



Erisma[®] - **LP EVO**

POSTERIOR FIXATION



Surgical Technique - USA



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Erisma-LP EVO

POSTERIOR FIXATION



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| 4 Rod Insertion | 8 Crosslink Placement |

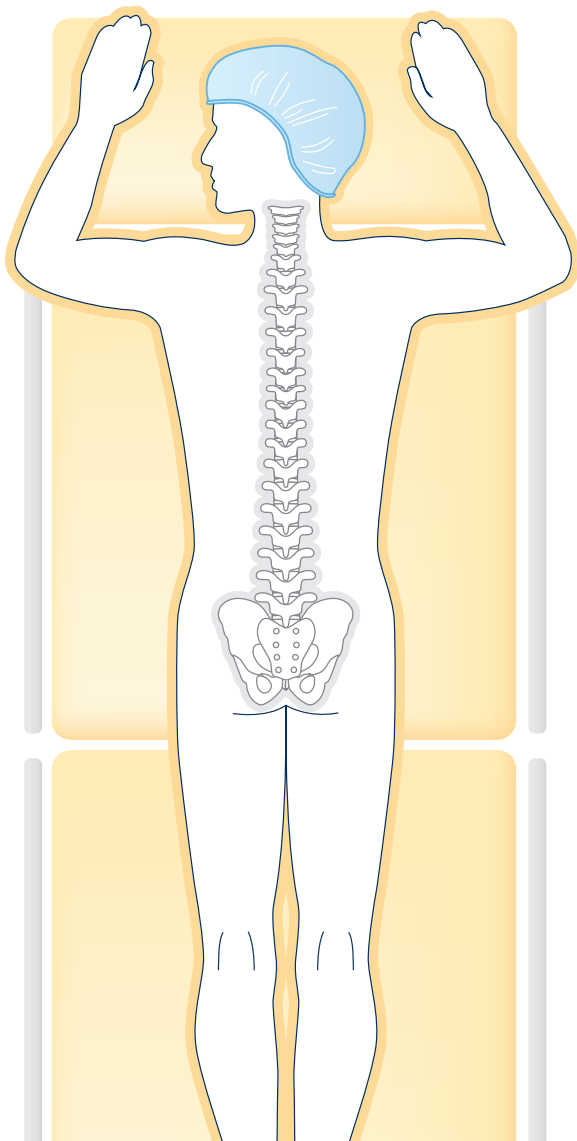
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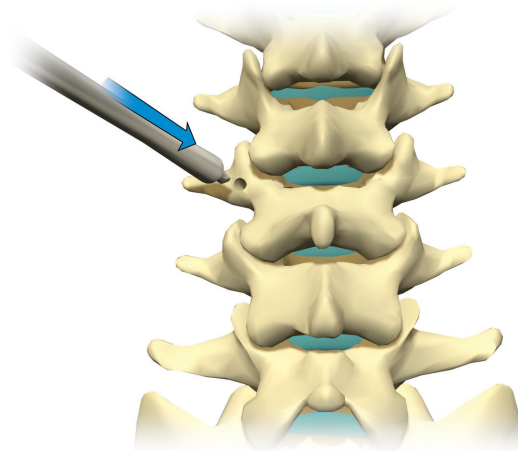
Surgical Technique

To become the architects of spine, Clariance has developed its products in collaboration with expert surgeons in their practice from all backgrounds including from France and the US. Because of this diversity, Clariance offers solutions that meet all practices. This surgical technique guide is the result of the proximity between the surgeons and Clariance.



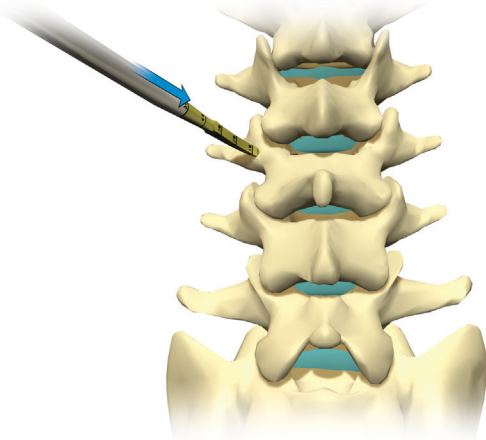
1 | PEDICLE PREPARATION

- After locating the pedicle, use the **Bone Awl** to perforate the cortical bone and prepare the pedicle entry point.



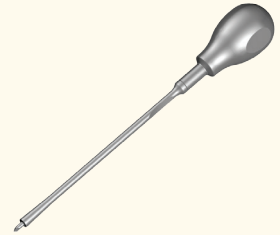
*In accordance with safety procedures in force, the patient is placed in the **ventral position** on the operating table. The surgical approach is based on the usual techniques used by the surgeon.*

- Insert the **Curved Lumbar Probe** into the pedicle. Use the depth markings in 10mm increments to help determine the appropriate Screw length.



BONE AWL

99702002



CURVED LUMBAR PROBE

99731001

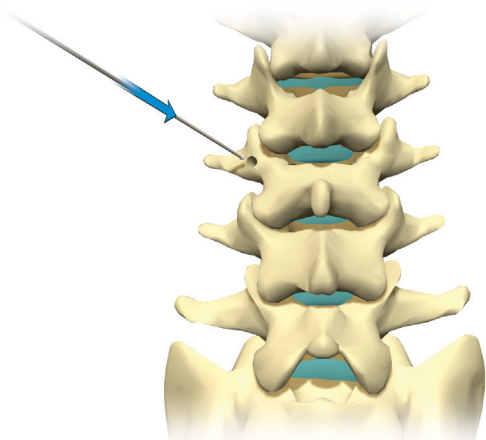


DOUBLE PEDICLE SOUNDER

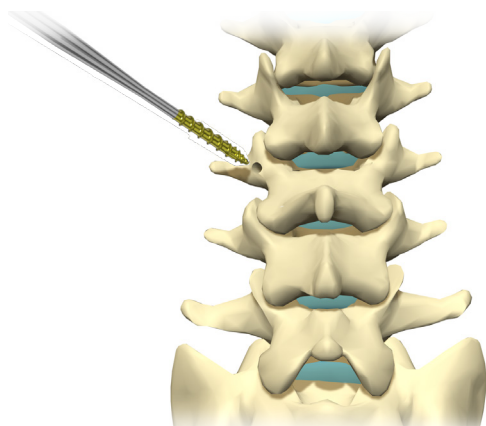
99730001



- Use the **Double Pedicle Sounder** to assess the pedicle canal.

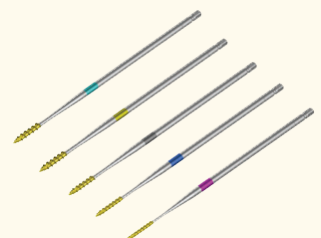


- Though Erisma-LP Evolution Screws are self-tapping, **Taps** are available and can be used if desired. The color-coding of the Tap sizes corresponds with that of the Screws.



TAP

997014xx



SCREWDRIVER

18710024
Assembly of
13911004
13914003
18912026
18911039



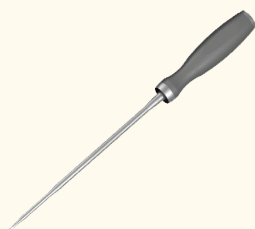
RATCHETING CYLINDRICAL HANDLE

99782007
99782006



T20 WRENCH

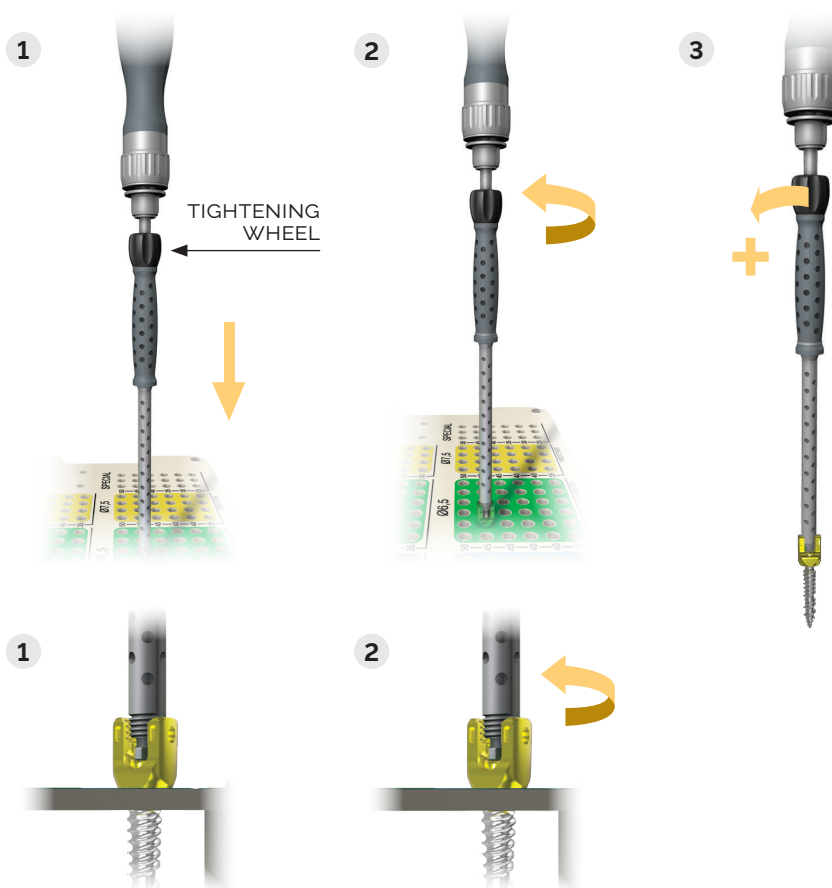
18720000



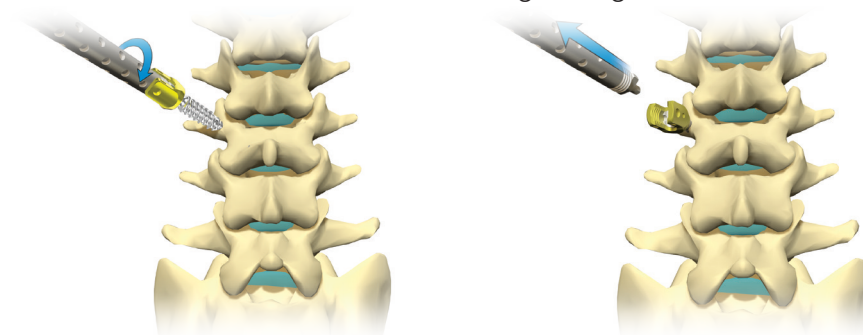
2 | PEDICLE SCREW INSERTION

- See page 16 & 17 for screwdriver assembly.
- Select the Screw of appropriate length and diameter according to the patient's anatomy.

Use the graduated gauge on the implant set to verify the Screw length.



- Insert the Screw into the Pedicle.
- Disengage the **Screwdriver** by unscrewing the black tightening wheel.



18710024 SCREWDRIVER

- When using the 18710024 Screwdriver, the user should ensure that the tip of the Screwdriver is properly engaged into the receiving Torx bore of the Erisma-LP polyaxial Screw. After proper engagement, the user can fully connect the Screwdriver on the Screw head.
- Disassembly of the polyaxial Screw can potentially occur when the 18710024 Screwdriver is not fully inserted and threaded onto the Screw head, as illustrated below.



- Use the **T20 Wrench** to adjust the sagittal height of the Screws or to remove the Screws.
- Verify the position of the Screws via X-Ray.

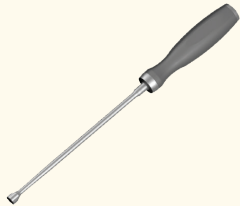
18720000 T20 WRENCH & 01720001 T20 SNAP FIT TIGHTENING WRENCH

- When using the 18720000 T20 Wrench or 01720001 T20 Snap Fit Tightening Wrench, the user should ensure that the tip of the T20 Wrench or the T20 Snap Fit Tightening Wrench is properly engaged into the receiving Torx bore of the Erisma-LP polyaxial Screw. After proper engagement, the user can adjust the insertion depth of the polyaxial Screw.
- Disassembly of the polyaxial Screw can potentially occur when using the T20 Wrench or the T20 Snap Fit Tightening Wrench for removing and adjusting the insertion depth of the polyaxial Screws and the T20 Wrench or the T20 Snap Fit Tightening Wrench is not correctly inserted in the Torx bore of the bone Screw, as illustrated below.



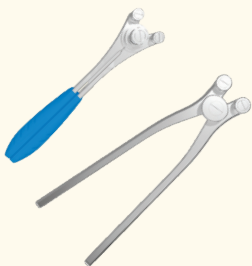
HEAD POSITIONER

18719002



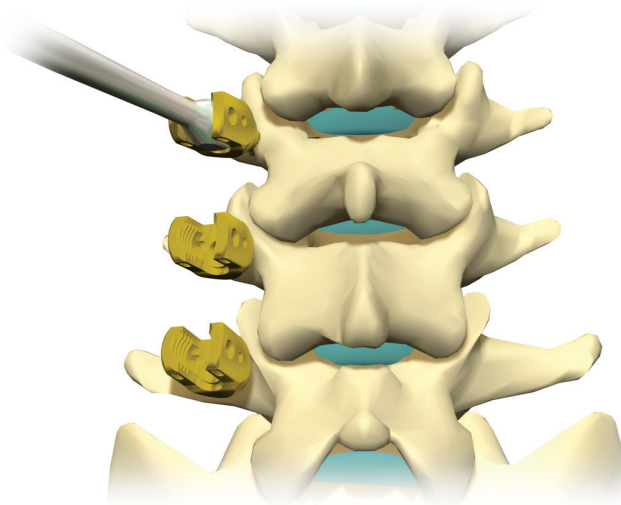
FRENCH BENDER

9970005
9970003

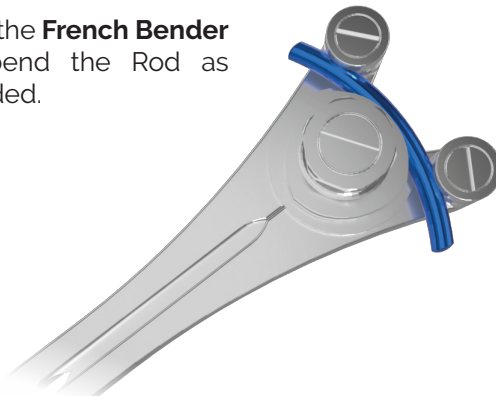


3 | ROD PREPARATION

- Use the **Head Positioner** to orient and align the Screw heads.



- Use the **French Bender** to bend the Rod as needed.



ATTENTION:

The Erisma-LP Evolution system offers a range of pre-bent Rods (30 - 100mm).

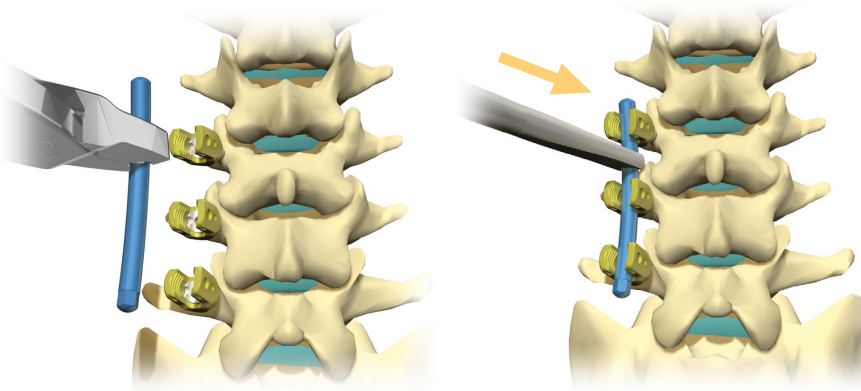
Longer rods are straight and require bending.

4 | ROD INSERTION

- Use the **Rod Holder** or the **Rod Holding Forceps** to insert the Rod.
- Erisma-LP Evolution offers three Rod introduction options:

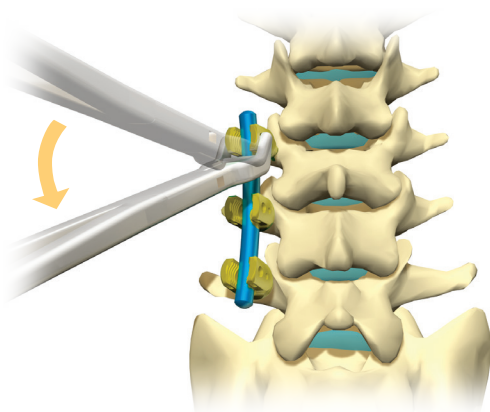
A | ROD PUSHER

- Use the **Rod Pusher** to further insert the Rod into the Screw heads.



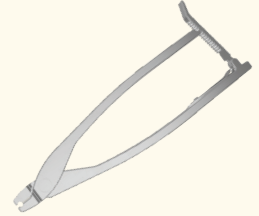
B | ROCKER (OPTIONAL)

- The prongs of the **Rocker** attach to the sides of the Screw head. Use the Rocker to gradually insert the Rod into the Screw heads.



ROD HOLDER

99715003



ROD HOLDING FORCEPS

99715002

99715007

Angled
Straight



ROD PUSHER

99743003



ROCKER

18742005



PERSUADER

18742009

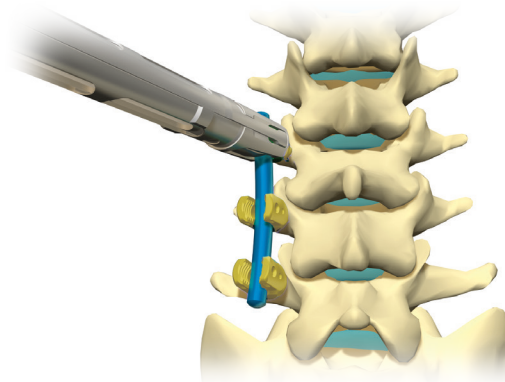


SELF-RETAINING SET SCREWDRIVER

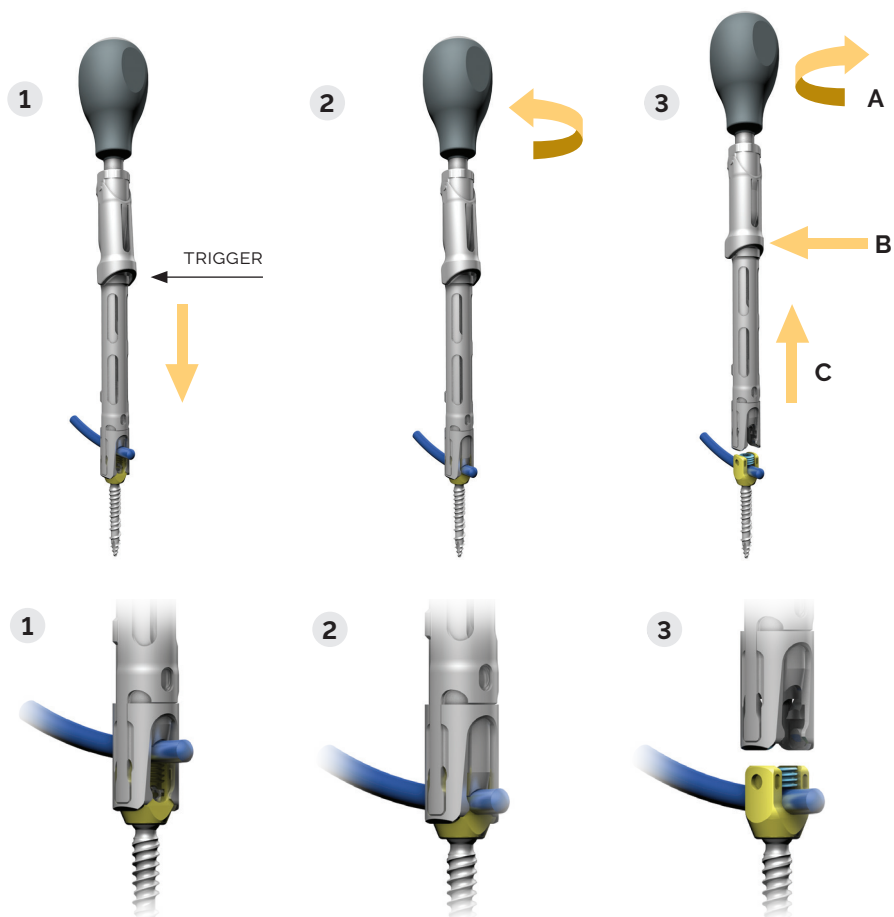
01720006



C | PERSUADER



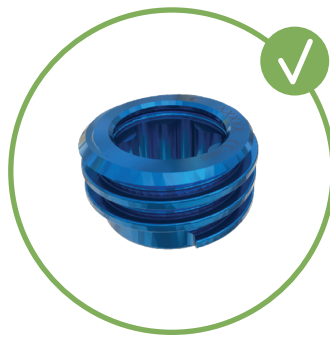
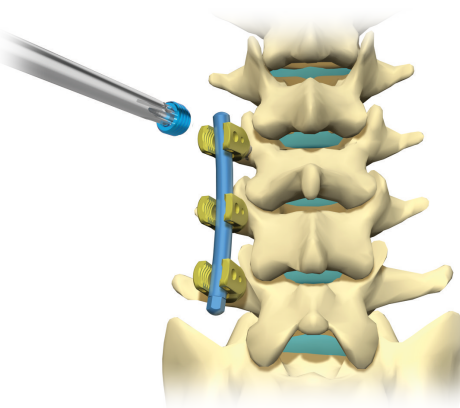
- Place the **Persuader** on top of the Screw head, being careful not to squeeze the trigger.
- Rotate the handle clockwise to push the Rod into the Screw head.
- Insert the set screw through the persuader using the self retaining set screwdriver.
- To disconnect the Persuader from the Screw head, rotate the handle counterclockwise and squeeze the trigger.



5 | SET SCREW INSERTION

A | WITHOUT THE USE OF THE PERSUADER

- Place the **Set Screw** on the **Set Screw Holder*** and screw it onto the Screw head by engaging the threads.

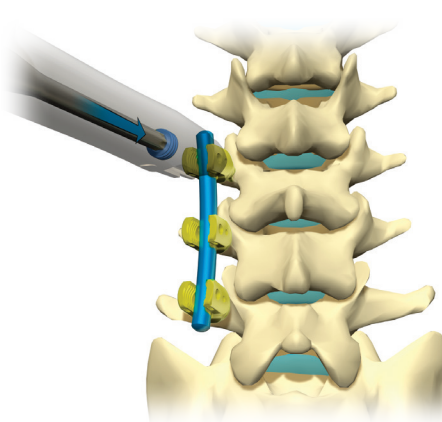


RECOMMENDATION:

Assemble the Set Screw according to the image above.

B | WITH THE USE OF THE PERSUADER OR THE GUIDING TUBE

- The Set Screw is placed on the **Self-Retaining Set Screwdriver**, then placed in the Screw head and screwed in by engaging the threads.



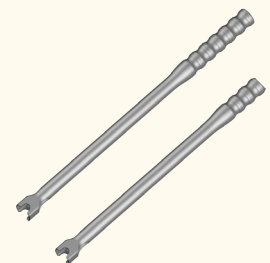
SET SCREW HOLDER

18714002
18714000



TUBE GUIDE

18721005
18721007



ROD HOLDER

99715005



ROD GRIPPER

99736013



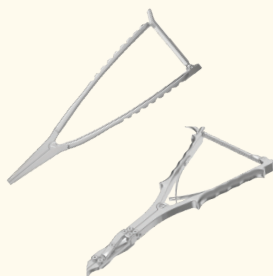
COMPRESSOR

99740005
50740000



DISTRACTOR

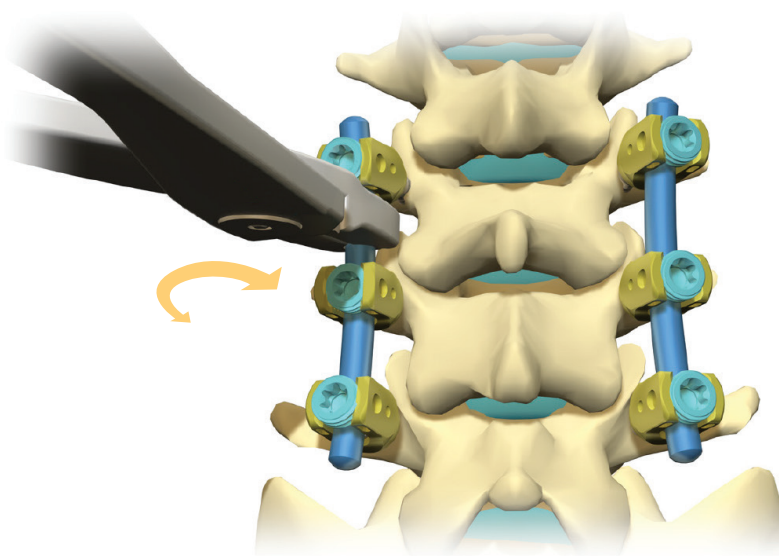
99741003
50741000



6 | CORRECTION MANEUVERS

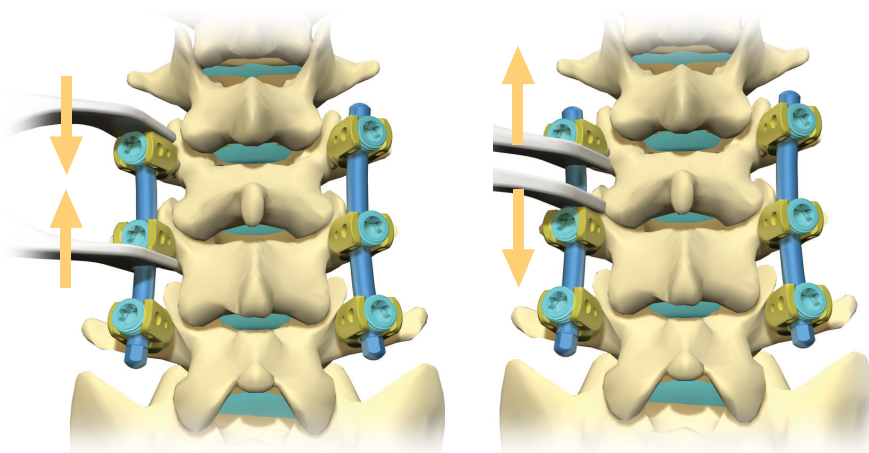
A | ROD ROTATION

- You may use the **Rod Holder*** or **Rod Gripper*** to adjust the Rod orientation and restore the appropriate curvature along the sagittal plane.



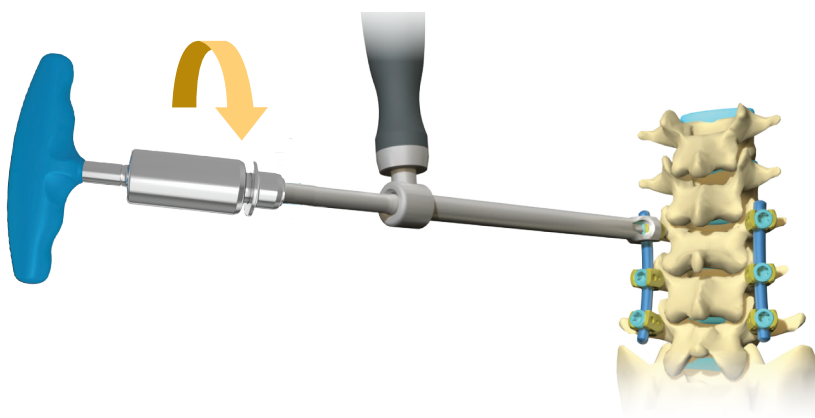
B | COMPRESSION & DISTRACTION

- Use the **Compressor** and **Distractor** to perform segmental compression and distraction maneuvers.



7 | FINAL TIGHTENING

- Place the **Counter Torque** on top of the Screw head.
- Connect the **Set Screw Holder** to the **Torque Limiting Handle** and insert it through the Counter Torque, engaging the tip in the **Set Screw**.
- Rotate the Torque Limiting Handle clockwise to perform the final tightening.

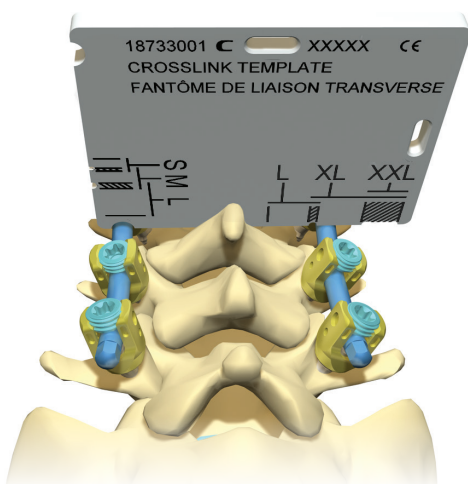


8 | CROSSLINK PLACEMENT

A Crosslink can be added to enhance the stability of the construct.

A | MEASUREMENT OF THE CROSSLINK

- Determine the appropriate Crosslink size using the **Crosslink Template**. Use the Rod Holder to grip the Crosslink Template.



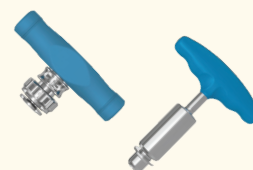
COUNTER TORQUE

18721008
18721002



RATCHETING TORQUE LIMITER

99781312
99781212



SELF-RETAINING SET SCREWDRIVER

18720011 Long
01720006 Short



CROSSLINK TEMPLATE

18733001



CROSSLINK HOLDER

18713001



T20 SHAFT CROSSLINK

18720004



TORQUE LIMITING HANDLE 7NM

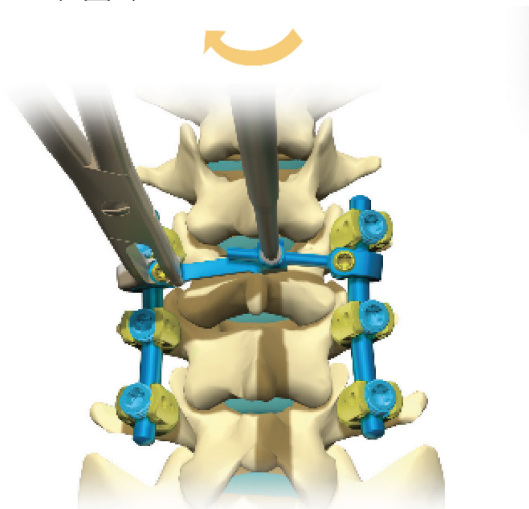
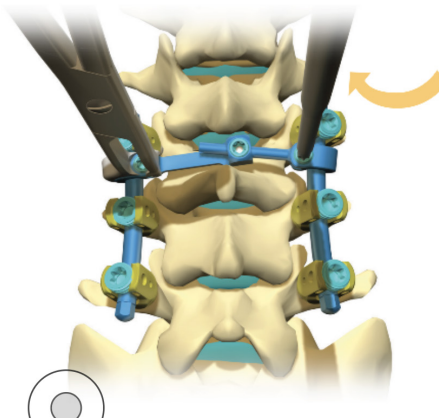
99781202

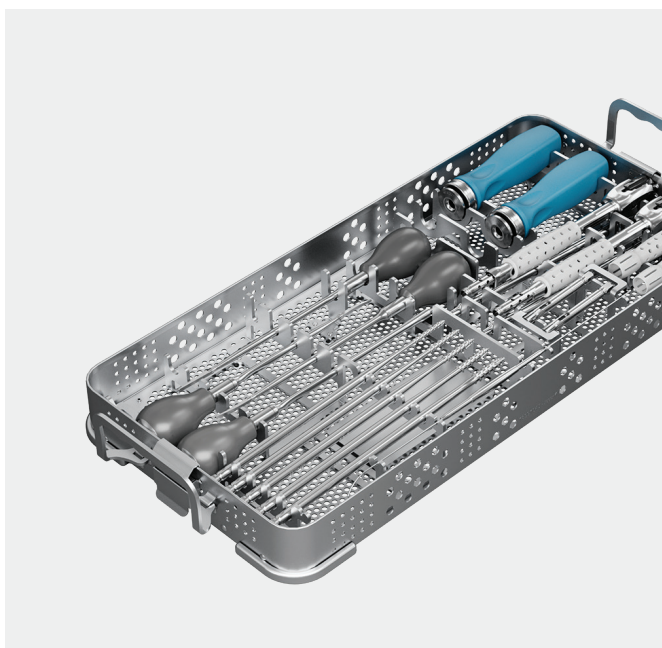
99781203



B | POSITIONING OF THE CROSSLINK

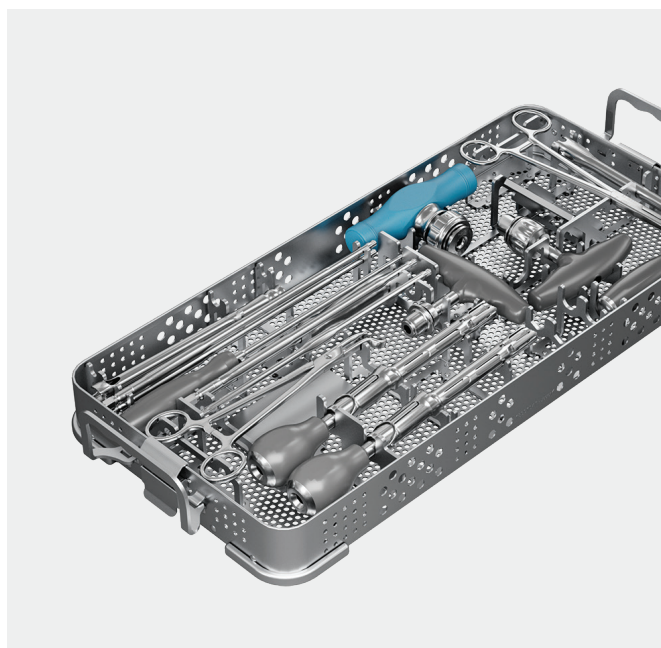
Using the Crosslink Holder, the **Transverse Connectors** of the Crosslink are placed on the Rods and the Set Screws are tightened using the **T20 Shaft for Crosslink**. Once the lateral Set Screws are locked, the central Set Screw can then be tightened.





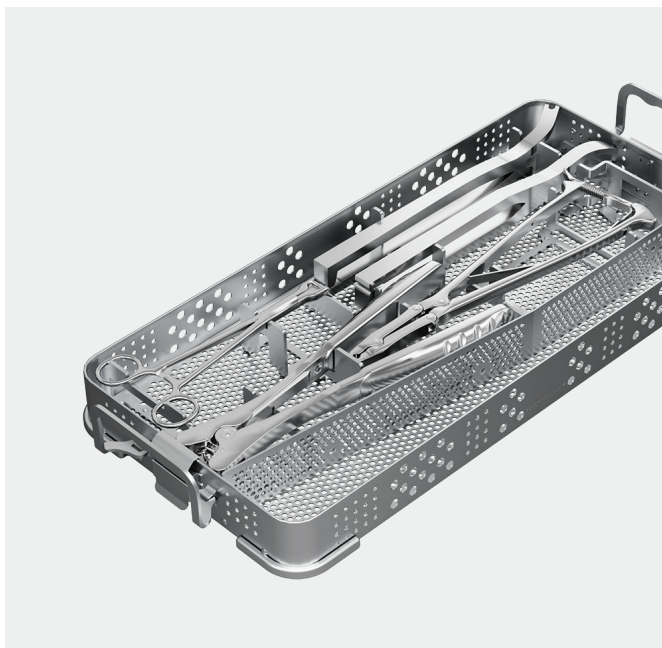
INSTRUMENTS TRAY #1

18991045 Instrument
10990027 Lid



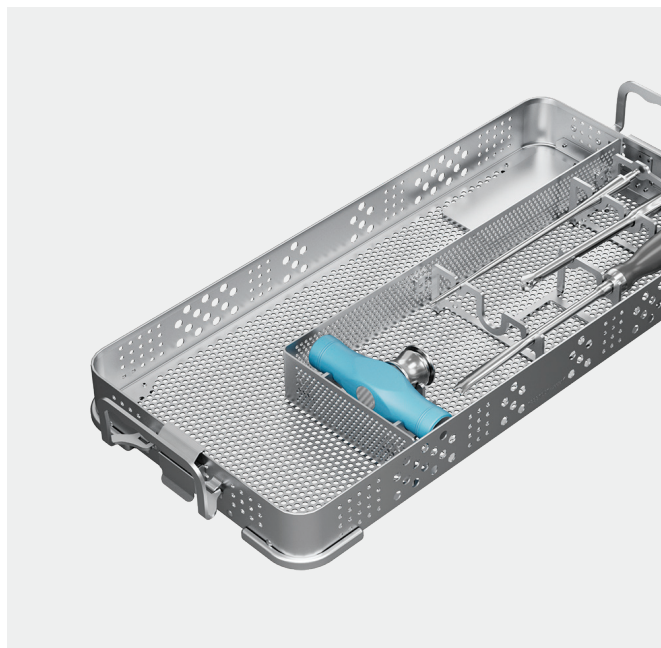
INSTRUMENTS TRAY #2

18991047 Instrument
10990027 Lid



INSTRUMENTS TRAY #3

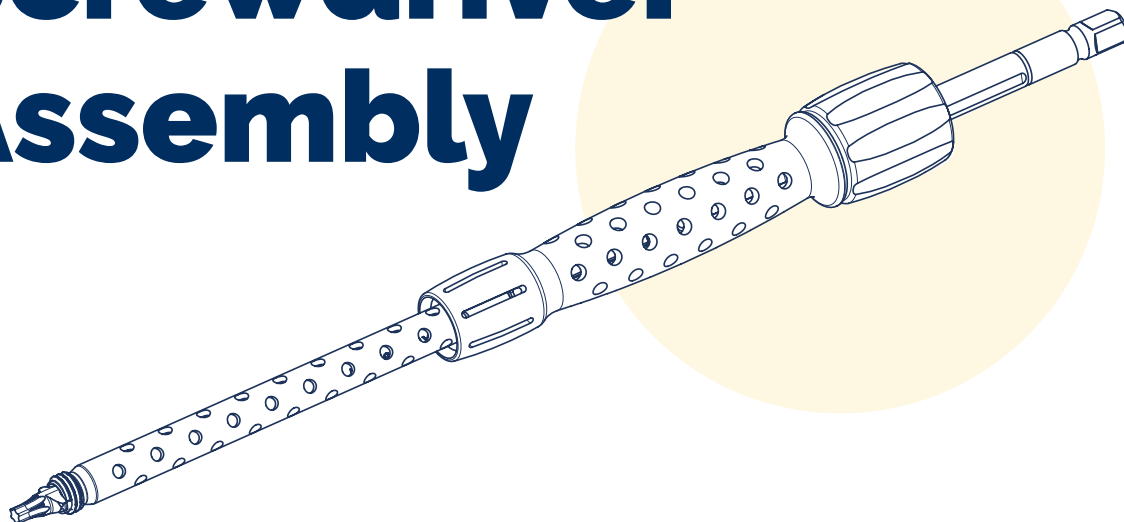
18991049 Instrument
10990027 Lid



INSTRUMENTS TRAY #4

18991051 Instrument
10990027 Lid

Screwdriver Assembly



TUBE

18912026

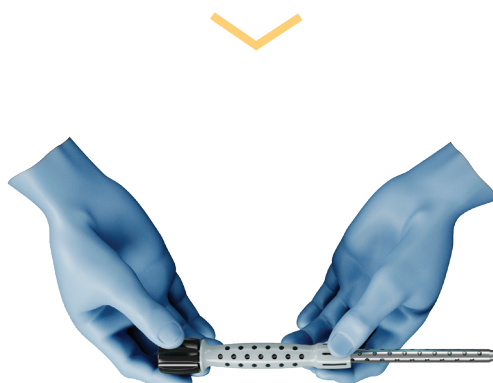
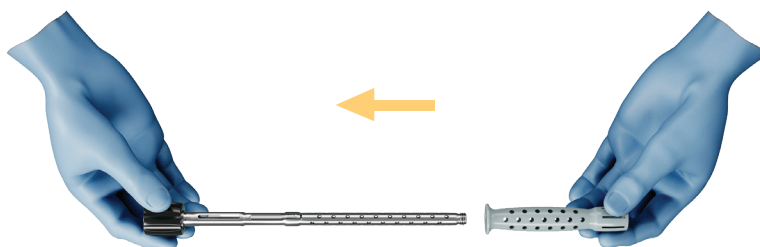


SLEEVE

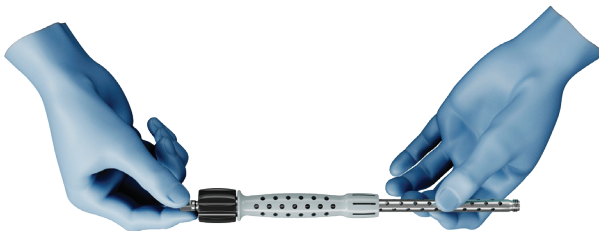
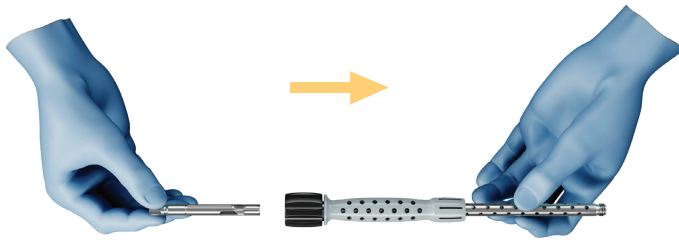
13914003



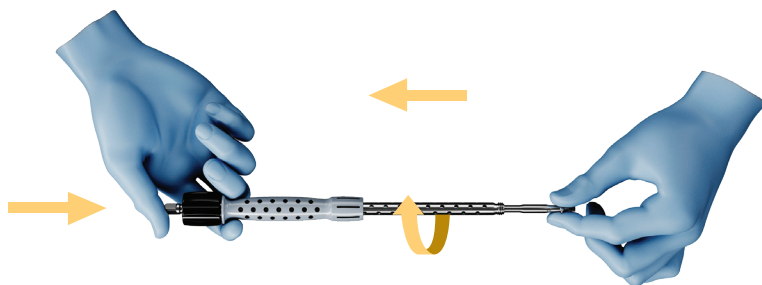
- Slide the Sleeve on the Tube until the Sleeve is flush against the black knob.



- Insert the Snap-On-Shaft through the black knob.



- Insert the Screwdriver Shaft in the Tube and turn it slightly while pushing in until the Shaft is fully engaged.



- Gently pull the Snap-On Shaft to settle the Screwdriver assembly.

SNAP-ON SHAFT

13911004

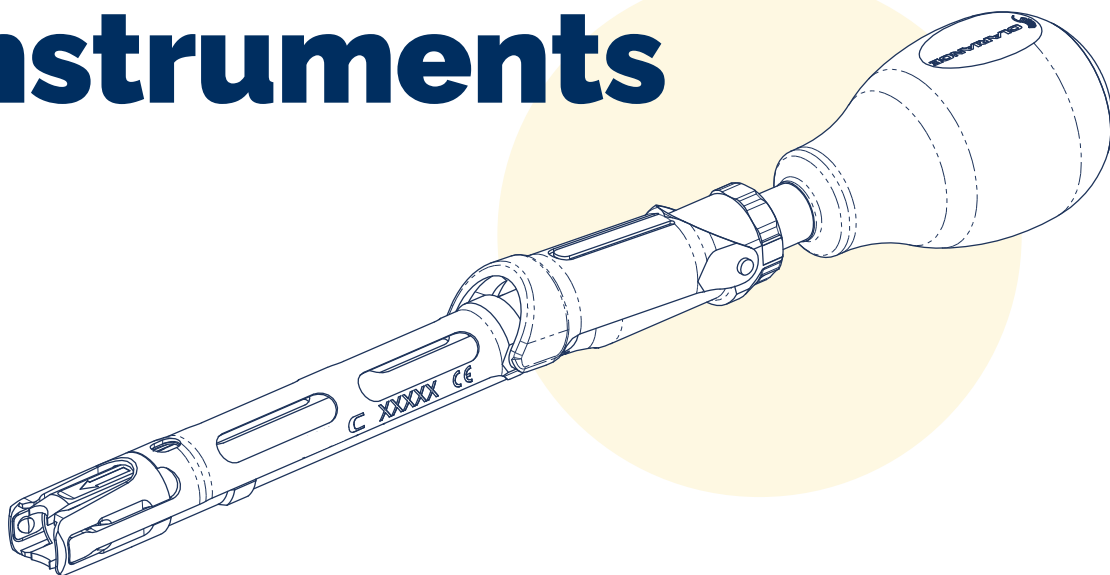


SCREWDRIVER SHAFT

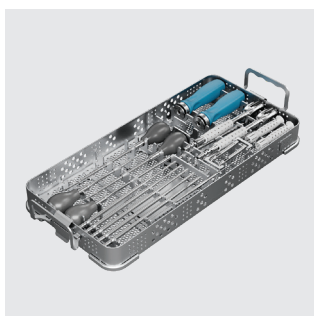
18911039



Instruments



Erism-LP Instrument Tray #1



INSTRUMENTS TRAY #1

18991045
18990027

Tray
Lid



TAP

99701445
99701455
99701465
99701475
99701485

4.5mm
5.5mm
6.5mm
7.5mm
8.5mm



BONE AWL

99702002



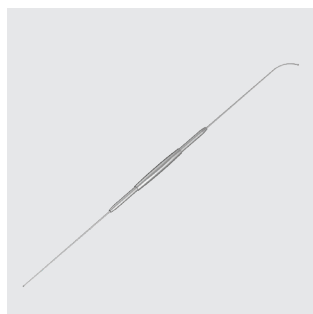
CURVED LUMBAR PROBE

99731001



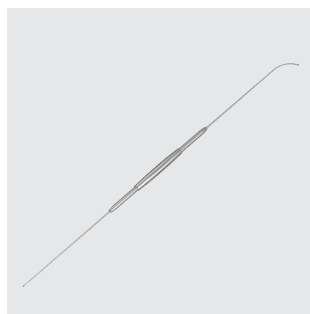
CURVED THORACIC PROBE

99731002



STRAIGHT LUMBAR PROBE

99731004



DOUBLE PEDICLE SOUNDER

99730001



RATCHETING CYLINDRICAL HANDLE

99782007
99782006

Blue
Grey

**SCREWDRIVER SHAFT**

18911039

Shaft

**QUICK CONNECT ROD**

13911004

**ASSEMBLY OF
SCREWDRIVER BODY**

18912026

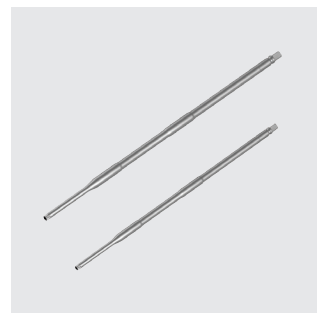
**SLEEVE**

13914003

ErismalP Instrument Tray #2

**INSTRUMENTS TRAY #2**18991047
18990027Tray
Lid**CROSSLINK HOLDER***

18713001

**SET SCREW HOLDER**18714002
18714000**SELF-RETAINING SET
SCREWDRIVER**01720006
01720006Short
Long**SCREW HEAD
POSITIONER**

18719003

**T20 TIGHTENING
WRENCH**

18720000

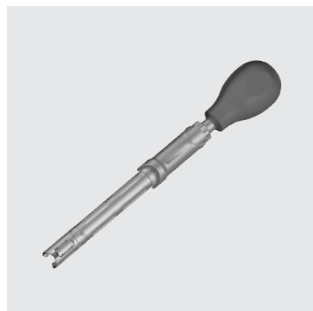
**COUNTER TORQUE**18721008
18721003**TUBE GUIDE**18721007
18721005Short
Long

Erisma-LP Instrument Tray #2



CROSSLINK TEMPLATE

18733001



PERSUADER

18742009



ROD HOLDING FORCEPS

99715002
99715007

Angled
Straight



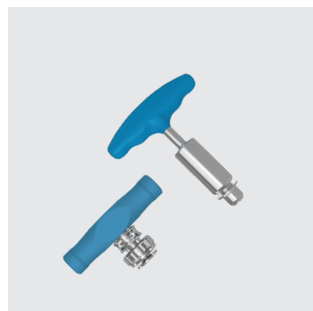
HEXAGONAL WRENCH

99719000



FIXED CANNULATED HANDLE*

99781001



RATCHETING TORQUE LIMITER

99781312
99781212

Erisma-LP Instrument Tray #3



INSTRUMENTS TRAY #3

18991049
18990027

Tray
Lid



COMPRESSOR

99740005
50740000



DISTRACTOR

99741003
50741000



ROD GRIPPER

99736013

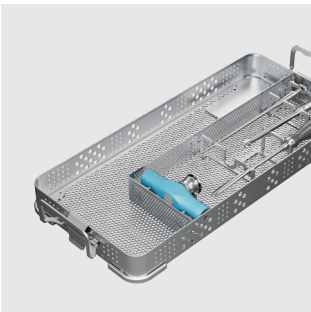
**FRENCH BENDER**

99700005
99700003

**ROCKER**

18742005

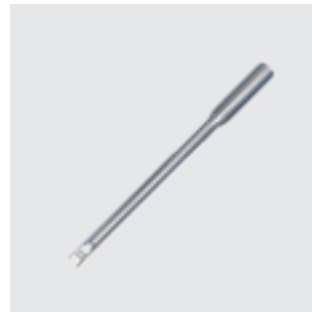
Erisma-LP Instrument Tray #4

**INSTRUMENTS TRAY #4**

18733001

**ROD PUSHER**

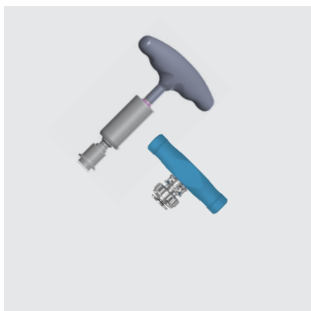
99743003

**PROTECTING GUIDE**

18721004

**T20 BAR FOR 7NM
TORQUE LIMITING
HANDLE**

18720004

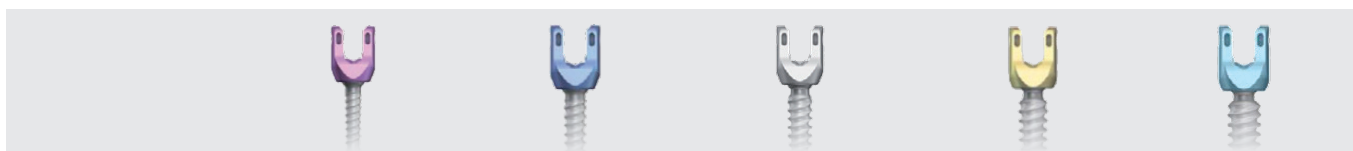
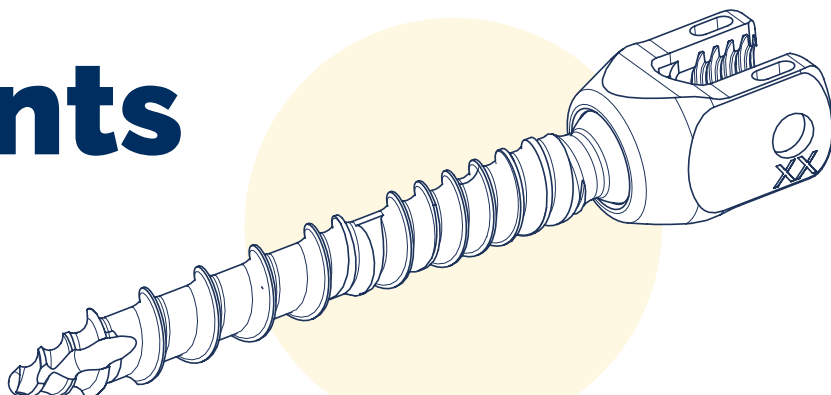
**TORQUE LIMITING
HANDLE 7NM**

99781202
99781203

**Optional: product availability may vary upon markets.
Please contact your local Sales Representative for more information.*

Implants

Product availability may vary upon markets. Please check with your local Sales Representative.



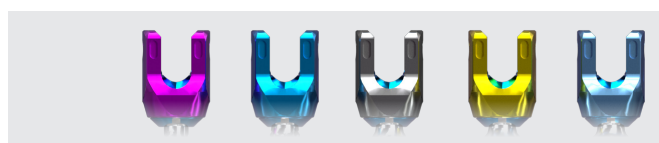
ERISMA-LP EVO POLYAXIAL SCREWS

	Ø4.5MM	Ø5.5MM	Ø6.5MM	Ø7.5MM	Ø8.5MM
L25MM	18154525	-	-	-	-
L30MM	18154530	18155530	18156530	18157530	-
L35MM	18154535	18155535	18156535	18157535	-
L40MM	18154540	18155540	18156540	18157540	-
L45MM	18154545	18155545	18156545	18157545	18158545
L50MM	-	18155550	18156550	18157550	18158550
L55MM	-	-	-	18157555	18158555



UNIPLANAR SCREWS

	Ø4.5MM	Ø5.5MM	Ø6.5MM	Ø7.5MM	Ø8.5MM
L25MM	15044525	15045525	-	-	-
L30MM	15044530	15045530	15046530	15047530	-
L35MM	15044535	15045535	15046535	15047535	-
L40MM	15044540	15045540	15046540	15047540	15048540
L45MM	-	15045545	15046545	15047545	15048545
L50MM	-	-	15046550	15047550	15048550
L55MM	-	-	15046555	15047555	15048555



CANNULATED UNIPLANAR SCREWS

	Ø4.5MM	Ø5.5MM	Ø6.5MM	Ø7.5MM	Ø8.5MM
L25MM	15054525	15055525	-	-	-
L30MM	15054530	15055530	15056530	15057530	15058530
L35MM	15054535	15055535	15056535	15057535	15058535
L40MM	15054540	15055540	15056540	15057540	15058540
L45MM	-	15055545	15056545	15057545	15058545
L50MM	-	-	15056550	15057550	15058550
L55MM	-	-	15056555	15057555	15058555



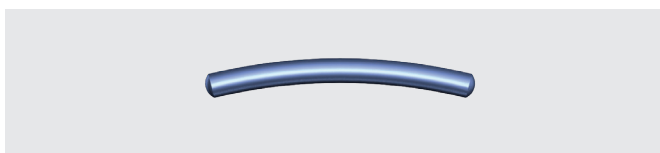
REDUCTION POLYAXIAL SCREW

	Ø4.5MM	Ø5.5MM	Ø6.5MM	Ø7.5MM	Ø8.5MM
L25MM	18174525	-	-	-	-
L30MM	18174530	18175530	18176530	18177530	-
L35MM	18174535	18175535	18176535	18177535	-
L40MM	18174540	18175540	18176540	18177540	-
L45MM	18174545	18175545	18176545	18177545	18178545
L50MM	-	18175550	18176550	18177550	18178550
L55MM	-	-	18176555	18177555	18178555



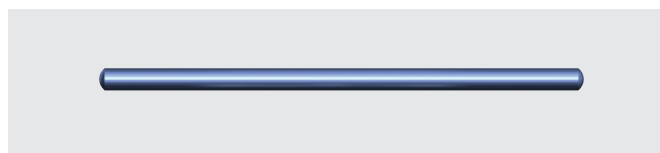
REDUCTION UNIPLANAR SCREW

	Ø4.5MM	Ø5.5MM	Ø6.5MM	Ø7.5MM	Ø8.5MM
L25MM	15064525	-	-	-	-
L30MM	15064530	15065530	15066530	15067530	-
L35MM	15064535	15065535	15066535	15067535	-
L40MM	15064540	15065540	15066540	15067540	-
L45MM	15064545	15065545	15066545	15067545	15068545
L50MM	-	15065550	15066550	15067550	15068550
L55MM	-	-	15066555	15067555	15068555



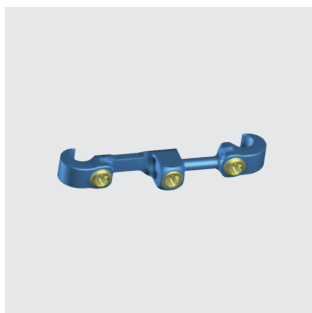
ERISMA-LP EVO PRE-BENT RODS

L30MM	18505030	L60MM	18505060
L35MM	18505035	L70MM	18505070
L40MM	18505040	L80MM	18505080
L45MM	18505045	L90MM	18505090
L50MM	18505050	L100MM	18505100



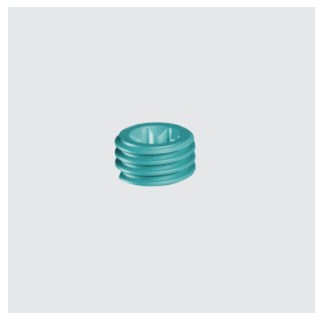
ERISMA-LP EVO STRAIGHT RODS

L120MM	18455512	L220MM	18455520
L140MM	18455514	L240MM	18455522
L160MM	18455516	L240MM	18455524
L180MM	18455518	-	-



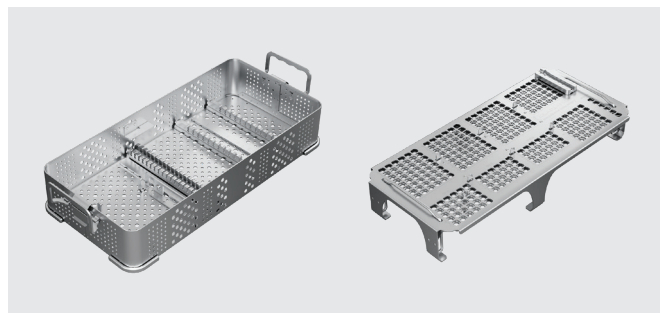
ERISMA-LP EVO CROSSLINKS

18442731	S 27-31mm
18443037	M 30-37mm
18443547	L 35-47mm
18444567	XL 45-67mm
18445893	XXL 58-93mm



ERISMA-LP EVO SET SCREW

13620009



ERISMA-LP EVO IMPLANT BASE

18991031
18991032
18991017
18991006/01

Implant Base
Lid for Implant Base
Screw Caddy
Crosslink Tray



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Notified Body N°2460 - As some references are not covered by the  marking, refer to the product label which bears the  marking