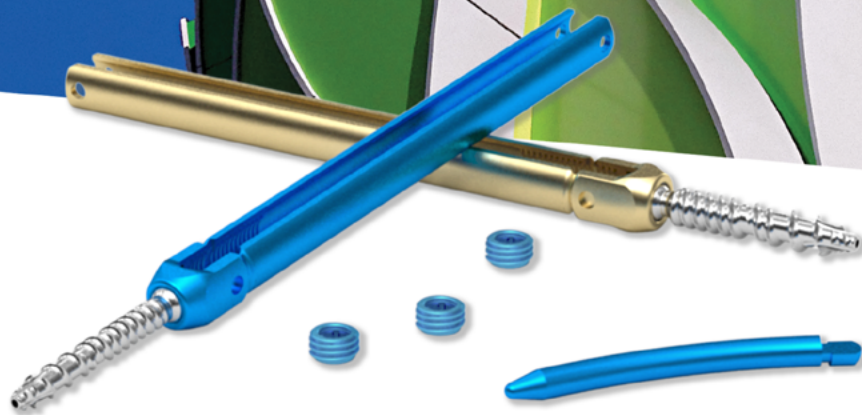


Erisma[®] - LP MIS



Designed for the spine

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Introduction	1
Features & Benefits	4
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Introduction

Erisma®-LP MIS is a pedicle screw system designed for the stabilization of the posterior lumbar spine.

The new Erisma®-LP MIS design is based on the same efficient techniques as the Erisma®-LP Evolution, satisfying surgeons’ needs regarding reliability, security, and ease of use. With a coherent set of implants and instruments, the Erisma®-LP MIS can be used for treating multiple thoraco-lumbar pathologies.

The Secure Guidewire of the Erisma®-LP MIS system enhances the security of MIS surgery.

» Indications

Degenerative pathologies
Spinal deformities
Tumors
Trauma
Spondylolisthesis

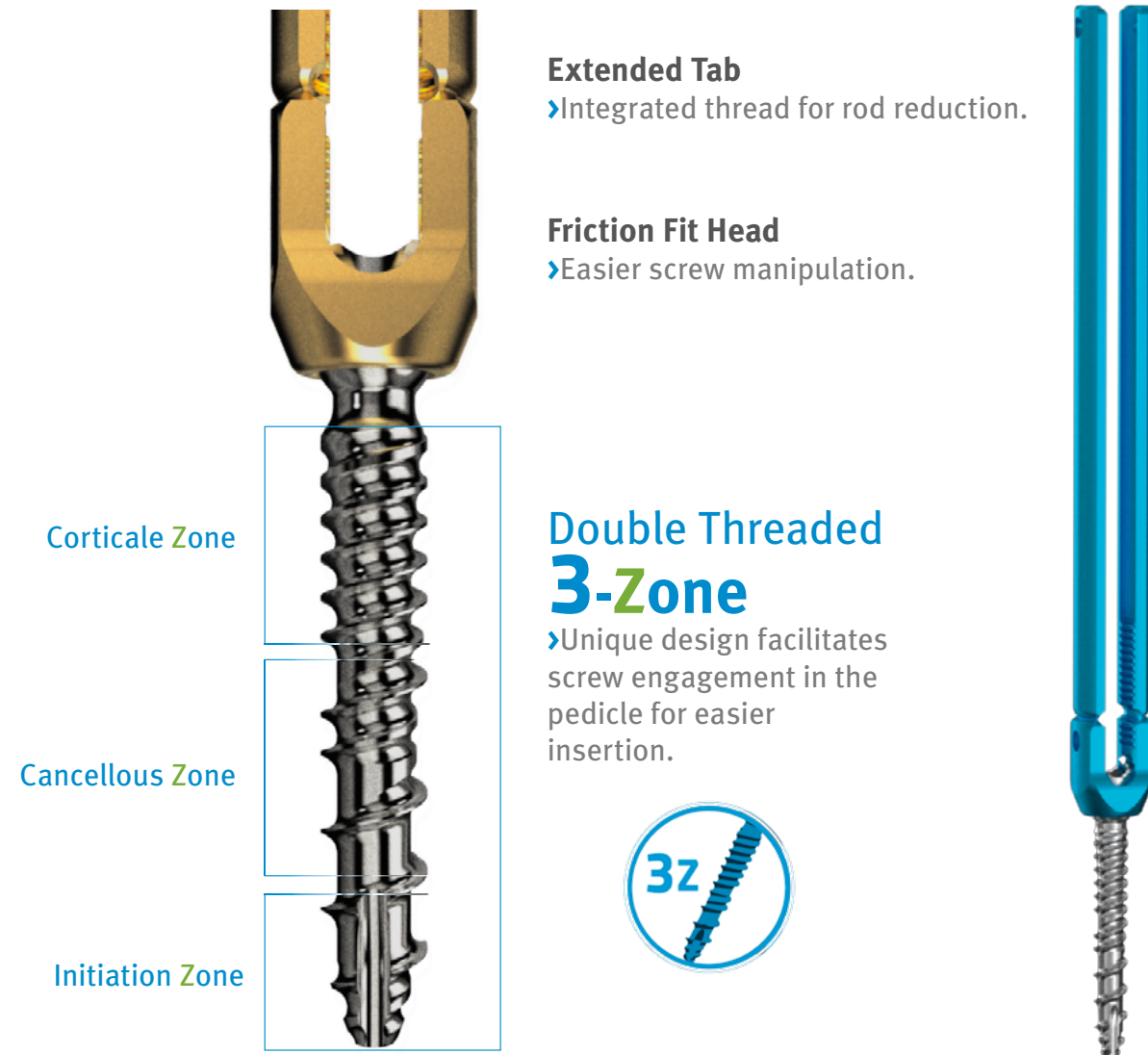
MANUFACTURER

CLARIANCE SAS
18, Rue Robespierre
62217 Beaurains - FRANCE
Tel +33 (0)3 21 16 12 15
Fax +33 (0)3 21 15 50 73



This surgical technique is for illustrative purposes only. The technique performed in each case will be determined by the medical judgement of the surgeon evaluated before and during the surgery as the best mode of treatment for each patient.

Features and Benefits



Polyaxial Screw Head

› A screwhead angulation of 50° provides great flexibility in screw positioning and allows quick and easy insertion of the rod.



Comprehensive Range

› Erisma® - LP MIS offers a comprehensive range of implants for treating multiple pathologies with just one system, simplifying the surgical technique.

Polyaxial Screws

› Color coded by screw dimension



Pre-Bent Rods

› Ø 5.5mm, Length 30mm through 100mm



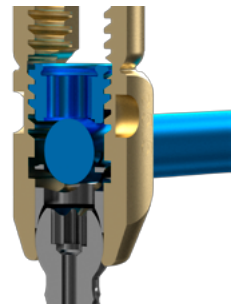
Straight Rods

› Ø 5.5mm, Length 40mm through 490mm



Strong Connection

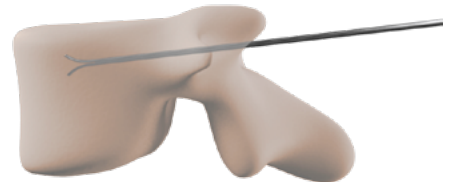
› Asymmetrical threading of the set screw prevents splaying of the screw head and maximizes rod grip strength.



Instrumentation

Secure Guidewire

› The Secure Guidewire enhances security during tapping and screw insertion, while preventing penetration of the anterior cortical wall of the vertebra and significantly reducing the risk of pre-mature, involuntary removal of the Secure Guidewire.



Persuader

› Powerful and controlled rod reduction.



Surgical Technique

1	Pedicle Targeting
2	Pedicle Screw Preparation
3	Pedicle Screw Insertion
4	Removal of Protector Tube
5	Rod Preparation
6	Rod Insertion
7	Insertion of the Set Screw
8	Correction Maneuvers
9	Final Tightening
10	Removal of Extended Tabs
11	Technique for Premature Extended Tab Breakage
12	Ablation

The patient is positioned on the table in accordance with standard protocol. X-Ray guidance is used to identify the correct site. The surgical approach is carried out according to the standard techniques of the responsible surgeon.

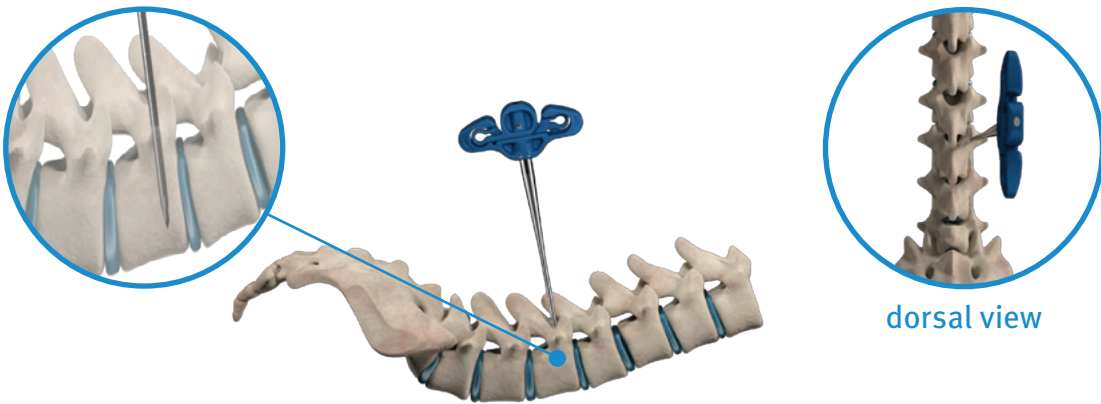


Pedicle Targeting

1

A ■ Positioning of Jamshidi Needle

The **Jamshidi** needle is aligned with the pedicle of the selected level.



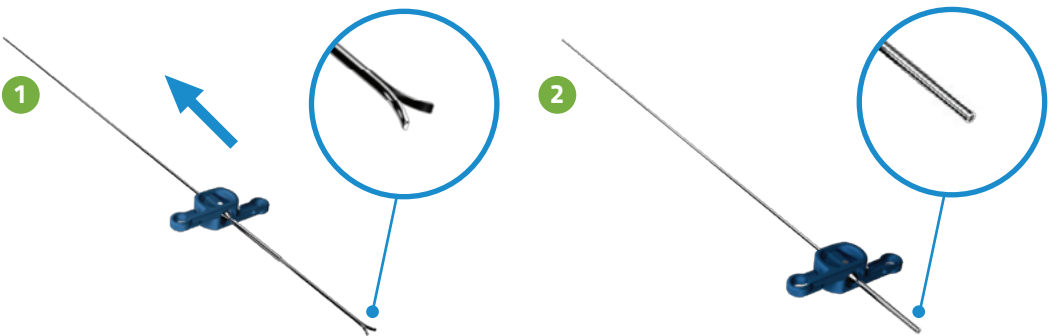
dorsal view



07709225 (reusable)
99709000 (single-use)
JAMSHIDI

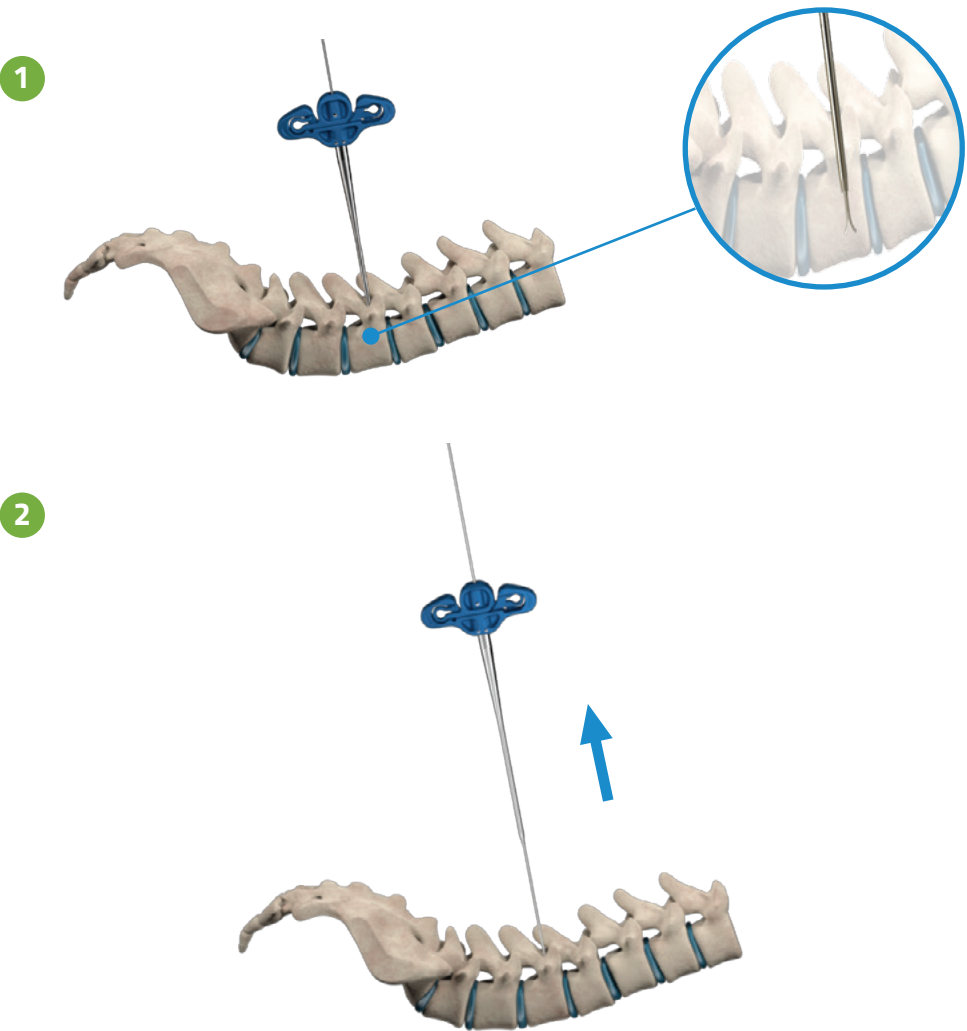
B ■ Insertion of Secure Guidewire

The **Secure Guidewire** is inserted through the **insertion tube** until complete retraction of the tulips occurs.



After removal of the inner needle of the **Jamshidi**, the **insertion tube** is introduced in the **Jamshidi** needle and locked.

The **Secure Guidewire** is directed into the **Jamshidi** needle until the tulips deploy in the vertebral body. The **Jamshidi** needle and **insertion tube** are then removed.



13709050
SECURE GUIDEWIRE



2
SINGLE USE EVENT



13720001 (reusable)
13720003 (single-use)
INSERTION TUBE



13707001 / 13707002
DILATOR



13719003
TAP SLEEVE DILATOR



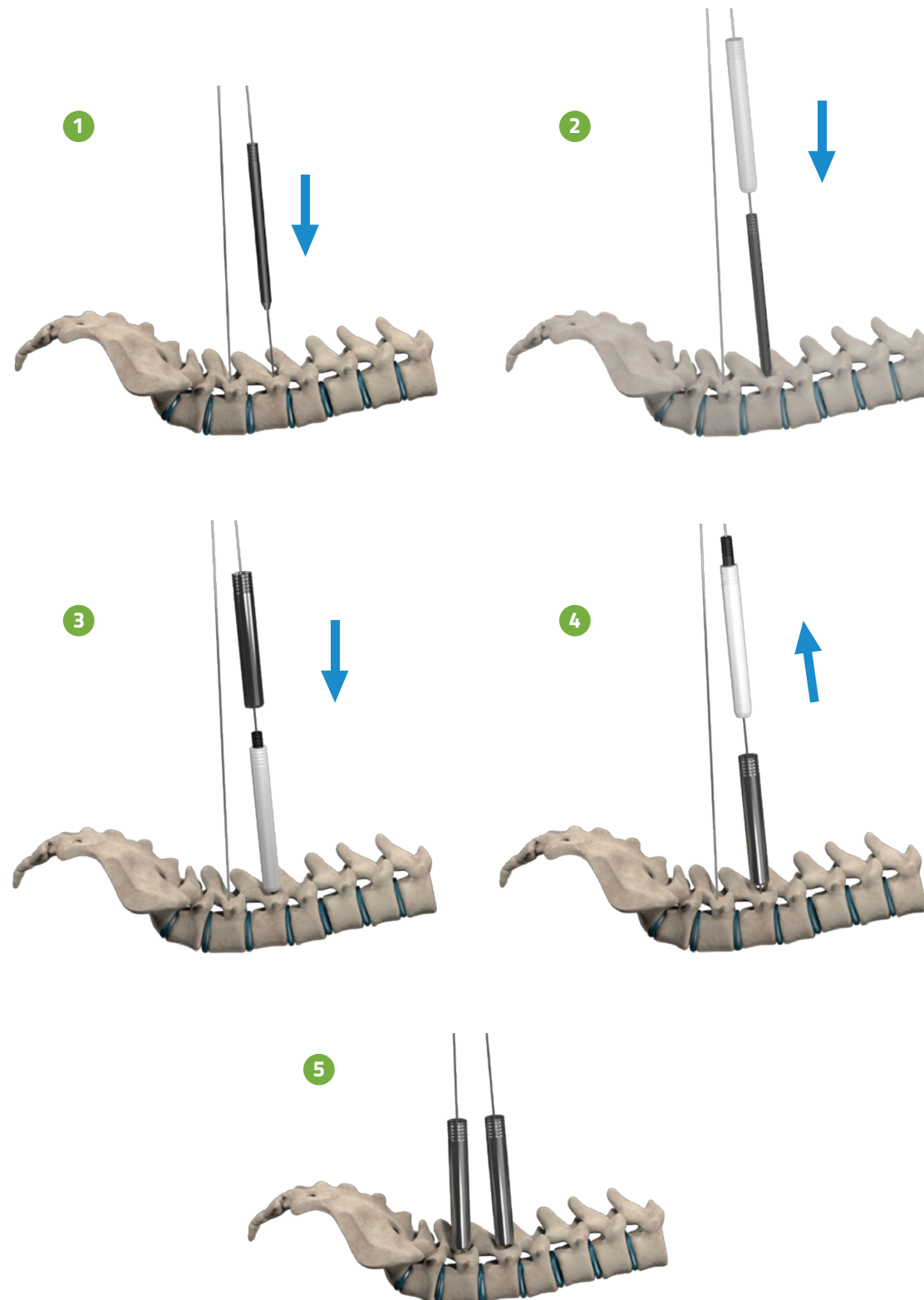
99702004
CANNULATED AWL

Pedicle Screw Preparation

2

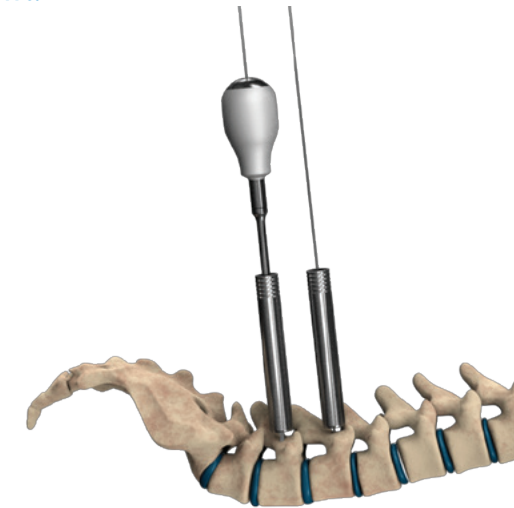
A ■ Dilator Placement

The initial incision is enlarged by sliding the **dilators** along the **Secure Guidewire**. The **tap sleeve dilator** is then positioned on the **dilators**. After the **tap sleeve dilator** has been inserted, the **dilators** can be removed.



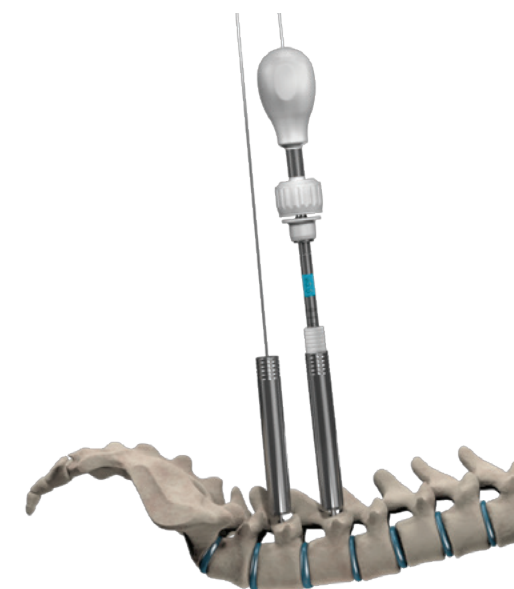
B ■ The Cannulated Awl

The pedicle is prepared by penetrating the cortical bone with the **cannulated awl**.



C ■ Tapping

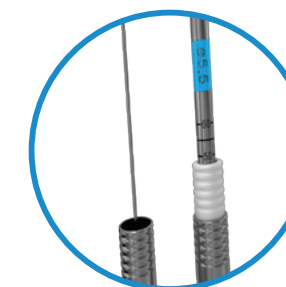
The **cannulated tap** corresponding with the diameter size of the selected screw should be chosen. **Taps** are color coded in accordance with the color coding guide of the screws.



Recommendation

Markings on the **cannulated tap** can be used to estimate screw length. The second **dilator** must remain in place during tapping.

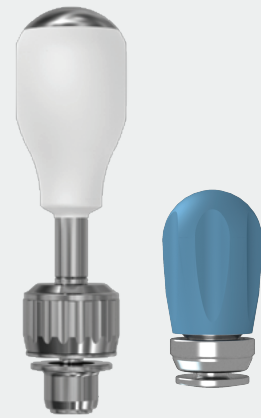
Be careful to not tap the blades of the **secure guidewire**.



997015**
CANNULATED TAP



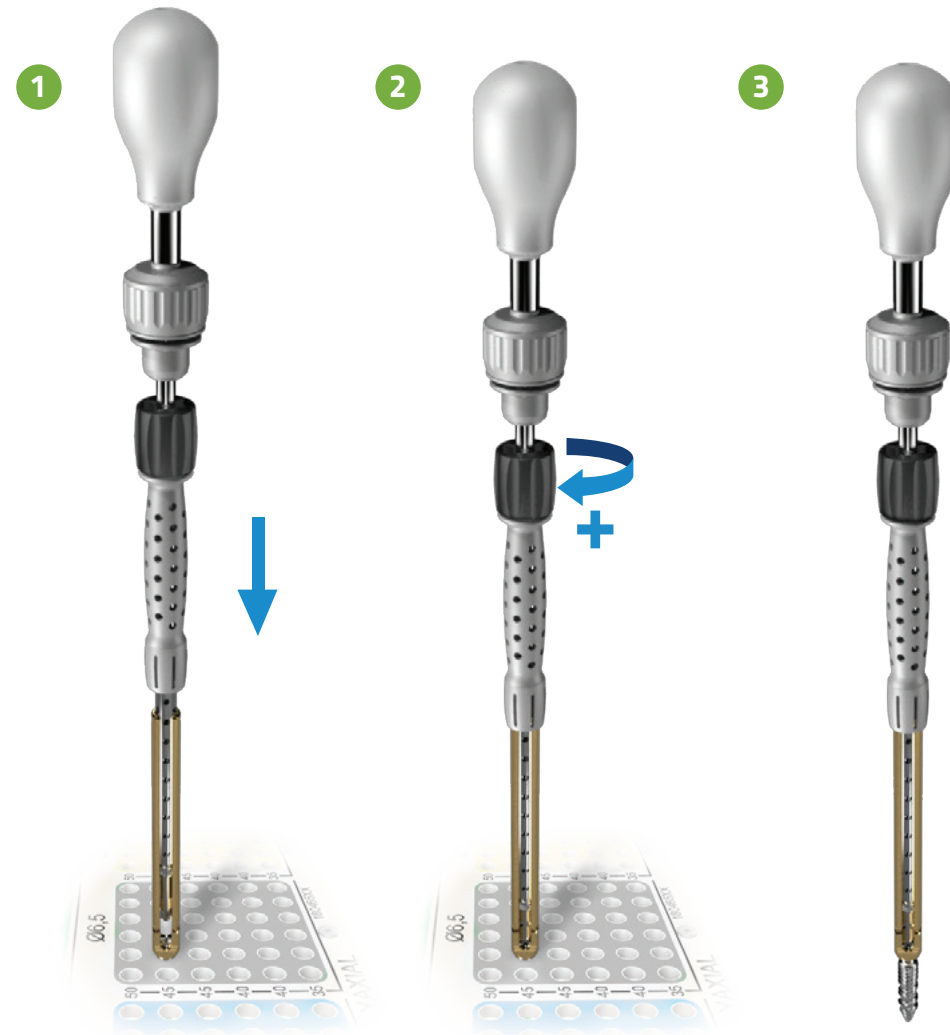
13710005
SCREWDRIVER



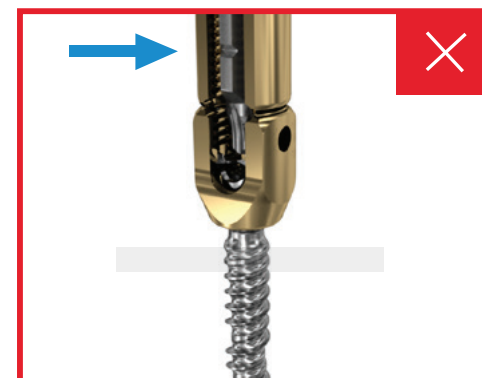
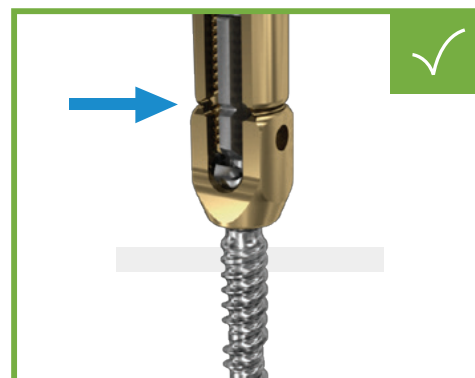
99780100 | 99780101
CANNULATED RATCHET PALM
HANDLE

Pedicle Screw Insertion

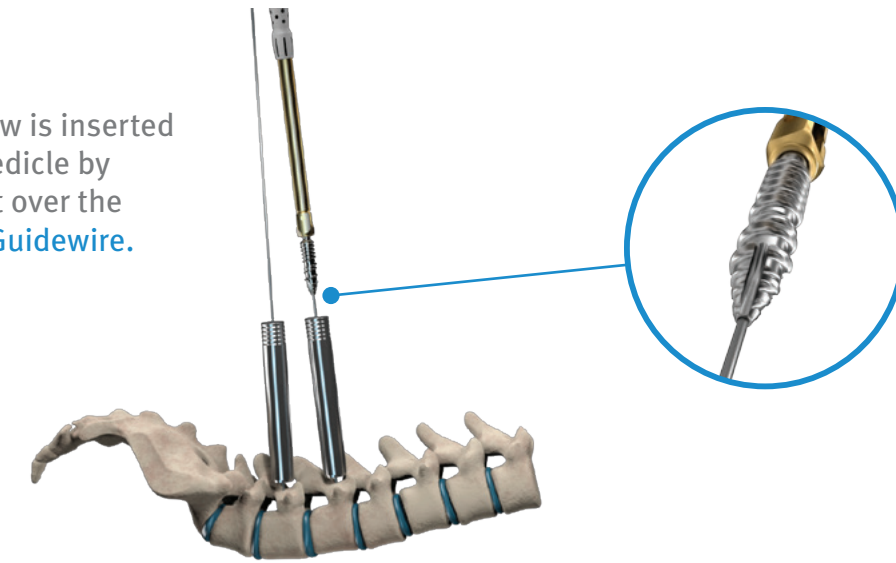
The selected screw is secured on the **screwdriver** by tightening the black knob clockwise.



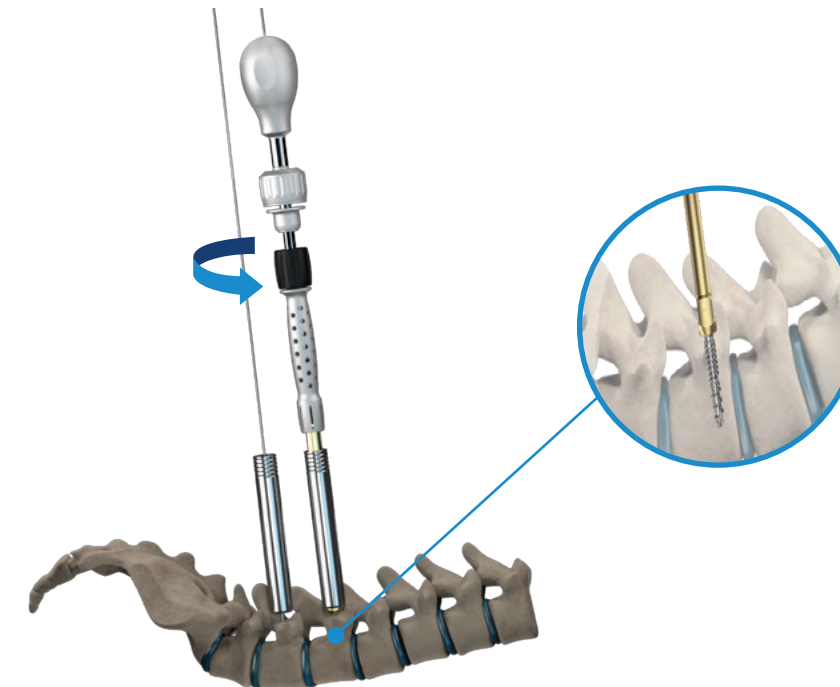
Visual control of the screw attachment is recommended.



The screw is inserted in the pedicle by sliding it over the **Secure Guidewire**.



The **screwdriver** is released by turning the black knob counterclockwise.



Recommendation

The **Secure Guidewire** should be removed as soon as the pedicle screw is engaged in the bone.

Failure to do so may result in obstruction of the **Secure Guidewire**.

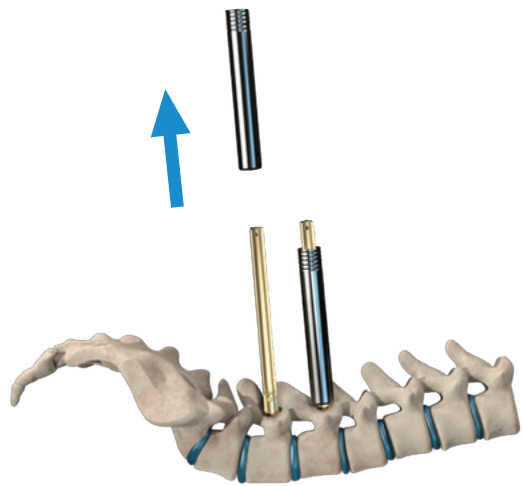


99762001
GUIDEWIRE REMOVER

Removal of Tap Sleeve Dilators

4

Once the screws are inserted, the tap sleeve dilators are removed.



Rod Preparation

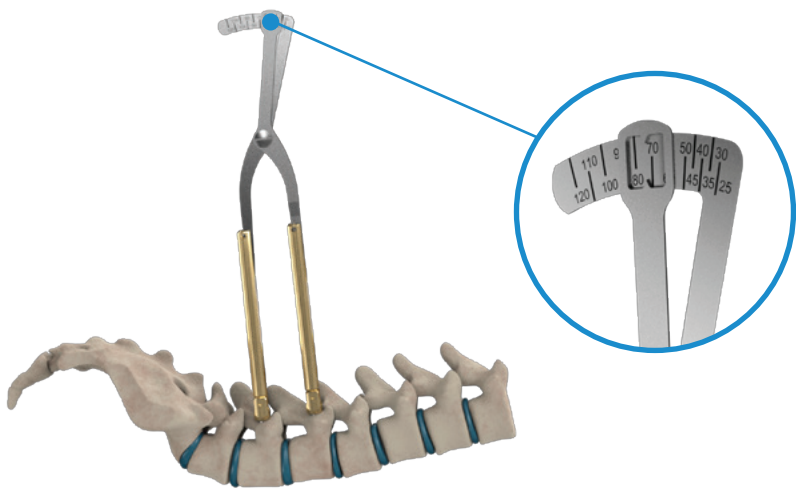
5

A ■ Rod Length Selection

The appropriate rod length is determined through the use of the rod sizing caliper. If the measurement is between two increments, the longer rod should be chosen.

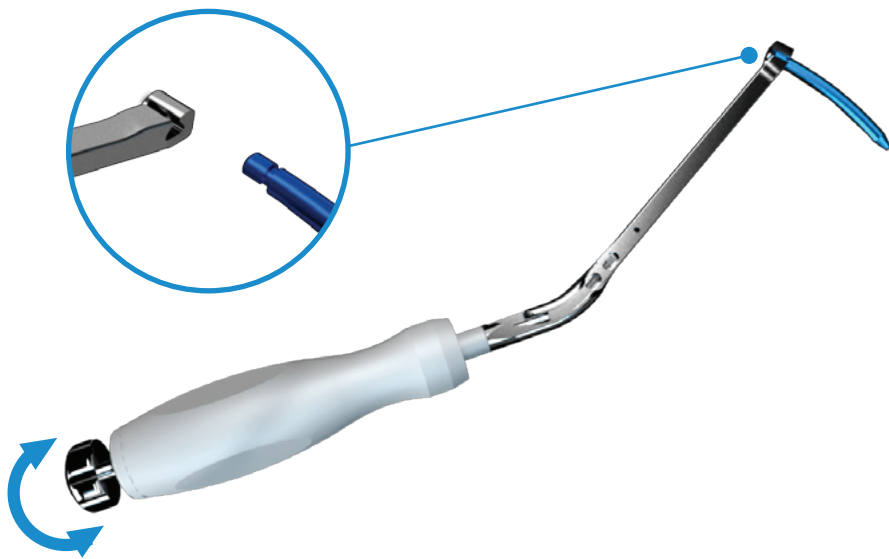


13731000
ROD SIZING CALIPER



B ■ Rod Inserter Connection

The rod inserter is connected to the flat end of the rod. The connection between the rod and the instrument is secured by turning the knob clockwise.



C ■ Rod Bending

If necessary, the curvature of the rod can be adjusted using the French bender.

Recommendation

It is recommended to secure the rod to the rod holder before using the French bender.



13711000
ROD INSERTER CURVED



13711001
ROD INSERTER STRAIGHT

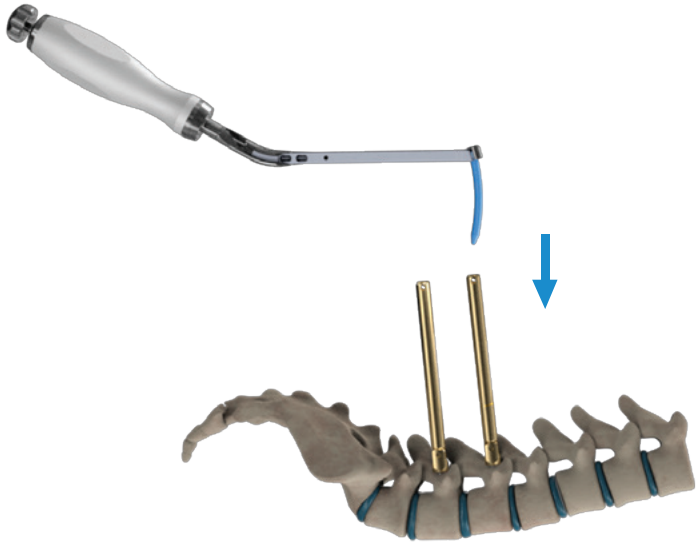


99750003
FRENCH BENDER

Rod Insertion

6

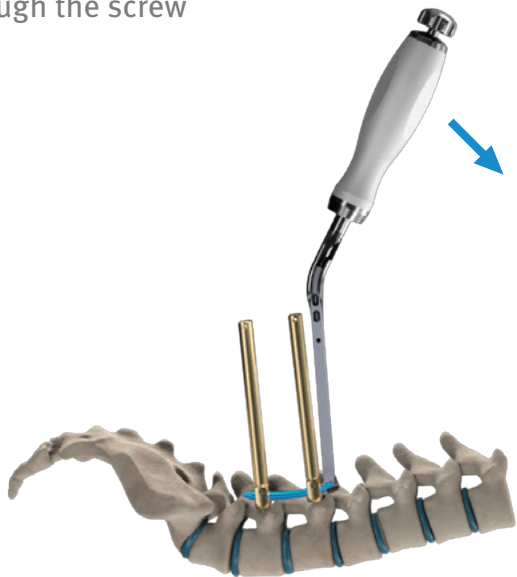
1. The rod is inserted vertically in the cranial screw.



2. The screw heads are aligned on the instrument shaft.

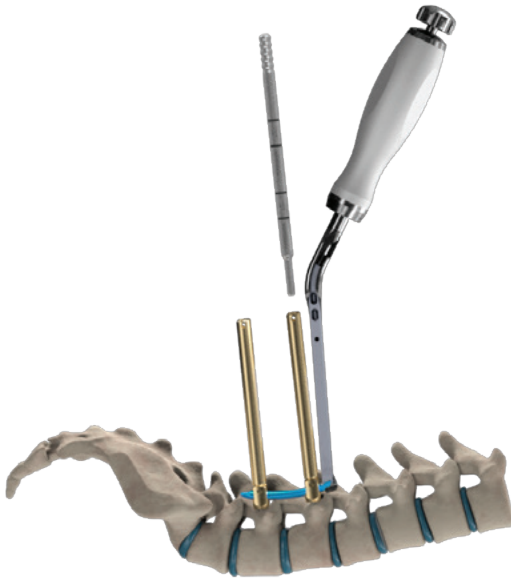


3. The rod is inserted through the screw heads.



Recommendation

Do not release the **rod inserter** until the set screws are inserted.



The **rod gauge** is inserted in the screw heads to verify the rod position.

The marking on the **rod gauge** indicates the appropriate instrument for set screw insertion.



If the tip of the screw extension is between the two markers, then use the **set retain set screwdriver** for set screw insertion.



If the tip of the screw extension is located below the bottom marker, then use the **Persuader** for set screw insertion.



If the tip screw extension is located above the top marker, then the rod must be repositioned.



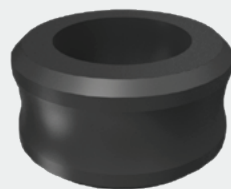
13733002
ROD GAUGE



01720006
SET RETAIN SET SCREWDRIVER



99781312 | 99781212
RATCHETING TORQUE LIMITER



13722002
RING MIS SCREW



13742000
PERSUADER

Insertion of the Set Screw

7

A ■ Insertion with the set retain set screwdriver

Recommendation

The **Ring MIS Screw** is available to avoid splaying of the screwtabs during set screw insertion.

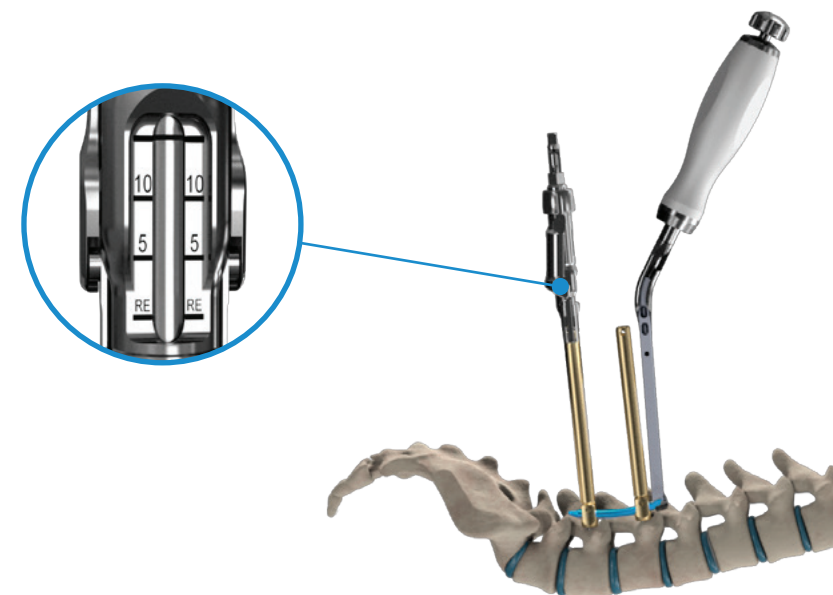


B ■ Insertion with Persuader

1. The set screw is attached to the **persuader** by pressing the set screw onto the instrument until a “click” is heard.



2. The instrument is connected to the screw head.

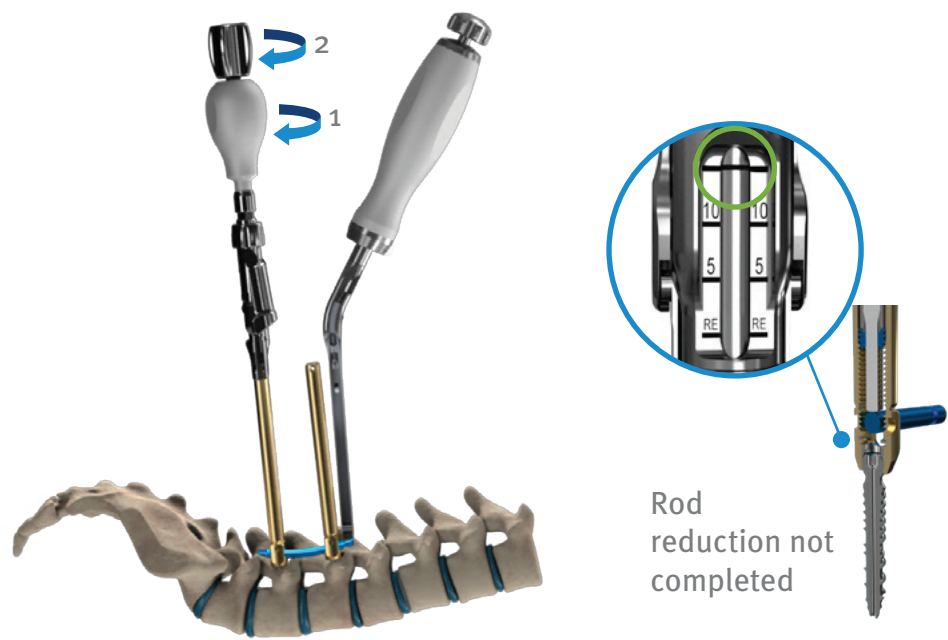


3. The **palm handle for persuader** is inserted onto the instrument.

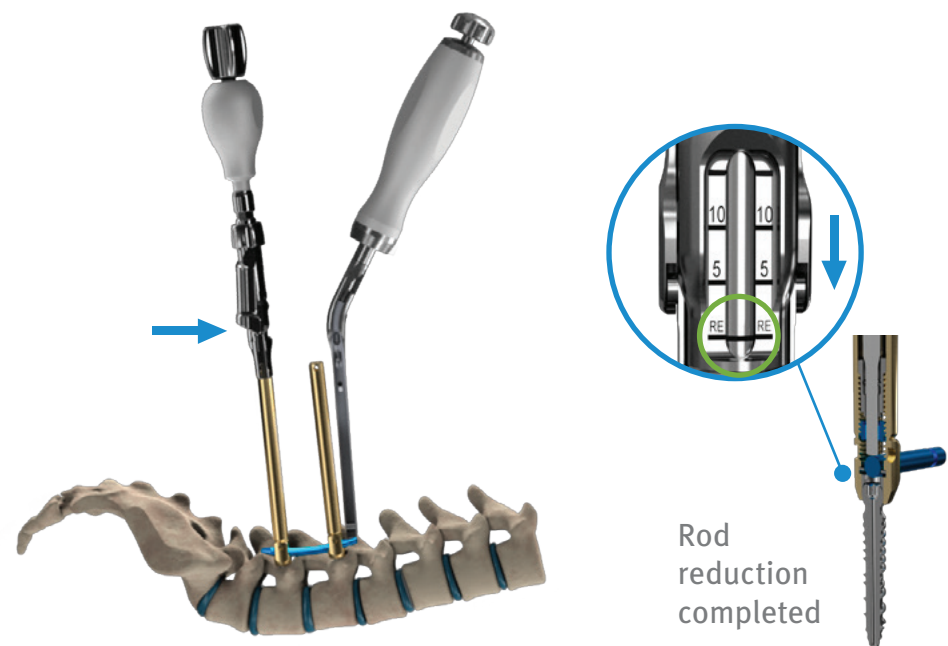


13780000
PALM HANDLE FOR PERSUADER

4. The **palm handle for persuader** is turned clockwise, which pushes the rod into place. The knob is then turned clockwise for set screw insertion.



5. Push the trigger to remove the instrument.



Correction Maneuvers

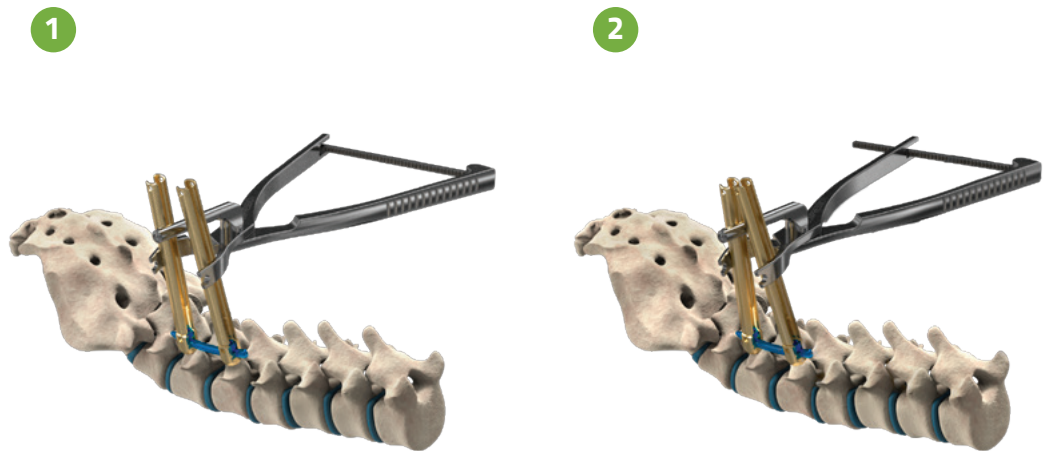
8

The **compressor / distractor** has two different positions for **compression** and **distraction** indicated by engravings on the instrument.

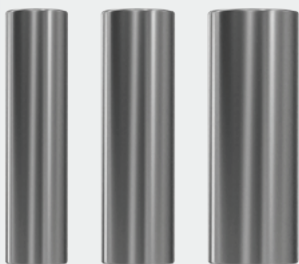


A ■ Compression

For compression, the **compressor / distractor** is applied to the proximal part of the screw tabs. The cylinder must be positioned above it.



13740000
COMPRESSOR / DISTRACTOR



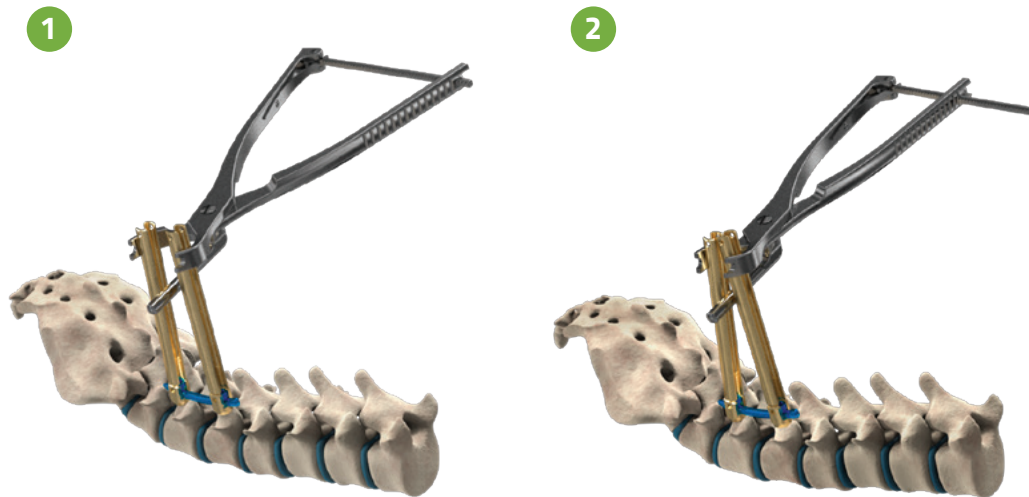
13747001 Ø12mm
13747002 Ø14mm
13747003 Ø16mm

SLEEVES

If the screw heads are too far apart, then use the appropriate **sleeves**.

B ■ Distraction

For distraction, the **compressor / distractor** is applied to the distal part of the screw tabs. The cylinder of the **compressor / distractor** should be positioned below it.



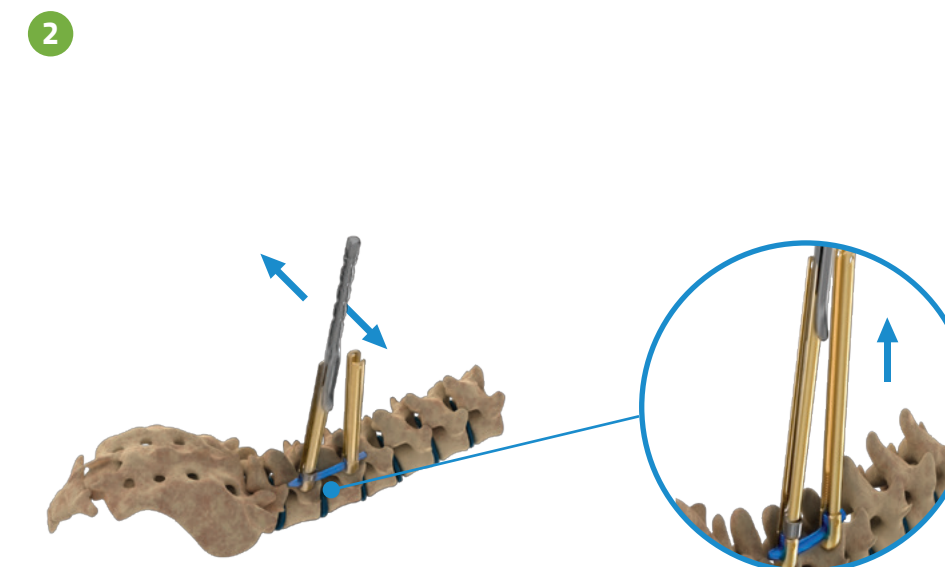
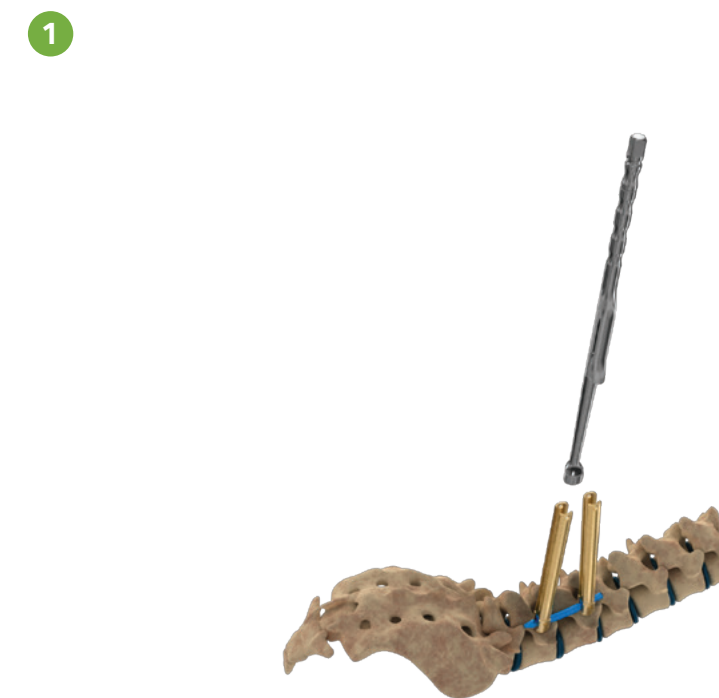
Final Tightening

The **counter torque** is positioned on the screw head. The **set retain set screwdriver** is connected to the **Ratcheting Torque Limiter** and inserted into the **set screw** through the torque limiting handle. The final tightening is done until the torque limiting handle clicks.



Removal of extended tabs

The **tab remover** is applied to the removable part of the screw tabs. A lateral back and forth movement separates the tabs.



13721001
COUNTER TORQUE

13722001
TAB REMOVER

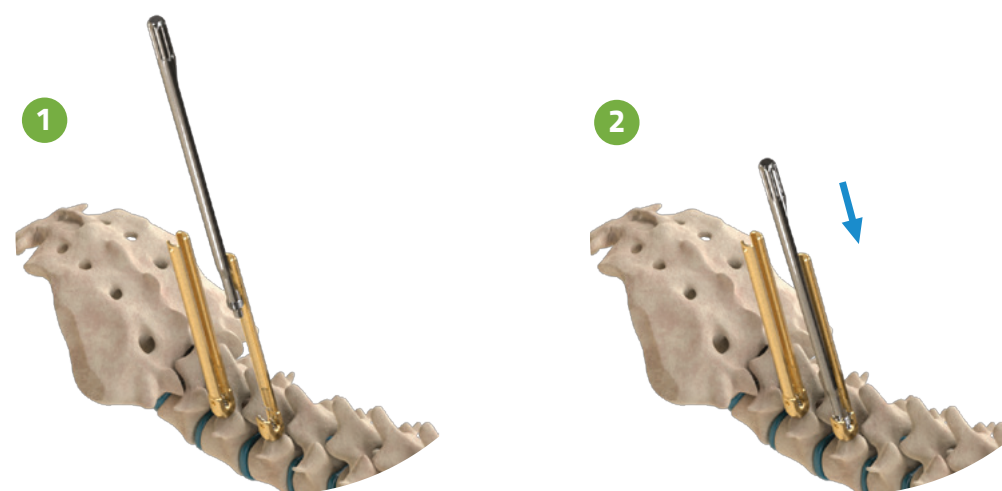
13721001
COUNTER TORQUE

99781312 | 99781212
RATCHETING TORQUE
LIMITER

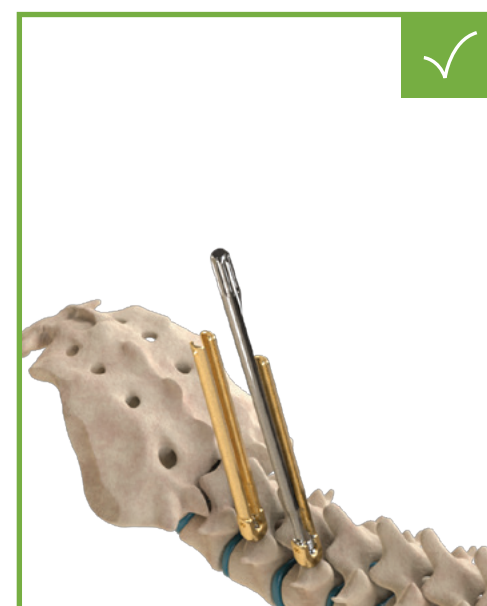
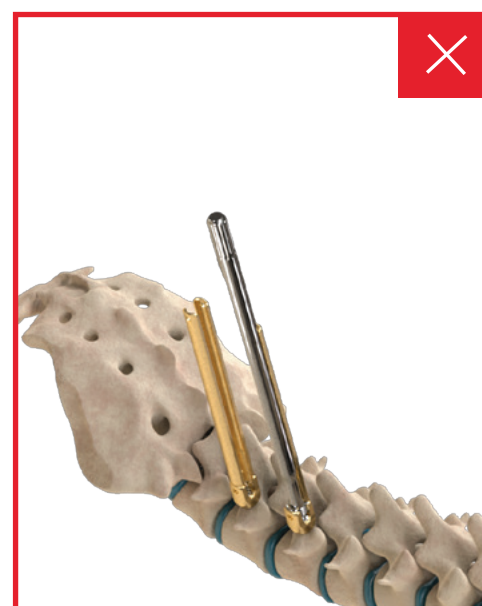
Technique for Premature Extended Tab Breakage ¹¹

A ■ First Operation

The **Guide for rescue tube** is screwed in the pedicle screw head.

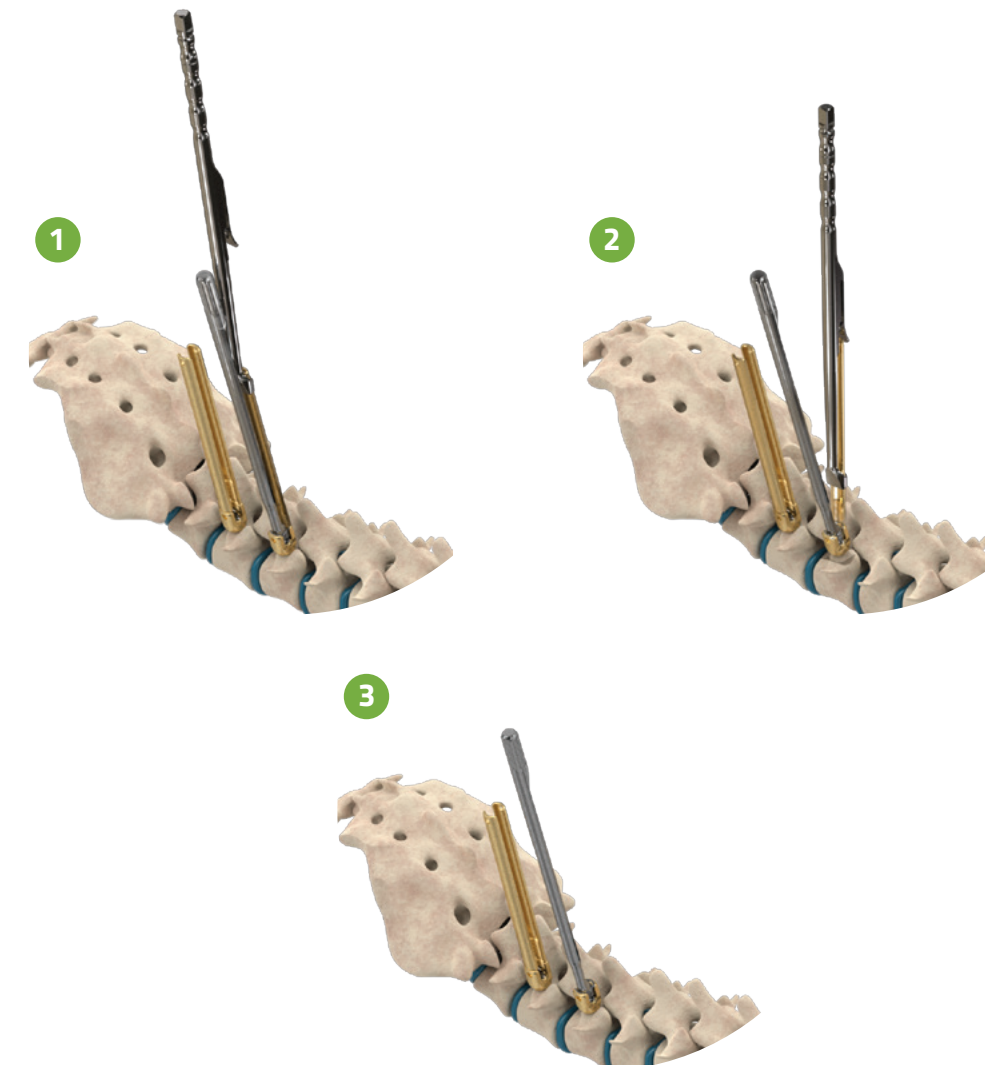


The concave shape of the **guide for rescue tube** must be parallel to the pedicle screw tab.



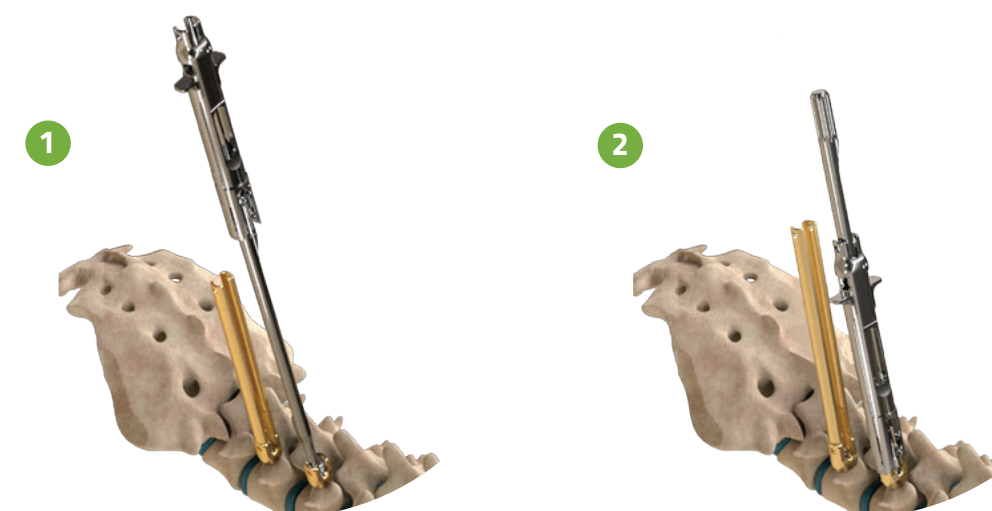
B ■ Second Operation

The Remaining tab is broken off.



C ■ Third Operation

The **rescue tube** slides down the **guide for rescue tube** and clips onto the pedicle screw head.

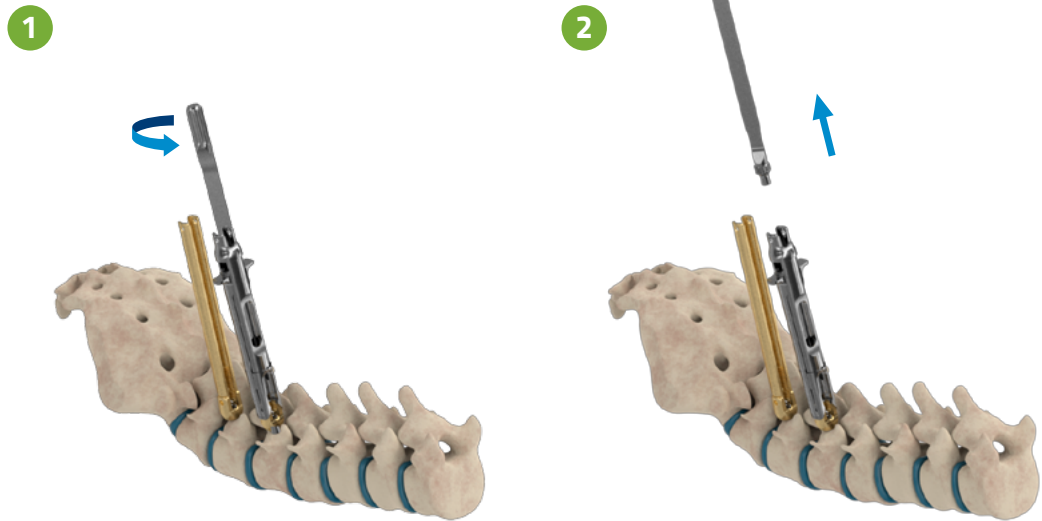


13719005
RESCUE TUBE

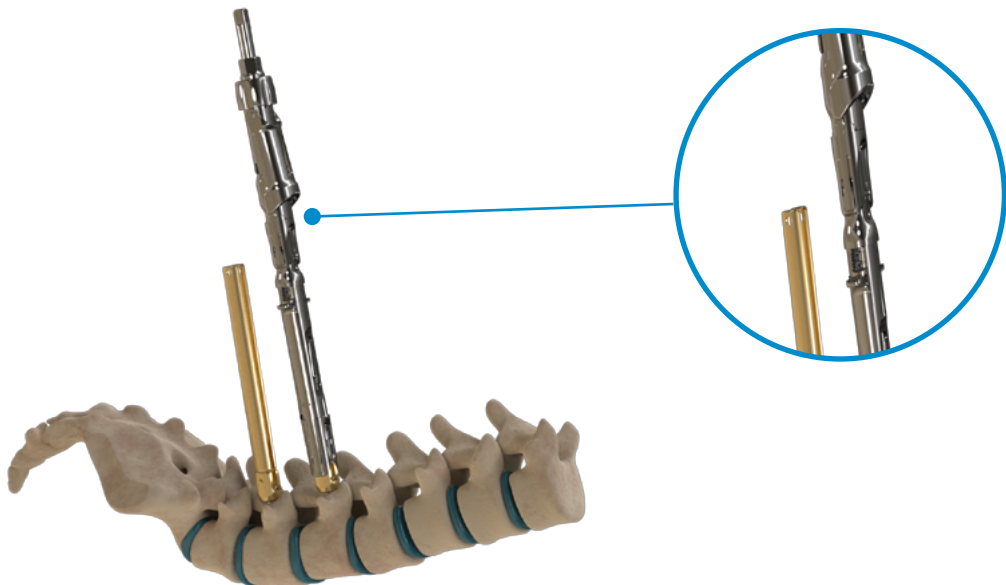
13719006
GUIDE FOR RESCUE TUBE

D ■ Fourth Operation

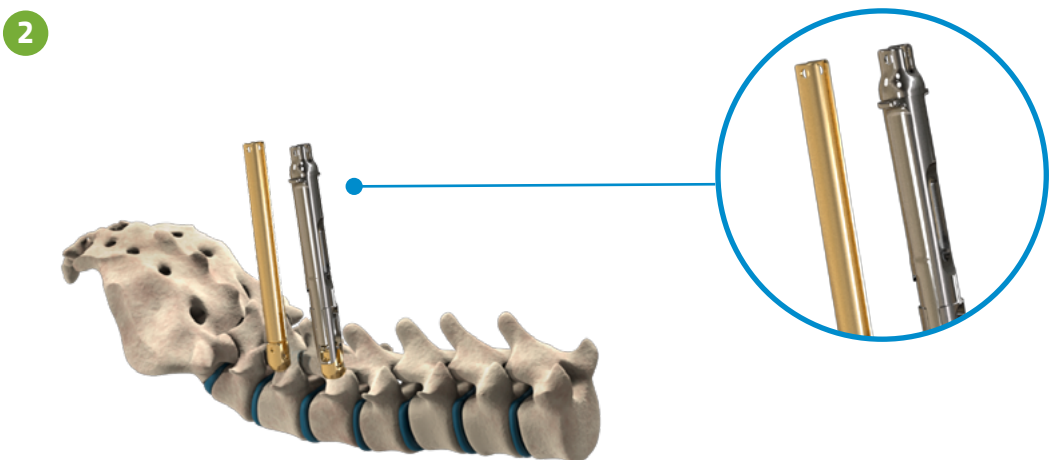
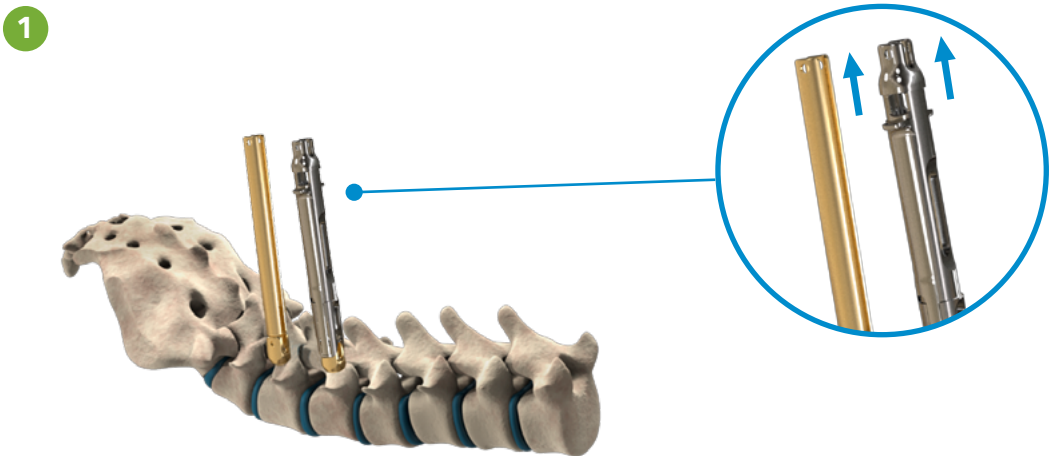
Once the **rescue tube** is properly positioned on the pedicle screw head, the **guide for the rescue tube** can be removed.



The **persuader** can be attached on the rescue tube.



Removing of the **rescue tube**.



Ablation

12

If the need for an ablation occurs, please contact the customer service department of **CLARIANCE**. The required material will be shipped at your convenience.

Product Catalog



JAMSHIDI (resuable) 07709225



INSERTION TUBE (reusable) 13720001



PEDICLE ACCESS KIT (SINGE-USE) 13709000-S



ROD INSERTER CURVED 13711000
ROD INSERTER STRAIGHT 13711001



ROD GAUGE 13733002



SET RETAIN SET SCREWDRIVER 01720006



SECURE GUIDEWIRE 13709050



DILATOR 13707001 / 13707002



TAP SLEEVE DILATOR 13719003



PERSUADER 13742000



PALM HANDLE FOR PERSUADER 13780000



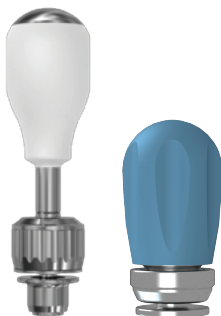
COMPRESSOR / DISTRACTOR 13740000



CANNULATED AWL 99702004



CANNULATED TAP
Ø 4,5 mm 99701545
Ø 5,5 mm 99701555
Ø 6,5 mm 99701565
Ø 7,5 mm 99701575
Ø 8,5 mm 99701586



CANNULATED RATCHET PALM HANDLE 99780100 | 99780101



COUNTER TORQUE 13721001



RATCHETING TORQUE LIMITER 99781312 | 99781212



TAB REMOVER 13722001



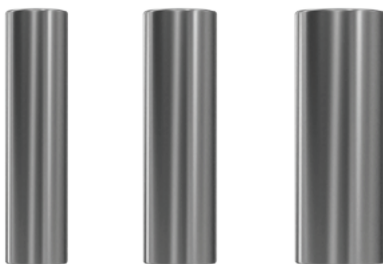
SCREWDRIVER 13710005



GUIDEWIRE REMOVER 99762001



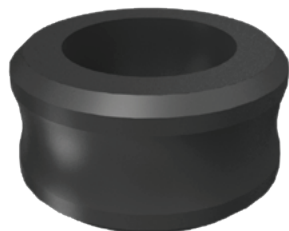
ROD SIZING CALIPER 13731000



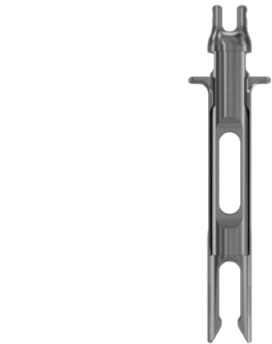
SLEEVE
Ø 12 mm 13747001
Ø 14 mm 13747002
Ø 16 mm 13747003



FRENCH BENDER 99750003



RING MIS SCREW 13722002



RESCUE TUBE

13719005



GUIDE FOR RESCUE TUBE

13719006



POLYAXIAL SCREW

L. (mm)	Ø 4,5	Ø 5,5	Ø 6,5	Ø 7,5	Ø 8,5
25	13014525	13015525	—	—	—
30	13014530	13015530	13016530	13017530	—
35	13014535	13015535	13016535	13017535	—
40	13014540	13015540	13016540	13017540	13018540
45	13014545	13015545	13016545	13017545	13018545
50	—	13015550	13016550	13017550	—
55	—	13015555	13016555	13017555	—



MIS PRE-LORDOSED RODS

Length (mm)	Reference
30	13435030
35	13435035
40	13435040
45	13435045
50	13435050
55	13435055
60	13435060
65	13435065
70	13435070
75	13435075
80	13435080
95	13435095
100	13435100



MIS STRAIGHT RODS

Length (mm)	Reference
40	13495040
50	13495050
60	13495060
70	13495070
80	13495080
90	13495090
100	13495100
110	13495110
120	13495120
140	13495140
160	13495160
180	13495180
200	13495200
440	13495440
490	13495490



SET SCREW

13620009

Trays

Instrument Tray #1	13991000
Lid for Instrument Tray #1	13991001
Instrument Tray #2	13991002
Lid for Instrument Tray #2	13991003
Instrument Tray #3	13991004
Lid for Instrument Tray #3	13991005
Lid for Implant Tray #1	13991006
Implant Tray #1	13991007
Lid for Implant Tray #2	13991008
Implant Tray #2	13991009
Set Screw Rack	13991010

Assembly Instructions

1. Slide the **sleeve for screwdriver** on the **assembly for screwdriver tube** until the black knob.



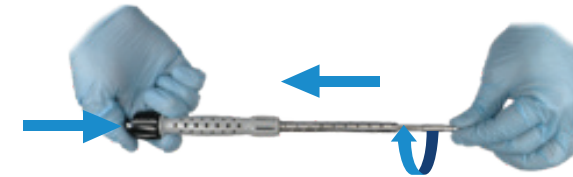
2. Fully insert the **quick-connect rod** in the screwdriver body through the black knob.



3. Insert the **rod of screwdriver** in the screwdriver body while exercising a pressure on the **quick-connect rod**.



4. Once the **rod of screwdriver** is fully engaged, slightly turn it while pushing until the rod perfectly fit with the **quick-connect rod** and clips.



5. Slightly pull the **quick-connect rod** to facilitate the settle of the screwdriver handle.



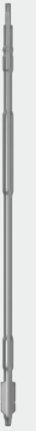
13911004
QUICK-CONNECT ROD



13914003
SLEEVE FOR SCREWDRIVER



18912026
ASSEMBLY OF SCREWDRIVER
TUBE



13911009
ROD OF SCREWDRIVER

Clariance SAS

18, Rue Robespierre
62217 Beaurains – France

T : +33 (0)3 21 16 12 15

F : +33 (0)3 21 15 50 73

contact@clariance-spine.com

www.clariance-spine.com

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Prior to using any CLARIANCE device, please review the instructions for use and surgical technique guide for a complete list of indications, contraindications, warnings, precautions, potential adverse events and directions for use.