

# Trident<sup>®</sup> Tritanium<sup>™</sup> Acetabular System

## surgical protocol

For Crossfire<sup>®</sup> and X3<sup>™</sup> Polyethylene, MDM, Trident<sup>®</sup> Alumina Ceramic Inserts with Tritanium<sup>™</sup> Hemispherical Acetabular Shells

Surgical protocol

Implants

Instruments



**Indications for Trident Tritanium shells for the U.S. and rest of world:**

- Painful, disabling joint disease of the hip resulting from: degenerative arthritis, rheumatoid arthritis, post-traumatic arthritis or late-stage avascular necrosis.
- Revision of previous unsuccessful femoral head replacement, cup arthroplasty or other procedure.
- Clinical management problems where arthrodesis or alternative reconstructive techniques are less likely to achieve satisfactory results.
- Where bone stock is of poor quality or is inadequate for other reconstructive techniques as indicated by deficiencies of the acetabulum.

The HOWMEDICA OSTEONICS TRIDENT and TRITANIUM Acetabular Shells are intended for cementless use only.

Dome hole plug is indicated for cemented or cementless hip arthroplasty, when an acetabular shell plug is thought to be advantageous.

**Indications for Trident Tritanium Shells for EU, EMEA countries requiring CE mark, and Australia:**

Primary Surgery:

- Painful, disabling joint disease of the hip resulting from: degenerative arthritis, rheumatoid arthritis, posttraumatic arthritis or late stage avascular necrosis.
- Clinical management problems where arthrodesis or alternative reconstructive techniques are less likely to achieve satisfactory results.
- Where bone stock is of poor quality or is inadequate for other reconstructive techniques as indicated by deficiencies of the acetabulum.

Revision Surgery: Revision of previous unsuccessful procedure.

The HOWMEDICA OSTEONICS TRIDENT and TRITANIUM Acetabular Shells are intended for cementless use only.

Dome hole plug is indicated for cementless hip arthroplasty, when an acetabular shell plug is thought to be advantageous.

**Indications for Trident Ceramic Insert with Ceramic Head:****Indications for U.S. and rest of world:**

Primary or revision hip arthroplasty due to:

- Non-inflammatory degenerative arthritis (osteoarthritis, avascular necrosis, traumatic arthritis, slipped capital epiphysis, pelvic fracture, failed fracture fixation, or diastrophic variant), or
- Inflammatory joint disease.

**Indications for EU, EMEA countries requiring the CE mark, and Australia:**

Primary or revision total hip arthroplasty due to:

- Non-inflammatory degenerative arthritis.

**Indications for Trident Polyethylene Insert with Metal or Ceramic Head**

Indications for US and Rest of World:

- Painful, disabling joint disease of the hip resulting from: degenerative arthritis, rheumatoid arthritis, post-traumatic arthritis or late stage avascular necrosis.
- Revision of previous unsuccessful femoral head replacement, cup arthroplasty or other procedure.
- Clinical management problems where arthrodesis or alternative reconstructive techniques are less likely to achieve satisfactory results.
- Where bone stock is of poor quality or inadequate for other reconstructive techniques as indicated by deficiencies of the acetabulum.

Indications for EU, EMEA countries requiring CE mark, and Australia

- Painful disabling joint disease of the hip resulting from: degenerative arthritis, rheumatoid arthritis, post-traumatic arthritis or late stage avascular necrosis.
- Revision of previous unsuccessful femoral head replacement, cup arthroplasty or other procedure.
- Clinical management problems where arthrodesis or alternative reconstructive techniques are less likely to achieve satisfactory results.

**Contraindications for Trident Tritanium shells and inserts:**

- Any active or suspected latent infection in or about the hip joint.
- Any mental or neuromuscular disorder which would create an unacceptable risk of prosthesis instability, prosthesis fixation failure or complications in postoperative care.
- Bone stock compromised by disease, infection or prior implantation which cannot provide adequate support and/or fixation to the prosthesis.
- Skeletal immaturity.

**Indications and contraindications for Howmedica Osteonics Bone Screws:**

- HOWMEDICA OSTEONICS Torx Cancellous Bone Screws are intended for supplemental fixation of associated HOWMEDICA OSTEONICS Cementless Acetabular Shells.
- HOWMEDICA OSTEONICS RESTORATION GAP Plate Screws are intended for fixation of the dome and iliac plates of the associated HOWMEDICA OSTEONICS RESTORATION GAP Acetabular Shell, TRIDENT TRITANIUM Hemispherical Multihole Acetabular Shells, Restoration Acetabular Augments and Restoration Anatomic Shells.

Refer to the package insert of the devices with which the bone screws will be used for a complete list of related indications and contraindications.

This publication sets forth detailed validated procedures for using the Trident Tritanium Acetabular System. It offers instructions that you should heed, but, as with any such technical guide, each surgeon must consider the particular needs of each patient and make appropriate adjustments when and as required.

**Warnings and precautions:**

See package insert for warnings, precautions, adverse effects, information for patients and other essential product information. Before using instrumentation, verify:

- Instruments have been properly disassembled prior to cleaning and sterilization;
- Instruments have been properly assembled poststerilization;
- Instruments have maintained design integrity; and,
- Proper size configurations are available.

For Instructions for Cleaning, Sterilization, Inspection and Maintenance of Orthopaedic Medical Devices, refer to LSTPI-B and SLI0001 ([ifu.stryker.com](http://ifu.stryker.com)).

For indications for use of associated products in this protocol, please refer to the following instructions for use (IFU) numbers enclosed within product packaging, or visit [ifu.stryker.com](http://ifu.stryker.com):

Trident Crossfire and X3 inserts: QIN 4351

Trident Ceramic Insert: QIN 4365

Trident Constrained Insert: QIN 4357

MDM Liner: QIN 4500

Acetabular Dome Home Plug: QIN 4402

For indications for use of the associated femoral heads please refer to the following instructions for use (IFU) numbers enclosed within product packaging, or visit [ifu.stryker.com](http://ifu.stryker.com):

C-Taper CoCr LFIT Heads: QIN 4309

V40 CoCr Femoral Heads: QIN 0095-3-200

Universal Taper Femoral Heads: QIN 4350

Alumina Ceramic V40 Femoral Heads: QIN 4350

BioloX delta Ceramic V40 Femoral Heads: QIN 4350

BioloX delta Ceramic C-Taper Femoral Heads: QIN 4350

Alumina Ceramic C-Taper Femoral Heads: QIN 4350

V40 Adapter Sleeve: QIN 4310

## Introduction

The Trident Tritanium Acetabular System hemispherical shells are manufactured from commercially pure titanium. The Trident Tritanium shells utilize the screw hole pattern and locking mechanism from the Trident Acetabular System. The shells are available in sizes 54mm-80mm\*, and are compatible with Trident X3 and Crossfire polyethylene liners, MDM, Trident Alumina Ceramic Inserts and Constrained Inserts. Refer to Table 1 for insert and shell compatibility and sizing options.

Trident Alumina Ceramic Inserts are designed to gain fixation within the shell by means of mating tapers. Rotational stability between the components is achieved when the shell's anti-rotational barbs interlock with the insert's scallops. **The Trident Alumina Ceramic Inserts must be used with Stryker Orthopaedics Alumina Heads.**

The Trident Polyethylene Inserts are designed to lock into the shell by means of a circumferential ring that engages the shell's mating groove. Rotational stability is achieved when the shell's anti-rotational barbs interlock with the insert's scallops.

The Trident Tritanium Acetabular System utilizes the CuttingEdge Total Hip Acetabular Instrumentation. This surgical technique is a guide to preparing the acetabulum for the Trident Tritanium Hemispherical Acetabular implants.

Refer to the Trident Constrained Insert surgical protocol for Constrained Insert use.

Refer to the MDM Liner surgical protocol for MDM Liner use.



Trident Tritanium Acetabular Shell



Trident Alumina Insert



Crossfire Polyethylene Insert and X3 Polyethylene Insert



Alumina Femoral Head



BIOLOX delta Femoral Head



LFIT Ion Implanted CoCr Femoral Head

**Note:**

\*Trident Tritanium Multihole Shell sizes 74-80 and applicable Alumina Ceramic Inserts are not CE marked in accordance with applicable EU regulations and directives. Stryker is not marketing or distributing these products in the EU. Any reference to these products is for presentation purposes only.

## Table 1: Femoral head, X3 Liner and Shell compatibility chart

Shell size, liner alpha code, and head size (mm)

Shell size, liner alpha code, and head size (mm)	Liner code	Femoral head size					
		44	40	36	32	28	22
54, 56	E	-	3.8	5.9	7.9	9.9	12.8
58, 60	F	3.8	5.8	7.9	9.9	11.9	14.8
62, 64	G	5.4	7.4	9.4	11.4	13.4	16.3
66, 68	H	7.1	9.1	11.2	13.2	15.2	18.1
70, 72	I	8.6	10.6	12.7	14.7	16.7	19.6
74*, 76*, 78*, 80*	J	10.6	12.6	14.7	16.7	18.7	21.6

Sizes 54-80 have 11 holes.

### Tritanium Revision Shell

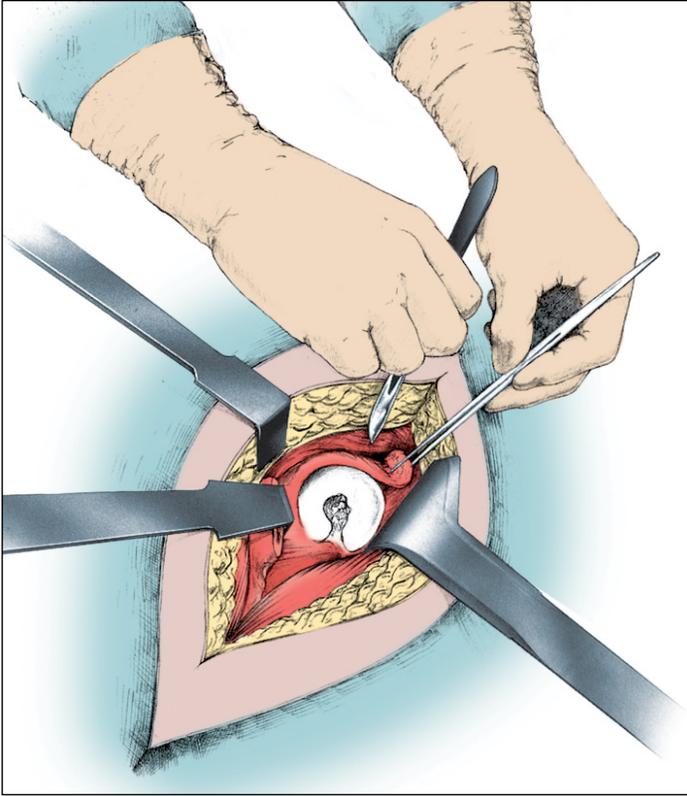
Alpha code	Tritanium Revision shell size (mm)	Trident X3 0°, 10° Inserts (mm)	Trident X3 Eccentric 0°, 10° Inserts (mm)	Trident X3 Elevated Rim Inserts (mm)	Trident 0° Constrained Inserts (mm)	Trident 10° Constrained Inserts (mm)	Alumina Ceramic 0° Inserts ID (mm)
E	54, 56	22, 28, 32, 36, 40 <sup>†</sup>	28, 32, 36	28, 32, 36	22	22	32
F	58, 60	22, 28, 32, 36, 40 <sup>†</sup> , 44 <sup>†</sup>	28, 32, 36	28, 32, 36	28	22	32
G	62, 64	22, 28, 32, 36, 40 <sup>†</sup> , 44 <sup>†</sup>	28, 32, 36	28, 32, 36	28	28	36
H	66, 68	22, 28, 32, 36, 40 <sup>†</sup> , 44 <sup>†</sup>	28, 32, 36	28, 32, 36	32	28	36
I	70, 72	22, 28, 32, 36, 40 <sup>†</sup> , 44 <sup>†</sup>	28, 32, 36	28, 32, 36	32	28	36
J	74*, 76*, 78*, 80*	22, 28, 32, 36, 40 <sup>†</sup> , 44 <sup>†</sup>	28, 32, 36	28, 32, 36	32	28	36

<sup>†</sup>Available in 0° only.

### MDM Liner and Insert compatibility with Trident II Shells

Tritanium Revision Shell	Alpha code	MDM CoCr Liner	Poly Insert OD (mm)	Poly Insert ID (mm)	Nominal poly thickness
54, 56	E	42E	42	28	6.8
58, 60	F	46F	46	28	8.8
62, 64	G	48G	48	28	9.8
66, 68	H	52H	52	28	11.8
70, 72	I	54I	54	28	12.8
74*, 76*, 78*, 80*	J	58J	58	28	14.8

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**Figure 1**

## Preoperative planning and X-ray evaluation

Preoperative planning is an essential part of the procedure, and templating should be performed prior to every case. The preoperative planning process should take qualitative and quantitative factors (including patient bone quality, density, and morphology) into consideration in order to evaluate and select the appropriate instrument/implant system for the patient. X-ray evaluation may also help detect anatomic anomalies that could prevent the intraoperative achievement of the established preoperative goals. Selecting potential implant style and sizes can facilitate operating room preparation and assure availability of an appropriate selection. When it is done using X-rays that have been suitably scaled for magnification, templating allows the surgeon to predict the style, size and position of the implant that may help restore the correct anatomy of the individual patient.

Template planning can be done using acetate templates for printed X-rays or preoperative planning software for digital studies. Use the template overlay LTEM89 1-3 available through your Stryker representative.

If a revision of an existing acetabular shell is required, the surgeon's preferred technique for removing the acetabular shell should be used.

## Acetabular preparation

The acetabulum is prepared by the release and removal of soft tissue using the surgeon's preferred technique to gain adequate exposure for reaming. Excision of the labrum and osteophytes allows for proper visualization of the bony anatomy and improves ease of reaming.

Stryker Orthopaedics Retractors can be utilized to gain acetabular exposure (Figure 1).

With the acetabulum exposed, bony defects can be identified. If necessary, bone grafting options may be considered prior to reaming.



Figure 2

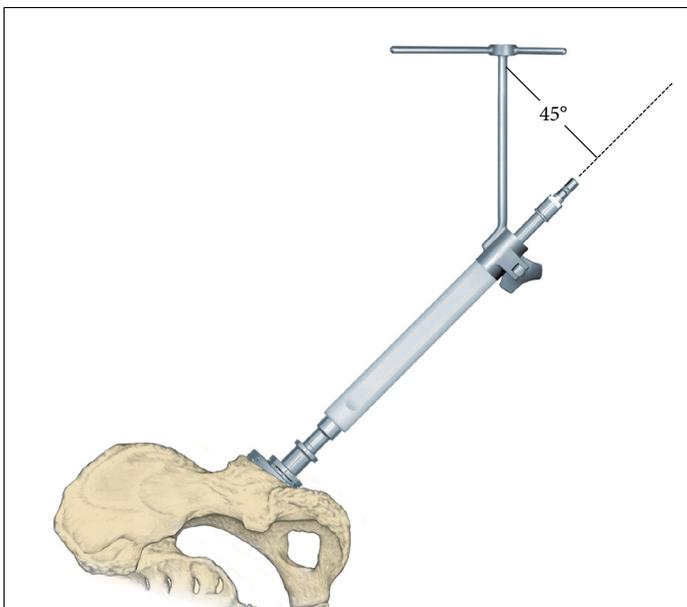


Figure 3

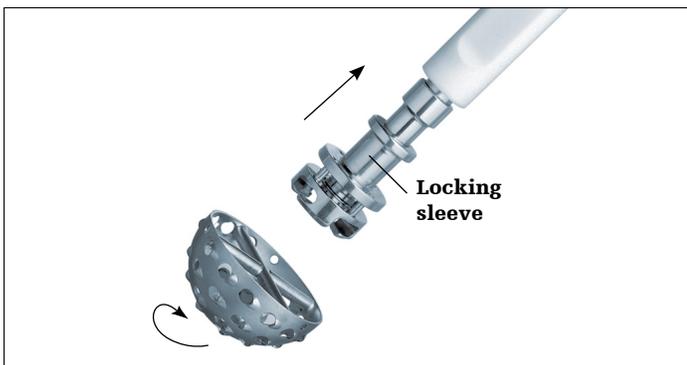


Figure 4

## Spherical reaming

To obtain congruity in the reaming process, an optional 45/20° Abduction/Anteversion Alignment Guide (2101-0210) can be attached to the CuttingEdge Reamer Handle (2102-0410) (Figure 2). The Alignment Guide, when perpendicular to the long axis of the patient, is designed to orient the reamer handle at 45° of abduction, thereby placing the axis of the spherical reamer at 45° of inclination (Figure 3). The reamer handle may then be positioned at 20° of anteversion by aligning the left/right anteversion rod on the Alignment Guide so that it is parallel to the long axis of the patient.

It is recommended that initial reaming begin with a CuttingEdge Spherical Reamer (2102-04XX) that is 4mm smaller than the templated or gauged size. The reamer is attached to the reamer handle by pushing down and applying a quarter-turn to lock in place. Reaming progresses in 1mm increments until final desired sizing is achieved. **Due to the porous nature of the Tritanium coating, the outer diameter may be larger than the size indicated. The surgeon must consider this in the acetabular preparation.**

### Note:

Depending on bone quality and surgeon preference, the surgeon may choose to ream line-to-line, or under-ream.

The low profile design of the CuttingEdge Spherical Reamer necessitates reaming to the full depth. The reamer head should be driven to the point where the rim/cross bar contacts the acetabular wall at the peripheral lunate region. Removal of the reamer from the handle is performed by pulling back on the locking sleeve and rotating the reamer head a quarter-turn in a clockwise direction (Figure 4).

Care should be taken so as not to enlarge or distort the acetabulum by eccentric reaming. Final acetabular reaming ideally shows the hemispherical acetabulum denuded of cartilage, with the subchondral plate preferably intact, and the anterior acetabular wall preserved.

It is believed that the subchondral plate functions as an important load-sharing and support mechanism. Preserving as much of the subchondral plate as possible may improve the qualities of the bone/metal composite.

### Note:

The CuttingEdge Spherical Reamers perform best when sharp. Care should be taken to protect the reamer from unnecessary handling, as dull or damaged cutting teeth may cause improper reaming. Dull cutting teeth will deflect to cut softer bone and resist hard bone. This situation may result in an irregularly shaped or enlarged acetabulum preparation.

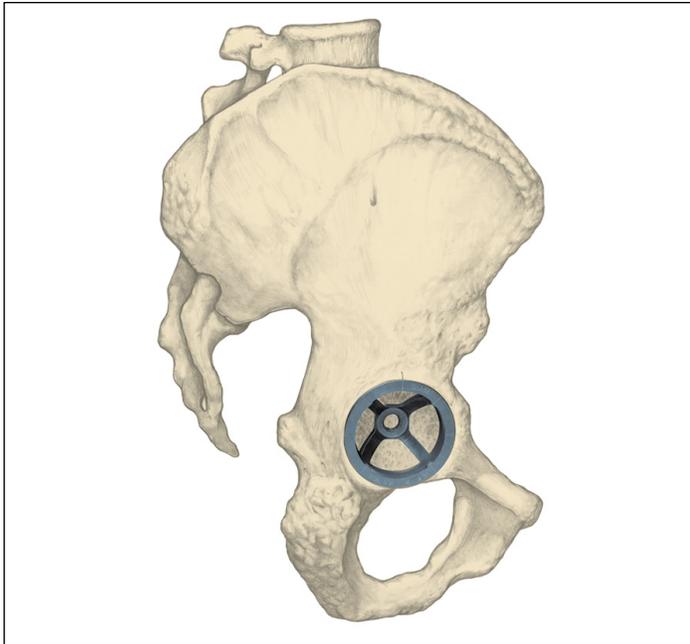


Figure 5

## Trial evaluation

Following the reaming procedure, the appropriate Trident Tritanium Window Trial (2208-40XXY) (Table 2), of the same diameter as the last spherical reamer used, is threaded onto the CuttingEdge Shell Positioner/ Impactor (2101-0200) and placed in the acetabulum to evaluate the size and congruity of the preparation (Figure 5). The trial is “windowed” for visualization and assessment of fit, contact and congruency of the trial within the acetabulum. By inserting the Trident Trial Insert (22X0-XXY) into the Trident Tritanium Window Trial (Figures 6 and 7), joint mechanics can be evaluated. To ensure that the Trial Insert is well fixed to the Trident Tritanium Window Trial during the trial evaluation, an Acetabular Trial Insert Containment Screw can be used. The Containment Screw Kit (2230-0010) is optional (Figure 6). The containment screw has a Torx drive feature and is compatible with Torx screwdrivers. To insert the Acetabular Containment Screw, you may use the Ratchet Handle (2107-1000) and Universal Driver (2107-1015) to insert the Acetabular Containment Screw. Do not overtighten as this may lead to liner trial damage.

To facilitate insertion/removal of the Trial Insert, Holding Forceps (2107-5003) may be placed into the two holes in the plastic face.

When trialing, it is recommended to use a Trident Tritanium Window Trial 1mm-2mm smaller than the implant OD so as not to destroy the press-fit.

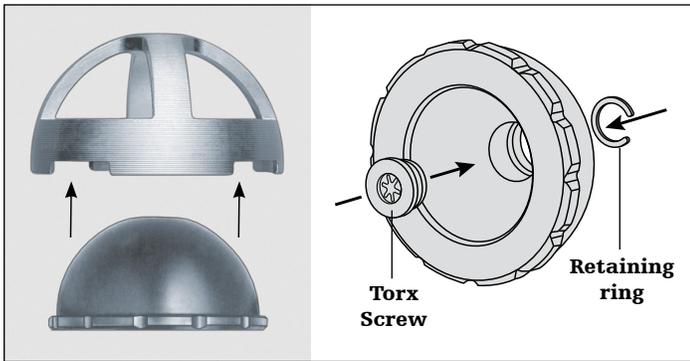


Figure 6

**Note:**  
The Window Trials (2208-40XX) specific to the Trident Tritanium Acetabular System must be used.

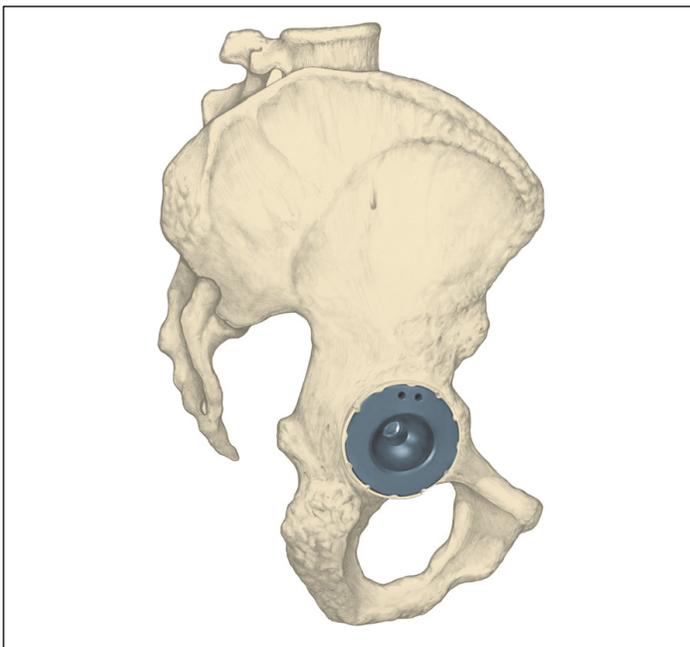


Figure 7

**Table 2: Trident Tritanium Window Trial/Trial Insert sizing**

Trident Tritanium Window Trial (mm)	Trident Tritanium Insert compatibility class
46	C
47	C
48	D
49	D
50	D
51	D
52	E
53	E
54	E
55	E
56	F
57	F
58	F
59	F
60	G
61	G
62	G
63	G
64	H
65	H
66	H
67	H
68	I
69	I
70	I
71	I
72	J
73	J
74	J
75	J
76	J
77	J
78	J
79	J
80	J

## Trident Tritanium Hemispherical Shell implantation

After completing the trial reduction, select the appropriately sized implant component.

If desired, the CuttingEdge Abduction/Anteversion Alignment Guide can be attached to the CuttingEdge Shell Positioner/ Impactor to help establish the recommended 45° of abduction inclination and 20° of anteversion (Figures 8 and 9).

**Caution:**

Proper pelvic orientation is critical if relying upon the CuttingEdge Alignment Guide to facilitate the desired abduction/anteversion angles for shell positioning.

The metal shell is threaded onto the impactor at the threaded hole in the dome of the metal shell. It is important to fully engage the threads and seat the impactor against the shell. Otherwise, the threads on the metal shell could become damaged, resulting in difficulty with the removal of the impactor from the shell.

The cluster screw hole pattern holes are intended to be oriented superiorly (Figure 10).

**Note:**

Shell positioning must be carefully considered when selecting a ceramic insert as no hooded option is available to adjust joint stability. Proper positioning of the Trident Tritanium Hemispherical Shell minimizes potential impingement and promotes the desired stability and articulation between the Alumina Insert and Head. Excessive vertical orientation of the shell should be avoided as this may lead to premature wear of the ceramic material.

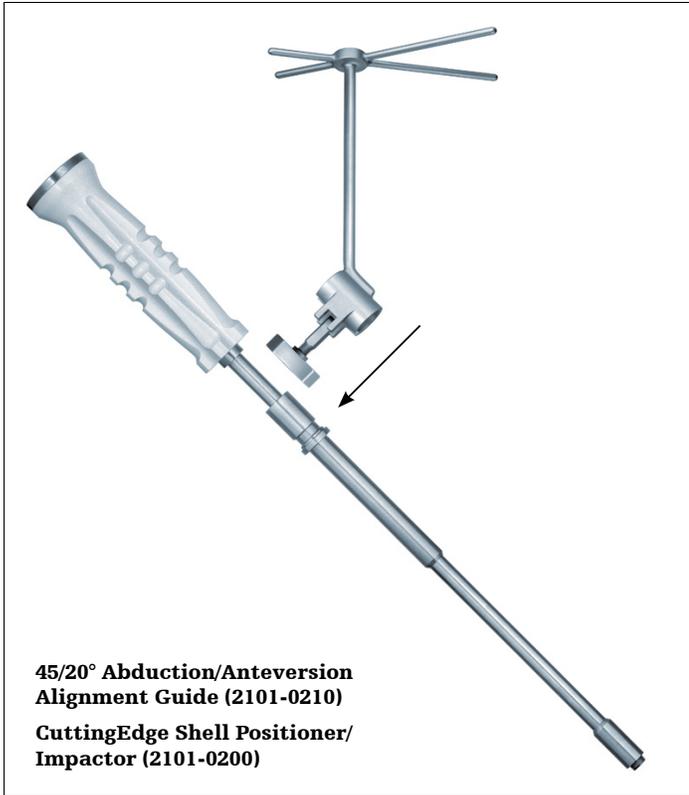


Figure 8



Figure 9

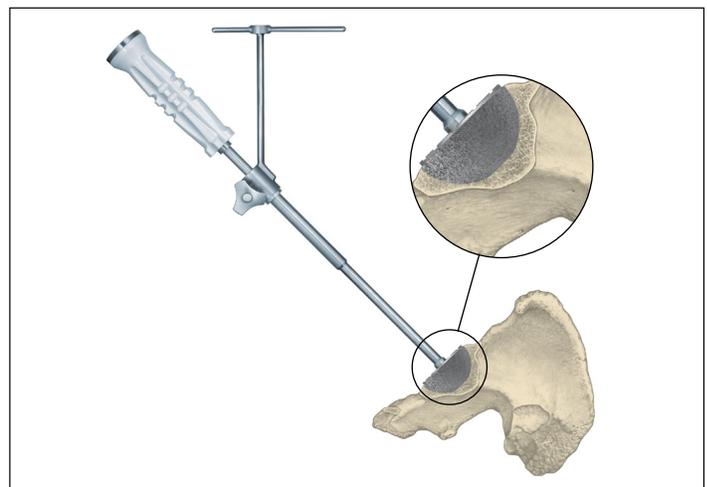


Figure 10

## Trident Tritanium Hemispherical Shell implantation (continued)

The recommended metal shell abduction angle of 45° can be determined by positioning the Alignment Guide perpendicular to the long axis of the patient (Figure 11).

Metal shell anteversion can be set at approximately 20° by moving the cup impactor so that the left/right anteversion rod is parallel to the long axis of the patient (Figure 12).

The metal shell is impacted into the acetabulum using a mallet until a tight, stable press-fit is achieved. The thumbscrew on the Alignment Guide is then loosened to

remove the guide. After removing the guide, the impactor handle is carefully unthreaded from the shell.

The depth of the shell seating may now be determined by viewing through the threaded hole in the dome. If it is determined that the shell is not fully seated, the CuttingEdge Final Cup Impactor (2101-0130) may then be required to assist in impacting the shell until it is completely seated in the prepared acetabulum.

An optional Acetabular Dome Hole Plug (2060-0000-1) may only be inserted into the shell using the Ratchet Handle (2107-1000) and Universal Driver (2107-1015). Evaluate the plug after insertion to confirm it is fully threaded into the shell to help prevent impingement with the liner.

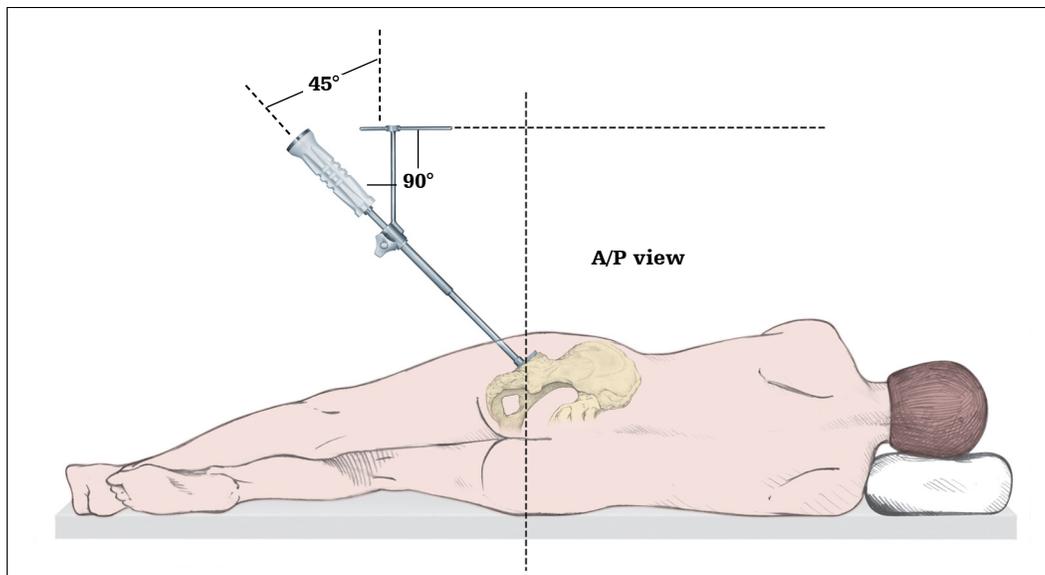


Figure 11

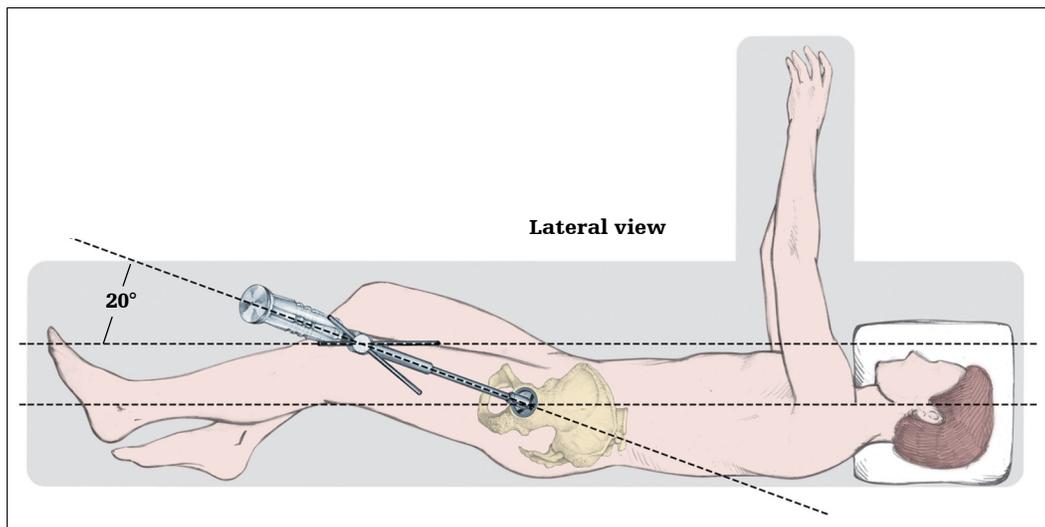


Figure 12

### Table 3: Stryker Orthopaedics 6.5mm Cancellous GAP Bone Screws

Screw lengths (mm)	Hex Screw* catalog number	Screw lengths (mm)	Torx Screw catalog number
12	5260-5-012	15	2080-0015
14	5260-5-014	20	2080-0020
16	5260-5-016	25	2080-0025
18	5260-5-018	30	2080-0030
20	5260-5-020	35	2080-0035
22	5260-5-022	40	2080-0040
24	5260-5-024	45	2080-0045
26	5260-5-026	50	2080-0050
28	5260-5-028	55	2080-0055
30	5260-5-030	60	2080-0060
35	5260-5-035		
40	5260-5-040		
45	5260-5-045		
50	5260-5-050		

Caution: Do not use Trident 2030-65XX screws.

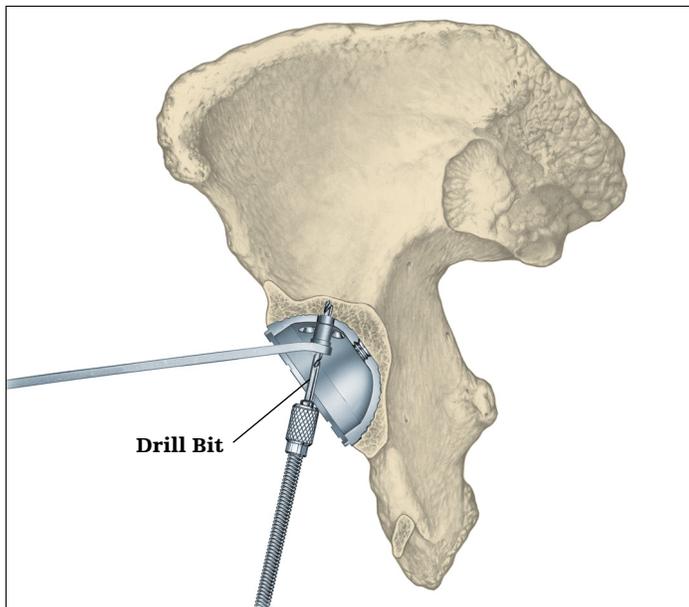


Figure 13

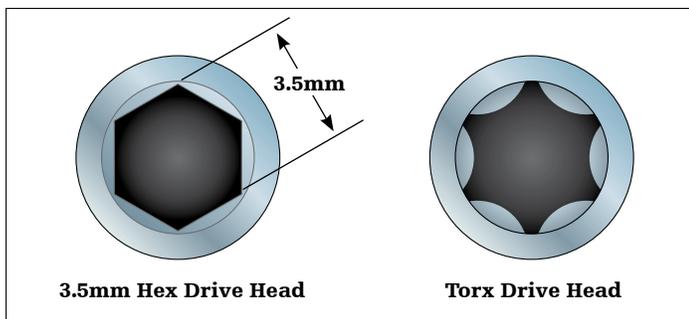


Figure 14

### Optional screw utilization

Only Stryker Orthopaedics 6.5mm Cancellous GAP Bone Screws (2080-00XX) can be used. Stryker Orthopaedics offers 6.5mm diameter cancellous bone screws, which are available in a variety of lengths (Table 3). The surgeon has the option of hex or Torx screws as shown in Table 3. Stryker Orthopaedics Cancellous Bone Screws are designed to be inserted or removed only with the assistance of Stryker Orthopaedics screw instruments.

Attach a 3.3 or 4.0mm Drill Bit to the Flexible Drill Shaft and connect to an appropriate power bone drill. After determining the site for screw placement, pass the appropriately sized Drill Bit through the Drill Guide of equivalent diameter size and insert the guide flush to the shell screw hole (Figure 13). Use of the guide is required to ensure proper alignment of the hole trajectory to the screw hole and facilitates full seating of the screw head within the shell upon insertion. Drill to the desired depth and insert the Depth Gauge to aid in selection of the appropriate screw size.

To insert a screw using the Universal Screwdriver, use the Screw Holding Forceps to hold the screw and guide into the implant.

For compatible hex instrumentation, please see the screw instrumentation table below.

**Note:**

In hard bone, the use of 6.5mm bone screws prepared in the usual fashion may be difficult. The use of a 4.0mm Drill Bit may make the utilization easier, without substantial compromise of screw purchase.

**Caution:**

Do not pass a drill, screw or any other instrumentation beyond the inner table of the pelvis. Malposition of either the shell screw hole orientation, screw hole preparation or improper use of the screws themselves may contribute to detrimental clinical consequences.

### Trial Insert reduction

After metal shell implantation, the Trident Trial Insert facilitates a final check of hip mechanics.

### Screw instrumentation

Catalog number	Description
2107-1000	Ratchet Handle
2107-1015	Universal Driver Shaft
2107-3317	3.3mm Drill Guide
2107-4017	4.0mm Drill Guide
2107-2200	Flexible Drill Shaft
2107-33XX	3.3mm x 25, 40, 60mm Drill Bits
2107-40XX	4.0mm x 25, 40, 60mm Drill Bits
2107-5003	Screw Holding Forceps
2107-0014	Wire Depth Gauge
6090-4-325	3.5mm Hex Driver Universal Joint Shaft
6090-4-330	Ratchet Handle
2408-0000	Bone Screw Insts 5/8 Tray

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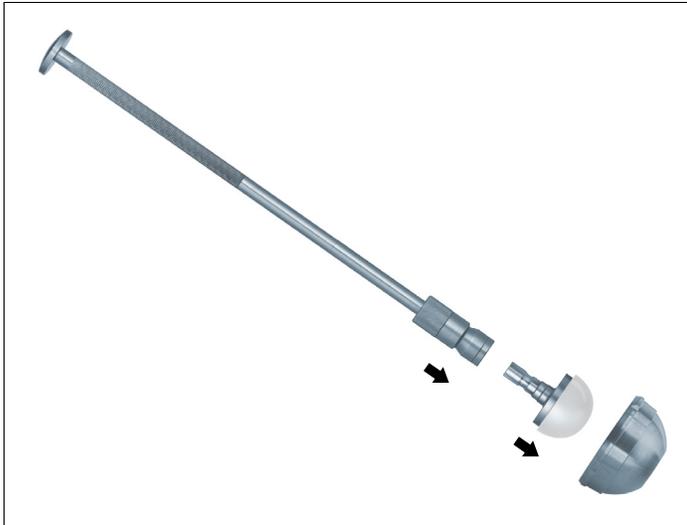


Figure 15



Figure 16

## Insert implantation

Select the appropriate size Silicone Insert Positioner Tip (2111-00XX).

Load Silicone Insert Positioner Tip to Insert Positioner/ Impactor Handle (2111-0000B) (Figure 15).

Load either the polyethylene or ceramic insert to Insert Positioner Tip. Press firmly to ensure insert is being securely held (Figure 16).

**Note:**

Use caution handling ceramic components during assembly because of the brittle nature of the ceramic material. Ceramic and polyethylene components are pre-sterilized and cannot be sterilized after opening.

Ensure that the inside of the shell is clean and free of soft tissue or any other debris, which could prevent the insert from properly sitting in the shell.

## Insert implantation (continued)

Gently introduce the ceramic or polyethylene insert making sure that the insert flange scallops are aligned with the slot at the rim of the shell (this allows seating the insert at the initial position supported by four indexing barbs). Once the insert is seated at the initial position, slowly turn and drop the insert into the final pre-locking position (Figure 17).

**Note:**  
Having a clear view of the rim of the acetabulum will allow easier visualization of the shell's slot and indexing barbs for proper positioning of the insert.

Remove Silicone Insert Positioner Tip from the Insert Positioner/Impactor Handle.

Select appropriate size Plastic Insert Impactor Tip.

Load Plastic Insert Impactor Tip (2111-30XX) to Insert Positioner/Impactor Handle.

Position Insert Positioner/Impactor Handle into ID of insert. Take care to align handle with axis of shell. Strike handle with approximately four firm mallet blows to fully seat insert.

**Note:**  
In order to obtain a secure lock, it is recommended to use only the hard plastic Insert Impactor Tips to impact the ceramic and polyethylene inserts.

Verify insert is fully seated and properly aligned into the acetabular shell. Check the taper lock by running a small osteotome around the periphery of the shell/insert interface.

**As with any modular interface under load, there is a potential for micromotion and associated fretting and/or corrosion. However, the Trident shell is designed to minimize the amount of motion at the taper interface thereby helping to reduce the corrosion potential.**

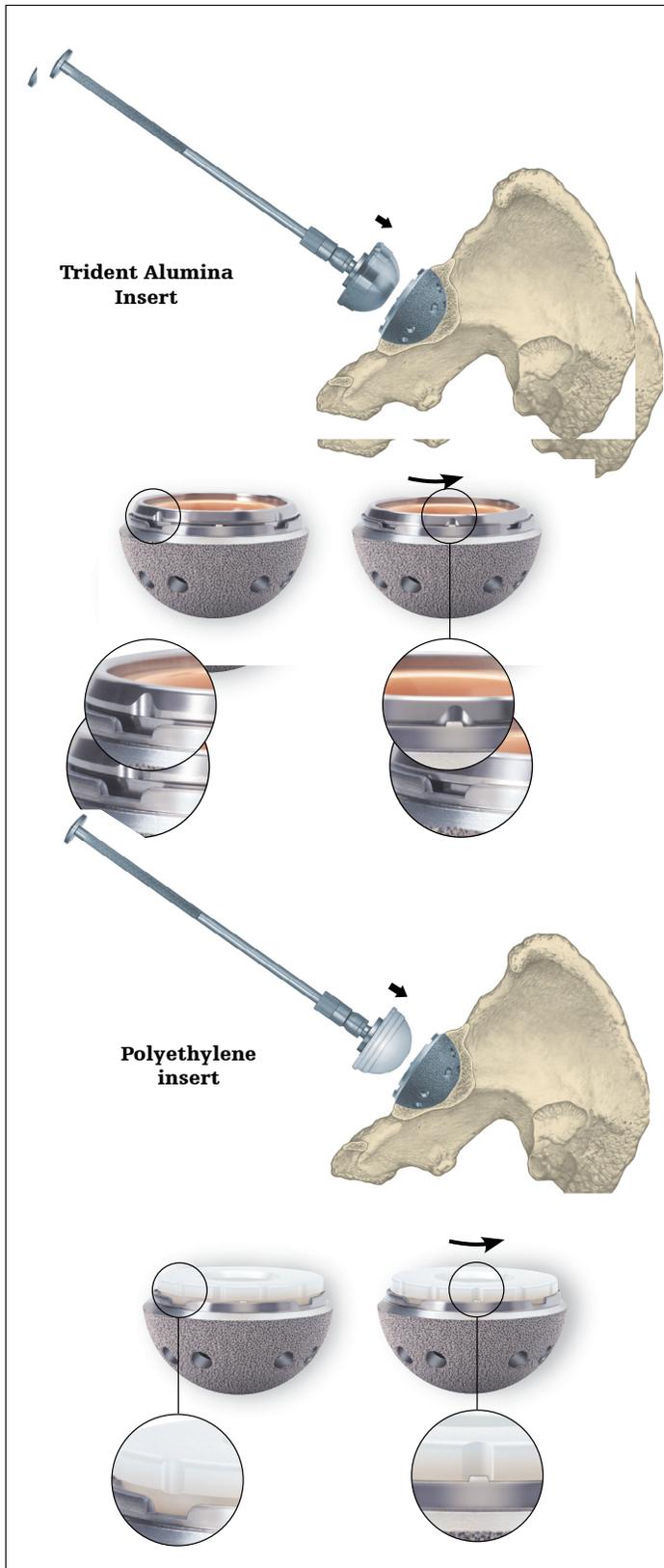


Figure 17

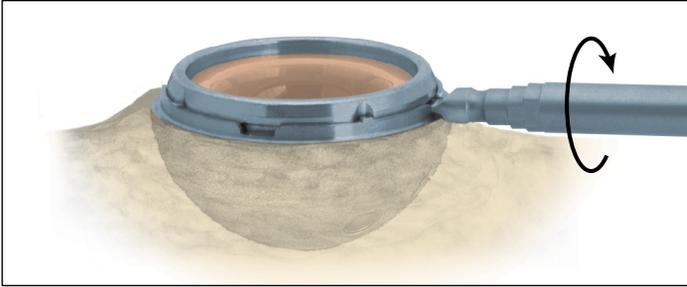


Figure 18

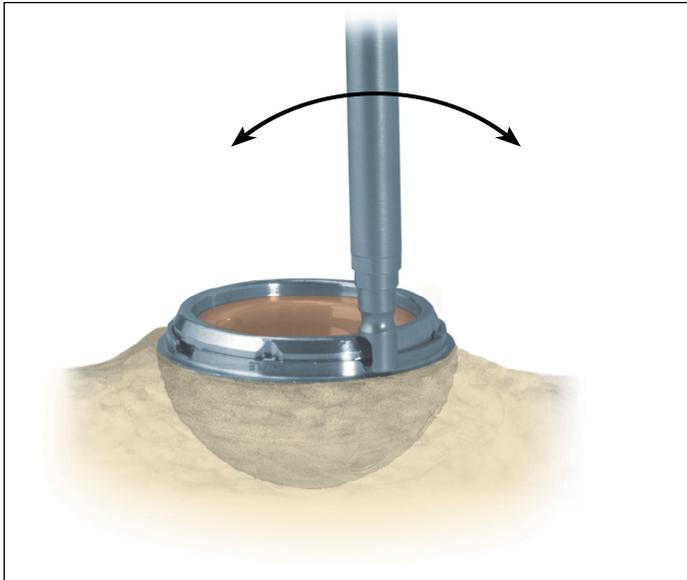


Figure 19

## Removal of the cup insert and shell

### Ceramic insert removal

The Trident Alumina Insert Removal Tool (2112-0000) is designed to provide the surgeon with two options for extracting the ceramic insert from the Trident shell.

#### Option 1: Flat head

Connect the T-Handle (1101-2100) to the L-shaped end of the removal tool. Insert the flat end of the removal tool between the shell and ceramic insert at one of the four notches at the shell rim. While applying continuous force toward the center of the shell, twist the T-Handle (like a screwdriver) to dislodge the ceramic insert (Figure 18). It may be required to repeat this procedure at the other notches in order to successfully disengage the taper.

#### Option 2: L-shaped

Insert the L-shaped end of the removal tool between the shell and ceramic insert at one of the four notches at the shell rim. Apply continuous force toward the center of the shell and lever the tool in a plane tangent to the shell's outside edge to dislodge the ceramic insert (Figure 19). It may be required to repeat this procedure at the other notches in order to successfully disengage the taper.

The removal tool may be attached to the Insert Positioner/Impactor Handle to increase leverage and length for larger patients.

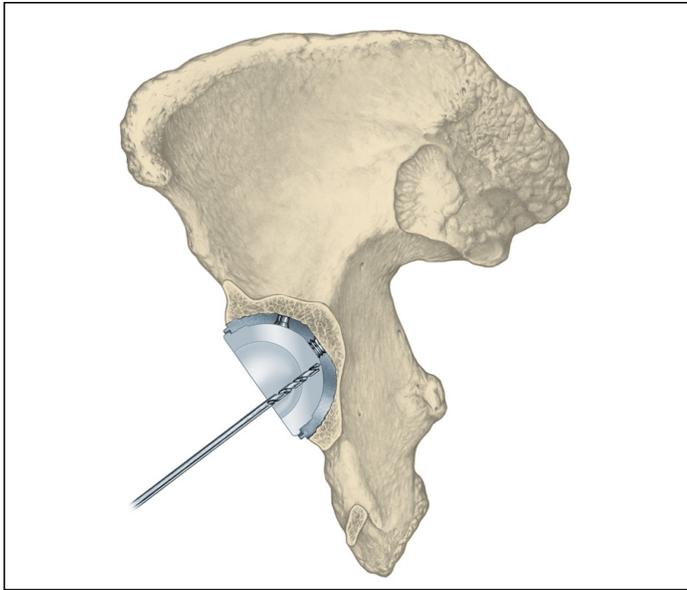


Figure 20

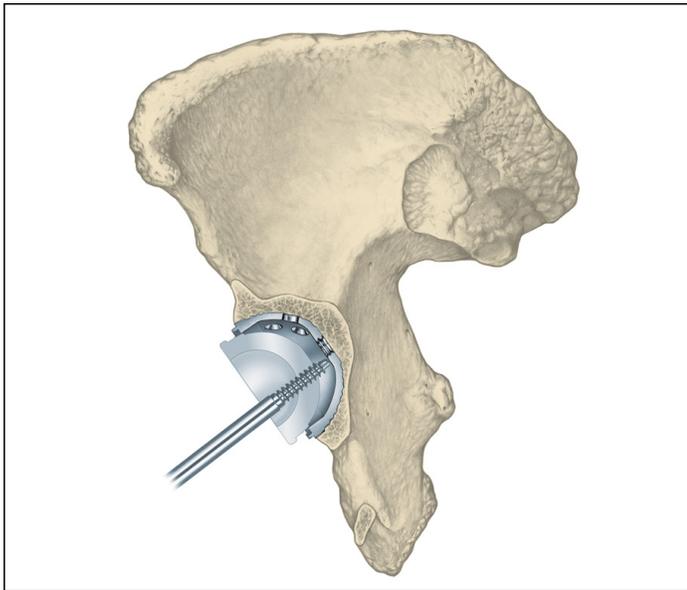


Figure 21

## Removal of the cup insert and shell (continued)

### Polyethylene Insert removal

Utilize a 3.3mm Drill Bit to create an off-center hole in the polyethylene insert. Use the T-Handle to thread the Polyethylene Insert Removal Tool into the insert, and advance the tool to the medial wall of the shell to dislodge the insert (Figures 20 and 21).

### Revising the Trident Tritanium Acetabular Shell with a Trident Polyethylene Insert

Should it become necessary to remove the ceramic insert, a Trident Polyethylene Insert can be inserted into the Trident Tritanium Acetabular Shell.

Carefully remove the Trident Alumina Insert.

The Trident Insert Trials are used to evaluate the shell face position and provide a final check of hip biomechanics. The polyethylene inserts provide 12 different insert orientations within the shell to facilitate desired joint stability.

Follow Insert Implantation to insert the polyethylene insert.

### Shell

Should removal of the metal shell become necessary, a curved osteotome, compatible cup removal system, or small burr can be passed around the cup periphery to loosen the fixation interface. The CuttingEdge Universal Shell Positioner can be threaded into the dome hole of the cup. A Slotted Mallet is slid over the positioner shaft to assist with the shell removal.

## Head disassembly

The Head Disassembly Instrument (6059-9-505) is used to remove an impacted head. Inspect the stem neck taper to verify that no damage has occurred prior to impacting a replacement head. A replacement head may then be attached to the stem neck taper and secured using the Stem Head Impactor.



Figure 22

### Note:

Revision of ceramic components – If a Stryker Orthopaedics Trident Ceramic Head needs to be revised for any reason, a new Trident Ceramic Head must not be affixed to the existing stem trunnion because the trunnion will have been deformed through assembly with the first ceramic head component. If the surgeon wishes to revise with a ceramic head, the entire hip stem must be replaced unless the femoral stem has an intact and undamaged V40 Taper trunnion. In this situation, the Adaptor Sleeve (catalog # 17-0000E) must be used. A new Trident Ceramic Head can then be affixed to the Adaptor Sleeve.

### Note:

If a Trident Ceramic Insert is being used, Trident Alumina Ceramic Heads must be used to articulate with the ceramic insert. Trident BIOLOX *delta* Ceramic Heads are not compatible with Trident Ceramic Inserts.

If the surgeon wishes to revise the Trident Ceramic Head with a metal head, inspect the stem trunnion closely for damage. If it appears undamaged, a metal head may then be used. The Trident Ceramic Insert, however, must be replaced with a Trident Polyethylene Insert. Metal heads can only articulate on polyethylene.

### Revision of BIOLOX *delta* Anatomic Universal Taper or BIOLOX *delta* Universal Taper Ceramic Heads

If the ceramic head needs to be revised for any reason, remove the ceramic head with the Head Disassembly Instrument (6059-9-505) and remove the Universal Adaptor Sleeve with the Ceramic Head Sleeve Disassembly Adaptor (1118-1005\*). If the surgeon wishes to revise with another BIOLOX *delta* Universal Taper ceramic head, place a new Universal Adaptor Sleeve onto the stem trunnion and then assemble the BIOLOX *delta* Universal Taper ceramic head onto the sleeved stem trunnion. If the surgeon wishes to revise with a V40 or C-taper ceramic or CoCr head, place the new femoral head directly onto the previously sleeved femoral component.

\*This product is not CE marked in accordance with applicable EU regulations and directives. Stryker is not marketing or distributing this product in the EU. Any reference to this product is for presentation purposes only.

## Catalog information

### Trident Tritanium Hemispherical Multihole

Catalog no.	Description
509-02-54E	Trident Tritanium Hemispherical Multihole
509-02-56E	Trident Tritanium Hemispherical Multihole
509-02-58F	Trident Tritanium Hemispherical Multihole
509-02-60F	Trident Tritanium Hemispherical Multihole
509-02-62G	Trident Tritanium Hemispherical Multihole
509-02-64G	Trident Tritanium Hemispherical Multihole
509-02-66H	Trident Tritanium Hemispherical Multihole
509-02-68H	Trident Tritanium Hemispherical Multihole
509-02-70I	Trident Tritanium Hemispherical Multihole
509-02-72I	Trident Tritanium Hemispherical Multihole
509-02-74J*	Trident Tritanium Hemispherical Multihole
509-02-76J*	Trident Tritanium Hemispherical Multihole
509-02-78J*	Trident Tritanium Hemispherical Multihole
509-02-80J*	Trident Tritanium Hemispherical Multihole

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## Catalog information

### Trident X3 Polyethylene Inserts

X3 0° catalog no.	X3 10° catalog no.	X3 Eccentric 0° catalog no.*	X3 Eccentric 10° catalog no.	X3 Elevated Rim catalog no.
623-00-22A or 723-00-22A	623-10-22A or 723-10-22A	-	-	-
623-00-22B or 723-00-22B	623-10-22B or 723-10-22B	-	-	-
623-00-22C or 723-00-22C	623-10-22C or 723-10-22C	-	-	-
623-00-22D or 723-00-22D	623-10-22D or 723-10-22D	-	-	-
623-00-22E or 723-00-22E	623-10-22E or 723-10-22E	-	-	-
623-00-22F or 723-00-22F	623-10-22F or 723-10-22F	-	-	-
623-00-22G or 723-00-22G	623-10-22G or 723-10-22G	-	-	-
623-00-22H or 723-00-22H	623-10-22H or 723-10-22H	-	-	-
623-00-22I or 723-00-22I	623-10-22I or 723-10-22I	-	-	-
623-00-22J or 723-00-22J	623-10-22J or 723-10-22J	-	-	-
-	623-10-26C or 723-10-26C	-	-	-
-	623-10-26D or 723-10-26D	-	-	-
-	623-10-26E or 723-10-26E	-	-	-
-	623-10-26F or 723-10-26F	-	-	-
-	623-10-26G or 723-10-26G	-	-	-
-	623-10-26H or 723-10-26H	-	-	-
-	623-10-26I or 723-10-26I	-	-	-
-	623-10-26J or 723-10-26J	-	-	-
623-00-28A or 723-00-28A	-	-	-	-
623-00-28B or 723-00-28B	-	663-00-28B or 763-00-28B	-	-
623-00-28C or 723-00-28C	623-10-28C or 723-10-28C	663-00-28C or 763-00-28C	663-10-28C or 763-10-28C	643-00-28C or 743-00-28C
623-00-28D or 723-00-28D	623-10-28D or 723-10-28D	663-00-28D or 763-00-28D	663-10-28D or 763-10-28D	643-00-28D or 743-00-28D
623-00-28E or 723-00-28E	623-10-28E or 723-10-28E	663-00-28E or 763-00-28E	663-10-28E or 763-10-28E	643-00-28E or 743-00-28E
623-00-28F or 723-00-28F	623-10-28F or 723-10-28F	663-00-28F or 763-00-28F	663-10-28F or 763-10-28F	643-00-28F or 743-00-28F
623-00-28G or 723-00-28G	623-10-28G or 723-10-28G	663-00-28G or 763-00-28G	663-10-28G or 763-10-28G	643-00-28G or 743-00-28G
623-00-28H or 723-00-28H	623-10-28H or 723-10-28H	663-00-28H or 763-00-28H	663-10-28H or 763-10-28H	643-00-28H or 743-00-28H
623-00-28I or 723-00-28I	623-10-28I or 723-10-28I	663-00-28I or 763-00-28I	663-10-28I or 763-10-28I	643-00-28I or 743-00-28I
623-00-28J or 723-00-28J	623-10-28J or 723-10-28J	663-00-28J or 763-00-28J	663-10-28J or 763-10-28J	643-00-28J or 743-00-28J
623-00-32B or 723-00-32B	-	-	-	-
623-00-32C or 723-00-32C	-	-	-	-
623-00-32D or 723-00-32D	623-10-32D or 723-10-32D	663-00-32D or 763-00-32D	663-10-32D or 763-10-32D	-
623-00-32E or 723-00-32E	623-10-32E or 723-10-32E	663-00-32E or 763-00-32E	663-10-32E or 763-10-32E	643-00-32E or 743-00-32E
623-00-32F or 723-00-32F	623-10-32F or 723-10-32F	663-00-32F or 763-00-32F	663-10-32F or 763-10-32F	643-00-32F or 743-00-32F
623-00-32G or 723-00-32G	623-10-32G or 723-10-32G	663-00-32G or 763-00-32G	663-10-32G or 763-10-32G	643-00-32G or 743-00-32G
623-00-32H or 723-00-32H	623-10-32H or 723-10-32H	663-00-32H or 763-00-32H	663-10-32H or 763-10-32H	643-00-32H or 743-00-32H
623-00-32I or 723-00-32I	623-10-32I or 723-10-32I	663-00-32I or 763-00-32I	663-10-32I or 763-10-32I	643-00-32I or 743-00-32I
623-00-32J or 723-00-32J	623-10-32J or 723-10-32J	663-00-32J or 763-00-32J	663-10-32J or 763-10-32J	643-00-32J or 743-00-32J
623-00-36D or 723-00-36D	-	-	-	-
623-00-36E or 723-00-36E	623-10-36E or 723-10-36E	663-00-36E or 763-00-36E	663-10-36E or 763-10-36E	643-00-36E or 743-00-36E
623-00-36F or 723-00-36F	623-10-36F or 723-10-36F	663-00-36F or 763-00-36F	663-10-36F or 763-10-36F	643-00-36F or 743-00-36F
623-00-36G or 723-00-36G	623-10-36G or 723-10-36G	663-00-36G or 763-00-36G	663-10-36G or 763-10-36G	643-00-36G or 743-00-36G
623-00-36H or 723-00-36H	623-10-36H or 723-10-36H	663-00-36H or 763-00-36H	663-10-36H or 763-10-36H	643-00-36H or 743-00-36H
623-00-36I or 723-00-36I	623-10-36I or 723-10-36I	663-00-36I or 763-00-36I	663-10-36I or 763-10-36I	643-00-36I or 743-00-36I
623-00-36J or 723-00-36J	623-10-36J or 723-10-36J	663-00-36J or 763-00-36J	663-10-36J or 763-10-36J	643-00-36J or 743-00-36J
623-00-40E or 723-00-40E	-	-	-	-
623-00-40F or 723-00-40F	-	-	-	-
623-00-40G or 723-00-40G	-	-	-	-
623-00-40H or 723-00-40H	-	-	-	-
623-00-40I or 723-00-40I	-	-	-	-
623-00-40J or 723-00-40J	-	-	-	-
623-00-44F or 723-00-44F	-	-	-	-
623-00-44G or 723-00-44G	-	-	-	-
623-00-44H or 723-00-44H	-	-	-	-
623-00-44I or 723-00-44I	-	-	-	-
623-00-44J or 723-00-44J	-	-	-	-

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## Catalog information

### Alumina Ceramic Insert compatibility chart

Alumina Inserts			Shell compatibility	Insert Trials	
Alpha code	Implant catalog no.	ID (mm)	Titanium Hemispherical Shell Size (mm)	Trial catalog no.	Trial color
D	625-0T-28D	28	50, 52	2200-28D	Black
E	625-0T-32E	32	54, 56	2200-32E	Blue
F	625-0T-32F	32	58, 60	2200-32F	Blue
G	625-0T-36G	36	62, 64	2200-36G	Gray
H	625-0T-36H	36	66, 68	2200-36H	Gray
I	625-0T-36I	36	70, 72	2200-36I	Gray

## Catalog information

### Trident Insert Trials

- = 0° (2200-XXX) and 10° (2210-XXX)
- = Elevated Rim (2260-XXX)

Alpha code	22mm	26mm	28mm	32mm	36mm	40mm	44mm
A	●		●*				
B	●		●*	●*			
C	●	●	●○	●*			
D	●	●	●○	●	●*		
E	●	●	●○	●○	●○	●*	
F	●	●	●○	●○	●○	●*	●*
G	●	●	●○	●○	●○	●*	●*
H	●	●	●○	●○	●○	●*	●*
I	●	●	●○	●○	●○	●*	●*
J	●	●	●○	●○	●○	●*	●*

\* Available in 0° only.

### Crossfire Inserts

Crossfire 0° cat. no.	Crossfire 10° cat. no.
621-00-22A	621-10-22A
621-00-22B	621-10-22B
621-00-28C	621-10-28C
621-00-28D	621-10-28D
621-00-32D	621-10-32D
621-00-32E	621-10-32E
621-00-32F	621-10-32F
621-00-32G	621-10-32G
621-00-32H	621-10-32H
621-00-32I	621-10-32I
621-00-32J	621-10-32J
621-00-36E	621-10-36E
621-00-36F	621-10-36F
621-00-36G	621-10-36G
621-00-36H	621-10-36H
621-00-36I	621-10-36I
621-00-36J	621-10-36J

## Catalog information

### MDM Liner, Insert and Femoral Head compatibility

MDM Liner	MDM Liner Trial	ADM/MDM X3 Insert	ADM/MDM Dual Articulating Insert Trial	Required Femoral Head size (mm)	ADM/MDM Monopolar Insert Trial
626-00-36C	3200-36C	1236-2-242 or 7236-2-242	1235-0-242	22.2 mm	1235-0-242M
626-00-38D	3200-38D	1236-2-244 or 7236-2-244	1235-0-244	22.2 mm	1235-0-244M
626-00-42E	3200-42E	1236-2-848 or 7236-2-848	1235-0-848	28 mm	1235-0-848M
626-00-46F	3200-46F	1236-2-852 or 7236-2-852	1235-0-852	28 mm	1235-0-852M
626-00-48G	3200-48G	1236-2-854 or 7236-2-854	1235-0-854	28 mm	1235-0-854M
626-00-52H	3200-52H	1236-2-858 or 7236-2-858	1235-0-858	28 mm	1235-0-858M
626-00-54I	3200-54I	1236-2-860 or 7236-2-860	1235-0-860	28 mm	1235-0-860M
626-00-58J	3200-58J	1236-2-864 or 7236-2-864	1235-0-864	28 mm	1235-0-864M

**Note:** MDM inserts are compatible with Stryker's 22.2 and 28mm heads only.

### Trident 0° Constrained Liner

Alpha code	Trident 0° Constrained Liner	Restoration Anatomic Shell (mm)	Bipolar Femoral Head size (mm)	Bipolar Head OD (mm)	Outer Bearing Poly thickness (mm)	Total range of motion†	Outer Bearing OD spherical diameter (mm)	Head Removal Key	Constrained 0° Liner Trial
D	690-00-22D	56, 58, 60	22	36	5.6	82°	40.4	HI-UHRK-3638**	2270-22D
E	690-00-22E	62, 64	22	36	7.5	82°	44.4	HI-UHRK-3638**	2270-22E
F	690-00-28F	66, 68	28	42	6.5	90°	48.5	HI-UHRK-28	2270-28F
G	690-00-28G	70, 72	28	42	8.1	90°	51.5	HI-UHRK-28	2270-28G
H	690-00-32H	74, 76, 78, 80	32	46	7.8	94°	55.0	HI-UHRK-32	2270-32H

### Trident 10° Constrained Liner

Alpha code	Trident 10° Constrained Liner	Restoration Anatomic Shell (mm)	Bipolar Femoral Head size (mm)	Bipolar Head OD (mm)	Outer Bearing Poly thickness (mm)	Total range of motion†	Outer Bearing OD spherical diameter (mm)	Head Removal Key	Constrained 10° Liner Trial
E	690-10-22E	62, 64	22	36	7.9	82°	44.4	HI-UHRK-3638**	2230-22E
F	690-10-22F	66, 68	22	36	9.9	82°	48.4	HI-UHRK-3638**	2230-22F
G	690-10-28G	70, 72	28	42	8.4	90°	51.5	HI-UHRK-28	2230-28G
H	690-10-28H	74, 76, 78, 80	28	42	10.2	90°	55.0	HI-UHRK-28	2230-28H

† Values calculated using Accolade® TMZF Size 3 stems.

\*\*Note: Special Key for 690-00-22D, 690-00-22E and 690-10-22E, 690-10-22F only.

## Catalog information

### Window Trials

Catalog no.	Description
2402-4020*	Trident Tritanium Window Trials Case
2208-4043	Tritanium Window Trial 43mm
2208-4044S	44MM Tritanium Window Trial
2208-4045	Tritanium Window Trial 45mm
2208-4046	Tritanium 46MM Window Trial
2208-4046S	46MM Tritanium Window Trial
2208-4047	Tritanium 47MM Window Trial
2208-4048	Tritanium 48MM Window Trial
2208-4048S	48MM Tritanium Window Trial
2208-4049	Tritanium 49MM Window Trial
2208-4050	Tritanium 50MM Window Trial
2208-4051	Tritanium 51MM Window Trial
2208-4052	Tritanium 52MM Window Trial
2208-4052S	52MM Tritanium Window Trial
2208-4053	Tritanium 53MM Window Trial
2208-4054	Tritanium 54MM Window Trial
2208-4055	Tritanium 55MM Window Trial
2208-4056	Tritanium 56MM Window Trial
2208-4056S	56MM Tritanium Window Trial
2208-4057	Tritanium 57MM Window Trial
2208-4058	Tritanium 58MM Window Trial
2208-4059	Tritanium 59MM Window Trial
2208-4060	Tritanium 60MM Window Trial
2208-4060S	60MM Tritanium Window Trial
2208-4061	Tritanium 61MM Window Trial
2208-4062	Tritanium 62MM Window Trial
2208-4063	Tritanium 63MM Window Trial
2208-4064	Tritanium 64MM Window Trial
2208-4064S	64MM Tritanium Window Trial
2208-4065	Tritanium 65MM Window Trial
2208-4066	Tritanium 66MM Window Trial
2208-4067	Tritanium 67MM Window Trial
2208-4068	Tritanium 68MM Window Trial
2208-4069	Tritanium 69MM Window Trial
2208-4070	Tritanium 70MM Window Trial
2208-4071	Tritanium 71MM Window Trial
2208-4072	Tritanium 72MM Window Trial
2208-4073	Tritanium 73MM Window Trial
2208-4074	Tritanium 74MM Window Trial
2208-4075	Tritanium 75MM Window Trial
2208-4076	Tritanium 76MM Window Trial
2208-4077	Tritanium 77MM Window Trial
2208-4078	Tritanium 78MM Window Trial
2208-4079	Tritanium 79MM Window Trial
2208-4080	Tritanium 80MM Window Trial
6147-3-107	Trident Tritanium Window Trials Tray

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### Screw Instrumentation

Catalog no.	Description
2107-1000	Ratchet Handle
2107-1015	Universal Driver Shaft
2107-3317	3.3mm Drill Guide
2107-4017	4.0mm Drill Guide
2107-2200	Flexible Drill Shaft
2107-33XX	3.3mm x 25, 40, 60mm Drill Bits
2107-40XX	4.0mm x 25, 40, 60mm Drill Bits
2107-5003	Screw Holding Forceps
2107-0014	Wire Depth Gauge
6090-4-325*	3.5mm Hex Driver Universal Joint Shaft
6090-4-330*	Ratchet Handle
6088-9-800*	40mm Wire Depth Gauge
6088-9-810*	80mm Wire Depth Gauge
6060-5-310*	Osteolock 45 and 60 Degree Drill Guide

### Instrumentation

<b>2101-0130</b>
Final Cup Impactor
<b>2101-0132</b>
Impaction Pad
<b>2060-0000-1</b>
Acetabular Dome Hole Plug

## Catalog information

### CuttingEdge Acetabular Reamers

Catalog no.	Description
2102-0438	38mm
2102-0439	39mm
2102-0440	40mm
2102-0441	41mm
2102-0442	42mm
2102-0443	43mm
2102-0444	44mm
2102-0445	45mm
2102-0446	46mm
2102-0447	47mm
2102-0448	48mm
2102-0449	49mm
2102-0450	50mm
2102-0451	51mm
2102-0452	52mm
2102-0453	53mm
2102-0454	54mm
2102-0455	55mm
2102-0456	56mm
2102-0457	57mm
2102-0458	58mm
2102-0459	59mm
2102-0460	60mm
2102-0461	61mm
2102-0462	62mm
2102-0463	63mm
2102-0464	64mm
2102-0465	65mm
2102-0466	66mm
2102-0467	67mm
2102-0468	68mm
2102-0469	69mm
2102-0470	70mm
2102-0471	71mm
2102-0472	72mm
2102-0473	73mm
2102-0474	74mm
2102-0475	75mm
2102-0476	76mm
2102-0477	77mm
2102-0478	78mm
2102-0479	79mm
2102-0480	80mm

## Catalog information

### Cases

<b>2402-0020</b>	
Trident/Tritanium Sterilization Case (not including lid and trays)	
<b>2402-1000</b>	
LFIT Anatomic V40 Single Layer Sterilization Case	
<b>2402-1010*</b>	
LFIT Anatomic C-Taper Single Layer Sterilization Case	
<b>2402-4020</b>	
Trident Tritanium Window Trials Case*	
<b>Stryker Orthopaedics Bone Screw Instrumentation Kit</b>	
HipBone Screw	
<b>2230-0010</b>	
Acetabular Trial Insert	
Containment Screw Kit	
Contains 5 screws and retaining rings. (Containment Screw Kit is optional – screws come pre-assembled with the Eccentric and Constrained trial inserts.)	
Stryker Orthopaedics has validated the following reusable instrument trays with Aesculap's SterilContainer System and with CSR wrap. Refer to LSTPI-B (Instructions for Cleaning, Sterilization, Inspection, and Maintenance of Reusable Medical Devices).	
<b>6147-0-100</b>	
Universal Lid	
<b>6147-3-101</b>	
Acetabular Reamers Tray (36–66 mm)	
<b>6147-3-102</b>	
Trident & Tritanium General Tray	
<b>6147-3-103</b>	
Acetabular Reamers Tray (67–80 mm)	
<b>6147-3-104</b>	
Trident & Tritanium Insert Trials Tray	
<b>6147-3-106</b>	
Trident Tritanium Window Trials Tray	
<b>6147-3-108*</b>	
Trident Constrained Liner Trials Tray	
<b>2400-0100</b>	
Single Box & Lid	
<b>2400-0200</b>	
Double Box & Lid	
<b>2400-0300</b>	
5/8 Box & Lid	
<b>2402-0008</b>	
Acetabular Insert Trial Tray	
<b>2402-0007</b>	
Acetabular Reamer Tray	

<b>Eccentric/Constrained Cases and Trays (for trials only)</b>
The system provides the option of either a Single Tier or Double Tier case. The Double Tier Case accommodates both the 10° Constrained Insert Trial Tray and the Eccentric Trial Tray.
<b>8000-0200</b>
Double Tier Case
<b>8000-0100*</b>
Single Tier Case
<b>2402-1100*</b>
Trident 10° Constrained Insert Trial Tray

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## Catalog information: femoral head compatibility

### V40 Taper BIOLOX delta Ceramic Anatomic Heads

Catalog no.	Diameter (mm)	Offset (mm)	Trial catalog no.
6570-0-036	36	-5	6264-8-036R
6570-0-436	36	-2.5	6264-8-436R
6570-0-136	36	+0	6264-8-136R
6570-0-536	36	+2.5	6264-8-536R
6570-0-236	36	+5	6264-8-236R
6570-0-736	36	+7.5	6264-8-736R

### C-Taper BIOLOX delta Ceramic Anatomic Heads

Catalog no.	Diameter (mm)	Offset (mm)	Trial catalog no.
18-36-5	36	-5	1100-3699R
18-36-3	36	-2.5	1100-3697R
18-3600	36	+0	1100-3600R
18-3625	36	+2.5	1100-3625R
18-3605	36	+5	1100-3605R
18-3675	36	+7.5	1100-3675R

### Universal Taper BIOLOX delta Ceramic Heads\*

Catalog no.	Diameter (mm)
6519-1-028	28
6519-1-032	32
6519-1-036	36
6519-1-040	40
6519-1-044	44

\*Requires use of Universal Adapter Sleeve.

### Universal Adapter Sleeves - Titanium

Catalog no.	Offset (mm)	Taper
19-0325T	-2.5	C-Taper
19-0000T	+0	C-Taper
19-0025T	+2.5	C-Taper
19-0005T	+5	C-Taper
6519-T-025	-2.5	V40
6519-T-100	+0	V40
6519-T-204	+4	V40

### Universal Trial Heads

Catalog no.	Diameter (mm)	Offset (mm)	Trial catalog no.
1100-4497R	44	-2.5	C-Taper
1100-4425R	44	+2.5	C-Taper
6264-8-728R	28	-2.5	V40
6264-8-632R	32	-2.5	V40
6264-8-236R	36	+4.0	V40
6264-8-940R	40	-2.5	V40
6264-8-944R	44	-2.5	V40

**Note:** Trial head with an "R" suffix is made from radiopaque material, designed to allow for easy visibility on X-rays.

### C-Taper Alumina Ceramic Heads

Catalog no.	Diameter (mm)	Offset (mm)	Trial catalog no.
17-28-3E	28	-2.5	1100-2897R
17-2800E	28	+0	1100-2800R
17-2805E	28	+5	1100-2805R
17-32-3E	32	-2.5	1100-3297R
17-3200E	32	+0	1100-3200R
17-3205E	32	+5	1100-3205R
17-36-5E	36	-5	1100-3699R
17-3600E	36	+0	1100-3600R
17-3605E	36	+5	1100-3605R

### V40 Taper Alumina Ceramic Heads

Catalog no.	Diameter (mm)	Offset (mm)	Trial catalog no.
6565-0-028	28	-2.7	6264-8-928R
6565-0-128	28	+0	6264-8-128R
6565-0-228	28	+4	6264-8-228R
6565-0-032	32	-4	6264-8-032R
6565-0-132	32	+0	6264-8-132R
6565-0-232	32	+4	6264-8-232R
6565-0-036	36	-5	6264-8-036R
6565-0-136	36	+0	6264-8-136R
6565-0-236	36	+5	6264-8-236R

## Catalog information: femoral head compatibility

### C-Taper LFIT CoCr Heads

Catalog no.	Diameter (mm)	Offset (mm)	Trial catalog no.
06-2200	22	0	1100-2200R
S-1400-HH22*	22	+2.5	1100-2225R*
06-2205	22	+5	1100-2205R
06-2210	22	+10	1100-2210R
06-2600	26	0	1100-2600R
S-1400-HH26*	26	+2.5	1100-2625R*
06-2605	26	+5	1100-2605R
S-1400-HH26*	26	+7.5	1100-2675R*
06-2610	26	+10	1100-2610R
06-2898	28	-3	1100-2898R
06-2800	28	0	1100-2800R
S-1400-HH28*	28	+2.5	1100-2825R*
06-2805	28	+5	1100-2805R
S-1400-HH28*	28	+7.5	1100-2875R*
06-2810	28	+10	1100-2810R
06-3299	32	-5	1100-3299R
S-1400-HH32*	32	-2.5	1100-3297R*
06-3200	32	0	1100-3200R
S-1400-HH32*	32	+2.5	1100-3225R*
06-3205	32	+5	1100-3205R
S-1400-HH32*	32	+7.5	1100-3275R*
06-3210	32	+10	1100-3210R

### V40 Taper LFIT CoCr Heads

Catalog no.	Diameter (mm)	Offset (mm)	Trial catalog no.
6260-9-122	22	0	6264-8-122R
6260-9-222	22	+3	6264-8-222R
6260-9-322	22	+8	6264-8-322R
6260-9-026	26	-3	6264-8-026R
6260-9-126	26	0	6264-8-126R
6260-9-226	26	+4	6264-7-226R
6260-9-326	26	+8	6264-8-326R
6260-9-426	26	+12	6264-8-426R
6260-9-028	28	-4	6264-8-028R
6260-9-128	28	0	6264-8-128R
6260-9-228	28	+4	6264-8-228R
6260-9-328	28	+8	6264-8-328R
6260-9-428	28	+12	6264-8-428R
6260-9-032	32	-4	6264-8-032R
6260-9-132	32	0	6264-8-132R
6260-9-232	32	+4	6264-8-232R
6260-9-332	32	+8	6264-8-332R
6260-9-432	32	+12	6264-8-432R

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## Catalog information

### Trident X3 Polyethylene Inserts

Trial 0° cat. no.	Trial 10° cat. no.	Trial Eccentric 0° cat. no.	Trial Eccentric 10° cat. no.	Trial Elevated Rim cat. no.	Trial 0° Constrained Insert cat. no.	Trial 10° Constrained Insert cat. no.
2200-22A	2210-22A	2240-28B	2250-28C	2260-28C	2270-22D	2230-22E
2200-22B	2210-22B	2240-28C	2250-28D	2260-28D	2270-22E	2230-22F
2200-22C	2210-22C	2240-28D	2250-28E	2260-28E	2270-28F	2230-28G
2200-22D	2210-22D	2240-28E	2250-28F	2260-28F	2270-28G	2230-28H
2200-22E	2210-22E	2240-28F	2250-28G	2260-28G	2270-32H	2230-28I
2200-22F	2210-22F	2240-28G	2250-28H	2260-28H	2270-32I	2230-28J
2200-22G	2210-22G	2240-28H	2250-28I	2260-28I	2270-32J	
2200-22H	2210-22H	2240-28I	2250-28J	2260-28J		
2200-22I	2210-22I	2240-28J	2250-32D	2260-32E		
2200-22J	2210-22J	2240-32D	2250-32E	2260-32F		
2200-26B	2210-26C	2240-32E	2250-32F	2260-32G		
2200-26C	2210-26D	2240-32F	2250-32G	2260-32H		
2200-26D	2210-26E	2240-32G	2250-32H	2260-32I		
2200-26E	2210-26F	2240-32H	2250-32I	2260-36E		
2200-26F	2210-26G	2240-32I	2250-32J	2260-36F		
2200-26G	2210-26H	2240-32J	2250-36G	2260-36G		
2200-26H	2210-26I	2240-36G	2250-36H	2260-36H		
2200-26I	2210-26J	2240-36H	2250-36I	2260-36I		
2200-26J	2210-28D	2240-36I	2250-36J			
2200-28C	2210-28E	2240-36J	2250-36E			
2200-28D	2210-28F	2240-36E	2250-36F			
2200-28E	2210-28G	2240-36F				
2200-28F	2210-28H					
2200-28G	2210-28I					
2200-28H	2210-28J					
2200-28I	2210-32D					
2200-28J	2210-32E					
2200-32D	2210-32F					
2200-32E	2210-32G					
2200-32F	2210-32H					
2200-32G	2210-32I					
2200-32H	2210-32J					
2200-32I	2210-36E					
2200-32J	2210-36F					
2200-36E	2210-36G					
2200-36F	2210-36H					
2200-36G	2210-36I					
2200-36H	2210-36J					
2200-36I						
2200-36J						
2200-40E						
2200-40F						
2200-40G						
2200-40H						
2200-40I						
2200-40J						
2200-44F						
2200-44G						
2200-44H						
2200-44I						
2200-44J						



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**TRITAN-SP-7\_Rev-1\_33118**

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