

stryker®

TRITANIUM ACETABULAR SYSTEM

Surgical
Technique



- **Cluster Hole Shell**
- **Solid Back Shell**

ACKNOWLEDGEMENTS

Stryker Orthopaedics would like to thank the following for their expertise in the implant, instrument and collateral development of the Tritanium Acetabular System.

John Andronaco, MD

William N. Capello, MD

James A. D'Antonio, MD

Michael Dunbar, MD

Arlen Hanssen, MD

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This publication sets forth detailed recommended procedures for using Stryker Orthopaedics devices and instruments. It offers guidance 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.

INDICATIONS FOR TRIDENT POLYETHYLENE INSERT WITH METAL OR CERAMIC HEAD

- Painful, disabling joint disease of the hip resulting from: non-inflammatory degenerative arthritis, rheumatoid arthritis, post-traumatic arthritis, or late stage avascular necrosis.
- Revision of previous failed femoral head replacement, shell 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.
- This acetabular shell is intended for cementless use only.

CONTRAINDICATIONS FOR TRIDENT POLYETHYLENE INSERT WITH METAL OR CERAMIC HEAD

- 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 post-operative care.
- Bone stock compromised by disease, infection or prior implantation which cannot provide adequate support and/or fixation to the prosthesis.
- Skeletal immaturity.

INDICATIONS FOR TRIDENT CERAMIC INSERT WITH CERAMIC HEAD

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.

CONTRAINDICATIONS FOR TRIDENT CERAMIC INSERT WITH CERAMIC HEAD

- 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 post-operative care.
- Bone stock compromised by disease, infection, or prior implantation which cannot provide adequate support and/or fixation to the prosthesis.
- Skeletal immaturity.

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 post-sterilization;
- 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 the following Greatbatch Inc. IFUs: MAN-000020, and MAN-000026.

TRITANIUM

TABLE OF CONTENTS

Step 1	
Pre-operative Planning and X-ray Evaluation	4
Step 2	
Acetabular Preparation	4
Step 3A	
Spherical Reaming	5
Step 3B	
Final Reaming	6
Step 4	
Trial Evaluation	7
Step 5	
Tritanium Acetabular Shell Implantation	8
Step 5A	
Optional Screw Utilization	10
Step 6	
Trial Insert Reduction	11
Step 7	
Insert Implantation	12
Step 8	
Head Assembly	13
Step 8	
Removal of the Insert and Shell	14
Step 9	
Head Disassembly	16
Catalog Information	18 - 22

TRITANIUM

INTRODUCTION

ACETABULAR SYSTEM

The Tritanium Acetabular System provides surgeons with a highly porous ingrowth surface manufactured from a commercially pure Titanium matrix. This surgical technique is a guide to preparing the acetabulum for Tritanium Acetabular Shells utilizing CuttingEdge Total Hip Acetabular Instrumentation.

The Tritanium Acetabular System is a modular component design that is assembled intra-operatively. Tritanium Shells are a true hemispherical shape and are designed to achieve a line-to-line or 1mm press-fit by under reaming the acetabulum. Shells are available in sizes 44mm - 66mm and in both solid back and cluster hole designs.

The Tritanium Acetabular System utilizes the Innerchange Locking Mechanism and is compatible with Trident X3 or Crossfire polyethylene and Trident Alumina Ceramic Inserts. Trident Alumina Ceramic Inserts gain fixation within the shell by means of mating tapers. Rotational stability between the components can be achieved when the shell's anti-rotational barbs interlock with the insert scallops.

The Trident Alumina Ceramic Inserts must be used with Stryker Orthopaedic Alumina Heads.

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

Refer to Tables 1 and 2 for insert and shell compatibility and sizing options.

		SHELL SIZE, LINER ALPHA CODE, AND HEAD SIZE (MM)									
TRIDENT PSL SHELL		40	42	44	46, 48	50, 52	54, 56	58, 60	62, 64	66, 68	70, 72
TRIDENT HEMISPHERICAL SHELL		42	44	46	48, 50	52, 54	56, 58	60, 62	64, 66	68, 70	72, 74
Tritanium Hemispherical Solid Back and Cluster Shells		44	46	48	50, 52	54, 56	58, 60	62, 64	66	N/A	N/A
LINER ALPHA CODE		A	B	C	D	E	F	G	H	I	J
ANATOMIC FEMORAL HEADS	44MM						3.8	5.4	7.1	8.6	10.6
	40MM					3.8	5.8	7.4	9.1	10.6	12.6
	36MM				3.9	5.9	7.9	9.4	11.2	12.7	14.7
FEMORAL HEADS	32MM		3.9	4.9	5.9	7.9	9.9	11.4	13.2	14.7	16.7
	28MM	4.9	5.9	6.9	7.9	9.9	11.9	13.4	15.2	16.7	18.7
	26MM			7.9	8.9	10.9	12.9	14.4	16.2	17.7	19.7
	22MM	7.8	8.8	9.8	10.8	12.8	14.8	16.3	18.1	19.6	21.6

		SHELL SIZE, LINER ALPHA CODE, AND HEAD SIZE (MM)							
Tritanium Hemispherical Shell		44	46	48	50, 52	54, 56	58, 60	62, 64	66
Liner Alpha Code		A	B	C	D	E	F	G	H
Compatible Femoral Heads with Polyethylene Inserts		22, 28	22, 28, 32	22, 26, 28, 32	22, 26, 28, 32, 36	22, 26, 28, 32, 36, 40	22, 26, 28, 32, 36, 40, 44	22, 26, 28, 32, 36, 40, 44	22, 26, 28, 32, 36, 40, 44
Compatible Femoral Heads with Alumina 0° Inserts					28	32	32	36	36



Tritanium Hemispherical Cluster Shell



Trident Alumina Ceramic Insert



LFIT CoCr Anatomic Femoral Head



BIOLOX delta Universal Taper Anatomic Head



X3 Polyethylene Insert



Alumina Ceramic Femoral Head



LFIT CoCr Femoral Head



BIOLOX delta Ceramic Head

STEP 1

PRE-OPERATIVE PLANNING AND X-RAY EVALUATION

Pre-operative planning and X-ray evaluation aids in the selection of the appropriate implant style and size for the patient's anatomy and hip pathology. Selecting potential implant styles and sizes can facilitate operating room preparation and assure availability of an appropriate size selection. X-ray evaluation may also help detect anatomic anomalies that could prevent the intra-operative achievement of the established pre-operative goals.



TIPS

James A. D'Antonio, MD
"Templating is an important step in the procedure because it allows surgeons to estimate the size of the implant to be used. Assess the center of rotation and offset of the hip to determine inferior location of the acetabular component relative to the tear drop."

STEP 2

ACETABULAR PREPARATION



NOTE

Careful identification and removal of osteophytes can help reduce the possibility of bone-to-bone or component-to-bone impingement.

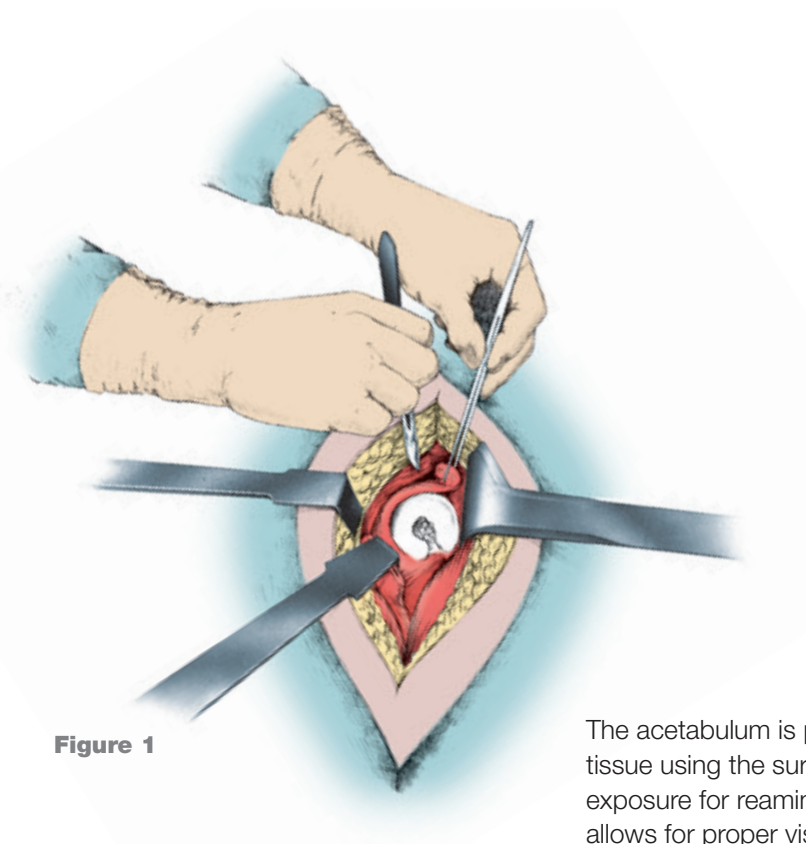


Figure 1

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' Femoral and Wing 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.

STEP 3A

SPHERICAL REAMING

To obtain optimal component positioning in the reaming process, an optional 45/20° Abduction/Anteversion Alignment Guide can be attached to the CuttingEdge Reamer Handle (Figure 2). The alignment guide, when perpendicular to the long axis of the patient, orients 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 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.



CAUTION

Only the CuttingEdge Spherical Reamers should be used to prepare the acetabulum for Tritanium Acetabular components.



CAUTION

All external alignment guides depend on knowing the patient is in a lateral decubitus position, therefore acceptable to anteversion.



NOTE

Changes in pelvic tilt and pelvic flexion caused by patient positioning on the table, as well as disease in the contralateral hip, spine and pelvis may impact a surgeon's ability to achieve component placement at 45/20° abduction/anteversion.



TIPS

William A. Leone, Jr., MD
"To assess pelvic motion and help achieve the recommended 45° abduction and 20° anteversion, an optional Pelvic Alignment Level (PAL) may be used. For recommended technique, refer to PAL Pelvic Alignment Level Surgical Protocol, LSP61."



TIPS

John Andronaco, MD
"Be sure to check for and remove internal osteophytes prior to reaming for the implant to prevent lateralizing the shell."

It is recommended that the initial reaming begin with a CuttingEdge Spherical Reamer 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 (Figure 4). Reaming progresses in 1mm increments until final sizing is achieved.

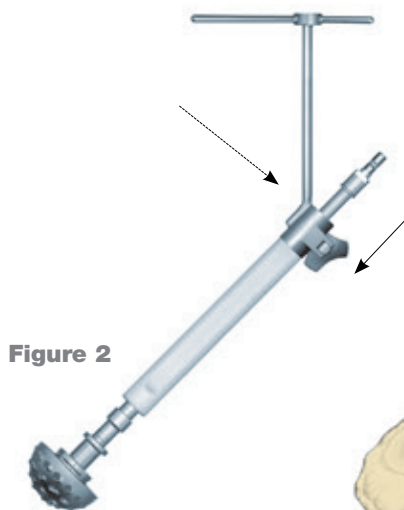


Figure 2

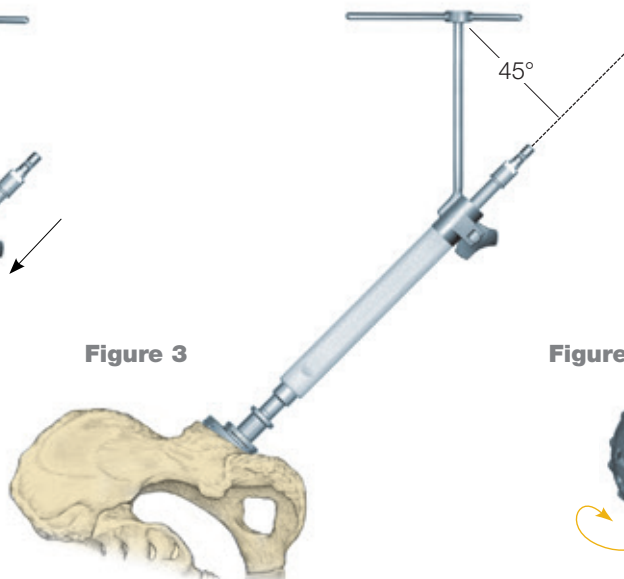


Figure 3

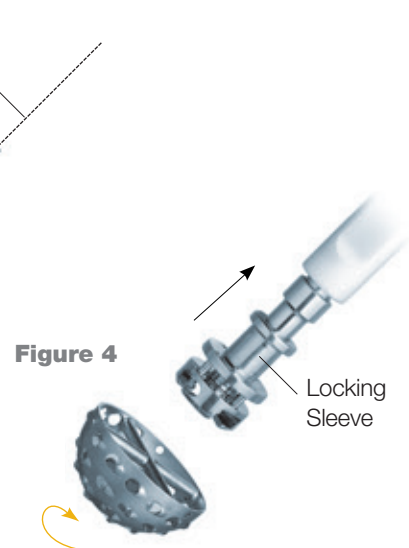


Figure 4

Locking Sleeve

STEP 3B

FINAL REAMING



NOTE

The amount of interference fit should be determined intra-operatively based upon the patient's bone quality.

When implanting the Tritanium Shell, it is recommended to under-ream by 1mm to achieve interference fit.

As with all manufacturing processes, due to the nature of the coating, the outer diameter may be slightly larger than the size indicated. The surgeon should consider this during acetabular preparation. Depending on acetabular bone quality, the surgeon may choose to ream line-to-line.

The full profile 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

When osteoporotic bone is encountered, it is recommended to under-ream by 1mm. When sclerotic bone is encountered, it may be difficult to fully seat the shell with a 1mm interference fit. In this situation, it is recommended to ream less than 1mm below the final implant diameter, or line-to-line to reduce the potential for problems that may typically occur in dense bone. Potential challenges implanting acetabular shells may include: acetabular fracture, failure to fully seat the implant, or slight deformation of the titanium shell, making seating of the insert more difficult.



TIPS

Timothy Izant, MD

“Assess patient bone quality prior to implantation. If patient possesses hard, type A bone, line-to-line reaming is recommended. If poorer bone quality exists, it is advised to under-ream by 1mm.”

William Capello, MD

“Pay special attention to differential bone densities that could cause eccentric reaming.”



NOTE

The CuttingEdge Spherical Reamers are very aggressive and 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 may deflect to cut softer bone and resist hard bone. This situation may result in an irregularly shaped or enlarged acetabulum preparation.

STEP 4

TRIAL EVALUATION

Following the reaming procedure, the appropriate Tritanium Window Trial (Table 3) is threaded onto the CuttingEdge Shell Positioner/Impactor and placed in the acetabulum to evaluate the size and congruity of the preparation (Figure 5). Use the trial that has the same diameter as that of the last spherical reamer used. 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 into the Universal Window Trial (Figures 6 & 7), joint mechanics can be evaluated. To ensure that the Trial Insert is well fixed to the Universal 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).

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

When trialing, it is recommended to use a Tritanium Window trial that is line-to-line or 1mm smaller than the implant OD to prevent destruction of the press-fit.

TABLE 3: TRITANIUM WINDOW TRIALS

CATALOG NUMBER	DESCRIPTION
2402-4041	Tritanium Window Trials Top Tray (Sizes 43mm - 67mm)
2402-4061	Tritanium Window Trials Bottom Tray (Sizes 68mm - 80mm)
2402-4020	Tritanium Window Trials Case
2402-3090	Clear Lid
2208-4043	43mm Tritanium Window Trial
2208-4044S	44mm Tritanium Window Trial
2208-4045	45mm Tritanium Window Trial
2208-4046S	46mm Tritanium Window Trial
2208-4047	47mm Tritanium Window Trial
2208-4048S	48mm Tritanium Window Trial
2208-4049	49mm Tritanium Window Trial
2208-4050	50mm Tritanium Window Trial



NOTE

Window Trials (2208-40XX) specific to the Tritanium Acetabular system must be used. Window Trials with an “S” suffix are designed to fit line-to-line with the shell OD.



NOTE

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

2208-4051	51mm Tritanium Window Trial
2208-4052S	52mm Tritanium Window Trial
2208-4053	53mm Tritanium Window Trial
2208-4054	54mm Tritanium Window Trial
2208-4055	55mm Tritanium Window Trial
2208-4056S	56mm Tritanium Window Trial
2208-4057	57mm Tritanium Window Trial
2208-4058	58mm Tritanium Window Trial
2208-4059	59mm Tritanium Window Trial
2208-4060S	60mm Tritanium Window Trial
2208-4061	61mm Tritanium Window Trial
2208-4062	62mm Tritanium Window Trial
2208-4063	63mm Tritanium Window Trial
2208-4064S	64mm Tritanium Window Trial
2208-4065	65mm Tritanium Window Trial
2208-4066	66mm Tritanium Window Trial



Figure 5

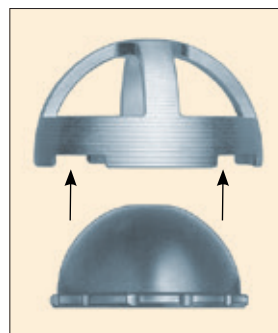


Figure 6

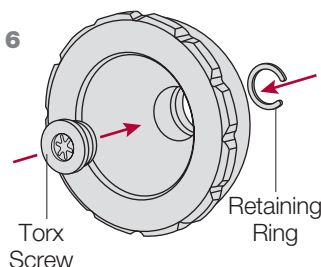
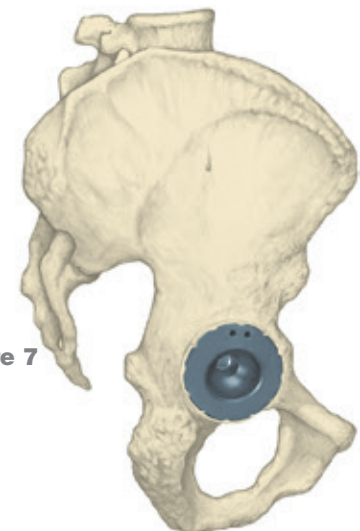


Figure 7



STEP 5

TRITANIUM ACETABULAR SHELL IMPLANTATION

Figure 8

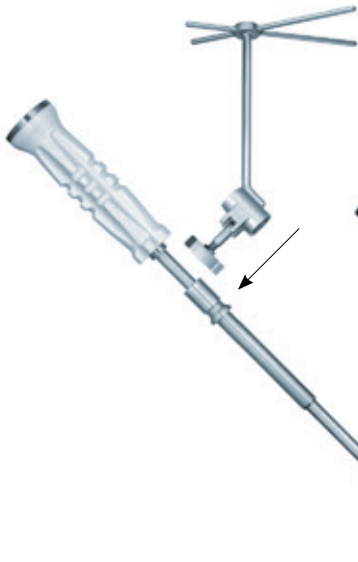


Figure 9

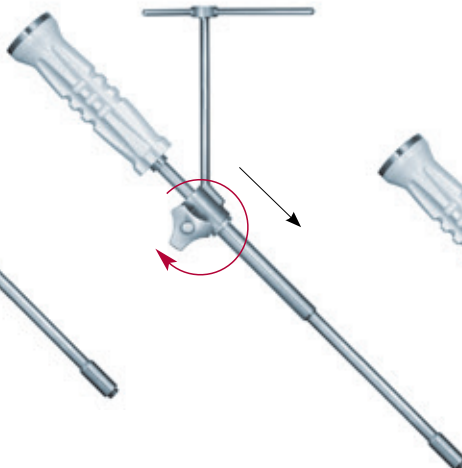
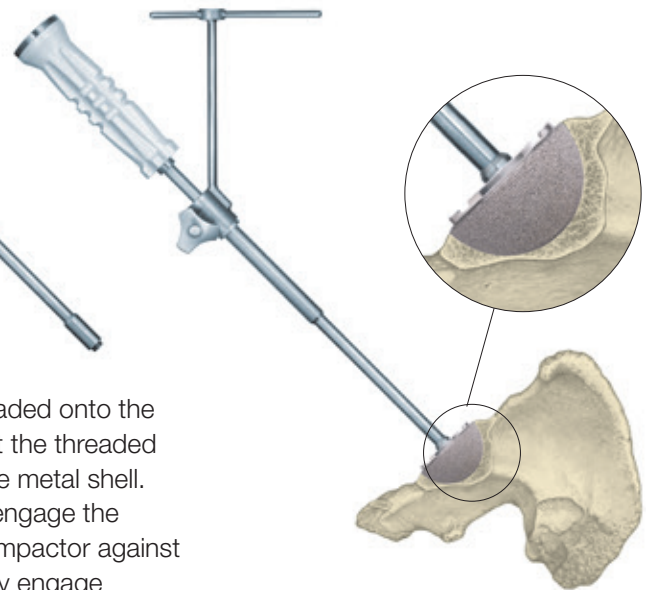


Figure 10



Assess acetabulum and surrounding soft tissue prior to shell introduction to ensure nothing is preventing shell implantation. During shell introduction into the acetabulum, minimize damage to the shell coating by instrumentation such as retractors, and avoid dragging the roughened surface across soft tissue. After completing the trial reduction, select the appropriately sized Tritanium Acetabular Shell as clearly identified on the product label. Ensure the patient is in the correct position. At this step it is prudent to re-assess patient positioning in the surgical field. 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 & 9).

The metal shell is threaded onto the impactor (Figure 10) 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. Failure to fully engage the threads and seat the impactor could result in thread damage and subsequent difficulty removing the impactor from the shell. If the cluster screw hole pattern shell is utilized, the holes are intended to be oriented superiorly.



CAUTION

The Alignment Guide may yield inaccurate placement if the pelvis has moved from the original position during intra-operative manipulation. Small changes in pelvic flexion will greatly affect anteversion. The Alignment Guide is only one aid to assist with proper implant positioning. The surgeon must also rely on anatomic landmarks to avoid improper positioning of components.



NOTE

Shell positioning must be carefully considered when selecting certain inserts as hooded options are not available in all sizes to adjust joint stability. Proper positioning of the Tritanium Acetabular Shell will minimize potential impingement and promote stability and articulation between the Insert and Head. As with any acetabular system, excessive vertical orientation and/or anteversion of the shell should be avoided as this may lead to premature wear and/or noise of the components' surfaces.

STEP 5

TRITANIUM ACETABULAR SHELL IMPLANTATION (CONTINUED)

Figure 11
A/P View

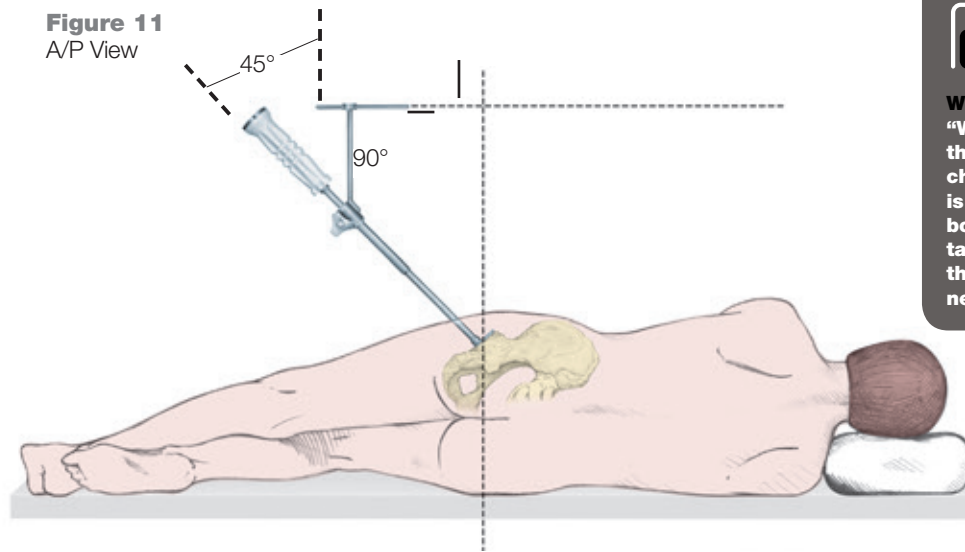
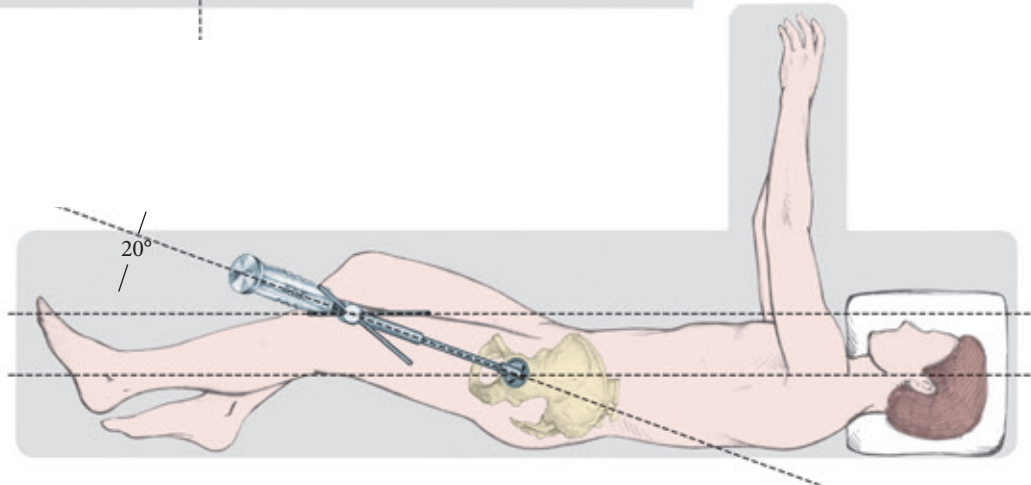


Figure 12
Lateral View



The recommended metal shell abduction angle of 45° is determined by positioning the alignment guide perpendicular to the long axis of the patient (Figure 11).

Metal shell anteversion is 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 may then be required to assist in impacting the shell until it is completely seated in the prepared acetabulum.

If utilizing the optional dome hole plug, assess that the plug is fully threaded into the shell to prevent liner impingement.



TIP

William Capello, M.D.
“With any high friction interface, the potential for the cup to change position during insertion is possible due to differential bone densities. Care should be taken to monitor position so that changes can be made as necessary.”



TIP

William Capello, M.D.
“While the alignment guides are of some assistance, it is important to critically evaluate anatomic landmarks before placement of the acetabular component. These anatomic landmarks include the anterior and posterior walls of the acetabulum, the sciatic notch, the floor and/or acetabular fossa of the acetabulum.”

STEP 5A

OPTIONAL SCREW UTILIZATION

If selecting a Cluster hole shell with screws, then only Stryker Orthopaedics Torx Bone Screws (2030-65XX-1) can be used. Stryker Orthopaedics offers 6.5mm diameter cancellous bone screws which are available in a variety of lengths (Table 4). Stryker Orthopaedics cancellous bone screws are designed to be inserted and removed only with the assistance of Stryker Orthopaedics screw instruments.

After determination of the proper site for screw placement, a 3.3mm diameter drill is passed through a drill guide to the desired depth (Figure 13). The screw hole is then assessed to determine the hole's depth using any one of several compatible depth guides. The properly sized screw is then selected and implanted into the bone using Stryker Orthopaedics Screw Drivers with a Torx driver head (Figure 14).

After screw implantation, assess that the screw head is seated flush against the shell to help prevent improper seating of the acetabular liner.



NOTE

Titanium Acetabular shells are not intended to be drilled through.



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.

Do not apply torque in excess of 69 in-lbs. to the screw. This may result in damage to the screw or driver instrument. To reach 69 in-lbs. unnecessary excessive force has to be applied. Power driven screw inserters may exceed 69 in-lbs.

TABLE 4: STRYKER TORX 6.5MM BONE SCREWS

CATALOG NUMBER	DESCRIPTION
2030-6516-1	16mm
2030-6520-1	20mm
2030-6525-1	25mm
2030-6530-1	30mm
2030-6535-1	35mm
2030-6540-1	40mm
2030-6545-1	45mm
2030-6550-1	50mm
2030-6555-1	55mm
2030-6560-1	60mm

Figure 13

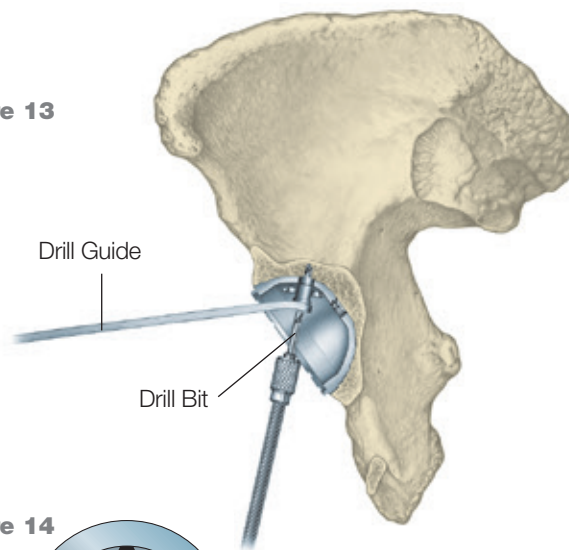
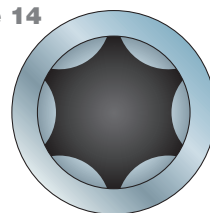


Figure 14



Torx Drive Head



NOTE

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

STEP 6

TRIAL INSERT REDUCTION

After metal shell implantation, insert Trident Trial Liner into the Titanium Shell (Table 5). At this point the patient should be taken through a complete range of motion using the final selected implant sizes. Careful assessment of impingement at the extreme range of motion should be performed. A final check of hip mechanics should be completed to include range of motion consistent with the patient's normal daily activities. At this point joint laxity should also be assessed, taking into consideration the type of anesthetic used and its effects on soft tissue.



NOTE

Impingement should be carefully assessed and avoided during range of motion. Excessive joint laxity has also been associated with noise in ceramic on ceramic bearings. Impingement can result in increased wear in metal-polyethylene systems.

TABLE 5: 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.

STEP 7

INSERT IMPLANTATION

1. Select the appropriate size Silicone Insert Positioner Tip that corresponds to the ID of the final implant selected.
2. Load Silicone Insert Positioner Tip into Insert Positioner/Impactor Handle (Figure 15).
3. Load either the polyethylene or ceramic insert onto the Insert Positioner Tip. Press firmly to ensure insert is being securely held (Figure 15).
4. 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.
5. Gently introduce the polyethylene or ceramic 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 16).
6. Remove Silicone Insert Positioner Tip from the Insert Positioner/Impactor Handle.
7. Select appropriate size Plastic Insert Impactor Tip.
8. Load Plastic Insert Impactor Tip onto Insert Positioner/Impactor Handle.
9. 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.
10. As with any modular interface under load, there is a potential for micromotion and associated fretting and/or corrosion. To reduce this risk, 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.



NOTE

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



NOTE

In order to obtain a secure lock it is recommended to use only the hard Plastic Insert Impactor Tips to impact the polyethylene and ceramic inserts.

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 and seating of the insert.

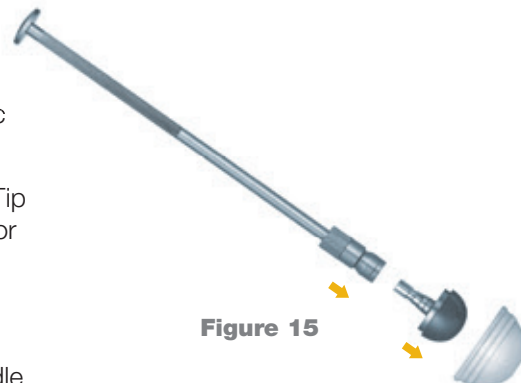


Figure 15

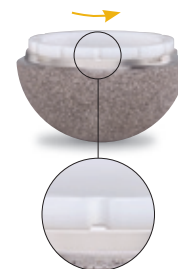


Figure 16

Polyethylene Insert

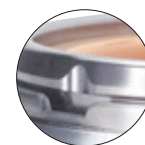


Initial Position

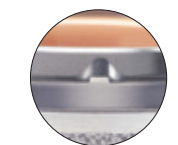


Final Pre-Locking Position

Alumina Insert



Initial Position



Final Pre-Locking Position

Optional Instrument - Curved Positioner/Impactor:

Silicone insert positioner tips can be loaded into the curved positioner/impactor handle as an alternate to the straight handle with 22-36mm heads.

STEP 8

HEAD ASSEMBLY

Prior to head assembly, neck length selection may be re-evaluated using a Stryker V40 or C-Taper Trial Head. Place the Trial Head onto the stem neck taper and reduce the hip to verify that the mechanics have not been altered due to implant seating.

Remove the Trial Head and dry the implant trunnion with a laparotomy sponge or sterile towel.

Select the appropriate corresponding V40 or C-Taper Femoral Head size and place it onto the dry trunnion of the femoral stem with a slight twist. Impact the head with two moderate blows using the Stem Head Impactor (1104-1000) (Figure 17).

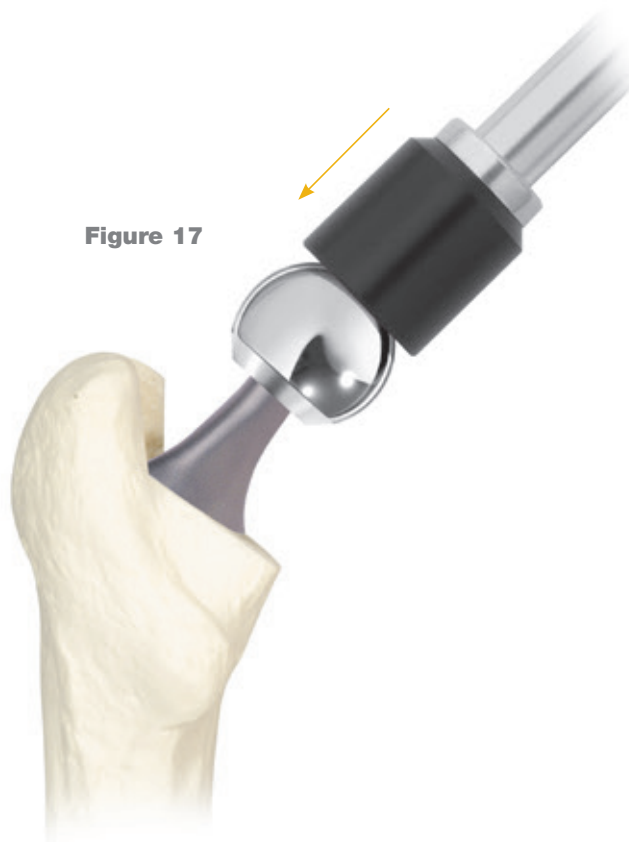


Figure 17

OPTIONAL STEP

UNIVERSAL ADAPTER SLEEVES

PART NUMBERS	TAPER	STEM MATERIAL COMPATIBILITY
19-0XXX	C-Taper	TMZF, Ti-6Al-4V, CoCr
6519-T-XXX	V40	TMZF, Ti-6Al-4V, CoCr, Stainless Steel

After completing the trialing process, intra-operatively assemble the Universal Adapter Sleeve to the femoral stem manually. The Universal Adapter Sleeve must be fully seated on the stem taper before the head is assembled.

Intra-operatively assemble the BIOLOX delta Universal Taper Ceramic head onto the sleeved femoral stem and set with one to three moderate blows using the Stem Head Impactor (1104-1000). Care must be taken to avoid excessive impact forces when assembling the Ceramic Head to the sleeved femoral component.



NOTE

When selecting a BIOLOX delta Universal Taper Ceramic Femoral Head for implantation, use of a Universal Adapter Sleeve is necessary.



NOTE

In no instance should any attempt be made to pre-assemble the Universal Adapter Sleeve inside the BIOLOX delta Universal Ceramic Head.

STEP 8

REMOVAL OF THE INSERT AND SHELL



NOTE

Prior to performing a liner exchange, visually assess the shell's locking mechanism for damage. If damaged, shell should be replaced.

Figure 18

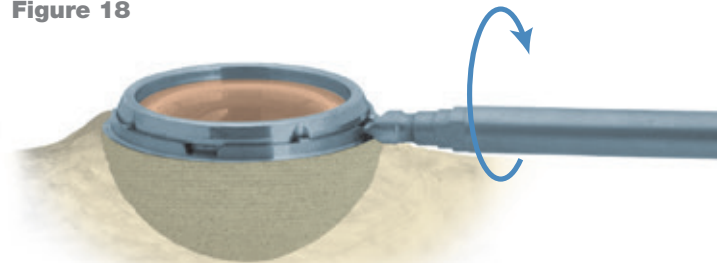
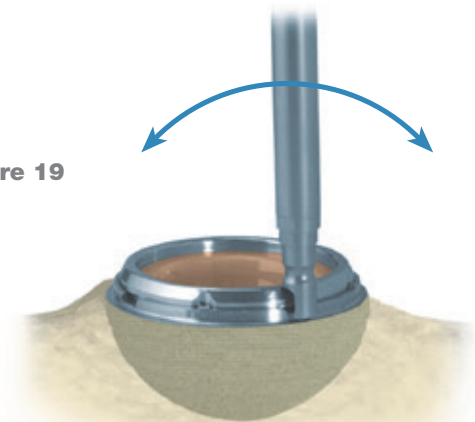


Figure 19



Ceramic Insert Removal

The Trident Insert Removal Tool is designed to provide the surgeon with two options for extracting the ceramic insert from the Tritanium shell.

Option 1: "Flat Head"

Connect the "T" handle 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.



NOTE

Prior to performing a liner exchange, visually assess the shell's locking mechanism for damage. If damaged, shell should be replaced.

STEP 8

REMOVAL OF THE INSERT AND SHELL (CONTINUED)

Figure 20

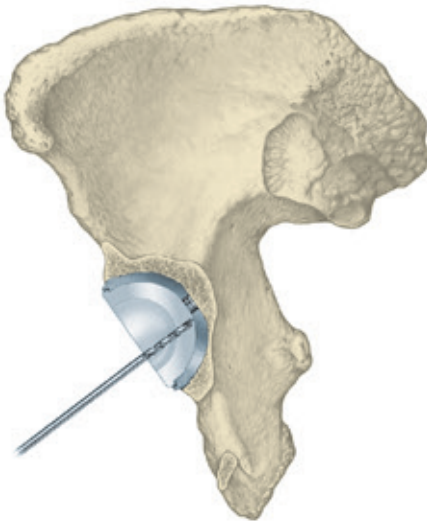
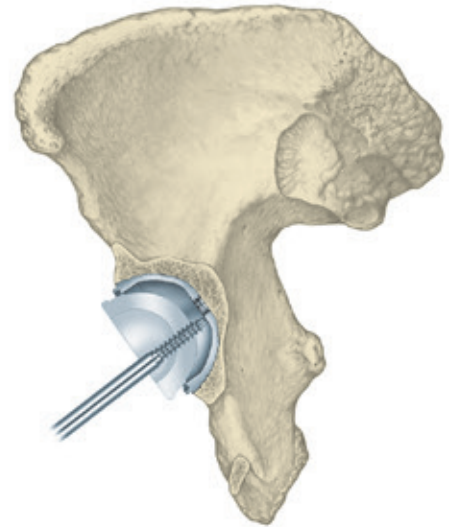


Figure 21



Polyethylene Insert Removal

Utilize a 3/16" (5mm) drill bit to create an off-center hole in the polyethylene insert. Care must be taken to avoid drilling through an unused screw hole and into the wall of the acetabulum. Use the "T" Handle (1101-2100) to thread the Polyethylene Insert Removal Tool (2112-0010) into the insert, and advance the tool to the medial wall of the shell to dislodge the insert (Figures 20 & 21).

Revising the Tritanium Acetabular Shell with a Trident Insert

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

1. Carefully remove the Trident Insert (refer to instructions above).
2. The Trident Insert Trials are used to evaluate the shell face position and provide a final check of hip biomechanics. Polyethylene inserts are available in various configurations and sizes, including 0, 10 degree and constrained insert options. The polyethylene inserts provide 12 different insert orientations within the shell to provide optimal joint stability.
3. Follow Step 7: Insert Implantation to insert the new insert.

Tritanium Shell Removal

Should removal of the metal shell ever become necessary, an osteotome 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.

STEP 9

HEAD DISASSEMBLY



NOTE

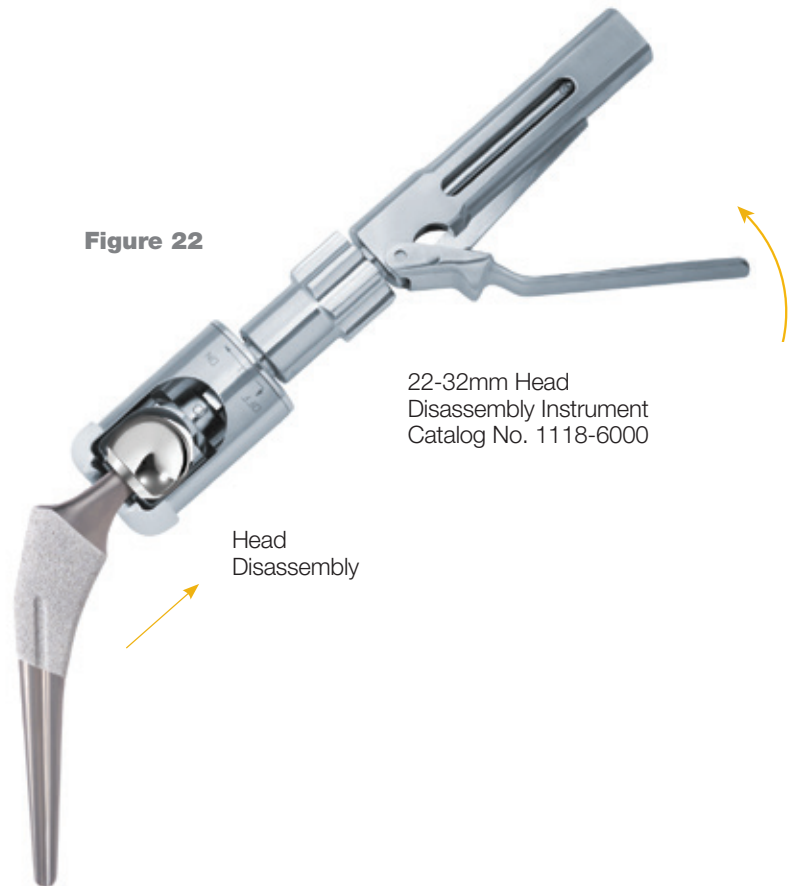
This Head Disassembly Instrument cannot be used with 36, 40, and 44mm heads. (Figure 22)

The Head Disassembly Instrument is used to remove an impacted head (Figures 22 & 23). Inspect the stem neck trunnion 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.

Revision of Ceramic Heads Assembled with an Adapter Sleeve

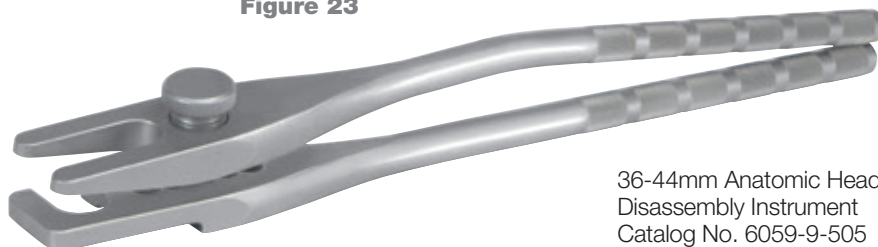
If the ceramic head needs to be revised for any reason, remove the ceramic head with the Head Disassembly Instrument (1118-6000 or 6059-9-505 depending on femoral head size) and remove the Adapter Sleeve with the Ceramic Head Sleeve Disassembly Adapter (1118-1005 and 1118-6000).

Figure 22



22-32mm Head Disassembly Instrument
Catalog No. 1118-6000

Figure 23



36-44mm Anatomic Head Disassembly Instrument
Catalog No. 6059-9-505

STEP 9

HEAD DISASSEMBLY (CONTINUED)

The following table provides a guide for selecting a replacement head. The first two columns describe the stem taper type and femoral head material used originally and the third column lists the available replacement options.

ORIGINAL STEM TAPER TYPE	ORIGINAL FEMORAL HEAD MATERIAL	REPLACEMENT FEMORAL HEAD OPTIONS
V40	Metal	<ol style="list-style-type: none"> 1. V40 to C-Taper adapter sleeve with a C-Taper Alumina Ceramic Head 2. V40 to C-Taper adapter sleeve with a C-Taper BIOLOX delta Ceramic Head 3. V40 Universal Taper sleeve with a BIOLOX delta Universal Ceramic Head 4. V40 Metal Head
	Alumina/BIOLOX delta Ceramic	<ol style="list-style-type: none"> 1. V40 to C-Taper adapter sleeve with a C-Taper Alumina Ceramic Head 2. V40 to C-Taper adapter sleeve with a C-Taper BIOLOX delta Ceramic Head 3. V40 Universal Taper sleeve with a BIOLOX delta Universal Ceramic Head 4. V40 Metal Head
	Universal BIOLOX delta Ceramic	<ol style="list-style-type: none"> 1. V40 Taper Metal Head after removal of sleeve 2. New V40 Universal Taper sleeve with a BIOLOX delta Universal Ceramic Head 3. V40 to C-Taper adapter sleeve with a C-Taper Alumina Ceramic Head 4. V40 to C-Taper adapter sleeve with a C-Taper BIOLOX delta Ceramic Head
C-Taper	Metal	<ol style="list-style-type: none"> 1. C-Taper Universal Taper sleeve with a BIOLOX delta Universal Ceramic Head 2. C-Taper Metal Head
	Alumina/BIOLOX delta Ceramic	<ol style="list-style-type: none"> 1. C-Taper Universal Taper sleeve with a BIOLOX delta Universal Ceramic Head 2. C-Taper Metal Head
	Universal BIOLOX delta Ceramic	<ol style="list-style-type: none"> 1. Metal Head after removal of sleeve 2. New C-Taper Universal Taper sleeve with a BIOLOX delta Universal Ceramic Head

Notes:

- Metal Heads and Ceramic Heads with sleeve only, can be used in revision cases only if the stem trunnion appears undamaged and intact upon close inspection. The entire hip stem must be revised if this is not the case.
- Only Alumina ceramic heads can be used with Alumina liners.
- BIOLOX delta ceramic, Alumina ceramic, and metal heads can be used with Polyethylene liners.
- Do not re-assemble a ceramic head and stem. Once a ceramic head has been assembled to a stem taper, it should never be re-assembled to that stem or subsequently assembled to any other stem. In addition, a ceramic head should only be assembled to an unused stem taper. Once a stem taper has been assembled to any femoral head, it should never be subsequently assembled to any ceramic head component due to deformation of the stem's taper locking mechanism during initial stem/head assembly.

TRITANIUM

CATALOG INFORMATION

TRITANIUM HEMISPHERICAL SOLID BACK SHELL

CATALOG NO.	CATALOG SIZE (MM)	RIM DIAMETER (MM)
500-03-44A	44	44
500-03-46B	46	46
500-03-48C	48	48
500-03-50D	50	50
500-03-52D	52	52
500-03-54E	54	54
500-03-56E	56	56
500-03-58F	58	58
500-03-60F	60	60
500-03-62G	62	62
500-03-64G	64	64
500-03-66H	66	66

X3 LINERS AND LINER TRIALS

0° CATALOG NO.	10° CATALOG NO.	ID (MM)	TRITANIUM HEMISPHERICAL SHELL SIZE (MM)	POLY THICKNESS (MM)	TRIAL 0° CAT. NO.
623-00-22A	623-10-22A	22	44	7.8	2200-22A
623-00-22B	623-10-22B	22	46	8.8	2200-22B
623-00-22C	623-10-22C	22	48	9.8	2200-22C
623-00-22D	623-10-22D	22	50, 52	10.8	2200-22D
623-00-22E	623-10-22E	22	54, 56	12.8	2200-22E
623-00-22F	623-10-22F	22	58, 60	14.8	2200-22F
623-00-22G	623-10-22G	22	62, 64	16.3	2200-22G
623-00-22H	623-10-22H	22	66	18.1	2200-22H
623-00-26C	623-10-26C	26	48	7.9	2200-26C
623-00-26D	623-10-26D	26	50, 52	8.9	2200-26D
623-00-26E	623-10-26E	26	54, 56	10.9	2200-26E
623-00-26F	623-10-26F	26	58, 60	12.9	2200-26F
623-00-26G	623-10-26G	26	62, 64	14.4	2200-26G
623-00-26H	623-10-26H	26	66	16.2	2200-26H
623-00-28A	N/A	28	44	4.9	2200-28A
623-00-28B	N/A	28	46	5.9	2200-28B
623-00-28C	623-10-28C	28	48	6.9	2200-28C
623-00-28D	623-10-28D	28	50, 52	7.9	2200-28D
623-00-28E	623-10-28E	28	54, 56	9.9	2200-28E
623-00-28F	623-10-28F	28	58, 60	11.9	2200-28F
623-00-28G	623-10-28G	28	62, 64	13.4	2200-28G
623-00-28H	623-10-28H	28	66	15.2	2200-28H
623-00-32B	N/A	32	46	3.9	2200-32B
623-00-32C	N/A	32	48	4.9	2200-32C
623-00-32D	623-10-32D	32	50, 52	5.9	2200-32D
623-00-32E	623-10-32E	32	54, 56	7.9	2200-32E
623-00-32F	623-10-32F	32	58, 60	9.9	2200-32F
623-00-32G	623-10-32G	32	62, 64	11.4	2200-32G
623-00-32H	623-10-32H	32	66	13.2	2200-32H
623-00-36D	N/A	36	50, 52	3.9	2200-36D
623-00-36E	623-10-36E	36	54, 56	5.9	2200-36E
623-00-36F	623-10-36F	36	58, 60	7.9	2200-36F
623-00-36G	623-10-36G	36	62, 64	9.4	2200-36G
623-00-36H	623-10-36H	36	66	11.2	2200-36H
623-00-40E	N/A	40	54, 56	3.8	2200-40E
623-00-40F	N/A	40	58, 60	5.8	2200-40F
623-00-40G	N/A	40	62, 64	7.4	2200-40G
623-00-40H	N/A	40	66	9.1	2200-40H
623-00-44F	N/A	44	58, 60	3.8	2200-44F
623-00-44G	N/A	44	62, 64	5.4	2200-44G
623-00-44H	N/A	44	66	7.1	2200-44H

TRITANIUM HEMISPHERICAL CLUSTER HOLE SHELL

CATALOG NO.	CATALOG SIZE (MM)	RIM DIAMETER (MM)
502-03-44A	44	44
502-03-46B	46	46
502-03-48C	48	48
502-03-50D	50	50
502-03-52D	52	52
502-03-54E	54	54
502-03-56E	56	56
502-03-58F	58	58
502-03-60F	60	60
502-03-62G	62	62
502-03-64G	64	64
502-03-66H	66	66

TRITANIUM

CATALOG INFORMATION (CONTINUED)

ALUMINA CERAMIC INSERT COMPATIBILITY CHART

ALUMINA INSERTS			SHELL COMPATIBILITY	INSERT TRIALS	
ALPHA CODE	IMPLANT CATALOG NO.	ID (MM)	TRITANIUM 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	2200-36H	Gray

V40 TAPER LFIT 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

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

C-TAPER LFIT 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-HH62	26	+2.5	1100-2625R
06-2605	26	+5	1100-2605R
S-1400-HH64	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-HH82	28	+2.5	1100-2825R
06-2805	28	+5	1100-2805R
S-1400-HH84	28	+7.5	1100-2875R
06-2810	28	+10	1100-2810R
06-3299	32	-5	1100-3299R
S-1400-HH31	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-HH34	32	+7.5	1100-3275R
06-3210	32	+10	1100-3210R

TRITANIUM

CATALOG INFORMATION (CONTINUED)

V40 TAPER LFIT ANATOMIC HEADS

CATALOG NO.	DIAMETER (MM)	OFFSET (MM)	TRIAL CATALOG NO.
6260-9-036	36	-5	6264-8-036R
6260-9-136	36	+0	6264-8-136R
6260-9-236	36	+5	6264-8-236R
6260-9-336	36	+10	6264-8-336R
6260-9-040	40	-4	6264-8-040R
6260-9-140	40	+0	6264-8-140R
6260-9-240	40	+4	6264-8-240R
6260-9-340	40	+8	6264-8-340R
6260-9-440	40	+12	6264-8-440R
6260-9-044	44	-4	6264-8-044R
6260-9-144	44	+0	6264-8-144R
6260-9-244	44	+4	6264-8-244R
6260-9-344	44	+8	N/A
6260-9-444	44	+12	N/A

C-TAPER LFIT ANATOMIC HEADS

CATALOG NO.	DIAMETER (MM)	OFFSET (MM)	TRIAL CATALOG NO.
06-3699	36	-5	1100-3699R
06-3697	36	-2.5	1100-3697R
06-3600	36	+0	1100-3600R
06-3625	36	+2.5	1100-3625R
06-3605	36	+5	1100-3605R
06-3675	36	+7.5	1100-3675R
06-3610	36	+10	1100-3610R
06-4099	40	-5	1100-4099R
06-4097	40	-2.5	1100-4097R
06-4000	40	+0	1100-4000R
06-4025	40	+2.5	1100-4025R
06-4005	40	+5	1100-4005R
06-4075	40	+7.5	1100-4075R
06-4010	40	+10	1100-4010R
06-4499	44	-5	1100-4499R
06-4497	44	-2.5	1100-4497R
06-4400	44	+0	1100-4400R
06-4425	44	+2.5	1100-4425R
06-4405	44	+5	1100-4405R
06-4475	44	+7.5	N/A
06-4410	44	+10	N/A

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.

V40 TAPER BIOLOX DELTA CERAMIC HEADS

CATALOG NO.	DIAMETER (MM)	OFFSET (MM)	TRIAL CATALOG NO.
6570-0-028	28	-4	6264-8-028R
6570-0-328	28	-2.7	6264-8-928R
6570-0-128	28	+0	6264-8-128R
6570-0-228	28	+4	6264-8-228R
6570-0-032	32	-4	6264-8-032R
6570-0-132	32	+0	6264-8-132R
6570-0-232	32	+4	6264-8-232R

C-TAPER BIOLOX DELTA CERAMIC HEADS

CATALOG NO.	DIAMETER (MM)	OFFSET (MM)	TRIAL CATALOG NO.
18-28-3	28	-2.5	1100-2897R
18-2800	28	+0	1100-2800R
18-2825	28	+2.5	1100-2825R
18-2805	28	+5	1100-2805R
18-32-3	32	-2.5	1100-3297R
18-3200	32	+0	1100-3200R
18-3225	32	+2.5	1100-3225R
18-3205	32	+5	1100-3205R

TRITANIUM

CATALOG INFORMATION (CONTINUED)

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

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

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

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

The V40 Adapter Sleeve (catalog #17-0000E) enables the C-Taper Alumina Heads to be used with the existing Stryker V40 taper.

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)	TAPER
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
6264-3-236R	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.

TRITANIUM

CATALOG INFORMATION (CONTINUED)

OFFSET OPTIONS

Offset Reamer Handle	T6320
Metal Handle Offset Cup Impactor	510912
Cup Impactor Alignment Guide	T7718
Reamer/Cup Impactor Case	T7396

2111-0000B

Insert Positioner/Impactor Handle

SILICONE INSERT POSITIONER TIPS

2111-0022	22mm
2111-0026	26mm
2111-0028	28mm
2111-0032	32mm
2111-0036	36mm
2111-0040	40mm
2111-0044	44mm

PLASTIC INSERT IMPACTOR TIPS

2111-3022	22mm
2111-3026	26mm
2111-3028	28mm
2111-3032	32mm
2111-3036	36mm
2111-3040	40mm
2111-3044	44mm

1118-6000

22mm - 32mm Head Disassembly Instrument

6059-9-505

36mm - 44mm Anatomic Head Disassembly Instrument

1118-1005

Ceramic Head Sleeve Disassembly Adapter

1101-2100

T-Handle

2102-0003

Hudson to Stryker Adapter

2102-0410

Acetabular Reamer Handle

2112-0000

Ceramic Removal Tool

2112-0010

Polyethylene Removal Tool

2101-0200

CuttingEdge
Shell Positioner/Impactor Handle

2101-0210

CuttingEdge
Abduction/Anteversion Alignment Guide

CuttingEdge Acetabular Reamers

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

Templates:

LTEM102 Tritanium Hemispherical Cluster
Hole and Solid Back Shells

Tritanium Window Trials

2402-4041	43mm - 67mm Tray
2402-4061	68mm - 80mm
2402-4020	Tritanium Window Trials Tray Case
2402-3090	Clear Lid
2208-4043	43mm
2208-4044S	44mm
2208-4045	45mm
2208-4046S	46mm
2208-4047	47mm
2208-4048S	48mm
2208-4049	49mm
2208-4050	50mm
2208-4051	51mm
2208-4052S	52mm
2208-4053	53mm
2208-4054	54mm
2208-4055	55mm
2208-4056S	56mm
2208-4057	57mm
2208-4058	58mm
2208-4059	59mm
2208-4060S	60mm
2208-4061	61mm
2208-4062	62mm
2208-4063	63mm
2208-4064S	64mm
2208-4065	65mm
2208-4066	66mm

Cases

2402-0020

Case (not including lid and trays)

2402-0090

Lid

2402-0040

Top Tray: Insert Trials (0° & 10°)

2402-0060

Bottom Tray: Preparation Tray

2402-1000

LFIT Anatomic V40 Single Layer Sterilization Case

2402-1020

LFIT Anatomic V40 Instrument Tray

8000-0150

LFIT Anatomic Sterilization Case Lid

2402-1010

LFIT Anatomic C-Taper Single Layer Sterilization Case

2402-1030

LFIT Anatomic C-Taper Instrument Tray

8000-0150

LFIT Anatomic Sterilization Case Lid

Stryker Orthopaedics Bone Screw Instrumentation Kit

Hip-Bone Screw

2230-0010

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.)

Eccentric/Constrained Cases and Trays (for trials only)

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.

8000-0200

Double Tier Case

8000-0100

Single Tier Case

2402-1100

Trident 10° Constrained Insert Trial Tray

2402-3020

Trident 0° and All-Poly Constrained Insert Trial Tray

2402-3090

Trident 0° and All-Poly Constrained Insert Trial Lid

TRITANIUM

NOTES

Blank area for notes.

TRITANIUM

NOTES

Large empty rectangular area for taking notes.

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TRITAN-SP-2
MS/GS 1/15

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