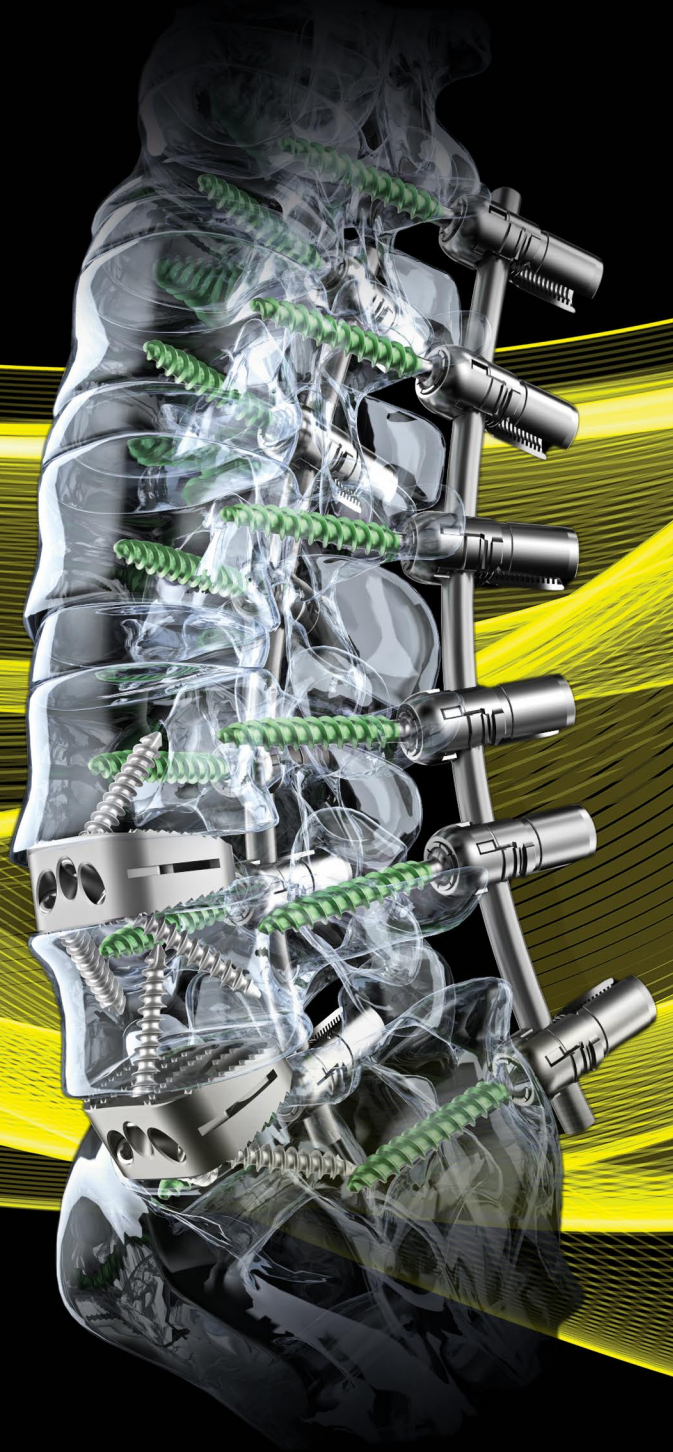




BIEDERMANN  
MOTEC

# MOSS VRS

Spinal System



Surgical Technique

Only Valid for the CE-Market



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# Introduction

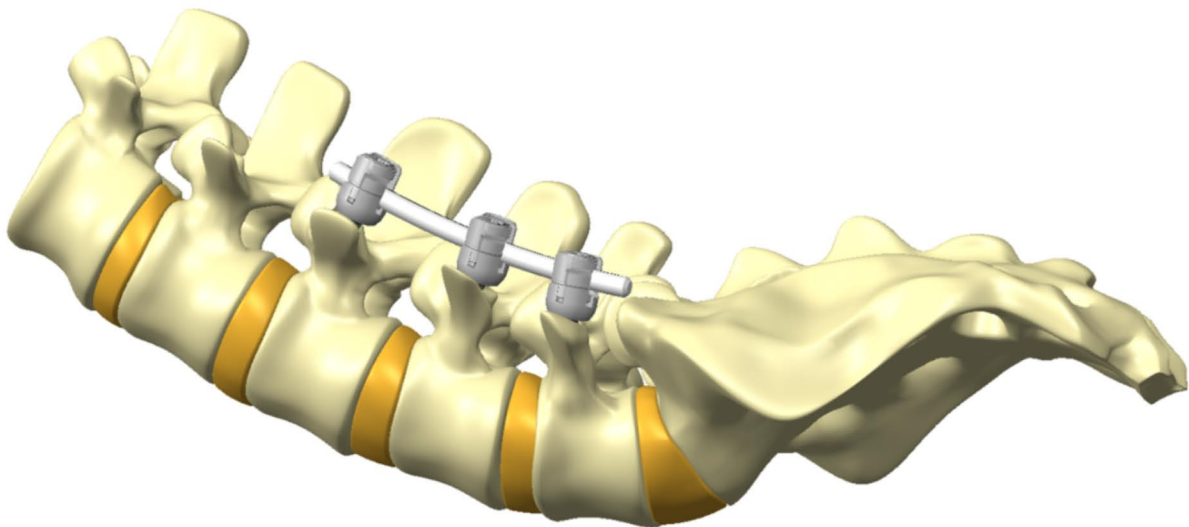
The Biedermann Motech MOSS VRS Spinal System is a comprehensive non-cervical spinal system that offers posterior clinical solutions.

The MOSS VRS System is a universal set of instruments and implants that are indicated for the treatment of significant mechanical instability or deformity of the spine which requires fusion with instrumentation.

The MOSS VRS System offers various options for stabilization of the spine. Therefore, the system includes the following implants:

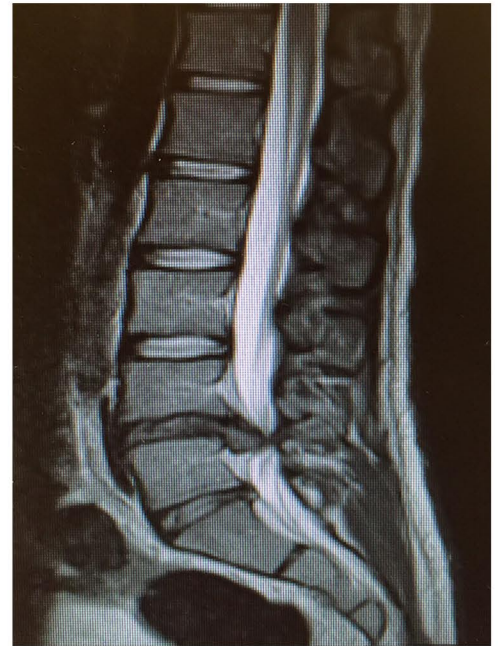
- MOSS VRS Pedicle Screws and MOSS Pedicle Screws in different designs:  
-->  $\varnothing$ 4.35-9.0 mm, length 25-100 mm
- MOSS VRS Rods and MOSS Rods in different designs:  
->  $\varnothing$ 5,5 mm and  $\varnothing$ 6.0 mm, Length 30-95 mm, 120-600 mm
- MOSS VRS Locking Caps
- MOSS VRS Reduction Heads

MOSS Pedicle Screws and MOSS Rods are cross-system components compatible to MOSS VRS Reduction Heads and MOSS 100 Polyaxial Heads



The MOSS VRS Spinal System is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of acute and chronic instabilities or deformities of the thoracic, lumbar and sacral spine. The MOSS VRS Spinal System is intended for posterior, non-cervical pedicle fixation for the following indications:

- Degenerative Disc Disease (DDD)  
(defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies)
- Spondylolisthesis
- Trauma (i.e. fractures or dislocations)
- Spinal Stenosis
- Curvatures (i.e. scoliosis, kyphosis and/or lordosis)
- Tumor
- Pseudoarthrosis
- Failed previous fusion



## Contraindications:

The MOSS VRS system is not recommended for use in the following cases:

- Overall inoperability
- Advanced Osteoporosis
- Active infection

For Relative Contraindications, Precautions and Warnings, please refer to the Instruction for use of the MOSS VRS Spinal System.

## Patient Positioning

The MOSS VRS system is inserted in the thoracolumbosacral area of the spine. The patient must be positioned accordingly.

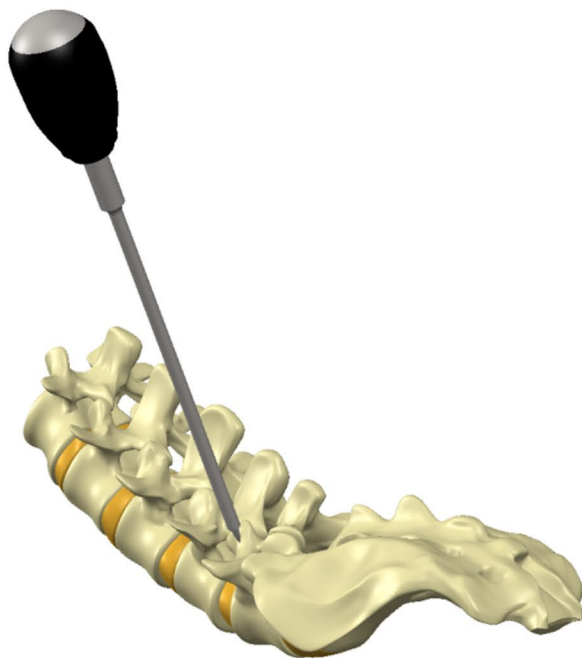
The instruments required for general dissection and creating an approach are not part of the MOSS VRS system.

## Placing the Hole

The holes for the MOSS VRS screws must be positioned in the pedicle.

Note:

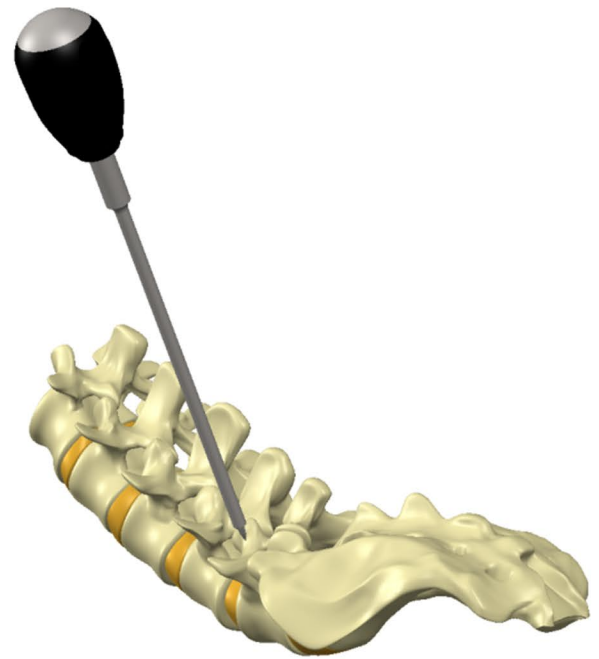
The instruments for drilling if required are not part of the MOSS VRS system.



## Placing the hole

For assistance in placing the hole the following instruments can be used:

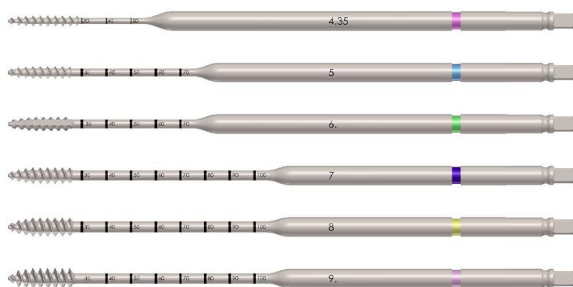
- Pedicle awl
- Pedicle probes
- Pedicle sounder



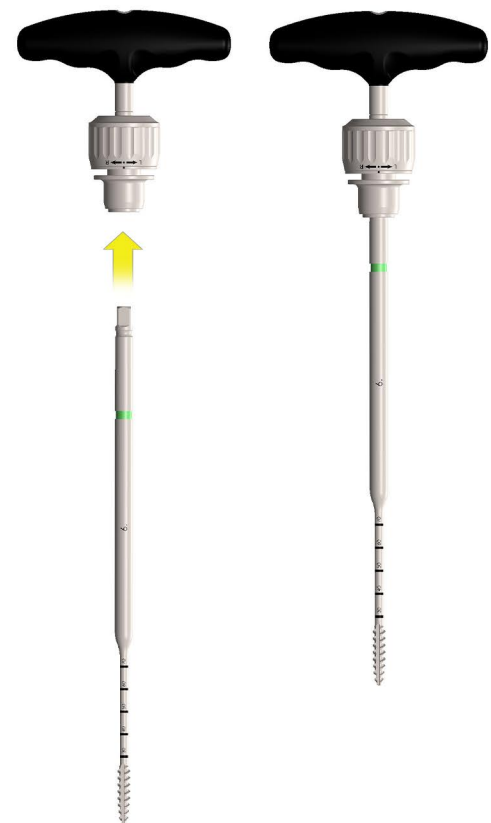
## Tapping the thread

Connect the selected tap to an appropriate handle.

For orientation, the colour coding of the double lead tap corresponds to the colour coding of the corresponding MOSS VRS pedicle screws.



An intraoperative x-ray check is also recommended for checking the tapping depth.



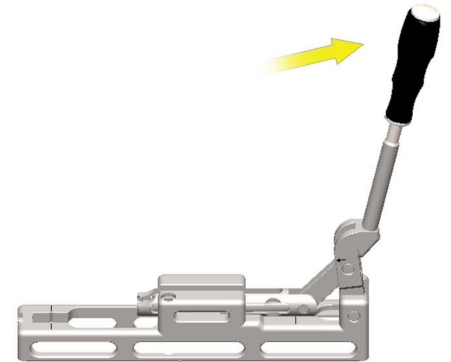
## Selecting the pedicle screw

When selecting the appropriate length and diameter of the pedicle screw, use the screw template or the template on the screw caddy to check the length and the diameter of the screw.

## Assembly of the screw

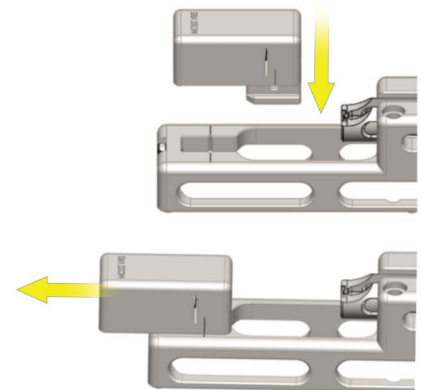
Step 1:

Place the lever vertically in the starting position.



Step 2:

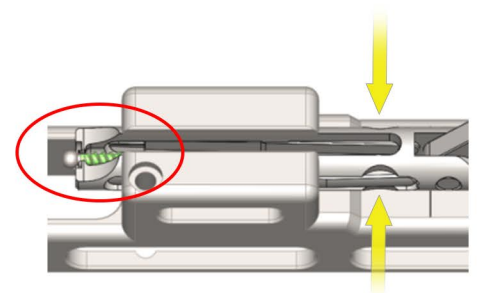
Insert the MOSS VRS head assembly into the T-groove of the assembly instrument and push it as far as it will go.



Step 3:

Insert the shank into the mount on the assembly instrument with the spherical head of the screw shank standing out.

The screw supports must be pushed together from the sides in order to introduce the screws. ATTENTION: The shanks can only be inserted in one position (see figure).

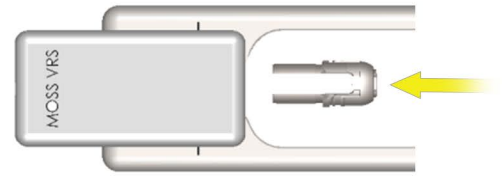




## Step 4:

Insert the polyaxial reduction head into the head assembly as far as it will go.

ATTENTION: The polyaxial reduction head can only be mounted into the head assembly with the rod opening slot in vertical position.



## Step 5:

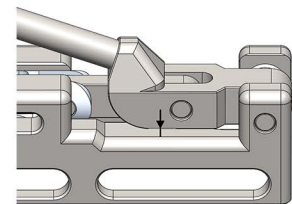
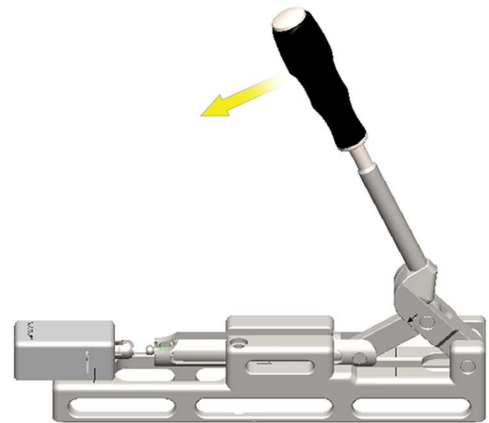
To connect the shank with the polyaxial reduction head push the lever of the assembly instrument to the horizontal position.

The markings align and the arrow sign is vertical when assembly is performed correctly.

ATTENTION: The screws are only assembled as intended when the lever has pushed horizontally as far as possible.

The end position must be checked:

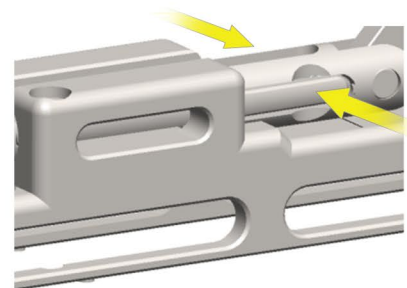
The markings must be aligned.



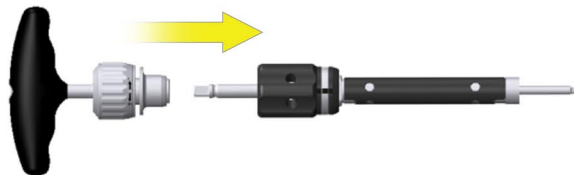
## Step 6:

Return the lever of the assembly instrument to the starting position (vertical) and remove the screw.

ATTENTION: The screw supports must be pushed together from the sides in order to remove the screws.

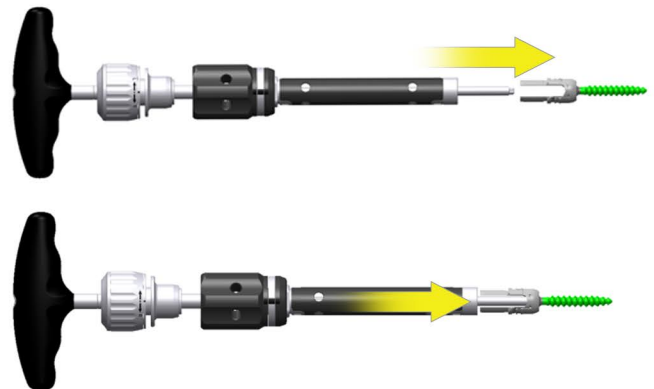


## Mounting the screw to the screw driver



Step 1: Connect the screw driver to an appropriate handle.

Step 2: Insert the screw driver into the drive of the mounted screw, slightly pushing the outer sleeve forward so that the thread engages.



Step 3: Turn the outer sleeve clockwise to tighten the screw driver. The screw is aligned axially.



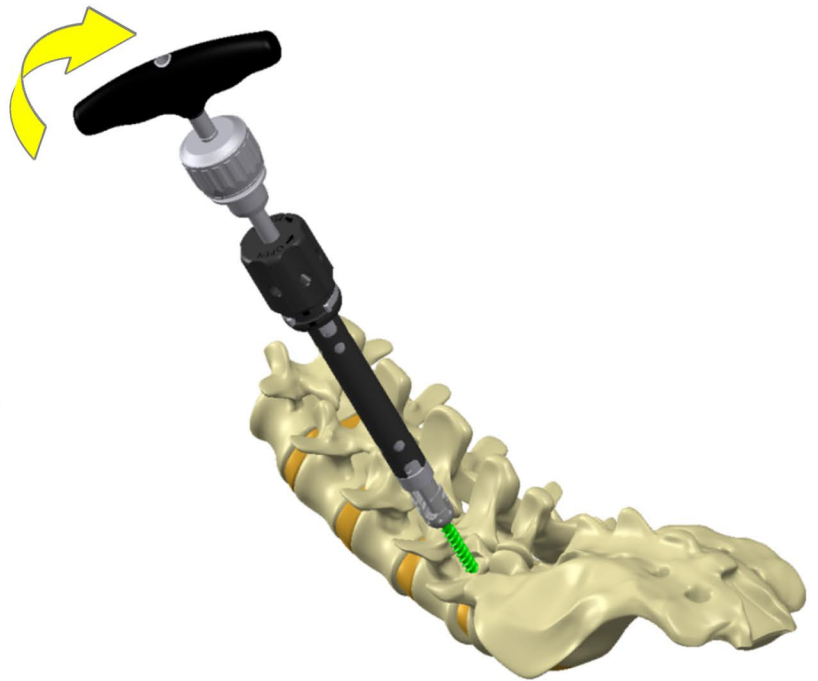
## Inserting the screw

**CAUTION:** The thread must be cut with the right sized tap before inserting the screws to avoid increased insertion torque.

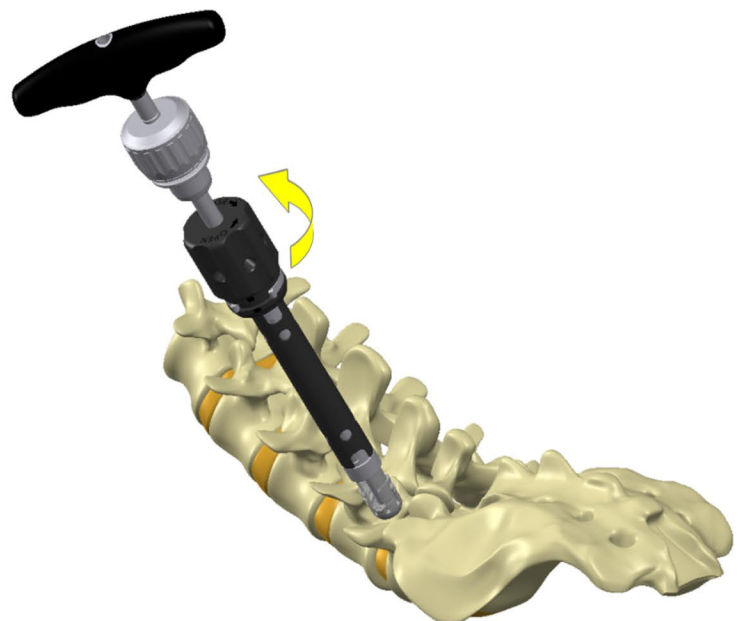
**OPTIONALLY:** Cut the area around the hole in the pedicle with the head reamer.

Step 1: Insert the pedicle screw in the vertebral bodies.

**ATTENTION:** Once the polyaxial head touches the bone do not advance the screw further as increased torque may damage the pedicle, the implant or the instrument.



Step 2: Release the screw driver.  
- Turn the nut counter-clockwise.  
- Release the screw driver from the screw.



## Inserting the rod

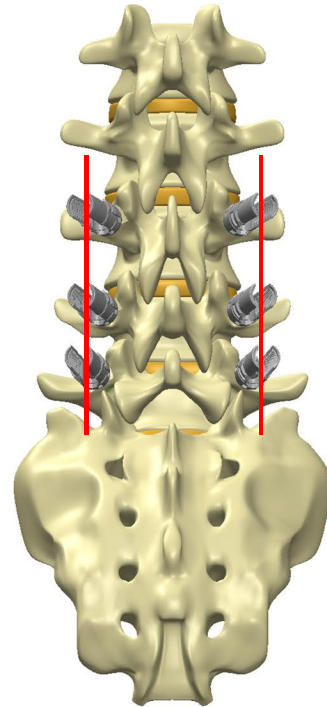
**WARNING:** Risk of implant fracture and physical injury from improper bending.

- Do not bend the rod back into shape.
- Do not damage the rod (e.g., notches, scratches)

**OPTIONALLY:** Intraoperative adjustment of the rods using the rod cutter, the rod bender and the bending iron to suit the patient's anatomy.

**OPTIONALLY:** Aligning of the polyaxial heads with the head alignment aid.

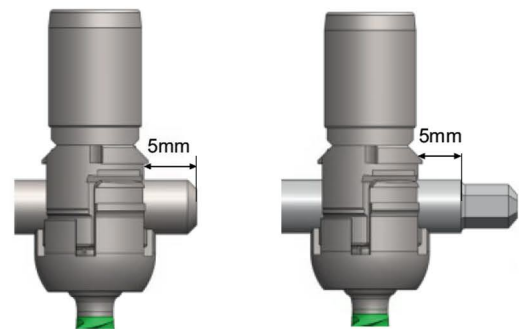
**OPTIONALLY:** The rod template can be used to plan interoperatively the correct bending of the rod.



Mount and insert the rod in the rod mount of the polyaxial head by using the rod holding forceps.

**ATTENTION:** Make sure that the rod protrudes at least 5 mm out of the polyaxial head.

If a rod with hex end is used, the rod needs to protrude 5 mm out of the polyaxial head in addition to the hex end (see figure).



## Reducing the rod into the polyaxial head

If the rod cannot easily be inserted into the polyaxial head then it can be reduced downwards.

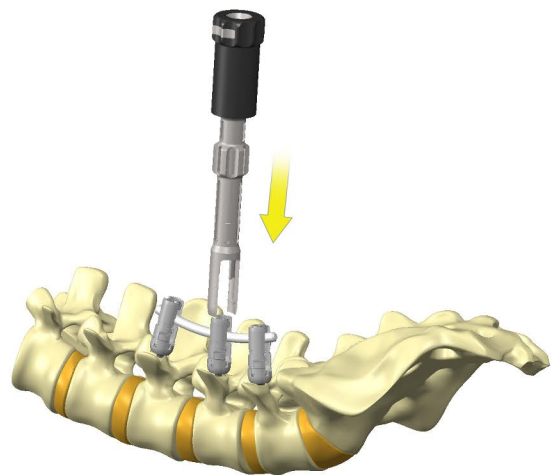
### Option 1:

The rod can be reduced downwards with the help of the reduction flank of the polyaxial head, the flank holder and the locking cap.

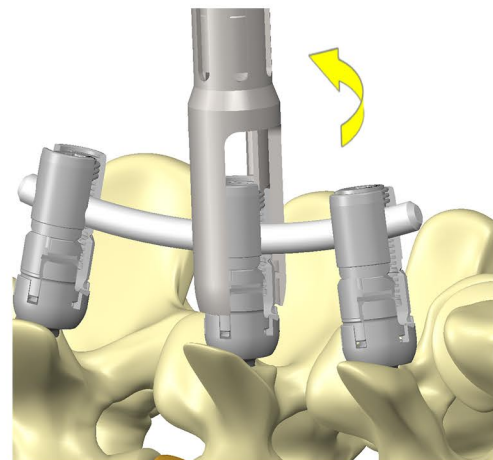
### Option 2:

The rod can also be reduced in the polyaxial head with the help of the reduction instruments.

Step 1: Place the reduction instrument on the polyaxial head (see figure).



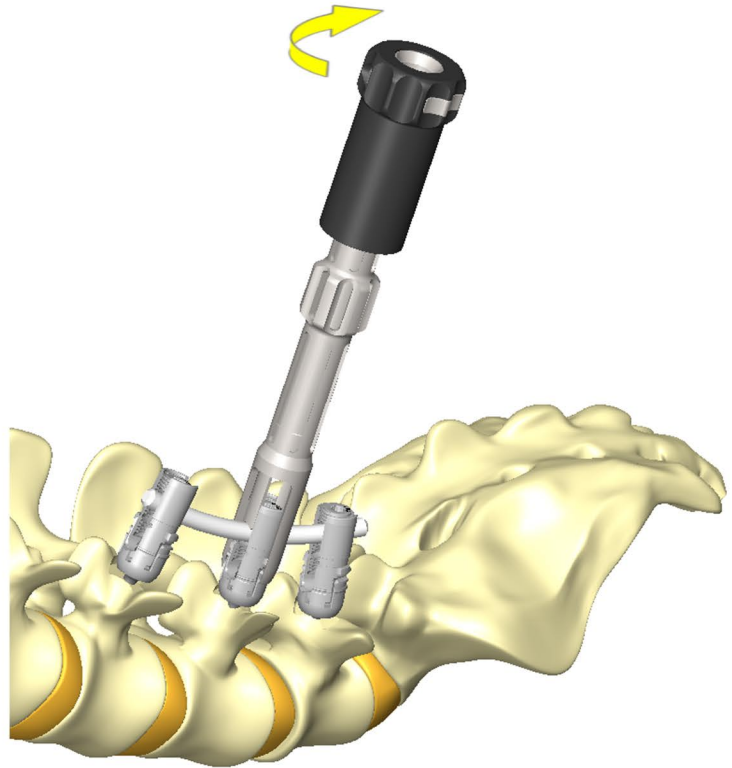
Step 2: Turn the reduction tool slightly counter-clockwise (see figure) until it touches the rod to connect it to the docking feature of the polyaxial head.



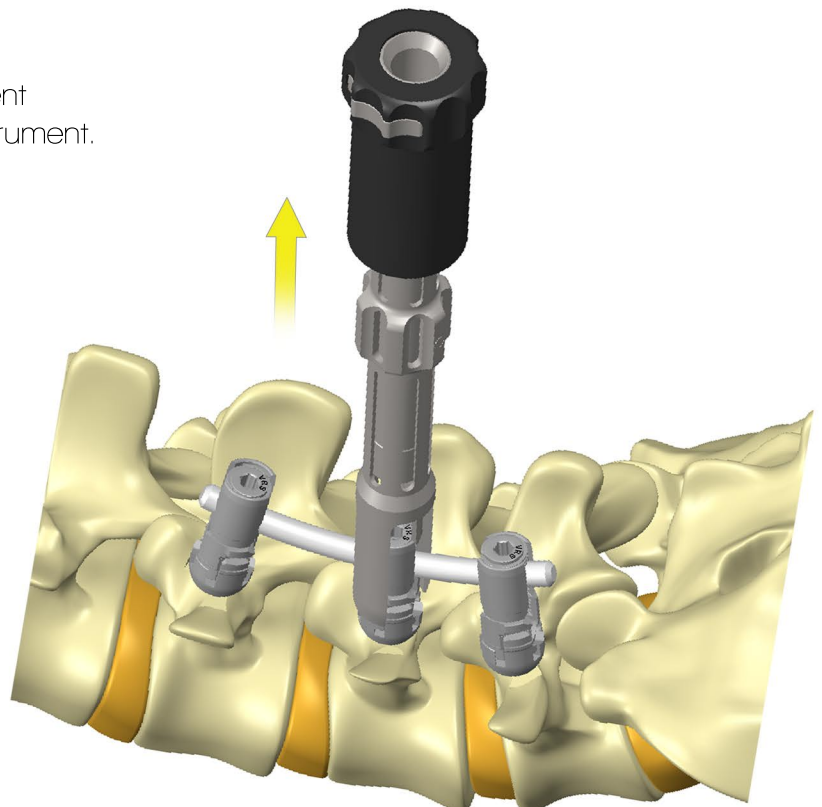
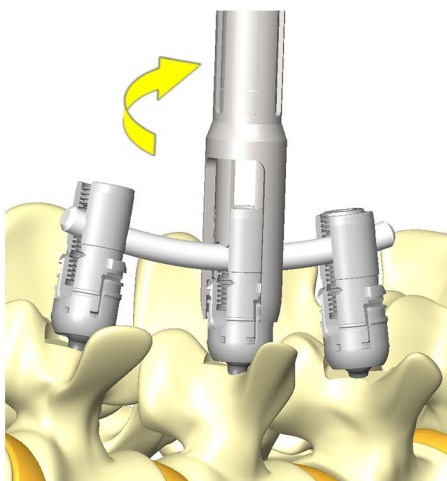
**ATTENTION:** Hold the reduction tool in that position when reducing and do not turn back the instrument clockwise until the desired reduction is achieved.

# Surgical Technique

Step 3: Turn the handle clockwise to reduce the rod downwards until the locking cap can be screwed in.



Step 4: For removal, turn the handle counter-clockwise completely back to relieve the pressure. Afterwards, turn the reduction instrument clockwise to remove the reduction instrument.

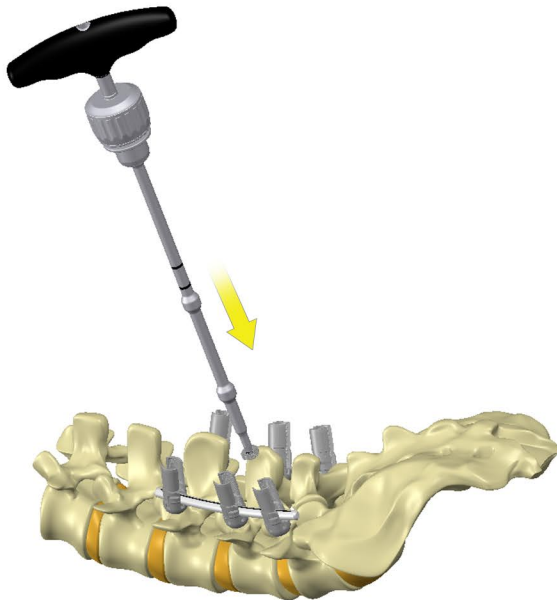


## Inserting the locking caps

Step 1: Connect the locking cap final tightener to an appropriate handle.



Step 2: Insert the locking cap final tightener to the locking cap and lift them out of the caddy.

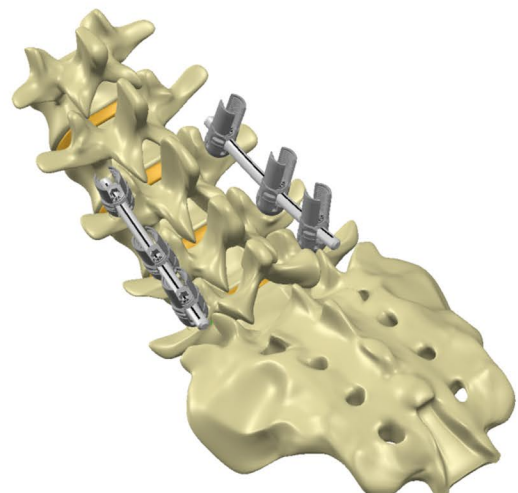
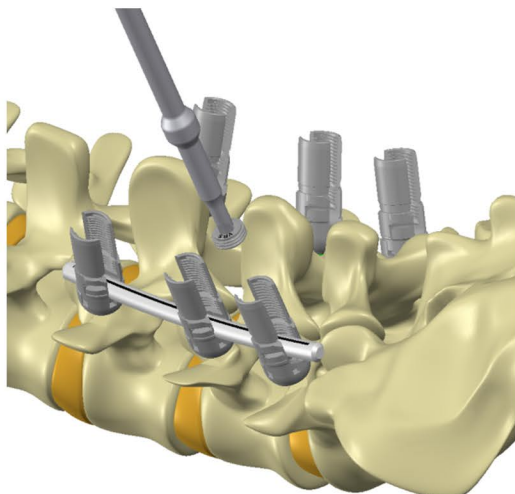


OPTIONALLY: Use the vertebral realignment sleeve as a guide for the locking cap final tightener.

Step 3: Introduce the locking cap in the polyaxial head.

Step 4: Reduce the locking cap as required.

Step 5: Once the locking cap is fully reduced, tighten the locking cap hand tight, at least until the rod is secured.



# OPTIONAL: Correction of Deformities

## Locking the polyaxiality of the polyaxial head

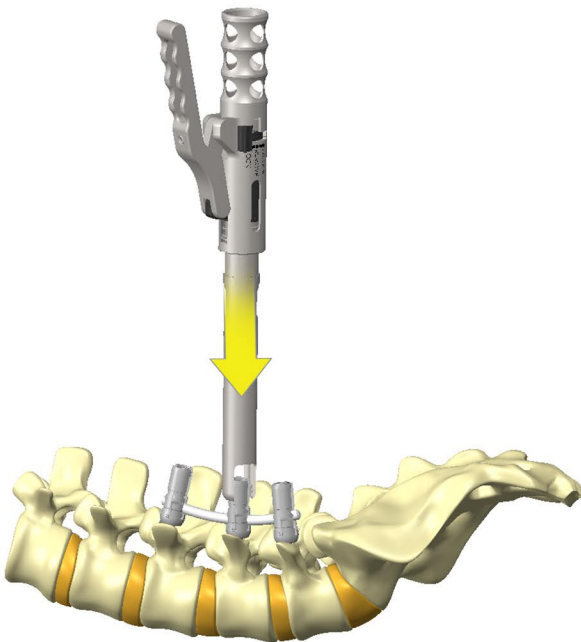
CAUTION: At least the locking cap must already be inserted at the top of the reduction flanks of the polyaxial reduction head.

The functions of the locking instrument are selected according to the markings with the slider.

The functions are:

- „Lock“: Locking the polyaxiality
- „Unlock“: Unlocking the polyaxiality

ATTENTION: The function „Remove“ is only needed to disassemble the instrument and must not be used in surgery.



Step 1: Placing the locking instrument.

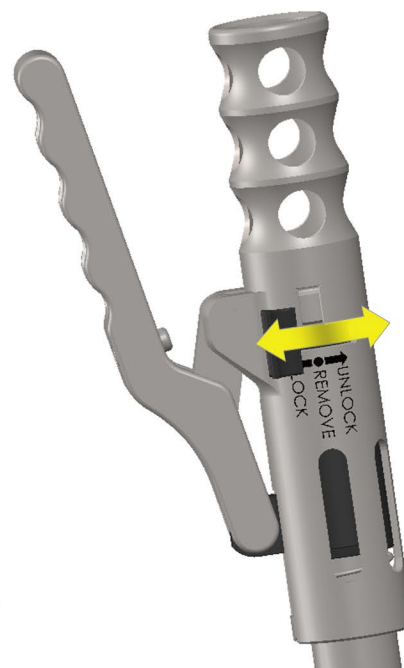
- Place the locking instrument on the polyaxial reduction head according to the figure.
- Turn the locking instrument counter-clockwise in order to connect it to the docking feature of the polyaxial head. The lever must be open as shown in the figure.

ATTENTION: Do not push down the instrument when twisting it counter-clockwise.

Step 2: Locking and unlocking the polyaxiality of the polyaxial head.

- The lever must be pressed to the shaft in order to lock and unlock the polyaxiality.
- The function "Lock" or "Unlock" can be selected by the slider.

ATTENTION: Do not use the "Unlock"-Function of the locking instrument if the locking cap is fully reduced in the polyaxial head or final tightened. Damage to the implant or instrument may occur.





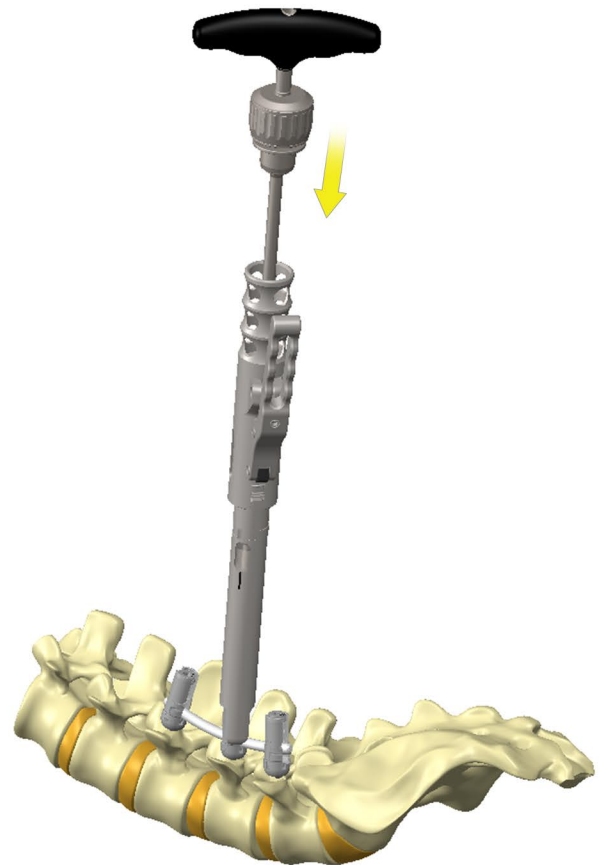
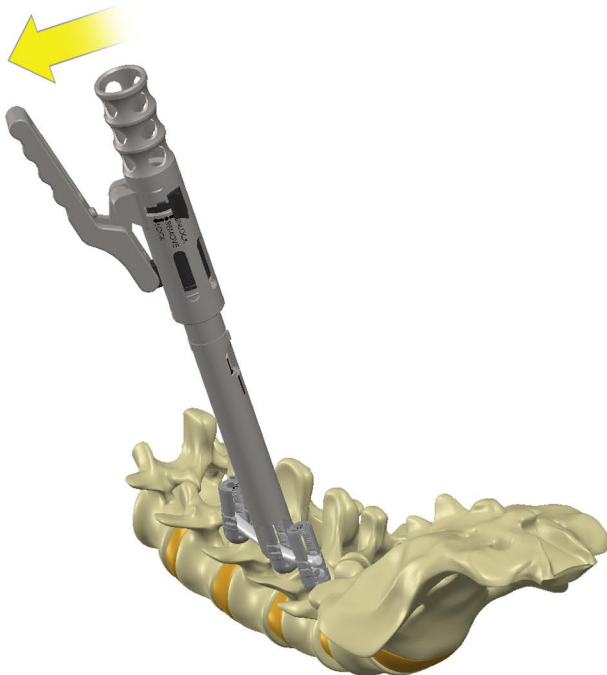
# OPTIONAL: Correction of Deformities

Step 3: Other functions of the locking instrument.

- The locking cap driver can be guided through the shaft of the locking instrument and the locking cap can be screwed in to reduce the rod if the lever is pushed off from the shaft before.

ATTENTION: Do not final tighten the set screw in the locking instrument.

Step 4: In order to remove the locking instrument the lever must be pushed off from the shaft.



Step 5: Removing the locking instrument.

- The locking instrument must be turned clockwise to remove it from the docking feature of the polyaxial head.

## Correcting the vertebral body and rod

### Option 1: Vertebral realignment sleeve

To correct the position of the vertebral body, the surgeon can place the vertebral realignment sleeve on the polyaxial head. The surgeon can lock the polyaxiality of the polyaxial head for this purpose.



### Option 2: Rod rotation key, rod rotation forceps

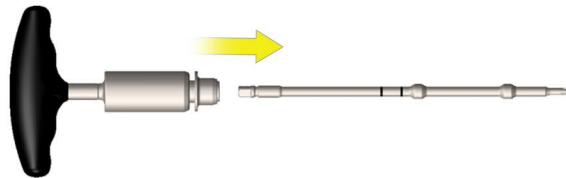
To rotate the rod, the surgeon can place the rod rotation forceps or the rod rotation key on the rod and thus rotate the rod.



## Compression / Distraction

At least one locking cap must be final tightened (see Chapter 5.12).

Step 1: Connect the locking cap driver to the T-handle for final tightener 11 Nm.



Step 2: Place the compression forceps/distraction forceps in the area to be compressed/distracted.

Step 3: Press the forceps together until the desired level of compression or distraction is reached.

Step 4: Hand-tighten the locking cap.

## Final tightening of the locking cap

### DANGER

Risk of physical injury due to insufficient or missing final tightening of the locking caps or due to final tightening without counter holder.

- Final tighten all locking caps with torque limiting T-handle for final tightener.
- Always use vertebral realignment sleeve and counter holder during final tightening to take up the forces and torques that develop.
- Do not use any other instruments during final tightening.

### WARNING

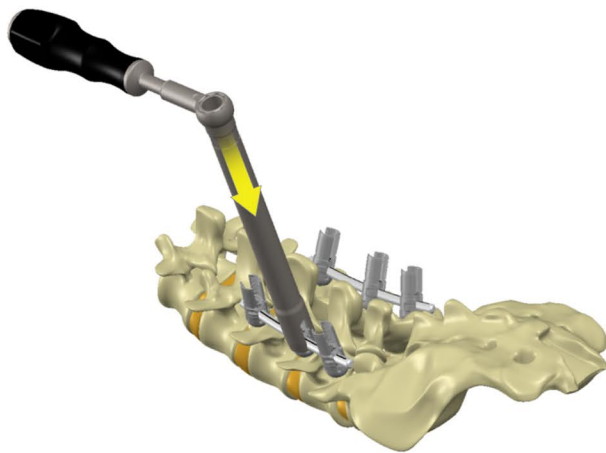
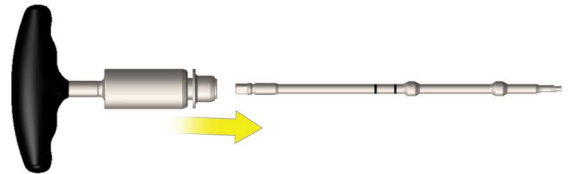
The application of incorrect torques for final tightening can damage the implant and endanger the patient.

- For final tightening, always use the torque limiting T-handle for final tightener.
- Always use vertebral realignment sleeve and counter holder during final tightening to take up the forces and torques that develop.

In corrections where higher forces occur it is recommended to sequentially retighten the set screws with the final tightener once final correction has been achieved, as studies<sup>1</sup> indicate that this improves the overall performance of the construct.

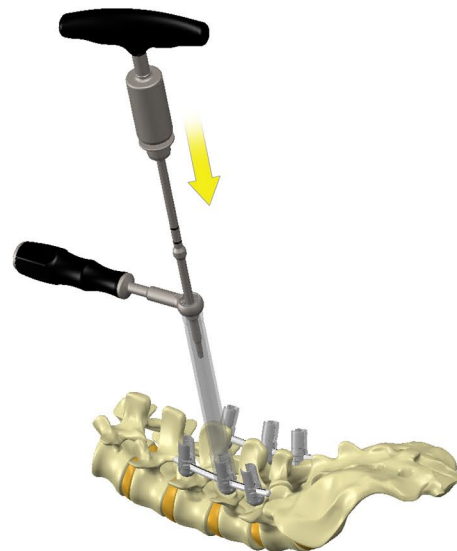
## Final tightening of the locking cap (continued)

Step 1: Connect the locking cap final tightener to the torque limiting T-handle 11 Nm for final tightener.

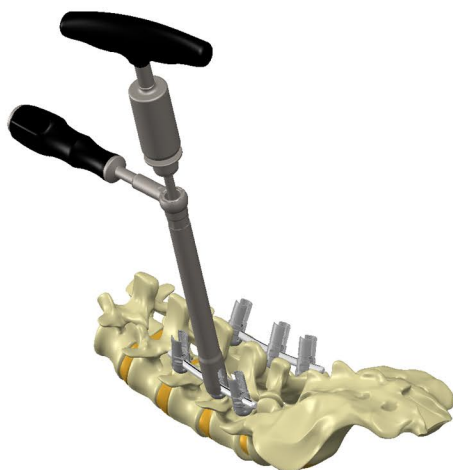


Step 2: Place the vertebral realignment sleeve on the polyaxial head.

Step 3: Place the counter holder on the vertebral realignment sleeve.



Step 4: Introduce the locking cap final tightener with the mounted torque limiting T-handle 11 Nm through the vertebral realignment sleeve.



Step 5: Final tighten the locking cap until the torque is attained. When doing so, hold the counter holder firmly. An audible "click" shows that the torque has been achieved.

## Final tightening of the locking cap (continued)

### ATTENTION

Incorrect use can damage the torque limiting T-handle.

- For manual use only. The specified torque only applies to insertion (clockwise rotation).
- The permissible operating temperature is between 10°C and 40°C.
- Do not use the torque limiting T-handle when it is warm or hot. (e.g., directly after sterilization)

The torque limiting T-handle cannot be dismantled and has the following service life as of the date of manufacture:

- 3 years, or
- 6,000 clicks, or
- 250 sterilisations

The date of manufacture is printed on the torque limiting T-handle and should be interpreted as follows:

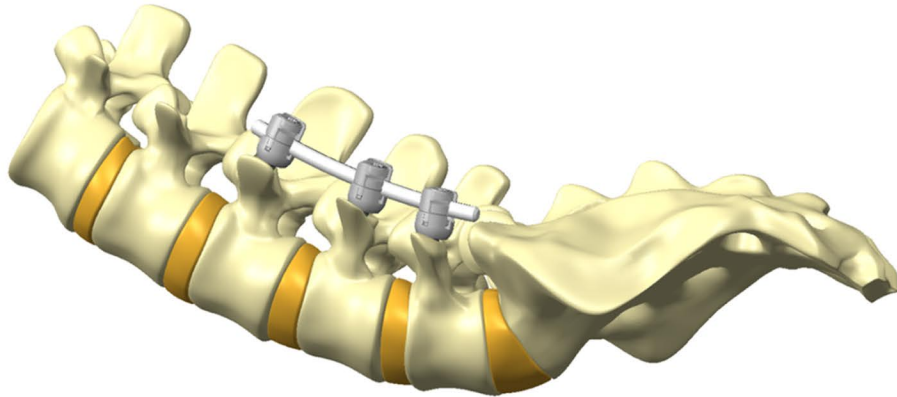
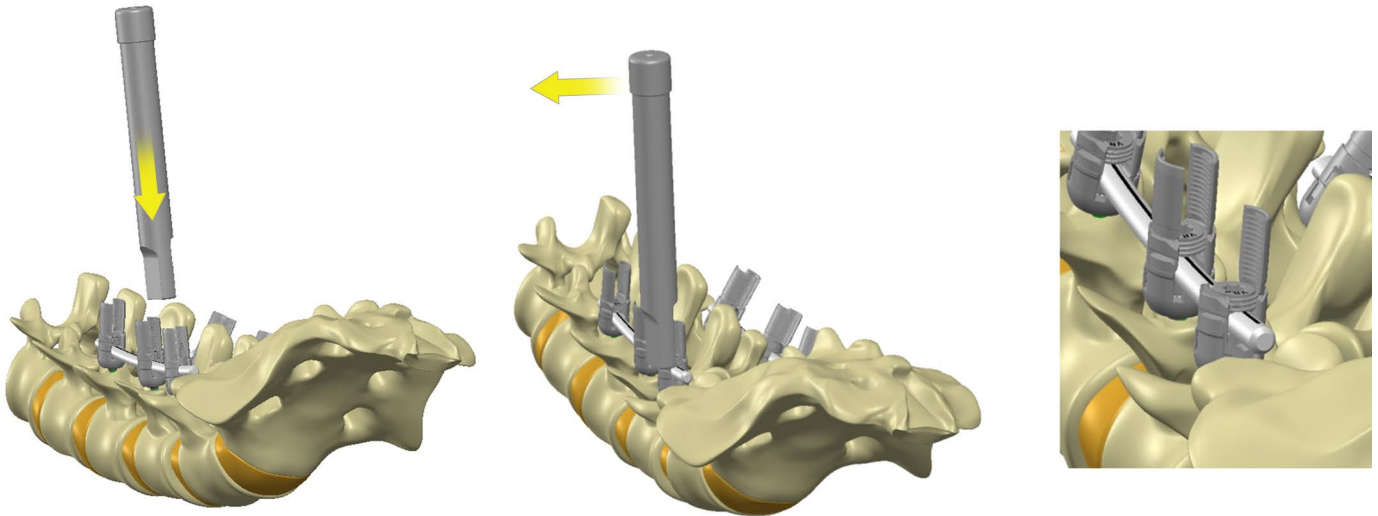
Example: W+S 06-12-040

Symbol	Meaning
W+S	Manufacturer's designation
06	Month of manufacture – in this case: June
12	Year of manufacture – in this case: 2012
040	Consecutive number (not relevant for determining the date of manufacture)

Example: The torque limiting T-handle was manufactured in June 2012 and must be checked by an authorized partner in June 2015 at the latest (checking of torque value, replacement of wearing parts).

## Breaking off the reduction flanks

Place the flank breaking instrument on one flank of the polyaxial head and snap the flank off, by moving the instrument sideways.



## Removing the flanks from the instrument

The instrument can collect 12 flanks. To remove the broken off flanks from the instrument open it at the handle site by turning off the cap and take out the flanks. The last flank sticking in the holding feature of the instrument can be ejected with the pestle on the cap.

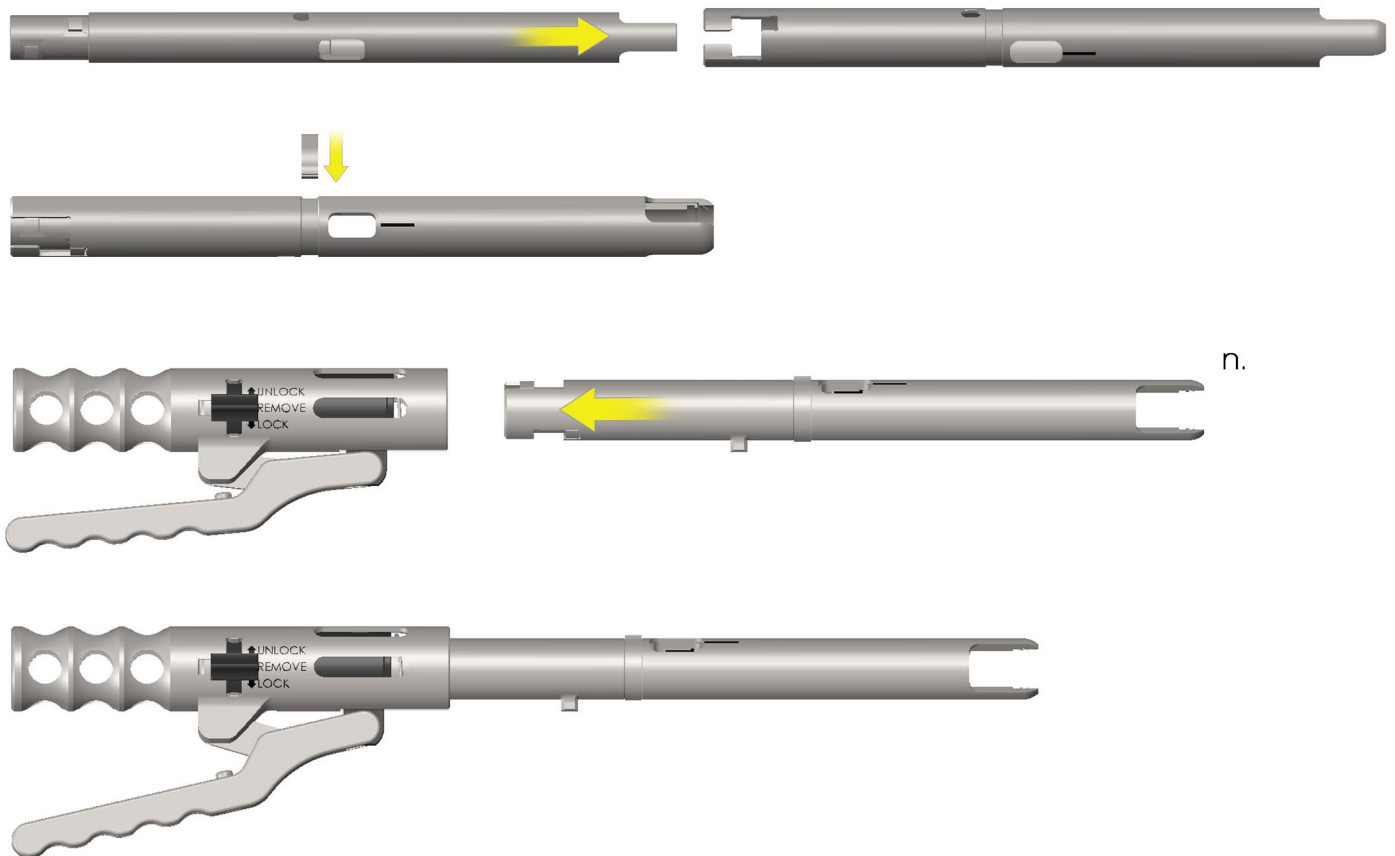


## Locking Instrument - Assembly

The Locking Instrument can be dismantled into 4 parts for cleaning.

ATTENTION: All running surfaces of the locking instrument must be sprayed with suitable instrument oil prior to assembly.

Step 1: Slide inner sleeve into outer sleeve, rotate inner sleeve and slide it further into outer sleeve



Step 4: Set the slider to "Lock" position.

## Disassembly

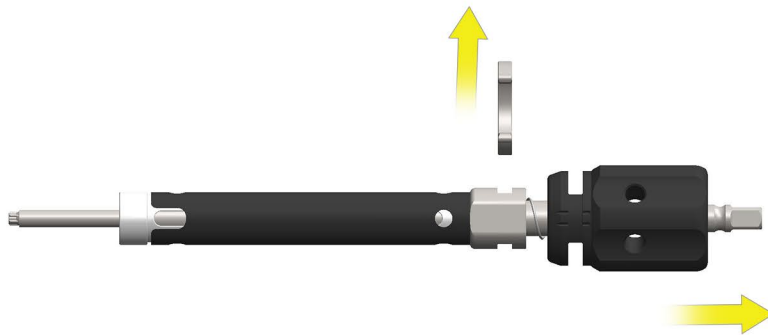
Step 1: Set the slider on the handpiece to the "Remove" position and pull the handpiece off.

Step 2: Remove the clip from the base.

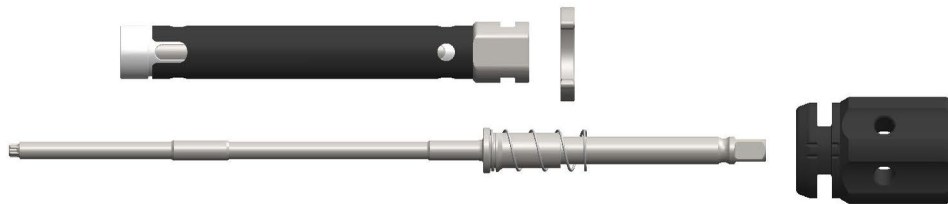
Step 3: Disassemble the base into two parts. Therefore, pull them apart until the stop is reached, turn slightly and pull them fully apart.

## Screw Driver

The screw driver is to be disassembled into 4 parts before cleaning.



Disassembled instrument:



For assembly, perform the disassembly steps in reverse order.



## Reduction Instruments

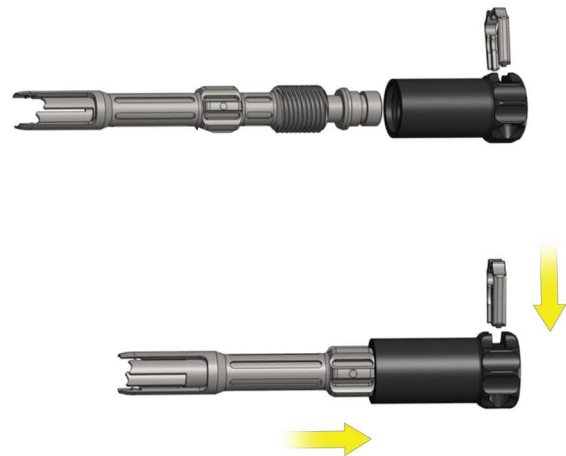
ATTENTION: All threads and running surfaces of the reduction instrument must be sprayed with suitable instrument oil prior to assembly.

Article number 208-020-0501:

This reduction instrument consists of 3 parts. The reduction sleeve, the rotary handle and the securing clip.

Step 1: Insert the reduction sleeve into the rotary handle as far as possible by turning it clockwise.

Step 2: Insert the clip to secure the connection of the reduction sleeve and the rotary handle.



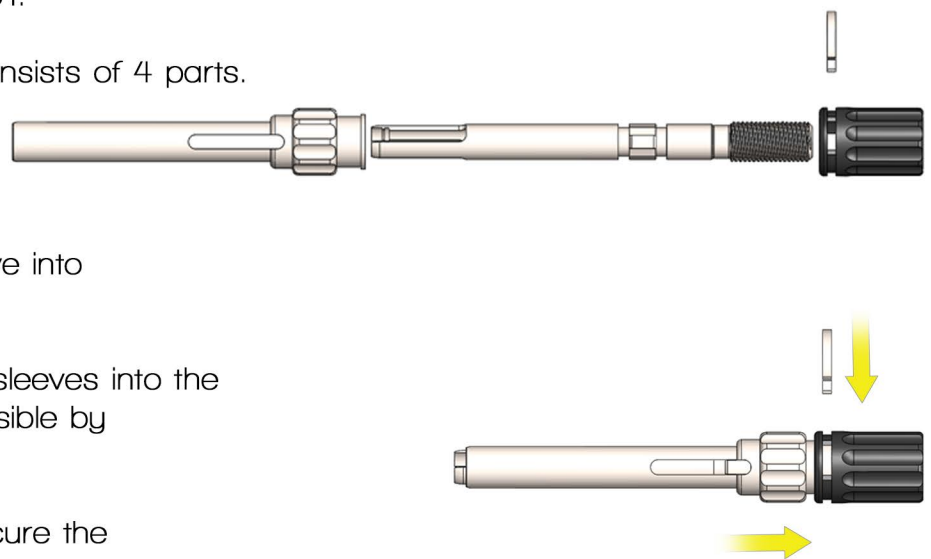
Article number 212-020-0501:

This reduction instrument consists of 4 parts. The outer sleeve, the inner sleeve, the rotary handle and the securing clip.

Step 1: Insert the inner sleeve into the outer sleeve.

Step 2: Insert the mounted sleeves into the rotary handle as far as possible by turning it clockwise.

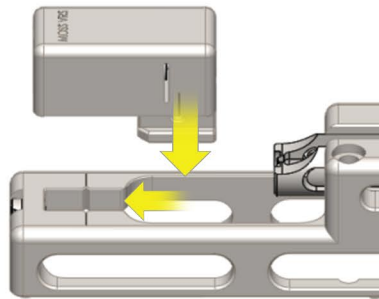
Step 3: Insert the clip to secure the connection of the sleeves and the rotary handle.



For disassembly, perform the assembly steps in reverse order

## Assembly Instrument

Place the assembly instrument in the starting position (lever vertical). Hold the base solid and remove the head assembly.



The instrument is assembled following successful reprocessing.

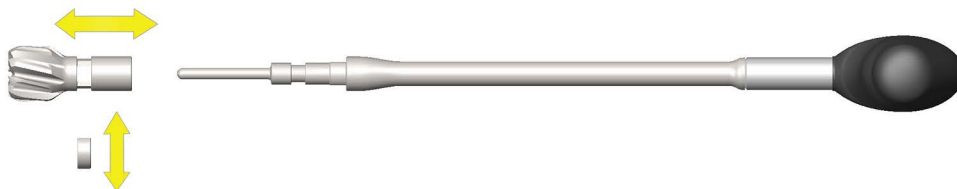
### ATTENTION

All threads and running surfaces on the assembly instrument must be sprayed with suitable instrument oil prior to assembly.

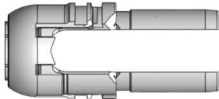



The head assembly can only be inserted in one direction.

## Head reamer

For disassembly, remove the clip and take off the reaming head from the shaft. The assembly works the other way round.



# Product Information - Implants

	CR*	Implant	Description
	Y	108-017-0001	Ti Reduction Head
	Y	108-004-0001	Ti Locking Cap Star 25
	Y	108-018-4320	Ti Pedicle Screw Ø4.35x20 mm, DL, magenta
	Y	108-018-4325	Ti Pedicle Screw Ø4.35x25 mm, DL, magenta
	Y	108-018-4330	Ti Pedicle Screw Ø4.35x30 mm, DL, magenta
	Y	108-018-4335	Ti Pedicle Screw Ø4.35x35 mm, DL, magenta
	Y	108-018-4340	Ti Pedicle Screw Ø4.35x40 mm, DL, magenta
	Y	108-018-4345	Ti Pedicle Screw Ø4.35x45 mm, DL, magenta
	Y	108-018-4350	Ti Pedicle Screw Ø4.35x50 mm, DL, magenta
	Y	108-018-4355	Ti Pedicle Screw Ø4.35x55 mm, DL, magenta
	Y	108-018-4360	Ti Pedicle Screw Ø4.35x60 mm, DL, magenta
	Y	108-018-4365	Ti Pedicle Screw Ø4.35x65 mm, DL, magenta
Y	108-018-4370	Ti Pedicle Screw Ø4.35x70 mm, DL, magenta	
	Y	107-018-5025	Ti Pedicle Screw Ø5.0x25 mm, DL, light blue
	Y	107-018-5030	Ti Pedicle Screw Ø5.0x30 mm, DL, light blue
	Y	107-018-5035	Ti Pedicle Screw Ø5.0x35 mm, DL, light blue
	Y	107-018-5040	Ti Pedicle Screw Ø5.0x40 mm, DL, light blue
	Y	107-018-5045	Ti Pedicle Screw Ø5.0x45 mm, DL, light blue
	Y	107-018-5050	Ti Pedicle Screw Ø5.0x50 mm, DL, light blue
	Y	107-018-5055	Ti Pedicle Screw Ø5.0x55 mm, DL, light blue
	Y	107-018-5060	Ti Pedicle Screw Ø5.0x60 mm, DL, light blue
	Y	107-018-5065	Ti Pedicle Screw Ø5.0x65 mm, DL, light blue
	Y	107-018-5070	Ti Pedicle Screw Ø5.0x70 mm, DL, light blue
	Y	107-018-5075	Ti Pedicle Screw Ø5.0x75 mm, DL, light blue
	Y	107-018-5080	Ti Pedicle Screw Ø5.0x80 mm, DL, light blue
	Y	107-018-5085	Ti Pedicle Screw Ø5.0x85 mm, DL, light blue
Y	107-018-5090	Ti Pedicle Screw Ø5.0x90 mm, DL, light blue	
Y	107-018-5095	Ti Pedicle Screw Ø5.0x95 mm, DL, light blue	
Y	107-018-5100	Ti Pedicle Screw Ø5.0x100 mm, DL, light blue	

# Product Information - Implants

## CR\* Implant Description



CR*	Implant	Description
Y	107-018-6025	Ti Pedicle Screw Ø6.0x25 mm, DL, light green
Y	107-018-6030	Ti Pedicle Screw Ø6.0x30 mm, DL, light green
Y	107-018-6035	Ti Pedicle Screw Ø6.0x35 mm, DL, light green
Y	107-018-6040	Ti Pedicle Screw Ø6.0x40 mm, DL, light green
Y	107-018-6045	Ti Pedicle Screw Ø6.0x45 mm, DL, light green
Y	107-018-6050	Ti Pedicle Screw Ø6.0x50 mm, DL, light green
Y	107-018-6055	Ti Pedicle Screw Ø6.0x55 mm, DL, light green
Y	107-018-6060	Ti Pedicle Screw Ø6.0x60 mm, DL, light green
Y	107-018-6065	Ti Pedicle Screw Ø6.0x65 mm, DL, light green
Y	107-018-6070	Ti Pedicle Screw Ø6.0x70 mm, DL, light green
Y	107-018-6075	Ti Pedicle Screw Ø6.0x75 mm, DL, light green
Y	107-018-6080	Ti Pedicle Screw Ø6.0x80 mm, DL, light green
Y	107-018-6085	Ti Pedicle Screw Ø6.0x85 mm, DL, light green
Y	107-018-6090	Ti Pedicle Screw Ø6.0x90 mm, DL, light green
Y	107-018-6095	Ti Pedicle Screw Ø6.0x95 mm, DL, light green
Y	107-018-6100	Ti Pedicle Screw Ø6.0x100 mm, DL, light green



Y	107-018-7025	Ti Pedicle Screw Ø7.0x25 mm, DL, violet
Y	107-018-7030	Ti Pedicle Screw Ø7.0x30 mm, DL, violet
Y	107-018-7035	Ti Pedicle Screw Ø7.0x35 mm, DL, violet
Y	107-018-7040	Ti Pedicle Screw Ø7.0x40 mm, DL, violet
Y	107-018-7045	Ti Pedicle Screw Ø7.0x45 mm, DL, violet
Y	107-018-7050	Ti Pedicle Screw Ø7.0x50 mm, DL, violet
Y	107-018-7055	Ti Pedicle Screw Ø7.0x55 mm, DL, violet
Y	107-018-7060	Ti Pedicle Screw Ø7.0x60 mm, DL, violet
Y	107-018-7065	Ti Pedicle Screw Ø7.0x65 mm, DL, violet
Y	108-018-7070	Ti Pedicle Screw Ø7.0x70 mm, DL, violet
Y	108-018-7075	Ti Pedicle Screw Ø7.0x75 mm, DL, violet
Y	108-018-7080	Ti Pedicle Screw Ø7.0x80 mm, DL, violet
Y	108-018-7085	Ti Pedicle Screw Ø7.0x85 mm, DL, violet
Y	108-018-7090	Ti Pedicle Screw Ø7.0x90 mm, DL, violet
Y	108-018-7095	Ti Pedicle Screw Ø7.0x95 mm, DL, violet
Y	108-018-7100	Ti Pedicle Screw Ø7.0x100 mm, DL, violet

## CR\* Implant Description





CR*	Implant	Description
Y	107-018-8025	Ti Pedicle Screw Ø8.0x25 mm, DL, gold
Y	107-018-8030	Ti Pedicle Screw Ø8.0x30 mm, DL, gold
Y	107-018-8035	Ti Pedicle Screw Ø8.0x35 mm, DL, gold
Y	107-018-8040	Ti Pedicle Screw Ø8.0x40 mm, DL, gold
Y	107-018-8045	Ti Pedicle Screw Ø8.0x45 mm, DL, gold
Y	107-018-8050	Ti Pedicle Screw Ø8.0x50 mm, DL, gold
Y	107-018-8055	Ti Pedicle Screw Ø8.0x55 mm, DL, gold
Y	107-018-8060	Ti Pedicle Screw Ø8.0x60 mm, DL, gold
Y	107-018-8065	Ti Pedicle Screw Ø8.0x65 mm, DL, gold
Y	107-018-8070	Ti Pedicle Screw Ø8.0x70 mm, DL, gold
Y	107-018-8075	Ti Pedicle Screw Ø8.0x75 mm, DL, gold
Y	107-018-8080	Ti Pedicle Screw Ø8.0x80 mm, DL, gold
Y	108-018-8085	Ti Pedicle Screw Ø8.0x85 mm, DL, gold
Y	108-018-8090	Ti Pedicle Screw Ø8.0x90 mm, DL, gold
Y	108-018-8095	Ti Pedicle Screw Ø8.0x95 mm, DL, gold
Y	108-018-8100	Ti Pedicle Screw Ø8.0x100 mm, DL, gold





Y	108-018-9025	Ti Pedicle Screw Ø9.0x25 mm, DL, pink
Y	108-018-9030	Ti Pedicle Screw Ø9.0x30 mm, DL, pink
Y	108-018-9035	Ti Pedicle Screw Ø9.0x35 mm, DL, pink
Y	108-018-9040	Ti Pedicle Screw Ø9.0x40 mm, DL, pink
Y	108-018-9045	Ti Pedicle Screw Ø9.0x45 mm, DL, pink
Y	108-018-9050	Ti Pedicle Screw Ø9.0x50 mm, DL, pink
Y	108-018-9055	Ti Pedicle Screw Ø9.0x55 mm, DL, pink
Y	108-018-9060	Ti Pedicle Screw Ø9.0x60 mm, DL, pink
Y	108-018-9065	Ti Pedicle Screw Ø9.0x65 mm, DL, pink
Y	108-018-9070	Ti Pedicle Screw Ø9.0x70 mm, DL, pink
Y	108-018-9075	Ti Pedicle Screw Ø9.0x75 mm, DL, pink
Y	108-018-9080	Ti Pedicle Screw Ø9.0x80 mm, DL, pink
Y	108-018-9085	Ti Pedicle Screw Ø9.0x85 mm, DL, pink
Y	108-018-9090	Ti Pedicle Screw Ø9.0x90 mm, DL, pink
Y	108-018-9095	Ti Pedicle Screw Ø9.0x95 mm, DL, pink
Y	108-018-9100	Ti Pedicle Screw Ø9.0x100 mm, DL, pink

# Product Information - Implants












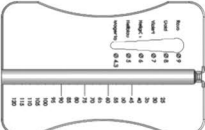
CR*	Implant	Description	
			
Y	107-021-0030	Ti Rod Ø5.5x30 mm, curved	
Y	107-021-0035	Ti Rod Ø5.5x35 mm, curved	
Y	107-021-0040	Ti Rod Ø5.5x40 mm, curved	
Y	107-021-0045	Ti Rod Ø5.5x45 mm, curved	
Y	107-021-0050	Ti Rod Ø5.5x50 mm, curved	
Y	107-021-0055	Ti Rod Ø5.5x55 mm, curved	
Y	107-021-0060	Ti Rod Ø5.5x60 mm, curved	
Y	107-021-0065	Ti Rod Ø5.5x65 mm, curved	
Y	107-021-0070	Ti Rod Ø5.5x70 mm, curved	
Y	107-021-0075	Ti Rod Ø5.5x75 mm, curved	
Y	107-021-0080	Ti Rod Ø5.5x80 mm, curved	
Y	107-021-0085	Ti Rod Ø5.5x85 mm, curved	
Y	107-021-0090	Ti Rod Ø5.5x90 mm, curved	
Y	107-021-0095	Ti Rod Ø5.5x95 mm, curved	
			
Y	107-022-0030	Ti Rod Ø5.5x30 mm, straight	
Y	107-022-0035	Ti Rod Ø5.5x35 mm, straight	
Y	107-022-0040	Ti Rod Ø5.5x40 mm, straight	
Y	107-022-0045	Ti Rod Ø5.5x45 mm, straight	
Y	107-022-0050	Ti Rod Ø5.5x50 mm, straight	
Y	107-022-0055	Ti Rod Ø5.5x55 mm, straight	
Y	107-022-0060	Ti Rod Ø5.5x60 mm, straight	
Y	107-022-0065	Ti Rod Ø5.5x65 mm, straight	
Y	107-022-0070	Ti Rod Ø5.5x70 mm, straight	
Y	107-022-0075	Ti Rod Ø5.5x75 mm, straight	
Y	107-022-0080	Ti Rod Ø5.5x80 mm, straight	
Y	107-022-0085	Ti Rod Ø5.5x85 mm, straight	
Y	107-022-0090	Ti Rod Ø5.5x90 mm, straight	
Y	107-022-0095	Ti Rod Ø5.5x95 mm, straight	
Y	107-023-0300	Ti Rod Ø5.5x300 mm, straight	hex on both sides
Y	107-023-0480	Ti Rod Ø5.5x480 mm, straight	size 4.3
Y	108-030-0120	CoCr Rod Ø5.5x120 mm, straight	
Y	108-030-0300	CoCr Rod Ø5.5x300 mm, straight	hex on both sides
Y	108-030-0360	CoCr Rod Ø5.5x360 mm, straight	size 4.3
Y	108-030-0480	CoCr Rod Ø5.5x480 mm, straight	
Y	108-030-0600	CoCr Rod Ø5.5x600 mm, straight	



CR*	Implant	Description
	Y 108-026-0030	Ti Rod Ø6.0x30 mm, curved
	Y 108-026-0035	Ti Rod Ø6.0x35 mm, curved
	Y 108-026-0040	Ti Rod Ø6.0x40 mm, curved
	Y 108-026-0045	Ti Rod Ø6.0x45 mm, curved
	Y 108-026-0050	Ti Rod Ø6.0x50 mm, curved
	Y 108-026-0055	Ti Rod Ø6.0x55 mm, curved
	Y 108-026-0060	Ti Rod Ø6.0x60 mm, curved
	Y 108-026-0065	Ti Rod Ø6.0x65 mm, curved
	Y 108-026-0070	Ti Rod Ø6.0x70 mm, curved
	Y 108-026-0075	Ti Rod Ø6.0x75 mm, curved
	Y 108-026-0080	Ti Rod Ø6.0x80 mm, curved
	Y 108-026-0085	Ti Rod Ø6.0x85 mm, curved
	Y 108-026-0090	Ti Rod Ø6.0x90 mm, curved
Y 108-026-0095	Ti Rod Ø6.0x95 mm, curved	
	Y 108-027-0030	Ti Rod Ø6.0x30 mm, straight
	Y 108-027-0035	Ti Rod Ø6.0x35 mm, straight
	Y 108-027-0040	Ti Rod Ø6.0x40 mm, straight
	Y 108-027-0045	Ti Rod Ø6.0x45 mm, straight
	Y 108-027-0050	Ti Rod Ø6.0x50 mm, straight
	Y 108-027-0055	Ti Rod Ø6.0x55 mm, straight
	Y 108-027-0060	Ti Rod Ø6.0x60 mm, straight
	Y 108-027-0065	Ti Rod Ø6.0x65 mm, straight
	Y 108-027-0070	Ti Rod Ø6.0x70 mm, straight
	Y 108-027-0075	Ti Rod Ø6.0x75 mm, straight
	Y 108-027-0080	Ti Rod Ø6.0x80 mm, straight
	Y 108-027-0085	Ti Rod Ø6.0x85 mm, straight
	Y 108-027-0090	Ti Rod Ø6.0x90 mm, straight
Y 108-027-0095	Ti Rod Ø6.0x95 mm, straight	
Y	108-028-0480	Ti Rod Ø6.0x480 mm, straight, hex on both sides, size 4.3
Y	108-029-0480	CoCr Rod Ø6.0x480 mm, straight, hex on both sides, size 4.3

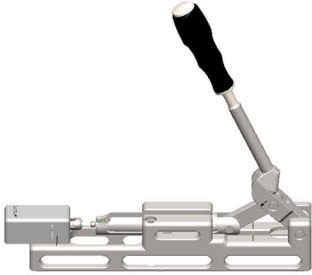













# Product Information - Instruments

	CR*	Instrument	Description
	Standard	208-040-0201	Pedicle Awl with Handle
	Standard	584577	Ball probe
	Standard	208-050-0208	Pedicle Probe, short, thoracic, straight
	Standard	208-050-0209	Pedicle Probe, short, lumbar, straight
	Standard	208-050-0210	Pedicle probe, short, Paddle, straight
	Standard	208-050-0211	Pedicle Probe, short, lumbar, angled
	Standard	208-050-0212	Pedicle probe, short, Paddle, angled
	Standard	208-050-0213	Pedicle Probe, short, thoracic, angled
	Standard	208-040-0408	Tap Ø4.35mm, magenta DL, 1/4" coupling, magenta
	Standard	208-040-0409	Tap Ø5.0mm, light blue DL, 1/4" coupling, light blue
	Standard	208-040-0410	Tap Ø6.0mm, light green DL, 1/4" coupling, light green
	Standard	208-040-0411	Tap Ø7.0mm, violet DL, 1/4" coupling, violet
	Standard	208-040-0412	Tap Ø8.0mm, gold DL, 1/4" coupling, gold
	Standard	208-040-0413	Tap Ø9.0mm, pink DL, 1/4" coupling, pink
	A	208-040-0501	Head Reamer
	Standard	584578	Depth Gauge 0-120mm
	Standard	584524	Screw Template










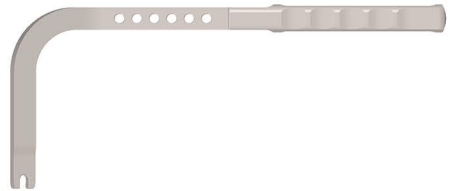
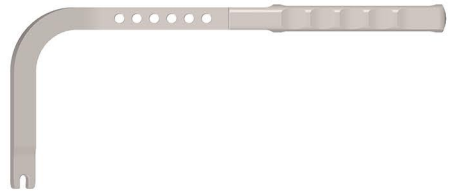
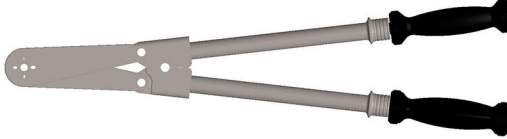



# Product Information - Instruments

	CR*	Instrument	Description
	B	208-050-0702	Assembly instrument incl. head assembly
	E/A	208-010-0103	Shank driver, star 20, 1/4" coupling
	Standard	207-020-0501	Pedicule Screw Driver
	Standard	208-050-0103	Rod Template Ø4,5x450mm
	B	207-010-0401	Rod Holding Forceps Ø4.5-6.0mm
	B	584708	Rod Rotation Forceps, Ø5.5mm
	Standard	208-020-0301	rod pusher, Ø6.0mm, 1/4" coupling
	Standard	208-010-0301	Locking Cap Star 25 Tightener 1/4" coupling, 223mm
	Standard	208-010-0302	Locking Cap Star 25 Tightener 1/4" coupling, 273mm
	Standard	208-020-0402	Head Alignment Aid
	Standard	208-020-0404	Head Alignment Aid, angled
	A/B	208-020-0401	Locking Instrument
	A/S7	208-020-0501	Reduction Instrument
	A/S7	212-020-0501	Reduction Instrument

\*Classification Reprocessing

# Product Information - Instruments

	CR*	Instrument	Description
	B	208-020-0601	Distraction Forceps
	B	208-020-0701	Compression Forceps
	A	208-020-1001	Vertebral Realignment Sleeve
	Standard	208-020-1003	Rod Rotation Key
	Standard	208-020-1004	Flank Holder
	A	208-020-1006	Counter Holder, fixable
	B	207-030-0101	Rod Bender
	Standard	208-030-0102	Rod Bender, straight, left
	Standard	208-030-0103	Rod Bender, straight, right
	Standard	208-030-0104	Rod Bender, L-shape, left
	Standard	208-030-0105	Rod Bender, L-shape, right
	B	208-040-0102	Rod Cutter
	A	208-050-1002	Flank Breaking Instrument

## CR\* Instrument Description



A 208-050-0407 Handle, cannulated, straight  
1/4" coupling



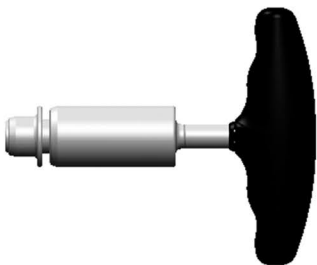
A/H 208-050-0408 Handle, cannulated, straight  
1/4" coupling, ratchet



A/H 208-050-0409 Handle, drop shape  
1/4" coupling, cannulated, ratchet



H 207-050-0405 1/4" Drop Shape Handle  
cannulated



H 208-050-0406 T-Handle for Final Tightener,  
11Nm, 1/4" coupling



A/H 207-050-0407 T-handle, 95mm  
cannulated, ratchet, 1/4" coupling

# Product Information - Instruments

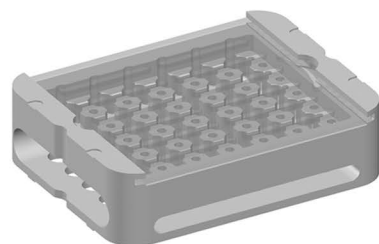
## CR\* Instrument Description



I 207-050-0505 Caddy Pedicle Screws

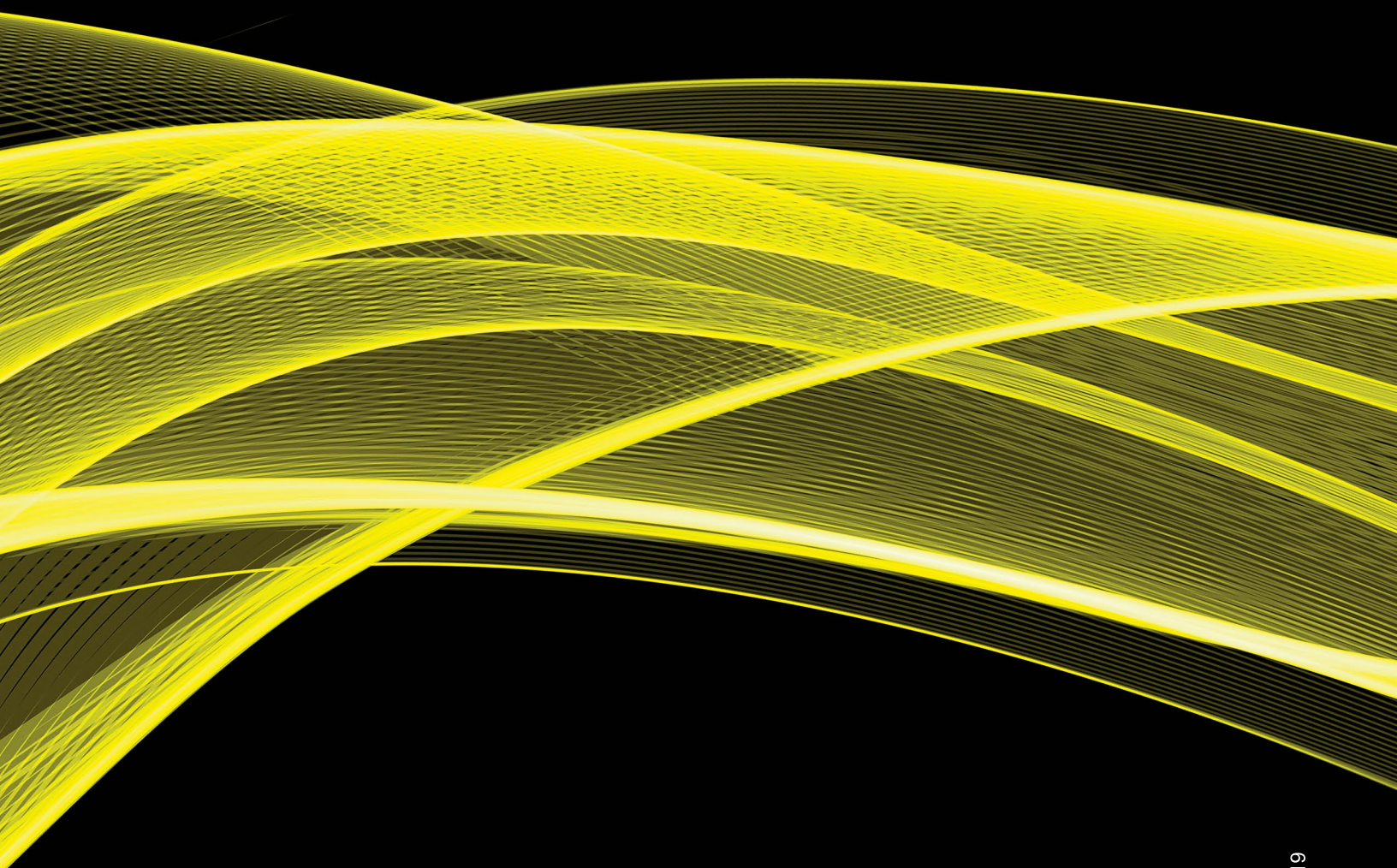


I 208-050-0504 Innie caddy



I 208-050-0505 Head caddy





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