TRAUSON®

Devine-TL5.5/6.0 Posterior Spinal System

Surgical Technique

Products you can trust at a price you can afford

TRAUSON®

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CONTENTS

Warning

This instruction is for reference only.
Operation must be performed under the guides of professional doctors.

Devine-TL5.5/6.0 Posterior Spinal System

Introduction

We are very proud to introduce Devine-TL system, a pedicle screw system.designed to deliver simple and diverse use.

Devine-TL is a comprehensive system that is designed to theat spinal deformity, degenerative disease and trauma applications.

Devine-TL spinal system offers two options based on different diameters of rod, 5.5mm and 6.0mm posterior spinal system.

Indications

- Disc degenerative disease
- Spondylolisthesis
- Stenosis
- Spinal Fracture
- Spinal Tumor

Contraindications

- Local spine or general infection
- Serious osteoporosis
- Cachexia
- Metals sensitivity
- Not withstand the operation for organ failure
- Be cautious to use the systems in diffuse idiopathic skeletal hyperostosis of spine
- Symptoms/signs were caused by myasthenia gravis or spinal cord diseases such as subacute combined degeneration of the spinal cord

Features & Benefits

- Elrod rod provides motion increase compared to rigid rod
- Load sharing delay or reduce adjacent level degeneration
- Wider range of diameter allow for an increased indications
- Reverse thread in set screw

Instruments (Devine-TL5.5/6.0)

Monoaxial Screwdriver(5.5/6.0)

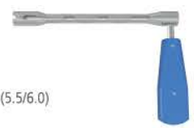
Reduction Monoaxial Screwdriver(5.5/6.0)

Mutiaxial Screwdriver(5.5/6.0)

Reduction Mutiaxial Screwdriver(5.5/6.0)

Provisional Tightener(Set Of 2)(5.5/6.0)

Set Screw Driverv(5.5/6.0)



Anti-torque Wrench(5.5/6.0)

Rod Rotation Wrench(5.5/6.0)

Reduction Tap Breaker(5.5/6.0)

Derotation Sleeve(Set Of 4)(5.5/6.0)

In-situ Bender-left (Optional) (5.5/6.0)

Hook Pusher (Optional) (5.5/6.0)

In-situ Bender-right (Optional) (5.5/6.0)

XHook Holder (Optional) (5.5/6.0)

Instrument Case (5.5/6.0)

Rod Reduction Forcep(5.5/6.0)

Anti-torque Wrench(5.5/6.0)

Instruments (Continued)

Straight Awl

Straight Awl, thoracic

3.0mm Straight Probe

3.0mm Curved Probe

3.5mm Curved Probe

3.5mm Curved Probe

Straight Feeler

Curved Feeler

Straight Feeler （Thick)

3.5mm Tap 4.5mm Tap 5.5mm Tap 6.5mm Tap

Crosslink Nut Driver

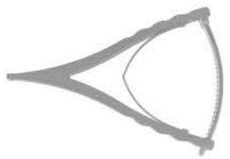
Domino Nut Driver

Rod Pusher

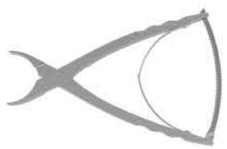
Rod Bender

Powerful Forcep

Rod Holder(Small)



Distractor



Compressor

Marker(Ball) (Set of 3)

Marker (Round) (Set Of 3)

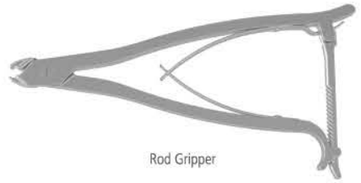
Trail Rod

Pedicle Elevator (Optional)

Lamina Elevator (Optional)

Anti-torque Wrench (Optional)

Rod Cutter (Optional)



Rod Gripper

Ratchet Handle

Torque Limiting Driver

Quick T-handle

Forcep Rocker

Hook Holder (Straight) (Optional)

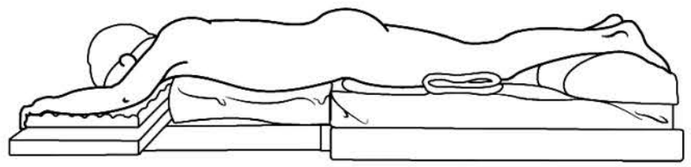
Hook Holder (Curved) (Optional)

Surgical Technique

Step1. Patient Positioning and Exposure

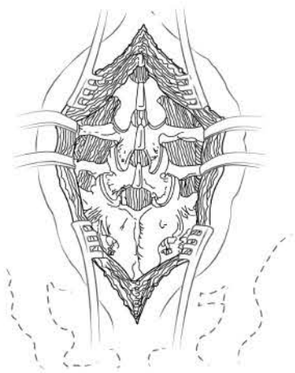
Diagnosis is based on patient history， physical examination and preoperative radiological assessment.

The patient can be placed on the surgical table in prone position that allows the abdomen to hang freely to facilitate venous drainage.



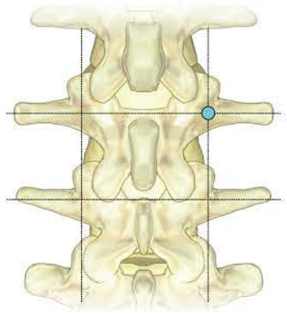
Surgical levels may be verified either clinically or radiologically. To help ensure adequate exposure， the incision is made to extend beyond the length of intended fusion.

Routine posterior approach is made to expose the transverse processes laterally.



Step2. Pedicle Preparation

The optimal insertion point is at the intersection of the transverse process and pars interarticularis.



Once anatomical landmarks are identified, use the pedicle awl to expose the pedicle entry point.

The pedicle awls have two types: lumbar and thoracic.

Pedicle awl

Pedicle awl，thoracic

Using pedicle finder create a pathway into pedicle. The correct rotational insertion of the instrument allows the finder to follow a path of minimum resistance without damaging the pedicle walls. In the case that resistance is met, the entry point and trajectory should be reevaluated.

Every type has two sizes: 3.0mm and 3.5mm.
There are two pedicle finder options available with Devine-TL, curved and straight.

Pedicle Finder, Straight, 3.0mm

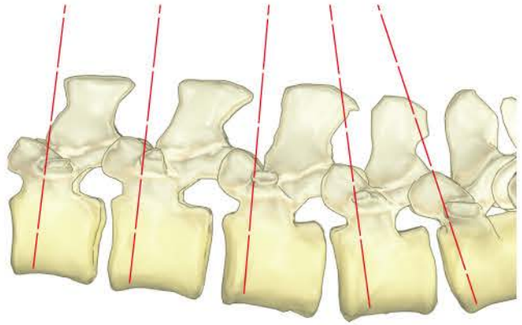
Pedicle Finder, Curved, 3.0mm

Pedicle Finder, Straight, 3.5mm

Pedicle Finder, Curved, 3.5mm

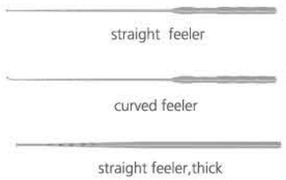
Surgical Technique (Continued)

Note:
-In sagittal plane, the pedicle finder should be parallel to the adjacent vertebral endplate.



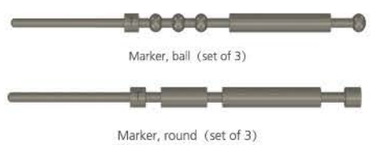
Having opened the channel of the pedicle, all five walls of the pedicle can be palpated with a probe to ensure that the walls of the pedicle have not been violated.

The pedicle probes have three types, straight、curved and crassied. The crassied probe can be used as a pedicle finder in patients who have small pedicle.



A radiographic marker is placed through the pedicle and into the targeting vertebral body, and its position within the confines of the pedicle is conformed with plain radiographs or fluoroscopy. The appropriate length of screw can also be confirmed on lateral radiographs by referring to the marker.

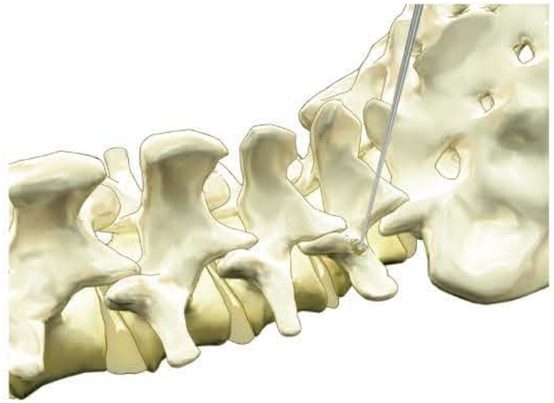
There are two kinds of pedicle markers: cylindrical and sphere. It is convenient to identify the pedicle in left or right with plain raidographs or fluoroscopy.



For increased bone purchase and more securely and faster insertion, use the bone taps to prepare the pedicle canal.

Taps are available in the following sizes:

Following the final preparation of the pedicle, a pedicle probe can be used to follow the tap threads through the cancellous bone and palpate for any perforations in the pedicle walls.



Step3. Pedicle screw insertion

Devine-TL thread pattern (Cylindrical shape and conical inner core design) is designed for optimal performance and purchases in cortical and cancellous vertebral bone.

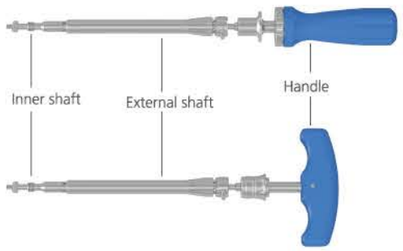
Surgical Technique (Continued)

Devine-TL spinal system have four types screws, monoaxial, reduction monoaxial, polyaxial, reduction polyaxial screw.

All types are self-tapping screws having a cutting flute to allow a surgeon to eliminate the tapping step. However, in most cases, tapping is recommended.

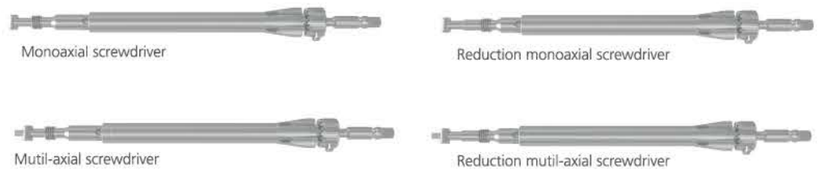
The hexagonal screw head is designed for faster and more directly engagement with the screwdriver and to prevent screw head stripping.

With the pedicle pathway prepared, and the proper screw diameter and length determined, the screw can be inserted into the pedicle using the appropriate Devine-TL screwdriver.

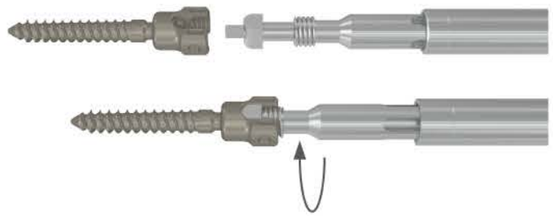


All the types of screwdrivers can be connected to any of the Devine-TL ratchet handle or quick T-handle. The design of the handle can help improve the connection between screw and screwdriver and provide more securely insertion.

Corresponding to screw, there are four types screwdriver, polyaxial, monoaxial, reduction polyaxial and reduction monoaxial screwdriver.



Fully seat the inner shaft into the screw head. Turn the outer shaft clockwise until the threads of outer shaft fully engaged the screw head. The combination of the outer shaft and inner shaft provides a stable insertion instrument for driving the screw.



Note:

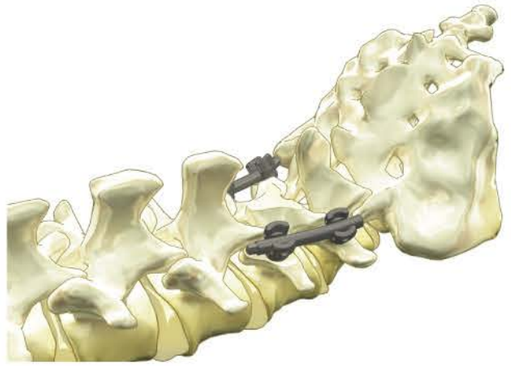
-when fully inserted, the screws should extend 50-80% into the vertebral body and be parallel to the superior endplate (For sacral fixation, especially when bone is osteopenic, bicortical purchase should be available).

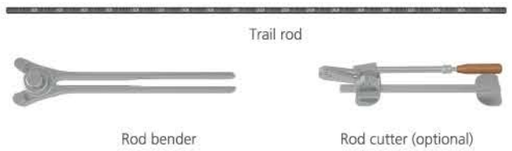
Surgical Technique (Continued)

Step4. Rod Contouring

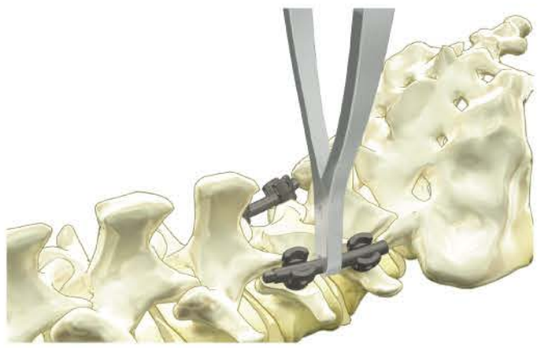
The Devine-TL spinal system can offer 5.5mm and 6.0mm diameter rods. This versatility is designed to present various size and stiffness options to meet different surgical needs.

Once all the screws are inserted, the appropriate length rod is determined. Using the rod template to more accurately determine the appropriate rod length. Cut a longer rod to the desired length using the table-top rod cutter.





To fit the desired contours, rod bending is performed by rod benders. To contour the rod, a series of small incremental adjustments will bend the rod gradually and help ensure even stress distribution on the rod.



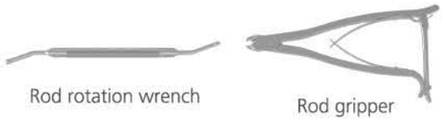
Step5. Rod Linkage

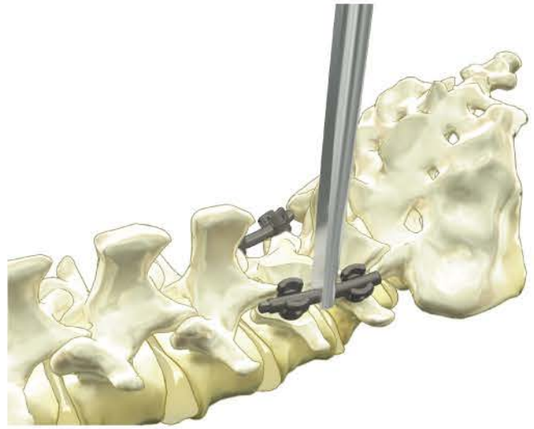
Prior to the rod placement step, the patient's frame or operating table should be adjusted to increase lumbar lordosis.

Once the rod is bent to the desired contour, the rod holder can be used to help place the rod into the grooves of the implant.

The rod pusher can be used for pushing the rod into the bottom of the screw head.

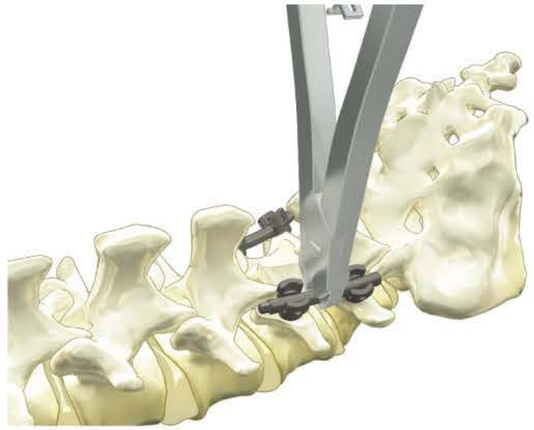
When the rod is placed in the bottom of screw head, we can use the rod rotation wrench, rod gripper or powerful forcep to rotate the rod.





Attach the rod rotation wrench to the hex end of the rod, then rotate the wrench that can allow for minor rod rotation.

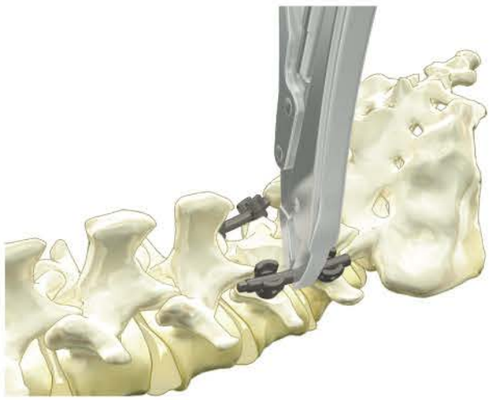
Using the rod gripper grip the rod, then rotate the rod gripper that can get rod rotation.



Surgical Technique (Continued)

In scoliosis patient,more powerful strength is needed to get the correction of deformity. The powerful forcep can offer more strength to accomplish rod rotation .

Powerful forcep



The in-situ rod benders can be used to achieve final incremental correction maneuvers. Care should be taken to not make extreme bends as that can cause stress concentration.

In-situ bender-left (optional)

In-situ bender-right (optional)

The Devine TL system uses the reverse thread blocker as its closure mechanism. It can help minimize stresses on the lateral wall of screw head and strength vertical pressure, easy to lock. The blocker is assembled onto the pre-tightener for insertion.

There are two provisional tightener. Load the blocker firmly onto the tip of the pre-tightener and place it into the screw head for provisional tightening. Do not perform final tightening with the pre-tightener as it will result in damage to the instrument over time.

Provisional tightener(set of 2)

Step6. Rod Reduction

If the rod is not fully seated into the bottom of the screw head, the rocker or the rod reduction forcep can be used to fully seat the rod.

To use the rocker to reduce the rod into the head of the pedicle screw. The rocker is then pushed backward toward the rod, levering the rod into the screw head.

rod rocker

To use the rod reducer to grasp the screw head, slowly compress allowing the sleeve to slidedown and seat the rod in the bottom of the screw head.

Surgical Technique (Continued)

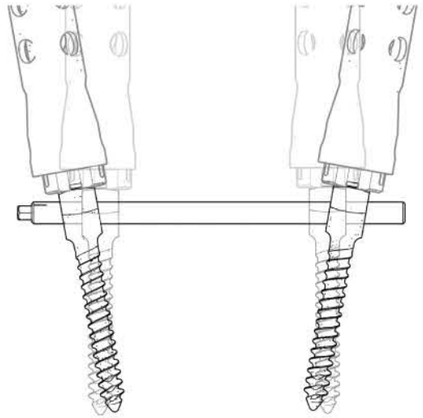
The provisional tightener is available if the rod is fully seated into the bottom of the screw head.


Rod reduction forcep


Derotation sleeve (set of 4)

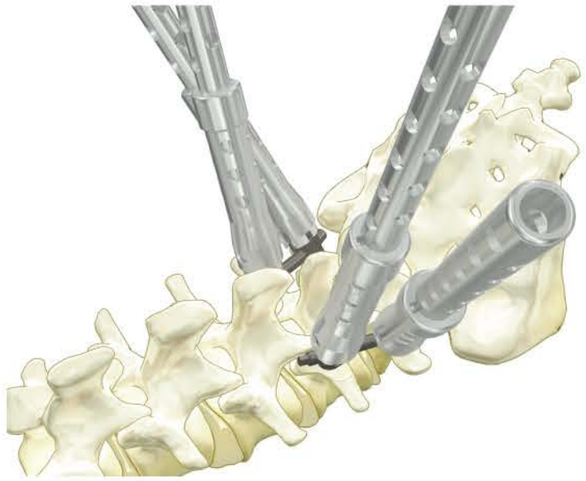
Step7. Derotation Sleeve

Devine-TL system offers derotation sleeve (set of 4) that can be used for fracture reduction or vertebral body derotation.



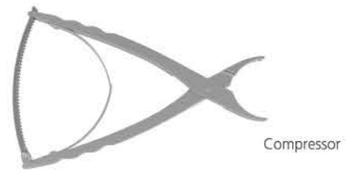
Press the screws together dorsally using the derotation sleeves to lordose the spine. It can allow correction of kyphosis of the spine and reduction of the fractured bone fragments.

In scoliosis patient, a periapical derotational maneuver can be applied by the derotation sleeves.



Step8. Compression and Distraction

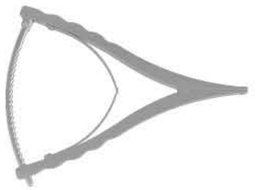
Spinal deformity can be further affected by creating a distraction on the cancavity of the deformity and compression on the convexity of the deformity. The compression and distraction maneuvers should be performed once all of the blockers are inserted but not final tightened.


Compressor

Note:

-Care should be taken with all blockers to ensure that the feet of parallel compressor or the distractor are placed securely against the implant body and not against the blocker. Failure to do this may result in slippage of the implant. Once satisfactory compression or distraction has been achieved, final tightening may be performed.

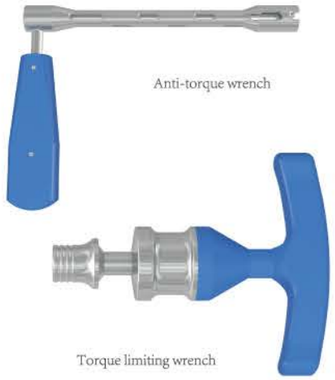
IIf the desired distance cannot be achieved by the compressor or distractor, the rod gripper can be used as a fixation stop that distract or compress step by step.


Distractor

Surgical Technique (Continued)

Step9. Final Tightening

Set screw driver can be attach to torque limiting wrench, then use it with anti-torque wrench to final tighten.



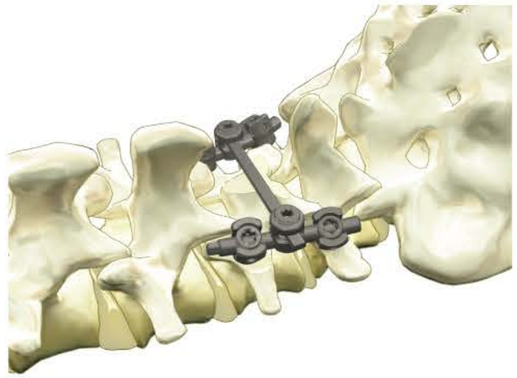
The anti-torque wrench can allow the torque limiting wrench to align with the tightening axis and help to maximize the torque needed to lock the implant assembly.

Set screw driver

Insert the anti-torque wrench into the locking stabilizer which should be positioned over the implant and rod. The anti-wrench provides adequate leverage for final tightening of the blocker. The locking stabilizer should be held firmly to prevent torque of the construct while the blocker is secured.

Step10. Cross Link

Cross connectors are recommended for increased rotational stability of the construct.



The cross connector is designed for low profile and vertical loading, It is easy to lock .


Crosslink nut driver


Anti-torque wrench(optional)

Following the final tightening of screws and rods, use the 3.0mm hex driver with anti-torque wrench to tighten the set screws.

Step11. Reduction Screw

Devine-TL reduction screws can be used during a reduction procedure. The tabs are broken off once the reduction procedure is finished.

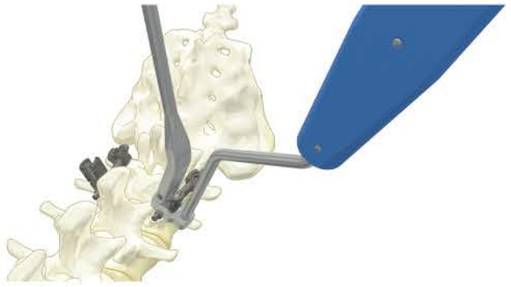
There is a snap clip in the reduction screw tab remover allowing a clean and easy break, the broken reduction screw tap can be held by the snap clip.


Reduction tap breaker


Anti-torque wrench

Surgical Technique (Continued)

The screw tab is broken away using reduction screw tab remover to grip the tab and bend it in a back and forth motion. Using the anti-torque wrench with reduction screw tab remover can allow a safe and quick break.



Step12. Domino Connector

In cases in which the patient's anatomy requires significantly different lateral or medial screw positions, domino connectors may be used to facilitate rod attachment. It is also used as growing rod technique for correction of scoliosis patient.

domino connector-horizontal

domino connector-vertical

The domino connector is available in two types: horizontal and vertical. It can meet different surgical needs.

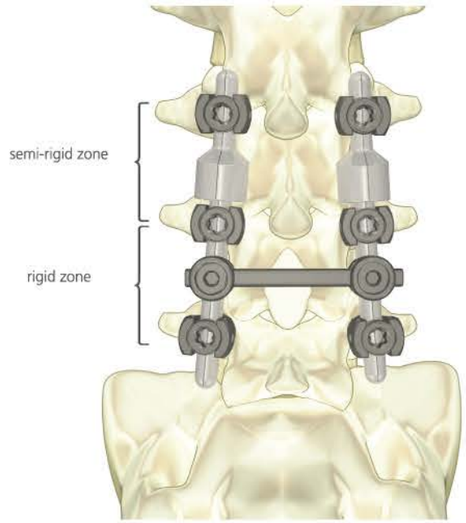
Slide the rod into the domino connector, then use the domino screwdriver to tighten the connector set screws to secure the assembly in place.

Step13. Elrod rod

Devine-TL system offers Elrod-intervertebral dynamic stabilization system. It is made of titanium alloy and allows 5 degree angulation in any direction. The marked line is convenient for exact rod placement.

Elrod system can increase segemental motion compared to rigid rod. It can effective afford load sharing, delay or reduce adjacent segmental degenerative disease.

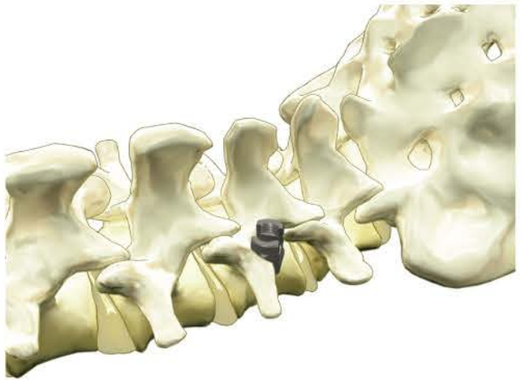
The dynamic stabilization system can provide bone/screw and screw/rod interface. It can help prevent screw loosening and construct breakage.



Surgical Technique (Continued)

Step14. Hooks Insertion (option)

The appropriate hook is chosen by a number of factors including patient anatomy, bone quality, correction technique, and the force applied.



The Devine-TL spinal system offers a number of anatomic top loading and top tightening hooks of different shapes and sizes.

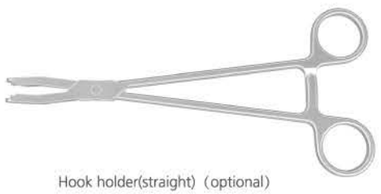
Various hooks

Normailized design of the products and instruments, convenient to manipulate.

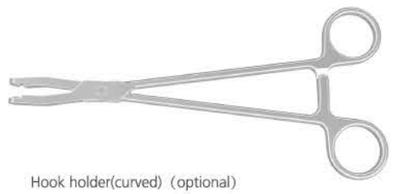
Pedicle elevator (optional)

Lamina elevator (optional)

There are four possible hook placement sites in the spine: pedicle, transverse process, supra lamina and infra lamina.



Hook holder(straight) (optional)



Hook holder(curved) (optional)

Implants Ordering Information

Fixed-angle Screw

P/N-TL5.5	P/N-TL6.0	Dia	Length	Material
45358020E	45411020E	Ø4.5mm	20mm	TA
45358025E	45411025E	Ø4.5mm	25mm	TA
45358030E	45411030E	Ø4.5mm	30mm	TA
45358035E	45411035E	Ø4.5mm	35mm	TA
45358040E	45411040E	Ø4.5mm	40mm	TA
45358045E	45411045E	Ø4.5mm	45mm	TA
45358050E	45411050E	Ø4.5mm	50mm	TA
45358055E	45411055E	Ø4.5mm	55mm	TA
45359020E	45412020E	Ø5.0mm	20mm	TA
45359025E	45412025E	Ø5.0mm	25mm	TA
45359030E	45412030E	Ø5.0mm	30mm	TA
45359035E	45412035E	Ø5.0mm	35mm	TA
45359040E	45412040E	Ø5.0mm	40mm	TA
45359045E	45412045E	Ø5.0mm	45mm	TA
45359050E	45412050E	Ø5.0mm	50mm	TA
45359055E	45412055E	Ø5.0mm	55mm	TA
45360025E	45413025E	Ø5.5mm	25mm	TA
45360030E	45413030E	Ø5.5mm	30mm	TA
45360035E	45413035E	Ø5.5mm	35mm	TA
45360040E	45413040E	Ø5.5mm	40mm	TA
45360045E	45413045E	Ø5.5mm	45mm	TA
45360050E	45413050E	Ø5.5mm	50mm	TA
45360055E	45413055E	Ø5.5mm	55mm	TA
45360060E	45413060E	Ø5.5mm	60mm	TA
45361025E	45414025E	Ø6.0mm	25mm	TA
45361030E	45414030E	Ø6.0mm	30mm	TA
45361035E	45414035E	Ø6.0mm	35mm	TA
45361040E	45414040E	Ø6.0mm	40mm	TA
45361045E	45414045E	Ø6.0mm	45mm	TA
45361050E	45414050E	Ø6.0mm	50mm	TA
45361055E	45414055E	Ø6.0mm	55mm	TA
45361060E	45414060E	Ø6.0mm	60mm	TA
45362025E	45415025E	Ø6.5mm	25mm	TA
45362030E	45415030E	Ø6.5mm	30mm	TA
45362035E	45415035E	Ø6.5mm	35mm	TA
45362040E	45415040E	Ø6.5mm	40mm	TA
45362045E	45415045E	Ø6.5mm	45mm	TA
45362050E	45415050E	Ø6.5mm	50mm	TA
45362055E	45415055E	Ø6.5mm	55mm	TA

Fixed-angle Screw

P/N-TL5.5	P/N-TL6.0	Dia	Length	Material
45362060E	45415060E	Ø6.5mm	60mm	TA
45363025E	45416025E	Ø7.0mm	25mm	TA
45363030E	45416030E	Ø7.0mm	30mm	TA
45363035E	45416035E	Ø7.0mm	35mm	TA
45363040E	45416040E	Ø7.0mm	40mm	TA
45363045E	45416045E	Ø7.0mm	45mm	TA
45363050E	45416050E	Ø7.0mm	50mm	TA
45363055E	45416055E	Ø7.0mm	55mm	TA
45363060E	45416060E	Ø7.0mm	60mm	TA
45363065E	45416065E	Ø7.0mm	65mm	TA
45364025E	45417025E	Ø7.5mm	25mm	TA
45364030E	45417030E	Ø7.5mm	30mm	TA
45364035E	45417035E	Ø7.5mm	35mm	TA
45364040E	45417040E	Ø7.5mm	40mm	TA
45364045E	45417045E	Ø7.5mm	45mm	TA
45364050E	45417050E	Ø7.5mm	50mm	TA
45364055E	45417055E	Ø7.5mm	55mm	TA
45364060E	45417060E	Ø7.5mm	60mm	TA
45364065E	45417065E	Ø7.5mm	65mm	TA

Reduction Fixed-angle Screw

P/N-TL5.5	P/N-TL6.0	Dia	Length	Material
45365020E	45418020E	Ø4.5mm	20mm	TA
45365025E	45418025E	Ø4.5mm	25mm	TA
45365030E	45418030E	Ø4.5mm	30mm	TA
45365035E	45418035E	Ø4.5mm	35mm	TA
45365040E	45418040E	Ø4.5mm	40mm	TA
45365045E	45418045E	Ø4.5mm	45mm	TA
45365050E	45418050E	Ø4.5mm	50mm	TA
45365055E	45418055E	Ø4.5mm	55mm	TA
45366020E	45419020E	Ø5.0mm	20mm	TA
45366025E	45419025E	Ø5.0mm	25mm	TA
45366030E	45419030E	Ø5.0mm	30mm	TA
45366035E	45419035E	Ø5.0mm	35mm	TA
45366040E	45419040E	Ø5.0mm	40mm	TA
45366045E	45419045E	Ø5.0mm	45mm	TA
45366050E	45419050E	Ø5.0mm	50mm	TA

Implants Ordering Information (Continued)

Reduction Fixed-angle Screw

P/N-TL5.5	P/N-TL6.0	Dia	Length	Material
45366055E	45419055E	Ø5.0mm	55mm	TA
45367025E	45420025E	Ø5.5mm	25mm	TA
45367030E	45420030E	Ø5.5mm	30mm	TA
45367035E	45420035E	Ø5.5mm	35mm	TA
45367040E	45420040E	Ø5.5mm	40mm	TA
45367045E	45420045E	Ø5.5mm	45mm	TA
45367050E	45420050E	Ø5.5mm	50mm	TA
45367055E	45420055E	Ø5.5mm	55mm	TA
45367060E	45420060E	Ø5.5mm	60mm	TA
45368025E	45421025E	Ø6.0mm	25mm	TA
45368030E	45421030E	Ø6.0mm	30mm	TA
45368035E	45421035E	Ø6.0mm	35mm	TA
45368040E	45421040E	Ø6.0mm	40mm	TA
45368045E	45421045E	Ø6.0mm	45mm	TA
45368050E	45421050E	Ø6.0mm	50mm	TA
45368055E	45421055E	Ø6.0mm	55mm	TA
45368060E	45421060E	Ø6.0mm	60mm	TA
45369025E	45422025E	Ø6.5mm	25mm	TA
45369030E	45422030E	Ø6.5mm	30mm	TA
45369035E	45422035E	Ø6.5mm	35mm	TA
45369040E	45422040E	Ø6.5mm	40mm	TA
45369045E	45422045E	Ø6.5mm	45mm	TA
45369050E	45422050E	Ø6.5mm	50mm	TA
45369055E	45422055E	Ø6.5mm	55mm	TA
45369060E	45422060E	Ø6.5mm	60mm	TA
45370025E	45423025E	Ø7.0mm	25mm	TA
45370030E	45423030E	Ø7.0mm	30mm	TA
45370035E	45423035E	Ø7.0mm	35mm	TA
45370040E	45423040E	Ø7.0mm	40mm	TA
45370045E	45423045E	Ø7.0mm	45mm	TA
45370050E	45423050E	Ø7.0mm	50mm	TA
45370055E	45423055E	Ø7.0mm	55mm	TA
45370060E	45423060E	Ø7.0mm	60mm	TA
45370065E	45423065E	Ø7.0mm	65mm	TA
45371025E	45424025E	Ø7.5mm	25mm	TA
45371030E	45424030E	Ø7.5mm	30mm	TA
45371035E	45424035E	Ø7.5mm	35mm	TA
45371040E	45424040E	Ø7.5mm	40mm	TA
45371045E	45424045E	Ø7.5mm	45mm	TA
45371050E	45424050E	Ø7.5mm	50mm	TA
45371055E	45424055E	Ø7.5mm	55mm	TA
45371060E	45424060E	Ø7.5mm	60mm	TA
45371065E	45424065E	Ø7.5mm	65mm	TA

Multi-axial Screw

P/N-TL5.5	P/N-TL6.0	Dia	Length	Material
45372020E	45425020E	Ø4.0mm	20mm	TA
45372025E	45425025E	Ø4.0mm	25mm	TA
45372030E	45425030E	Ø4.0mm	30mm	TA
45372035E	45425035E	Ø4.0mm	35mm	TA
45372040E	45425040E	Ø4.0mm	40mm	TA
45372045E	45425045E	Ø4.0mm	45mm	TA
45372050E	45425050E	Ø4.0mm	50mm	TA
45373020E	45426020E	Ø4.5mm	20mm	TA
45373025E	45426025E	Ø4.5mm	25mm	TA
45373030E	45426030E	Ø4.5mm	30mm	TA
45373035E	45426035E	Ø4.5mm	35mm	TA
45373040E	45426040E	Ø4.5mm	40mm	TA
45373045E	45426045E	Ø4.5mm	45mm	TA
45373050E	45426050E	Ø4.5mm	50mm	TA
45374020E	45427020E	Ø5.0mm	20mm	TA
45374025E	45427025E	Ø5.0mm	25mm	TA
45374030E	45427030E	Ø5.0mm	30mm	TA
45374035E	45427035E	Ø5.0mm	35mm	TA
45374040E	45427040E	Ø5.0mm	40mm	TA
45374045E	45427045E	Ø5.0mm	45mm	TA
45374050E	45427050E	Ø5.0mm	50mm	TA
45375020E	45428020E	Ø5.5mm	20mm	TA
45375025E	45428025E	Ø5.5mm	25mm	TA
45375030E	45428030E	Ø5.5mm	30mm	TA
45375035E	45428035E	Ø5.5mm	35mm	TA
45375040E	45428040E	Ø5.5mm	40mm	TA
45375045E	45428045E	Ø5.5mm	45mm	TA
45375050E	45428050E	Ø5.5mm	50mm	TA
45375055E	45428055E	Ø5.5mm	55mm	TA
45375060E	45428060E	Ø5.5mm	60mm	TA
45376020E	45429020E	Ø6.0mm	20mm	TA
45376025E	45429025E	Ø6.0mm	25mm	TA
45376030E	45429030E	Ø6.0mm	30mm	TA
45376035E	45429035E	Ø6.0mm	35mm	TA
45376040E	45429040E	Ø6.0mm	40mm	TA
45376045E	45429045E	Ø6.0mm	45mm	TA
45376050E	45429050E	Ø6.0mm	50mm	TA
45376055E	45429055E	Ø6.0mm	55mm	TA
45376060E	45429060E	Ø6.0mm	60mm	TA
45376065E	45429065E	Ø6.0mm	65mm	TA
45377020E	45430020E	Ø6.5mm	20mm	TA
45377025E	45430025E	Ø6.5mm	25mm	TA
45377030E	45430030E	Ø6.5mm	30mm	TA

Multi-axial Screw

P/N-TL5.5	P/N-TL6.0	Dia	Length	Material
45377035E	45430035E	Ø6.5mm	35mm	TA
45377040E	45430040E	Ø6.5mm	40mm	TA
45377045E	45430045E	Ø6.5mm	45mm	TA
45377050E	45430050E	Ø6.5mm	50mm	TA
45377055E	45430055E	Ø6.5mm	55mm	TA
45377060E	45430060E	Ø6.5mm	60mm	TA
45377065E	45430065E	Ø6.5mm	65mm	TA
45378025E	45431025E	Ø7.0mm	25mm	TA
45378030E	45431030E	Ø7.0mm	30mm	TA
45378035E	45431035E	Ø7.0mm	35mm	TA
45378040E	45431040E	Ø7.0mm	40mm	TA
45378045E	45431045E	Ø7.0mm	45mm	TA
45378050E	45431050E	Ø7.0mm	50mm	TA
45378055E	45431055E	Ø7.0mm	55mm	TA
45378060E	45431060E	Ø7.0mm	60mm	TA
45378065E	45431065E	Ø7.0mm	65mm	TA
45378070E	45431070E	Ø7.0mm	70mm	TA
45379025E	45432025E	Ø7.5mm	25mm	TA
45379030E	45432030E	Ø7.5mm	30mm	TA
45379035E	45432035E	Ø7.5mm	35mm	TA
45379040E	45432040E	Ø7.5mm	40mm	TA
45379045E	45432045E	Ø7.5mm	45mm	TA
45379050E	45432050E	Ø7.5mm	50mm	TA
45379055E	45432055E	Ø7.5mm	55mm	TA
45379060E	45432060E	Ø7.5mm	60mm	TA
45379065E	45432065E	Ø7.5mm	65mm	TA
45379070E	45432070E	Ø7.5mm	70mm	TA

Reduction Multi-axial Screw

P/N-TL5.5	P/N-TL6.0	Dia	Length	Material
45380020E	45433020E	Ø4.0mm	20mm	TA
45380025E	45433025E	Ø4.0mm	25mm	TA
45380030E	45433030E	Ø4.0mm	30mm	TA
45380035E	45433035E	Ø4.0mm	35mm	TA
45380040E	45433040E	Ø4.0mm	40mm	TA
45380045E	45433045E	Ø4.0mm	45mm	TA
45380050E	45433050E	Ø4.0mm	50mm	TA

Reduction Multi-axial Screw

P/N-TL5.5	P/N-TL6.0	Dia	Length	Material
45381020E	45434020E	Ø4.5mm	20mm	TA
45381025E	45434025E	Ø4.5mm	25mm	TA
45381030E	45434030E	Ø4.5mm	30mm	TA
45381035E	45434035E	Ø4.5mm	35mm	TA
45381040E	45434040E	Ø4.5mm	40mm	TA
45381045E	45434045E	Ø4.5mm	45mm	TA
45381050E	45434050E	Ø4.5mm	50mm	TA
45382020E	45435020E	Ø5.0mm	20mm	TA
45382025E	45435025E	Ø5.0mm	25mm	TA
45382030E	45435030E	Ø5.0mm	30mm	TA
45382035E	45435035E	Ø5.0mm	35mm	TA
45382040E	45435040E	Ø5.0mm	40mm	TA
45382045E	45435045E	Ø5.0mm	45mm	TA
45382050E	45435050E	Ø5.0mm	50mm	TA
45383020E	45436020E	Ø5.5mm	20mm	TA
45383025E	45436025E	Ø5.5mm	25mm	TA
45383030E	45436030E	Ø5.5mm	30mm	TA
45383035E	45436035E	Ø5.5mm	35mm	TA
45383040E	45436040E	Ø5.5mm	40mm	TA
45383045E	45436045E	Ø5.5mm	45mm	TA
45383050E	45436050E	Ø5.5mm	50mm	TA
45383055E	45436055E	Ø5.5mm	55mm	TA
45383060E	45436060E	Ø5.5mm	60mm	TA
45384020E	45437020E	Ø6.0mm	20mm	TA
45384025E	45437025E	Ø6.0mm	25mm	TA
45384030E	45437030E	Ø6.0mm	30mm	TA
45384035E	45437035E	Ø6.0mm	35mm	TA
45384040E	45437040E	Ø6.0mm	40mm	TA
45384045E	45437045E	Ø6.0mm	45mm	TA
45384050E	45437050E	Ø6.0mm	50mm	TA
45384055E	45437055E	Ø6.0mm	55mm	TA
45384060E	45437060E	Ø6.0mm	60mm	TA
45384065E	45437065E	Ø6.0mm	65mm	TA
45385020E	45438020E	Ø6.5mm	20mm	TA
45385025E	45438025E	Ø6.5mm	25mm	TA
45385030E	45438030E	Ø6.5mm	30mm	TA
45385035E	45438035E	Ø6.5mm	35mm	TA
45385040E	45438040E	Ø6.5mm	40mm	TA
45385045E	45438045E	Ø6.5mm	45mm	TA

Implants Ordering Information (Continued)

Reduction Multi-axial Screw

P/N-TL5.5	P/N-TL6.0	Dia	Length	Material
45385050E	45438050E	Ø6.5mm	50mm	TA
45385055E	45438055E	Ø6.5mm	55mm	TA
45385060E	45438060E	Ø6.5mm	60mm	TA
45385065E	45438065E	Ø6.5mm	65mm	TA
45386025E	45439025E	Ø7.0mm	25mm	TA
45386030E	45439030E	Ø7.0mm	30mm	TA
45386035E	45439035E	Ø7.0mm	35mm	TA
45386040E	45439040E	Ø7.0mm	40mm	TA
45386045E	45439045E	Ø7.0mm	45mm	TA
45386050E	45439050E	Ø7.0mm	50mm	TA
45386055E	45439055E	Ø7.0mm	55mm	TA
45386060E	45439060E	Ø7.0mm	60mm	TA
45386065E	45439065E	Ø7.0mm	65mm	TA
45386070E	45439070E	Ø7.0mm	70mm	TA
45387025E	45440025E	Ø7.5mm	25mm	TA
45387030E	45440030E	Ø7.5mm	30mm	TA
45387035E	45440035E	Ø7.5mm	35mm	TA
45387040E	45440040E	Ø7.5mm	40mm	TA
45387045E	45440045E	Ø7.5mm	45mm	TA
45387050E	45440050E	Ø7.5mm	50mm	TA
45387055E	45440055E	Ø7.5mm	55mm	TA
45387060E	45440060E	Ø7.5mm	60mm	TA
45387065E	45440065E	Ø7.5mm	65mm	TA
45387070E	45440070E	Ø7.5mm	70mm	TA

Pedicle Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
45388010E	45441010E	L	TA
45388020E	45441020E	M	TA
45388030E	45441030E	S	TA

Wide Blade Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
45390010E	45443010E	L	TA
45390020E	45443020E	M	TA
45390030E	45443030E	S	TA

Narrow Blade Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
45391010E	45444010E	L	TA
45391020E	45444020E	M	TA
45391030E	45444030E	S	TA

Wide Blade Ramped Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
45392020E	45445020E	M	TA

Narrow Blade Ramped Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
45393020E	45446020E	M	TA

Lumbar Supralaminar Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
/	45447010E	L	TA
45394020E	45447020E	M	TA
/	45447030E	S	TA

Lumbar Infralaminar Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
45395010E	45448010E	L	TA
/	45448020E	M	TA
45395030E	45448030E	S	TA

Extended Body Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
45396010E	45449010E	L	TA
45396020E	45449020E	M	TA
45396030E	45449030E	S	TA

Thoracic Angled Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
45397001E	45450001E	L	TA
45397002E	45450002E	R	TA

Crosslink Device

P/N-TL5.5	P/N-TL6.0	Length	Material
45399040E	45453040E	L=40	TA
45399045E	45453045E	L=45	TA
45399050E	45453050E	L=50	TA
45399055E	45453055E	L=55	TA
45399060E	45453060E	L=60	TA
45399070E	45453070E	L=70	TA
45399080E	45453080E	L=80	TA
45399090E	45453090E	L=90	TA
45399100E	45453100E	L=100	TA

Rod

P/N-TL5.5	P/N-TL6.0	Length	Material
45398030E	45451030E	L=30	TA
45398035E	45451035E	L=35	TA
45398040E	45451040E	L=40	TA
45398045E	45451045E	L=45	TA
45398050E	45451050E	L=50	TA
45398055E	45451055E	L=55	TA
45398060E	45451060E	L=60	TA
45398070E	45451070E	L=70	TA
45398080E	45451080E	L=80	TA
45398090E	45451090E	L=90	TA
45398100E	45451100E	L=100	TA
45398110E	45451110E	L=110	TA
45398120E	45451120E	L=120	TA
45398250E	45451250E	L=250	TA
45398510E	45451510E	L=510	TA

Offset Hook

P/N-TL5.5	P/N-TL6.0	Specification	Material
45389001E	45442001E	L	TA
45389002E	45442002E	R	TA

TL5.5 Domino Connector

P/N-TL5.5	Spec	Material
45401001E	Square	TA
45401002E	Straight	TA

M5 Set Screw

P/N-TL5.5	Material
45402000E	TA

Elrod ROD

P/N-TL5.5	P/N-TL6.0	Length	Material
45403055E	45454055E	L=55	TA
45403060E	45454060E	L=60	TA
45403065E	45454065E	L=65	TA
45403070E	45454070E	L=70	TA
45403075E	45454075E	L=75	TA
45403080E	45454080E	L=80	TA
45403085E	45454085E	L=85	TA
45403090E	45454090E	L=90	TA
45403095E	45454095E	L=95	TA
45403100E	45454100E	L=100	TA
45403110E	45454110E	L=110	TA
45403120E	45454120E	L=120	TA
45403130E	45454130E	L=130	TA

Instruments Ordering Information

Devine-TL5.5 Spine Instrument Set

P/N	Description	Quantity
13200100E	Stright Awl	1
13200200E	Stright Awl, thoracic	1
13200300E	3.0mm Straight Probe	1
13200400E	3.0mm Curved Probe	1
13200500E	3.5mm Straight Probe	1
13200600E	3.5mm Curved Probe	1
13200700E	Straght Feeler	1
13200800E	Curved Feeler	1
10240100E	3.5mm Tap	1
10240200E	4.5mm Tap	1
10240300E	5.5mm Tap	1
10240400E	6.5mm Tap	1
10240500E	Monoaxial Screwdriver	1
10240600E	Reduction Monoaxial Screwdriver	1
10240700E	Multiaxial Screwdriver	1
10240800E	Reduction Multiaxial Screwdriver	1
13201700E	Trail Rod, Ø3	1
10240900E	Previsional Tighter	2
10241000E	Set Screw Driver	1
13202000E	Torque Limiting Driver	1
10241100E	Anti-torque Wrench	1
13202200E	Crosslink Nut Driver, SW3.0	1
13202300E	Rod Pusher	1
13202400E	Rod Rotation Wrench, SW3.5	1
13202500E	Reduction Tap Breaker	1
13202600E	Rod Holder (Small)	1
13202700E	Rod Bender	1
13202800E	Compressor	1

Devine-TL5.5 Spine Instrument Set

P/N	Description	Quantity
13202900E	Distractor	1
13203000E	Powerful Forcep	1
13203100E	Rod Gripper	1
10241200E	Rod Reduction Forcep	1
13203300E	Forcep Rocker	1
10241300E	Derotation Sleeve, Large	4
13203500E	Ratchet Handle	1
13203600E	Quick T-handle	1
13204400E	Domino Nut Driver, SW2.5	1
13203800E	Straight Feeler (thick)	1
13203900E	Marker (round)	3
13204000E	Marker (ball)	3
10241400E	Anti-torque Wrench	1
10241500E	Instrument Case	1
13204300E	Quick Handle	1
13204500E	Anti-torque Wrench	1
13204600E	Clasp Pusher	1
11904600E	Crosslink Holder	1
13204800E	Reduction Tap Cutter	1
13204900E	In-situ Bender - left	1
13205000E	In-situ Bender - right	1
13205100E	Hook Holder (straight)	1
13205200E	Hook Holder (curved)	1
11901400E	Pedicle Elevator	1
11901500E	Lamina Elevator	1
11901600E	Hook Pusher	1
11901800E	Hook Holder	1
11903000E	Rod Cutter	1

Devine-TL6.0 Spine Instrument Set

P/N	Description	Quantity
13200100E	Stright Awl	1
13200200E	Stright Awl, thoracic	1
13200300E	3.0mm Straight Probe	1
13200400E	3.0mm Curved Probe	1
13200500E	3.5mm Straight Probe	1
13200600E	3.5mm Curved Probe	1
13200700E	Straght Feeler	1
13200800E	Curved Feeler	1
10240100E	3.5mm Tap	1
10240200E	4.5mm Tap	1
10240300E	5.5mm Tap	1
10240400E	6.5mm Tap	1
10250100E	Monoaxial Screwdriver	1
10250200E	Reduction Monoaxial Screwdriver	1
10250300E	Multiaxial Screwdriver	1
10250400E	Reduction Multiaxial Screwdriver	1
13201700E	Trail Rod, Ø3	1
10250500E	Previsional Tighter	1
10250600E	Set Screw Driver	1
13202000E	Torque Limiting Driver	1
10250700E	Anti-torque Wrench	1
13202200E	Crosslink Nut Driver, SW3.0	1
13202300E	Rod Pusher	1
19901500E	Rod Rotation Wrench, SW3.5	1
13202500E	Reduction Tap Breaker	1
13202600E	Rod Holder (Small)	1
13202700E	Rod Bender	1
13202800E	Compressor	1

Devine-TL6.0 Spine Instrument Set

P/N	Description	Quantity
13202900E	Distractor	1
13203000E	Powerful Forcep	1
13203100E	Rod Gripper	1
10250900E	Rod Reduction Forcep	1
13203300E	Forcep Rocker	1
10251000E	Derotation Sleeve, Large	4
13203500E	Ratchet Handle	1
13203600E	Quick T-handle	1
13204400E	Domino Nut Driver, SW2.5	1
13203800E	Straight Feeler (thick)	1
13203900E	Marker (round)	3
13204000E	Marker (ball)	3
10250800E	Anti-torque Wrench	1
10251200E	Instrument Case	1
13204300E	Quick Handle	1
10251100E	Anti-torque Wrench	1
13204600E	Clasp Pusher	1
11904600E	Crosslink Holder	1
19902400E	Reduction Tap Cutter	1
11402013E	In-situ Bender - left	1
11402014E	In-situ Bender - right	1
13205100E	Hook Holder (straight)	1
13205200E	Hook Holder (curved)	1
11901400E	Pedicle Elevator	1
11901500E	Lamina Elevator	1
11901600E	Hook Pusher	1
11901800E	Hook Holder	1
11903000E	Rod Cutter	1