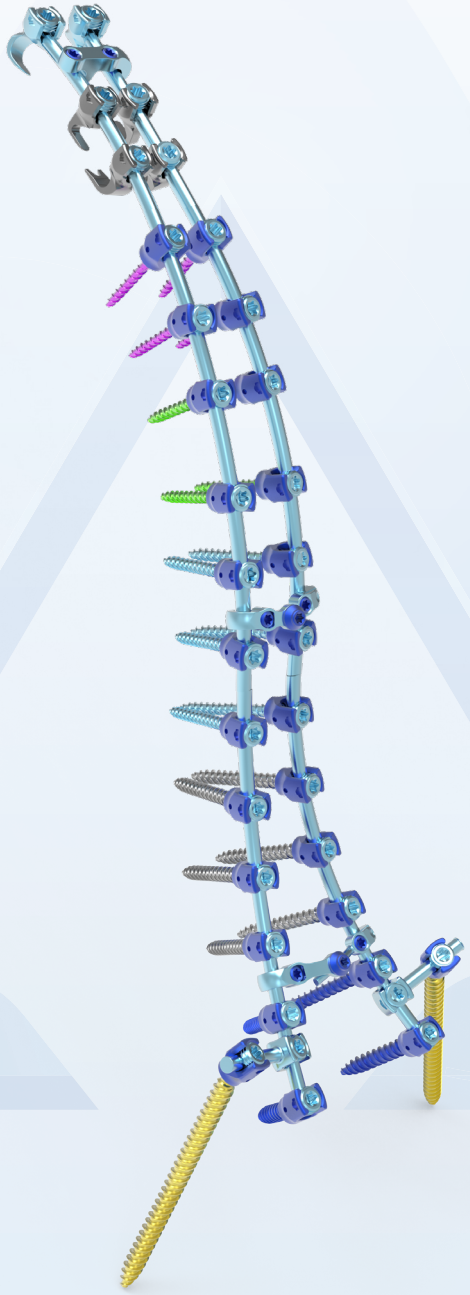
# OLYMPIC

## POSTERIOR SPINAL FIXATION SYSTEM

ASTURA MEDICAL

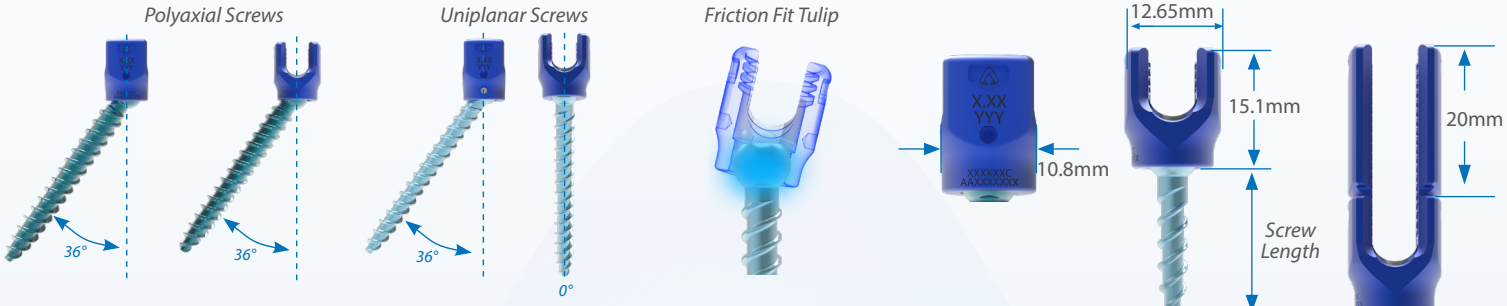
# DESIGN RATIONALE

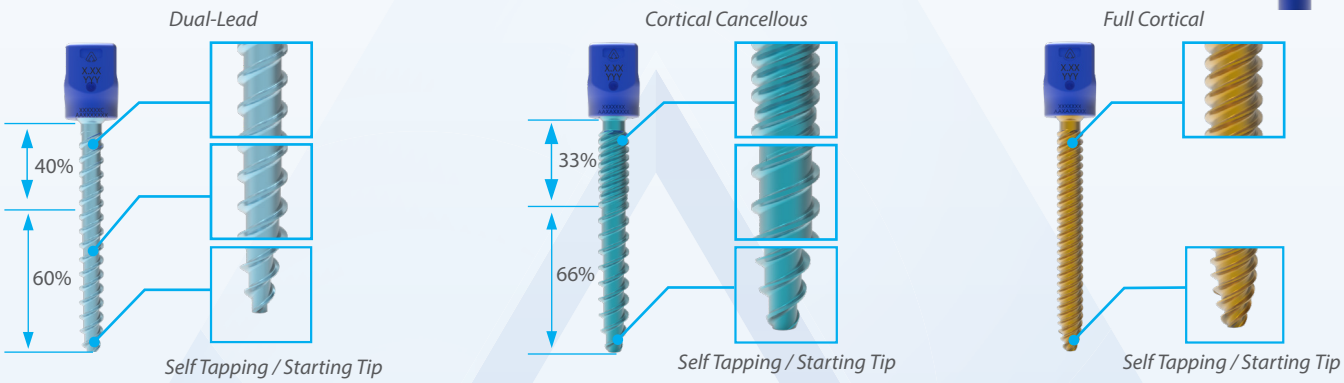
***The Olympic Posterior Spinal Fixation System by Astura Medical is a comprehensive system that offers a wide array of implant options and expansive instrumentation, designed to deliver intraoperative versatility and efficiency when addressing even the most difficult pathologies.***



# POSTERIOR SPINAL FIXATION OVERVIEW

## SPECIFICATIONS




## DUAL LEAD

*Dual-Lead*

Ø4.0mm Ø4.5mm Ø5.0mm Ø6.0mm Ø7.0mm Ø8.0mm Ø9.0mm Ø10.0mm

*Dual-Lead High Top*

Ø4.5mm Ø5.0mm Ø6.0mm Ø7.0mm Ø8.0mm

*Uniplanar Dual-Lead*

Ø4.0mm Ø4.5mm Ø5.0mm Ø6.0mm Ø7.0mm Ø8.0mm

*Uniplanar Dual-Lead High Top*

Ø4.5mm Ø5.0mm Ø6.0mm Ø7.0mm Ø8.0mm

# POSTERIOR SPINAL FIXATION OVERVIEW

## CORTICAL CANCELLOUS

*Cortical Cancellous*

Ø4.0mm Ø4.5mm Ø5.5mm Ø6.5mm Ø7.5mm Ø8.5mm

*High Top Cortical Cancellous*

Ø4.5mm Ø5.5mm Ø6.5mm Ø7.5mm

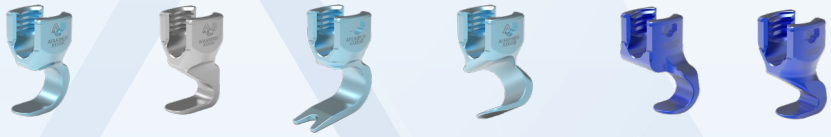
## FULL CORTICAL

*Full Cortical*

Ø4.5mm Ø5.0mm Ø5.5mm Ø6.0mm

## HOOKS

*Laminar* *Laminar Ramped* *Pedical* *Transverse Process* *Offset* *Offset Ramped*



## RODS

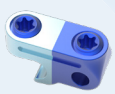
*Ø5.5 & Ø6.0, Material: TiCP*

*Lordotic* *Straight* *Hex* *Z Rod*

## ROD CONNECTORS

*OFFSET*

*Single Open / Closed*



*Double Side Loading / Side Loading*

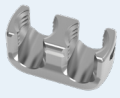
*INLINE*

*Single*

*Double*

*TRANSITION*

*Top Loading*



*Closed*

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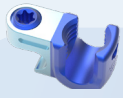
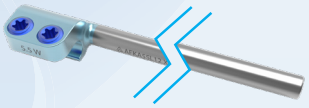
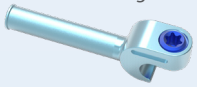


*EXTENSIONS*



*LATERAL*

*Side Loading*



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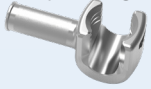
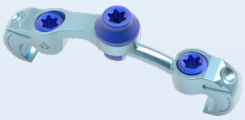
*Top Loading*



## CROSS CONNECTORS

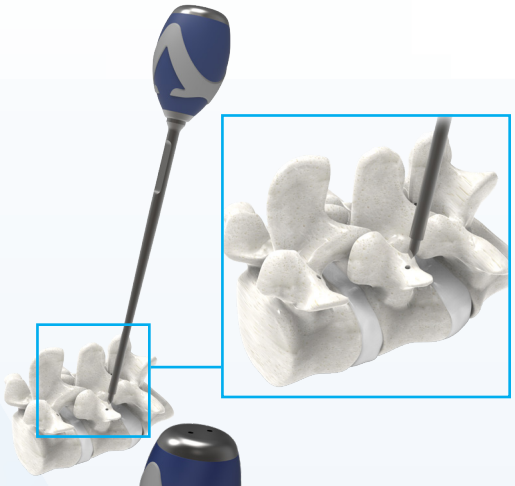
*Variable 5.5/6.0*



*Fixed 5.5/6.0*

## 1.0 EXPOSURE

1.1 Identify the affected level using a combination of palpation and fluoroscopy. Using a Midline Approach, incise the skin to the fascial layer Incise the fascia and use blunt dissection to retract the muscle away from the posterior elements.

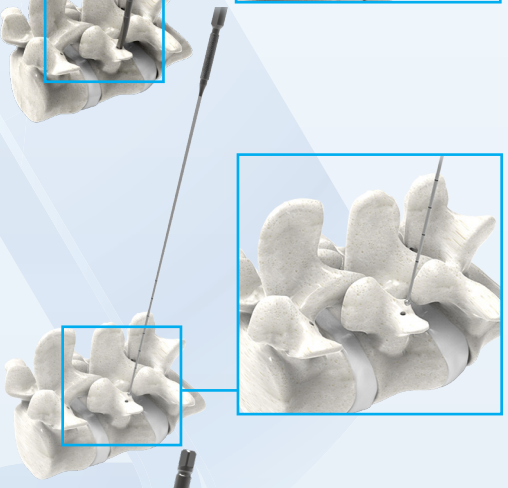


## 2.0 PEDICLE PREPARATION

2.1 Create a pilot hole in the pedicle at the junction of the transverse and superior articular processes using the Lumbar Pedicle Awl (AZA001000).

2.2 If in the lumbar spine, use the Lumbar Pedicle Probe (Straight – AZA00200 or Curved – AZA002002) to complete the cannulation of the pedicle.

2.3 If in the thoracic spine, use the Thoracic Pedicle Probe (Straight – AZA003001 or Curved – AZA003002).



2.4 Use the Ball Tip Probe (AZA004000) to palpate the pedicle wall to ensure its integrit.

2.5 Select the correct size Bone Tap (AZA0050XX) for the screw to be used and attach to one of the Ratcheting Handles (EBECDZBBZ, EAECDUBBZ or EDECDTBBZ).

2.6 Insert the Bone Tap into the pilot hole and rotate clockwise until the desired tapping depth has been achieved. The Bone Tap has depth-indicating ringsthat may be used to aid in achieving the correct depth and screw length.

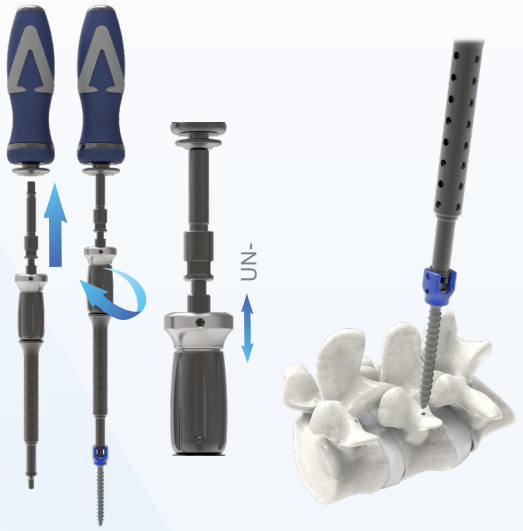
## 3 0 SCREW DRIVER AND SCREW ASSEMBLY / DISASSEMBLY

3.1 Assemble a Ratchet Handle (EBECDZBBZ, EAECDUBBZ or EDECDTBBZ) and the Screw Driver (AZA006000) by inserting the proximal end of the Screw Driver into the distal end of the handle. Compress the spring loaded quick connect ring of the handle to assemble. The ¼" square drive of the Screw Driver shaft is fully secured to the handle when the small groove reaches the distal end of the handle.

3.2 The pedicle screw can be assembled to the Screw Driver in the LOCKED or UNLOCKED position.

3.3 Attach the appropriate pedicle screw onto the Screw Driver by inserting the distal end of the Screw Driver into the screw and thread the grip clockwise to engage the Screw Driver thread into the head of the screw.

3.4 Set the screw driver to the LOCKED position and ensure the ratcheting handle is set in the FORWARD position.



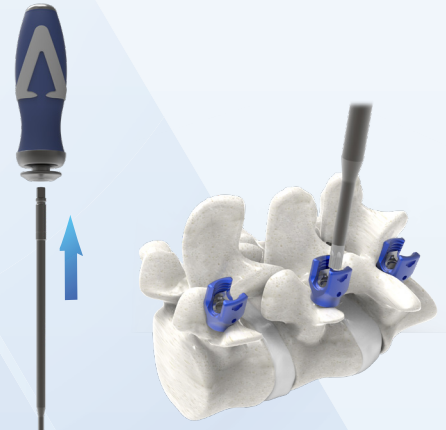

## 4 0 SCREW INSERTION / ADJUSTMENT

4.1 Insert the pedicle screw into the pilot hole and rotate clockwise until the desired depth is achieved.

4 2 To disassemble the Screw Driver from the pedicle screw, set the Screw Driver to the UNLOCKED position and unthread the grip in a counter clockwise direction to disengage the Screw Driver thread from the head of the screw. Pull upward to remove Screw Driver from pedicle screw.

4.3 If adjustment to the height of the screw is needed, use the Fixed Inline Handle (EAECAUBBZ) connected to the Screw Height Adjuster (AZA008001) to engage the screw and rotate to the desired heigh.

4.4 For easier rod insertion, align the pedicle screw using the Head Manipulator (AZA007000).



## 5.0 ROD CONTOURING AND INSERTION

5.1 Rod Options: The OLYMPIC Posterior Spinal Fixation System supports both Ø5.5mm and Ø6.0mm rods. Ø6.0mm implants and Ø6.0mm supporting instruments are available upon request. Refer to catalog for specific Ø6.0mm implant offerings and instruments.

5.2 Use the Rod Template (AZA032200) to determine the appropriate rod contour and length once the pedicle screws are in place.

5.3 Use Rod Bender (AZA02700) to achieve the desired rod contour. A rod cutter may be used to achieve the desired rod length It is recommended that rods be bent in one direction only. Over manipulation and bending may cause fracture of the rod.

5.4 Place the rod into position using the Rod Inserter (AZA009000).

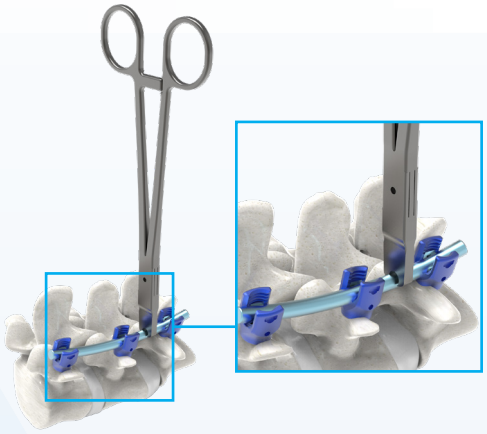
5.5 If the rod needs to be bent when already in position, use the In Situ Rod Bender (Left – AZA02800L and Right – AZA02800R).

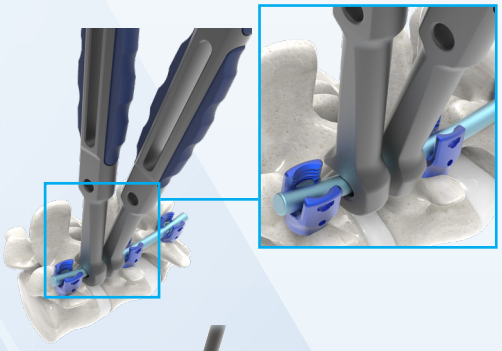
5.6 Load the set screws using the Short Set Screw Inserter (AZA017000) or the Long Set Screw Inserter (AZA018000). Align the set screws into the screw head and rotate clockwise until provisionally tightened.

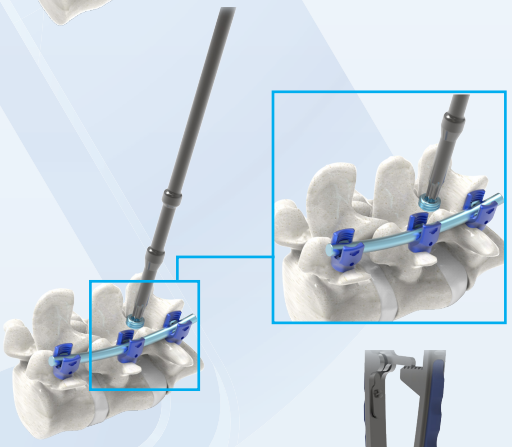
5.7 Set Screw 5.5 – Color: Light Blue (ABAA00055) to be used with Ø5.5 rods.

5.8 Set Screw 6.0 – Color: Gray (ABAA00060) to be used with Ø6.0 rods.

5.9 To reposition the rod in situ, use the Rod Gripper (AZA010000), as necessary.







## 6.0 ROD REDUCTION

6.1 Reduction Overview: The OLYMPIC Posterior Spinal Fixation System provides the surgeon with a variety of rod reduction options: High Top Screws (AAHAXXXXX), Rod Rocker (AZA012000), Single Action Reducer (AZA013000), Sequential Action Reducer (AZA014000), and Clip Reducer (AZA015000). The surgeon may utilize any one of these methods to fully seat the rod into the implant and allow engagement of the setscrew.

6.2 **High Top Screws**: High Top screws are used to allow for increased spondylolisthesis reduction. The High Top Screw Driver (AZA022000) is required when using High Top screws.

6.2.1 Utilize the set screw to reduce the rod to the screw bushing. Remove the tabs of the high top screw using the High Top Tab Breaker (AZA023000). Align the tab breaker onto one of the tabs and bend the tab outward to break off. Repeat for the other tab.

6.2.2 Once tabs have been removed, unthread the handle from the body portion to remove the broken tabs.

6.3 **Rod Rocker**: If the rod is slightly proud with respect to the implant, the Rod Rocker (AZA012000) may be used.

6.3.1 Attach the Rod Rocker pins into the lateral pocket features of the implant and rock the handle back to make contact with the rod and force it into the implant.

6.3.2 When the rod is fully seated, insert the Set Screw using the Set Screw Inserter (Short - AZA017000 or Long AZA018000).

6.4 The Sequential Action Reducer (AZA014000) may be used when additional distance is required to seat the rod into the screw head Long Set Screw Inserter (AZA018000) must be used with Sequential Action Reducer.

6.5 The **Clip Reducer** (AZA015000) may also be used to reduce the rod when multiple reduction points are necessary.

6.5.1 With the rod in place, position the Sequential Action or Clip Reducer over the implant and snap it into place using the spring-loaded clip. The reducer will automatically lock onto the screw.

6.5.2 Confirm proper engagement by giving a light tug upward.

6.5.3 To reduce the rod, turn the handle of the Sequential Action or Clip Reducer clockwise until the rod is fully seated into the screw head, as indicated by the laser mark lines.

6.5.4 If additional torque is required to complete the reduction, attach the Reducer Driver Attachment (AZA016000) to a Ratchet Handle (EBECDZBBZ, EAECDUBBZ or EDECDTBBZ) and to the Reducer and rotate until reduction is achieved.

6.5.5 Insert a Set Screw through the cannula of the Sequential Action or Clip Reducer using the Long Set Screw Inserter (AZA018000) for the Sequential Action Reducer and Short Set Screw Inserter (AZA017000) for the Clip Reducer and provisionally tighten. Remove the Sequential Action or Clip Reducer by squeezing the release tabs and pull up  It is not necessary to unthread the Reducer.

6.6 The **Single Action Reducer** (AZA013000) can be also used to quickly reduce the rod. Long Set Screw Inserter (AZA018000) must be used with Single Action Reducer.

6.6.1 Release the ratchet handle prior to use by flipping up the lever to the vertical position. Set lever to the horizontal position before use.

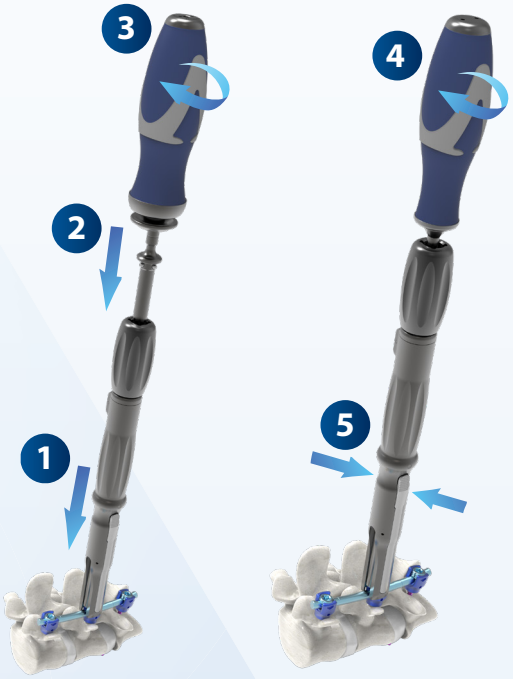
6.6.2 With the rod in place, position the Single Action Reducer over the implant and snap it into place using the spring loaded clip. The reducer will automatically lock onto the screw.

6.6.3 Confirm connection with a light tug upward.

6.6.4 To reduce the rod, squeeze the handle until the rod is fully seated into the screw.

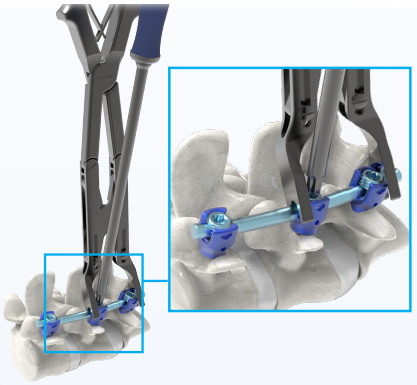
6.6.5 Insert a Set Screw through the cannula of the Single Action Reducer using the Long Set Screw Inserter (AZA018000) and provisionally tighten.

6.6.6 Remove the Single Action Reducer by squeezing the release tabs and pull up. It is not necessary to release the ratchet handle.



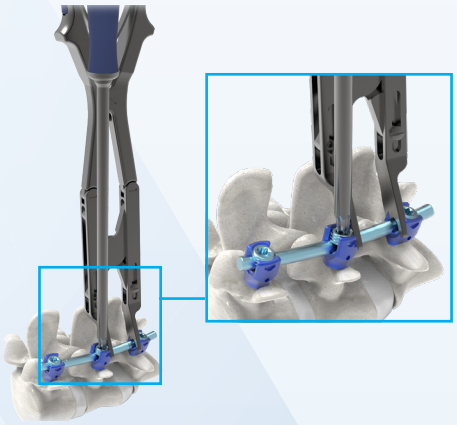

## 7.0 PARALLEL COMPRESSION

7.1 Compression can be performed at any instrumented level.
7.2 Assemble the Set Screw Torque Shaft (Short - AZA020001 or Long – AZA020002) with the Ratcheting T-Handle (EBECDZBBZ).
7.3 Tighten the Set Screw on one side of the motion segment using the assembly and leave the Set Screw loose in the adjacent segment to be compresse.
7.4 Place the Compressor (AZA03000) tips outside of the screw heads and over the rod. Squeeze the handles until adequate compression is attained.
7.5 Use the Set Screw Torque Shaft and handle to tighten the Set Screw and maintain the compression.



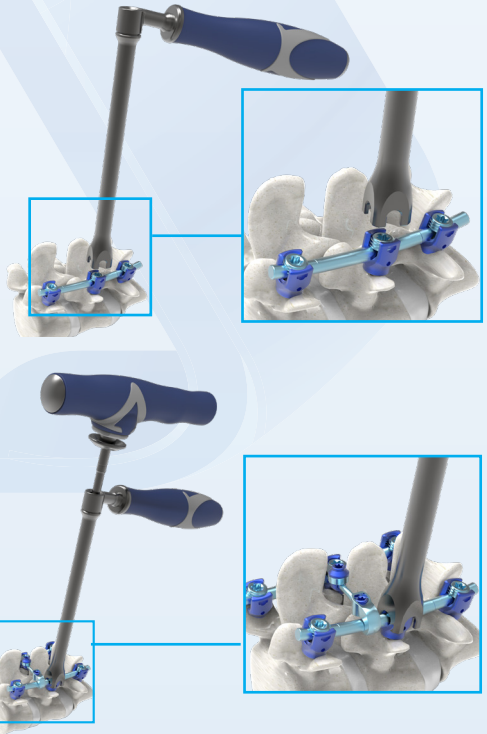
## 8.0 PARALLEL DISTRACTION

8.1 Distraction can be performed at any instrumented level.
8.2 Assemble the Set Screw Torque Shaft (Short - AZA020001 or Long – AZA020002) with the Ratcheting T-Handle (EBECDZBBZ).
8.3 Tighten the Set Screw on one side of the motion segment using the assembly and leave the Set Screw loose in the adjacent segment to be compressed.
8.4 Place the Distractor (AZA031000) tips in between the screw heads and over the rod. Squeeze the handles until adequate distraction is attained.
8.5 Use the Set Screw Torque Shaft and handle to tighten the Set Screw and maintain the compression.



## 9.0 FINAL TIGHTENING

9.1 Final tightening of the construct should be performed when all Screws and Rods are in their final position.
9.2 Connect the Offset 100 in-lb Torque Limiting T-Handle (ECECGAAZF) to the Set Screw Torque shaft (Short - AZA020001 or Long – AZA020002).
9.3 Insert the assembly into the Counter Torque.
9.3.1 5.5 Counter Torque (AZA019000) to be used with Ø5.5 Rod.
9.3.2 6.0 Counter Torque (AZA019001) to be used with Ø6.0 Rods.
9.4 With the Set Screw Torque shaft (Short - AZA020001 or Long – AZA020002) protruding out of the Counter Torque, engage the pedicle screw until fully seated.
9.5 Slide the counter torque down until the instrument is fully seated over the rod and screw.
9.6 Turn T-handle clockwise to tighten. Final tightening is achieved when the T-handle audibly clicks.



## 10.0 CROSS CONNECTOR SYSTEM

10.1 The OLYMPIC Posterior Spinal Fixation System offers Variable Cross Connector implants which can be used to increase the torsional stability of a construct.

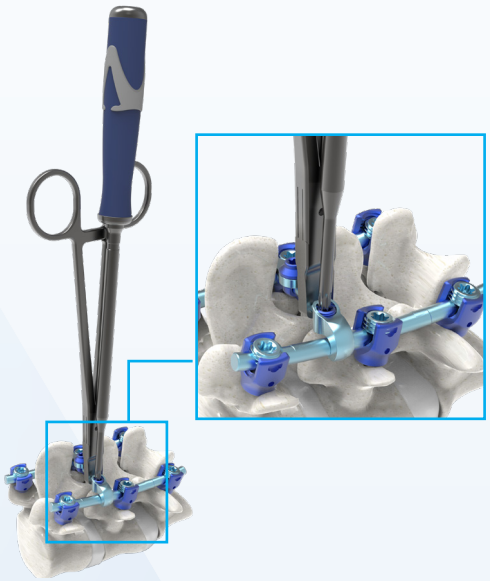
10.2 Select the appropriate sized Variable Cross Connector.

10.3 Use the Rod Inserter (AZA009000) to insert the Cross Connector into position.The Link should span in between two Rods and connect via the connectors.

10.4 Attach the Cross Connector to both Rods and lock into place by rotating the lateral set screws clockwise using the Rod Connector Driver (AZA024000) and provisionally tighten. Backing out the set screws may be required to engage Cross Connector with Rods. Use Rod Connector Driver to adjust set screw height.

10.5 Provisionally tighten the center screw using the Rod Connector Driver (AZA024000), if using a variable cross connector.

10.6 Attach the 40 in-lbs Torque Limiting T-Handle (EBEZJAAZC) to the Rod Connector Torque Shaft (AZA008000). Final tighten the lateral set screws and center screw of the crossLink by turning the T-handle clockwise. Final Tightening is achieved when the T-handle audibly clicks.



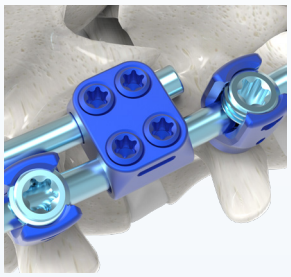
## 11.0 CONNECTOR IMPLANTS

11.1 The OLYMPIC Posterior Spinal Fixation System offers a variety of Rod-to-Rod Connectors, Lateral Connectors and Rod Extensions to help facilitate the procedure.

11.2 Connector Color Indications

11.2.1 DARK BLUE: Use with Ø3.5 Rod
11.2.2 LIGHT BLUE: Use with Ø5.5 Rod
11.2.3 GRAY: Use with Ø5.5* or Ø6.0 Rod
11.2.4 MAGENTA: Use with Ø6.0** or Ø6.35 Rod
11.2.4.1 * Ø5.5 Rod acceptable except on side loading connectors
11.2.4.2 ** Ø6.0 Rod acceptable except on side loading connectors

11.3 To final tighten the Rod Connectors; assemble the 60 in-lbs Torque Limiting T-Handle (EBECJAAZD) with the Rod Connector Torque Shaft (AZA008000), connect to the set screw, and rotate clockwise until the T-Handle provides an audible click. When necessary, the Rod Gripper (AZA010000) can be attached to the rod adjacent to the connector to be used as a counter torque.



11.4 Top Loading Rod Connectors utilize Set Screw (ABAA000XX).

11.4.1 Set Screw 5.5 – Color: Blue (ABAA00055) to be used with Ø5.5 rods.

11.4.2 Set Screw 6.0 – Color: Gray (ABAA00060) to be used with Ø6.0 rods.

11.5 Connect the Offset 100 in-lb Torque Limiting T-Handle (ECECGAAZF) to the Set Screw Torque shaft (Short - AZA020001 or Long – AZA020002).

11.6 Turn T-handle clockwise to tighten. Final tightening is achieved when the T-handle audibly clicks.

## 12.0 SCREW HEAD MOBILIZATION

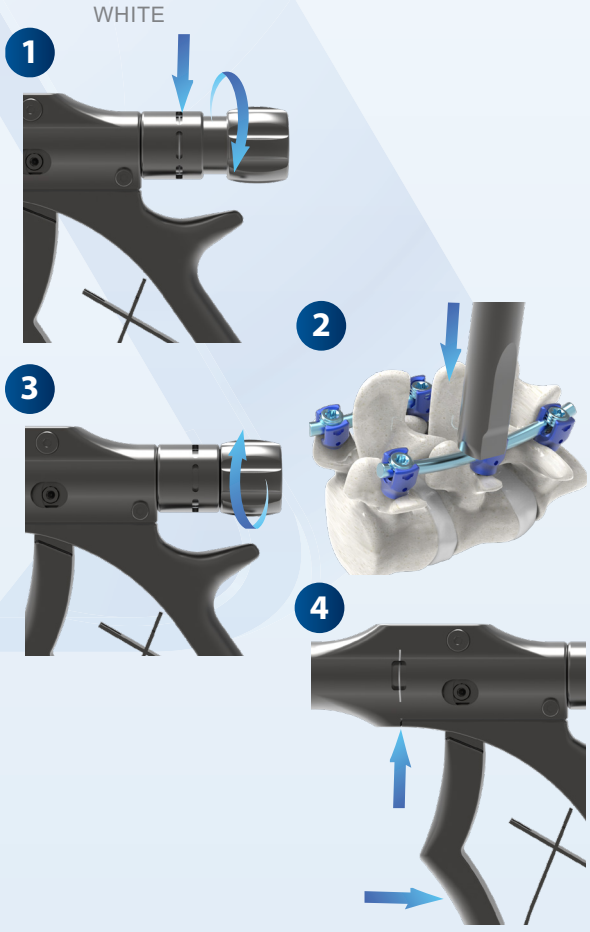
12.1 The OLYMPIC Posterior Spinal Fixation System polyaxial screw head is capable of remobilization to regain variability.

12.1.1 To regain polyaxial variability, set the the Screw Head Mobilizer (AZA021000) to the NEUTRAL position by threading the knob until the WHITE groove is visible.

12.1.2 With the Screw Head Mobilizer In the NEUTRAL position, position the Screw Head Mobilizer over the implant and snap it into place using the spring loaded clip. The Screw Head Mobilizer will automatically lock onto the screw.

12.1.3 Thread the knob in a clockwise direction until resistance is felt.

12.1.4 Squeeze the handle until the inner shaft markings line up with the markings on outer body. Verify polyaxial variability by rotating the Screw Head Mobilizer instrument prior to releasing the handle.



12.1.5 Release the handle and disengage the spring-loaded clip by threading the knob in a counter clockwise direction until it stops. Pull up on the Screw Head Mobilizer to remove the instrument from the screw.

## 13.0 IMPLANT REMOVAL

13.1 Cross Connectors / Rod Connectors

13.1.1 Assemble the Ratcheting T-Handle (EBECDZBBZ) to the Rod Connector Torque Shaft (AZA008000).

13.1.2 Engage the Rod Connector Torque Shaft to the center screw and lateral set screws on the Cross Connector and unthread in a counter clockwise direction.

13.2 Top Loading Connectors

13.2.1 Assemble the Ratcheting T-Handle (EBECDZBBZ) to the Set Screw Torque shaft (Short - AZA020001 or Long – AZA020002).

13.2.2 Engage the Set Screw Torque Shaft to the Set Screw and unthread in a counter clockwise direction.

13.3 Set Screws and Rods:

13.3.1 Assemble the Ratcheting T-Handle (EBECDZBBZ) to the Set Screw Torque Shaft (Short – AZA020001 or Long – AZA020002).

13.3.2 Insert the assembly into the Counter Torque (AZA019006).

13.3.3 Slide the counter torque down until the instrument is fully seated over the rod and implant.

13.3.4 Turn T-handle counter-clockwise to loosen and remove the set screw.

13.3.5 Repeat for each screw.

13.3.6 Grab the rod using the Rod Gripper (AZA010000) and remove the rod.

13.4 Polyaxial Screw:

13.4.1 Assemble the Ratcheting T-Handle (EBECDZBBZ) to the Screw Height Adjuster (AZA008001).

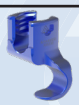
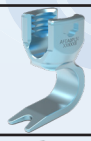
13.4.2 Engage the Screw Height Adjuster to the Screw and unthread in a counter clockwise direction.

## 1.0 GENERAL

1.1 The implants, instruments, and techniques listed within this document are to supplement the Olympic Posterior Spinal Fixation System (PSFS). Please refer to the Olympic Pedicle Screw Fixation System Surgical Technique for all techniques not listed in this document.

## 2.0 HOOK OFFERING

2.1 The Olympic System offers a wide variety of hook styles and sizes to best suit patient anatomy. The table below summarizes each style of hook size offered standard with a provided system.

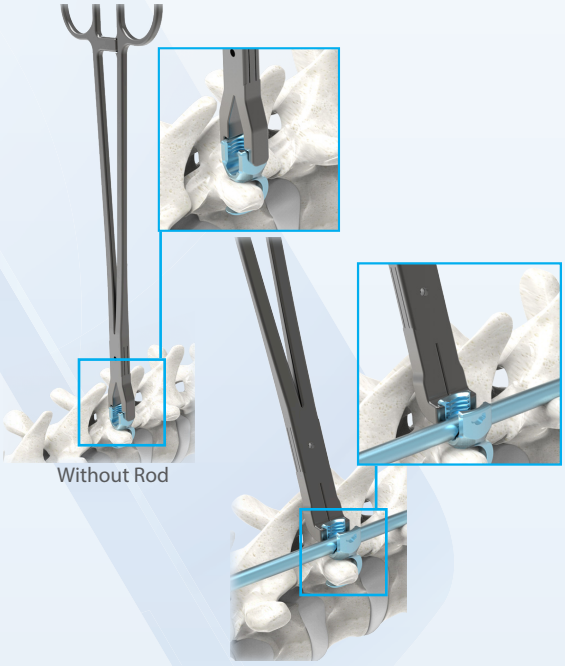
| HOOK STYLE | IMAGE | SIZES OFFERED | THROAT HIGHT (mm)<br>THROAT DEPTH (mm) | BLADE WIDTH (mm) | HOOK OFFSET (mm) | DIRECTION |
|---|---|---|---|---|---|---|
| COLOR CHART | XS: Magenta S: Dark Blue M: Gray L: Light Blue XL: Green | | | | | |
| LAMINA WIDE BLADE |  | S<br>M<br>L<br>XL | 6.5 / 6.5<br>8 / 8<br>9.5 / 9.5<br>11 / 11 | 6 | Low 2.5<br>High 5.0 | Upgoing |
| LAMINA NARROW BLADE |  | S<br>M<br>L | 6.5 / 6.5<br>8 / 8<br>9.5 / 9.5 | 4 | Low 2.5 | Upgoing |
| RAMPED LAMINA WIDE BLADE |  | S<br>M | 6.5x2.5 / 6<br>8x3.5 / 8 | 6 | Low 2.5 | Downgoing |
| RAMPED LAMINA NARROW BLADE |  | S<br>M | 6.2x2.5 / 6<br>8x3.5 / 8 | 4 | Low 2.5 | Downgoing |
| RAMPED OFFSET LAMINA NARROW BLADE (LEFT/RIGHT) |  | S<br>M | 6.2x2.5 / 6<br>8x3.5 / 8 | 4 | Low 2.5 | Downgoing |
| OFFSET (LEFT/RIGHT) |  | S<br>L | 6.5 / 6.5<br>9.5 / 9.5 | 6 | Low 2.5 | Upgoing |
| PEDICAL |  | XS<br>S<br>M<br>L | 5 / 5<br>8 / 6<br>8 / 8<br>9.5 / 9.5 | 7(XS)<br>8 (S, M, L) | Low 2.5 | Upgoing |
| TRANSVERSE PROCESS |  | L<br>XL | 9.5 / 9.5<br>11 / 11 | 8 | Low 2.5 | Upgoing |

## 3.0 HOOK PREPARATION AND INSERTION

3.1 After the affected level has been exposed, use the appropriate hook elevator to prepare and trial the desired hook location. Using a Hook Elevator will ensure there will be bony contact prior to implant insertion.

## 4.0 HOOK INSERTION

3.2 Attach one of the Hook Holders (AZA670010, AZA670020, AZA680010, AZA680020) to the appropriate hook. Insert the hook into the exposed location. Offset Hook Holders should be used when there is an existing rod positioned over the desired hook location.

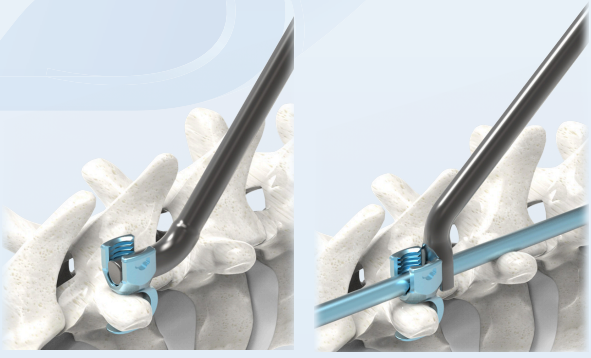


Without Rod

With Rod

## 5.0 HOOK MANIPULATION

4.1 If necessary, use either the Hook Impactor (AZA065000) or Hook Pusher (AZA066000) to manipulate the hook upon insertion. The Hook Pusher should be used when there is an existing rod positioned over the desired hook location.



Without Rod

With Rod

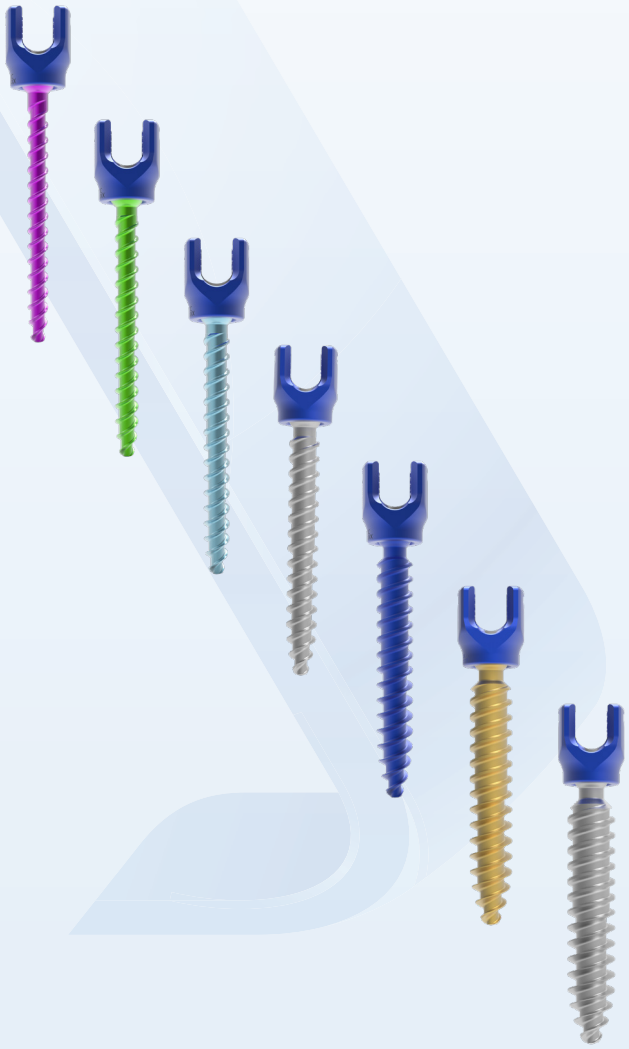
# OLYMPIC IMPLANT OFFERING

## SET SCREWS

| Part Number | Description | Qty |
|---|---|---|
| ABAA00055 | Set Screw 5.5mm | 30 |
| ABAA00060 | Set Screw 6.0mm | 30**** |

## POLYAXIAL SCREWS

| Part Number | Description | Qty |
|---|---|---|
| AAAA40020 | Polyaxial Screw, 4.0mm X 20mm | 4 |
| AAAA40025 | Polyaxial Screw, 4.0mm X 25mm | 8 |
| AAAA40030 | Polyaxial Screw, 4.0mm X 30mm | 8 |
| AAAA40035 | Polyaxial Screw, 4.0mm X 35mm | 8 |
| AAAA40040 | Polyaxial Screw, 4.0mm X 40mm | 8 |
| AAAA40045 | Polyaxial Screw, 4.0mm X 45mm | 8 |
| AAAA40050 | Polyaxial Screw, 4.0mm X 50mm | 4 |
| AAAA45020 | Polyaxial Screw, 4.5mm X 20mm | 4 |
| AAAA45025 | Polyaxial Screw, 4.5mm X 25mm | 8 |
| AAAA45030 | Polyaxial Screw, 4.5mm X 30mm | 8 |
| AAAA45035 | Polyaxial Screw, 4.5mm X 35mm | 8 |
| AAAA45040 | Polyaxial Screw, 4.5mm X 40mm | 8 |
| AAAA45045 | Polyaxial Screw, 4.5mm X 45mm | 8 |
| AAAA45050 | Polyaxial Screw, 4.5mm X 50mm | 4 |
| AAAA50030 | Polyaxial Screw, 5.0mm X 30mm | 4 |
| AAAA50035 | Polyaxial Screw, 5.0mm X 35mm | 8 |
| AAAA50040 | Polyaxial Screw, 5.0mm X 40mm | 8 |
| AAAA50045 | Polyaxial Screw, 5.0mm X 45mm | 8 |
| AAAA50050 | Polyaxial Screw, 5.0mm X 50mm | 8 |
| AAAA50055 | Polyaxial Screw, 5.0mm X 55mm | 8 |
| AAAA60030 | Polyaxial Screw, 6.0mm X 30mm | 4 |
| AAAA60035 | Polyaxial Screw, 6.0mm X 35mm | 8 |
| AAAA60040 | Polyaxial Screw, 6.0mm X 40mm | 8 |
| AAAA60045 | Polyaxial Screw, 6.0mm X 45mm | 8 |
| AAAA60050 | Polyaxial Screw, 6.0mm X 50mm | 8 |
| AAAA60055 | Polyaxial Screw, 6.0mm X 55mm | 8 |
| AAAA60060 | Polyaxial Screw, 6.0mm X 60mm | 4 |
| AAAA70030 | Polyaxial Screw, 7.0mm X 30mm | 4 |
| AAAA70035 | Polyaxial Screw, 7.0mm X 35mm | 8 |
| AAAA70040 | Polyaxial Screw, 7.0mm X 40mm | 8 |
| AAAA70045 | Polyaxial Screw, 7.0mm X 45mm | 8 |
| AAAA70050 | Polyaxial Screw, 7.0mm X 50mm | 8 |
| AAAA70055 | Polyaxial Screw, 7.0mm X 55mm | 8 |
| AAAA70060 | Polyaxial Screw, 7.0mm X 60mm | 4 |
| AAAA70065 | Polyaxial Screw, 7.0mm X 65mm | 3 |
| AAAA70070 | Polyaxial Screw, 7.0mm X 70mm | 3 |
| AAAA70075 | Polyaxial Screw, 7.0mm X 75mm | 3 |
| AAAA70080 | Polyaxial Screw, 7.0mm X 80mm | 3 |
| AAAA70085 | Polyaxial Screw, 7.0mm X 85mm | 3 |
| AAAA70090 | Polyaxial Screw, 7.0mm X 90mm | 3 |
| AASA80030 | Polyaxial Screw, 8.0mm X 30mm | 4 |
| AASA80035 | Polyaxial Screw, 8.0mm X 35mm | 4 |
| AASA80040 | Polyaxial Screw, 8.0mm X 40mm | 4 |
| AASA80045 | Polyaxial Screw, 8.0mm X 45mm | 4 |
| AASA80050 | Polyaxial Screw, 8.0mm X 50mm | 4 |
| AASA80055 | Polyaxial Screw, 8.0mm X 55mm | 4 |
| AASA80060 | Polyaxial Screw, 8.0mm X 60mm | 4 |
| AASA90030 | Polyaxial Screw, 9.0mm X 30mm | 4 |
| AASA90035 | Polyaxial Screw, 9.0mm X 35mm | 4 |
| AASA90040 | Polyaxial Screw, 9.0mm X 40mm | 4 |
| AASA90045 | Polyaxial Screw, 9.0mm X 45mm | 4 |
| AASA90050 | Polyaxial Screw, 9.0mm X 50mm | 4 |
| AASA90055 | Polyaxial Screw, 9.0mm X 55mm | 4 |
| AASA90060 | Polyaxial Screw, 9.0mm X 60mm | 4 |



*Deformity Container ** Universal Connector Container ***Hook Container ****6.0 Rod Container

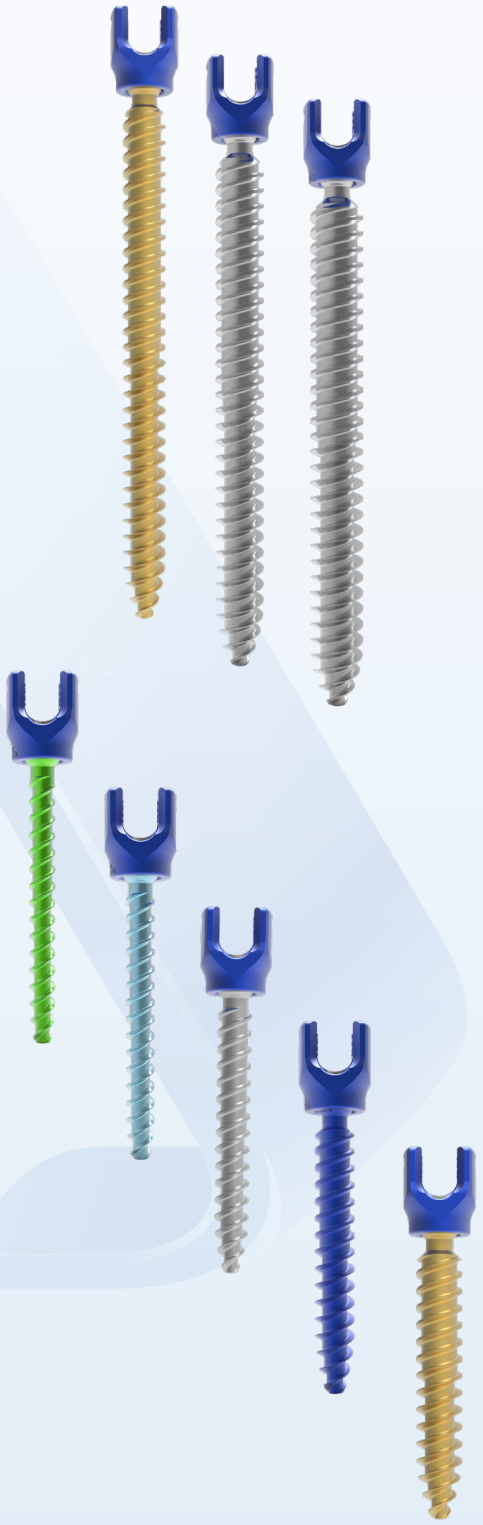
# OLYMPIC IMPLANT OFFERING

## POLYAXIAL SCREWS

| Part Number | Description | Qty |
|---|---|---|
| AASA80065 | Polyaxial Screw, 8.0mm X 65mm | 3* |
| AASA80070 | Polyaxial Screw, 8.0mm X 70mm | 3* |
| AASA80075 | Polyaxial Screw, 8.0mm X 75mm | 3* |
| AASA80080 | Polyaxial Screw, 8.0mm X 80mm | 3* |
| AASA80085 | Polyaxial Screw, 8.0mm X 85mm | 3* |
| AASA80090 | Polyaxial Screw, 8.0mm X 90mm | 3* |
| AASA80100 | Polyaxial Screw, 8.0mm X 100mm | 3* |
| AASA80110 | Polyaxial Screw, 8.0mm X 110mm | 3* |
| AASA80120 | Polyaxial Screw, 8.0mm X 120mm | 3* |
| AASA90080 | Polyaxial Screw, 9.0mm X 80mm | 3* |
| AASA90090 | Polyaxial Screw, 9.0mm X 90mm | 3* |
| AASA90100 | Polyaxial Screw, 9.0mm X 100mm | 3* |
| AASA90110 | Polyaxial Screw, 9.0mm X 110mm | 3* |
| AASA90120 | Polyaxial Screw, 9.0mm X 120mm | 3* |
| AASA00080 | Polyaxial Screw, 10.0mm X 80mm | 3* |
| AASA00090 | Polyaxial Screw, 10.0mm X 90mm | 3* |
| AASA00100 | Polyaxial Screw, 10.0mm X 100mm | 3* |
| AASA00110 | Polyaxial Screw, 10.0mm X 110mm | 3* |
| AASA00120 | Polyaxial Screw, 10.0mm X 120mm | 3* |

## CANNULATED SCREWS

| Part Number | Description | Qty |
|---|---|---|
| AABA45020 | Polyaxial Screw, Cannulated, 4.5mm X 20mm | 4 |
| AABA45025 | Polyaxial Screw, Cannulated, 4.5mm X 25mm | 4 |
| AABA45030 | Polyaxial Screw, Cannulated, 4.5mm X 30mm | 8 |
| AABA45035 | Polyaxial Screw, Cannulated, 4.5mm X 35mm | 8 |
| AABA45040 | Polyaxial Screw, Cannulated, 4.5mm X 40mm | 8 |
| AABA45045 | Polyaxial Screw, Cannulated, 4.5mm X 45mm | 8 |
| AABA45050 | Polyaxial Screw, Cannulated, 4.5mm X 50mm | 4 |
| AABA50030 | Polyaxial Screw, Cannulated, 5.0mm X 30mm | 4 |
| AABA50035 | Polyaxial Screw, Cannulated, 5.0mm X 35mm | 8 |
| AABA50040 | Polyaxial Screw, Cannulated, 5.0mm X 40mm | 8 |
| AABA50045 | Polyaxial Screw, Cannulated, 5.0mm X 45mm | 8 |
| AABA50050 | Polyaxial Screw, Cannulated, 5.0mm X 50mm | 8 |
| AABA50055 | Polyaxial Screw, Cannulated, 5.0mm X 55mm | 4 |
| AABA60030 | Polyaxial Screw, Cannulated, 6.0mm X 30mm | 4 |
| AABA60035 | Polyaxial Screw, Cannulated, 6.0mm X 35mm | 8 |
| AABA60040 | Polyaxial Screw, Cannulated, 6.0mm X 40mm | 8 |
| AABA60045 | Polyaxial Screw, Cannulated, 6.0mm X 45mm | 8 |
| AABA60050 | Polyaxial Screw, Cannulated, 6.0mm X 50mm | 8 |
| AABA60055 | Polyaxial Screw, Cannulated, 6.0mm X 55mm | 8 |
| AABA60060 | Polyaxial Screw, Cannulated, 6.0mm X 60mm | 4 |
| AABA70030 | Polyaxial Screw, Cannulated, 7.0mm X 30mm | 4 |
| AABA70035 | Polyaxial Screw, Cannulated, 7.0mm X 35mm | 8 |
| AABA70040 | Polyaxial Screw, Cannulated, 7.0mm X 40mm | 8 |
| AABA70045 | Polyaxial Screw, Cannulated, 7.0mm X 45mm | 8 |
| AABA70050 | Polyaxial Screw, Cannulated, 7.0mm X 50mm | 8 |
| AABA70055 | Polyaxial Screw, Cannulated, 7.0mm X 55mm | 8 |
| AABA70060 | Polyaxial Screw, Cannulated, 7.0mm X 60mm | 4 |
| AATA80030 | Polyaxial Screw, Cannulated, 8.0mm X 30mm | 4 |
| AATA80035 | Polyaxial Screw, Cannulated, 8.0mm X 35mm | 4 |
| AATA80040 | Polyaxial Screw, Cannulated, 8.0mm X 40mm | 4 |
| AATA80045 | Polyaxial Screw, Cannulated, 8.0mm X 45mm | 4 |
| AATA80050 | Polyaxial Screw, Cannulated, 8.0mm X 50mm | 4 |



*Deformity Container ** Universal Connector Container ***Hook Container ****6.0 Rod Container

# OLYMPIC IMPLANT OFFERING

## CANNULATED SCREWS

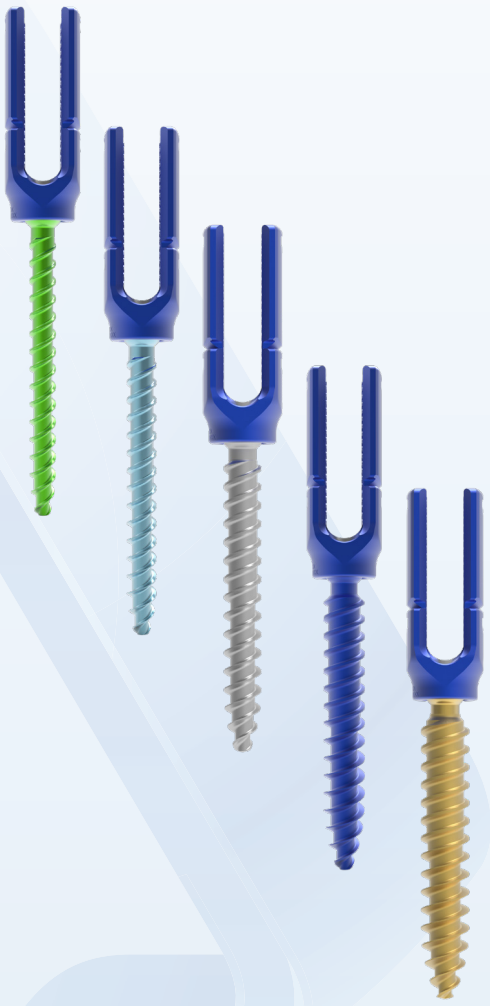
| Part Number | Description | Qty |
|---|---|---|
| AATA80055 | Polyaxial Screw, Cannulated, 8.0mm X 55mm | 4 |
| AATA80060 | Polyaxial Screw, Cannulated, 8.0mm X 60mm | 4 |

## HIGH TOP POLYAXIAL SCREWS

| Part Number | Description | Qty |
|---|---|---|
| AAHA45020 | High Top Polyaxial Screw, 4.5mm X 20mm | 2 |
| AAHA45025 | High Top Polyaxial Screw, 4.5mm X 25mm | 2 |
| AAHA45030 | High Top Polyaxial Screw, 4.5mm X 30mm | 4 |
| AAHA45035 | High Top Polyaxial Screw, 4.5mm X 35mm | 2 |
| AAHA45040 | High Top Polyaxial Screw, 4.5mm X 40mm | 2 |
| AAHA45045 | High Top Polyaxial Screw, 4.5mm X 45mm | 2 |
| AAHA45050 | High Top Polyaxial Screw, 4.5mm X 50mm | 2 |
| AAHA50030 | High Top Polyaxial Screw, 5.0mm X 30mm | 2 |
| AAHA50035 | High Top Polyaxial Screw, 5.0mm X 35mm | 2 |
| AAHA50040 | High Top Polyaxial Screw, 5.0mm X 40mm | 4 |
| AAHA50045 | High Top Polyaxial Screw, 5.0mm X 45mm | 2 |
| AAHA50050 | High Top Polyaxial Screw, 5.0mm X 50mm | 2 |
| AAHA50055 | High Top Polyaxial Screw, 5.0mm X 55mm | 2 |
| AAHA50060 | High Top Polyaxial Screw, 5.0mm X 60mm | 2 |
| AAHA60030 | High Top Polyaxial Screw, 6.0mm X 30mm | 2 |
| AAHA60035 | High Top Polyaxial Screw, 6.0mm X 35mm | 2 |
| AAHA60040 | High Top Polyaxial Screw, 6.0mm X 40mm | 4 |
| AAHA60045 | High Top Polyaxial Screw, 6.0mm X 45mm | 2 |
| AAHA60050 | High Top Polyaxial Screw, 6.0mm X 50mm | 2 |
| AAHA60055 | High Top Polyaxial Screw, 6.0mm X 55mm | 2 |
| AAHA60060 | High Top Polyaxial Screw, 6.0mm X 60mm | 2 |
| AAHA70030 | High Top Polyaxial Screw, 7.0mm X 30mm | 2 |
| AAHA70035 | High Top Polyaxial Screw, 7.0mm X 35mm | 2 |
| AAHA70040 | High Top Polyaxial Screw, 7.0mm X 40mm | 4 |
| AAHA70045 | High Top Polyaxial Screw, 7.0mm X 45mm | 2 |
| AAHA70050 | High Top Polyaxial Screw, 7.0mm X 50mm | 2 |
| AAHA70055 | High Top Polyaxial Screw, 7.0mm X 55mm | 2 |
| AAHA70060 | High Top Polyaxial Screw, 7.0mm X 60mm | 2 |
| AAKA80030 | High Top Polyaxial Screw, 8.0mm X 30mm | 2 |
| AAKA80035 | High Top Polyaxial Screw, 8.0mm X 35mm | 2 |
| AAKA80040 | High Top Polyaxial Screw, 8.0mm X 40mm | 4 |
| AAKA80045 | High Top Polyaxial Screw, 8.0mm X 45mm | 2 |
| AAKA80050 | High Top Polyaxial Screw, 8.0mm X 50mm | 2 |
| AAKA80055 | High Top Polyaxial Screw, 8.0mm X 55mm | 2 |
| AAKA80060 | High Top Polyaxial Screw, 8.0mm X 60mm | 2 |

## HIGH TOP CANNULATED SCREWS

| Part Number | Description | Qty |
|---|---|---|
| AAJA50030 | High Top Polyaxial Screw, Cannulated, 5.0mm X 30mm | 2 |
| AAJA50035 | High Top Polyaxial Screw, Cannulated, 5.0mm X 35mm | 2 |
| AAJA50040 | High Top Polyaxial Screw, Cannulated, 5.0mm X 40mm | 4 |
| AAJA50045 | High Top Polyaxial Screw, Cannulated, 5.0mm X 45mm | 2 |
| AAJA50050 | High Top Polyaxial Screw, Cannulated, 5.0mm X 50mm | 2 |
| AAJA50055 | High Top Polyaxial Screw, Cannulated, 5.0mm X 55mm | 2 |
| AAJA50060 | High Top Polyaxial Screw, Cannulated, 5.0mm X 60mm | 2 |
| AAJA60030 | High Top Polyaxial Screw, Cannulated, 6.0mm X 30mm | 2 |
| AAJA60035 | High Top Polyaxial Screw, Cannulated, 6.0mm X 35mm | 2 |
| AAJA60040 | High Top Polyaxial Screw, Cannulated, 6.0mm X 40mm | 4 |



*Deformity Container ** Universal Connector Container ***Hook Container ****6.0 Rod Container

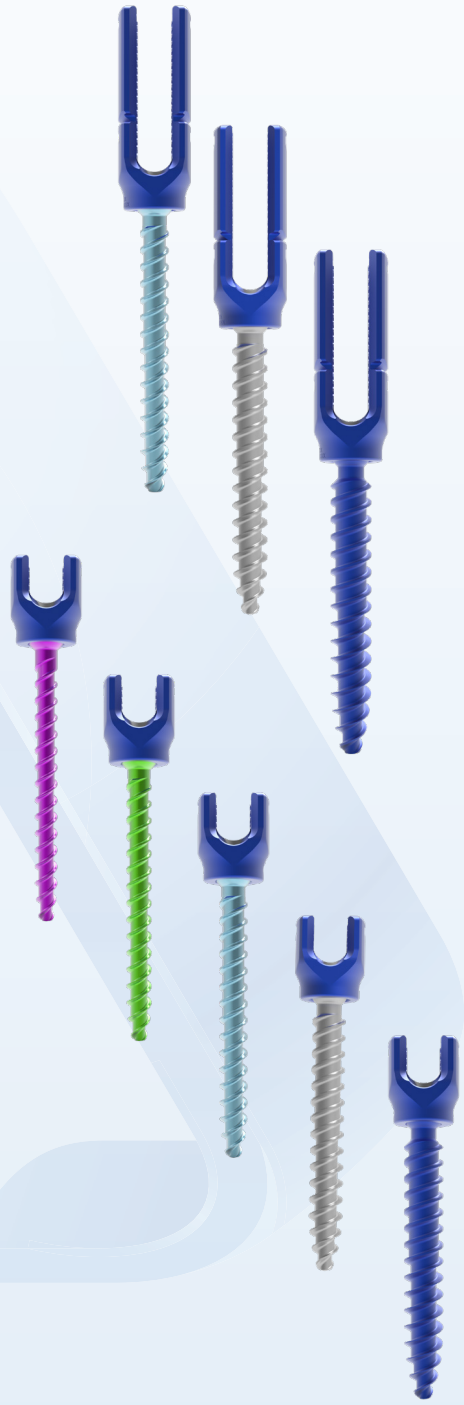
# OLYMPIC IMPLANT OFFERING

## HIGH TOP CANNULATED SCREWS

| Part Number | Description | Qty |
|---|---|---|
| AAJA60045 | High Top Polyaxial Screw, Cannulated, 6.0mm X 45mm | 2 |
| AAJA60050 | High Top Polyaxial Screw, Cannulated, 6.0mm X 50mm | 2 |
| AAJA60055 | High Top Polyaxial Screw, Cannulated, 6.0mm X 55mm | 2 |
| AAJA60060 | High Top Polyaxial Screw, Cannulated, 6.0mm X 60mm | 2 |
| AAJA70030 | High Top Polyaxial Screw, Cannulated, 7.0mm X 30mm | 2 |
| AAJA70035 | High Top Polyaxial Screw, Cannulated, 7.0mm X 35mm | 2 |
| AAJA70040 | High Top Polyaxial Screw, Cannulated, 7.0mm X 40mm | 4 |
| AAJA70045 | High Top Polyaxial Screw, Cannulated, 7.0mm X 45mm | 2 |
| AAJA70050 | High Top Polyaxial Screw, Cannulated, 7.0mm X 50mm | 2 |
| AAJA70055 | High Top Polyaxial Screw, Cannulated, 7.0mm X 55mm | 2 |
| AAJA70060 | High Top Polyaxial Screw, Cannulated, 7.0mm X 60mm | 2 |

## UNIPLANAR POLYAXIAL SCREWS

| Part Number | Description | Qty |
|---|---|---|
| AGAA40020 | Uniplanar Screw, 4.0mm X 20mm | 4 |
| AGAA40025 | Uniplanar Screw, 4.0mm X 25mm | 8 |
| AGAA40030 | Uniplanar Screw, 4.0mm X 30mm | 8 |
| AGAA40035 | Uniplanar Screw, 4.0mm X 35mm | 8 |
| AGAA40040 | Uniplanar Screw, 4.0mm X 40mm | 8 |
| AGAA40045 | Uniplanar Screw, 4.0mm X 45mm | 8 |
| AGAA40050 | Uniplanar Screw, 4.0mm X 50mm | 4 |
| AGAA45020 | Uniplanar Screw, 4.5mm X 20mm | 4 |
| AGAA45025 | Uniplanar Screw, 4.5mm X 25mm | 8 |
| AGAA45030 | Uniplanar Screw, 4.5mm X 30mm | 8 |
| AGAA45035 | Uniplanar Screw, 4.5mm X 35mm | 8 |
| AGAA45040 | Uniplanar Screw, 4.5mm X 40mm | 8 |
| AGAA45045 | Uniplanar Screw, 4.5mm X 45mm | 8 |
| AGAA45050 | Uniplanar Screw, 4.5mm X 50mm | 4 |
| AGAA50030 | Uniplanar Screw, 5.0mm X 30mm | 4 |
| AGAA50035 | Uniplanar Screw, 5.0mm X 35mm | 8 |
| AGAA50040 | Uniplanar Screw, 5.0mm X 40mm | 8 |
| AGAA50045 | Uniplanar Screw, 5.0mm X 45mm | 8 |
| AGAA50050 | Uniplanar Screw, 5.0mm X 50mm | 8 |
| AGAA50055 | Uniplanar Screw, 5.0mm X 55mm | 4 |
| AGAA60030 | Uniplanar Screw, 6.0mm X 30mm | 4 |
| AGAA60035 | Uniplanar Screw, 6.0mm X 35mm | 8 |
| AGAA60040 | Uniplanar Screw, 6.0mm X 40mm | 8 |
| AGAA60045 | Uniplanar Screw, 6.0mm X 45mm | 8 |
| AGAA60050 | Uniplanar Screw, 6.0mm X 50mm | 8 |
| AGAA60055 | Uniplanar Screw, 6.0mm X 55mm | 8 |
| AGAA60060 | Uniplanar Screw, 6.0mm X 60mm | 4 |
| AGAA70030 | Uniplanar Screw, 7.0mm X 30mm | 4 |
| AGAA70035 | Uniplanar Screw, 7.0mm X 35mm | 8 |
| AGAA70040 | Uniplanar Screw, 7.0mm X 40mm | 8 |
| AGAA70045 | Uniplanar Screw, 7.0mm X 45mm | 8 |
| AGAA70050 | Uniplanar Screw, 7.0mm X 50mm | 8 |
| AGAA70055 | Uniplanar Screw, 7.0mm X 55mm | 8 |
| AGAA70060 | Uniplanar Screw, 7.0mm X 60mm | 4 |



*Deformity Container ** Universal Connector Container ***Hook Container ****6.0 Rod Container

# OLYMPIC IMPLANT OFFERING

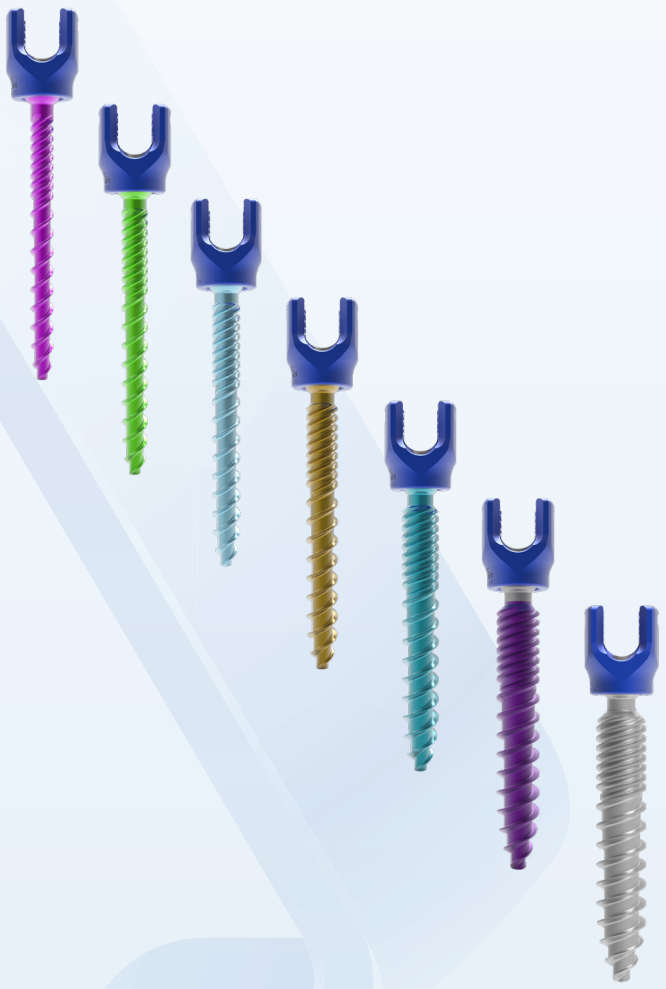
## UNIPLANAR HIGH TOP POLYAXIAL SCREWS

| Part Number | Description | Qty |
|---|---|---|
| AGGA45020 | High Top Uniplanar Screw, 4.5mm X 20mm | 4 |
| AGGA45025 | High Top Uniplanar Screw, 4.5mm X 25mm | 8 |
| AGGA45030 | High Top Uniplanar Screw, 4.5mm X 30mm | 8 |
| AGGA45035 | High Top Uniplanar Screw, 4.5mm X 35mm | 8 |
| AGGA45040 | High Top Uniplanar Screw, 4.5mm X 40mm | 8 |
| AGGA45045 | High Top Uniplanar Screw, 4.5mm X 45mm | 8 |
| AGGA45050 | High Top Uniplanar Screw, 4.5mm X 50mm | 4 |
| AGGA50030 | High Top Uniplanar Screw, 5.0mm X 30mm | 4 |
| AGGA50035 | High Top Uniplanar Screw, 5.0mm X 35mm | 8 |
| AGGA50040 | High Top Uniplanar Screw, 5.0mm X 40mm | 8 |
| AGGA50045 | High Top Uniplanar Screw, 5.0mm X 45mm | 8 |
| AGGA50050 | High Top Uniplanar Screw, 5.0mm X 50mm | 8 |
| AGGA50055 | High Top Uniplanar Screw, 5.0mm X 55mm | 8 |
| AGGA50060 | High Top Uniplanar Screw, 5.0mm X 60mm | 4 |
| AGGA60030 | High Top Uniplanar Screw, 6.0mm X 30mm | 4 |
| AGGA60035 | High Top Uniplanar Screw, 6.0mm X 35mm | 8 |
| AGGA60040 | High Top Uniplanar Screw, 6.0mm X 40mm | 8 |
| AGGA60045 | High Top Uniplanar Screw, 6.0mm X 45mm | 8 |
| AGGA60050 | High Top Uniplanar Screw, 6.0mm X 50mm | 8 |
| AGGA60055 | High Top Uniplanar Screw, 6.0mm X 55mm | 8 |
| AGGA60060 | High Top Uniplanar Screw, 6.0mm X 60mm | 4 |
| AGGA70030 | High Top Uniplanar Screw, 7.0mm X 30mm | 4 |
| AGGA70035 | High Top Uniplanar Screw, 7.0mm X 35mm | 8 |
| AGGA70040 | High Top Uniplanar Screw, 7.0mm X 40mm | 8 |
| AGGA70045 | High Top Uniplanar Screw, 7.0mm X 45mm | 8 |
| AGGA70050 | High Top Uniplanar Screw, 7.0mm X 50mm | 8 |
| AGGA70055 | High Top Uniplanar Screw, 7.0mm X 55mm | 8 |
| AGGA70060 | High Top Uniplanar Screw, 7.0mm X 60mm | 4 |

*Deformity Container ** Universal Connector Container ***Hook Container ****6.0 Rod Container

## POLYAXIAL SCREWS (CORTICAL CANCELLOUS)

| Part Number | Description | Qty |
|---|---|---|
| AADA40020 | Cortical Polyaxial Screw, 4.0mm x 20mm | 4 |
| AADA40025 | Cortical Polyaxial Screw, 4.0mm x 25mm | 8 |
| AADA40030 | Cortical Polyaxial Screw, 4.0mm x 30mm | 8 |
| AADA40035 | Cortical Polyaxial Screw, 4.0mm x 35mm | 8 |
| AADA40040 | Cortical Polyaxial Screw, 4.0mm x 40mm | 8 |
| AADA40045 | Cortical Polyaxial Screw, 4.0mm x 45mm | 8 |
| AADA40050 | Cortical Polyaxial Screw, 4.0mm x 50mm | 4 |
| AADA45020 | Cortical Polyaxial Screw, 4.5mm x 20mm | 4 |
| AADA45025 | Cortical Polyaxial Screw, 4.5mm x 25mm | 8 |
| AADA45030 | Cortical Polyaxial Screw, 4.5mm x 30mm | 8 |
| AADA45035 | Cortical Polyaxial Screw, 4.5mm x 35mm | 8 |
| AADA45040 | Cortical Polyaxial Screw, 4.5mm x 40mm | 8 |
| AADA45045 | Cortical Polyaxial Screw, 4.5mm x 45mm | 8 |
| AADA45050 | Cortical Polyaxial Screw, 4.5mm x 50mm | 4 |
| AADA50030 | Cortical Polyaxial Screw, 5.0mm x 30mm | 4 |
| AADA50035 | Cortical Polyaxial Screw, 5.0mm x 35mm | 8 |
| AADA50040 | Cortical Polyaxial Screw, 5.0mm x 40mm | 8 |
| AADA50045 | Cortical Polyaxial Screw, 5.0mm x 45mm | 8 |
| AADA50050 | Cortical Polyaxial Screw, 5.0mm x 50mm | 8 |
| AADA50055 | Cortical Polyaxial Screw, 5.0mm x 55mm | 8 |
| AADA55030 | Cortical Polyaxial Screw, 5.5mm x 30mm | 4 |
| AADA55035 | Cortical Polyaxial Screw, 5.5mm x 35mm | 8 |
| AADA55040 | Cortical Polyaxial Screw, 5.5mm x 40mm | 8 |
| AADA55045 | Cortical Polyaxial Screw, 5.5mm x 45mm | 8 |
| AADA55050 | Cortical Polyaxial Screw, 5.5mm x 50mm | 8 |
| AADA55055 | Cortical Polyaxial Screw, 5.5mm x 55mm | 8 |
| AADA55060 | Cortical Polyaxial Screw, 5.5mm x 60mm | 4 |
| AADA65030 | Cortical Polyaxial Screw, 6.5mm x 30mm | 4 |
| AADA65035 | Cortical Polyaxial Screw, 6.5mm x 35mm | 8 |
| AADA65040 | Cortical Polyaxial Screw, 6.5mm x 40mm | 8 |
| AADA65045 | Cortical Polyaxial Screw, 6.5mm x 45mm | 8 |
| AADA65050 | Cortical Polyaxial Screw, 6.5mm x 50mm | 8 |
| AADA65055 | Cortical Polyaxial Screw, 6.5mm x 55mm | 8 |
| AADA65060 | Cortical Polyaxial Screw, 6.5mm x 60mm | 4 |
| AAPA75030 | Cortical Polyaxial Screw, 7.5mm x 30mm | 4 |
| AAPA75035 | Cortical Polyaxial Screw, 7.5mm x 35mm | 8 |
| AAPA75040 | Cortical Polyaxial Screw, 7.5mm x 40mm | 8 |
| AAPA75045 | Cortical Polyaxial Screw, 7.5mm x 45mm | 8 |
| AAPA75050 | Cortical Polyaxial Screw, 7.5mm x 50mm | 8 |
| AAPA75055 | Cortical Polyaxial Screw, 7.5mm x 55mm | 8 |
| AAPA75060 | Cortical Polyaxial Screw, 7.5mm x 60mm | 4 |
| AAPA85030 | Cortical Polyaxial Screw, 8.5mm x 30mm | 4 |
| AAPA85035 | Cortical Polyaxial Screw, 8.5mm x 35mm | 4 |
| AAPA85040 | Cortical Polyaxial Screw, 8.5mm x 40mm | 4 |
| AAPA85045 | Cortical Polyaxial Screw, 8.5mm x 45mm | 4 |
| AAPA85050 | Cortical Polyaxial Screw, 8.5mm x 50mm | 4 |
| AAPA85055 | Cortical Polyaxial Screw, 8.5mm x 55mm | 4 |
| AAPA85060 | Cortical Polyaxial Screw, 8.5mm x 60mm | 4 |



*Deformity Container ** Universal Connector Container ***Hook Container ****6.0 Rod Container

# OLYMPIC IMPLANT OFFERING

## CANNULATED SCREWS (CORTICAL CANCELLOUS)

| Part Number | Description | Qty |
|---|---|---|
| AAEA45020 | Cortical Polyaxial Screw, Cannulated 4.5mm x 20mm | 4 |
| AAEA45025 | Cortical Polyaxial Screw, Cannulated 4.5mm x 25mm | 8 |
| AAEA45030 | Cortical Polyaxial Screw, Cannulated 4.5mm x 30mm | 8 |
| AAEA45035 | Cortical Polyaxial Screw, Cannulated 4.5mm x 35mm | 8 |
| AAEA45040 | Cortical Polyaxial Screw, Cannulated 4.5mm x 40mm | 8 |
| AAEA45045 | Cortical Polyaxial Screw, Cannulated 4.5mm x 45mm | 8 |
| AAEA45050 | Cortical Polyaxial Screw, Cannulated 4.5mm x 50mm | 4 |
| AAEA55030 | Cortical Polyaxial Screw, Cannulated 5.5mm x 30mm | 4 |
| AAEA55035 | Cortical Polyaxial Screw, Cannulated 5.5mm x 35mm | 8 |
| AAEA55040 | Cortical Polyaxial Screw, Cannulated 5.5mm x 40mm | 8 |
| AAEA55045 | Cortical Polyaxial Screw, Cannulated 5.5mm x 45mm | 8 |
| AAEA55050 | Cortical Polyaxial Screw, Cannulated 5.5mm x 50mm | 8 |
| AAEA55055 | Cortical Polyaxial Screw, Cannulated 5.5mm x 55mm | 4 |
| AAEA65030 | Cortical Polyaxial Screw, Cannulated 6.5mm x 30mm | 4 |
| AAEA65035 | Cortical Polyaxial Screw, Cannulated 6.5mm x 35mm | 8 |
| AAEA65040 | Cortical Polyaxial Screw, Cannulated 6.5mm x 40mm | 8 |
| AAEA65045 | Cortical Polyaxial Screw, Cannulated 6.5mm x 45mm | 8 |
| AAEA65050 | Cortical Polyaxial Screw, Cannulated 6.5mm x 50mm | 8 |
| AAEA65055 | Cortical Polyaxial Screw, Cannulated 6.5mm x 55mm | 8 |
| AAEA65060 | Cortical Polyaxial Screw, Cannulated 6.5mm x 60mm | 4 |
| AARA75030 | Cortical Polyaxial Screw, Cannulated 7.5mm x 30mm | 4 |
| AARA75035 | Cortical Polyaxial Screw, Cannulated 7.5mm x 35mm | 8 |
| AARA75040 | Cortical Polyaxial Screw, Cannulated 7.5mm x 40mm | 8 |
| AARA75045 | Cortical Polyaxial Screw, Cannulated 7.5mm x 45mm | 8 |
| AARA75050 | Cortical Polyaxial Screw, Cannulated 7.5mm x 50mm | 8 |
| AARA75055 | Cortical Polyaxial Screw, Cannulated 7.5mm x 55mm | 8 |
| AARA75060 | Cortical Polyaxial Screw, Cannulated 7.5mm x 60mm | 4 |
| AARA85030 | Cortical Polyaxial Screw, Cannulated 8.5mm x 30mm | 4 |
| AARA85035 | Cortical Polyaxial Screw, Cannulated 8.5mm x 35mm | 4 |
| AARA85040 | Cortical Polyaxial Screw, Cannulated 8.5mm x 40mm | 4 |
| AARA85045 | Cortical Polyaxial Screw, Cannulated 8.5mm x 45mm | 4 |
| AARA85050 | Cortical Polyaxial Screw, Cannulated 8.5mm x 50mm | 4 |
| AARA85055 | Cortical Polyaxial Screw, Cannulated 8.5mm x 55mm | 4 |
| AARA85060 | Cortical Polyaxial Screw Cannulated, 8.5mm x 60mm | 4 |

## HIGH TOP POLYAXIAL SCREWS (CORTICAL CANCELLOUS)

| Part Number | Description | Qty |
|---|---|---|
| AAFA45020 | High Top Cortical Polyaxial Screw, 4.5mm x 20mm | 4 |
| AAFA45025 | High Top Cortical Polyaxial Screw, 4.5mm x 25mm | 4 |
| AAFA45030 | High Top Cortical Polyaxial Screw, 4.5mm x 30mm | 4 |
| AAFA45035 | High Top Cortical Polyaxial Screw, 4.5mm x 35mm | 4 |
| AAFA45040 | High Top Cortical Polyaxial Screw, 4.5mm x 40mm | 4 |
| AAFA45045 | High Top Cortical Polyaxial Screw, 4.5mm x 45mm | 4 |
| AAFA45050 | High Top Cortical Polyaxial Screw, 4.5mm x 50mm | 4 |
| AAFA55030 | High Top Cortical Polyaxial Screw, 5.5mm x 30mm | 4 |
| AAFA55035 | High Top Cortical Polyaxial Screw, 5.5mm x 35mm | 4 |
| AAFA55040 | High Top Cortical Polyaxial Screw, 5.5mm x 40mm | 4 |
| AAFA55045 | High Top Cortical Polyaxial Screw, 5.5mm x 45mm | 4 |
| AAFA55050 | High Top Cortical Polyaxial Screw, 5.5mm x 50mm | 4 |
| AAFA55055 | High Top Cortical Polyaxial Screw, 5.5mm x 55mm | 4 |
| AAFA55060 | High Top Cortical Polyaxial Screw, 5.5mm x 60mm | 4 |
| AAFA65030 | High Top Cortical Polyaxial Screw, 6.5mm x 30mm | 4 |
| AAFA65035 | High Top Cortical Polyaxial Screw, 6.5mm x 35mm | 4 |

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# OLYMPIC IMPLANT OFFERING

## HIGH TOP POLYAXIAL SCREWS (CORTICAL CANCELLOUS)

| Part Number | Description | Qty |
|---|---|---|
| AAFA65040 | High Top Cortical Polyaxial Screw, 6.5mm x 40mm | 4 |
| AAFA65045 | High Top Cortical Polyaxial Screw, 6.5mm x 45mm | 4 |
| AAFA65050 | High Top Cortical Polyaxial Screw, 6.5mm x 50mm | 4 |
| AAFA65055 | High Top Cortical Polyaxial Screw, 6.5mm x 55mm | 4 |
| AAFA65060 | High Top Cortical Polyaxial Screw, 7.5mm x 60mm | 4 |
| AAGA75030 | High Top Cortical Polyaxial Screw, 7.5mm x 30mm | 4 |
| AAGA75035 | High Top Cortical Polyaxial Screw, 7.5mm x 35mm | 4 |
| AAGA75040 | High Top Cortical Polyaxial Screw, 7.5mm x 40mm | 4 |
| AAGA75045 | High Top Cortical Polyaxial Screw, 7.5mm x 45mm | 4 |
| AAGA75050 | High Top Cortical Polyaxial Screw, 7.5mm x 50mm | 4 |
| AAGA75055 | High Top Cortical Polyaxial Screw, 7.5mm x 55mm | 4 |
| AAGA75060 | High Top Cortical Polyaxial Screw, 7.5mm x 60mm | 4 |

## POLYAXIAL SCREWS (FULL CORTICAL)

| Part Number | Description | Qty |
|---|---|---|
| AAUA45025 | Full Cortical Polyaxial Screw, 4.5mm x 25mm | 8 |
| AAUA45030 | Full Cortical Polyaxial Screw, 4.5mm x 30mm | 8 |
| AAUA45035 | Full Cortical Polyaxial Screw, 4.5mm x 35mm | 8 |
| AAUA45040 | Full Cortical Polyaxial Screw, 4.5mm x 40mm | 8 |
| AAUA45045 | Full Cortical Polyaxial Screw, 4.5mm x 45mm | 8 |
| AAUA50025 | Full Cortical Polyaxial Screw, 5.0mm x 25mm | 8 |
| AAUA50030 | Full Cortical Polyaxial Screw, 5.0mm x 30mm | 8 |
| AAUA50035 | Full Cortical Polyaxial Screw, 5.0mm x 35mm | 8 |
| AAUA50040 | Full Cortical Polyaxial Screw, 5.0mm x 40mm | 8 |
| AAUA50045 | Full Cortical Polyaxial Screw, 5.0mm x 45mm | 8 |
| AAUA55025 | Full Cortical Polyaxial Screw, 5.5mm x 25mm | 8 |
| AAUA55030 | Full Cortical Polyaxial Screw, 5.5mm x 30mm | 8 |
| AAUA55035 | Full Cortical Polyaxial Screw, 5.5mm x 35mm | 8 |
| AAUA55040 | Full Cortical Polyaxial Screw, 5.5mm x 40mm | 8 |
| AAUA55045 | Full Cortical Polyaxial Screw, 5.5mm x 45mm | 8 |
| AAUA60025 | Full Cortical Polyaxial Screw, 6.0mm x 25mm | 8 |
| AAUA60030 | Full Cortical Polyaxial Screw, 6.0mm x 30mm | 8 |
| AAUA60035 | Full Cortical Polyaxial Screw, 6.0mm x 35mm | 8 |
| AAUA60040 | Full Cortical Polyaxial Screw, 6.0mm x 40mm | 8 |
| AAUA60045 | Full Cortical Polyaxial Screw, 6.0mm x 45mm | 8 |

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# OLYMPIC IMPLANT OFFERING

## RODS - STRAIGHT

| Part Number | Description | Qty |
|---|---|---|
| ACAB55030 | 5.5 Rod, Straight, TiCP, 30mm | 2 |
| ACAB55040 | 5.5 Rod, Straight, TiCP, 40mm | 2 |
| ACAB55050 | 5.5 Rod, Straight, TiCP, 50mm | 2 |
| ACAB55060 | 5.5 Rod, Straight, TiCP, 60mm | 2 |
| ACAB55070 | 5.5 Rod, Straight, TiCP, 70mm | 2 |
| ACAB55080 | 5.5 Rod, Straight, TiCP, 80mm | 2 |
| ACAB55090 | 5.5 Rod, Straight, TiCP, 90mm | 2 |
| ACAB55100 | 5.5 Rod, Straight, TiCP, 100mm | 2 |
| ACAB60030 | 6.0 Rod, Straight, TiCP, 30mm | 2 **** |
| ACAB60040 | 6.0 Rod, Straight, TiCP, 40mm | 2 **** |
| ACAB60050 | 6.0 Rod, Straight, TiCP, 50mm | 2 **** |
| ACAB60060 | 6.0 Rod, Straight, TiCP, 60mm | 2 **** |
| ACAB60070 | 6.0 Rod, Straight, TiCP, 70mm | 2 **** |
| ACAB60080 | 6.0 Rod, Straight, TiCP, 80mm | 2 **** |
| ACAB60090 | 6.0 Rod, Straight, TiCP, 90mm | 2 **** |
| ACAB60100 | 6.0 Rod, Straight, TiCP, 100mm | 2 **** |

## RODS - LORDOTIC

| Part Number | Description | Qty |
|---|---|---|
| ACBB55030 | 5.5 Rod, Lordotic, TiCP, 30mm | 2 |
| ACBB55035 | 5.5 Rod, Lordotic, TiCP, 35mm | 4 |
| ACBB55040 | 5.5 Rod, Lordotic, TiCP, 40mm | 4 |
| ACBB55045 | 5.5 Rod, Lordotic, TiCP, 45mm | 4 |
| ACBB55050 | 5.5 Rod, Lordotic, TiCP, 50mm | 4 |
| ACBB55055 | 5.5 Rod, Lordotic, TiCP, 55mm | 4 |
| ACBB55060 | 5.5 Rod, Lordotic, TiCP, 60mm | 4 |
| ACBB55065 | 5.5 Rod, Lordotic, TiCP, 65mm | 4 |
| ACBB55070 | 5.5 Rod, Lordotic, TiCP, 70mm | 4 |
| ACBB55075 | 5.5 Rod, Lordotic, TiCP, 75mm | 4 |
| ACBB55080 | 5.5 Rod, Lordotic, TiCP, 80mm | 4 |
| ACBB55085 | 5.5 Rod, Lordotic, TiCP, 85mm | 2 |
| ACBB55090 | 5.5 Rod, Lordotic, TiCP, 90mm | 2 |
| ACBB55095 | 5.5 Rod, Lordotic, TiCP, 95mm | 2 |
| ACBB55100 | 5.5 Rod, Lordotic, TiCP, 100mm | 2 |
| ACBB55110 | 5.5 Rod, Lordotic, TiCP, 110mm | 2 |
| ACBB55120 | 5.5 Rod, Lordotic, TiCP, 120mm | 2 |
| ACBB60030 | 6.0 Rod, Lordotic, TiCP, 30mm | 2 **** |
| ACBB60035 | 6.0 Rod, Lordotic, TiCP, 35mm | 4 **** |
| ACBB60040 | 6.0 Rod, Lordotic, TiCP, 40mm | 4 **** |
| ACBB60045 | 6.0 Rod, Lordotic, TiCP, 45mm | 4 **** |
| ACBB60050 | 6.0 Rod, Lordotic, TiCP, 50mm | 4 **** |
| ACBB60055 | 6.0 Rod, Lordotic, TiCP, 55mm | 4 **** |
| ACBB60060 | 6.0 Rod, Lordotic, TiCP, 60mm | 4 **** |
| ACBB60065 | 6.0 Rod, Lordotic, TiCP, 65mm | 4 **** |
| ACBB60070 | 6.0 Rod, Lordotic, TiCP, 70mm | 4 **** |
| ACBB60075 | 6.0 Rod, Lordotic, TiCP, 75mm | 4 **** |
| ACBB60080 | 6.0 Rod, Lordotic, TiCP, 80mm | 4 **** |
| ACBB60085 | 6.0 Rod, Lordotic, TiCP, 85mm | 2 **** |
| ACBB60090 | 6.0 Rod, Lordotic, TiCP, 90mm | 2 **** |
| ACBB60095 | 6.0 Rod, Lordotic, TiCP, 95mm | 2 **** |
| ACBB60100 | 6.0 Rod, Lordotic, TiCP, 100mm | 2 **** |
| ACBB60110 | 6.0 Rod, Lordotic, TiCP, 110mm | 2 **** |
| ACBB60120 | 6.0 Rod, Lordotic, TiCP, 120mm | 2 **** |

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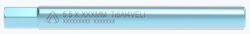
# OLYMPIC IMPLANT OFFERING

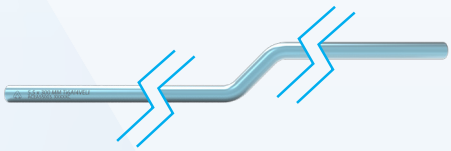
## RODS - HEX

| Part Number | Description | Qty |
|---|---|---|
| ACCA55300 | 5.5 Rod, Hex, Ti6Al4V ELI, 300mm | 2 |
| ACCA55500 | 5.5 Rod, Hex, Ti6Al4V ELI, 500mm | 2 |
| ACCC55300 | 5.5 Rod, Hex, CoCr, 300mm | 2 / OPT |
| ACCC55500 | 5.5 Rod, Hex, CoCr, 500mm | 2 |
| ACCC60300 | 6.0 ROD, HEX, CoCr, 300mm | 4 **** |
| ACCA60500 | 6.0 ROD, HEX, Ti6Al4VELI, 500mm | 4 **** |
| ACCC60500 | 6.0 ROD, HEX, CoCr, 500mm | 4 **** |



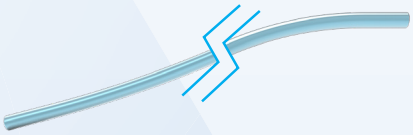
## RODS – Z ROD

| Part Number | Description | Qty |
|---|---|---|
| ACEA55003 | 5.5 Z-ROD, Ti6Al4VELI, 300mm | 2 ** |
| ACEA60003 | 6.0 Z-ROD, Ti6Al4VELI, 300mm | 2 ** |



## SCOLIOSIS RODS, TI6AI4VEIL, 300MM

| Part Number | Description | Qty |
|---|---|---|
| ACHA55550 | SCOLIOSIS ROD, TI64, 5.5mm - 550mm | 2/OPT |
| ACHA60550 | SCOLIOSIS ROD, TI64, 6.0mm - 550mm | 2/OPT |
| ACHB55550 | SCOLIOSIS ROD, COCR, 5.5mm - 550mm | 2/OPT |
| ACHB60550 | SCOLIOSIS ROD, COCR, 6.0mm - 550mm | 2/OPT |



## LAMINA HOOKS

| Part Number | Description | Qty |
|---|---|---|
| AFAA0WLS0 | Lamina Hook, Large | 8 *** |
| AFAA0WMS0 | Lamina Hook, medium | 8 *** |
| AFAA0WSS0 | Lamina Hook, small | 8 *** |
| AFAA0NLS0 | Lamina Hook large, narrow | 4 *** |
| AFAA0NMS0 | Lamina Hook medium, narrow | 4 *** |
| AFAA0NSS0 | Lamina Hook small, narrow | 4 *** |
| AFAA0WLH0 | Lamina Hook, large, extended | 2 *** |
| AFAA0WMH0 | Lamina Hook, medium, extended | 2 *** |
| AFAA0WSH0 | Lamina Hook, small, extended | 2 *** |
| AFAA0WBS0 | Lamina Hook, X Large | 2 / OPT *** |

## RAMPED LAMINA HOOKS

| Part Number | Description | Qty |
|---|---|---|
| AFBA0WMS0 | Lamina Hook medium, ramped | 4 *** |
| AFBA0NMS0 | Lamina Hook, medium, ramped, narrow | 4 *** |
| AFBA0WSS0 | Lamina Hook small, ramped | 4 *** |
| AFBA0NSS0 | Lamina Hook, small, ramped, narrow | 4 *** |

## RAMPED OFFSET LAMINA HOOKS

| Part Number | Description | Qty |
|---|---|---|
| AFGALNMS0 | Ramped Offset Lamina Hook, Medium, Narrow, Left | 2 *** |
| AFGARNMS0 | Ramped Offset Lamina Hook, Medium, Narrow, Right | 2 *** |
| AFGALNSS0 | Ramped Offset Lamina Hook, Small, Narrow, Left | 2 *** |
| AFGARNSS0 | Ramped Offset Lamina Hook, Small, Narrow, Right | 2 *** |
| AFGALWMS0 | Ramped Offset Lamina Hook, Medium, Wide, Left | 2 / OPT *** |

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# OLYMPIC IMPLANT OFFERING

## RAMPED OFFSET LAMINA HOOKS

| Part Number | Description | Qty |
|---|---|---|
| AFGARWMS0 | Ramped Offset Lamina Hook, Medium, Wide, Right | 2 / OPT *** |
| AFGALWSS0 | Ramped Offset Lamina Hook, Small, Wide, Left | 2 / OPT *** |
| AFGARWSS0 | Ramped Offset Lamina Hook, Small, Wide, Right | 2 / OPT *** |

## OFFSET HOOKS

| Part Number | Description | Qty |
|---|---|---|
| AFDARWLS0 | Offset Hook, large, right | 2 *** |
| AFDALWLS0 | Offset Hook, large, left | 2 *** |
| AFDARWSS0 | Offset Hook, small, right | 2 *** |
| AFDALWSS0 | Offset Hook, small, left | 2 *** |

## PEDICAL HOOKS

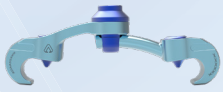
| Part Number | Description | Qty |
|---|---|---|
| AFEA0PLS0 | Pedicle Hook, large | 2 *** |
| AFEA0PMS0 | Pedicle Hook, medium | 4 *** |
| AFEA0PSS0 | Pedicle Hook, small | 4 *** |
| AFEA0PPS0 | Pedicle Hook, extra small | 2 *** |

## TRANSVERSE HOOKS

| Part Number | Description | Qty |
|---|---|---|
| AFFARWBS0 | Transverse Process Hook, x large, right | 2 *** |
| AFFALWBS0 | Transverse Process Hook, x large, left | 2 *** |
| AFFARWLS0 | Transverse Process Hook, large, right | 2 *** |
| AFFALWLS0 | Transverse process Hook, large, left | 2 *** |

## CROSS LINKS

| Part Number | Description | Qty |
|---|---|---|
| ADAA00001 | 5.5 / 6.0 Cross Link, variable, xxsml | 2 |
| ADAA00002 | 5.5 / 6.0 Cross Link, variable, xsml | 2 |
| ADAA00003 | 5.5 / 6.0 Cross Link, variable, sml | 2 |
| ADAA00004 | 5.5 / 6.0 Cross Link, variable, med | 2 |
| ADAA00005 | 5.5 / 6.0 Cross Link, variable, lrg | 2 |
| ADAA00006 | 5.5 / 6.0 Cross Link, variable, xlrg | 2 |
| ADAA00007 | 5.5 / 6.0 Cross Link, variable, xxlrg | 2 |
| ADBA00016 | 5.5 / 6.0 Cross Link fixed, 16mm | 2/OPT |
| ADBA00019 | 5.5 / 6.0 Cross Link fixed, 19mm | 2/OPT |
| ADBA00022 | 5.5 / 6.0 Cross Link fixed, 22mm | 2/OPT |
| ADBA00025 | 5.5 / 6.0 Cross Link fixed, 25mm | 2/OPT |
| ADBA00028 | 5.5 / 6.0 Cross Link fixed, 28mm | 2/OPT |
| ADBA00031 | 5.5 / 6.0 Cross Link fixed, 31mm | 2/OPT |
| ADBA00034 | 5.5 / 6.0 Cross Link fixed, 34mm | 2/OPT |
| ADBA00037 | 5.5 / 6.0 Cross Link fixed, 37mm | 2/OPT |



## SACROILIAC CONNECTORS

| Part Number | Description | Qty |
|---|---|---|
| AEQA60002 | Sacroiliac Connector, Variable, Xsml, 25mm | 1/OPT |
| AEQA60006 | Sacroiliac Connector, Variable, Sml, 25mm | 1/OPT |
| AEQA60010 | Sacroiliac Connector, Variable, Med, 25mm | 1/OPT |
| AEQA60014 | Sacroiliac Connector, Variable, Lrg, 25mm | 1/OPT |
| AEQA60018 | Sacroiliac Connector, Variable, Xlrg, 25mm | 1/OPT |

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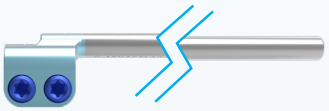
# OLYMPIC IMPLANT OFFERING

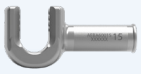
## ROD CONNECTORS

| Part Number | Description | Qty |
|---|---|---|
| AEKA55L12 | Rod Extension Connector, Left, 5.5, 5.5, Side Loading, Double, Wide, 300mm | 1** |
| AEKA55R12 | Rod Extension Connector, Right, 5.5, 5.5, Side Loading, Double, Wide, 300mm | 1** |
| AEKA55L24 | Rod Extension Connector, Left, 5.5, 6.0, Side Loading, Double, Wide, 300mm | 1** |
| AEKA55R24 | Rod Extension Connector, Right, 5.5, 6.0, Side Loading, Double, Wide, 300mm | 1** |



## LATERAL ROD CONNECTORS

| Part Number | Description | Qty |
|---|---|---|
| AEAA55015 | Lateral Rod Connector, 5.5, Closed, 15mm | 2** |
| AEAA55030 | Lateral Rod Connector, 5.5, Closed, 30mm | 2** |
| AEAA55045 | Lateral Rod Connector, 5.5, Closed, 45mm | 2** |
| AEAA55060 | Lateral Rod Connector, 5.5, Closed, 60mm | 2** |
| AEBA60015 | Lateral Rod Connector, 6.0, Top Loading, 15mm | 2** |
| AEBA60030 | Lateral Rod Connector, 6.0, Top Loading, 30mm | 2** |
| AEBA60045 | Lateral Rod Connector, 6.0, Top Loading, 45mm | 2** |
| AEBA60060 | Lateral Rod Connector, 6.0, Top Loading, 60mm | 2** |
| AECA55015 | Lateral Rod Connector, 5.5, Side Loading, 15mm | 2** |
| AECA55030 | Lateral Rod Connector, 5.5, Side Loading, 30mm | 2** |
| AECA55045 | Lateral Rod Connector, 5.5, Side Loading, 45mm | 2** |
| AECA55060 | Lateral Rod Connector, 5.5, Side Loading, 60mm | 2** |
| AEAA63515 | Lateral Rod Connector, 6.35, Closed, 15mm | 2** |
| AEAA63530 | Lateral Rod Connector, 6.35, Closed, 30mm | 2** |
| AEAA63545 | Lateral Rod Connector, 6.35, Closed, 45mm | 2** |
| AEAA63560 | Lateral Rod Connector, 6.35, Closed, 60mm | 2** |
| AECA60015 | Lateral Rod Connector, 6.0, Side Loading, 15mm | 2** |
| AECA60030 | Lateral Rod Connector, 6.0, Side Loading, 30mm | 2** |
| AECA60045 | Lateral Rod Connector, 6.0, Side Loading, 45mm | 2** |
| AECA60060 | Lateral Rod Connector, 6.0, Side Loading, 60mm | 2** |



## INLINE ROD CONNECTORS

| Part Number | Description | Qty |
|---|---|---|
| AEDA55002 | Inline Rod Connector, 5.5, Medium | 2** |
| AEDA63502 | Inline Rod Connector, 6.35, Medium | 2** |
| AELA35102 | Inline Transition Rod Connector, Medium, 3.5mm, 5.5mm | 2** |
| AELA35106 | Inline Transition Rod Connector, Medium, 3.5mm, 6.35mm | 2** |
| AELA55002 | Inline Transition Rod Connector, Medium, 5.5mm, 6.35mm | 2** |

## OFFSET ROD CONNECTORS

| Part Number | Description | Qty |
|---|---|---|
| AEEA55002 | Offset Rod Connector, 5.5, Wide | 2** |
| AEEA55016 | Offset Rod Connector, 5.5, Double, Wide Medium | 2** |
| AEFA55001 | Offset Rod Connector, 6.0, 5.5, Std, Top/Side Loading | 2** |
| AEFA55003 | Offset Rod Connector, 6.0, 5.5, X Wide, Top/Side Loading | 2** |
| AEFA55004 | Offset Rod Connector, 6.0, 5.5, XXWide, Top/Side Loading | 2** |
| AENA55002 | Offset Rod Connector, 5.5, Single, Wide, Side / Side Loading | 2** |
| AENA55003 | Offset Rod Connector, 5.5, Single, X Wide, Side / Side Loading | 2** |
| AENA55004 | Offset Rod Connector, 5.5, Single, XX Wide, Side / Side Loading | 2** |
| AENA55012 | Offset Rod Connector, 5.5, Double, Wide, Side / Side Loading | 2** |
| AERA60001 | Offset Rod Connector, 6.0, 6.0, Std, Top/Top Loading | 2** |
| AERA60003 | Offset Rod Connector, 6.0, 6.0, X Wide, Top/Top Loading | 2** |
| AERA60004 | Offset Rod Connector, 6.0, 6.0, XX Wide, Top/Top Loading | 2** |
| AEEA63502 | Offset Rod Connector, 6.35, Wide | 2** |
| AEEA63512 | Offset Rod Connector, 6.35, Double, Wide Medium | 2** |

*Deformity Container ** Universal Connector Container ***Hook Container ****6.0 Rod Container

# OLYMPIC IMPLANT OFFERING

## OFFSET ROD CONNECTORS

| Part Number | Description | Qty |
|---|---|---|
| AEFA60001 | Offset Rod Connector, 6.0, 6.0, Std, Top/Side Loading | 2 ** |
| AENA60002 | Offset Rod Connector, 6.0, Single, Wide, Side/Side Loading | 2 ** |
| AENA60012 | Offset Rod Connector, 6.0, Double, Wide, Side/Side Loading | 2 ** |
| AEFA63501 | Offset Rod Connector, 6.0, 6.35, Std Top/Side Loading | 2 ** |
| AERA35001 | Offset Rod Connector, 6.0, 3.5, Std, Top/Top Loading | 2 ** |

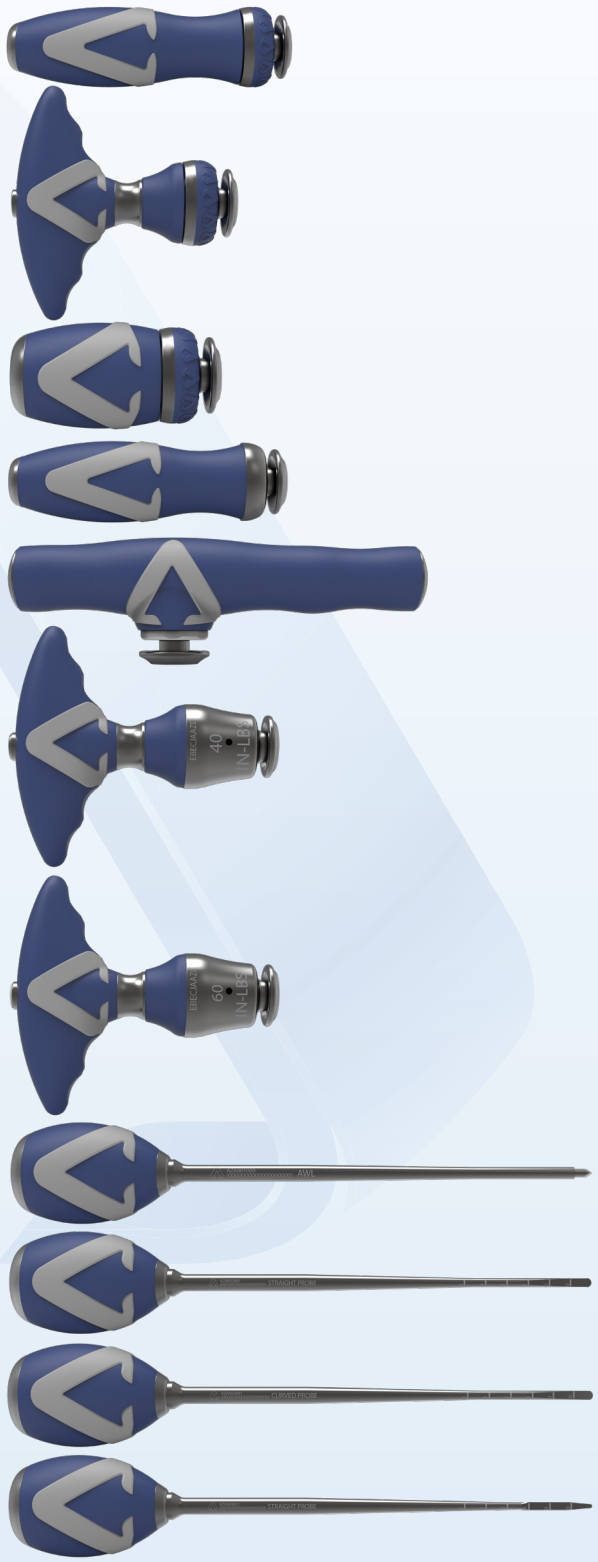
## OFFSET TRANSITION ROD CONNECTORS

| Part Number | Description | Qty |
|---|---|---|
| AEHA55004 | Offset Transition Rod Connector, Wide, Closed/Side Loading, 5.5mm, 5.5mm | 2 ** |
| AEHA55007 | Offset Transition Rod Connector, X Wide, Closed/Side Loading, 5.5mm, 5.5mm | 2 ** |
| AEHA55010 | Offset Transition Rod Connector, XX Wide, Closed/Side Loading, 5.5mm, 5.5mm | 2 ** |
| AEHA63501 | Offset Transition Rod Connector, Std, Closed/Side Loading, 6.35mm, 6.0mm | 2 ** |
| AEGA35102 | Offset Transition Rod Connector, Wide, 3.5mm, 5.5mm | 2 ** |
| AEGA35104 | Offset Transition Rod Connector, Wide, 3.5mm, 6.35mm | 2 ** |
| AEHA35102 | Offset Transition Rod Connector, Wide, Closed/Side Loading, 3.5mm, 5.5mm | 2 ** |
| AEHA35104 | Offset Transition Rod Connector, Wide, Closed/Side Loading, 3.5mm, 6.0mm | 2 ** |
| AEHA55002 | Offset Transition Rod Connector, Std, Closed/Side Loading, 5.5mm, 6.0mm | 2 ** |
| AEHA55003 | Offset Transition Rod Connector, Std, Closed/Side Loading, 5.5mm, 6.35mm | 2 ** |
| AEMA55001 | Offset Transition Rod Connector, 5.5, 6.0, Single, Side / Side Loading | 2 ** |
| AEMA55002 | Offset Transition Rod Connector, 5.5, 6.35, Single, Side / Side Loading | 2 ** |
| AEMA55006 | Offset Transition Rod Connector, 5.5, 3.5, Single, Wide, Side / Side Loading | 2 ** |
| AEMA60001 | Offset Transition Rod Connector, 6.0, 6.35, Single, Side / Side Loading | 2 ** |
| AEMA60004 | Offset Transition Rod Connector, 6.0, 3.5, Single, Wide, Side / Side Loading | 2 ** |
| AEMA55011 | Offset Transition Rod Connector, 5.5, 6.0, Double, Side / Side Loading | 2 ** |
| AEMA55012 | Offset Transition Rod Connector, 5.5, 6.35, Double, Side / Side Loading | 2 ** |
| AEMA55016 | Offset Transition Rod Connector, 5.5, 3.5, Double, Wide, Side / Side Loading | 2 ** |
| AEMA60011 | Offset Transition Rod Connector, 6.0, 6.35, Double, Side / Side Loading | 2 ** |
| AEMA60014 | Offset Transition Rod Connector, 6.0, 3.5, Double, Wide, Side / Side Loading | 2 ** |

*Deformity Container ** Universal Connector Container ***Hook Container ****6.0 Rod Container

# OLYMPIC DEGENERATIVE INSTRUMENT OFFERING

| Part Number | Description | Qty |
|---|---|---|
| EAECDUBBZ | AXIAL HANDLE, L, 1/4 SQ, RATCHET, ALUMINUM CORE, INTERNAL, CANNULATED, CANNULATED CAP | 2 |
| EBECDZBBZ | T-HANDLE, L, 1/4 SQ, RATCHET, ALUMINUM CORE, INTERNAL, CANNULATED, CANNULATED CAP | 2 |
| EDECDTBBZ | EGG, L , 1/4 SQ, RATCHET, ALUMINUM CORE, INTERNAL, CANNULATED, CANNULATED CAP | 1 |
| EAECAUBBZ | AXIAL HANDLE, L, 1/4 SQ, FIXED, ALUMINUM CORE, INTERNAL, CANNULATED, CANNULATED CAP | 1 |
| ECECGAAZF | OFFSET-T, L, 1/4 SQ, TORQUE, ALUMINUM CORE, INTERNAL, NON-CANNULATED, 100 IN-LBS | 1 |
| EBECJAAZC | T-HANDLE, L, 1/4 SQ, TORQUE, STAINLESS STEEL CORE, INTERNAL, NON-CANNULATED, 40 IN-LBS | 1 |
| EBECJAAZD | T-HANDLE, L, 1/4 SQ, TORQUE, STAINLESS STEEL CORE, INTERNAL, NON-CANNULATED, 60 IN-LBS | 1 |
| AZA001000 | Lumbar Pedicle Awl | 1 OPT |
| AZA002001 | Lumbar Pedicle Probe, Straight | 1 |
| AZA002002 | Lumbar Pedicle Probe, Curved | 1 |
| AZA003001 | Thoracic Pedicle Probe, Straight | 1 |



# OLYMPIC DEGENERATIVE INSTRUMENT OFFERING

| Part Number | Description | Qty |
|---|---|---|
| AZA003002 | Thoracic Pedicle Probe, Curved | 1 |
| AZA004000 | Ball Tip Probe | 2 |
| AZA005035 | Bone Tap, 3.5mm | 1 |
| AZA005040 | Bone Tap, 4.0mm | 1 |
| AZA005045 | Bone Tap, 4.5mm | 1 |
| AZA005050 | Bone Tap, 5.0mm | 1 |
| AZA005060 | Bone Tap, 6.0mm | 1 |
| AZA005070 | Bone Tap, 7.0mm | 1 |
| AZA005080 | Bone Tap, 8.0mm | 1 / OPT |
| AZA005090 | Bone Tap, 9.0mm | 1 / OPT |
| AZA005100 | Bone Tap, 10.0mm | 1 / OPT |
| AZA059035 | Cortical Tap, 3.5mm | 1 |
| AZA059040 | Cortical Tap, 4.0mm | 1 |
| AZA059045 | Cortical Tap, 4.5mm | 1 |
| AZA059055 | Cortical Tap, 5.5mm | 1 |
| AZA059065 | Cortical Tap, 6.5mm | 1 |
| AZA059075 | Cortical Tap, 7.5mm | 1 |
| AZA006000 | Screw Driver, T25 | 2 |
| AZA007000 | Head Manipulator | 1 |
| AZA008000 | Rod Connector Torque, T20 | 2 |
| AZA008001 | Screw Height Adjuster, T25 | 1 |
| AZA032200 | Rod Template 200mm | 1 |
| AZA027000 | Rod Bender | 1 |

# OLYMPIC DEGENERATIVE INSTRUMENT OFFERING

| Part Number | Description | Qty |
|---|---|---|
| AZA02800R | 5.5 In Situ Rod Bender, Right | 1 |
| AZA02800L | 5.5 In Situ Rod Bender, Left | 1 |
| AZA009000 | 5.5 Rod Inserter | 1 |
| AZA010000 | 5.5 Rod Gripper | 1 |
| AZA011000 | Rod Pusher | 1 |
| AZA012000 | Rod Rocker | 1 |
| AZA013000 | Single Action Reducer | 1 |
| AZA014000 | Sequential Action Reducer | 2 |
| AZA015000 | Clip Reducer | 2 |
| AZA016000 | Reducer Driver Attachment | 1 |

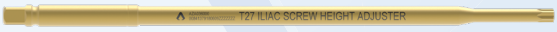
# OLYMPIC DEGENERATIVE INSTRUMENT OFFERING

| Part Number | Description | Qty |
|---|---|---|
| AZA017000 | Short Set Screw Inserter, T30 | 2 |
| AZA018000 | Long Set Screw Inserter, T30 | 2 |
| AZA031000 | Distractor | 1 |
| AZA030000 | Compressor | 1 |
| AZA019006 | 5.5 Counter Torque | 1 |
| AZA020001 | Short Set Screw Torque Shaft, T30 | 2 |
| AZA020002 | Long Set Screw Torque Shaft, T30 | 1 |

# OLYMPIC DEGENERATIVE INSTRUMENT OFFERING

| Part Number | Description | Qty |
|---|---|---|
| AZA021000 | Screw Head Mobilizer | 1 |
| AZA022020 | High Top Screw Driver, Cannulated, T25 | 1 OPT |
| AZA022000 | High Top Screw Driver, T25 | 1 OPT |
| AZA023000 | High Top Tab Breaker | 1 OPT |
| AZA024000 | Rod Connector Provisional Driver, T20 | 1 |
| AZA025500 | Guide Wire, 1.4mm x 500mm, Non-Sterile | 4 / OPT |
| AZA050045 | Navigated Bone Tap, 4.5mm | 1 / OPT |
| AZA050050 | Navigated Bone Tap, 5.0mm | 1 / OPT |
| AZA050060 | Navigated Bone Tap, 6.0mm | 1 / OPT |
| AZA050070 | Navigated Bone Tap, 7.0mm | 1 / OPT |
| AZA050080 | Navigated Bone Tap, 8.0mm | 1 / OPT |
| AZA050090 | Navigated Bone Tap, 9.0mm | 1 / OPT |
| AZA050100 | Navigated Bone Tap, 10.0mm | 1 / OPT |
| AZA060035 | Cortical Navigated Bone Tap, 3.5mm | 1/OPT |
| AZA060040 | Cortical Navigated Bone Tap, 4.0mm | 1/OPT |
| AZA060045 | Cortical Navigated Bone Tap, 4.5mm | 1/OPT |
| AZA060055 | Cortical Navigated Bone Tap, 5.5mm | 1/OPT |
| AZA060065 | Cortical Navigated Bone Tap, 6.5mm | 1/OPT |
| AZA060075 | Cortical Navigated Bone Tap, 7.5mm | 1/OPT |

# OLYMPIC DEGENERATIVE INSTRUMENT OFFERING

| Part Number | Description | Qty | |
|---|---|---|---|
| AZA051000 | Navigated Screw Driver, T25 | 1 / OPT |  |
| EJZCMBBZZ | Power Driver Attachment | 1 / OPT |  |
| AZA054000 | Pedicle Marker Inserter | 1 / OPT |  |
| AZA05200R | Pedicle Marker, Right | 4 / OPT |  |
| AZA05200L | Pedicle Marker, Left | 4 / OPT |  |
| AZA03300 | Hex Rod Wrench | 1/OPT |  |
| AZA034000 | Iliac Screw Driver, T27 | 1/OPT |  |
| AZA036000 | Iliac Screw Height Adjuster, T27 | 1/OPT |   |
| AZA053000 | Screw Height Adjuster, Stick Fit | 1/OPT |   |

# OLYMPIC 6.0
# INSTRUMENT OFFERING

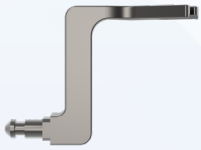
| Part Number | Description | Qty |
|---|---|---|
| AZA02900R | 6.0 In Situ Rod Bender, Right | 1 |
| AZA02900L | 6.0 In Situ Rod Bender, Left | 1 |
| AZA009001 | 6.0 Rod Inserter | 1 |
| AZA010001 | 6.0 Rod Gripper | 1 |
| AZA019007 | 6.0 Counter Torque | 1 |

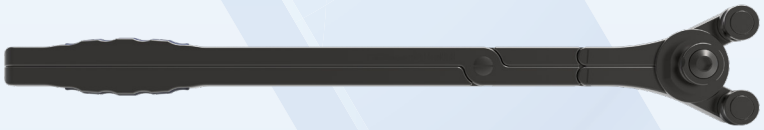
# OLYMPIC DEFORMITY INSTRUMENT OFFERING

| Part Number | Description | Qty |
|---|---|---|
| AZA015000 | Clip Reducer | 10 |
| AZA071010 | Coronal Bender 5.5/6.0, Right | 1 |
| AZA071020 | Coronal Bender 5.5/6.0, Left | 1 |
| AZA005080 | Bone Tap, 8.0mm | 1 |
| AZA005090 | Bone Tap, 9.0mm | 1 |
| AZA005100 | Bone Tap, 10.0mm | 1 |
| AZA014000 | Sequential Action Reducer | 4 |
| AZA032500 | Rod Template, 500mm | 1 |
| AZA070000 | 2 Level Compressor, Handle | 1 |

# OLYMPIC DEFORMITY INSTRUMENT OFFERING

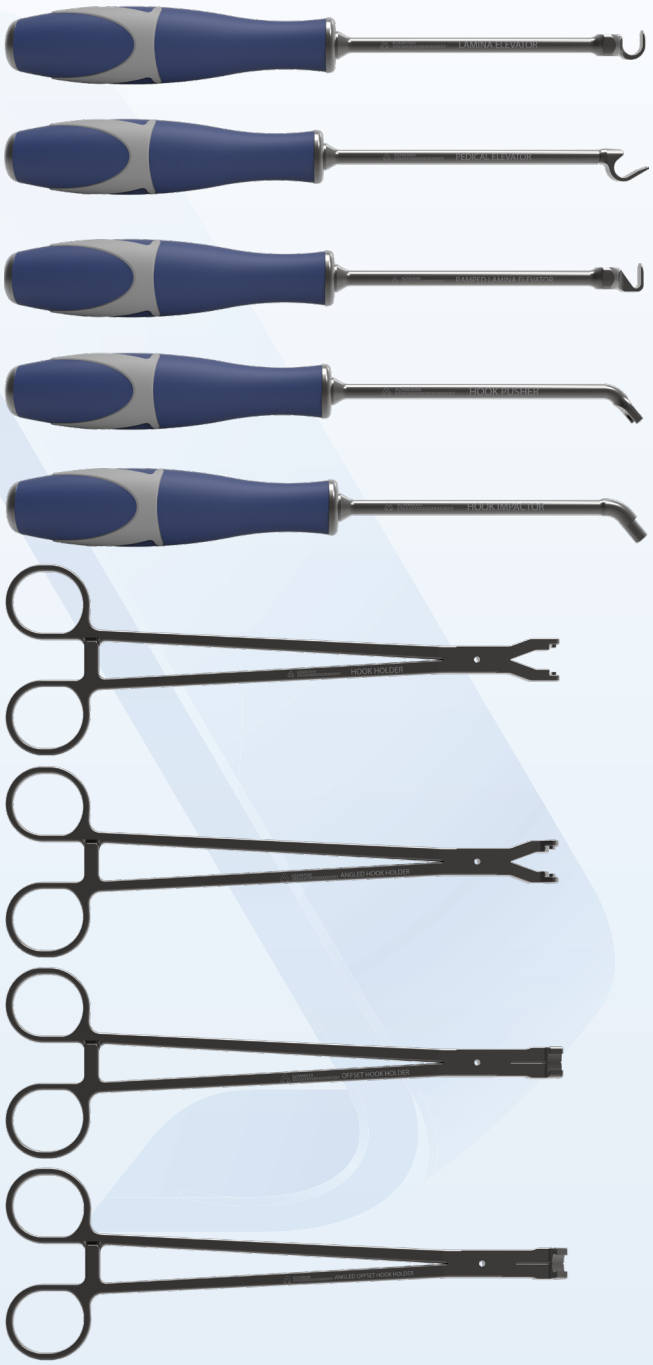
| Part Number | Description | Qty |
|---|---|---|
| AZA07001R | 2 Level Compressor, 2 Level Tip, Right | 1 |
| AZA07001L | 2 Level Compressor, 2 Level Tip, Left | 1 |
| AZA07002R | 2 Level Compressor, 1 Level Tip, Right | 1 |
| AZA07002L | 2 Level Compressor, 1 Level Tip, Left | 1 |
| AZA076000 | Double Action Rod Bender | 1 |
| AZA075000 | Rod Rotation Gripper | 2 |





# OLYMPIC DEFORMITY INSTRUMENT OFFERING

| Part Number | Description | Qty |
|---|---|---|
| AZA061000 | Lamina Elevator, Large, Wide | 1 |
| AZA063000 | Pedicle Elevator, Large | 1 |
| AZA064000 | Ramped Lamina Elevator, Large, Wide | 1 |
| AZA065000 | Hook Pusher | 1 |
| AZA066000 | Hook Impactor | 1 |
| AZA067010 | Straight Hook Holder | 1 |
| AZA067020 | Angled Hook Holder | 1 |
| AZA068010 | Straight Offset Hook Holder | 1 |
| AZA068020 | Angled Offset Hook Holder | 1 |



OLYMPIC
POSTERIOR SPINAL FIXATION SYSTEM

# INSTRUCTIONS FOR USE

**1.0 IMPORTANT NOTE TO OPERATING SURGEON**: OLYMPIC Posterior Spinal Fixation System spinal implants, like any other temporary internal fixation devices, have a finite useful life. The patient's activity level has a significant impact on this useful life. Your patient must be informed that any activity increases the risk of loosening, bending, or breaking of the implant components. It is essential to instruct patients about restrictions to their activities in the postoperative period and to examine patients postoperatively to evaluate the development of the fusion mass and the status of the implant components. Even if solid bone fusion occurs, implant components may nevertheless bend, break, or loosen. Therefore, the patient must be made aware that implant components may bend, break, or loosen even though restrictions in activity are followed.

Because of the limitations imposed by anatomic considerations and modern surgical materials, metallic implants cannot be made to last indefinitely. Their purpose is to provide temporary internal support while the fusion mass is consolidating. These types of implants are more likely to fail if no bone graft is used, if a pseudarthrosis develops, or if patients have severe or multiple preoperative curves.

The surgeon may remove these implants after bone fusion occurs. The possibility of a second surgical procedure must be discussed with the patient, and the risks associated with a second surgical procedure must also be discussed. If the implants do break, the decision to remove them must be made by the physician who must consider the condition of the patient and the risks associated with the presence of the broken implant.

**2.0 DESCRIPTION**: The OLYMPIC Posterior Spinal Fixation System is a top loading thoracolumbar, sacral, and iliac fixation system designed to provide fixation during the fusion process. The system is composed of preassembled polyaxial screws, monoaxial screws, rods, cross connectors, and rod connectors. The system is supported by a comprehensive set of instruments to install the implants within the system. All implant components are manufactured from the materials listed in the table below.

| Material | Conforming Standard |
|---|---|
| TiCP | ASTM F67 |
| CoCr | ASTM F1537 |
| Ti-6Al-4V ELI | ASTM F136 |
| Elgiloy | ASTM F1058 |
| Nitinol #1 | ASTM F2063 |

The NAVIGATED INSTRUMENT SYSTEM is comprised of nonsterile, reusable instruments including taps and drivers that can be operated manually. These instruments are intended to be used with the Medtronic StealthStation® System (v 2.1.0) and are manufactured from stainless steel, as specified in ASTM F899.

**3.0 CAUTION**: Federal law (USA) restricts this device to sale and use by, or on the order of a physician. All implants are intended for single use only. The OLYMPIC Posterior Spinal Fixation System must not be reused under any circumstances. These instructions for use are designed to assist in use of the OLYMPIC Posterior Spinal Fixation System and are not a reference for surgical techniques.

**4.0 INDICATIONS:** The OLYMPIC Posterior Spinal Fixation System is intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of thoracic, lumbar, and sacral spine (T1-S2/Ilium): degenerative spondylolisthesis with objective evidence of neurological impairment, fracture, dislocation, deformities or curvatures (i.e. scoliosis, kyphosis, and/or lordosis), spinal tumor, and failed previous fusion (pseudarthrosis). When used as an adjunct to fusion, the OLYMPIC Posterior Spinal Fixation System is intended to be used with autograft/allograft.

In addition, the OLYMPIC Posterior Spinal Fixation System is intended for treatment of severe spondylolisthesis (grades 3 and 4) of the L5-S1 vertebra in skeletally mature patients receiving fusion by autogenous bone graft, having implants attached to the lumbosacral spine and/or ilium with removal of the implants after the attainment of a solid fusion. Levels of pedicle screw fixation for these patients are L3-sacrum/ilium.

When used for posterior non-cervical pedicle screw fixation in pediatric patients, the OLYMPIC Posterior Spinal Fixation System implants are indicated as an adjunct to fusion to treat adolescent idiopathic scoliosis. The OLYMPIC Posterior Spinal Fixation System is intended to be used with autograft and/or allograft. Pediatric pedicle screw fixation is limited to a posterior approach.

The NAVIGATED INSTRUMENT SYSTEM is intended to be used in the preparation and placement of OLYMPIC PSFS screws during spinal surgery to assist the surgeon in precisely locating anatomical structures in either open or minimally invasive procedures. These instruments are designed for use with the Medtronic StealthStation® System, which is indicated for any medical condition in which the use of stereotactic surgery may be appropriate, and where reference to a rigid anatomical structure, such as a skull, a long bone, or vertebra, can be identified relative to a CT or MR based model, fluoroscopy images, or digitized landmarks of the anatomy. Refer to the Astura Navigated Instrument System Instructions For Use (INS-00006) regarding the use of these instruments.

**5.0 CONTRAINDICATIONS:** Disease conditions that have been shown to be safely and predictably managed without the use of internal fixation devices are relative contraindications to the use of these devices. Active systemic infection or infection localized to the site of the proposed implantation are contraindications to implantation. Severe osteoporosis is a relative contraindication because it may prevent adequate fixation of spinal anchors and thus preclude the use of this or any other spinal instrumentation system. Any entity or condition that totally precludes the possibility of fusion, i.e., cancer, kidney dialysis, or osteopenia is a relative contraindication. Other relative contraindications include obesity, certain degenerative diseases, and foreign body sensitivity. In addition, the patient's occupation or activity level or mental capacity may be relative contraindications to this surgery. Specifically, patients who because of their occupation or lifestyle, or because of conditions such as mental illness, alcoholism, or drug abuse, may place undue stresses on the implant during bony healing and may be at higher risk for implant failure. See also the WARNINGS, PRECAUTIONS AND POSSIBLE ADVERSE EFFECTS CONCERNING TEMPORARY METALLIC INTERNAL FIXATION DEVICES section of this insert.

**6.0 POSSIBLE ADVERSE EVENTS**

6.1 Bending or fracture of implant.
6.2 Loosening of the implant.
6.3 Metal sensitivity, or allergic reaction to a foreign body.
6.4 Infection, early or late.
6.5 Nonunion, delayed union.
6.6 Decrease in bone density due to stress shielding.
6.7 Pain, discomfort, or abnormal sensations due to the presence of the device.
6.8 Nerve damage due to surgical trauma or presence of the device. Neurological difficulties including bowel and/or bladder dysfunction, impotence, retrograde ejaculation, and paraesthesia.
6.9 Bursitis.
6.10 Paralysis.
6.11 Dural tears experienced during surgery could result in the need for further surgery for dural repair, a chronic CSF leak or fistula, and possible meningitis.
6.12 Death.
6.13 Vascular damage due to surgical trauma or presence of the device. Vascular damage could result in catastrophic or fatal bleeding. Malposition implants adjacent to large arteries or veins could erode these vessels and cause catastrophic bleeding in the late postoperative period.
6.14 Screw back out, possibly leading to implant loosening, and/or reoperation for device removal.
6.15 Damage to lymphatic vessels and/or lymphatic fluid exudation.
6.16 Spinal cord impingement or damage.
6.17 Fracture of bony structures.
6.18 Degenerative changes or instability in segments adjacent to fused vertebral levels.
6.19 Pediatric specific:
6.19.1 Pedicle screw fixation, such as screw or rod bending, breakage, or loosening, may also occur in pediatric patients. Pediatric patients may be at an increased risk for device-related injury because of their small stature.

**7.0 WARNINGS AND PRECAUTIONS:** Following are specific warnings, precautions, and possible adverse effects that should be understood by the surgeon and explained to the patient. These warnings do not include all adverse effects that can occur with surgery in general, but are important considerations particular to metallic internal fixation devices. General surgical risks should be explained to the patient prior to surgery.

7.1 Warnings
7.1.1 The safety and effectiveness of pedicle screw spinal systems have been established only for spinal conditions with significant mechanical instability or deformity requiring fusion with instrumentation. These conditions are significant mechanical instability or deformity of the thoracic, lumbar, and sacral spine secondary to severe spondylolisthesis (grades 3 and 4) of the L5-S1 vertebra, degenerative spondylolisthesis with objective evidence of neurologic impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudarthrosis). The safety and effectiveness of these devices for any other conditions are unknown.
7.1.2 The safety and effectiveness of this device has not been established for use as part of a growing rod construct. This device is only intended to be used when definitive fusion is being performed at all instrumented levels.
7.1.3 Correct Selection of The Implant Is Extremely Important: The potential for satisfactory fixation is increased by the selection of the proper size, shape, and design of the implant. While proper selection can help minimize risks, the size and shape of human bones present limitations on the size, shape and strength of implants. Metallic internal fixation devices cannot withstand activity levels equal to those placed on normal healthy bone. No implant can be expected to withstand indefinitely the unsupported stress of full weight bearing

7.1.4 Implants Can Break When Subjected to The Increased Loading Associated with Delayed Union or Nonunion: Internal fixation appliances are load-sharing devices which are used to obtain alignment until normal healing occurs. If healing is delayed, or does not occur, the implant may eventually break due to metal fatigue. The degree or success of union, loads produced by weight bearing, and activity levels will, among other conditions, dictate the longevity of the implant. Notches, scratches or bending of the implant during the course of surgery may also contribute to early failure. Patients should be fully informed of the risks of implant failure.

7.1.5 Mixing Metals Can Cause Corrosion: There are many forms of corrosion damage and several of these occur on metals surgically implanted in humans. General or uniform corrosion is present on all implanted metals and alloys. The rate of corrosive attack on metal implant devices is usually very low due to the presence of passive surface films. Dissimilar metals in contact, such as titanium and stainless steel, accelerates the corrosion process of stainless steel and more rapid attack occurs. The presence of corrosion often accelerates fatigue fracture of implants. The amount of metal compounds released into the body system will also increase. Internal fixation devices, such as rods, hooks, etc., which come into contact with other metal objects, must be made from like or compatible metals

7.1.6 PATIENT SELECTION: In selecting patients for internal fixation devices, the following factors can be of extreme importance to the eventual success of the procedure:

7.1.6.1 The patient's weight: An overweight or obese patient can produce loads on the device that can lead to failure of the appliance and the operation.

7.1.6.2 The patient's occupation or activity: If the patient is involved in an occupation or activity that includes heavy lifting, muscle strain, twisting, repetitive bending, stooping, running, substantial walking, or manual labor, he/she should not return to these activities until the bone is fully healed. Even with full healing, the patient may not be able to return to these activities successfully.

7.1.6.3 A condition of senility, mental illness, alcoholism, or drug abuse: These conditions, among others, may cause the patient to ignore certain necessary limitations and precautions in the use of the appliance, leading to implant failure or other complications.

7.1.6.4 Foreign body sensitivity: The surgeon is advised that no preoperative test can completely exclude the possibility of sensitivity or allergic reaction. Patients can develop sensitivity or allergy after implants have been in the body for a period of time.

7.1.6.5 Smoking: Patients who smoke have been observed to experience higher rates of pseudarthrosis following surgical procedures where bone graft is used. Additionally, smoking has been shown to cause diffuse degeneration of intervertebral discs. Progressive degeneration of adjacent segments caused by smoking can lead to late clinical failure (recurring pain) even after successful fusion and initial clinical improvement.

The OLYMPIC Posterior Spinal Fixation System has not been evaluated for safety and compatibility in the MR environment. The OLYMPIC Posterior Spinal Fixation System has not been tested for heating, migration, or image artifact in the MR environment. The safety of OLYMPIC Posterior Spinal Fixation System in the MR environment is unknown. Scanning a patient who has this device may result in patient injury.

7.2 **Precautions**

7.2.1 The implantation of pedicle screw spinal systems should be performed only by experienced spinal surgeons with specific training in the use of this pedicle screw spinal system because this is a technically demanding procedure presenting a risk of serious injury to the patient. The surgeon must be thoroughly knowledgeable not only in the medical and surgical aspects of the implant, but must also be aware of the mechanical and metallurgical limitations of metallic surgical implants. Postoperative care is extremely important. The patient must be instructed in the limitations of the metallic implant and be warned regarding weight bearing and body stresses on the appliance prior to firm bone healing. The patient should be warned that noncompliance with postoperative instructions could lead to failure of the implant and possible need thereafter for additional surgery to remove the device. Refer to the individual system surgical technique manuals for additional important information. A surgical technique can be obtained from the local representative or ASTURA MEDICAL.

7.2.2 During the surgical procedure, the rods may be cut to size and shaped to provide correction and maintain proper anatomic lordotic and kyphotic alignment.

7.2.3 After solid fusion occurs, these devices serve no functional purpose and may be removed. In some cases, removal is indicated because the implants are not intended to transfer or to support forces developed during normal activities. Any decision to remove the device must be made by the physician and the patient taking into consideration the patient's general medical condition and the potential risk to the patient of a second surgical procedure.

7.2.4 These devices are not intended or expected to be the only mechanism for support of the spine. Regardless of the etiology of the spinal pathology, for which implantation of these devices was chosen, it is the expectation and requirement that a spinal fusion or arthrodesis be planned and obtained. Without solid biological support provided by spinal fusion, the devices cannot be expected to support the spine indefinitely and will fail in any of several modes. These modes may include bone-metal interface failure, implant fracture, or bone failure.

7.2.5 Based on the fatigue testing results, the physician/surgeon should consider the levels of implantation, patient weight, patient activity level, other patient conditions, etc. which may impact on the performance of the system.

7.2.6 Surgical Implants Must Never Be Reused: An explanted metal implant should never be reimplanted. Even though the device appears undamaged, it may have small defects and internal stress patterns which may lead to early breakage.

7.2.7 Correct Handling of The Implant Is Extremely Important: Contouring of metal implants should only be done with proper equipment. The operating surgeon should avoid any notching, scratching or reverse bending of the devices when contouring. Alterations will produce defects in surface finish and internal stresses which may become the focal point for eventual breakage of the implant. Bending of screws will significantly decrease the fatigue life and may cause failure.

7.2.8 Considerations For Removal Of The Implant After Healing: If the device is not removed after the completion of its intended use, any of the following complications may occur: (1) Corrosion, with localized tissue reaction or pain; (2) Migration of implant position resulting in injury; (3) Risk of additional injury from postoperative trauma; (4) Bending, loosening, and/or breakage, which could make removal impractical or difficult; (5) Pain, discomfort, or abnormal sensations due to the presence of the device; (6) Possible increased risk of infection; and (7) Bone loss due to stress shielding. The surgeon should carefully weigh the risks versus benefits when deciding whether to remove the implant. Implant removal should be followed by adequate postoperative management to avoid refracture. If the patient is older and has a low activity level, the surgeon may choose not to remove the implant thus eliminating the risks involved with a second surgery.

7.2.9 Adequately Instruct The Patient: Postoperative care and the patient's ability and willingness to follow instructions are among the most important aspects of successful bone healing. The patient must be made aware of the limitations of the implant, and instructed to limit and restrict physical activities, especially lifting and twisting motions and any type of sports participation. The patient should understand that a metallic implant is not as strong as normal healthy bone and could loosen, bend and/or break if excessive demands are placed on it, especially in the absence of complete bone healing. Implants displaced or damaged by improper activities may migrate and damage the nerves or blood vessels. An active, debilitated, or demented patient who cannot properly use weight-supporting devices may be particularly at risk during postoperative rehabilitation.

7.3 **Pediatric Warnings and Precautions**

7.3.1 Special precautions are needed during pediatric use. Care should be taken when using instruments in pediatric patients, since these patients can be more susceptible to the stresses involved in their use.

7.3.2 The use of pedicle screw fixation in the pediatric population may present additional risks when patients are of a smaller stature and skeletally immature. Pediatric patients may have smaller spinal structures (pedicle diameter or length) that may preclude the use of pedicle screws or increase the risk of pedicle screw mal positioning and neurological or vascular injury. Patients who are not skeletally mature undergoing spinal fusion procedure may have a reduced longitudinal spinal growth, or may be at a risk for rotational spinal deformities due to continued differential growth of the anterior spine.

7.3.3 The implantation of the OLYMPIC Posterior Spinal Fixation System in pediatric patients should be performed only by experienced spinal surgeons with specific training in the use of this system in pediatric patients.

7.3.4 Preoperative and operating procedures, including knowledge of surgical techniques, good reduction, and proper selection of placement of the implants are important considerations in the successful utilization of the system in pediatric patients.

7.3.5 The selection of proper size, shape, and design of the implant for each patient is crucial to the safe use of this device in pediatric patients.

**8.0 PREOPERATIVE**

8.1 Only patients that meet the criteria described in the indications should be selected.

8.2 Patient conditions and/or predispositions such as those addressed in the aforementioned contraindications should be avoided.

8.3 Care should be used in the handling and storage of the implant components. The implants should not be scratched or otherwise damaged. Implants and instruments should be protected during storage especially from corrosive environments.

8.4 The type of construct to be assembled for the case should be determined prior to beginning the surgery. An adequate inventory of implant sizes should be available at the time of surgery, including sizes larger and smaller than those expected to be used.

8.5 The surgeon must ensure that all necessary implants and instruments are available and on hand prior to surgery.

8.6 Since mechanical parts are involved, the surgeon should be familiar with the various components before using the equipment and should personally assemble the devices to verify that all parts and necessary instruments are present before the surgery begins. The OLYMPIC Posterior Spinal Fixation System components are not to be combined with the components from another manufacturer.
8.7 All components and instruments should be cleaned and sterilized before use. Additional sterile components should be available in case of an unexpected need.
8.8 All sets should be carefully checked for completeness and all components should be carefully checked for lack of damage prior to all surgeries.
8.9 A surgical technique manual may be obtained from ASTURA MEDICAL or from any of its representatives.

**9.0 INTRAOPERATIVE**

9.1 Any instruction manuals should be carefully followed.
9.2 At all times, extreme caution should be used around the spinal cord and nerve roots. Damage to nerves will cause loss of neurological functions.
9.3 The implant surfaces should not be scratched or notched, since such actions may reduce the functional strength of the construct.
9.4 Autogenous bone grafts must be placed in the area to be fused and the graft should be extended from the upper to the lower vertebrae to be fused.
9.5 Bone cement should never be used with this device since this material will make removal of the components difficult or impossible and may affect the properties of the implant. The heat generated from the curing process may also cause neurological damage and bone necrosis.
9.6 Before closing the soft tissues, all of the devices should be securely seated.
9.7 Breakage, slippage, or misuse of the instruments or implant components may cause injury to the patient or the operative personnel.

**10.0 POSTOPERATIVE:**

10.1 Until X-rays confirm the maturation of the fusion mass, external immobilization (such as bracing or casting) is recommended. Instructions to the patient to reduce stress on the implants are an equally important part of the attempt to avoid the occurrence of clinical problems that may accompany fixation failure.
10.2 Detailed instructions on the use and limitations of the device should be given to the patient. The risk of fatigue and/or breakage of a temporary internal fixation device during postoperative rehabilitation may be increased if the patient is active, or if the patient is debilitated, demented or otherwise unable to use crutches or other such weight supporting devices. The patient should be warned to avoid falls or sudden jolts in spinal position.
10.3 To allow the maximum chances for a successful surgical result: the patient or device should not be exposed to mechanical vibrations that may loosen the device construct. The patient should be warned of this possibility and instructed to limit and restrict physical activities, especially lifting and twisting motions and any type of sport participation. The patient should be advised not to smoke or consume alcohol during the bone graft healing process.
10.4 The patient should be advised of their inability to bend at the point of spinal fusion and taught to compensate for this permanent physical restriction in body motion.
10.5 If a non-union develops or if the components loosen and/or break, the device(s) should be revised and/or removed immediately before serious injury occurs. Failure to immobilize a delayed or non-union of bone will result in excessive and repeated stresses on the implant. By the mechanism of fatigue, these stresses can cause eventual loosening or breakage of the device(s). It is important that immobilization of the spinal surgical site be maintained until firm bony union is established and confirmed by roentgenographic examination. The patient must be adequately warned of these hazards and closely supervised to ensure cooperation until bony union is confirmed.
10.6 Any decision to remove the device should take into consideration the potential risk to the patient of a second surgical procedure and the difficulty of initial implant removal.
10.7 Any retrieved devices should be treated in such a manner that reuse in another surgical procedure is not possible. As with all orthopedic implants, none of the retrieved OLYMPIC Posterior Spinal Fixation System components should ever be reused under any circumstances.

**11.0 PACKAGING:** Packages for each of the components should be intact upon receipt. All sets and components should be carefully checked for completeness and lack of damage prior to use. Damaged packages or products should not be used, and should be returned immediately to ASTURA MEDICAL.

**12.0 CLEANING AND DECONTAMINATION:** Instruments are supplied clean and NOT STERILE, and must be sterilized prior to use.

**13.0 CLEANING:** All instruments must first be cleaned before sterilization and introduction into a sterile surgical field. Reference LIT-00005 for disassembly and reassembly instructions.
Immediately after the procedure, place the instruments in a tray and cover with a towel moistened with sterile water and transport to decontamination environment. An enzymatic cleaner bath (soak) or a solution of water and neutral pH detergent are effective in removing organic material from instruments. Use distilled water if possible. Instruments should be fully submerged for at least ten (10) minutes.
Instruments must be thoroughly cleaned. Be sure dissimilar metal instruments are separated. Confirm that all cannulated and modular instruments are fully disassembled. Ensure that all cannulas are flushed until cleaning solution runs clear and that all instruments are completely immersed. Use a small brush to remove soil from all surfaces of the instrument while fully immersed in the solution. Remove soil from hinges, jaws, tips, box locks, and ratchets. Never use steel wool, wire brushes, or highly abrasive detergents or cleaners to remove soil from instruments. Once instruments are cleaned and disassembled, place instruments in an ultrasonic cleaner with warm enzymatic detergent for a minimum of fifteen (15) minutes. If there is any visual contamination, repeat the steps as necessary until the instruments are visually clean. Rinse instruments under running water for at least one (1) minute to remove solutions.
Instruments should never be exposed to cleaning agents containing any peroxides.
Users should periodically inspect instruments for corrosion, discoloration, etc., and properly dispose of instruments that show signs of wear and tear.
**Note: Certain cleaning solutions such as those containing caustic soda, formalin, glutaraldehyde, bleach and/or other alkaline cleaners may damage some devices, particularly instruments; these solutions should not be used.**

**14.0 STERILIZATION:** Moist heat sterilization is recommended using the Association for the Advancement of Medical Instrumentation (AAMI) guideline ST79:2006 according to the following validated cycle parameters for both implants and instruments:

| Method | Cycle | Temperature | Exposure Time | Dry Time |
|---|---|---|---|---|
| Steam | Prevacuum | 270°F(132°C) | 4 minutes | 30 minutes |

Wrap tray with a towel placed between tray and FDA cleared wrap.
The Sterility Assurance Level (SAL) is 1 x $10^{-6}$, via the indicated methods. No claims of pyrogenicity are made.
Remove all packaging materials prior to sterilization. Use only sterile products in the operative field. Always immediately re-sterilize all implants and instruments used in surgery. This process must be performed before handling or returning to ASTURA MEDICAL.
It is the end user's responsibility to use only sterilizers and sterilization wraps, sterilization pouches, chemical indicators, biological indicators, and sterilization cassettes that have been cleared by the Food and Drug Administration for the selected sterilization cycle specifications.

**15.0 PRODUCT COMPLAINTS:** Any Health Care Professional, who has any complaints or who has experienced any dissatisfaction relating to the product quality, durability, reliability, safety, effectiveness and/or performance, should notify ASTURA MEDICAL or its representative. Further, if any of the implanted OLYMPIC Posterior Spinal Fixation System component(s) ever malfunctions, ASTURA MEDICAL or its representative must be notified immediately.
If any OLYMPIC Posterior Spinal Fixation System product ever malfunctions and may have caused or contributed to the death or serious injury of a patient, the distributor or ASTURA MEDICAL must be notified immediately by telephone, fax or in writing.
For all complaints, please include the device name, reference number, and lot number of the component(s), your name, address, and the nature of the event to help ASTURA MEDICAL understand the cause of the complaint.
If further information is needed or required, please contact using the company information listed below.

**16.0 COMPANY INFORMATION**

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## NOTES

## NOTES


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