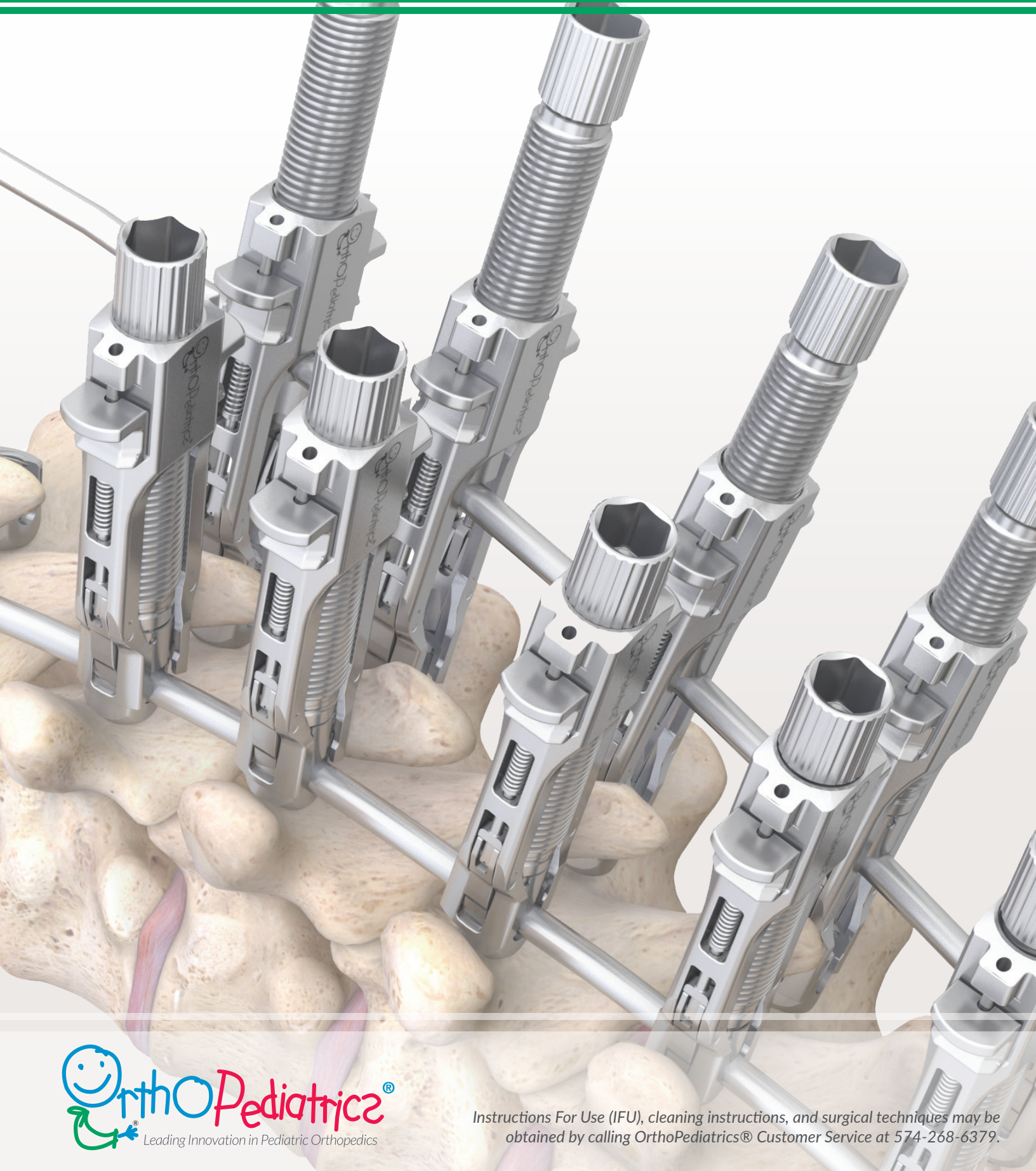


RESPONSE™ Spine System Overview

featuring 5.5mm and 5.5/6.0mm Systems



IMPLANT CLASSIFICATION

The **RESPONSE™ Spine Systems** (5.5 and 5.5/6.0mm) feature the following pedicle screws:

- Polyaxial and Polyaxial Reduction Pedicle Screws
- Uniaxial and Uniaxial Reduction Pedicle Screws
- Fixed Pedicle Screws

Each pedicle screw size is designed with a unique color identifier as shown in the illustrations below.

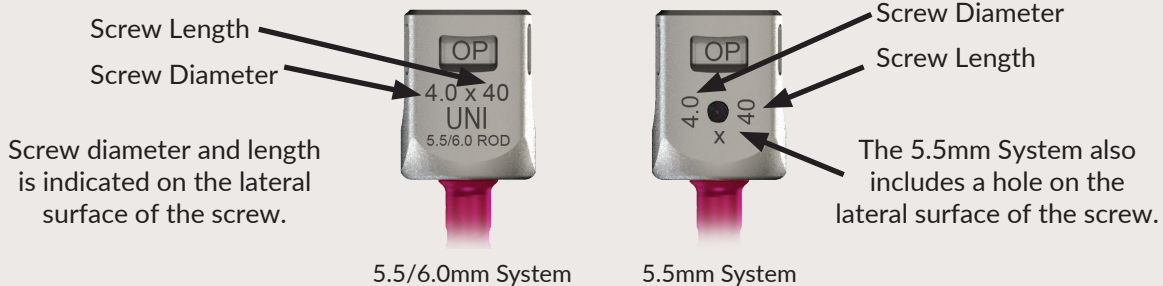


Polyaxial Screws are designated by an absence of arrows or divots on the proximal surface of the screw.

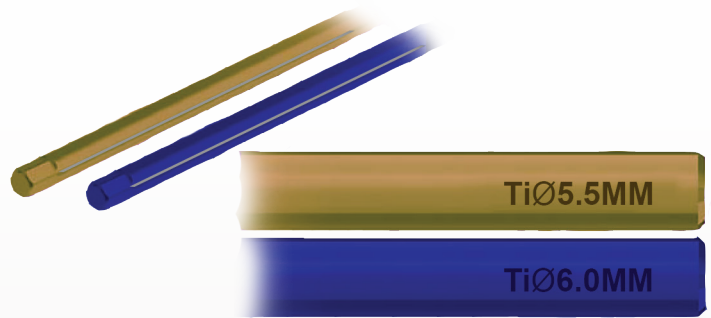
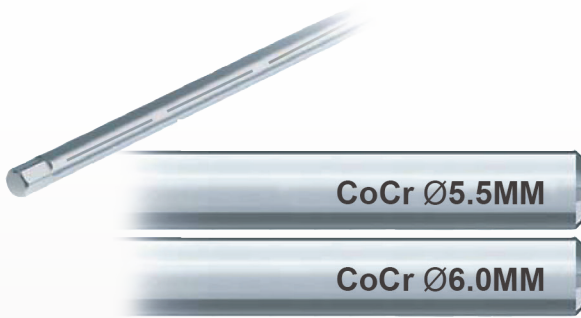
Uniaxial Screws are designated by two arrows on the proximal surface of the screw.

Fixed Screws are designated by a divot on the top left and bottom right corners on the proximal surface of the screw.

Polyaxial Reduction and Uniaxial Reduction Screws are designated by extended tabs which are removed following rod reduction.



ROD OFFERINGS



Cobalt Chrome Rod (CoCr)	
5.5mm x 500mm	00-1003-6001
6.0mm x 500mm	00-1300-6051
Optional	
5.5mm x 600mm	00-1003-6003
6.0mm x 600mm	00-1300-6061

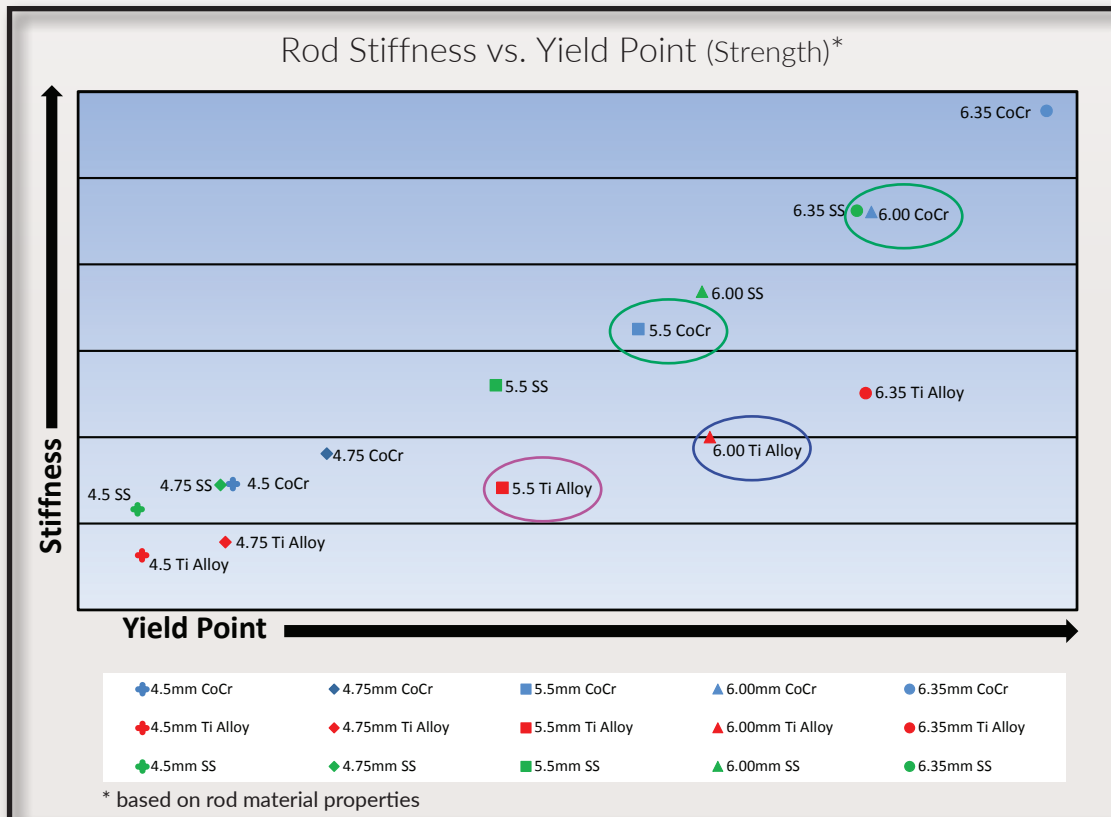
Titanium Rod (Ti)	
5.5mm x 500mm	00-1300-5552
6.0mm x 500mm	00-1300-6052
Optional	
5.5mm x 600mm	00-1300-5562
6.0mm x 600mm	00-1300-6062

Cobalt Chrome rod material is identified in two ways:

- etched dashed lines which run along the length of the rod
- etching on one end which calls out metal type and diameter

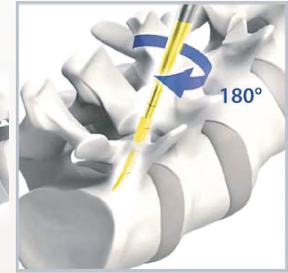
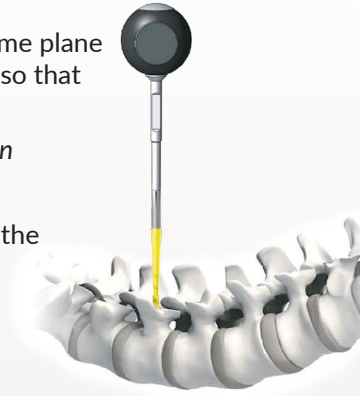
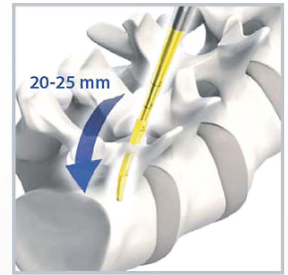
Titanium Alloy rod material is identified in three ways:

- etched straight line which runs along the length of the rod
- unique color identifier
- etching on one end which calls out metal type and diameter



1 Prepare Pedicles

- Create a 3mm deep posterior cortical breach with the Pedicle Awl or burr.
 - 1** Note: Gentle twisting of the handle with light pressure is the safest way to advance the awl.
- Insert the tip approximately 20 - 25mm.
- Orient the probe so that the flat surface of the probe is in the same plane as the curve of the pedicle, then remove the probe to reorient it so that the tip points medially.
 - 2** Note: Take care to ensure the orientation of the probe is correct in order to avoid damage to the pedicle.
- Carefully place the probe into the base of the prior hole and use the instrument markings to advance the probe to the desired depth.
- Rotate the probe 180° to ensure adequate room for screw.



2 Feeler Probe and Tap

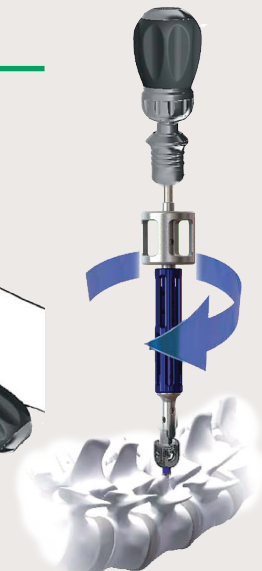
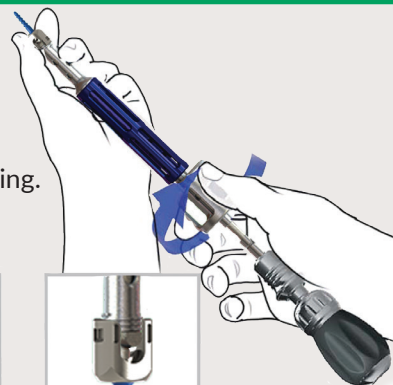
- Advance the feeler probe to the base (floor) of the hole to confirm five bony borders: a floor and four walls (medial, lateral, superior, and inferior).
- Undertap the pedicle 1mm less than desired screw size using a handle or power.



Tap Sizing	
Screw Size	Tap Size
4mm Screw	3mm Tap
5mm Screw	4mm Tap
6mm Screw	5mm Tap
7mm Screw	6mm Tap
8mm Screw	7mm Tap
9mm Screw	8mm Tap

3 Pedicle Screw Insertion

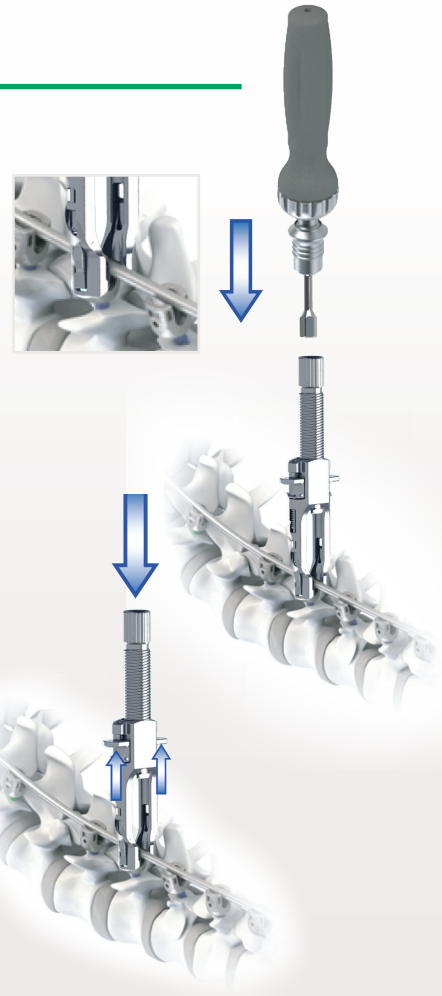
- Place the hexalobe tip of the driver into the screw.
- Engage the hex with the driver tip.
- Turn the threading knob to thread the driver to the screw.
- Slowly advance the screw down the pedicle to ensure proper tracking.
 - 1** Note: Following screw insertion, utilize the screw head positioner to ensure proper tulip head alignment in preparation for rod placement.



4

Rod Reduction Options

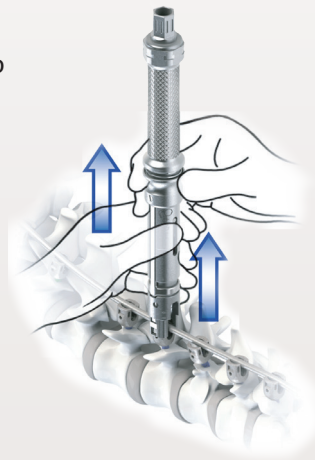
- Utilize the Jiminy™ Rod Reducers or Rod Reduction Towers by pushing the instrument down over the top of the screw head.
- To reduce the Rod, use both the hex adapter and axial ratcheting handle to turn the hexagonal knob clockwise.



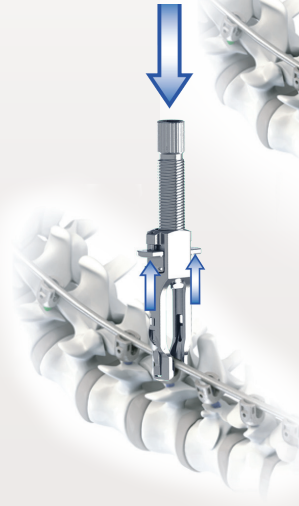
Rod Reducer Removal

- After the rod has been reduced and the set screw has been provisionally tightened, do the following for instrument removal:

Rod Reduction Tower: turn the hexagonal knob counter clockwise a few turns and then pull up on the medial collar to disengage from the screw head.



Jiminy™ Rod Reducer: turn the hexagonal knob counter clockwise a few turns then place downward pressure on the hexagonal knob and pull up on the release tabs to disengage from the screw head.



5

Deformity Correction - Rod Reduction, Compression, & Distraction

- Once the contoured rod and all of the set screws have been placed, the rod is ready to be rotated into its final position (figure 1). The rotation must be done slowly in order to prevent rapid neurologic changes and/or injury to the spinal cord.

1 Note: If using a 5.5mm rod, the 5.5mm rod-grippers should be used. If using a 6.0mm rod, the 6.0mm rod-grippers should be used.

- Tighten the apical set screws. Compression or distraction may be performed at this time (figure 2).

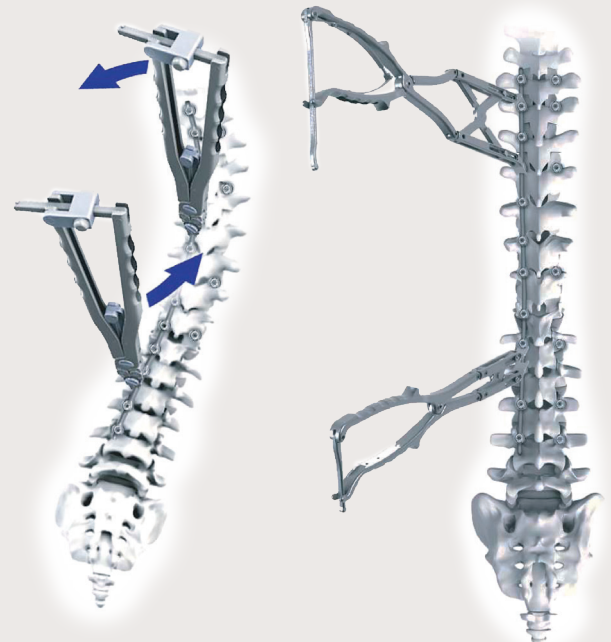


FIGURE 1: Rod rotation for final positioning

FIGURE 2: Compression and distraction of rod

6

Coupled Derotation

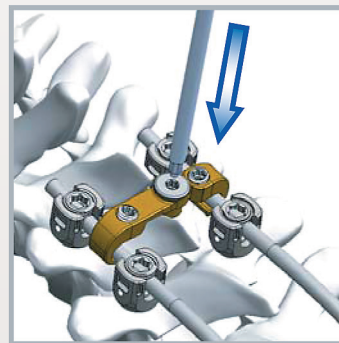
- Snap-fit to engage the Jiminy™ Rod Reducer or Rod Reduction Towers to each pedicle screw per the vertebral bodies to be manipulated.
- If using the Rod Reduction Tower, assemble the Multi Segment Rotation Handles to the towers.
- If using the Jiminy Rod Reducer, assemble the Jiminy Extension Handles to the reducers.
- Derotate the spine by manipulating the construct. With continued derotation and translational forces applied by the triangulated constructs.
- Position the handles parallel to each other.
- Insert multi segment rotation pin through the slots in the handles. *The pins may be offset to accommodate possible differing orientation of the towers relative to the vertebral body.*



7

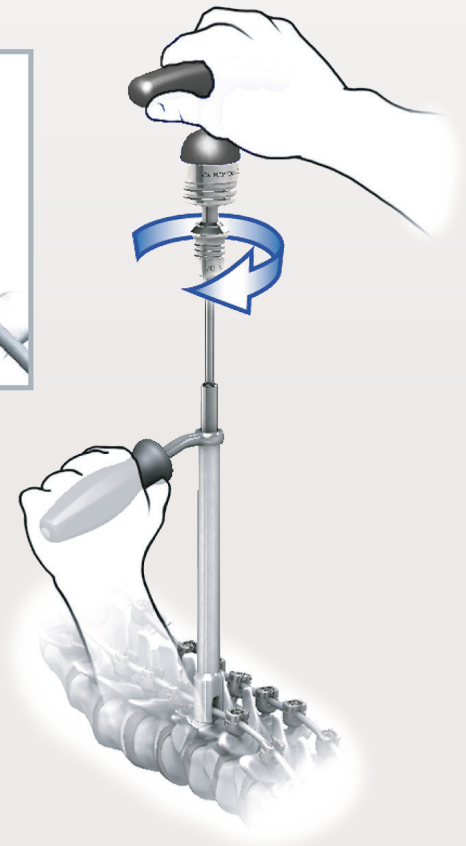
Cross Connector Insertion & Final Tightening

- Capture both rods and confirm placement. Place Small Set Screws using the Small Set Screw Starter. Provisionally tighten using the Small Set Screw Driver to secure the connector to the rods.
- For final tightening, seat the Counter Torque Tube and the Small Set Screw Driver onto the connector, rod, and set screw.
- Turn the green T-handle (58 in-lbs) until an audible click is heard, indicating that proper torque has been met.



Final Tightening

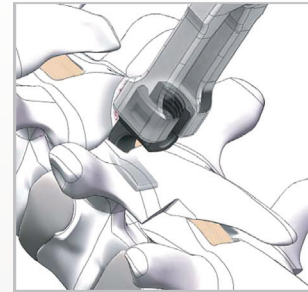
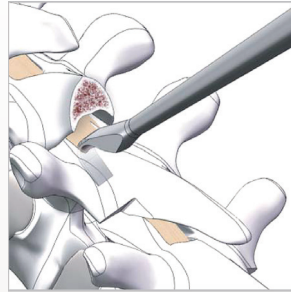
- To final tighten all open pedicle screw assemblies, seat the Counter Torque Wrench and the Set Screw Driver Shaft onto the open screw, saddle, and set screw.
- Place the **black** Set Screw Torque Limiter T-Handle (95in-lbs) and turn the handle clockwise while firmly holding the Counter Torque Wrench.
- Turn the T-handle until two audible clicks are heard, indicating that proper torque has been met.
- When final torque is complete a squeaking sound is often heard. This is by design for the RESPONSE™ Spine System thread technology. This squeaking is caused by an effect called “galling” or cold welding. By utilizing this science, the large set screw and tulip head interface self-locks upon final torque.



HOOK IMPLANTS - 5.5mm System and 5.5/6.0mm System

The **RESPONSE™ Spine System** offers top loading open and closed hooks of different anatomic shapes and sizes. The surgeon must choose the appropriate hook based on the individual patient's anatomy, deformity degree and type, method of correction chosen, and amount of compression/distraction that will be needed to provide proper and stable purchase of the implants.

Several different instruments can be used for hook insertion. The Straight or Lateral Implant Holder combined with the Hook Pusher.



Hook Description	5.5/6.0mm System Item Number	5.5mm System Item Number	Hook Description	5.5/6.0mm System Item Number	5.5mm System Item Number
Open Pedicle Hook, 5.0mm	00-1300-3149	00-1003-3149	Open Reduction Thoracic Hook, 5.0mm, Wide	00-1300-3401	-
Open Pedicle Hook, 6.5mm	00-1300-3150	00-1003-3150	Open Reduction Thoracic Hook, 6.5mm, Wide	00-1300-3402	-
Open Pedicle Hook, 8.0mm	00-1300-3151	00-1003-3151	Open Reduction Thoracic Hook, 8.0mm, Wide	00-1300-3403	-
Open Pedicle Hook, 9.5mm	00-1300-3152	00-1003-3153	Open Reduction Thoracic Hook, 9.5mm, Wide	00-1300-3404	-
Open Pedicle Hook, 11.0mm	00-1300-3153	00-1003-3152	Open Reduction Thoracic Hook, 11.0mm, Wide	00-1300-3405	-
Open Laminar Hook, 5.0mm, Narrow	00-1300-3249	00-1003-3249	Open Reduction Left Offset Thoracic Hook	00-1300-3406	-
Open Laminar Hook, 6.5mm, Narrow	00-1300-3250	00-1003-3250	Open Reduction Right Offset Thoracic Hook	00-1300-3407	-
Open Laminar Hook, 8mm, Narrow	00-1300-3251	00-1003-3251			
Open Laminar Hook, 9.5mm, Narrow	00-1300-3252	00-1003-3256	Closed Pedicle Hook, 5.0mm	-	00-1003-3099
Open Laminar Hook, 11mm, Narrow	00-1300-3253	00-1003-3252	Closed Pedicle Hook, 6.5mm	-	00-1003-3100
			Closed Pedicle Hook, 8mm	-	00-1003-3101
Open Laminar Hook, 5.0mm, Wide	00-1300-3254	00-1003-3257	Closed Pedicle Hook, 9.5mm	-	00-1003-3103
Open Laminar Hook, 6.5mm, Wide	00-1300-3255	00-1003-3253	Closed Pedicle Hook, 11mm	-	00-1003-3102
Open Laminar Hook, 8mm, Wide	00-1300-3256	00-1003-3254			
Open Laminar Hook, 9.5mm, Wide	00-1300-3257	00-1003-3258	Closed Laminar Hook, 5.0mm Narrow	-	00-1003-3199
Open Laminar Hook, 11mm, Wide	00-1300-3258	00-1003-3255	Closed Laminar Hook, 6.5mm, Narrow	-	00-1003-3200
			Closed Laminar Hook, 8mm, Narrow	-	00-1003-3201
Open Thoracic Hook, 5.0mm, Narrow	00-1300-3259	-	Closed Laminar Hook, 9.5mm Narrow	-	00-1003-3206
Open Thoracic Hook, 6.5mm, Narrow	00-1300-3260	00-1003-3260	Closed Laminar Hook, 11mm, Narrow	-	00-1003-3202
Open Thoracic Hook, 8.0mm, Narrow	00-1300-3261	00-1003-3261			
Open Thoracic Hook, 9.5mm, Narrow	00-1300-3262	00-1003-3262	Closed Laminar Hook, 5.0mm Wide	-	00-1003-3207
Open Thoracic Hook, 11.0mm, Narrow	00-1300-3263	-	Closed Laminar Hook, 6.5mm, Wide	-	00-1003-3203
			Closed Laminar Hook, 8mm, Wide	-	00-1003-3204
Open Thoracic Hook, 5.0mm, Wide	00-1300-3264	-	Closed Laminar Hook, 9.5mm Wide	-	00-1003-3208
Open Thoracic Hook, 6.5mm, Wide	00-1300-3265	00-1003-3265	Closed Laminar Hook, 11mm, Wide	-	00-1003-3205
Open Thoracic Hook, 8.0mm, Wide	00-1300-3266	00-1003-3266			
Open Thoracic Hook, 9.5mm, Wide	00-1300-3267	00-1003-3267	Open Left Offset Lumbar Hook	00-1300-3302	00-1003-3302
Open Thoracic Hook, 11.0mm, Wide	00-1300-3268	-	Open Right Offset Lumbar Hook	00-1300-3303	00-1003-3303
Open Left Offset Thoracic Hook	00-1300-3300	00-1003-3300			
Open Right Offset Thoracic Hook	00-1300-3301	00-1003-3301			

5.5mm SYSTEM IMPLANTS

Screw Description	5.5mm Uniaxial Screw	5.5mm Uniaxial Reduction Screw	5.5mm Polyaxial Screw	5.5mm Polyaxial Reduction Screw	5.5mm Fixed Angle Screw
4.0mm x 20mm	00-1003-4318	00-1003-4470	00-1003-4066	-	00-1003-5066
4.0mm x 25mm	00-1003-4319	00-1003-4471	00-1003-4067	-	00-1003-5067
4.0mm x 30mm	00-1003-4320	00-1003-4472	00-1003-4068	00-1003-4219	00-1003-5068
4.0mm x 35mm	00-1003-4321	00-1003-4473	00-1003-4069	00-1003-4220	00-1003-5069
4.0mm x 40mm	00-1003-4322	00-1003-4474	00-1003-4070	00-1003-4221	00-1003-5070
5.0mm x 20mm	00-1003-4351	-	00-1003-4099	-	00-1003-5099
5.0mm x 25mm	00-1003-4352	00-1003-4488	00-1003-4100	-	00-1003-5100
5.0mm x 30mm	00-1003-4353	00-1003-4489	00-1003-4101	00-1003-4236	00-1003-5101
5.0mm x 35mm	00-1003-4354	00-1003-4490	00-1003-4102	00-1003-4237	00-1003-5102
5.0mm x 40mm	00-1003-4355	00-1003-4491	00-1003-4103	00-1003-4238	00-1003-5103
5.0mm x 45mm	00-1003-4356	00-1003-4492	00-1003-4104	00-1003-4239	00-1003-5104
5.0mm x 50mm	00-1003-4357	00-1003-4493	00-1003-4105	00-1003-4240	00-1003-5105
5.0mm x 55mm	00-1003-4358	00-1003-4494	00-1003-4106	-	00-1003-5106
6.0mm x 30mm	00-1003-4387	00-1003-4505	00-1003-4135	00-1003-4252	00-1003-5135
6.0mm x 35mm	00-1003-4388	00-1003-4506	00-1003-4136	00-1003-4253	00-1003-5136
6.0mm x 40mm	00-1003-4389	00-1003-4507	00-1003-4137	00-1003-4254	00-1003-5137
6.0mm x 45mm	00-1003-4390	00-1003-4508	00-1003-4138	00-1003-4255	00-1003-5138
6.0mm x 50mm	00-1003-4391	00-1003-4509	00-1003-4139	00-1003-4256	00-1003-5139
6.0mm x 55mm	00-1003-4392	-	00-1003-4140	00-1003-4257	00-1003-5140
7.0mm x 35mm	00-1003-4422	00-1003-4523	00-1003-4170	00-1003-4270	00-1003-5173
7.0mm x 40mm	00-1003-4423	00-1003-4524	00-1003-4171	00-1003-4271	00-1003-5174
7.0mm x 45mm	00-1003-4424	-	00-1003-4172	00-1003-4272	00-1003-5175
7.0mm x 50mm	00-1003-4425	-	00-1003-4173	00-1003-4273	00-1003-5176
7.0mm x 55mm	-	-	-	00-1003-4274	00-1003-5177
7.0mm x 60mm	00-1003-4427	-	00-1003-4175	-	-
7.0mm x 70mm	00-1003-4429	-	00-1003-4177	-	-
7.0mm x 80mm	00-1003-4431	-	00-1003-4179	-	-

5.5mm Connectors and Set Screws



Fixed Cross Connector

14mm	00-1003-3086
16mm	00-1003-3087
18mm	00-1003-3088
20mm	00-1003-3089
22mm	00-1003-3090
24mm	00-1003-3091
26mm	00-1003-3092
28mm	00-1003-3093
30mm	00-1003-3094
32mm	00-1003-3095
34mm	00-1003-3096
36mm	00-1003-3097



Adjustable Cross Connector

XS	00-1003-3041
S	00-1003-3043
M	00-1003-3045
L	00-1003-3047
XL	00-1003-3049



Closed Lateral Connector

20mm	00-1003-3065
30mm	00-1003-3066
40mm	00-1003-3067
60mm	00-1003-3068

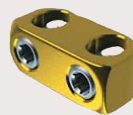


Set Screw, Small*
00-1003-3012

*5.5mm System ONLY
Used In: Closed Hooks, Lateral, Inline, Wedding Band, & Domino Connectors



Inline Connector
00-1003-3050



Wedding Band Connector
00-1003-3055



Domino Connector
00-1003-3054



Set Screw, Large
00-1003-4001
Used In: Pedicle Screws & Open Hooks

5.5/6.0mm SYSTEM IMPLANTS

Screw Description	5.5/6.0mm Uniaxial Screw	5.5/6.0mm Uniaxial Reduction Screw	5.5/6.0mm Polyaxial Screw	5.5/6.0mm Polyaxial Reduction Screw	5.5/6.0mm Fixed Angle Screw
4.0MM X 20MM	00-1300-0420	00-1300-1420	00-1300-2420	00-1300-3420	00-1300-4420
4.0MM X 25MM	00-1300-0425	00-1300-1425	00-1300-2425	00-1300-3425	00-1300-4425
4.0MM X 30MM	00-1300-0430	00-1300-1430	00-1300-2430	00-1300-3430	00-1300-4430
4.0MM X 35MM	00-1300-0435	00-1300-1435	00-1300-2435	00-1300-3435	00-1300-4435
4.0MM X 40MM	00-1300-0440	00-1300-1440	00-1300-2440	00-1300-3440	00-1300-4440
5.0MM X 20MM	00-1300-0520	00-1300-1520	00-1300-2520	00-1300-3520	00-1300-4520
5.0MM X 25MM	00-1300-0525	00-1300-1525	00-1300-2525	00-1300-3525	00-1300-4525
5.0MM X 30MM	00-1300-0530	00-1300-1530	00-1300-2530	00-1300-3530	00-1300-4530
5.0MM X 35MM	00-1300-0535	00-1300-1535	00-1300-2535	00-1300-3535	00-1300-4535
5.0MM X 40MM	00-1300-0540	00-1300-1540	00-1300-2540	00-1300-3540	00-1300-4540
5.0MM X 45MM	00-1300-0545	00-1300-1545	00-1300-2545	00-1300-3545	00-1300-4545
5.0MM X 50MM	00-1300-0550	00-1300-1550	00-1300-2550	00-1300-3550	00-1300-4550
5.0MM X 55MM	00-1300-0555	00-1300-1555	00-1300-2555	00-1300-3555	00-1300-4555
6.0MM X 25MM	00-1300-0625	00-1300-1625	00-1300-2625	00-1300-3625	00-1300-4625
6.0MM X 30MM	00-1300-0630	00-1300-1630	00-1300-2630	00-1300-3630	00-1300-4630
6.0MM X 35MM	00-1300-0635	00-1300-1635	00-1300-2635	00-1300-3635	00-1300-4635
6.0MM X 40MM	00-1300-0640	00-1300-1640	00-1300-2640	00-1300-3640	00-1300-4640
6.0MM X 45MM	00-1300-0645	00-1300-1645	00-1300-2645	00-1300-3645	00-1300-4645
6.0MM X 50MM	00-1300-0650	00-1300-1650	00-1300-2650	00-1300-3650	00-1300-4650
6.0MM X 55MM	00-1300-0655	00-1300-1655	00-1300-2655	00-1300-3655	00-1300-4655
7.0MM X 30MM	00-1300-0730	00-1300-1730	00-1300-2730	00-1300-3730	00-1300-4730
7.0MM X 35MM	00-1300-0735	00-1300-1735	00-1300-2735	00-1300-3735	00-1300-4735
7.0MM X 40MM	00-1300-0740	00-1300-1740	00-1300-2740	00-1300-3740	00-1300-4740
7.0MM X 45MM	00-1300-0745	00-1300-1745	00-1300-2745	00-1300-3745	00-1300-4745
7.0MM X 50MM	00-1300-0750	00-1300-1750	00-1300-2750	00-1300-3750	00-1300-4750
7.0MM X 55MM	00-1300-0755	00-1300-1755	00-1300-2755	00-1300-3755	00-1300-4755
7.0MM X 60MM	00-1300-0760	00-1300-1760	00-1300-2760	00-1300-3760	00-1300-4760
7.0MM X 70MM	00-1300-0770	00-1300-1770	00-1300-2770	00-1300-3770	00-1300-4770
7.0MM X 80MM	00-1300-0780	00-1300-1780	00-1300-2780	00-1300-3780	00-1300-4780
7.0MM x 100MM	00-1300-0710	00-1300-1710	00-1300-2710	00-1300-3710	00-1300-4710
8.0MM X 50MM	-	-	00-1300-2850	00-1300-3850	-
8.0MM X 60MM	-	-	00-1300-2860	00-1300-3860	-
8.0MM X 70MM	-	-	00-1300-2870	00-1300-3870	-
8.0MM X 80MM	-	-	00-1300-2880	00-1300-3880	-
8.0MM X 100MM	-	-	00-1300-2810	00-1300-3810	-
9.0MM X 50MM	-	-	00-1300-2950	-	-
9.0MM X 60MM	-	-	00-1300-2960	-	-
9.0MM X 70MM	-	-	00-1300-2970	-	-
9.0MM X 80MM	-	-	00-1300-2980	-	-
9.0MM X 100MM	-	-	00-1300-2910	-	-

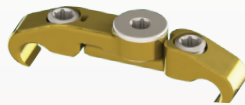
See Reverse Side for 5.5/6.0mm Connectors and Set Screw

5.5mm/6.0mm Connectors and Set Screws



Fixed Cross Connector

14MM	00-1300-5014
16MM	00-1300-5016
18MM	00-1300-5018
20MM	00-1300-5020
22MM	00-1300-5022
24MM	00-1300-5024
26MM	00-1300-5026
28MM	00-1300-5028
30MM	00-1300-5030
32MM	00-1300-5032
34MM	00-1300-5034
36MM	00-1300-5036



Adjustable Cross Connector

S	00-1300-3041
M	00-1300-3043
L	00-1300-3045
XL	00-1300-3047

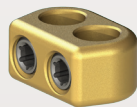


Open Lateral Connector

20MM	00-1300-7020
30MM	00-1300-7030
40MM	00-1300-7040
50MM	00-1300-7050
60MM	00-1300-7060
70MM	00-1300-7070
80MM	00-1300-7080



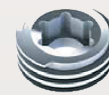
Inline Connector,
20mm
00-1300-5720



Wedding Band
Connector
00-1300-5900



Domino Connector,
20mm
00-1300-5820



Large Set Screw
00-1003-4001

Instructions For Use (IFU), cleaning instructions, and surgical techniques may be obtained by calling OrthoPediatrics® Customer Service at 574-268-6379. Read and understand indications, warnings, and adverse effects explained in IFU's prior to use.

OrthoPediatrics, Children Are Not Just Small Adults, ArmorLink, Jiminy, PediFlex, PediFrag, PediLoc, PediNail, PediPlates, PLEO, Response, Scwire, ShieldLoc, and the OP and Pedi logos are trademarks of OrthoPediatrics Corp.

OrthoPediatrics, Children Are Not Just Small Adults, PediPlates, PediLoc, Scwire and the Pedi logo are registered trademarks in the United States. The Pedi logo is a registered trademark in Australia and New Zealand, and a registered Community Trade Mark.

