



RENOIR™

POSTERIOR CERVICO-THORACIC
FIXATION SYSTEM

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FEATURES AND BENEFITS

The RENOIR™ Posterior Cervico-Thoracic Fixation System consists of various rods, multi-application polyaxial screws and locking set screws to provide an efficient and secure top-loading, rigid fixation.

Set Screw available in standard and cap with cap screw configuration to be used with crosslink

Straight and transition rods available

Polyaxial screw angulation $\pm 30^\circ$

Self-tapping screws with a pitch distance of 1.7 mm

Trilobe Drive Feature for increased torque

Tulip height 10.6mm for a low profile construct

SPECIFICATIONS

RENOIR™ Polyaxial Screws: 3.5mm Diameter

Part Number	Length (mm)
012.1408	8
012.1410	10
012.1412	12
012.1414	14
012.1416	16
012.1418	18
012.1420	20
012.1422	22

*longer screws available upon request

RENOIR™ Polyaxial Screws: 4.0mm Diameter

Part Number	Length (mm)
012.1510	10
012.1512	12
012.1514	14
012.1516	16
012.1518	18
012.1520	20
012.1522	22
012.1524	24

*longer screws available upon request

RENOIR™ Lamina Hooks: 3.5 Diameter

Part Number	Angle	Length (mm)
012.1816	Straight	16
012.1826	Right	17
012.1836	Left	18

RENOIR™ Cross Connectors

Size	Length (mm)
Small	30
Medium	35
Large	45

RENOIR™ Straight Rods: 3.5mm Diameter

Part Number	Length (mm)
012.1030	30
012.1040	40
012.1050	50
012.1060	60
012.1070	70
012.1080	80
012.1090	90
012.1100	100
012.1120	120
012.1200	200
012.1240	240

RENOIR™ Transition Rods: 3.5 - 5.5mm Diameter

Part Number	Type
012.0300	Transition Rod, D3.5 x L150, D5.5 x L150mm
012.0400	Transition Rod, D3.5 x L200, D5.5 x L200m

RENOIR™ Set Screws

Part Number	Length (mm)
012.1404	Set Screw, Star, OD7 xL3.7mm
012.1405	Set Screw, Cap Head, Star, OD7 x L3.5mm

POSITIONING & PREPARATION

PATIENT POSITIONING

SITE PREPERATION

01. Make an incision on the mid-line performing routine dissection to expose the vertebrae to be fused.

SCREW HOLE PREPERATION

01. Penetrate the cortical bone to initiate an entry point using the Awl (100.7020 Awl, Cervical with Sleeve).
Note: The Awl depth stop is 10mm.
02. The RENOIR™ Posterior Cervico-Thoracic Fixation System screws are self-tapping. If pre-tapping is desired, connect the appropriate diameter Tap to the Quick Coupling Handle. Align the Drill Guide with the desired trajectory for screw insertion. Proceed to tap to desired depth

POSITIONING & PREPARATION, *Cont.*

03. A Straight Probe (015.7022 Probe, Straight) or a Curved Probe (015.7021 Probe, Curved) may be used to extend preparation hole to the bone. A ball tip Straight Tester (012.7034 Tester, Straight) or Curved Tester (012.7035 Tester, Curved) may be used to confirm the integrity of the bone hole.

04. Select the drill bit of the appropriate length. Attach the Drill Bit to the Straight Handle with Rotary Cap.

Note: Each Drill has a limit stop coinciding with the drill bit depth of 12 or 14mm.

05. The Testers may be used to verify that the walls of the prepared pedicle pathway are not compromised.

USING THE ADJUSTABLE DRILL GUIDE

01. The Adjustable Drill Guide (012.7009 Drill Guide Adjustable Depth) may be used to ensure driver depth. Pull down the tapered sleeve to release the ratchet.

02. Adjust the drill stop until the appropriate depth is indicated.

03. Release the sleeve to lock the drill guide at the appropriate depth.

04. Ensure that the ratchet is fully engaged by pressing the drill stop.

05. Attach the drill bit to the Straight Handle with Rotary Cap, AO Small QC (100.2011 Straight Handle with Rotary Cap, AO Small QC) and insert the assembly through the drill guide.

06. Drill to stop.

Note: The Depth Gauge (100.7101 Depth Gauge, Straight Tip, 0.66mm Depth) may be used to verify depth.

SCREW INSERTION

SCREW DRIVER ASSEMBLY

01. Connect the Poly Screw Driver (012.7041 Driver, Polyaxial) to the Handle ().
02. Select the desired Polyaxial screw size and thread the Poly Screw Driver into screw housing.
03. Tighten the outer sleeve of the Poly Screw Driver until the screw housing is secured on the driver.

SCREW INSERTION

01. Insert the screw down the hole previously created confirming the desired trajectory using the Poly screwdriver.
02. Remove the Poly screwdriver by turning the sleeve counterclockwise to disengage from the screw housing.
03. Remove Driver by pulling straight out of screw housing.

Note: As an option use the Quick Screw Driver for fine tuning screw depth.

SCREW HEAD ALIGNMENT

01. Align the heads of the screws with the Alignment Tool/Rod Pusher (012.7051 Alignment Tool/Rod Pusher) so that the saddles of the screws line up for rod placement.

ROD INSERTION

ROD CONTOURING

01. RENOIR™ Posterior Cervico-Thoracic Fixation System contains straight rods. If contouring is desired, use the Rod Bender (012.7063 Rod Bender).
02. Place the rod within the Rod Bender and squeeze the handles to achieve desired curvature.

Note: Optionally, a pair of In-Situ Benders is available.

03. If a pre-cut rod needs further trimming, a Rod Cutter (012.7062 Rod Cutter) can be used to cut the rod to an appropriate length.

ROD PLACEMENT

04. Insert the rod by grasping it with the Rod Holder (012.7061 Rod Holding Forceps).
05. Place the rod so that it fits uniformly within the implants.

ROD REDUCTION

06. Use the Alignment Tool/ Rod Pusher to secure the rod into the screw housing prior to set screw insertion.

SET SCREW INSERTION

SET SCREW INSERTION

01. The Anti-Torque Device can be used to place the set screw down the barrel of the Anti-Torque Device (012.7073 Anti-Torque Tool) directly onto the screw. Alternatively, insert set screw using the Set Screw Driver (012.7071 Driver, Set Screw, Star) through the Persuader (012.7067 Rod Persuader).

Note: Alternatively, the RENOIR™ Posterior Cervico-Thoracic Fixation System has a rod fork to reduce the rod and can be used in the set screw insertion process.

COMPRESSION AND DISTRACTION

COMPRESSION

01. In the event compression is needed, the compressor (012.7081 Compressor) can be placed outside of two parallel screw headbodies.
02. Squeeze the Instruments handles until desired compression is achieved then remove.

DISTRACTION

03. In the event distraction is needed, the distractor (012.7082 Distractor) can be placed inside of two parallel screw headbodies.
04. Squeeze the Instruments handles until desired compression is achieved then remove.

PLACING CROSS CONNECTORS

CROSS CONNECTOR CONSTRUCT

01. Use the Holder, Cross Connector to hold the cross connector firmly.
02. The Hex Socket Driver, 6.0 (012.7013 Hex Socket Driver, 6.0) is used to lock the desired length of the cross-link.

FINAL TIGHTENING

SET SCREW FINAL TIGHTENING

01. In order to tighten the set screw, the Anti-Torque tool is used with the Driver, Torque Limiter, 3 N-m (012.7072 Driver, Torque Limiter, 3 N-m).
02. Thread final tightener through and turn clockwise until final tightening is achieved.

CAP SCREW FINAL TIGHTENING

01. In order to tighten the cap screw for the cross connect, the Counter Torque, Cross Connector is used with the Driver, Torque Limiter, 3 N-m (012.7102 Counter Torque, Cross Connector).
02. Thread final tightener through and turn clockwise until final tightening is achieved.

INSTRUMENTATION

INSERTERS

Part Number	Description
128.7294	TLIF Cage Inserter W9 <i>(Must be used with part 017.7292.10 -Draw Screw)</i>
128.7295	TLIF Cage Insert W11 <i>(Must be used with part 017.7292.10 -Draw Screw)</i>
017.7292.10	Draw Screw <i>(Inserter Inner Shaft)</i>

INSTRUCTIONS FOR USE

PRODUCT DESCRIPTION

Enter IFU Description

INDICATIONS

Enter IFU Indications

CONTRAINDICATIONS

- Enter IFU Contraindications

WARNING(S)

- Enter IFU Warnings

PRECAUTIONS

Enter IFU Precautions

For full Instructions For Use, please refer to the associated IFU. Please visit www.CTLAmedica.com, contact our customer service department or your sales representative for the most current revision of our IFU for indications, warnings, precautions and other essential medical information.

RENOIR™ POSTERIOR CERVICO-THORACIC FIXATION SYSTEM

NOTES

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