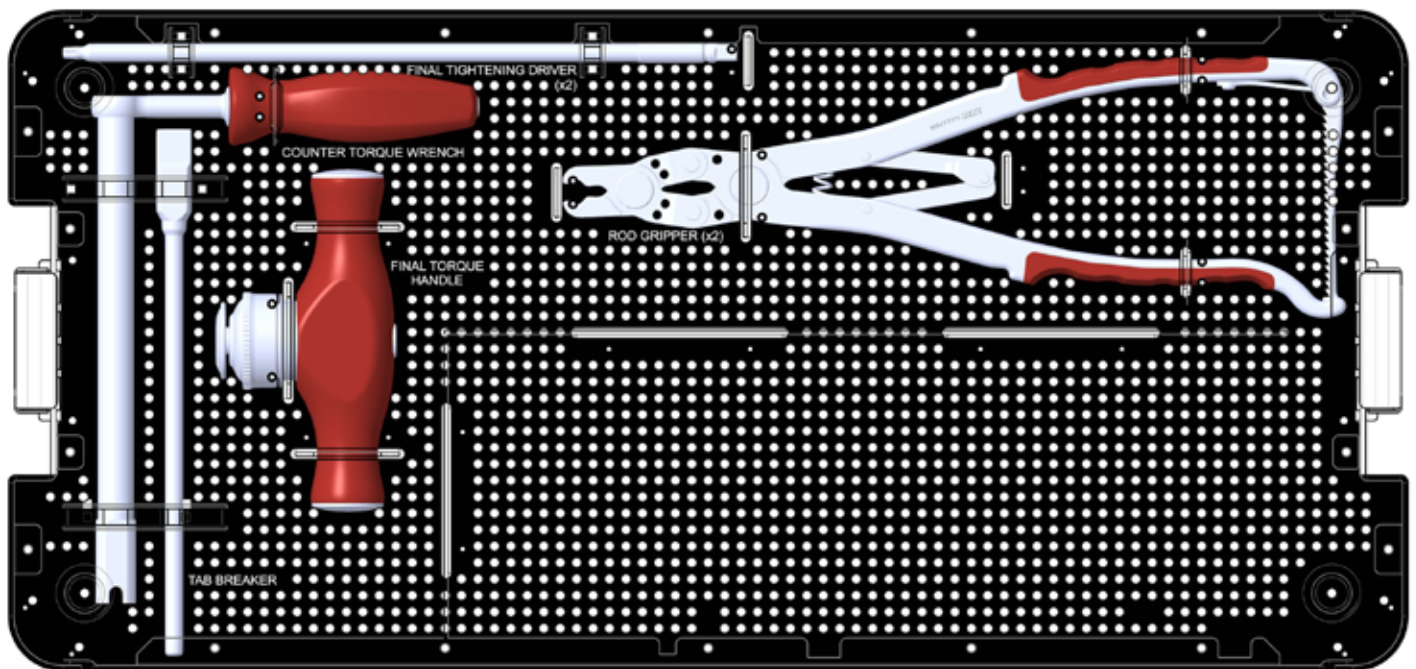
INSTRUMENT TRAY CONFIGURATIONS – LEVEL 3

Product Code	Product Description	Quantity
Level 3		
101.117	Pistol Persuader	1
101.118	Inline Persuader	1
101.122	Compressor	1
101.123	Distractor	1



## INSTRUMENT TRAY CONFIGURATIONS – LEVEL 4

Product Code	Product Description	Quantity
<b>Level 4</b>		
101.121	Final Torque Handle	1
101.124	Counter Torque Wrench	1
101.125	Rod Gripper	2
101.126	Final Tightening Driver	2
101.132	Tab Breaker	1



## INSTRUMENT TRAY CONFIGURATIONS

Product Code	Product Description	Quantity
<b>Level 1</b>		
101.101	Inline Handle - Ratcheting	2
101.104	Locking Driver Shaft	2
101.105	Palm Handle	2
101.106	Pedicle Probe - Duckbill	1
101.107	Pedicle Probe - Straight	1
101.108	Pedicle Probe - Curved	1
101.109	Sounder - Straight	1
101.110	Sounder - Curved	1
101.111	Tap - 4.5mm	2
101.112	Tap - 5.5mm	2
101.113	Tap - 6.5mm	2
101.114	Tap - 7.5mm	2
101.129	Bone Screw Adjuster	1
101.133	Locking Driver Sleeve	2
101.134	Pedicle Awl	1
<b>Level 2</b>		
101.102	T-Handle - Ratcheting	2
101.103	Set Screw Driver	2
101.115	Rod Fork	1
101.116	French Bender	1
101.119	Rod Pusher	1
101.120	Rod Holder	1
101.127	Insitu Bender - Left	1
101.128	Insitu Bender - Right	1
101.131	Rod Template	1
101.135	Rod Trial - 30mm	1
101.136	Rod Trial - 40mm	1
101.137	Rod Trial - 50mm	1
101.138	Rod Trial - 60mm	1
<b>Level 3</b>		
101.117	Pistol Persuader	1
101.118	Inline Persuader	1
101.122	Compressor	1
101.123	Distractor	1
<b>Level 4</b>		
101.121	Final Torque Handle	1
101.124	Counter Torque Wrench	1
101.125	Rod Gripper	2
101.126	Final Tightening Driver	2
101.132	Tab Breaker	1

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STG-PS Rev. 1

