

3-Lok™ Spinal System



Thoracic Spine

Lumbar Spine

Sacral Spine

- 6mm rod system ■
- Universal application ■
- Low profile design ■
- Unique clamping mechanism ■
- User friendly instrumentation ■
- Anterior and posterior applications ■
- Titanium – MRI compatible ■



Developed in collaboration with
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Corin Care



Corin Medical



Corin



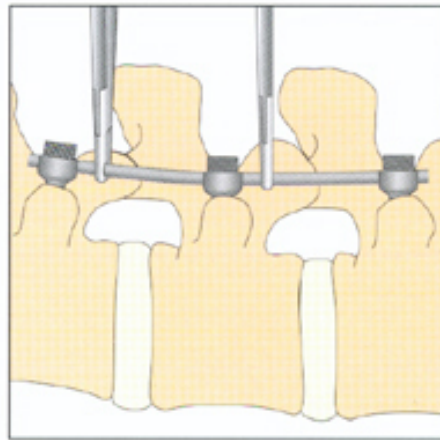
**CORIN SPINAL
SYSTEMS**
A Corin Group Company

3-Lok[®] Pedicle Screw Introduction



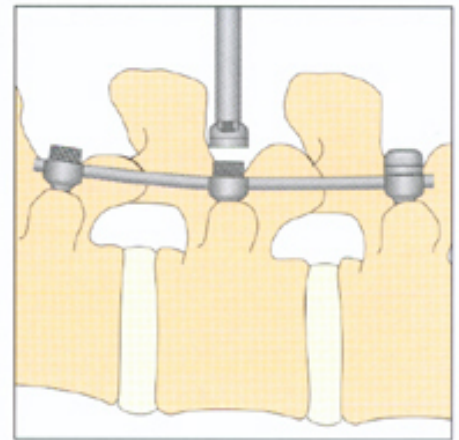
Rod bending

The malleable rod provides a template for contouring the definitive rod with the rod bender.



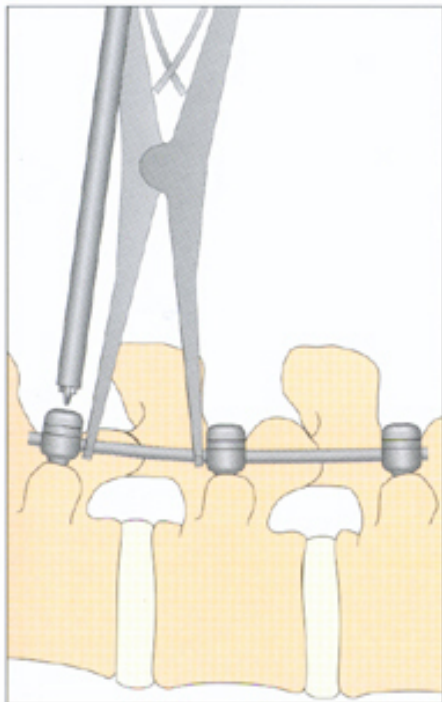
Rod positioning

With the aid of the rod introducers, the definitive rod is positioned across the screw heads.



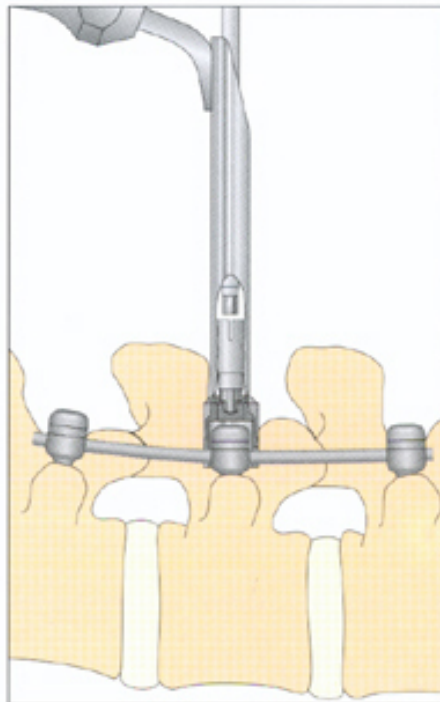
The Screw Collar/Cap

Using the collar/cap introducer, a locking cap with captive collar is placed over each screw pinching the rod in position. Do not overtighten.



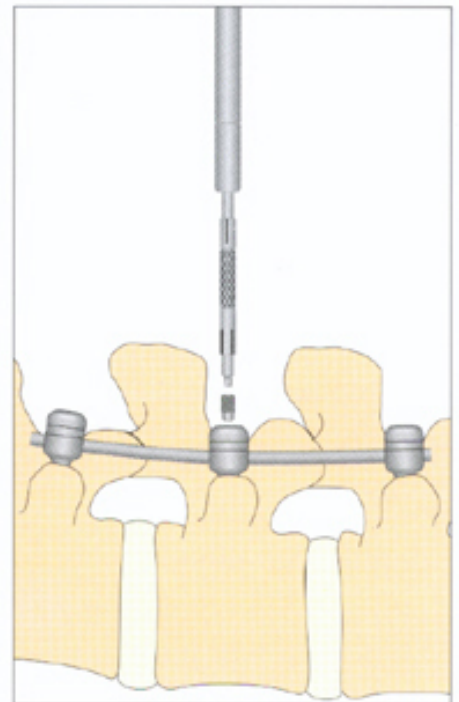
Vertebral alignment

Final manipulation is achieved using the compressor or distractor and the cap tightened using the locking cap screwdriver, to maintain the new position.



Final Cap tightening

The torque screwdriver with the torque driver adaptor is passed through the screw/rod stabiliser (which protects the construct from distortion) to achieve high pressure damping.



The Grub Screw

The grub screw is introduced and tightened with the small hexagonal screwdriver to achieve final locking.

Deformity Indications

The system can be used for Scoliosis, Kyphosis and Lordosis with the addition of Pedicle and Laminar Hooks.

Anterior Washers and Staple Washers are available for anterior application of the system.

A full range of dedicated instruments and a separate Scoliosis Operative Technique are available for these procedures.

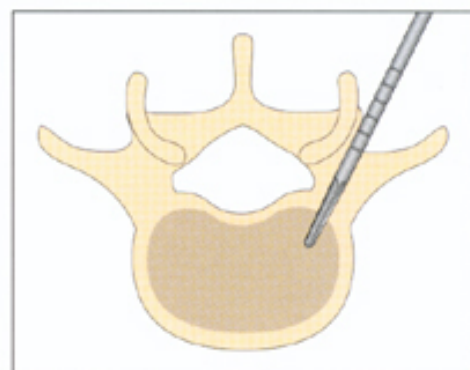
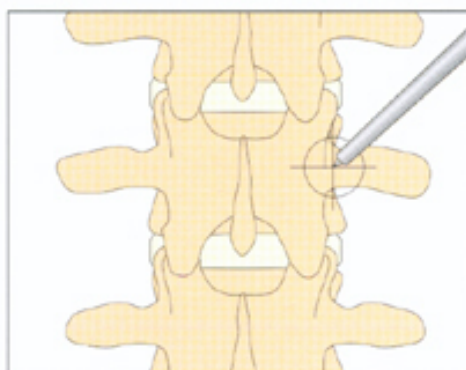


3-Lok Pedicle Screw Introduction

Surgical Exposure

Longitudinal mid-line skin incision. The capsule and articular cartilage of the joints included in the fusion are removed.

Identification of the pedicle canal can be simplified by using anterior/posterior imaging as the precise point of screw entry is highly critical.

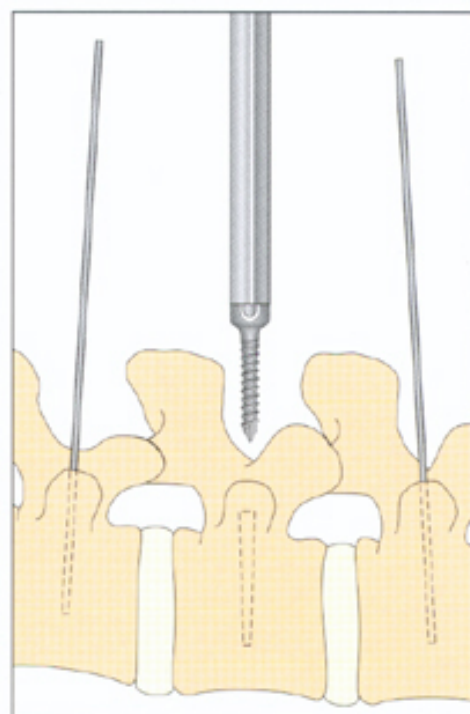
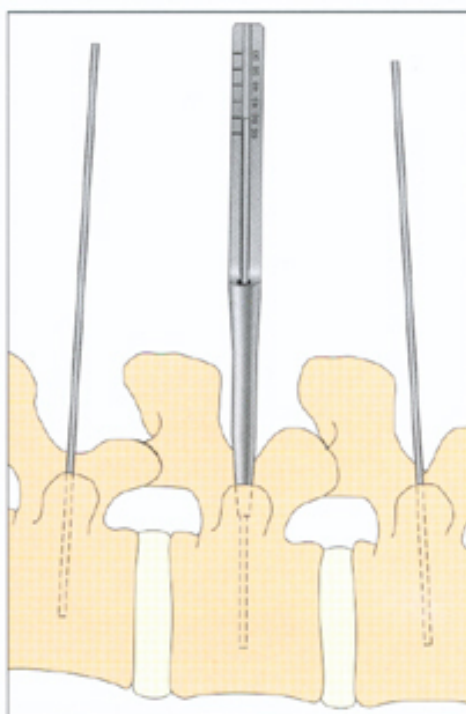
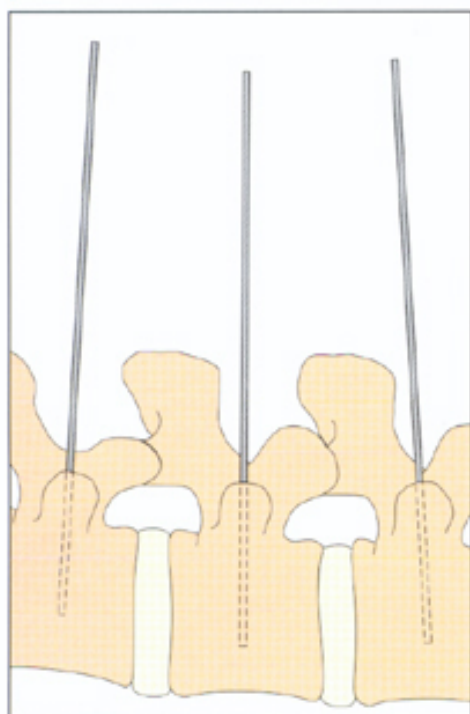


Hole Site Preparation

A start hole in the pedicle canal is achieved by careful insertion of the awl.

Pedicle Reamer

The blunt ended pedicle reamer is used to deepen the start hole and ream the pedicle canal.



Guide Pins

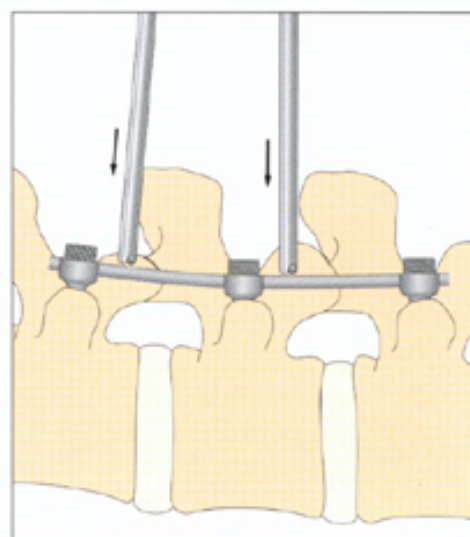
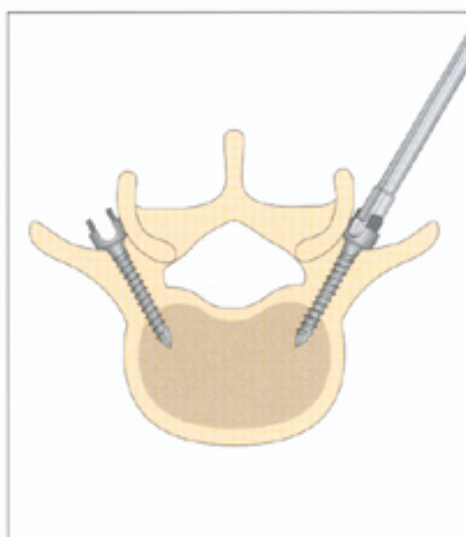
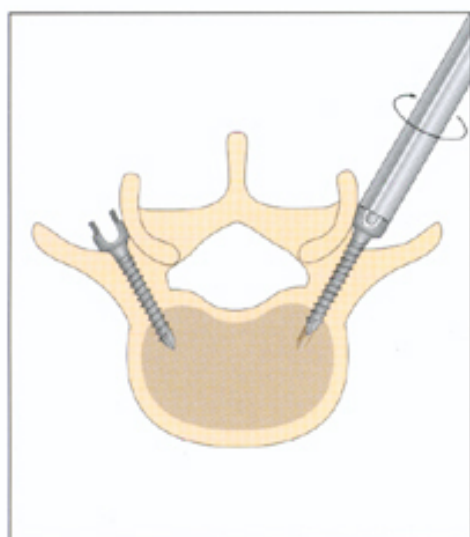
X-ray guide pins are placed in the pedicle canal holes. Two different diameter pins are provided to differentiate between right and left screw sites.

Screw length

Screw length is determined by sliding the back measure over the guide pin and reading from the scale.

Screw alignment

The screw is attached to the screw introducer and aligned in the same plane as the guide pin which is removed just prior to screw insertion.



Screw introduction

The screw is carefully inserted into the pedicle canal following the pre-reamed hole.

Seating the screw

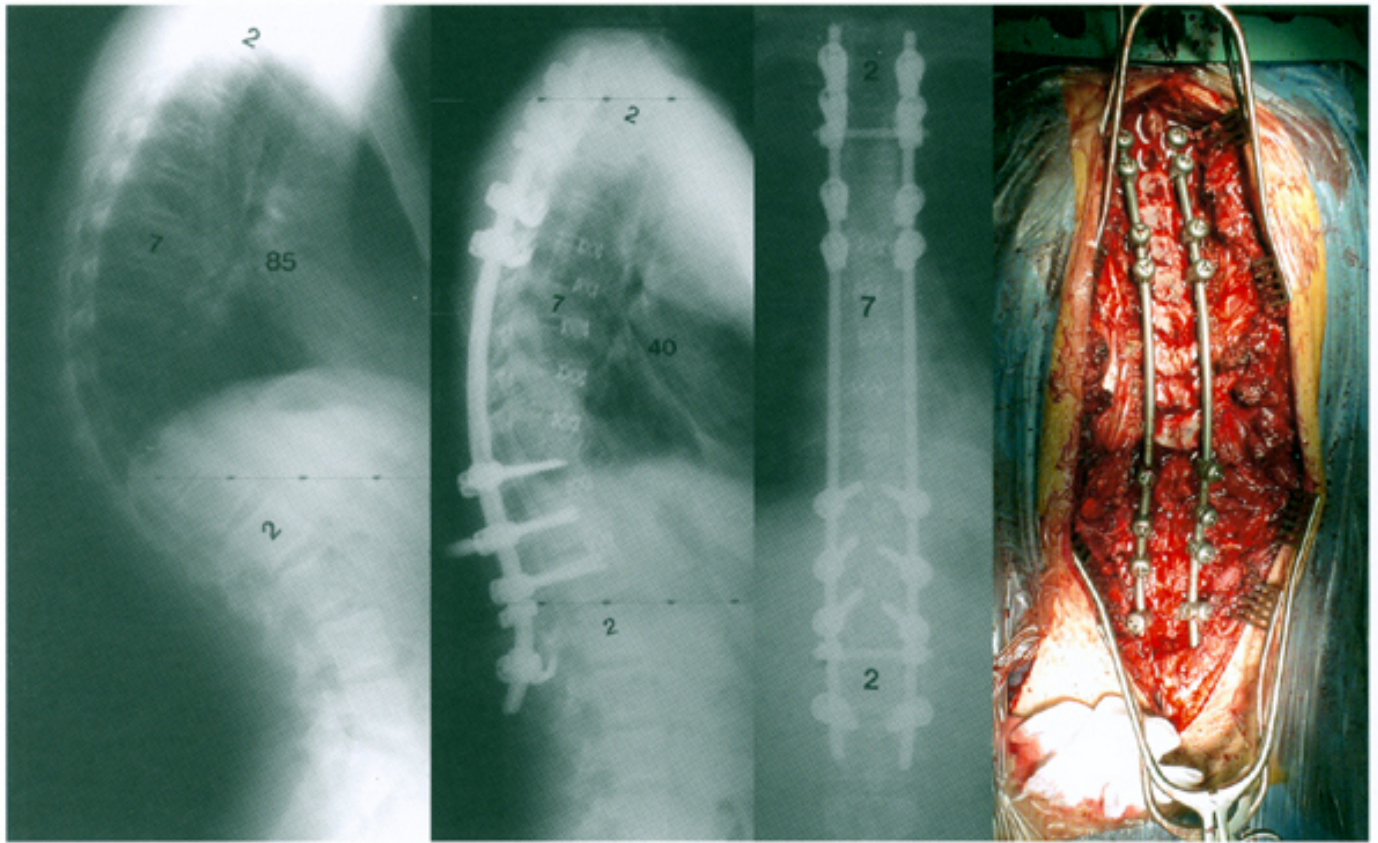
Orientation of the rod slot is achieved using the pedicle screw driver.

Rod contouring

A malleable rod is laid across the screw heads and formed to shape using the rod pushers.

The Corin 3-Lok Spinal System

Case 1

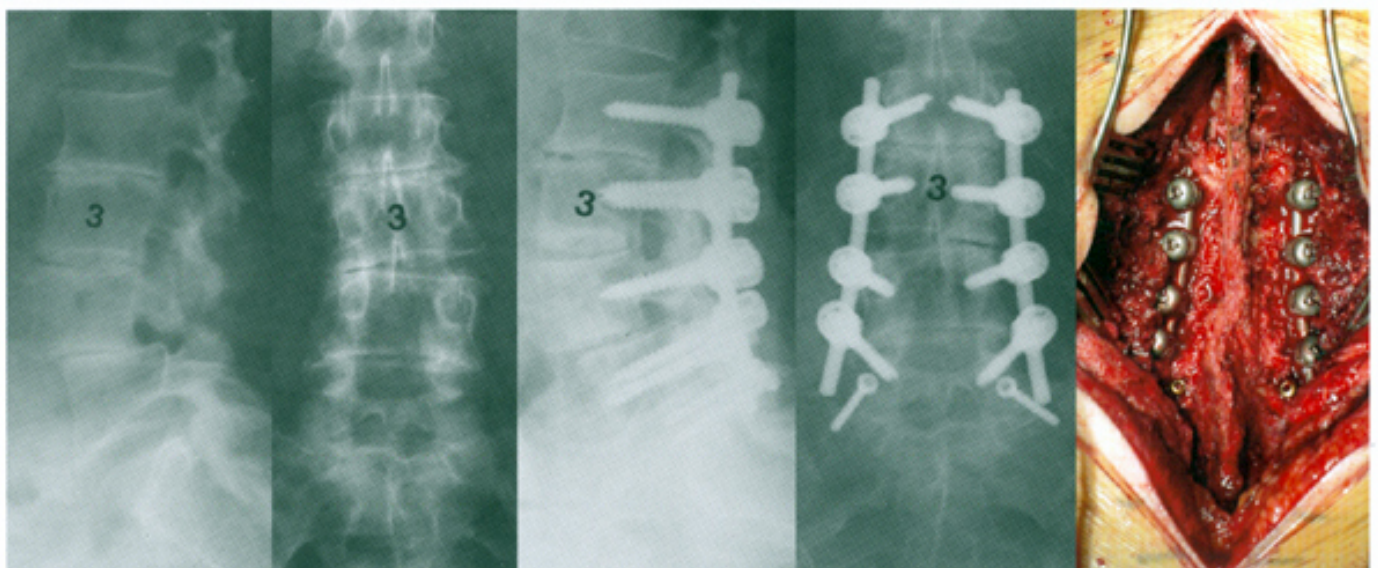


Pre Operative Lateral view
15 year old boy with
Scheuermann's Kyphosis.

Post Operative Lateral & A/P view
Correction from 85° to 40°. Anterior and
posterior fusion with instrumentation from T2
to L2 using cages and the 3-Lok System.

Intra Operative view
Construct prior to insertion of
cross braces.

Case 2



Pre Operative Lateral & A/P view
69 year old lady with degenerative Lumbar
Scoliosis and Spondylolisthesis of L4 on L5

Post Operative Lateral & A/P view
Posterior fusion from L2 to S1 using the 3-Lok
System and facet screws.

Intra Operative view
Finished construction prior to
closure.

The Concept

The 3-Lok spinal system is designed for the treatment of disorders of the thoracic, lumbar and sacral regions of the spine. The unique clamping method is specifically designed to prevent screw head loosening and rod migration, composed of only two components: a Locking Cap with Captive Collar, and a Grub Screw.

- Captive rotating collar optimises stress distribution
- Atraumatic profile

3-Lok Spinal System

Implants

The anatomically designed range of implants provides maximum choice and flexibility during surgery, ensuring reliable and stable fixation. All components have the same low profile locking mechanism, ensuring ease of use for the surgeon and post-operative comfort for the patient. The implants have a transverse slot to accommodate the 6mm connecting rod. A locking cap assembly with a captive but rotatable collar clamps the rod in the implant head. This permits optimum stress distribution throughout the screw/rod interface. Additional clamping is provided by means of a grub screw introduced through the locking cap ensuring a secure three point grip on the rod.

Universal Applications

The Corin 3-Lok spinal system is designed for both posterior and anterior spinal surgery, for deformities, degenerative disease and trauma. The system can be used in the thoracic, lumbar and sacral regions of the spine.

Indications

When used as a pedicle screw system:

- Degenerative spinal disease
- Spondylolisthesis
- Post-laminectomy syndrome
- Spinal trauma
- Tumours

When used with pedicle and laminar hooks:

- Scoliosis
- Kyphosis
- Lordosis

Instrumentation

A comprehensive range of user-friendly instruments has been designed for the 3-Lok spinal system. Each operative step has dedicated instruments to ensure easy implant positioning and manipulation, allowing time saving achievement of optimum results.

