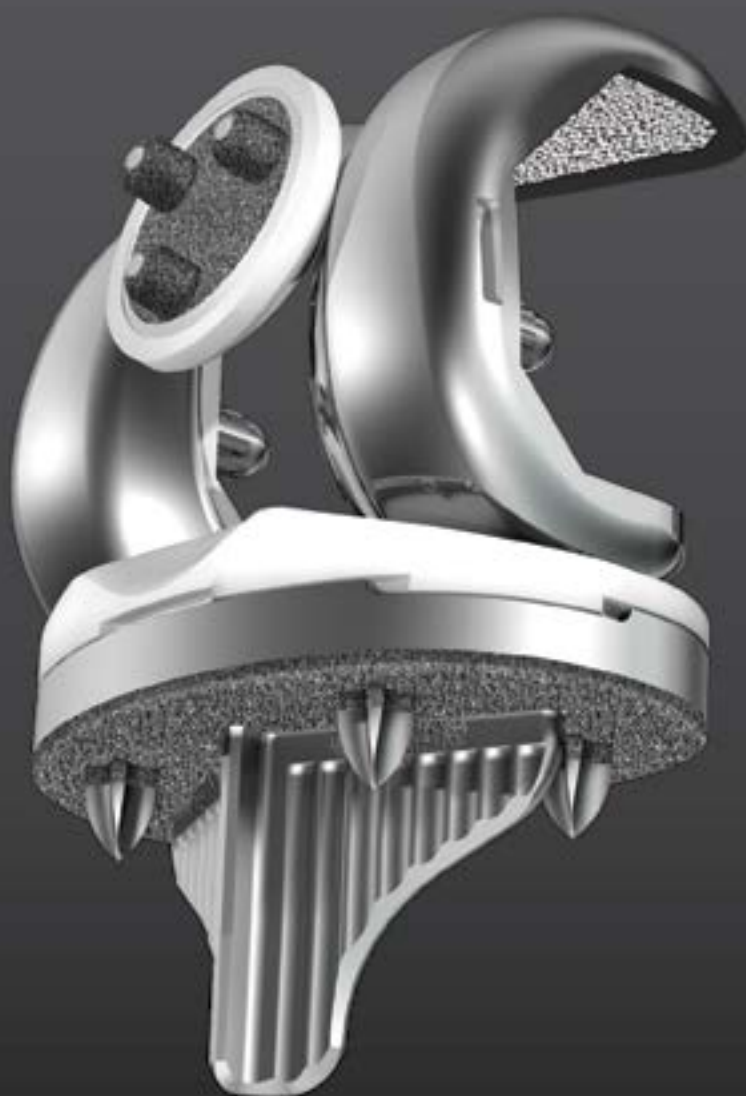


Triathlon® Tritanium®

Surgical Protocol



with Triathlon Cementless Beaded
PA Femoral Component

Triathlon Tritanium

Surgical Protocol

with Triathlon Cementless Beaded PA Femoral Component

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Acknowledgments

Stryker Orthopaedics wishes to thank the global Triathlon Tritanium Knee System Surgeon Advisors for their dedication to the development and refinement of the Triathlon Tritanium Baseplate and Instrumentation.

Triathlon Tritanium

Surgical Protocol

with Triathlon Cementless Beaded PA Femoral Component

Description

Howmedica Osteonics Corp.'s total knee systems include the Triathlon Tritanium Baseplate which is designed to be used with the Triathlon Primary Knee system femoral components, tibial inserts, and patellar components for total reconstructive replacement of the knee joint. The characteristics specific to each device are detailed on the product label. The Triathlon Tritanium Baseplate is indicated for both cementless and cemented applications.

Femoral Components: The Triathlon Tritanium Baseplate is compatible with the Triathlon cruciate retaining (CR), and cruciate sacrificing (posteriorly stabilized – PS) designs.

Tibial Components: The Triathlon Tritanium Baseplate is compatible with Triathlon tibial inserts in a cruciate retaining (CR), posterior stabilized (PS), and condylar stabilizing (CS) designs. Tibial inserts are available in a range of thicknesses and in various degrees of constraint.

Note: The Triathlon Tritanium Baseplate is packaged together with an Impactor Pad. The Impactor Pad is to be used during the tibial baseplate impaction step only and is to be discarded once impaction has completed. The Impactor Pad is not for implantation.

Patellar Components: Patellar resurfacing components are available in symmetric and asymmetric options in both all-plastic and metal-backed* designs. Use of a patellar component is optional. The Triathlon Tritanium Baseplate is compatible with all Triathlon patellar components.

Additional Revision-ONLY Compatibility Note for Triathlon Tritanium Metal-Backed Patella

- **The Triathlon Tritanium Metal-Backed Patella is indicated for use with the Total Stabilizer (TS) components including the metal bone augmentation components, the modular stem extensions and offsets. Only the Tritanium Metal-Backed Patella is compatible with the revision components. The Tritanium Tibial Baseplate is not compatible with the revision components.**

Indications

General Total Knee Arthroplasty (TKA) Indications:

- Painful, disabling joint disease of the knee resulting from: noninflammatory degenerative joint disease (including osteoarthritis, traumatic arthritis, or avascular necrosis), rheumatoid arthritis or post-traumatic arthritis.
- Post-traumatic loss of knee joint configuration and function.
- Moderate varus, valgus, or flexion deformity in which the ligamentous structures can be returned to adequate function and stability.
- Revision of previous unsuccessful knee replacement or other procedure.
- Fracture of the distal femur and/or proximal tibia that cannot be stabilized by standard fracture-management techniques.

The Triathlon Total Knee System beaded and beaded with Peri-Apatite components are intended for uncemented use only.

The Triathlon Tritanium Tibial Baseplate and Tritanium Metal-Backed Patella components are indicated for both uncemented and cemented use.*

The Triathlon All-Polyethylene tibial components are indicated for cemented use only.

Additional Indications for Posterior Stabilized (PS) components and Total Stabilizer (TS)* components:

- Ligamentous instability requiring implant bearing surface geometries with increased constraint.
- Absent or non-functioning posterior cruciate ligament.
- Severe anteroposterior instability of the knee joint.

Additional Indications for Total Stabilizer (TS)* components:

- Severe Instability of the knee secondary to compromised collateral ligament integrity or function.

Indication for Bone Augments:

- Painful, disabling joint disease of the knee secondary to: degenerative arthritis, rheumatoid arthritis, or post-traumatic arthritis, complicated by the presence of bone loss.
- Salvage of previous unsuccessful total knee replacement or other surgical procedure, accompanied by bone loss.

Contraindications

- Any active or suspected latent infection in or about the knee joint.
- Distant foci of infection which may cause hematogenous spread to the implant site.
- 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.
- Severe instability of the knee joint secondary to the absence of collateral ligament integrity and function.

See package insert for warnings, precautions, adverse effects and other essential product information.

Before using Triathlon 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.

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).

Surgical Protocol

Triathlon Tritanium Knee Construct



Figure 1

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).



Figure 2

This protocol demonstrates the technique for implanting a Triathlon cementless beaded femoral component with the Triathlon Tritanium baseplate and compatible Triathlon Tritanium Metal-Backed Patellar component*.

Triathlon Tritanium Baseplate

- ▶ The Triathlon Tritanium baseplate is designed to be similar to the Triathlon Primary baseplate. It offers the same profile and insert locking mechanism.
- ▶ The Triathlon Tritanium baseplate features four cruciform pegs.
- ▶ The Triathlon Tritanium baseplate features Stryker's Tritanium 3D porous metal technology on the underside of the baseplate, the proximal end of the keel and the proximal end of each of the four cruciform pegs.
- ▶ It is available in eight sizes and is indicated for both cementless and cemented applications. Surgeons may select an option based on preference and local bone conditions.
- ▶ The Triathlon Tritanium baseplate is compatible with all available posterior stabilizing (PS) and cruciate retaining (CR) Triathlon femoral components for both cemented and cementless applications, and accepts available Triathlon cruciate retaining (CR), condylar stabilizing (CS) and posterior stabilizing (PS) inserts.

Triathlon Peri-Apatite Cementless Beaded Femur

- ▶ The Triathlon cementless beaded femoral components are available in both posterior stabilizing (PS) and cruciate retaining (CR) configurations.
- ▶ The Triathlon cementless femoral components are made from cobalt-chrome. They are coated with cobalt-chrome beads and are available with and without Peri-Apatite (PA) technology.
- ▶ Peri-Apatite (PA) is Stryker's technology for application of Hydroxyapatite (HA) to three-dimensional beaded constructs.



Figure 3

Triathlon Primary Tibial Inserts

- ▶ Compatible Triathlon inserts are available in three configurations – cruciate retaining (CR), anterior-lipped/condylar stabilizing (CS) and posterior stabilizing (PS).
- ▶ Triathlon primary inserts are available in eight sizes with thicknesses of 9, 11, 13, 16 and 19mm, with additional available thicknesses of 22 and 25mm for the PS inserts.
- ▶ Triathlon primary inserts are available with conventional polyethylene as well as Stryker's X3 highly crosslinked polyethylene.



Figure 4

Triathlon Tritanium Metal-Backed Patella*

- ▶ The Triathlon Tritanium Metal-Backed Patella* is indicated for both cemented and cementless applications.
- ▶ The Triathlon Tritanium Metal-Backed patellar components* are available in symmetric and asymmetric configurations. There are a total of 9 sizes which are compatible with all Triathlon femoral and tibial components.
- ▶ The Triathlon Tritanium Metal-Backed Patella* features Stryker's Tritanium 3D porous metal technology, made from commercially pure titanium, on the metal underside of the patella.
- ▶ The Triathlon Tritanium Metal-Backed patellar components* are available with conventional polyethylene.

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).

Femoral Preparation

Step 1 Distal Resection



Figure 5

Exposure

- ▶ Triathlon Total Knee Arthroplasty can be performed through any standard approach. A standard anterior mid-line incision or other suitable approaches such as mid-vastus, sub-vastus or quadriceps sparing may be used based on surgeon preference.
- ▶ Any previous incision can be used or incorporated to decrease the risk of skin slough.
- ▶ The capsule is entered through a medial parapatellar approach.



Figure 6

Femoral Intramedullary (IM) Alignment

- ▶ The Universal Driver allows for attachment of all drills and pins. It may be attached directly to a reamer, drill, or a Jacob's chuck.
- ▶ Locate the IM drill hole. It is approximately 1cm anterior to the femoral attachment of the posterior cruciate ligament and slightly medial to the mid-line of the distal femur.
- ▶ Attach the 3/8" IM Drill to the Universal Driver and drill into the IM canal. The first diameter will create a tight fit around the IM Rod. If further clearance is desired, continue to drill until the larger step diameter opens the hole.

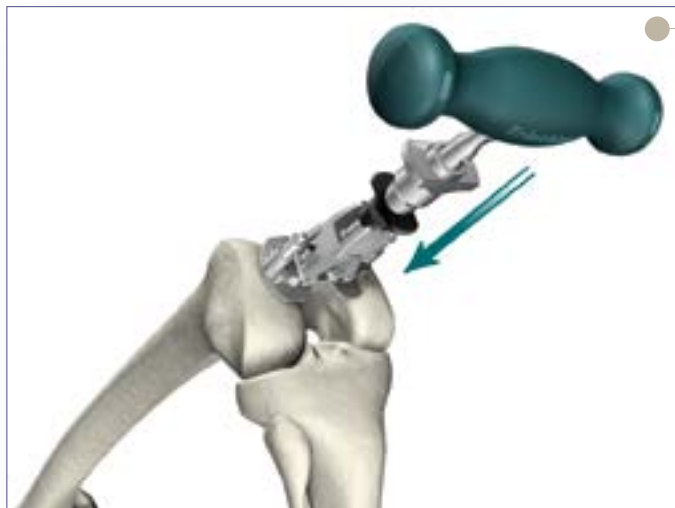


Figure 7

- ▶ Attach the T-Handle Driver to the 5/16" IM Rod.
- ▶ Insert the IM Rod into the Femoral Alignment Guide as far proximal as possible. The Femoral Alignment Guide is designed for use on either the left or right knee and may be set to 5°, 6° or 7° of valgus.
- ▶ Set the instrument to the desired angle by pulling back on the black knob of the Femoral Alignment Guide and placing it in the appropriate notch.
- ▶ Advance the rod, with attached guide, slowly up the IM canal until the desired depth is reached.

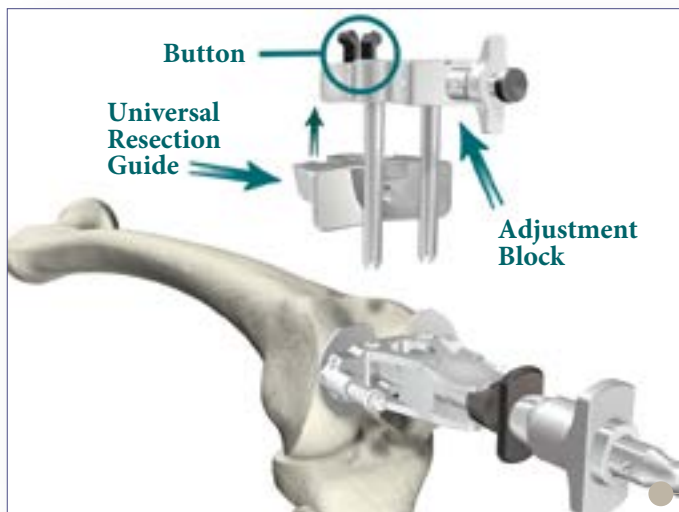


Figure 8

- ▶ Snap the Universal Resection Guide onto the Adjustment Block and insert the posts of the Adjustment Block into the two holes in the Femoral Alignment Guide.
- ▶ Place the Femoral Alignment Guide in contact with the more prominent distal femoral condyle and align the guide in neutral position.

Tip: Align the Femoral Alignment Guide to the trans-epicondylar axis. The guide should usually have contact with both medial and lateral trochlea for more stability.

- ▶ Impact the distal captured pins in the Femoral Alignment Guide to aid in stabilization.

Note: Impacting a distal capture pin that does not make contact with the femoral condyle may result in an undesirable change in the alignment guide position.

- ▶ Pin the Distal Resection Guide to the anterior femur.

Instrument Bar

6541-4-801
Universal Driver



6541-4-538
3/8" IM Drill



6541-4-800
T-Handle Driver



6541-4-516
5/16" IM Rod



6541-1-657
Femoral Alignment Guide



6541-1-721
Universal Resection Guide



6541-1-600
Adjustment Block



6541-4-003
Headless Pins – 3"



Femoral Preparation

Step 1 Distal Resection (continued)

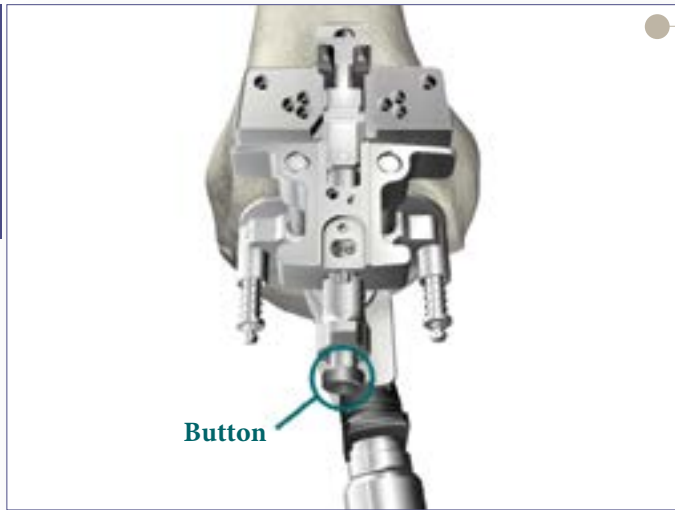


Figure 9

- ▶ The Adjustment Block allows for an 8mm (the distal thickness of the femoral component) and 10mm (used to aid in the correction of a flexion contracture) resection level.

Tip: The thickness of the resected femoral condyle should be measured. In some cases, a greater resection may be required. This can be accomplished by adjusting the block as described below to achieve a greater resection (+ 2mm or + 4mm).

- ▶ Press the black button on the end of the Adjustment Block and pull to set the resection to the desired level.
- ▶ Pin the Universal Resection Guide to the anterior femur.

Note: If the medial “O” pin hole is too close to the edge of the bone (on smaller femurs), use the holes marked “2” which are closer to the center of the bone. Please note: this will limit the amount of further resection to 2mm.



Figure 10

Distal Resection

- ▶ After the Universal Resection Guide is pinned in place, remove the IM Rod. The Femoral Alignment Guide and the Adjustment Block may be removed by squeezing the black tabs on the Adjustment Block.
- ▶ The distal femoral resection is made.

Tip: Use saline irrigation during distal femoral resection.

- ▶ An optional Modular Capture – may be attached to the Universal Resection Guide. Squeeze the black tabs on the Modular Capture – Distal Resection to insert into the Universal Resection Guide. When using a modular capture, a .050" (1.25mm) blade is used.
- ▶ Remove the Modular Capture, measure the resection and check the resection for flatness. Remove the Universal Resection Guide.

Instrument Bar

Femoral Preparation

6541-1-600

Adjustment Block



6541-1-657

Femoral Alignment Guide



6541-1-721

Universal Resection Guide



6541-4-806

Universal Alignment Handle



6541-4-602

Universal Alignment Rods



6541-1-723

Modular Capture – Distal Resection



6541-4-003

Headless Pins – 3"



Femoral Preparation

Step 2 Femoral Sizing

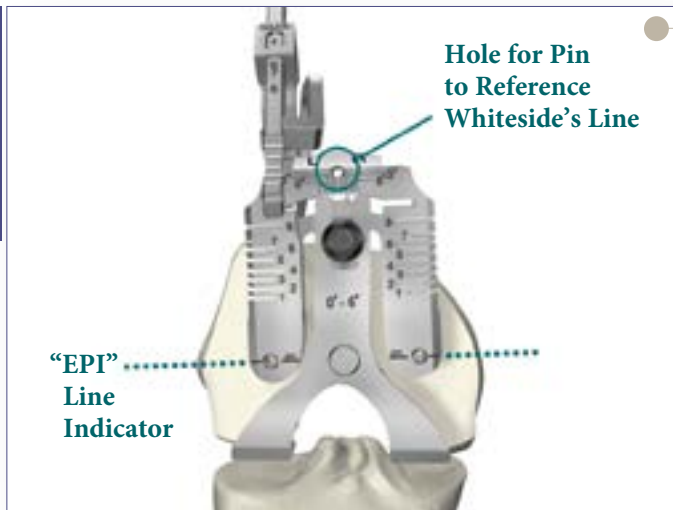


Figure 11

- ▶ Assemble the Femoral Sizer with the Femoral Stylus in the lateral hole (for both a left or right knee) and set the stylus length to an approximate size.
- ▶ Set the rotation to LEFT for a left knee and RIGHT for a right knee and adjust to the desired amount of external rotation.
- ▶ The Femoral Sizer also sets the final rotation of the femoral component. Additional checks for rotation may be made by lining up the epicondyles with the reference lines marked "EPI" or assessing Whiteside's line with a pin through the hole in the top of the guide.

Note: In the event of a hypoplastic femoral condyle: Pin the Femoral Sizer through the EPI hole on the unaffected side for stability. Rotate the Femoral Sizer and assess rotation using the rotational checks mentioned above.

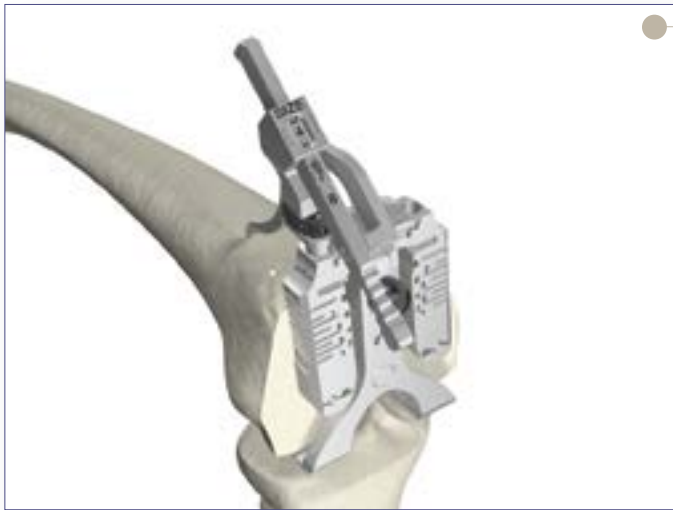


Figure 12

- ▶ Position the assembly flush on the resected distal femur, sliding the feet of the Femoral Sizer under the posterior condyles. The Femoral Stylus point should be placed at the anticipated level of resection, commonly the lateral cortex.
- ▶ It is important that the Femoral Stylus point rest on bone and not on soft tissue.



Figure 13

- ▶ The size is determined by the position of the scribe mark on the Femoral Stylus shaft within the sizing window.



Figure 14

- It is recommended that the anterior resection level be checked to further confirm the correct size by sliding a Bladerunner through the sizing guide's size-specific anterior slots and assessing the resection. If it appears that there is a potential for notching, the next larger size component will need to be chosen. Ensure the femoral component chosen is compatible with the size of the tibial component selected during tibial preparation.
- Once size confirmation is complete, attach the 1/8" Peg Drill to the Universal Driver and create fixation pin-holes (for the 4:1 Cutting Block) through the holes on the face of the Femoral Sizer marked "EPI".

Instrument Bar



6541-1-603
Femoral Sizer



6541-1-605
Femoral Stylus



6541-4-003
Headless Pins – 3"



6541-4-400
Bladerunner

Femoral Preparation

Step 3 Anterior, Posterior and Chamfer Cuts



Figure 15

4:1 Cutting Block Fixation

- Locate the fixation pegs of the appropriate size
Express 4:1 Cutting Block into the pin holes created on the distal femur.

Note: Check run-out of the anterior cut. If not enough anterior bone is resected, consider selecting the next smaller size 4:1 Cutting Block. Ideally, the cut should be flush with the distal femur.

- Pin the 4:1 Cutting Block in place for stability.



Figure 16

Femoral Anterior, Posterior and Chamfer Cuts

- Complete the remaining four femoral bone resections.
- The use of a .050" (1.25mm) thick sawblade is recommended.
- The order of bone resections is not critical; however, a recommended sequence for improved stability of the 4:1 Cutting Block is:
 1. Anterior cortex.
 2. Posterior condyles.
 3. Posterior chamfer.
 4. Anterior chamfer.

Note:

- Cutting the anterior chamfer last helps stabilize the cutting guide.
- It is advisable to pay close attention to minimizing the bias on the sawblade during these resections.

- Remove the 4:1 Cutting Block.

Femoral Preparation

Step 4 PS Box Preparation

PS Box Preparation

- ▶ If it is determined that a PS femoral component will be used, the distal femur must be prepared for the PS box. Place the appropriate sized PS Box Cutting Guide on the resected distal femur.

Note: The appropriate size is the same as the size 4-in-1 cutting block that was used to prepare the distal femur. For example, if a size 3 “4-in-1 Cutting Block” was used to prepare the distal femur, select the size 3 PS Box Cutting Guide.

- ▶ M/L placement of the guide is based primarily on best coverage of the distal bone and alignment of the box opening with the intercondylar notch.

Optional surgical tip: Use a CR Femoral Trial of the same size to identify the preferred M/L position of the PS Box Cutting Guide.

- Place the appropriate sized CR Femoral Trial on to the prepared femur.
- Adjust the M/L placement of the Femoral Trial to achieve the desired position of the femoral component.
- Using a surgical marketing pen, mark the location of the distal peg prep holes through the CR Femoral Trial.
- Remove the CR Femoral Trial and line-up the PS Box Cutting Guide on the distal femur with the previously marked holes.

Instrument Bar



See Catalog

Express 4:1 Cutting Block



6541-7-806

MIS 4:1 Impactor/Extractor



See Catalog

MIS PS Box Cutting Guide



See Catalog

CR Femoral Trial

Femoral Preparation

Step 4 PS Box Preparation (continued)

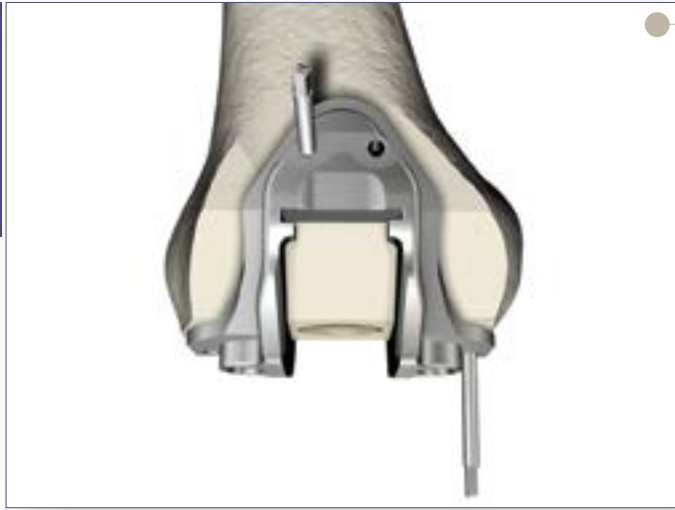


Figure 17

PS Box Cutting Guide

- ▶ Pin the PS Box Cutting Guide in place using Headless Pins.
- ▶ **Optional surgical tip:** To provide the appropriate anterior/posterior and medial/lateral stability with a minimal number of pins, place one pin distally and one pin anteriorly.

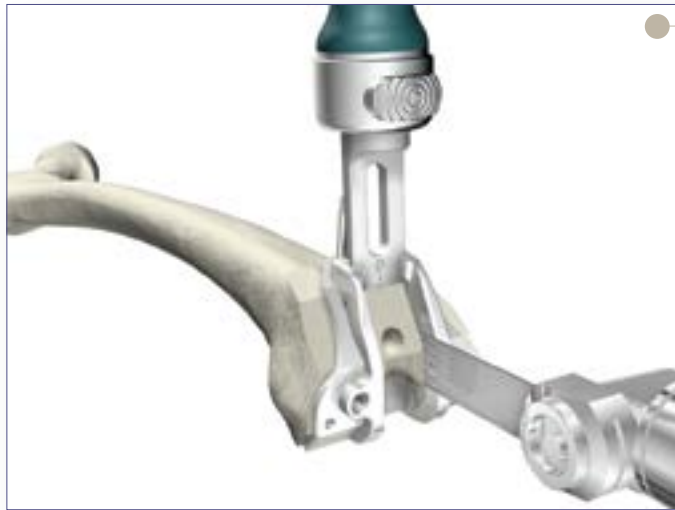


Figure 18

There are two ways to continue the PS box preparation:

PS Box Preparation Option: Chisel and Saw

- ▶ **Option A: Chisel and Saw:** Cut the cortical rim on both sides of the posterior-most portion of the intercondylar notch using the oscillating saw.
 - Assemble the Box Chisel and insert into the slot.
 - Impact the Box Chisel with a mallet until seated to the stop. Leave the Box Chisel in place to act as a reference plane. Cut the medial and lateral edges of the box with an oscillating saw to complete the bone resection as shown.
 - Avoid biasing the blade during resection for optimal bone conservation.



Figure 19

PS Box Preparation Option: Saw Only

- **Option B: Saw Only:** Use a narrow oscillating saw through the proximal slot to resect the distal portion of the femur. An oscillating or reciprocating saw can be used to resect the medial and lateral borders of the intercondylar notch to the proximal portion of the cutting guide.

Note: After completion of options A or B, the surgeon may choose to use the optional and recommended Triathlon PS Femoral Finishing Punch to complete preparation of the box.

- Prior to trialing with a PS Femoral Trial, assure the box is prepared properly and remove all remaining bone from the prepared box.

Instrument Bar

See Catalog

MIS PS Box Cutting Guide



6541-4-810

Impaction Handle



6541-4-709

Box Chisel



See Catalog

Triathlon PS Femoral Box Finishing Punch



See Catalog

PS Femoral Trial



6541-4-003

Headless Pins – 3"



Femoral Preparation

Step 4 PS Box Preparation (continued)

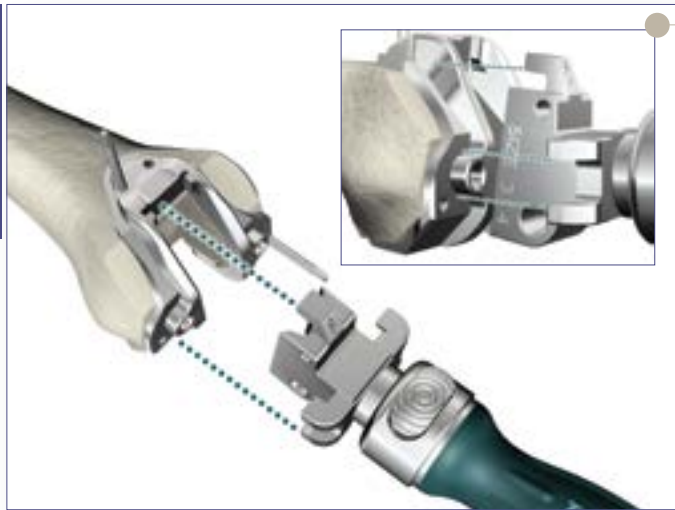


Figure 20

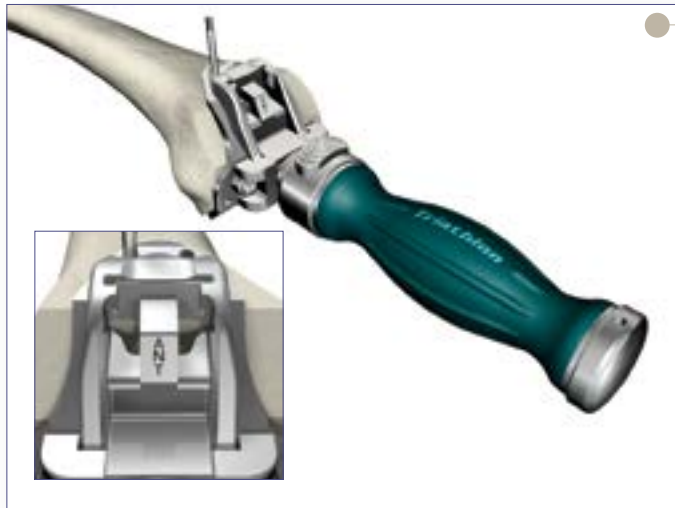


Figure 21



Figure 22

Optional PS Box Preparation Finishing Punch

If the optional Triathlon PS Femoral Box Finishing Punch is chosen:

- ▶ The chisel should be fully removed from the PS Box Cutting Guide prior to using the Triathlon PS Femoral Box Finishing Punch.
- ▶ Secure the appropriate size Triathlon PS Femoral Box Finishing Punch to the Triathlon Impaction Handle. There are four Triathlon PS Femoral Box Finishing Punches (Size 1-2, Size 3-4, Size 5-6 and Size 7-8).
- ▶ Properly orient the Triathlon PS Femoral Box Finishing Punch, assuring the anterior side is facing upwards.

Seating of the PS Box Finishing Punch

If the optional Triathlon PS Femoral Box Finishing Punch is chosen:

- ▶ Impact the Triathlon PS Femoral Box Finishing Punch through the PS Box Cutting Guide until properly seated.
- ▶ The Triathlon PS Femoral Box Finishing Punch is properly seated when the stop of the Finishing Punch is centered over the PS Box Cutting Guide drill holes. See figure on left which depict the Triathlon PS Femoral Box Finishing Punch properly seated on the PS Box Cutting Guide.
- ▶ When seated properly, there should be a gap between the anterior nose of the Triathlon PS Femoral Box Finishing Punch and the PS Box Cutting Guide.
- ▶ Remove the Triathlon PS Femoral Box Finishing Punch with the Triathlon Slap Hammer.
- ▶ Remove pins and the PS Box Cutting Guide from the prepared distal femur.

Note: The Triathlon PS Femoral Box Finishing Punch is designed to be used with the PS Box Cutting Guide and should not be impacted onto the prepared distal femur without the PS Box Cutting Guide in place.



Figure 23

PS Box Femoral Box Trial/Protector

- ▶ If the optional and recommended Triathlon PS Femoral Box Trial/Protector is chosen:
 - Remove the PS Box Cutting Guide.
 - Place by hand (not through impaction) the appropriate size Triathlon PS Femoral Box Trial/Protector into the prepared box to assure accuracy of the box preparation. There are two Triathlon PS Femoral Box Trial/Protectors (Size 1-4 and Size 5-8).
 - The box trial/protector is fully seated when both the distal and posterior “wings” are flush with the bone.

Note: Triathlon PS Femoral Box Trial/Protector assesses the accuracy of M/L box width and box depth.

Instrument Bar



See Catalog

MIS PS Box Cutting Guide



6541-4-810

Impaction Handle



6541-4-709

Box Chisel



See Catalog

Triathlon PS Femoral Box Finishing Punch



See Catalog

Triathlon PS Femoral Box Trial/Protector

Femoral Preparation

Step 4 PS Box Preparation (continued)



Figure 24



Figure 25

Femoral Box Protection During Tibia Subluxation

- ▶ To protect the prepared femoral box prior to trialing with a femoral component, place the Triathlon PS Femoral Box Trial/Protector into the prepared box by hand (not through impaction).
- ▶ Ensure the box trial is fully seated on the distal and posterior resections as described above in the box trialing step.
 - The Triathlon PS Femoral Box Trial/Protector features a slot in which a retractor can be placed to lever against the distal femur during tibial subluxation.
 - If preferred, select an extraction tool that fits into the retractor hole for ease of removal.
 - Remove the PS Femoral Box Trial/Protector prior to assembling and implanting the Triathlon PS femoral component.

To avoid femoral component impingement and to improve flexion, all osteophytes beyond the posterior condyles as well as those medially and laterally may be removed with an osteotome.

Note: If it is difficult to reach the posterior osteophytes in a tight knee, the tibial resection can be made and then the osteophytes can more easily be removed.

Femoral Preparation

Step 5 Femoral Trial Assessment

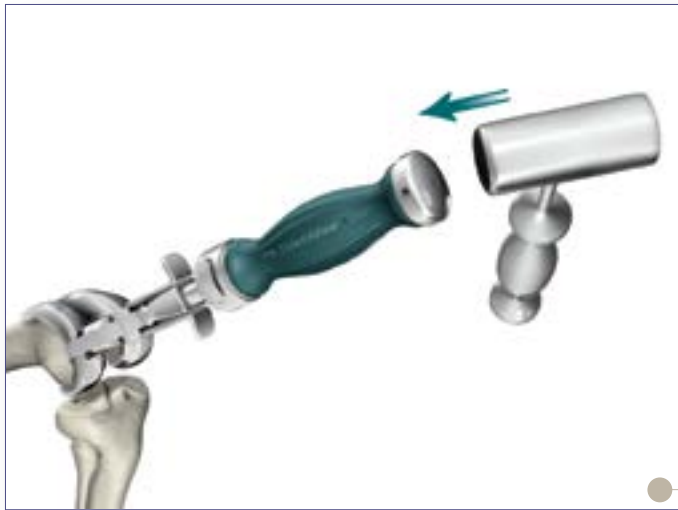


Figure 26

- ▶ The remaining portion of the technique is for both Posterior Stabilized or Cruciate Retaining.
- ▶ Assemble the appropriate size and side (Left/Right) PS or CR Femoral Trial to the Femoral Impactor/ Extractor with the Impaction Handle.
- ▶ Impact the PS or CR Femoral Trial onto the prepared distal femur. Use the Impaction Handle to ensure the Femoral Trial is aligned with the distal plane.
- ▶ Remove the Femoral Impactor/Extractor and Impaction Handle and assess the fit of the PS or CR Femoral Trial. Care must be taken to ensure that all of the osteophytes beyond the end of the posterior condyles are removed.

Instrument Bar



See Catalog

MIS PS Box Cutting Guide



See Catalog

Triathlon PS Femoral Box Trial/Protector

6541-4-003

Headless Pins – 3"



6541-4-809

Headless Pin Driver



6541-4-810

Impaction Handle



6541-4-801

Universal Driver



See Catalog

CR Femoral Trial



See Catalog

PS Femoral Trial



6541-4-807

Femoral Impactor/Extractor



6541-4-710

Posterior Osteophyte Removal Tool



Femoral Preparation

Step 5 Femoral Trial Assessment (continued)

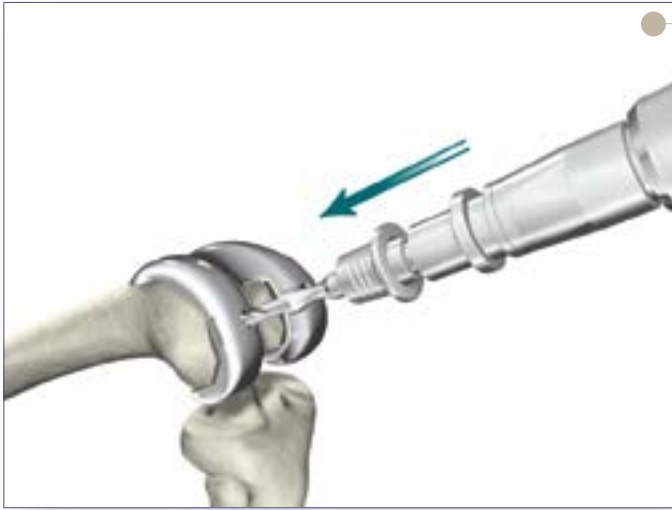


Figure 27

- ▶ Cruciate Retaining Knee: Attach the 1/4" Peg Drill to the Universal Driver and create the Modular Femoral Distal Fixation Peg holes.
- ▶ Attach the Posterior Osteophyte Removal Tool to the Impaction Handle and remove posterior osteophytes.
- ▶ Posterior Stabilized Knee: If the Modular Femoral Distal Fixation Pegs are to be used, the location holes may be prepared at this stage using the 1/4" Peg Drill attached to the Universal Driver.
- ▶ The peg holes may also be prepared through the PS Box Cutting Guide.

Note: Surgeon may leave Femoral Trial in place to protect the bone and aid with subluxing the tibia forward.



Figure 28

- To remove the Femoral Trial, attach the Femoral Impactor Extractor to the Slap Hammer and remove the PS or CR Femoral Trial from the femur.

Instrument Bar

6541-4-801

Universal Driver



See Catalog

CR Femoral Trial



See Catalog

PS Femoral Trial



6541-4-525

1/4" Peg Drill



6541-4-803

Slap Hammer



6541-4-710

Posterior Osteophyte Removal Tool



Tibial Preparation

Step 1A Tibial Preparation: Extramedullary (EM) Referencing

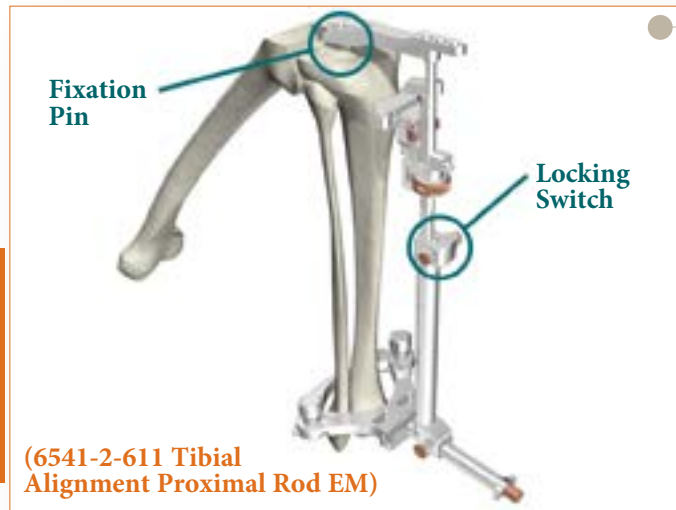


Figure 29

Tibial Resection Assembly

- ▶ The Tibial Resection Guide, available in left and right configurations, and the Universal Resection Guide are designed to avoid soft tissue impingement.
- ▶ The tibial resection assembly has five parts: the appropriate Tibial Resection Guide, the Ankle Clamp, the Distal Assembly, the Tibial Alignment Proximal Rod and the Tibial Adjustment Housing. These are assembled first.

Note: The Tibial Adjustment Housing is available in 3° slope and 0° slope (optional).



Figure 30

Tibial Slope

- ▶ Place the ankle clamp around the ankle and unlock the locking switch.
- ▶ Tibial slope can be checked by verifying that the long axis of the assembly is parallel to the tibia.

Caution:

- The center of the ankle is generally in line with the second metatarsal, unless ankle and foot deformity is present. The assembly should be aligned over the center of the ankle.
- Because of the shape of the tibia, the distal portion of the guide will be further away from the tibia than the proximal. Failure to recognize this will result in placing the component in extension.

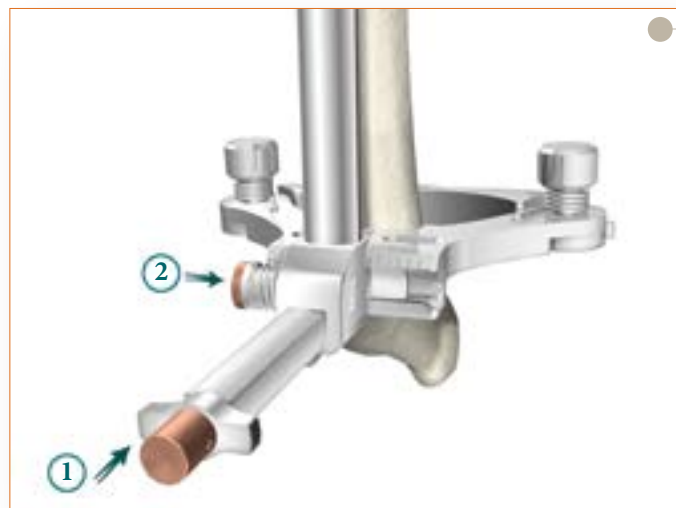


Figure 31

Varus/Valgus Alignment

- ▶ Medial/Lateral offset can be adjusted by pushing the bronze button (1) and sliding the assembly medially until the shaft intersects the center of the tibia.
- ▶ Once triaxial alignment is achieved, release the bronze button.

Tibial Slope Adjustment

- ▶ If the Proximal Rod is parallel to the tibia, the slope is 0° or 3° depending on which Tibial Adjustment Housing is used.
- ▶ Tibial slope can be adjusted by pressing the bronze button (2).

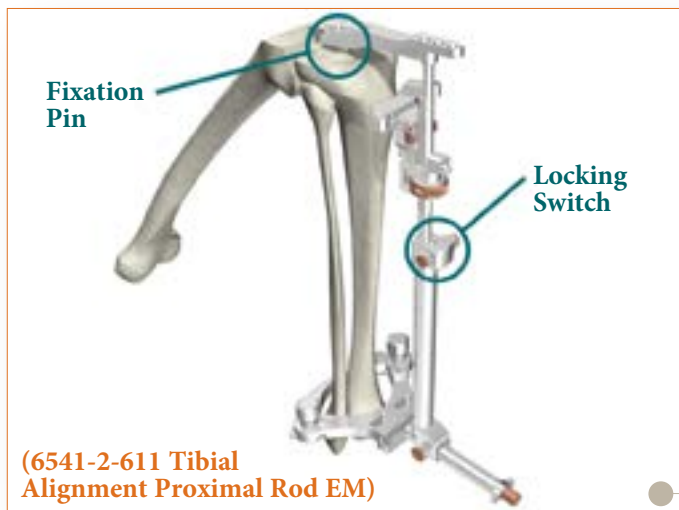


Figure 32

Rotational Alignment

- ▶ Rotate the entire assembly to ensure that the base of the assembly is aligned with the center of the ankle.
- ▶ The center of the ankle is generally in line with the second metatarsal.
- ▶ Once alignment is confirmed, set the bronze locking switch on the Distal Assembly to the locked position.

Instrument Bar

Right 6541-2-700

Left 6541-2-701

Tibial Resection Guide



6541-2-610

Tibial Alignment Distal Assembly EM



6541-2-609

Tibial Alignment Ankle Clamp EM



6541-2-611

Tibial Alignment Proximal Rod EM



0° slope 6541-2-704

3° slope 6541-2-705

Tibial Adjustment Housing



6541-2-611E

Express Proximal Rod EM



Tibial Preparation

Step 1B: Tibial Preparation: Intramedullary (IM) Referencing

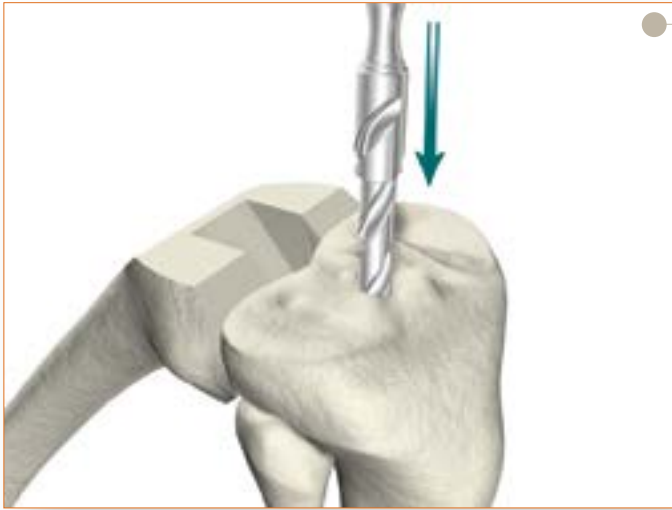


Figure 33

- ▶ Attach the 3/8" IM Drill to the Universal Driver and create a hole in the location determined by the pre-operative X-rays to align with the IM canal.



Figure 34

- ▶ Attach the T-Handle Driver to the 5/16" IM Rod and slowly pass into the canal, ensuring clearance. Remove the 5/16" IM Rod and insert it into the body of the Tibial Alignment Jig IM. The assembly is then inserted into the canal beyond the isthmus to the physal scar of the ankle if possible.

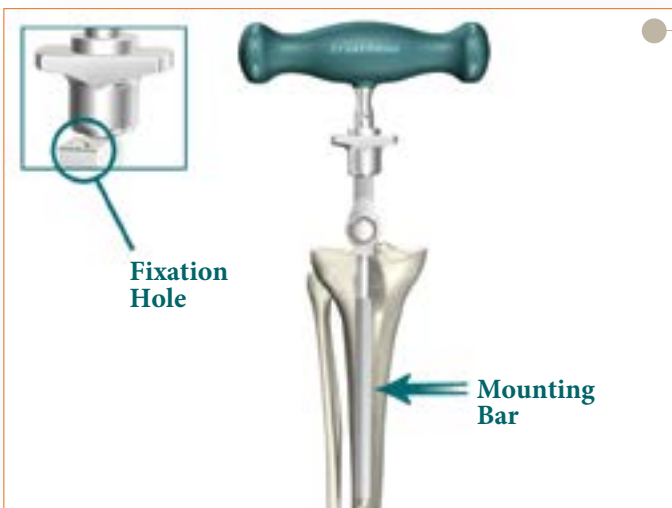


Figure 35

Rotational Alignment

- ▶ With the body of the Tibial Alignment Jig IM resting on the proximal tibia, proper rotational alignment is achieved by rotating the instrument about the 5/16" IM Rod so that the vertical mounting bar is at the junction of the medial and middle 1/3rd of the tibial tubercle. A Headless Pin or the 1/8" Drill is then inserted into the fixation hole to fix rotation (See Inset).



Figure 36

Varus/Valgus Alignment

- ▶ Assemble the appropriate Tibial Resection Guide (left, right or Universal Resection Guide) on the Tibial Adjustment Housing.

Note: The Tibial Adjustment Housing is available in 3° slope and 0° slope (optional).

- ▶ Attach the assembly onto the mounting bar by pressing the bronze wheel on the Tibial Adjustment Housing. Attach the Universal Alignment Handle to the Tibial Resection Guide and slide a Universal Alignment Rod through the handle for sagittal assessment.
- ▶ When alignment is confirmed, the Universal Alignment Handle should be centered over the ankle.

Instrument Bar

6541-4-538

3/8" IM Drill



6541-4-801

Universal Driver



6541-4-800

T-Handle Driver



6541-4-516

5/16" IM Rod



6541-2-600

Tibial Alignment Jig IM



0° slope 6541-2-704

3° slope 6541-2-705

Tibial Adjustment Housing



Right 6541-2-700

Left 6541-2-701

Tibial Resection Guide



6541-4-602

Universal Alignment Rods



6541-1-721

Universal Resection Guide



6541-4-806

Universal Alignment Handle



Tibial Preparation

Step 2 Tibial Resection

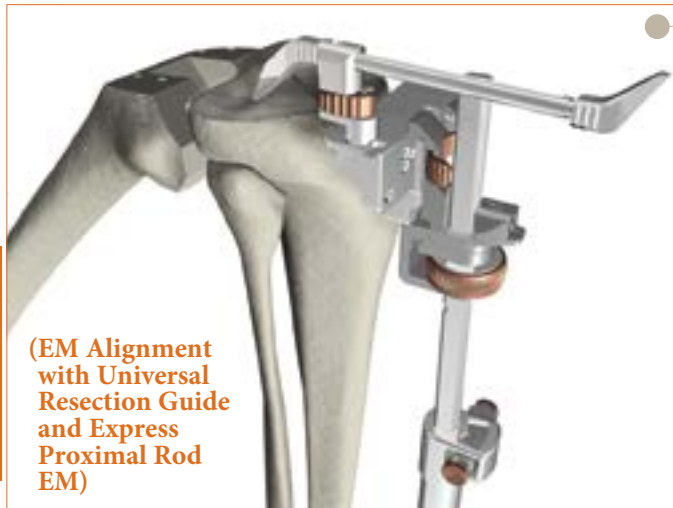


Figure 37

The following applies to both extramedullary and intramedullary alignment.

Establish Tibial Resection Level

- ▶ The Tibial Stylus attaches to the Tibial Resection Guide or Universal Resection Guide with the “9” end referencing the lowest level of the unaffected compartment.
- ▶ 9mm of bone will be resected. Alternatively, if the “2” end of the Tibial Stylus is used, the amount of bone resected will be 2mm below the tip of the stylus.
- ▶ The height of the Tibial Resection Guide, Tibial Stylus and Tibial Adjustment Housing can be adjusted using the bronze wheel on the Tibial Adjustment Housing.
- ▶ For coarse adjustment, press the bronze wheel and slide the assembly up or down. For fine adjustment, turn the bronze wheel to the right to move the assembly up the Proximal Rod or turn left to move the assembly down the Proximal Rod.
- ▶ Pin the Tibial Resection Guide in place.
- ▶ Remove all alignment instruments leaving only the Tibial Resection Guide in place.

Note: Rotate bronze wheel one extra turn to ensure stylus is under tension for accurate resection.



Figure 38

Tibial Resection

- ▶ Resect the proximal tibia. An optional Tibial Resection Guide Modular Capture (Left or Right) may be added.

Tip:

- Prior to removing the Tibial Resection Guide, check for flatness with a straight edge of an instrument such as the Bladerunner.
- Use saline irrigation during resection.
- ▶ Remove the Tibial Resection Guide.



Figure 39

Tibial Component Sizing

- ▶ Place the PS or CR Femoral Trial on the femur. Draw the tibia anteriorly. Assemble a Universal Tibial Template, Alignment Handle and a PS or CR Tibial Insert Trial.
- ▶ Place the assembly on the resected tibial plateau and choose the size that best addresses rotation and coverage.
- ▶ Perform a trial reduction to assess overall component fit, ligament stability and joint range of motion.

Note: Do not impact the Tibial Insert Trial. In the event that excessive resistance is encountered during insertion of the Tibial Insert Trial, remove, reposition, and reinsert the Tibial Insert Trial. Ensure all excess debris (bone and soft tissue) is cleared from the Universal Tibial Template.

Instrument Bar

6541-2-611E

Express Proximal Rod EM



6541-2-611

Tibial Alignment Proximal Rod EM



Right 6541-2-700

Left 6541-2-701

Tibial Resection Guide



0° slope 6541-2-704

3° slope 6541-2-705

Tibial Adjustment Housing



6541-4-806

Universal Alignment Handle



6541-2-429

Tibial Stylus



Right 6541-2-702

Left 6541-2-703

Tibial Resection Guide Modular Capture



6541-4-003

Headless Pins – 3"



See Catalog

CR & PS Femoral Trials



See Catalog

Universal Tibial Template



See Catalog

CR, CS & PS Tibial Inserts



Tibial Preparation

Step 2 Tibial Resection (continued)

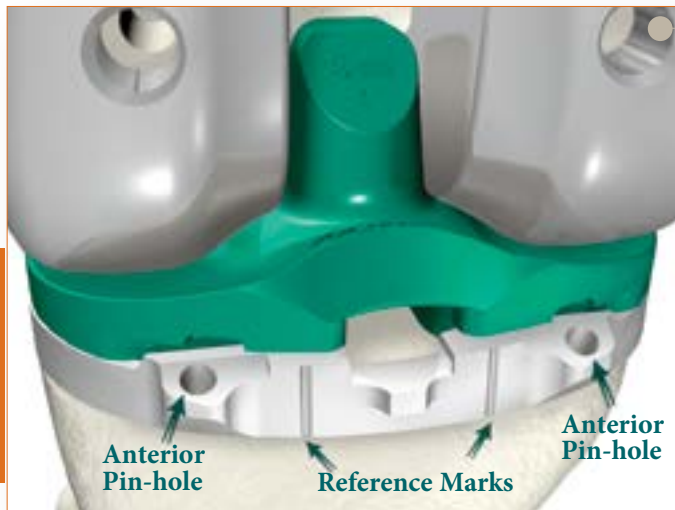


Figure 40

There are two options to secure the Universal Tibial Template to the tibia:

Securing Tibial Template

Option 1:

- ▶ Once satisfactory alignment and tibial component orientation are achieved, place pins through the two anterior holes of the Universal Tibial Template to secure its position. Remove the PS or CR Femoral Trial. Remove the Tibial Trial Insert and further secure the Universal Tibial Template by placing additional pins into the proximal tibia through any of the available holes.

Option 2:

- ▶ Once satisfactory alignment and tibial component orientation are achieved, mark the anterior tibial cortex in line with the reference marks on the anterior border of the Universal Tibial Template. Remove the PS or CR Femoral Trial and disassemble the Tibial Trial Insert from the Universal Tibial Template.
- ▶ Check the orientation and coverage of the Universal Tibial Template on the proximal tibia again while referencing the marks on the anterior border of the Universal Tibial Template and the anterior cortex made previously. Reposition the Universal Tibial Template if required while maintaining a flush fit to the anterior tibial cortex.
- ▶ Place pins through the two anterior holes of the Universal Tibial Template to secure its position. Further secure the Universal Tibial Template by placing additional pins into the proximal tibia through any of the available holes.

Tip: In dense bone, holes for pinning, may be pre-drilled using the 1/8" drill (3170-0000).

Note: The Tibial Insert Trial can be removed by hand or with the aid of a retractor.

Tibial Preparation

Step 3 Tibial Keel Punch

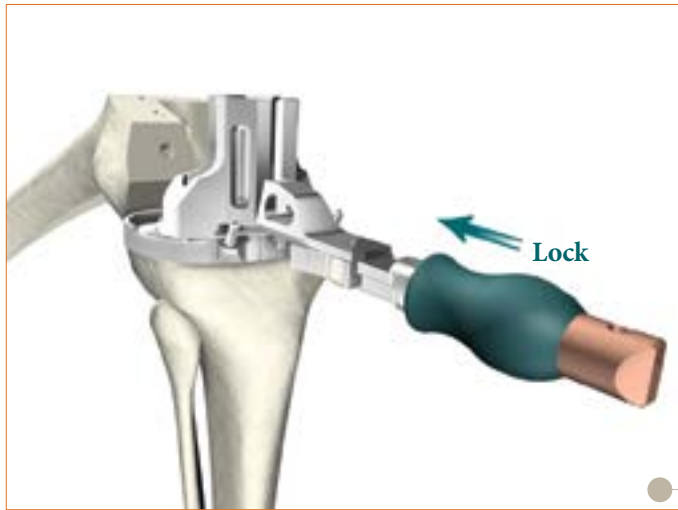


Figure 41

Securing Tibial Keel Punch Guide

- ▶ Assemble the Keel Punch Guide to the Universal Tibial Template by inserting at a slight angle to the top of the Universal Tibial Template (into the two locating slots toward the posterior portion of the Universal Tibial Template).
- ▶ Allow the Keel Punch Guide to sit flat on the Universal Tibial Template and push forward on the handle to lock the Keel Punch Guide to the Universal Tibial Template.

Instrument Bar



See Catalog

Universal Tibial Template



See Catalog

CR & PS Femoral Trials

6541-4-003

Headless Pins – 3"



Size 1, 2, 3 – 6541-2-713

Size 4, 5, 6, 7, 8 – 6541-2-748

Keel Punch Guide

Tibial Preparation

Step 3 Tibial Keel Punch (continued)

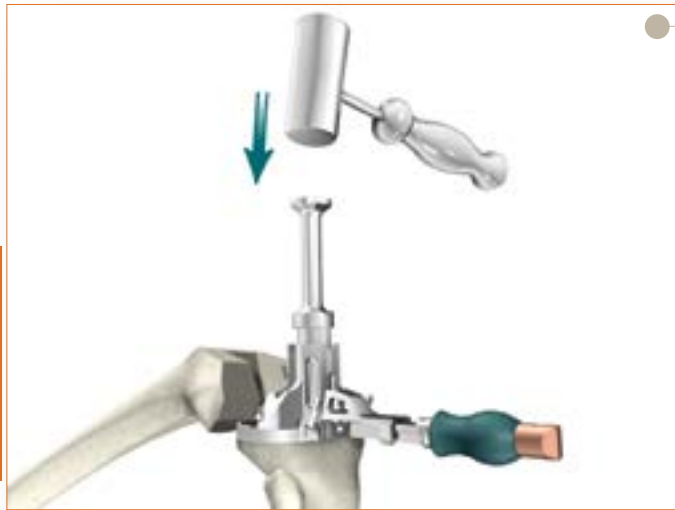


Figure 42

Tibial Keel Punching

- ▶ Place the appropriate Cementless Keel Punch into the Keel Punch Guide.
- ▶ Use a mallet to impact the Keel Punch.

Tip: The presence of variably dense bone in the proximal tibia can influence the advancement of the Keel Punch. Take care to ascertain that the pinned Universal Tibial Template maintains its position during Keel Punch impaction. It may be advisable to remove sclerotic bone in the path of the Keel Punch prior to impaction.



Figure 43

Extracting Keel Punch

- To extract the Keel Punch, lift up on the Keel Punch Guide handle and pull the handle to cantilever the Keel Punch out of the tibia.

Instrument Bar



See Catalog

Universal Tibial Template

6541-4-003

Headless Pins – 3"



Size 1, 2, 3 – **6541-2-713**

Size 4, 5, 6, 7, 8 – **6541-2-748**

Keel Punch Guide



See Catalog

Cementless Keel Punch



6541-4-804

Headless Pin Extractor

Patella Preparation



Figure 44



Figure 45

Patella Resection

- Patella preparation is optional and is based on surgeon preference and surgeon evaluation of the articulating surface.
- Remove all osteophytes and synovial insertions around the patella, and measure thickness using a caliper.
- After determining the depth of the cut, affix the stylus in the appropriate slot of the Patella Resection Guide and capture the patella between the jaws of the guide.

Note: Care should be taken when determining the depth of the cut in an effort to minimize the risk of fracture. The amount of bone to be left after resecting the patella is a clinical decision and is based on surgeon judgment and evaluation of patient characteristics.

- Using a .050" (1.25mm) non-offset sawblade, resect the patella.

Patella Peg Preparation

- Choose the appropriate size Patella Drill Template and insert into the Patella Clamp.
- Position the chosen patellar drill guide over the patella and secure it to the bone by deploying the clamp mechanism.

Drill Selection Guide

- For Tritanium Metal-Backed Patella*: Use the standard Metal-Backed Patella drill (6541-3-522); 5.7mm (0.225in) drill diameter = 0.4mm (0.016in) pressfit.
- If the bone is sclerotic in any of the peg locations, the Surgeon may elect to use the Tritanium Dense Bone Patella Drill (6541-3-526), which will create slightly less press fit; 6.0mm (0.235in) drill diameter = 0.15mm (0.006in) pressfit.
- If the surgeon chooses to cement the Tritanium Metal-Backed Patella or prefers to use a cemented All Poly-Patella, then the All-Poly Patella Drill (6541-3-524) must be used.
- Drill three fixation holes with the appropriate drill.

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).

Trial Assessment



Figure 46

- Remove any residual cartilage and wash away all debris.
- Place correct size Patella Trial (Symmetric or Asymmetric) onto the prepared patella.
- Replace all Trials and assess patellar tracking by taking the knee through a ROM. The patella should track normally throughout the ROM without tendency for tilting or lateral subluxation.

Instrument Bar



6633-7-744
Patella Clamp



6633-7-738
Patella Stylus



6633-7-736
Slotted Patella Resection Guide



See Catalog
Express Symmetric & Asymmetric
Patella Drill Templates



6541-3-800E
Express Cement Cap



6541-3-524
All-Poly Patella Drill w/Stop



6541-3-522*
Metal-Backed Patella Drill w/Stop



6541-3-526
Tritanium Dense Bone Patella Drill



See Catalog
Symmetric & Asymmetric Patella Trials

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).

Tibial Preparation

Step 4 Tibial Peg Preparation



(6541-2-64X Tibial Peg Drill Template)

Figure 47

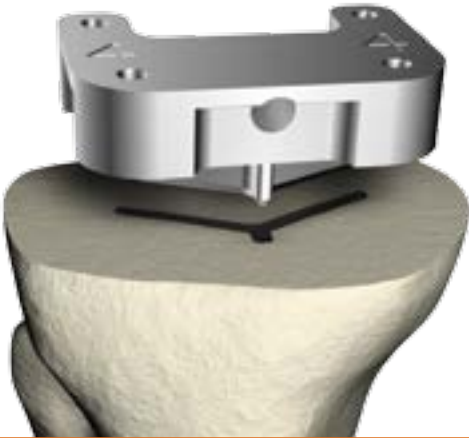


Figure 48

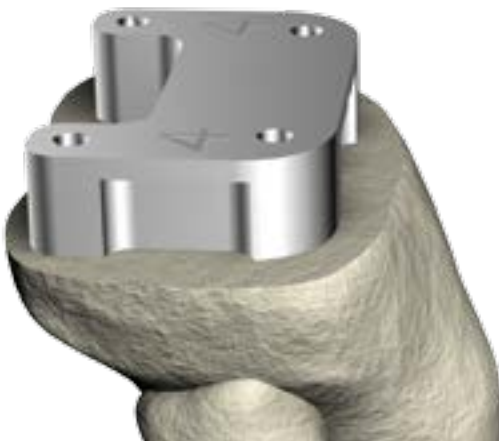


Figure 49

Tibial Peg Drill Template

Note: Universal Tibial Template, Keel Punch Tower, Keel Punch and all pins need to be removed from tibia before tibial peg preparation.

- ▶ Select the Tibial Peg Drill Template that corresponds to the pre-determined Tibial Baseplate size.
- ▶ The position of the four holes and the keel on the underside of the Tibial Peg Drill Template correspond to the relative location of the keel and four pegs on the implant.
- ▶ Insert the keel on the Tibial Peg Drill Template into the prepared keel slot as shown.
- ▶ Ensure that the Tibial Peg Drill Template sits flush against the resected tibia to ensure accurate peg preparation.



1/8" Tibial Peg Drill (6541-2-625)

Figure 50



Figure 51



6541-4-801

Universal Driver



6541-2-64X – See Catalog

Tibial Peg Drill Template



6541-2-625

1/8" Tibial Peg Drill

Drilling for Pegs

Drill Selection:

- ▶ Drilling the tibial peg holes will facilitate seating the implant.
- ▶ Select the 1/8" Tibial Peg Drill (6541-2-625).
- ▶ Hold Tibial Peg Drill Template in position by applying finger pressure to the template. Position 1/8" Tibial Peg Drill through a peg hole perpendicular to the resected tibia.
- ▶ Drill through all four template holes using the 1/8" Tibial Peg Drill taking care to ensure surgical glove and fingers are not in contact with drill prior to drilling.
- ▶ Drilling is complete when the drill stop has contacted the template surface.
- ▶ Carefully remove the Tibial Peg Drill Template from the bone by lifting straight up and out of keel slot.

Tip: The central hole of the Tibial Drill Guide can be used to facilitate removal of the guide straight up and out of the keel slot.

Tibial Preparation

Step 4 Tibial Peg Preparation (continued)



Image of the Tibia After Tibial Preparation

Figure 52

Tibial Preparation

Step 4 Tibial Peg Preparation



7/32" Tibial Peg Drill (6541-2-626)

Figure 53



Figure 54

Optional: Drilling with the 7/32" Peg Drill

- ▶ If the surgeon feels the bone is too dense at any of the peg locations after preparing with the 1/8" drill and template, the optional 7/32" Peg Drill (6541-2-626) may be used to increase the size of the peg holes.
- ▶ Drill taking care to ensure surgical glove and fingers are not in contact with drill prior to drilling. Ensure axial alignment before drilling. Drilling is complete after the drill stop has contacted bone. Do not continue to drive the drill after the stop has been reached.

Note: Ensure Tibial Peg Drill template is removed prior to drilling with the 7/32" Tibial Peg Drill.

Instrument Bar

6541-4-801

Universal Driver



6541-2-626

7/32" Tibial Peg Drill



Femoral Implantation

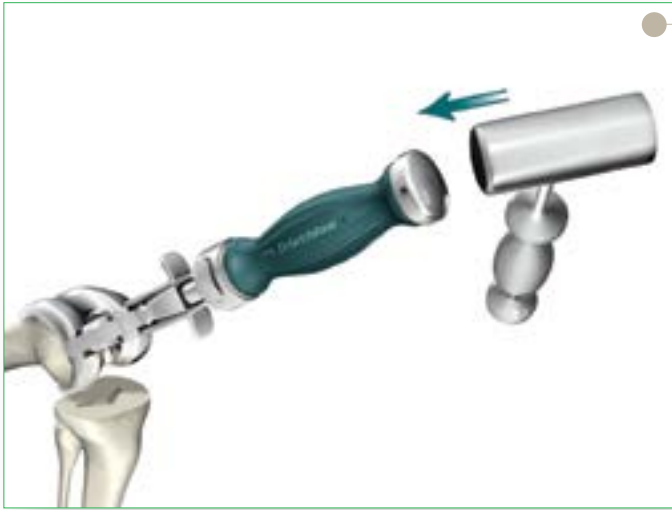


Figure 55

- ▶ Attach the Femoral Impactor Extractor to the Impaction Handle and attach to the appropriate size and side Femoral Component. Place the Femoral Component on the femur and impact it until fully seated.
- ▶ Posterior Stabilized Knee: If Modular Femoral Distal Fixation Pegs are to be used, assemble the pegs to the Femoral Component using the 1/8" Hex Drive and the Slip Torque Handle prior to implantation.
- ▶ The Femoral Impactor can be attached to the Impaction Handle to further seat the Femoral Component onto the prepared femur.

Tibial Implantation

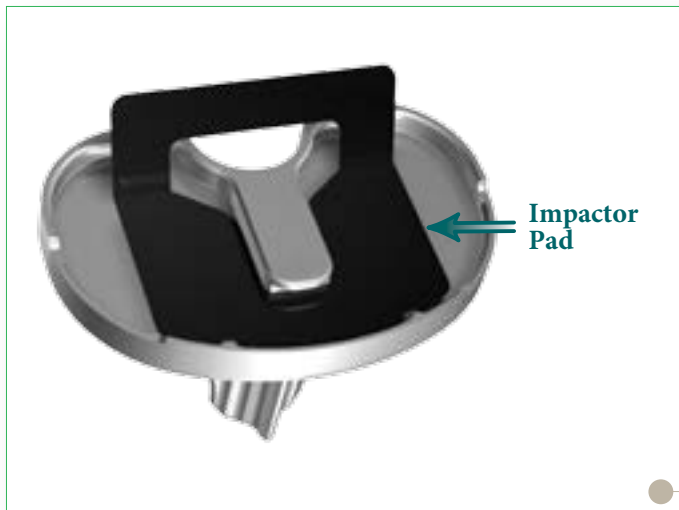


Figure 56

- The Triathlon Tritanium Tibial Baseplate is packaged together with an Impactor Pad as shown.

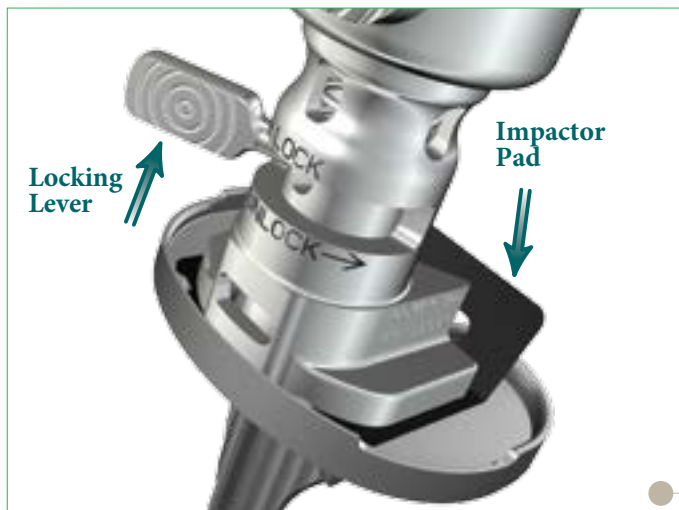


Figure 57

Locking onto the Impactor Pad

Note: It is advisable to confirm at this stage if the surgeon plans to implant the Baseplate with or without cement.

If Cementless:

- Connect the Tibial Baseplate Impactor/Extractor to the Impaction Handle
- Connect the Tibial Baseplate Impactor/Extractor to the Triathlon Tritanium Baseplate over the Impactor Pad and lock the lever

Instrument Bar

6541-4-810

Impaction Handle



6541-4-807

Femoral Impactor/Extractor



6541-4-805

Baseplate Impactor/Extractor



5536-B-X00 -

Baseplate - See Catalog

6541-4-901 - Impactor Pad

Triathlon Tritanium Tibial Baseplate with Impactor Pad



Tibial Implantation

(continued)



Figure 58

Baseplate Impaction

Caution: Pegs on the Triathlon Tritanium Tibial Baseplate are sharp. Take care when handling the baseplate.

Tip: At this stage, cysts or voids on the surface of the tibia may be bone grafted with local resected cancellous bone.

- ▶ Introduce the Triathlon Tritanium Baseplate onto the prepared tibia taking care to align keel slot and peg holes with the keel and pegs of the baseplate.
- ▶ Impact until fully seated. Ensure baseplate is fully seated prior to proceeding.
- ▶ Unlock the locking lever on the Baseplate Impactor Extractor and remove the assembly from the baseplate. **Discard the Impactor Pad.**

Caution: It is recommended that the Impactor Pad be left on during impaction. Discard the Impactor Pad following impaction of the baseplate and prior to the Tibial Insert Implantation step. **Do not implant the Impactor Pad.**

Note: Do not rock the baseplate in the bone because it could affect the press-fit.

If Cementing:

- ▶ If a decision is made to cement the Triathlon Tritanium Baseplate, the keel must be re-prepared with the Cemented Keel Punch.
- ▶ The appropriate Tibial Template and Keel Punch Tower must be pinned back into place. The Cemented Keel Punch is then impacted into place to open up the keel slot to allow for a cement mantle.
- ▶ If necessary, before applying the bone cement, remove bone debris and tissue from the Triathlon Tritanium Baseplate.

Tibial Insert Implantation



Figure 59

- ▶ Prior to assembly of the Tibial Insert, the Tibial Trial Insert may be placed on the Triathlon Tritanium Baseplate, to once more assess joint stability and range of motion.
- ▶ To assemble the Tibial Insert, distract the joint and angle the insert posteriorly into the Triathlon Tritanium Baseplate. The posterior lip of the Tibial Insert must fit beneath the lip on the posterior Triathlon Tritanium Baseplate wall.
- ▶ Attach the Tibial Insert Impactor to the Impaction Handle and impact to snap the Insert in place anteriorly.
- ▶ The Tibial Insert is fully seated once the locking wire locks under the barbs on the anterior/interior surface of the Triathlon Tritanium Baseplate wall.

Instrument Bar

6541-4-810

Impaction Handle



6541-4-825

Slip Torque Handle



6541-4-805

Baseplate Impactor/Extractor



See Catalog

CR , CS & PS Tibial Inserts



6541-4-813

Tibial Insert Impactor



Size 1-3 – 6541-2-013

Size 4-6 – 6541-2-046

Cemented Keel Punch



Patella Implantation

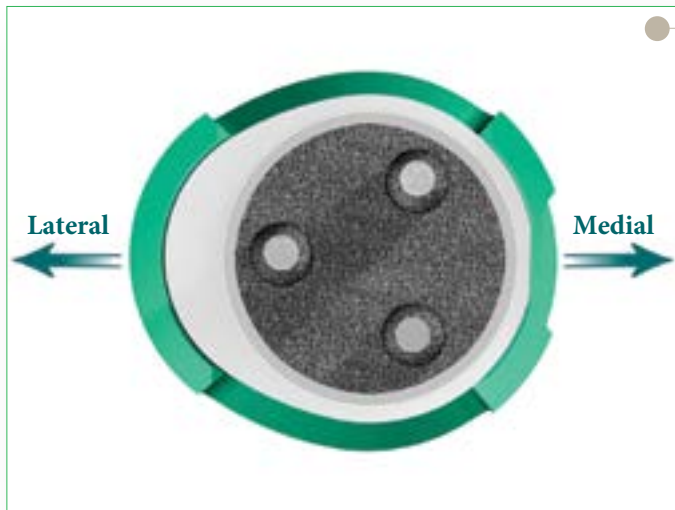


Figure 60

Assembling the Patella Implant to the Patella Capture

- ▶ Select the Patella Capture that corresponds to the size of the patella to be implanted and snap the polyethylene side of the patella implant to the capture.

Note: If an asymmetric patella and Capture are selected, place the medial side of the patella in first and then snap in the lateral side.

Orienting the Patella Implant to the Native Patella

- ▶ Ensure all bone debris from patella preparation has been removed so the implant can seat properly.
- ▶ Align the pegs of the Patellar Component to the fixation peg holes previously prepared.

Caution: When using an asymmetric patellar component, ensure that the lateral extension of the asymmetric patella implant is over the lateral facet of the native patella.

- ▶ Lightly press the patellar pegs into the native patella.

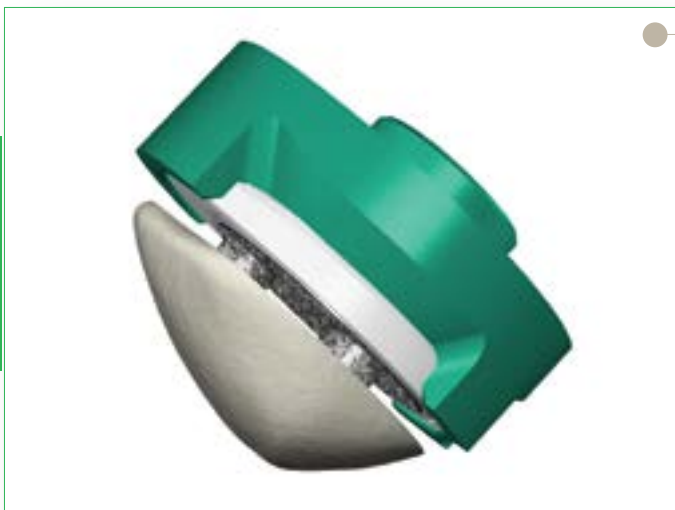


Figure 61

Implanting the patellar component using the Patella Inserter

- ▶ Hold the native patella, patella implant and Patella Capture in one hand and position the Patella Inserter over the Capture as shown.
- ▶ Bring the two arms of the patella inserter together until the native patella rests against the lower patella plate and the top of the capture fits flush against the upper plate of the patella inserter.

Note: The Impaction Handle may be attached to the Patella Inserter as an option.



Figure 62

Patella Implantation

(continued)



Figure 63

- Turn the T-handle of the Patella Inserter until the metal backing portion of the patella implant is fully seated onto the resected surface of the native patella.

Note: The metal backing portion of the patella implant protrudes slightly from the peripheral polyethylene surface. There may be a slight gap between the peripheral polyethylene and the bone surface when the central metal backing portion is fully seated.

Caution: While carefully turning the T-handle, observe through the windows on the Patella Capture that the patella implant is properly seating onto the native patella. Stop once the metal backing portion of the implant is fully seated. Care should be taken to avoid over-compressing the implant and native patella.

- Unscrew the T-handle and remove the Patella Inserter and Capture.
- Re-examine to ensure the the implant is properly seated on the native patella.

If cementing the patella component:

- If a decision is made to cement the Tritanium Metal-Backed Patella* or to use an All-Poly Patella, the peg holes must be prepared with the All-Poly Patella Drill (6541-3-524).
- If necessary, remove bone and tissue debris from the Tritanium Metal-Backed Patella.
- Prepare the bone surface for cementing and apply the cement.
- To facilitate removal of excess bone cement, do not use the Patella Capture with the Patella Inserter.
- Alternatively, the Triathlon Patella Clamp and Express Cement Cap can be used for cement application insertion.
- Maintain clamping pressure while excess cement is cleared and polymerization is complete.

Instrument Bar



6541-3-530
Patella Inserter



See Catalog
Symmetric Tritanium Patella Capture



See Catalog
Asymmetric Tritanium Patella Capture

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).

Product Dimensions

Product Dimensions

Triathlon Tritanium Baseplate

Part No.	Size	A/P (mm)	M/L (mm)	Keel Depth (mm)	Keel Width (Proximal)	Peg Length (mm)	Peg Diameter (mm)
5536-B-100	1	40	61	28	40	7	7
5536-B-200	2	42	64	28	40	8	7
5536-B-300	3	44	67	28	40	9	7
5536-B-400	4	46	70	28	52	9	7
5536-B-500	5	49	74	28	52	9	7
5536-B-600	6	52	77	28	52	11	7
5536-B-700	7	56	80	28	58	11	7
5536-B-800	8	60	85	28	58	12	7

Triathlon Tritanium Metal-Backed Symmetric Patella*

Part No.	Size	Diameter (mm)	Thickness (mm)
5556-L-319	S31	31	9
5556-L-339	S33	33	9
5556-L-360	S36	36	10
5556-L-391	S39	39	11

Triathlon Tritanium Metal-Backed Asymmetric Patella*

Part No.	Size	S/I* Diameter (mm)	M/L Width (mm)	Thickness (mm)
5552-L-299	A29	29	33	9
5552-L-320	A32	32	36	10
5552-L-350	A35	35	39	10
5552-L-381	A38	38	42	11
5552-L-401	A40	40	44	11

*S/I - Superior/Inferior

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).

Catalog #	Description	Quantity in Kit
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Miscellaneous Instruments Kit Contents

3170-0000	1/8" Drill	2
6541-4-003	Headless Pins – 3"	4
6541-4-300	Headed Nail Impactor Extractor (Optional)	1
6541-4-400	Bladerunner	1
6541-4-515	Headed Nails – 1½" (Optional)	2
6541-4-516	5/16" IM Rod*	1
6541-4-518	1/8" Peg Drill	1
6541-4-525	1/4" Peg Drill	1
6541-4-538	3/8" IM Drill	1
6541-4-575	Headed Nails – 3/4" (Optional)	2
6541-4-602	Universal Alignment Rods	1
6541-4-610	Adjustable Spacer Block (Optional)	1
6541-4-700	Bone File (Optional)	1
6541-4-709	Box Chisel	1
6541-4-710	Posterior Osteophyte Removal Tool (Optional)	1
6541-4-800	T-Handle Driver	1
6541-4-801	Universal Driver	1
6541-4-802	1/8" Hex Drive (Optional)	1
6541-4-803	Slap Hammer	1
6541-4-804	Headless Pin Extractor	1
6541-4-805	Tibial Baseplate Impactor Extractor	1
6541-4-806	Universal Alignment Handle	1
6541-4-807	Femoral Impactor Extractor	1
6541-4-809	Headless Pin Driver	1
6541-4-810	Impaction Handle	2
6541-4-811	Femoral Impactor	1
6541-4-812	Tibial Baseplate Impactor	1
6541-4-813	Tibial Insert Impactor	1
6541-4-825	Slip Torque Handle (Optional)	1
6541-8-004	Triathlon Miscellaneous Upper Tray	1
6541-8-104	Triathlon Miscellaneous Lower Tray	1
6541-9-000	Triathlon Case	1
Total Quantity		39

*Alternate Flexible IM Rod available for order: 6541-4-516E

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).

Catalog #	Description	Quantity in Kit
Patella Preparation & Trialing Part Numbers		
6633-7-736	Slotted Patella Resection Guide	1
6633-7-738	Patella Stylus	1
7650-1454	Patella Caliper	1
6541-3-524	All-Poly Patella Drill w/Stop	1
6541-3-617E	Express Asymmetric Patella Drill Template – 29mm	1
6541-3-618E	Express Asymmetric Patella Drill Template – 33mm	1
6541-3-619E	Express Asymmetric Patella Drill Template – 35mm	1
6541-3-620E	Express Asymmetric Patella Drill Template – 38mm	1
6541-3-621E	Express Asymmetric Patella Drill Template – 40mm	1
6541-3-627E	Express Symmetric Patella Drill Template – 27mm	1
6541-3-629E	Express Symmetric Patella Drill Template – 29mm	1
6541-3-631E	Express Symmetric Patella Drill Template – 31mm	1
6541-3-633E	Express Symmetric Patella Drill Template – 33mm	1
6541-3-636E	Express Symmetric Patella Drill Template – 36mm	1
6541-3-639E	Express Symmetric Patella Drill Template – 39mm	1
6541-3-800E	Express Cement Cap	1
6633-7-744	Patella Clamp	1
5550-T-278	Symmetric Patella 27mm x 8mm	1
5550-T-298	Symmetric Patella 29mm x 8mm	1
5550-T-319	Symmetric Patella 31mm x 9mm	1
5550-T-339	Symmetric Patella 33mm x 9mm	1
5550-T-360	Symmetric Patella 36mm x 10mm	1
5550-T-391	Symmetric Patella 39mm x 11mm	1
5551-T-299	Asymmetric Patella 29mm (S/I) x 33mm (M/L) x 9mm	1
5551-T-320	Asymmetric Patella 32mm (S/I) x 36mm (M/L) x 10mm	1
5551-T-350	Asymmetric Patella 35mm (S/I) x 39mm (M/L) x 10mm	1
5551-T-381	Asymmetric Patella 38mm (S/I) x 42mm (M/L) x 11mm	1
5551-T-401	Asymmetric Patella 40mm (S/I) x 44mm (M/L) x 11mm	1
6541-3-522*	Metal-Backed Patella Drill w/Stop	1
6541-8-005E	Patellar Preparation – Upper Tray	1
6541-8-105E	Patellar Preparation – Lower Tray	1
6541-7-806	MIS 4:1 Impactor/Extractor	1
6541-1-701E	#1 Express 4:1 Cutting Block (Optional)	1
6541-1-708E	#8 Express 4:1 Cutting Block (Optional)	1
6541-9-000	Triathlon Case	1
6541-3-530	Tritanium Patella Inserter	1
6541-3-526	Tritanium Dense Bone Patella Drill	1
6541-3-319	Symmetric Size S31 Patella Capture	1
6541-3-339	Symmetric Size S33 Patella Capture	1
6541-3-360	Symmetric Size S36 Patella Capture	1
6541-3-391	Symmetric Size S39 Patella Capture	1
6541-3-299	Asymmetric Size A29 Patella Capture	1
6541-3-320	Asymmetric Size A32 Patella Capture	1
6541-3-350	Asymmetric Size A35 Patella Capture	1
6541-3-381	Asymmetric Size A38 Patella Capture	1
6541-3-401	Asymmetric Size A40 Patella Capture	1
Total Quantity		45

Catalog #	Description	Sizes	Qty
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To prepare tibia for the cementless indication, use the cementless keel punches provided below:

6541-6-013	Triathlon Cementless Keel Punch	1-3	1 Each Size
6541-6-046	Triathlon Cementless Keel Punch	4-6	1 Each Size
6541-6-078	Triathlon Cementless Keel Punch	7-8	1 Each Size

For Tibial Peg Preparation, please use the Triathlon Tritanium Baseplate Instrumentation below:

6541-8-100	Triathlon Tritanium Prep Tray		1
6541-2-64X	Tritanium Tibial Peg Drill Template	X= 1,2,3,4,5,6,7 and 8	1 Each Size
6541-2-625	Tritanium Tibial Peg Drill – 1/8"		1
6541-2-626	Tritanium Tibial Peg Drill – 7/32"		1

Catalog #	Description	Quantity in Kit
Size 3-6 Femoral & Tibial Preparation Kit Contents		
6541-1-600	Adjustment Block	1
6541-1-603	Femoral Sizer	1
6541-1-605	Femoral Stylus	1
6541-1-657	Femoral Alignment Guide	1
6541-1-703E	#3 Express 4:1 Cutting Block	1
6541-1-704E	#4 Express 4:1 Cutting Block	1
6541-1-705E	#5 Express 4:1 Cutting Block	1
6541-1-706E	#6 Express 4:1 Cutting Block	1
6541-1-721	Universal Resection Guide	1
6541-1-723	Modular Capture – Distal Resection	1
6541-2-013	Size 1-3 Keel Punch	1
6541-2-046	Size 4-6 Keel Punch	1
6541-2-429	Tibial Stylus	1
6541-2-600	Tibial Alignment Jig IM (Optional)	1
6541-2-603	#3 Universal Tibial Template	1
6541-2-604	#4 Universal Tibial Template	1
6541-2-605	#5 Universal Tibial Template	1
6541-2-606	#6 Universal Tibial Template	1
6541-2-609	Tibial Alignment Ankle Clamp EM	1
6541-2-610	Tibial Alignment Distal Assembly EM	1
6541-2-611E	Express Proximal Rod EM	1
6541-2-620	Tibial Template Converter	1
6541-2-700	Tibial Resection Guide Right	1
6541-2-701	Tibial Resection Guide Left	1
6541-2-702	Tibial Resection Guide Modular Capture Right	1
6541-2-703	Tibial Resection Guide Modular Capture Left	1
6541-2-704	Tibial Adjustment Housing – 0° slope (Optional)	1
6541-2-705	Tibial Adjustment Housing – 3° slope	1
6541-2-713	Size 1-3 Keel Punch Guide	1
6541-2-748	Size 4-8 Keel Punch Guide	1
6541-2-807	Tibial Alignment Handle	1
6541-8-002	Triathlon Size 3-6 Upper Tray	1
6541-8-102	Triathlon Size 3-6 Lower Tray	1
6541-9-000	Triathlon Case	1
		Total Quantity 34

Catalog #	Description	Quantity in Kit
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Size 3-6 PS Femoral & Tibial Trialing Kit Contents

5511-T-301	PS Femoral Trial #3 Left	1
5511-T-302	PS Femoral Trial #3 Right	1
5511-T-401	PS Femoral Trial #4 Left	1
5511-T-402	PS Femoral Trial #4 Right	1
5511-T-501	PS Femoral Trial #5 Left	1
5511-T-502	PS Femoral Trial #5 Right	1
5511-T-601	PS Femoral Trial #6 Left	1
5511-T-602	PS Femoral Trial #6 Right	1
5532-T-309A or 5532-T-309B	PS Tibial Insert Trial #3 – 9mm	1
5532-T-311A or 5532-T-311B	PS Tibial Insert Trial #3 – 11mm	1
5532-T-313A or 5532-T-313B	PS Tibial Insert Trial #3 – 13mm	1
5532-T-316A or 5532-T-316B	PS Tibial Insert Trial #3 – 16mm	1
5532-T-319A or 5532-T-319B	PS Tibial Insert Trial #3 – 19mm	1
5532-T-409A or 5532-T-409B	PS Tibial Insert Trial #4 – 9mm	1
5532-T-411A or 5532-T-411B	PS Tibial Insert Trial #4 – 11mm	1
5532-T-413A or 5532-T-413B	PS Tibial Insert Trial #4 – 13mm	1
5532-T-416A or 5532-T-416B	PS Tibial Insert Trial #4 – 16mm	1
5532-T-419A or 5532-T-419B	PS Tibial Insert Trial #4 – 19mm	1
5532-T-509A or 5532-T-509B	PS Tibial Insert Trial #5 – 9mm	1
5532-T-511A or 5532-T-511B	PS Tibial Insert Trial #5 – 11mm	1
5532-T-513A or 5532-T-513B	PS Tibial Insert Trial #5 – 13mm	1
5532-T-516A or 5532-T-516B	PS Tibial Insert Trial #5 – 16mm	1
5532-T-519A or 5532-T-519B	PS Tibial Insert Trial #5 – 19mm	1
5532-T-609A or 5532-T-609B	PS Tibial Insert Trial #6 – 9mm	1
5532-T-611A or 5532-T-611B	PS Tibial Insert Trial #6 – 11mm	1
5532-T-613A or 5532-T-613B	PS Tibial Insert Trial #6 – 13mm	1
5532-T-616A or 5532-T-616B	PS Tibial Insert Trial #6 – 16mm	1
5532-T-619A or 5532-T-619B	PS Tibial Insert Trial #6 – 19mm	1
6541-5-713	#3 MIS PS Box Cutting Guide	1
6541-5-714	#4 MIS PS Box Cutting Guide	1
6541-5-715	#5 MIS PS Box Cutting Guide	1
6541-5-716	#6 MIS PS Box Cutting Guide	1
6541-8-009	Triathlon 3-6 PS Upper Tray	1
6541-8-109	Triathlon 3-6 PS Lower Tray	1
6541-9-000	Triathlon Case	1

Total Quantity 35

Catalog #	Description	Quantity in Kit
Size 3-6 CR Femoral & Tibial Trialing Kit Contents		
5510-T-301	CR Femoral Trial #3 Left	1
5510-T-302	CR Femoral Trial #3 Right	1
5510-T-401	CR Femoral Trial #4 Left	1
5510-T-402	CR Femoral Trial #4 Right	1
5510-T-501	CR Femoral Trial #5 Left	1
5510-T-502	CR Femoral Trial #5 Right	1
5510-T-601	CR Femoral Trial #6 Left	1
5510-T-602	CR Femoral Trial #6 Right	1
5530-T-309A or 5530-T-309B	CR Tibial Insert Trial #3 – 9mm	1
5530-T-311A or 5530-T-311B	CR Tibial Insert Trial #3 – 11mm	1
5530-T-313A or 5530-T-313B	CR Tibial Insert Trial #3 – 13mm	1
5530-T-316A or 5530-T-316B	CR Tibial Insert Trial #3 – 16mm	1
5530-T-319A or 5530-T-319B	CR Tibial Insert Trial #3 – 19mm	1
5530-T-409A or 5530-T-409B	CR Tibial Insert Trial #4 – 9mm	1
5530-T-411A or 5530-T-411B	CR Tibial Insert Trial #4 – 11mm	1
5530-T-413A or 5530-T-413B	CR Tibial Insert Trial #4 – 13mm	1
5530-T-416A or 5530-T-416B	CR Tibial Insert Trial #4 – 16mm	1
5530-T-419A or 5530-T-419B	CR Tibial Insert Trial #4 – 19mm	1
5530-T-509A or 5530-T-509B	CR Tibial Insert Trial #5 – 9mm	1
5530-T-511A or 5530-T-511B	CR Tibial Insert Trial #5 – 11mm	1
5530-T-513A or 5530-T-513B	CR Tibial Insert Trial #5 – 13mm	1
5530-T-516A or 5530-T-516B	CR Tibial Insert Trial #5 – 16mm	1
5530-T-519A or 5530-T-519B	CR Tibial Insert Trial #5 – 19mm	1
5530-T-609A or 5530-T-609B	CR Tibial Insert Trial #6 – 9mm	1
5530-T-611A or 5530-T-611B	CR Tibial Insert Trial #6 – 11mm	1
5530-T-613A or 5530-T-613B	CR Tibial Insert Trial #6 – 13mm	1
5530-T-616A or 5530-T-616B	CR Tibial Insert Trial #6 – 16mm	1
5530-T-619A or 5530-T-619B	CR Tibial Insert Trial #6 – 19mm	1
6541-8-008	Triathlon 3-6 CR Upper Tray	1
6541-8-108	Triathlon 3-6 CR Lower Tray	1
6541-9-000	Triathlon Case	1
		Total Quantity 31

Catalog #	Description	Quantity in Kit
Size 1, 8 PS Preparation & Trialing Kit Contents		
5511-T-101	PS Femoral Trial #1 Left	1
5511-T-102	PS Femoral Trial #1 Right	1
5511-T-801	PS Femoral Trial #8 Left	1
5511-T-802	PS Femoral Trial #8 Right	1
5532-T-109A or 5532-T-109B	PS Tibial Insert Trial #1 – 9mm	1
5532-T-111A or 5532-T-111B	PS Tibial Insert Trial #1 – 11mm	1
5532-T-113A or 5532-T-113B	PS Tibial Insert Trial #1 – 13mm	1
5532-T-116A or 5532-T-116B	PS Tibial Insert Trial #1 – 16mm	1
5532-T-119A or 5532-T-119B	PS Tibial Insert Trial #1 – 19mm	1
5532-T-809A or 5532-T-809B	PS Tibial Insert Trial #8 – 9mm	1
5532-T-811A or 5532-T-811B	PS Tibial Insert Trial #8 – 11mm	1
5532-T-813A or 5532-T-813B	PS Tibial Insert Trial #8 – 13mm	1
5532-T-816A or 5532-T-816B	PS Tibial Insert Trial #8 – 16mm	1
5532-T-819A or 5532-T-819B	PS Tibial Insert Trial #8 – 19mm	1
6541-5-711	#1 MIS PS Box Cutting Guide	1
6541-5-718	#8 MIS PS Box Cutting Guide	1
6541-2-078	Size 7-8 Keel Punch (Optional)	1
6541-2-601	#1 Universal Tibial Template (Optional)	1
6541-2-608	#8 Universal Tibial Template (Optional)	1
6541-8-113	Triathlon 1 & 8 PS Lower Tray	1
6541-9-000	Triathlon Case	1
Total Quantity		21

Catalog #	Description	Quantity in Kit
Size 1, 8 CR Preparation & Trialing Kit Contents		
5510-T-101	CR Femoral Trial #1 Left	1
5510-T-102	CR Femoral Trial #1 Right	1
5510-T-801	CR Femoral Trial #8 Left	1
5510-T-802	CR Femoral Trial #8 Right	1
5530-T-109A or 5530-T-109B	CR Tibial Insert Trial #1 – 9mm	1
5530-T-111A or 5530-T-111B	CR Tibial Insert Trial #1 – 11mm	1
5530-T-113A or 5530-T-113B	CR Tibial Insert Trial #1 – 13mm	1
5530-T-116A or 5530-T-116B	CR Tibial Insert Trial #1 – 16mm	1
5530-T-119A or 5530-T-119B	CR Tibial Insert Trial #1 – 19mm	1
5530-T-809A or 5530-T-809B	CR Tibial Insert Trial #8 – 9mm	1
5530-T-811A or 5530-T-811B	CR Tibial Insert Trial #8 – 11mm	1
5530-T-813A or 5530-T-813B	CR Tibial Insert Trial #8 – 13mm	1
5530-T-816A or 5530-T-816B	CR Tibial Insert Trial #8 – 16mm	1
5530-T-819A or 5530-T-819B	CR Tibial Insert Trial #8 – 19mm	1
6541-2-078	Size 7-8 Keel Punch	1
6541-2-601	#1 Universal Tibial Template	1
6541-2-608	#8 Universal Tibial Template	1
6541-8-112	Triathlon 1 & 8 CR Lower Tray	1
6541-9-000	Triathlon Case	1
		Total Quantity 19

Size 2, 7 PS Preparation & Trialing Kit Contents

5511-T-201	PS Femoral Trial #2 Left	1
5511-T-202	PS Femoral Trial #2 Right	1
5511-T-701	PS Femoral Trial #7 Left	1
5511-T-702	PS Femoral Trial #7 Right	1
5532-T-209A or 5532-T-209B	PS Tibial Insert Trial #2 – 9mm	1
5532-T-211A or 5532-T-211B	PS Tibial Insert Trial #2 – 11mm	1
5532-T-213A or 5532-T-213B	PS Tibial Insert Trial #2 – 13mm	1
5532-T-216A or 5532-T-216B	PS Tibial Insert Trial #2 – 16mm	1
5532-T-219A or 5532-T-219B	PS Tibial Insert Trial #2 – 19mm	1
5532-T-709A or 5532-T-709B	PS Tibial Insert Trial #7 – 9mm	1
5532-T-711A or 5532-T-711B	PS Tibial Insert Trial #7 – 11mm	1
5532-T-713A or 5532-T-713B	PS Tibial Insert Trial #7 – 13mm	1
5532-T-716A or 5532-T-716B	PS Tibial Insert Trial #7 – 16mm	1
5532-T-719A or 5532-T-719B	PS Tibial Insert Trial #7 – 19mm	1
6541-1-702E	#2 Express 4:1 Cutting Block (Optional)	1
6541-1-707E	#7 Express 4:1 Cutting Block (Optional)	1
6541-5-712	#2 MIS PS Box Cutting Guide	1
6541-5-717	#7 MIS PS Box Cutting Guide	1
6541-2-078	Size 7-8 Keel Punch (Optional)	1
6541-2-602	#2 Universal Tibial Template (Optional)	1
6541-2-607	#7 Universal Tibial Template (Optional)	1
6541-8-022	Triathlon 2 & 7 PS Upper Tray	1
6541-9-000	Triathlon Case	1
		Total Quantity 23

Catalog #	Description	Quantity in Kit
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Size 2, 7 CR Preparation & Trialing Kit Contents

5510-T-201	CR Femoral Trial #2 Left	1
5510-T-202	CR Femoral Trial #2 Right	1
5510-T-701	CR Femoral Trial #7 Left	1
5510-T-702	CR Femoral Trial #7 Right	1
5530-T-209A or 5530-T-209B	CR Tibial Insert Trial #2 – 9mm	1
5530-T-211A or 5530-T-211B	CR Tibial Insert Trial #2 – 11mm	1
5530-T-213A or 5530-T-213B	CR Tibial Insert Trial #2 – 13mm	1
5530-T-216A or 5530-T-216B	CR Tibial Insert Trial #2 – 16mm	1
5530-T-219A or 5530-T-219B	CR Tibial Insert Trial #2 – 19mm	1
5530-T-709A or 5530-T-709B	CR Tibial Insert Trial #7 – 9mm	1
5530-T-711A or 5530-T-711B	CR Tibial Insert Trial #7 – 11mm	1
5530-T-713A or 5530-T-713B	CR Tibial Insert Trial #7 – 13mm	1
5530-T-716A or 5530-T-716B	CR Tibial Insert Trial #7 – 16mm	1
5530-T-719A or 5530-T-719B	CR Tibial Insert Trial #7 – 19mm	1
6541-1-702E	#2 Express 4:1 Cutting Block	1
6541-1-707E	#7 Express 4:1 Cutting Block	1
6541-2-078	Size 7-8 Keel Punch	1
6541-2-602	#2 Universal Tibial Template	1
6541-2-607	#7 Universal Tibial Template	1
6541-8-021	Triathlon 2 & 7 CR Upper Tray	1
6541-9-000	Triathlon Case	1

Total Quantity 21

Size 1-8 Max PS Tibial Trialing Kit Contents

5532-T-122A	PS Tibial Insert Trial #1 – 22mm	1
5532-T-125A	PS Tibial Insert Trial #1 – 25mm	1
5532-T-222A	PS Tibial Insert Trial #2 – 22mm	1
5532-T-225A	PS Tibial Insert Trial #2 – 25mm	1
5532-T-322A	PS Tibial Insert Trial #3 – 22mm	1
5532-T-325A	PS Tibial Insert Trial #3 – 25mm	1
5532-T-422A	PS Tibial Insert Trial #4 – 22mm	1
5532-T-425A	PS Tibial Insert Trial #4 – 25mm	1
5532-T-522A	PS Tibial Insert Trial #5 – 22mm	1
5532-T-525A	PS Tibial Insert Trial #5 – 25mm	1
5532-T-622A	PS Tibial Insert Trial #6 – 22mm	1
5532-T-625A	PS Tibial Insert Trial #6 – 25mm	1
5532-T-722A	PS Tibial Insert Trial #7 – 22mm	1
5532-T-725A	PS Tibial Insert Trial #7 – 25mm	1
5532-T-822A	PS Tibial Insert Trial #8 – 22mm	1
5532-T-825A	PS Tibial Insert Trial #8 – 25mm	1
6541-8-120	Triathlon 1-8 Max PS – Upper Tray	1
6541-9-000	Triathlon Case	1

Total Quantity 18

Catalog #	Description	Sizes	Qty
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Triathlon CR Modified Hollow Tibial Insert Trials Part Numbers

5530-T-X09A	CR Modified Hollow Tibial Insert Trial 9mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-T-X11A	CR Modified Hollow Tibial Insert Trial 11mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-T-X13A	CR Modified Hollow Tibial Insert Trial 13mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-T-X16A	CR Modified Hollow Tibial Insert Trial 16mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-T-X19A	CR Modified Hollow Tibial Insert Trial 19mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Triathlon PS Modified Hollow Tibial Insert Trials Part Numbers

5532-T-X09A	PS Modified Hollow Tibial Insert Trial 9mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-T-X11A	PS Modified Hollow Tibial Insert Trial 11mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-T-X13A	PS Modified Hollow Tibial Insert Trial 13mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-T-X16A	PS Modified Hollow Tibial Insert Trial 16mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-T-X19A	PS Modified Hollow Tibial Insert Trial 19mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-T-X22A	PS Modified Hollow Tibial Insert Trial 22mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-T-X25A	PS Modified Hollow Tibial Insert Trial 25mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Catalog #	Description	Sizes	Qty
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Triathlon CR Femoral Component – Cemented Part Numbers

5510-F-X01	Triathlon CR Femoral Component – Left Cemented	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5510-F-X02	Triathlon CR Femoral Component – Right Cemented	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Triathlon CR Femoral Cementless Component – Beaded Part Numbers

5513-F-X01	Triathlon CR Femoral Component – Left Cementless Beaded	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5513-F-X02	Triathlon CR Femoral Component – Right Cementless Beaded	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Triathlon CR Femoral Cementless Component – Beaded w/Peri-Apatite Part Numbers

5517-F-X01	Triathlon CR Femoral Component – Left Cementless Beaded w/PA	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5517-F-X02	Triathlon CR Femoral Component – Right Cementless Beaded w/PA	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Triathlon PS Femoral Component – Cemented Part Numbers

5515-F-X01	Triathlon PS Femoral Component – Left Cemented	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5515-F-X02	Triathlon PS Femoral Component – Right Cemented	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Triathlon PS Femoral Cementless Component – Beaded Part Numbers

5514-F-X01	Triathlon PS Femoral Component – Left Cementless Beaded	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5514-F-X02	Triathlon PS Femoral Component – Right Cementless Beaded	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Triathlon PS Femoral Cementless Component – Beaded w/Peri-Apatite Part Numbers

5516-F-X01	Triathlon PS Femoral Component – Left Cementless Beaded w/PA	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5516-F-X02	Triathlon PS Femoral Component – Right Cementless Beaded w/PA	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Triathlon Tritanium Baseplate

5536-B-X00	Triathlon Tritanium Baseplate	X = 1,2,3,4,5,6,7,8	1 Each Size
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Please note: Each Triathlon Tritanium Baseplate will be provided packaged together with an Impactor Pad (6541-4-901) which is required during the tibial baseplate impaction step and discarded immediately after.

Catalog #	Description	Sizes	Qty
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Triathlon CR Tibial Inserts – Conventional Polyethylene and X3 Part Numbers

Conventional Polyethylene Inserts			
5530-P-X09	Triathlon CR Tibial Insert – Conventional Polyethylene 9mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-P-X11	Triathlon CR Tibial Insert – Conventional Polyethylene 11mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-P-X13	Triathlon CR Tibial Insert – Conventional Polyethylene 13mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-P-X16	Triathlon CR Tibial Insert – Conventional Polyethylene 16mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-P-X19	Triathlon CR Tibial Insert – Conventional Polyethylene 19mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
X3 Inserts			
5530-G-X09	Triathlon CR Tibial Insert – X3 9mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-G-X11	Triathlon CR Tibial Insert – X3 11mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-G-X13	Triathlon CR Tibial Insert – X3 13mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-G-X16	Triathlon CR Tibial Insert – X3 16mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5530-G-X19	Triathlon CR Tibial Insert – X3 19mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Catalog #	Description	Sizes	Qty
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Triathlon CS Tibial Inserts – Conventional Polyethylene and X3 Part Numbers

Conventional Polyethylene Inserts			
5531-P-X09	Triathlon CS Tibial Insert – Conventional Polyethylene 9mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-P-X11	Triathlon CS Tibial Insert – Conventional Polyethylene 11mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-P-X13	Triathlon CS Tibial Insert – Conventional Polyethylene 13mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-P-X16	Triathlon CS Tibial Insert – Conventional Polyethylene 16mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-P-X19	Triathlon CS Tibial Insert – Conventional Polyethylene 19mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-P-X22	Triathlon CS Tibial Insert – Conventional Polyethylene 22mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-P-X25	Triathlon CS Tibial Insert – Conventional Polyethylene 25mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
X3 Inserts			
5531-G-X09	Triathlon CS Tibial Insert – X3 9mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-G-X11	Triathlon CS Tibial Insert – X3 11mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-G-X13	Triathlon CS Tibial Insert – X3 13mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-G-X16	Triathlon CS Tibial Insert – X3 16mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-G-X19	Triathlon CS Tibial Insert – X3 19mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-G-X22	Triathlon CS Tibial Insert – X3 22mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5531-G-X25	Triathlon CS Tibial Insert – X3 25mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Triathlon PS Tibial Inserts – Conventional Polyethylene and X3 Part Numbers

Conventional Polyethylene Inserts			
5532-P-X09	Triathlon PS Tibial Insert – Conventional Polyethylene 9mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-P-X11	Triathlon PS Tibial Insert – Conventional Polyethylene 11mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-P-X13	Triathlon PS Tibial Insert – Conventional Polyethylene 13mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-P-X16	Triathlon PS Tibial Insert – Conventional Polyethylene 16mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-P-X19	Triathlon PS Tibial Insert – Conventional Polyethylene 19mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-P-X22	Triathlon PS Tibial Insert – Conventional Polyethylene 22mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-P-X25	Triathlon PS Tibial Insert – Conventional Polyethylene 25mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
X3 Inserts			
5532-G-X09	Triathlon PS Tibial Insert – X3 9mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-G-X11	Triathlon PS Tibial Insert – X3 11mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-G-X13	Triathlon PS Tibial Insert – X3 13mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-G-X16	Triathlon PS Tibial Insert – X3 16mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-G-X19	Triathlon PS Tibial Insert – X3 19mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-G-X22	Triathlon PS Tibial Insert – X3 22mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size
5532-G-X25	Triathlon PS Tibial Insert – X3 25mm	X = 1,2,3,4,5,6,7 and 8	1 Each Size

Catalog #	Description	Sizes	Qty
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Symmetric Patella – Conventional Polyethylene and X3 Part Numbers

Conventional Polyethylene Patellas			
5550-L-278	Symmetric Patella – Conventional Polyethylene	S27mm x 8mm	1
5550-L-298	Symmetric Patella – Conventional Polyethylene	S29mm x 8mm	1
5550-L-319	Symmetric Patella – Conventional Polyethylene	S31mm x 9mm	1
5550-L-339	Symmetric Patella – Conventional Polyethylene	S33mm x 9mm	1
5550-L-360	Symmetric Patella – Conventional Polyethylene	S36mm x 10mm	1
5550-L-391	Symmetric Patella – Conventional Polyethylene	S39mm x 11mm	1
X3 Patellas			
5550-G-278	Symmetric Patella – X3	S27mm x 8mm	1
5550-G-298	Symmetric Patella – X3	S29mm x 8mm	1
5550-G-319	Symmetric Patella – X3	S31mm x 9mm	1
5550-G-339	Symmetric Patella – X3	S33mm x 9mm	1
5550-G-360	Symmetric Patella – X3	S36mm x 10mm	1
5550-G-391	Symmetric Patella – X3	S39mm x 11mm	1
Tritanium Metal-Backed Patellas*			
5556-L-319	Symmetric Patella with Tritanium	S31mm x 9mm	1
5556-L-339	Symmetric Patella with Tritanium	S33mm x 9mm	1
5556-L-360	Symmetric Patella with Tritanium	S36mm x 10mm	1
5556-L-391	Symmetric Patella with Tritanium	S39mm x 11mm	1

Asymmetric Patella – Conventional Polyethylene and X3 Part Numbers

Conventional Polyethylene Patellas			
5551-L-299	Asymmetric Patella – Conventional Polyethylene	A29mm (S/I*) x 9mm	1
5551-L-320	Asymmetric Patella – Conventional Polyethylene	A32mm (S/I*) x 10mm	1
5551-L-350	Asymmetric Patella – Conventional Polyethylene	A35mm (S/I*) x 10mm	1
5551-L-381	Asymmetric Patella – Conventional Polyethylene	A38mm (S/I*) x 11mm	1
5551-L-401	Asymmetric Patella – Conventional Polyethylene	A40mm (S/I*) x 11mm	1
X3 Patellas			
5551-G-299	Asymmetric Patella – X3	A29mm (S/I*) x 9mm	1
5551-G-320	Asymmetric Patella – X3	A32mm (S/I*) x 10mm	1
5551-G-350	Asymmetric Patella – X3	A35mm (S/I*) x 10mm	1
5551-G-381	Asymmetric Patella – X3	A38mm (S/I*) x 11mm	1
5551-G-401	Asymmetric Patella – X3	A40mm (S/I*) x 11mm	1
Tritanium Metal-Backed Patellas*			
5552-L-299	Asymmetric Patella with Tritanium	A29mm (S/I*) x 9mm	1
5552-L-320	Asymmetric Patella with Tritanium	A32mm (S/I*) x 10mm	1
5552-L-350	Asymmetric Patella with Tritanium	A35mm (S/I*) x 10mm	1
5552-L-381	Asymmetric Patella with Tritanium	A38mm (S/I*) x 11mm	1
5552-L-401	Asymmetric Patella with Tritanium	A40mm (S/I*) x 11mm	1

*S/I – Superior/Inferior

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).

Catalog #	Description	Sizes	Qty
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Asymmetric Patella – Metal-Backed Beaded w/ Peri-Apatite^{*+}

Conventional Polyethylene Patellas			
5554-L-320	Asymmetric Patella – Metal-Backed Beaded with Peri-Apatite	A32mm (S/I*) x 10mm	1
5554-L-350	Asymmetric Patella – Metal-Backed Beaded with Peri-Apatite	A35mm (S/I*) x 10mm	1
5554-L-381	Asymmetric Patella – Metal-Backed Beaded with Peri-Apatite	A38mm (S/I*) x 11mm	1
5554-L-401	Asymmetric Patella – Metal-Backed Beaded with Peri-Apatite	A40mm (S/I*) x 11mm	1

*S/I – Superior/Inferior

⁺These products are not CE marked

Catalog #	Description
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Modular Femoral Distal Fixation Peg Part Number

5575-X-000	Modular Femoral Distal Fixation Peg (2 per pack)
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Triathlon PS Box Preparation (Optional) Part Numbers

6541-5-212	Sizes 1-2 Triathlon PS Femoral Finishing Punch
6541-5-234	Sizes 3-4 Triathlon PS Femoral Finishing Punch
6541-5-256	Sizes 5-6 Triathlon PS Femoral Finishing Punch
6541-5-278	Sizes 7-8 Triathlon PS Femoral Finishing Punch
6541-5-814	Sizes 1-4 Triathlon PS Femoral Box Trial/Protector
6541-5-858	Sizes 5-8 Triathlon PS Femoral Box Trial/Protector
6541-8-122	Triathlon PS Box Preparation Sizes 1-8 Tray

Triathlon Tritanium

Surgical Protocol

with Triathlon Cementless Beaded PA Femoral Component

Notes

Triathlon Tritanium

Surgical Protocol

with Triathlon Cementless Beaded PA Femoral Component

Notes

Triathlon Tritanium

Surgical Protocol

with Triathlon Cementless Beaded PA Femoral Component

Notes

Femoral Component/ Insert Compatibility

Size Matching: One up, one down, e.g., size 5 femur with size 4 or 6 insert/ baseplate.

Note: Cementless implants are not to be used with cement.

	Femoral Components	Insert Type			
		CR	CS	PS	TS
Cementless	CR Cemented	✓	✓	No	No
	PS Cemented	No	✓	✓	✓
	TS Cemented	No	No	✓	✓
	CR Beaded	✓	✓	No	No
	PS Beaded	No	No	✓	No
	CR Beaded with PA	✓	✓	No	No
	PS Beaded with PA	No	No	✓	No

Femoral Component/ Patella Compatibility

Size Matching: Every patella articulates with every femur due to a common radius across all sizes.

*The Triathlon Tritanium Metal-Backed Patella is not available for supply in Australia as it has not yet been included on the Australian Registry of Therapeutic Goods (ARTG).

	Femoral Components	Patella Type			
		Asymmetric	Asymmetric Metal Backed*	Symmetric Metal Backed*	Symmetric
Cementless	CR Cemented	✓	✓	✓	✓
	PS Cemented	✓	✓	✓	✓
	TS Cemented	✓	✓	✓	✓
	CR Beaded	✓	✓	✓	✓
	PS Beaded	✓	✓	✓	✓
	CR Beaded with PA	✓	✓	✓	✓
	PS Beaded with PA	✓	✓	✓	✓

Tibial Insert/Baseplate Compatibility

Size Matching: Size Specific, e.g., size 4 insert to be used only with size 4 baseplate.

Note: TS insert can only be used with the cemented universal baseplate.

	Tibial Baseplates	Insert Type			
		CR	CS	PS	TS
Cementless	Cemented Cruciform	✓	✓	✓	No
	Cemented Universal	✓	✓	✓	✓
	Beaded Cruciform	✓	✓	✓	No
	Beaded Screw Fix	✓	✓	✓	No
	Beaded with PA Cruciform	✓	✓	✓	No
	Beaded with PA Screw Fix	✓	✓	✓	No
	Tritanium	✓	✓	✓	No

Triathlon TS Augments

Distal Augments are for use with both the medial and lateral portions of the side indicated, e.g. #4 right is used for medial and lateral compartments on a right femur.

Posterior Augments are universal size specific, e.g. size 4 posterior augments are for the size 4 femur.

Tibial Augments are size specific and come in left medial/right lateral or right medial/left lateral configurations.

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