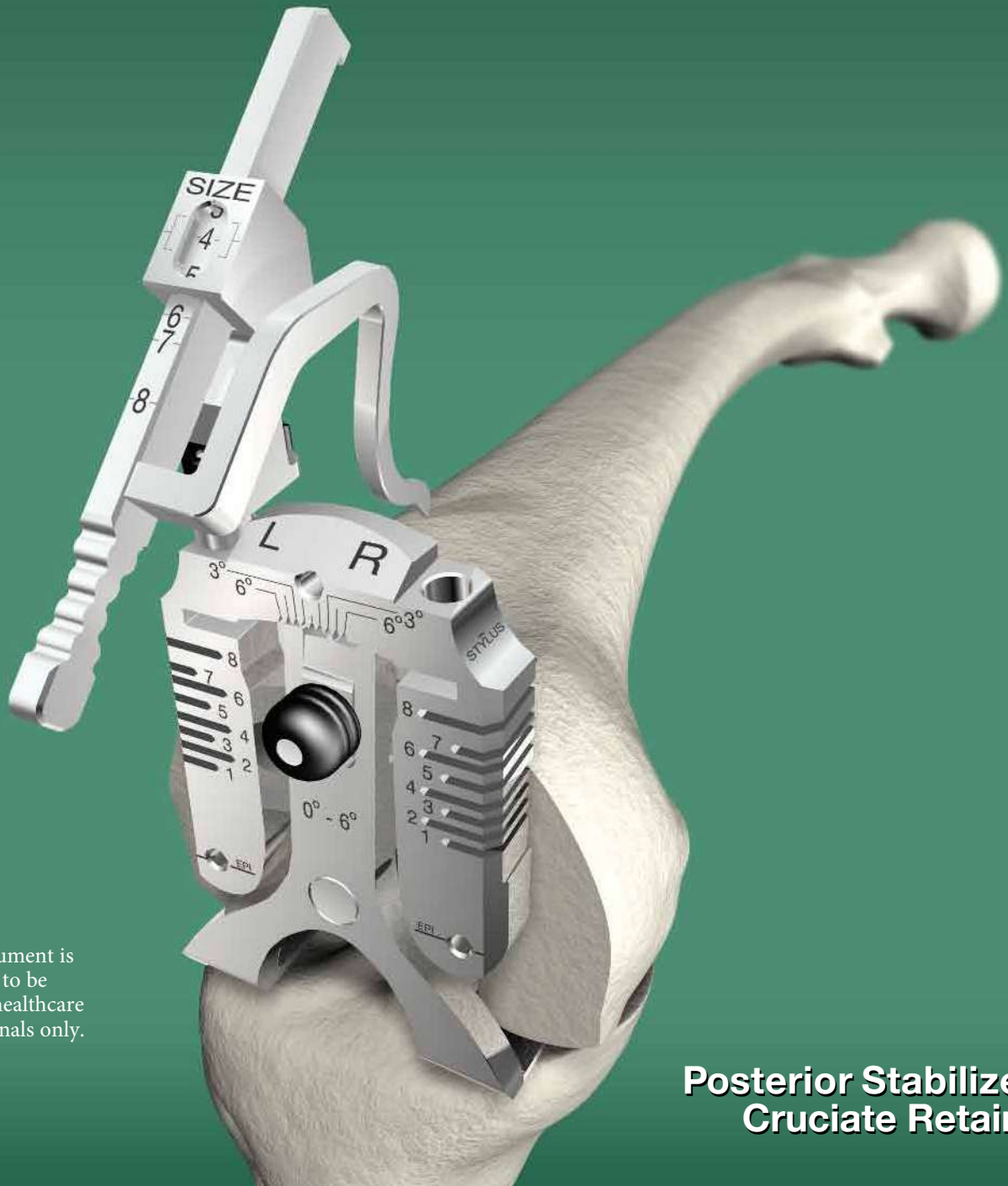
stryker®

Orthopaedics

Triathlon® Knee System Surgical Protocol



This document is intended to be used by healthcare professionals only.

Posterior Stabilized & Cruciate Retaining

Triathlon Knee System
Surgical Protocol

Acknowledgments

Stryker Orthopaedics wishes to thank the global Triathlon Knee System Surgeon Panel for their dedication to the development and refinement of the Triathlon Knee System and instrumentation.

Triathlon Knee System
Surgical Protocol

Indications
General Total Knee Arthroplasty (TKA) Indications include:
- Painful, disabling joint disease of the knee resulting from: non-inflammatory 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.

Additional Indications for Posterior Stabilized (PS) 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.

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

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 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.
- Severe instability of the knee joint secondary to the absence of collateral ligament integrity and function.
- Obesity. An overweight or obese patient can produce loads on the prosthesis which can lead to failure of the fixation of the device or to failure of the device itself.

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

Patient Counseling
Surgeons should discuss all relevant contraindications, adverse effects and the need for post-implantation protection with their patients.

Surgical Procedure

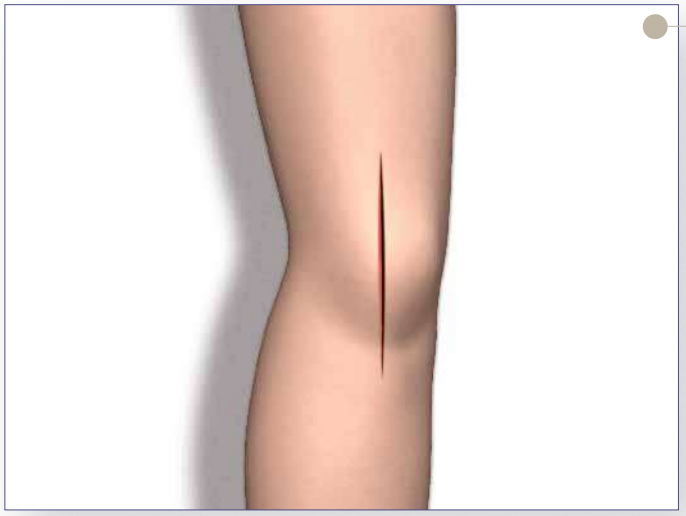


Figure 1

Exposure

- A standard anterior mid-line incision is utilized. Any previous incision can be used or incorporated to decrease the risk of skin slough.
- The capsule is entered through a medial parapatellar approach.

Femoral Preparation

Femoral Intramedullary Alignment

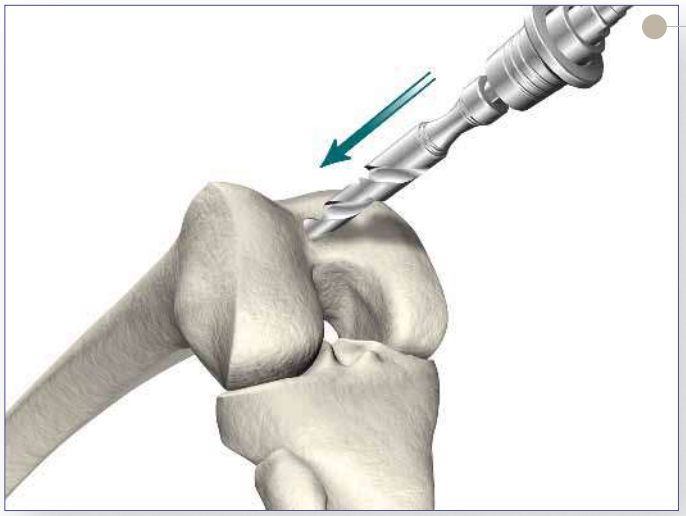


Figure 2

- The Universal Driver allows for attachment of all drills and pins. The Universal Driver 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.

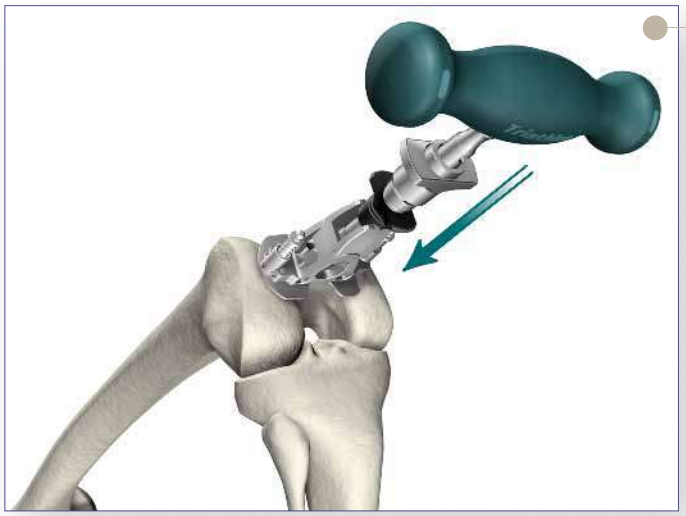


Figure 3

- Attach the T-Handle Driver to the 5/16" IM Rod. Insert the IM Rod into the Femoral Alignment Guide. 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.

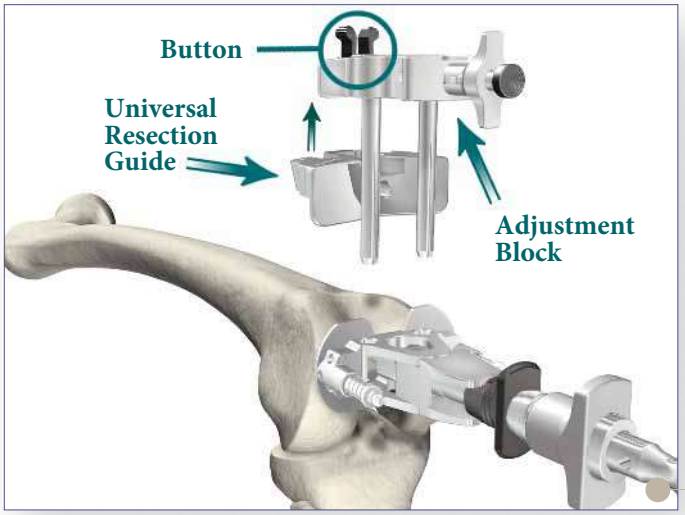


Figure 4

- 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.
- 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 a change in the alignment setting.

- 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

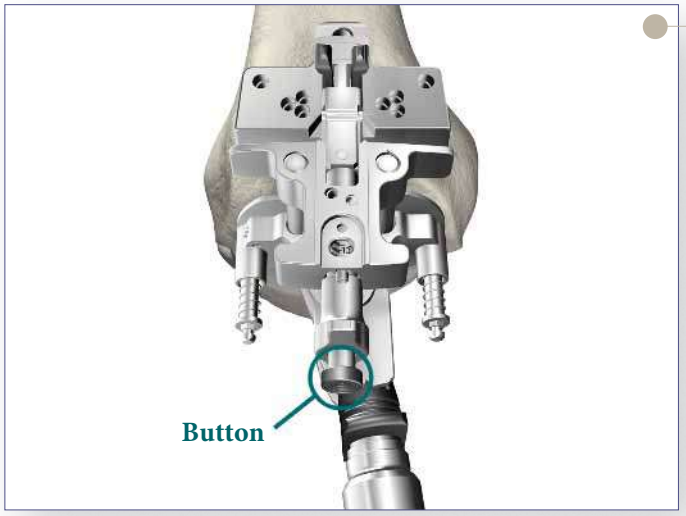


Figure 5

- 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. 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.

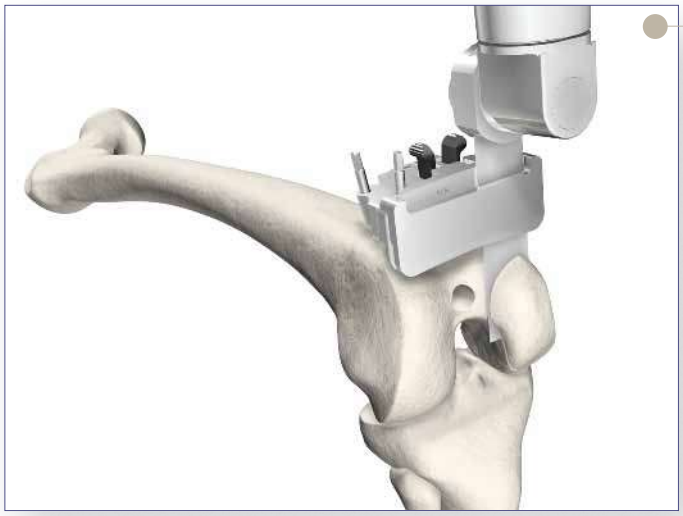


Figure 6

- 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. 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 and check the resection for flatness. Remove the Universal Resection Guide.

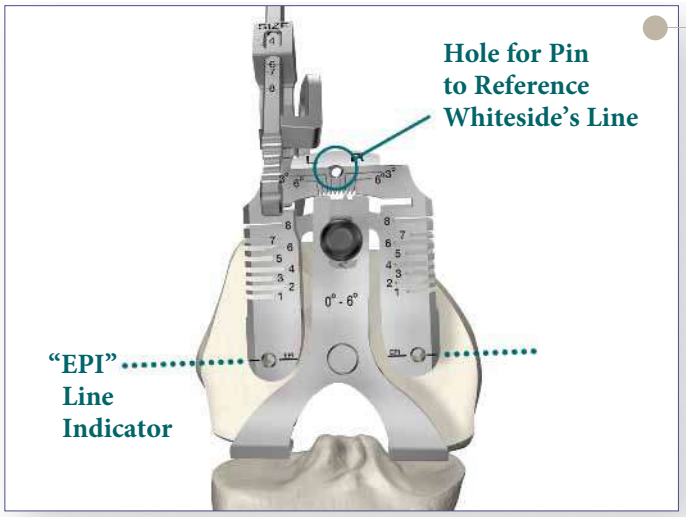


Figure 7

Femoral Sizing

- Assemble the Femoral Sizer with the Femoral Stylus in the appropriate lateral hole, setting the stylus length to an approximate size. Set the rotation to "LEFT" for a left leg and "RIGHT" for a right leg and adjust to the desired amount of external rotation.
- A secondary rotational check can be made by lining up the epicondyles with the reference lines marked "EPI". A tertiary check is to assess Whiteside's line with a pin through the hole in the top of the guide.
- 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.

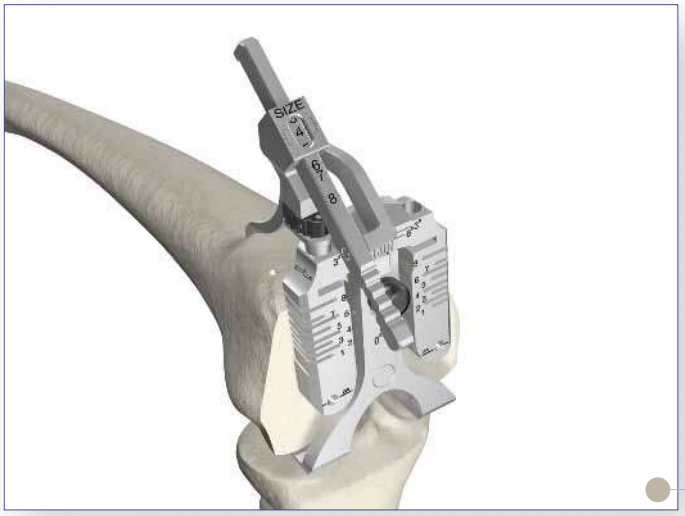


Figure 8

- 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 on the lateral cortex.
- It is important that the Femoral Stylus point rest on bone and not on soft tissue.

Figure 9

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

Instrument Bar

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

6541-1-603
Femoral Sizer

6541-1-605
Femoral Stylus

6541-4-003
Headless Pins - 3”

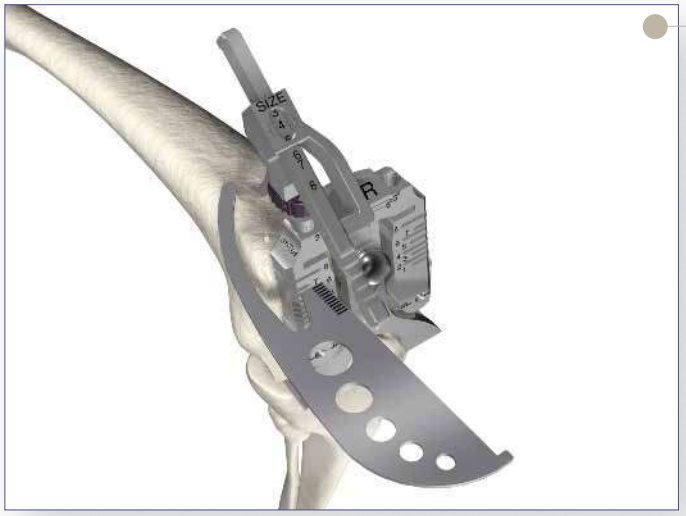


Figure 10

- 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.
- 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".
- 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 there is a pronounced positive step, consider selecting the next smaller size 4:1 Cutting Block if the anterior femur preparation is not adequate.

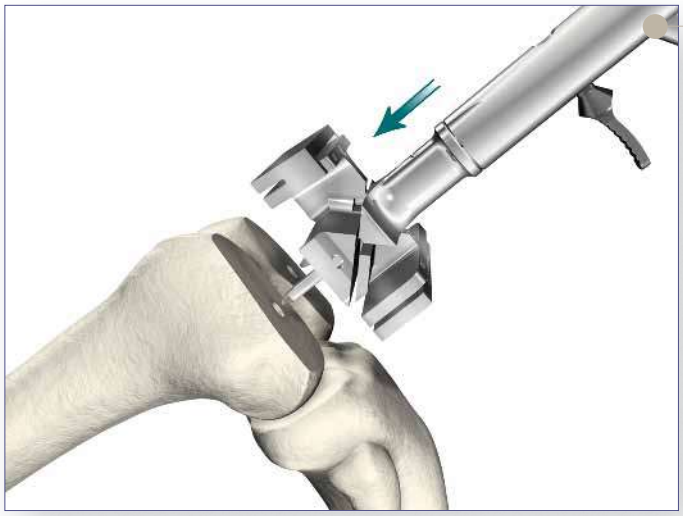


Figure 11

Femoral Anterior, Posterior and Chamfer Resections

- 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 later helps stabilize the cutting guide.

- Remove the 4:1 Cutting Block.

Figure 12

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.

- 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 (or both pins distally).

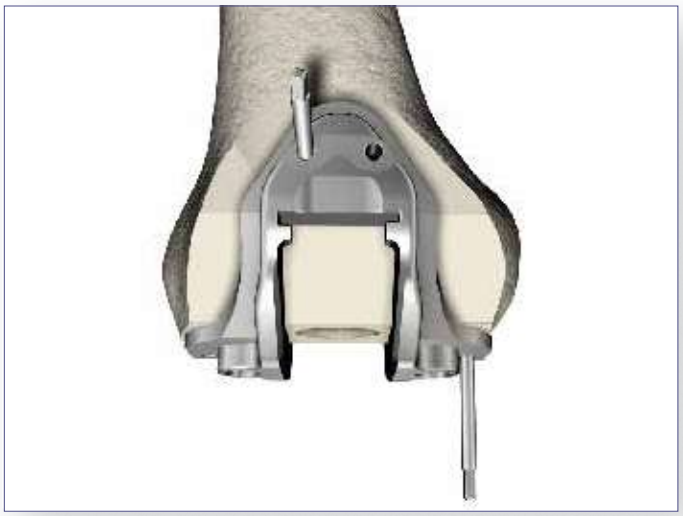


Figure 13

Instrument Bar

6541-1-603
Femoral Sizer

6541-1-605
Femoral Stylus

6541-4-400
Bladerunner

See Catalog
Express 4:1 Cutting Block

6541-7-806
MIS 4:1 Impactor/Extractor

1 - **6541-5-711**
2 - **6541-5-712**
3 - **6541-5-713**
4 - **6541-5-714**
5 - **6541-5-715**
6 - **6541-5-716**
7 - **6541-5-717**
8 - **6541-5-718**
MIS PS Box Cutting Guide

6541-4-003
Headless Pins - 3"

See Catalog
CR Femoral Trial

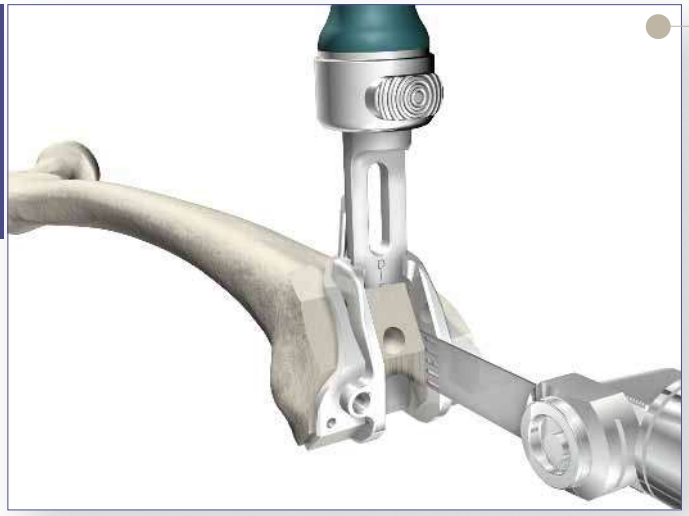


Figure 14

- There are two ways to continue the PS box preparation:

  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 in Figure 14. Avoid biasing the blade during resection for optimal bone conservation.

Figure 15

Option B: Saw Only: Use a reciprocating saw or a narrow oscillating saw through the proximal slot to resect the distal portion of the femur. An oscillating 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.

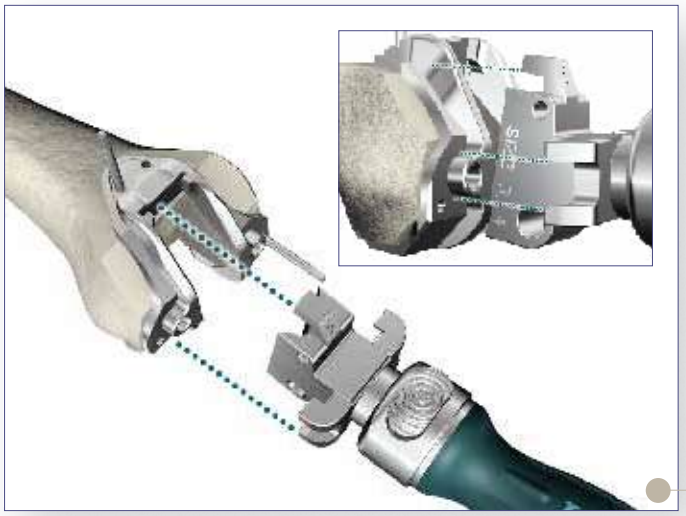


Figure 16

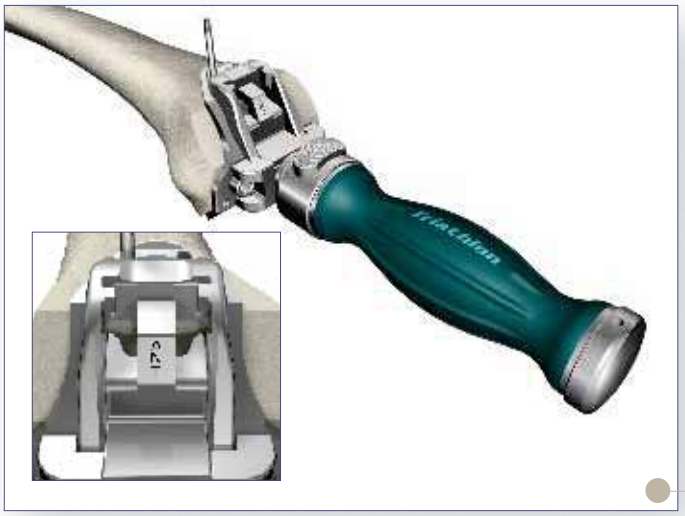


Figure 17

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.
- 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 Figures 17 & 18, which depicts the Triathlon PS Femoral Box Finishing Punch properly seated on the PS Box Cutting Guide. There should be a gap between the anterior nose of the Triathlon PS Femoral Box Finishing Punch and the PS Box Cutting Guide.

Instrument Bar

1 - **6541-5-711**
2 - **6541-5-712**
3 - **6541-5-713**
4 - **6541-5-714**
5 - **6541-5-715**
6 - **6541-5-716**
7 - **6541-5-717**
8 - **6541-5-718**

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

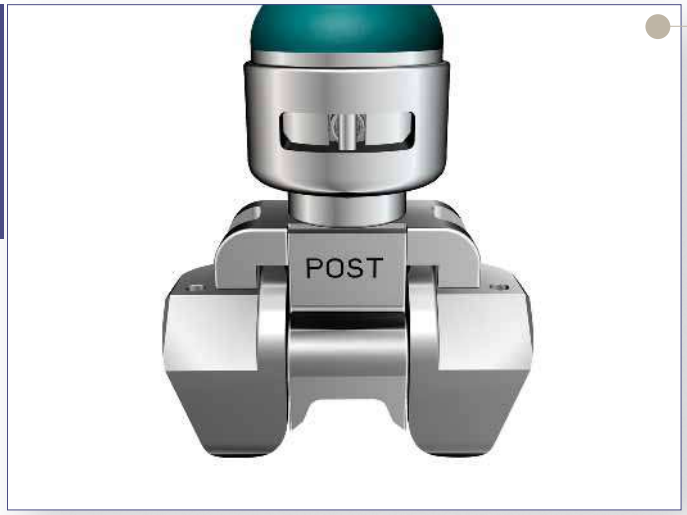


Figure 18

- 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.

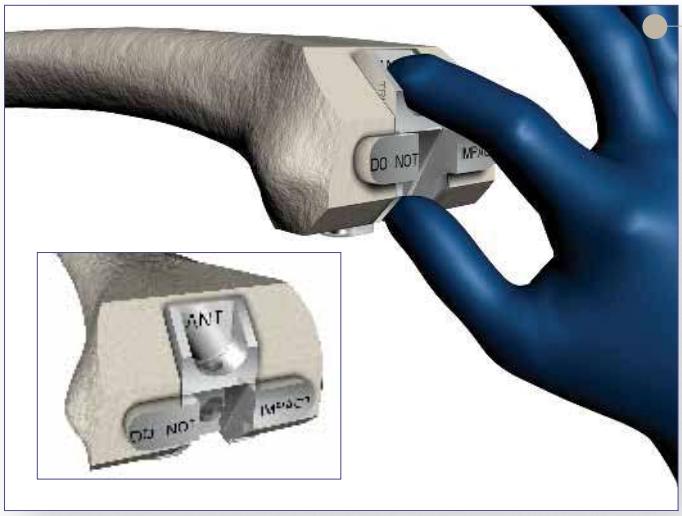


Figure 19

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). See Figure 19 for proper orientation.
- 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.

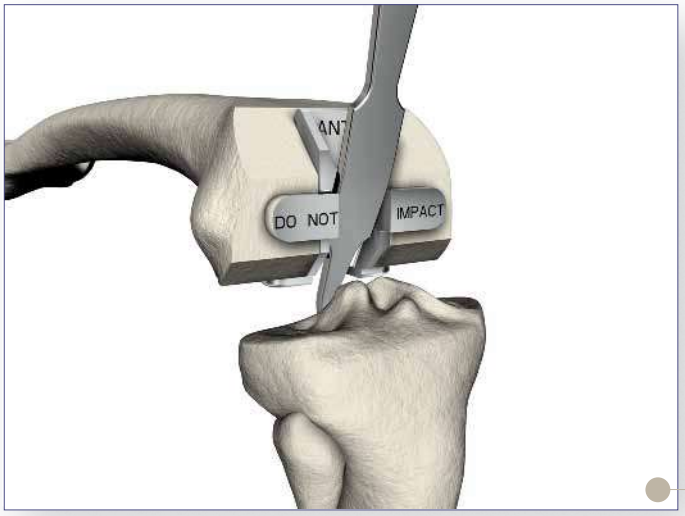


Figure 20

- 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.

Instrument Bar

 # 1 - 6541-5-711
 # 2 - 6541-5-712
 # 3 - 6541-5-713
 # 4 - 6541-5-714
 # 5 - 6541-5-715
 # 6 - 6541-5-716
 # 7 - 6541-5-717
 # 8 - 6541-5-718

MIS PS Box Cutting Guide

See Catalog

Triathlon PS Femoral Box Finishing Punch

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

Figure 21

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 Trial Assessment

The remaining portion of the technique should be used for a Posterior Stabilized or Cruciate Retaining knee.

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.

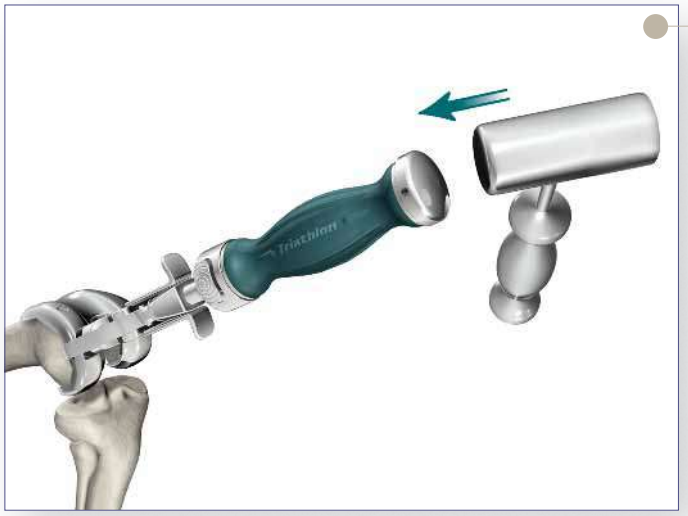


Figure 22

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.

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.

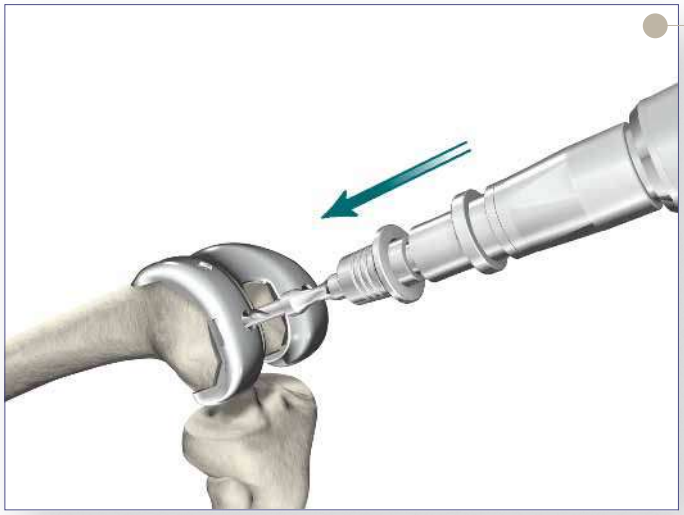


Figure 23

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.

Figure 24

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

Instrument Bar

6541-4-809

Headless Pin Driver

6541-4-810

Impaction Handle

6541-4-807

Femoral Impactor/Extractor

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

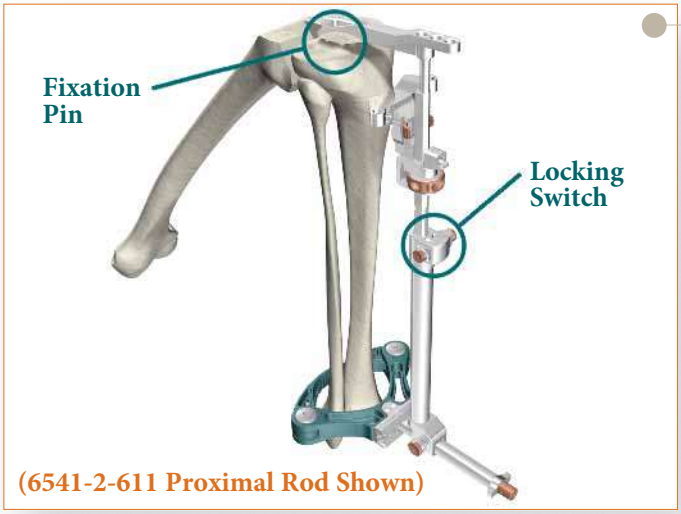


Figure 25

Figure 26

Tibial Preparation

- There are two options for tibial preparation: extra-medullary (EM) referencing alignment and intra-medullary (IM) referencing alignment.
- The Tibial Resection Guide, available in left and right configurations, and the Universal Resection Guide are designed to avoid soft tissue impingement.

Option 1 – Extramedullary Referencing

- The tibial resection assembly has five parts: the appropriate Tibial Resection Guide, the Ankle Clamp, the Distal Assembly, the Proximal Rod and the Tibial Adjustment Housing. These are assembled first.

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

Flexion/Extension Alignment

- Place the ankle clamp around the ankle and unlock the locking switch.
- Flexion/Extension alignment is correct when the long axis of the assembly parallels the mid-coronal plane of the tibia. Flexion/Extension alignment can be checked by verifying that the long axis of the assembly is parallel to the tibia.

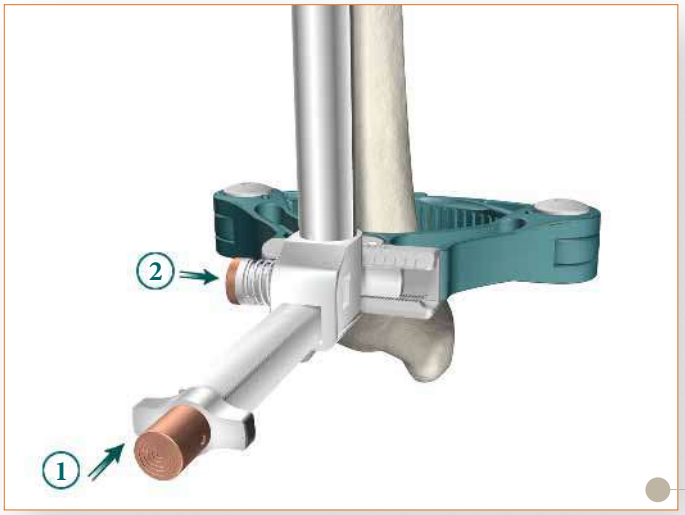


Figure 27

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

Note: 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).

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

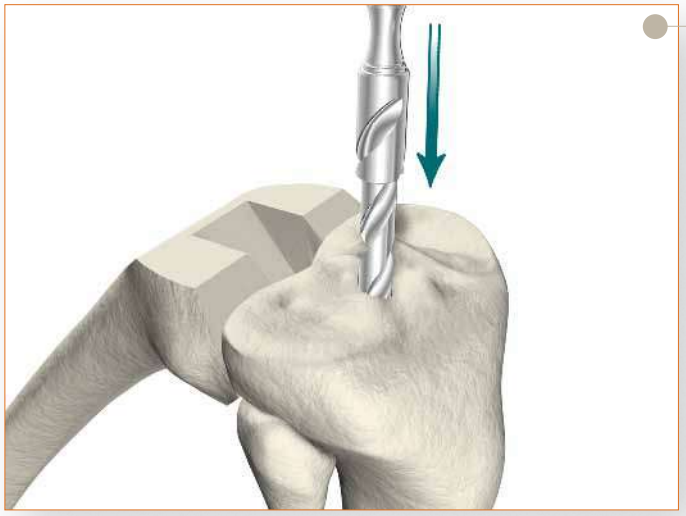


Figure 28

Option 2 – Intramedullary Referencing

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

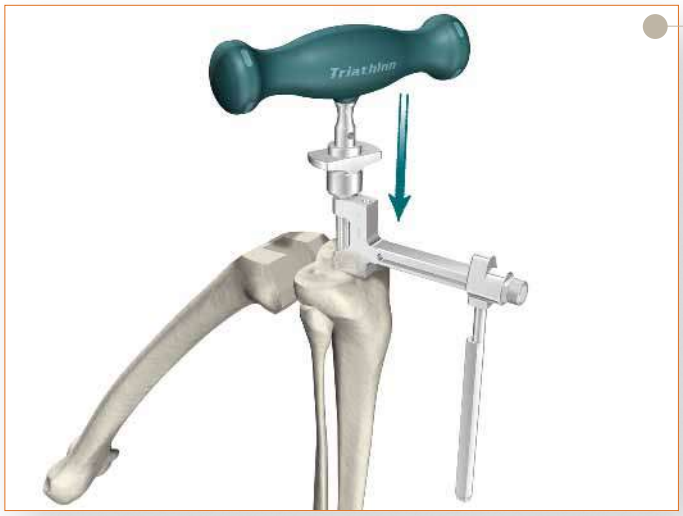


Figure 29

- 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.

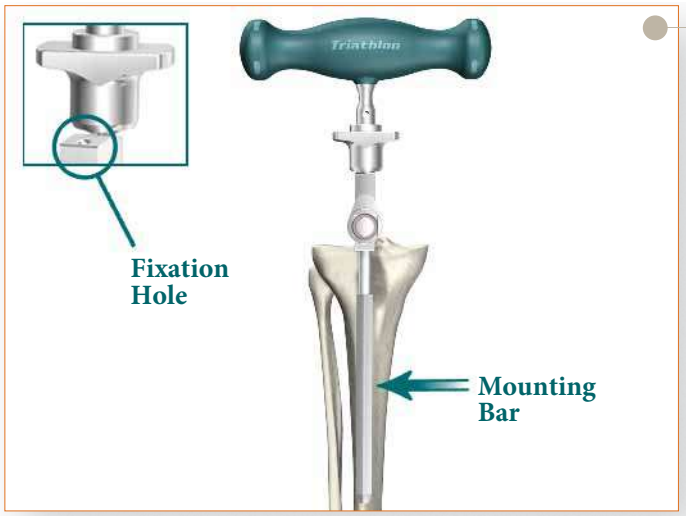


Figure 30

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 over the medial 1/3 of the tibial tubercle. A Headless Pin or the 1/8" Drill are then inserted into the fixation hole to fix rotation (See Inset).

(Tibial Resection Guide shown)

Figure 31

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 0° slope (optional) and 3° slope.

- 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

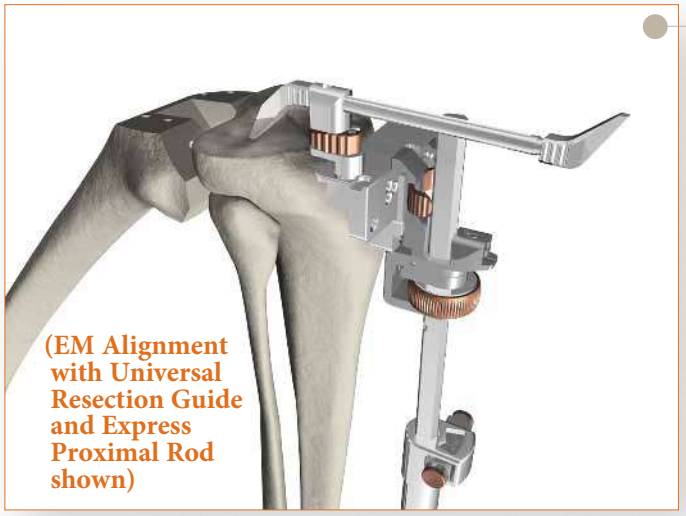


Figure 32

[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.
- Remove all alignment instruments leaving only the Tibial Resection Guide in place.

Note: Rotate bronze wheel one extra turn, as stylus should be under tension to ensure the minimum amount of bone necessary is resected.

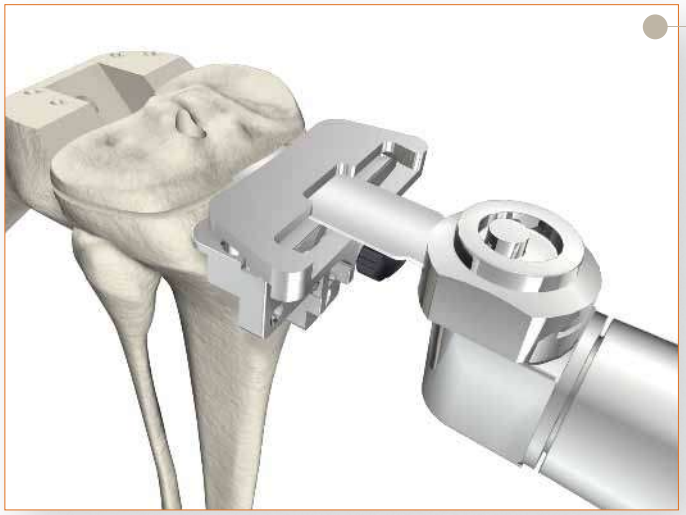


Figure 33

Tibial Resection

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

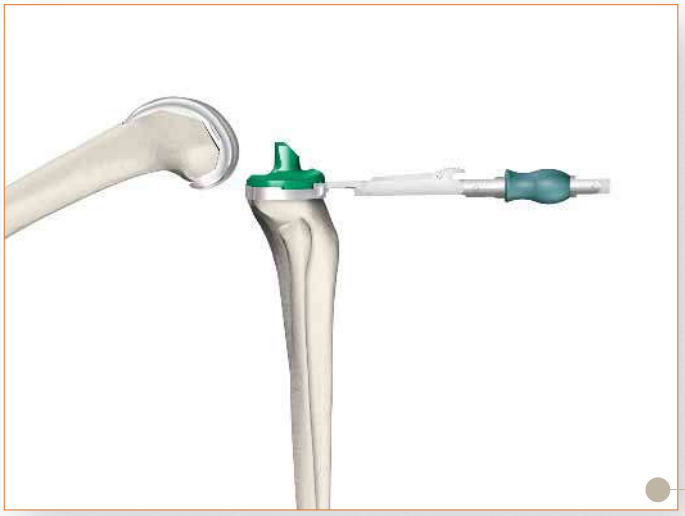


Figure 34

Tibial Component Sizing

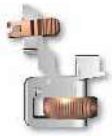
- Place the PS or CR Femoral Trial on the femur.
- Draw the tibia anteriorly. Assemble a Universal Tibial Template, Alignment Handle and a PS or CR Tibial Insert Trial.
- Place the assembly on the resected tibial plateau and choose the size that best addresses rotation and coverage.
- Perform a trial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

Note: Ensure all excess debris (bone and soft tissue) is cleared from the Universal Tibial Template.

Instrument Bar

6541-2-611E
Express 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

6541-2-611
Tibial Alignment Proximal Rod EM

6541-2-429
Tibial Stylus

6541-1-721
Universal Resection Guide

6541-1-723
Modular Capture - Distal Resection

Right 6541-2-702
Left 6541-2-703
Tibial Resection Guide Modular Capture

See Catalog
CR & PS Femoral Trials

See Catalog
Universal Tibial Template

See Catalog
CR & PS Tibial Insert Trials

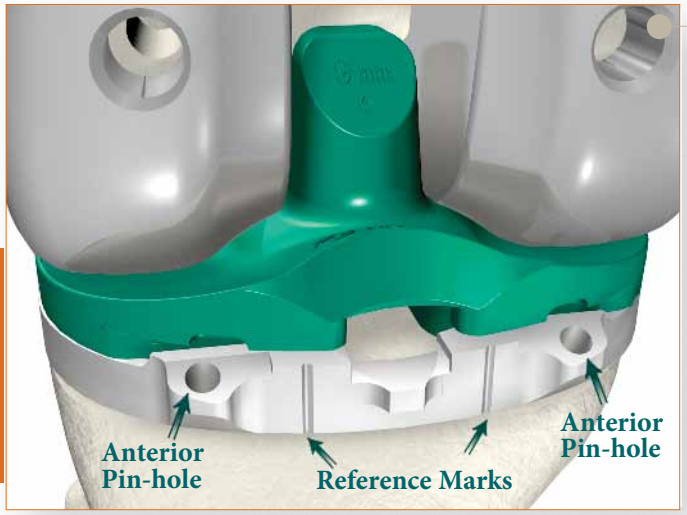


Figure 35

- There are two options to secure the Universal Tibial Template to the tibia:
  - Option 1: Once satisfactory alignment and tibial component orientation are achieved, remove the PS or CR Femoral Trial. Place two Headless Pins in the anterior holes of the Universal Tibial Template, disassemble the Tibial Trial Insert from the Universal Tibial Template, and secure by pinning.
  - 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. Reposition the Universal Tibial Template (if required) by aligning the anterior reference marks on the template with the reference marks on the anterior cortex. The template is positioned flush to the anterior tibial cortex. Place two Headless Pins in the anterior holes to secure the Universal Tibial Template.

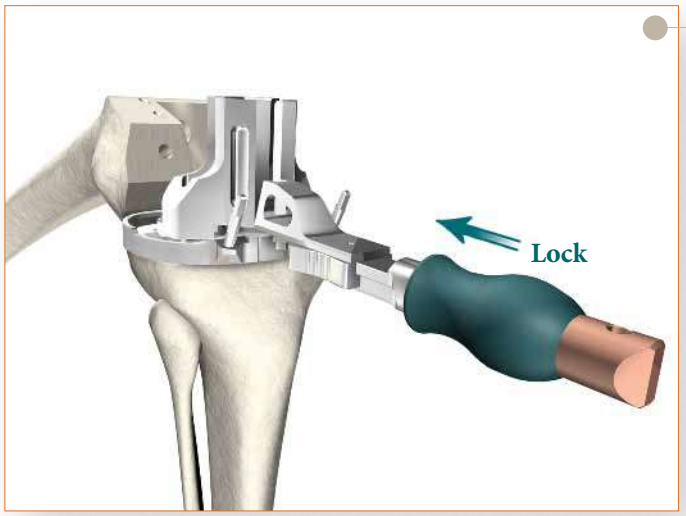


Figure 36

Tibial Keel Punching

- 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.

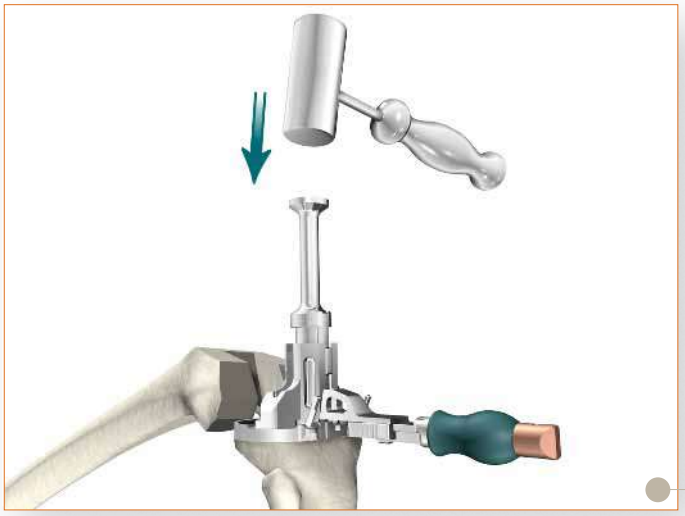


Figure 37

- Place the appropriate Keel Punch into the Keel Punch Guide. Use a mallet to impact the Keel Punch. Advance the Keel Punch until it seats fully in the Keel Punch Guide. In sclerotic bone, the use of a saw prior to the Keel Punch may be advisable.

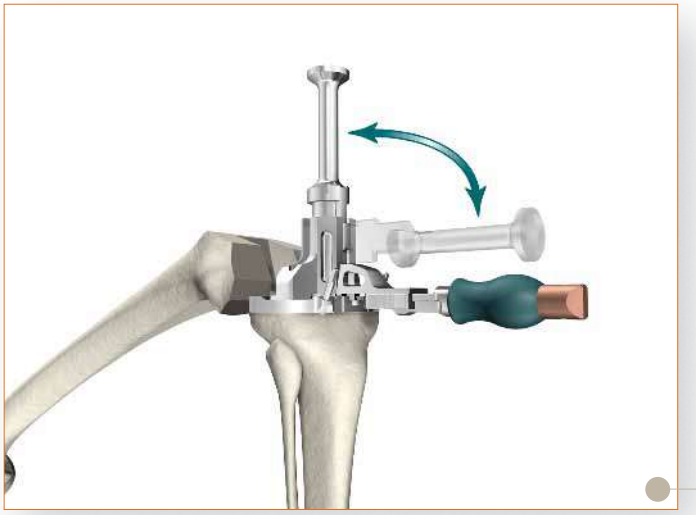


Figure 38

- 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.
- Remove the Headless Pins with the Headless Pin Extractor and remove the Universal Tibial Template.

Instrument Bar

See Catalog
CR & PS Femoral Trials

See Catalog
Universal Tibial Template

6541-4-003
Headless Pins - 3”

6541-4-809
Headless Pin Driver

6541-4-801
Universal Driver

Size 1, 2, 3 - **6541-2-713**
Size 4, 5, 6, 7, 8 - **6541-2-748**
Keel Punch Guide

See Catalog
Keel Punch

6541-4-804
Headless Pin Extractor

Figure 39

Patellar Preparation

Remove all osteophytes and synovial insertions around the patella, and measure thickness using a caliper. After determining the depth of the cut with a caliper, affix the stylus in the appropriate slot to the patella resection guide, and capture the patella between the jaws of the saw guide. Using .050" non-offset sawblade, resect the patella.

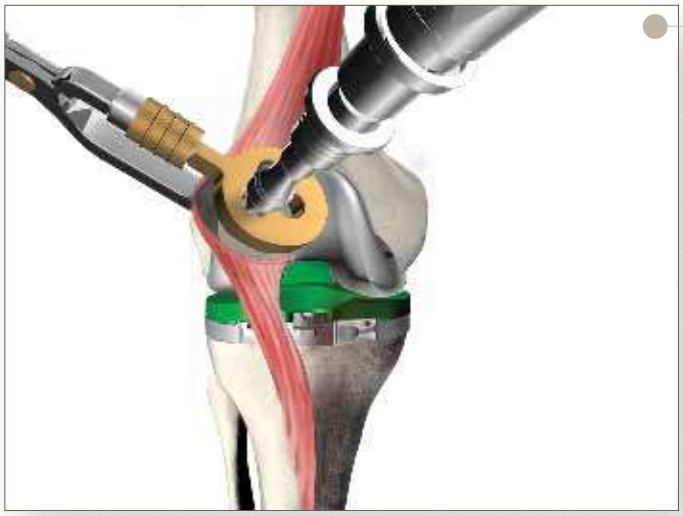


Figure 40

- Choose the appropriate size patella template and insert into the Patella Clamp.
- Center the chosen patellar drill guide over the patella with the clamp perpendicular to the trochlear groove. Drill three fixation holes with the appropriate drill (Metal-backed patella or All Poly).
- If a cemented component is to be used, prepare the resected bone surfaces for bone cement application.

Figure 41

Trial Assessment

- 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.

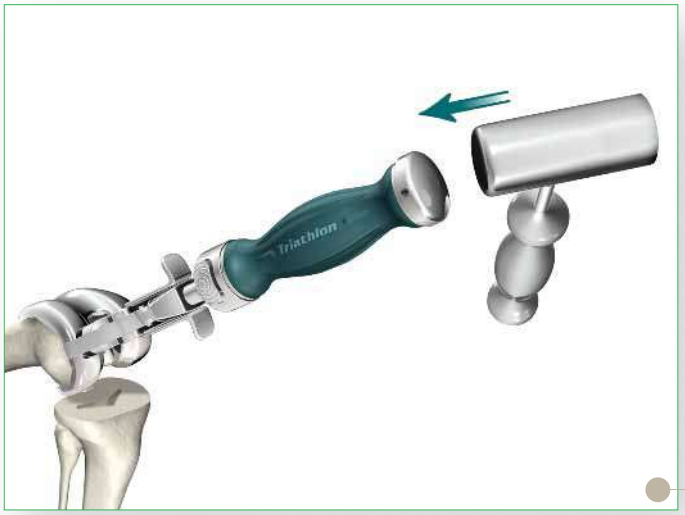


Figure 42

Component Implantation

Femoral Component - Cemented/Cementless

- 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.

Note: Clear all excess bone cement (Does not apply to cementless component).

Instrument Bar

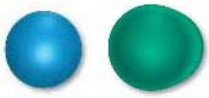
6633-7-744
Patella Clamp

6633-7-738
Patella Stylus

6633-7-736
Slotted Patella Resection Guide

See Catalog
Express Symmetric & Asymmetric Patella Drill Templates

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



See Catalog
Symmetric & Asymmetric Patella Trials

6541-4-810
Impaction Handle

6541-4-807
Femoral Impactor/Extractor

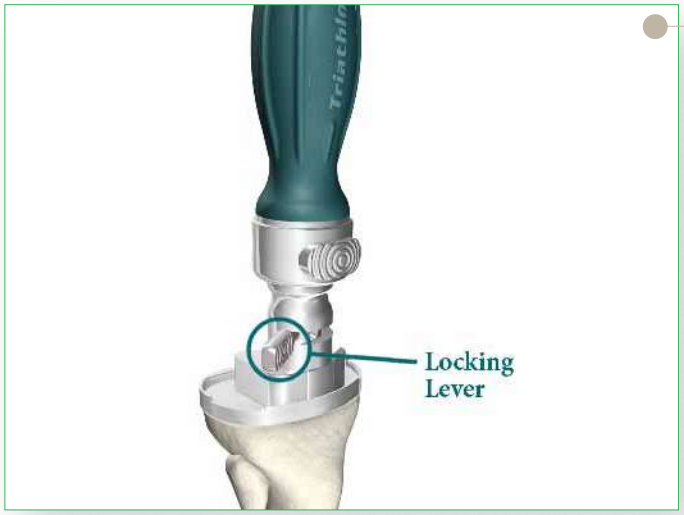


Figure 43

Primary Tibial Baseplate - Cemented/Cementless

- Connect the Tibial Baseplate Impactor Extractor to the Impaction Handle.
- Introduce the Primary Tibial Baseplate onto the prepared tibia and impact until the baseplate is seated. Unlock the locking lever and remove the assembly from the Primary Tibial Baseplate.
- To further seat the baseplate, attach the Tibial Baseplate Impactor to the Impaction Handle.
- Impact until the Primary Tibial Baseplate is fully seated.

Note: Clear all excess bone cement while maintaining position of the Primary Tibial Baseplate.

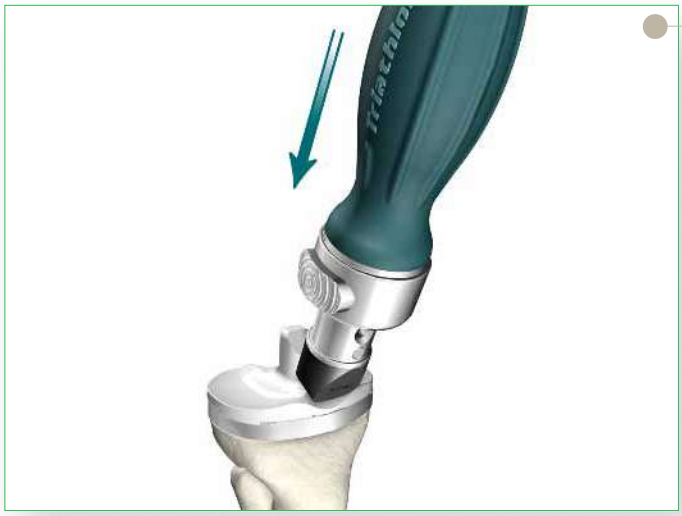


Figure 44

Tibial Insert

- Prior to assembly of the Tibial Insert, the Tibial Trial Insert may be placed on the Primary Tibial 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 Primary Tibial Baseplate. The posterior lip of the Tibial Insert must fit beneath the lip on the posterior Primary Tibial 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 Primary Tibial Baseplate wall.

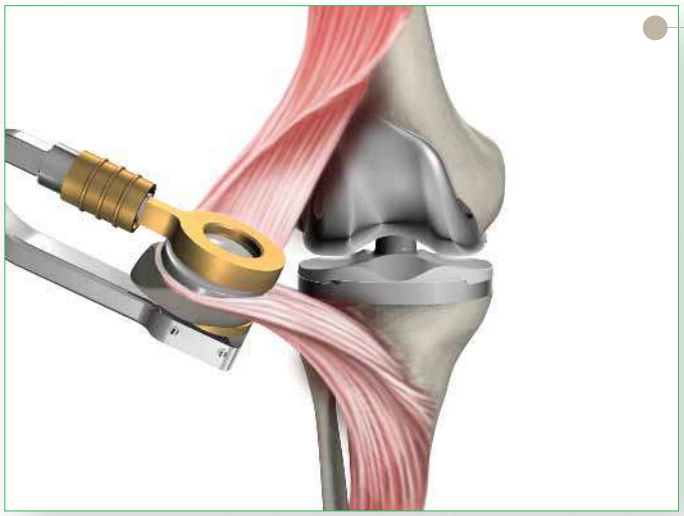


Figure 45

Patellar Component - Cemented/Cementless

- Place the Patella Component onto the prepared patella, making certain the fixation peg holes are aligned to the corresponding holes.
- Seat the Patellar Component onto the prepared patella by clamping the Patella Clamp.
- Leave the assembly clamped to the patella while excess cement is cleared and polymerization is complete (cemented only).
- Remove the patella clamp.

Figure 46

- Assess the joint in flexion and extension.

Closure

For Cemented Components

- After cement polymerization and removal of all residual cement, thoroughly irrigate the joint. Close soft tissues in the normal layered fashion.

Instrument Bar

6541-4-810
Impaction Handle

See Catalog
PS Femoral Component - Cemented

See Catalog
PS Femoral Component - Cementless

See Catalog
CR Femoral Component - Cemented

See Catalog
CR Femoral Component - Cementless

6541-4-802
1/8" Hex Drive

6541-4-825
Slip Torque Handle

See Catalog
Modular Femoral Distal Fixation Pegs

6541-4-811
Femoral Impactor

6541-4-805
Baseplate Impactor/Extractor

See Catalog
Primary Tibial Baseplate - Cemented

See Catalog
Primary Tibial Baseplate - Cementless

6541-4-813
Tibial Insert Impactor

See Catalog
CR & PS Tibial Inserts

See Catalog
Symmetric & Asymmetric Patellas

6541-3-800E
Express Cement Cap

6633-7-744
Patella Clamp

Catalog #	Description	Quantity in Kit
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 - 1 1/2” (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

Patella Preparation & Trialing Part Numbers

Catalog #	Description	Quantity in Kit
6633-7-736	Slotted Patella Resection Guide	1
6633-7-738	Patella Stylus	1
7650-1454	Patella Caliper	1
6541-3-524	All-PolyPatella 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
	Total Quantity 35	

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	Tibial Alignment 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

Size 3-6 PS Femoral & Tibial Trialing Kit Contents

Catalog #	Description	Quantity in Kit
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-309	PS Tibial Insert Trial #3 - 9mm	1
5532-T-311	PS Tibial Insert Trial #3 - 11mm	1
5532-T-313	PS Tibial Insert Trial #3 - 13mm	1
5532-T-316	PS Tibial Insert Trial #3 - 16mm	1
5532-T-319	PS Tibial Insert Trial #3 - 19mm	1
5532-T-409	PS Tibial Insert Trial #4 - 9mm	1
5532-T-411	PS Tibial Insert Trial #4 - 11mm	1
5532-T-413	PS Tibial Insert Trial #4 - 13mm	1
5532-T-416	PS Tibial Insert Trial #4 - 16mm	1
5532-T-419	PS Tibial Insert Trial #4 - 19mm	1
5532-T-509	PS Tibial Insert Trial #5 - 9mm	1
5532-T-511	PS Tibial Insert Trial #5 - 11mm	1
5532-T-513	PS Tibial Insert Trial #5 - 13mm	1
5532-T-516	PS Tibial Insert Trial #5 - 16mm	1
5532-T-519	PS Tibial Insert Trial #5 - 19mm	1
5532-T-609	PS Tibial Insert Trial #6 - 9mm	1
5532-T-611	PS Tibial Insert Trial #6 - 11mm	1
5532-T-613	PS Tibial Insert Trial #6 - 13mm	1
5532-T-616	PS Tibial Insert Trial #6 - 16mm	1
5532-T-619	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-309	CR Tibial Insert Trial #3 - 9mm	1
5530-T-311	CR Tibial Insert Trial #3 - 11mm	1
5530-T-313	CR Tibial Insert Trial #3 - 13mm	1
5530-T-316	CR Tibial Insert Trial #3 - 16mm	1
5530-T-319	CR Tibial Insert Trial #3 - 19mm	1
5530-T-409	CR Tibial Insert Trial #4 - 9mm	1
5530-T-411	CR Tibial Insert Trial #4 - 11mm	1
5530-T-413	CR Tibial Insert Trial #4 - 13mm	1
5530-T-416	CR Tibial Insert Trial #4 - 16mm	1
5530-T-419	CR Tibial Insert Trial #4 - 19mm	1
5530-T-509	CR Tibial Insert Trial #5 - 9mm	1
5530-T-511	CR Tibial Insert Trial #5 - 11mm	1
5530-T-513	CR Tibial Insert Trial #5 - 13mm	1
5530-T-516	CR Tibial Insert Trial #5 - 16mm	1
5530-T-519	CR Tibial Insert Trial #5 - 19mm	1
5530-T-609	CR Tibial Insert Trial #6 - 9mm	1
5530-T-611	CR Tibial Insert Trial #6 - 11mm	1
5530-T-613	CR Tibial Insert Trial #6 - 13mm	1
5530-T-616	CR Tibial Insert Trial #6 - 16mm	1
5530-T-619	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-109	PS Tibial Insert Trial #1 - 9mm	1
5532-T-111	PS Tibial Insert Trial #1 - 11mm	1
5532-T-113	PS Tibial Insert Trial #1 - 13mm	1
5532-T-116	PS Tibial Insert Trial #1 - 16mm	1
5532-T-119	PS Tibial Insert Trial #1 - 19mm	1
5532-T-809	PS Tibial Insert Trial #8 - 9mm	1
5532-T-811	PS Tibial Insert Trial #8 - 11mm	1
5532-T-813	PS Tibial Insert Trial #8 - 13mm	1
5532-T-816	PS Tibial Insert Trial #8 - 16mm	1
5532-T-819	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-109	CR Tibial Insert Trial #1 - 9mm	1
5530-T-111	CR Tibial Insert Trial #1 - 11mm	1
5530-T-113	CR Tibial Insert Trial #1 - 13mm	1
5530-T-116	CR Tibial Insert Trial #1 - 16mm	1
5530-T-119	CR Tibial Insert Trial #1 - 19mm	1
5530-T-809	CR Tibial Insert Trial #8 - 9mm	1
5530-T-811	CR Tibial Insert Trial #8 - 11mm	1
5530-T-813	CR Tibial Insert Trial #8 - 13mm	1
5530-T-816	CR Tibial Insert Trial #8 - 16mm	1
5530-T-819	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-209	PS Tibial Insert Trial #2 - 9mm	1
5532-T-211	PS Tibial Insert Trial #2 - 11mm	1
5532-T-213	PS Tibial Insert Trial #2 - 13mm	1
5532-T-216	PS Tibial Insert Trial #2 - 16mm	1
5532-T-219	PS Tibial Insert Trial #2 - 19mm	1
5532-T-709	PS Tibial Insert Trial #7 - 9mm	1
5532-T-711	PS Tibial Insert Trial #7 - 11mm	1
5532-T-713	PS Tibial Insert Trial #7 - 13mm	1
5532-T-716	PS Tibial Insert Trial #7 - 16mm	1
5532-T-719	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

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-209	CR Tibial Insert Trial #2 - 9mm	1
5530-T-211	CR Tibial Insert Trial #2 - 11mm	1
5530-T-213	CR Tibial Insert Trial #2 - 13mm	1
5530-T-216	CR Tibial Insert Trial #2 - 16mm	1
5530-T-219	CR Tibial Insert Trial #2 - 19mm	1
5530-T-709	CR Tibial Insert Trial #7 - 9mm	1
5530-T-711	CR Tibial Insert Trial #7 - 11mm	1
5530-T-713	CR Tibial Insert Trial #7 - 13mm	1
5530-T-716	CR Tibial Insert Trial #7 - 16mm	1
5530-T-719	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-122	PS Tibial Insert Trial #1 - 22mm	1
5532-T-125	PS Tibial Insert Trial #1 - 25mm	1
5532-T-222	PS Tibial Insert Trial #2 - 22mm	1
5532-T-225	PS Tibial Insert Trial #2 - 25mm	1
5532-T-322	PS Tibial Insert Trial #3 - 22mm	1
5532-T-325	PS Tibial Insert Trial #3 - 25mm	1
5532-T-422	PS Tibial Insert Trial #4 - 22mm	1
5532-T-425	PS Tibial Insert Trial #4 - 25mm	1
5532-T-522	PS Tibial Insert Trial #5 - 22mm	1
5532-T-525	PS Tibial Insert Trial #5 - 25mm	1
5532-T-622	PS Tibial Insert Trial #6 - 22mm	1
5532-T-625	PS Tibial Insert Trial #6 - 25mm	1
5532-T-722	PS Tibial Insert Trial #7 - 22mm	1
5532-T-725	PS Tibial Insert Trial #7 - 25mm	1
5532-T-822	PS Tibial Insert Trial #8 - 22mm	1
5532-T-825	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
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
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

Catalog #	Description	Sizes	Additional Instruments Required
Primary Tibial Baseplate Options Part Numbers			
5520-B-X00	Primary Tibial Baseplate - Cemented	X = 1,2,3,4,5,6,7 and 8	
5520-M-X00	Primary MIS Baseplate - Cemented	X = 1,2,3,4,5,6,7 and 8	6541-2-113 - Size 1-3 MIS Keel Punch
			6541-2-146 - Size 4-6 MIS Keel Punch
			6541-2-178 - Size 7-8 MIS Keel Punch
5523-B-X00	Primary Tibial Baseplate - Beaded	X = 1,2,3,4,5,6,7 and 8	6541-6-013 - Sizes 1-3 Cementless Keel Punch
5526-B-X00	Primary Tibial Baseplate - Beaded with Peri-Apatite	X = 1,2,3,4,5,6,7 and 8	6541-6-046 - Sizes 4-6 Cementless Keel Punch
			6541-6-078 - Sizes 7-8 Cementless Keel Punch
5521-B-X00	Universal Baseplate	X = 1,2,3,4,5,6,7 and 8	6543-7-527 - Boss Reamer
			6543-4-818 - Torque Wrench

Catalog #	Description	Sizes	Qty
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

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

Symmetric Patella - Conventional Polyethylene and X3 Part Numbers

Catalog #	Description	Sizes	Qty
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

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

*S/I - Superior/Inferior

Catalog #	Description

Modular Femoral Distal Fixation Peg Part Number

5575-X-000	Modular Femoral Distal Fixation Peg (2 per pack)

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

Notes

Notes

Notes

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