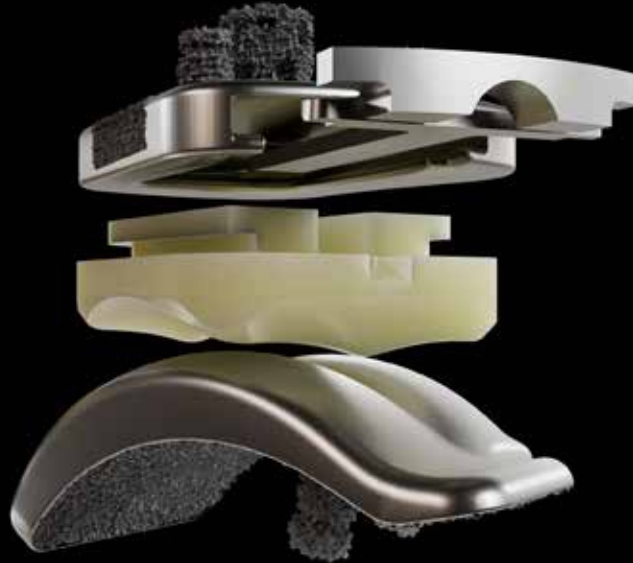


# EXACTECH | EXTREMITIES

Operative Technique



**VANTAGE**<sup>®</sup>  
TOTAL ANKLE

Total Ankle Fixed Bearing with  
Activit-E™ Vitamin E Polyethylene



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The Vantage Ankle was developed in conjunction with:

**James K. DeOrio, MD**

Duke University  
*Durham, NC*

**James A. Nunley, MD**

Duke University  
*Durham, NC*

**Mark E. Easley, MD**

Duke University  
*Durham, NC*

**Victor Valderrabano, MD, PhD**

Schmerzlinik Basel  
*Basel, Switzerland*

# OPERATIVE TECHNIQUE OVERVIEW



**Figure 1**  
Make Incision



**Figure 2**  
Retract for Initial Exposure



**Figure 3**  
Place Alignment Guide and Pin



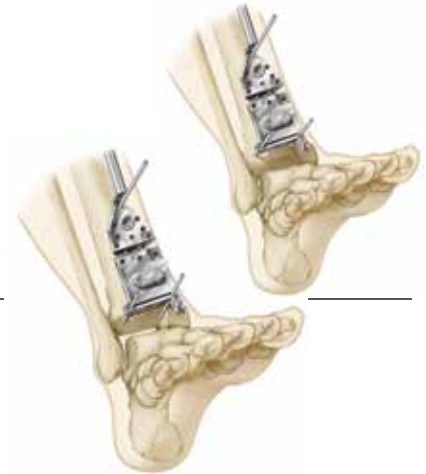
**Figure 4**  
Determine Rotation



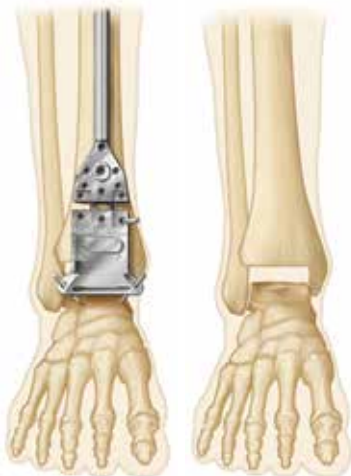
**Figure 5**  
Adjust Distal Tibial Cutting Block in the A/P and Lateral Plane



**Figure 6**  
Set Resection Height and Confirm Initial Sizing



**Figure 7**  
Pin and Resect Distal Tibia



**Figure 8**  
Place Talar Block Pin and Resect



**Figure 9**  
Verify Resection



**Figure 10**  
Assess Tibia Size Using A/P Sizing Tool

OPERATIVE TECHNIQUE OVERVIEW



**Figure 11**  
Place Distractor and Lollipop on Talar Cut to Pin Anterior Holes



**Figure 12**  
Place Talar Cutting Block Over the Two Pins Placed with the Lollipop and Stabilize with Olive Pins



**Figure 13**  
Use Anterior Mill in First Two Anterior Slots and Then Cut Two Chamfer Cuts Posterior



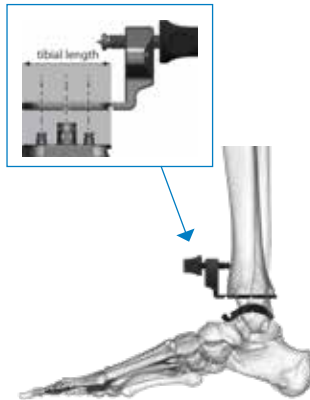
**Figure 14**  
Rasp Talar Bone to Remove High Spots



**Figure 15**  
Center Trial on the Cut Surface and Place Center Screw During Motion Assessment



**Figure 16**  
Drill Peg Holes Through Talar Trial



**Figure 17**  
Confirm Tibial Size and Placement



**Figure 18**  
Pin Talar Punch Guide with Punch Trial and Pin



**Figure 19**  
Punch Center and Peripheral Pegs



**Figure 20**  
Impact Tibia



**Figure 21**  
Insert Final Liner Component



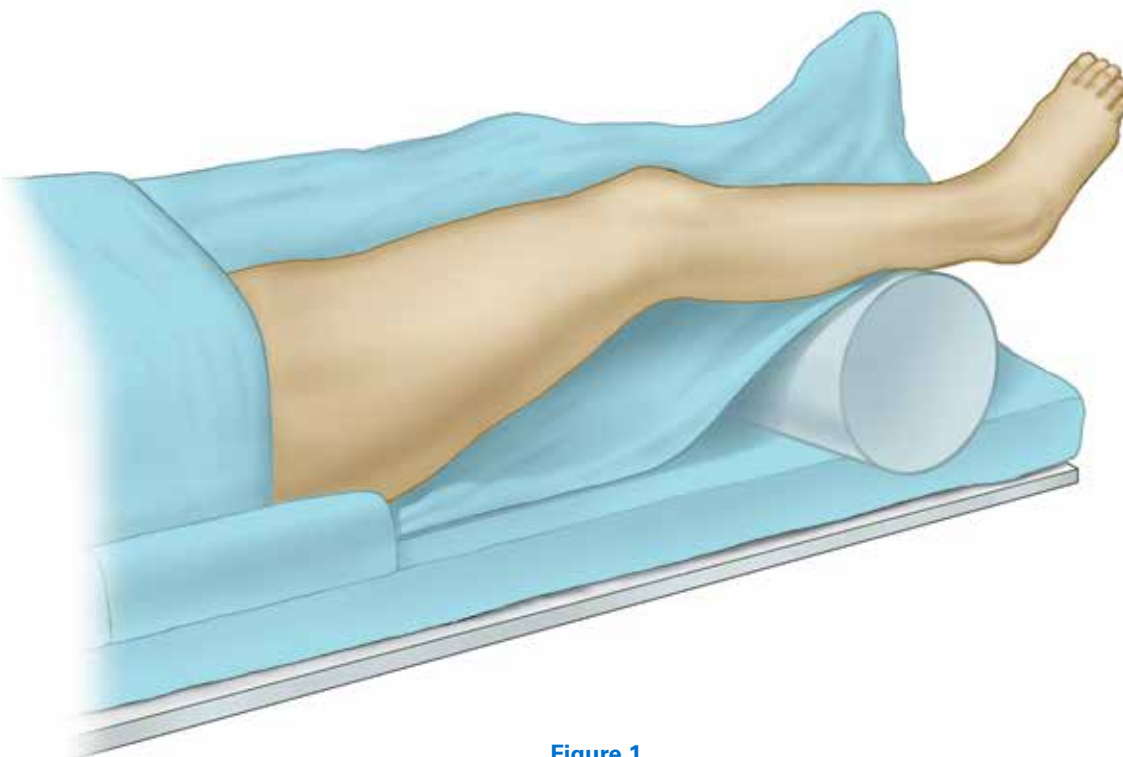
**Figure 22**  
Impact Talus  
(Tibial implant not shown for clarity)



**Figure 23**  
Lock Polyethylene Into Place

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 1**  
Position Patient

### SURGICAL APPROACH

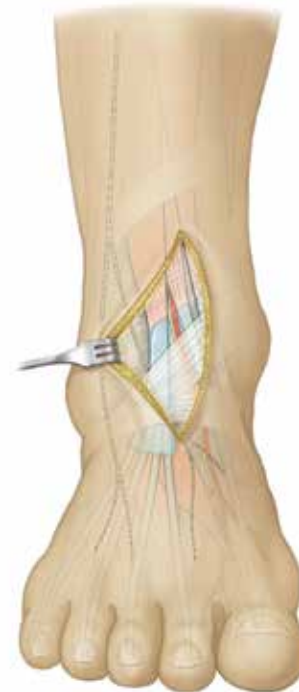
The patient is placed supine on the operating table. It is usually necessary to put a small bump under the ipsilateral hip so that the leg will not externally rotate; the patella should be facing directly anterior. Surgery is generally done under regional anesthesia, but general anesthesia is certainly acceptable. If regional anesthesia is used, then a popliteal catheter or sciatic catheter will need to be carefully blocked out of the OR field so as not to interfere with the surgical technique. A thigh tourniquet will be utilized for all cases; it should be well padded and placed proximal to the popliteal catheter. Adhesive drapes are generally placed around the knee to block out the popliteal catheter and the thigh area.

The extremity is then prepped and draped into a sterile field, exposing the knee to the foot. Intravenous antibiotics and a sequential compression device on the opposite leg are used in all cases. The extremity is then exsanguinated with an esmarch bandage and a thigh tourniquet elevated to the appropriate level (*Figure 1*).



**Figure 2**

Place Skin Incision 6-8cm Proximal to Tibiotalar Joint



**Figure 3**

Retract for Initial Exposure

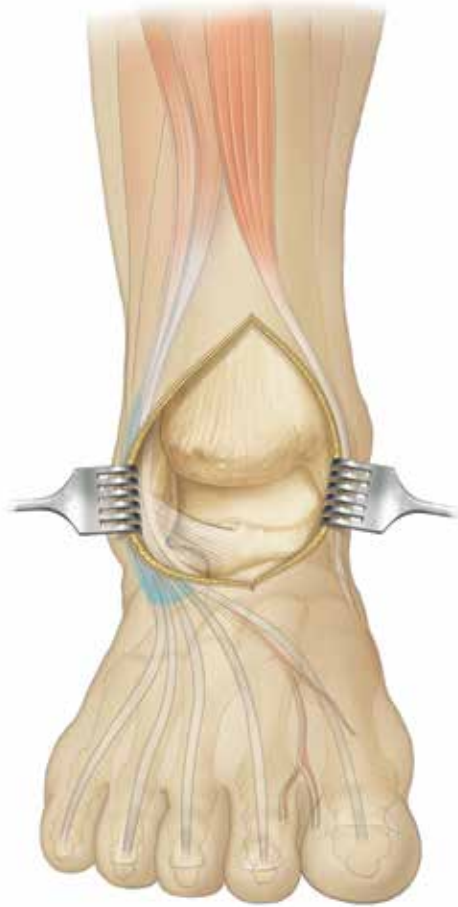
The skin incision is made 1cm lateral to the crest of the tibia and extends approximately 6-8cm proximal to the level of the tibiotalar joint and 6cm distal to the joint just past the talonavicular joint. After dividing the subcutaneous tissues, it is important to identify the superficial peroneal nerve as its distal course will frequently cross from lateral to medial directly over the ankle joint. Frequently, it will be necessary to sacrifice the small medial branch of the nerve, but never the entire superficial peroneal nerve (*Figure 2*).

Next, the extensor retinaculum is exposed. The extensor hallucis longus sheath is opened through the extent of the skin incision. It is important not to open the anterior tibial

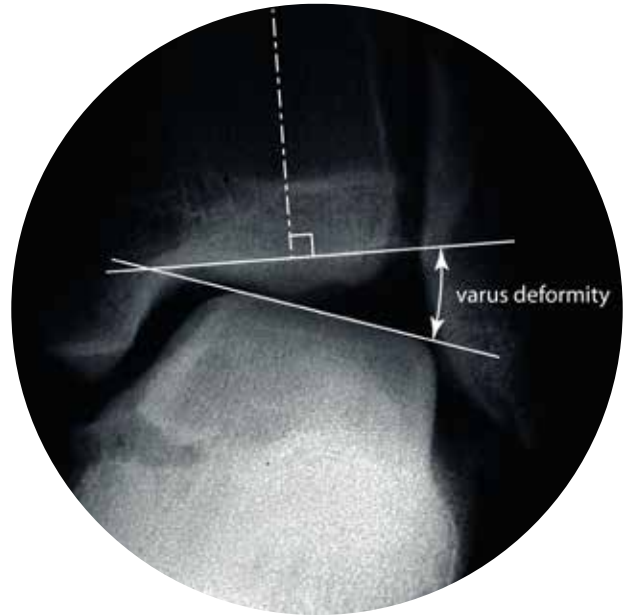
tendon sheath as this is usually more difficult to close and may lead to bowstringing with wound closure. Bowstringing from inadequate retinacular closure has led to wound breakdown. Once the EHL tendon sheath is open, the deep peroneal nerve and artery will be located directly below the EHL tendon and muscle. It is important to protect these structures as they are gently and bluntly dissected from the tibia with a cuff of soft tissue and retracted laterally with EHL tendon and muscle. Care must be taken distally as the deep peroneal nerve and artery curve from the lateral to medial and will be in the area of the lateral talonavicular joint. These must be protected throughout the surgical procedure (*Figure 3*).

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 4**  
Expose Bony Anatomy

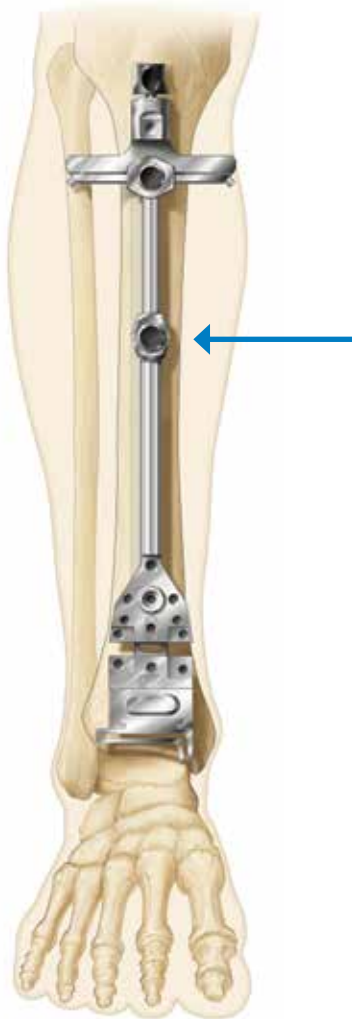


**Figure 5**  
Address Varus Ankle

Next, a longitudinal incision is made in the capsule of the ankle joint, and the capsule is reflected medially to expose the entire medial malleolus and laterally to expose the syndesmosis. At this point, a deep retractor, generally a gelpi retractor, is placed to hold the soft tissues open and expose the ankle joint. A saw or osteotome is used to remove anterior osteophytes from the tibia, and this should be done perpendicular to the longitudinal axis of the tibia. Frequently, there are massive osteophytes on the neck of the talus and these should be removed with a cushioning rongeur. Care must be taken not to remove too much bone from the neck of the talus to avoid weakening it (*Figure 4*).

If the preoperative radiographs demonstrate a varus deformity to the ankle, it may be necessary to perform a release of the deltoid ligament. This is done with a combination of sharp and blunt dissections, starting at the tip of the medial malleolus and releasing from anterior to posterior until all attachments of soft tissue to the medial malleolus and the posterior aspect of the tibia are released. This will free the tissue up as a cuff and allow for correction of moderate varus deformity (*Figure 5*).





**Figure 6**  
Place Alignment Guide – Anterior



**Figure 7**  
Check Alignment Guide – Lateral

Once the ankle joint is exposed, a small 5mm incision is made over the tibial tubercle. With the **Tibial Cutting Block** attached, place the **Total Ankle Alignment Guide** onto the proximal tibial bone in the A/P direction. The guide should be adjusted to the height of the tibial tubercle using the button at the center of the shaft (*Figure 6*).

**SURGICAL PEARL**

Distal alignment block should be opened to the 0 mark in order to allow for superior or inferior adjustments.

Use the medial shim to align the **Tibial Tubercle Pin** or **Tibial Tubercle Pin Pouch** prior to insertion, then place the Tubercle Pin through the proximal hole in the guide and into the anterior cortex of the tibia.

Once the length of the guide is adjusted and centered on the joint, adjust the medial-lateral position of the **Tibial Cutting Block** to align the center shaft of the alignment guide to the midline of the tibia. Place a provisional 2.4mm pin in the most proximal hole of the alignment guide. This will hold the position of the distal block and allow minor adjustments proximally.

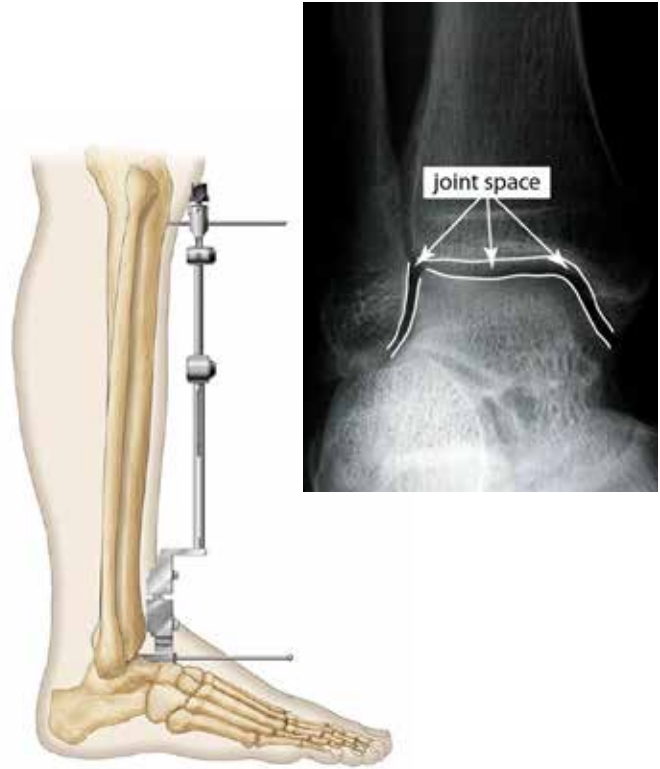
Small adjustments may be made to the slope once the pin is placed, however errors larger than 10° will be difficult to correct at this stage (*Figure 7*).

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 8**  
Adjust Tibial Block Rotation




**Figure 9**  
Align Tibial Cutting Block with A/P Mortise View

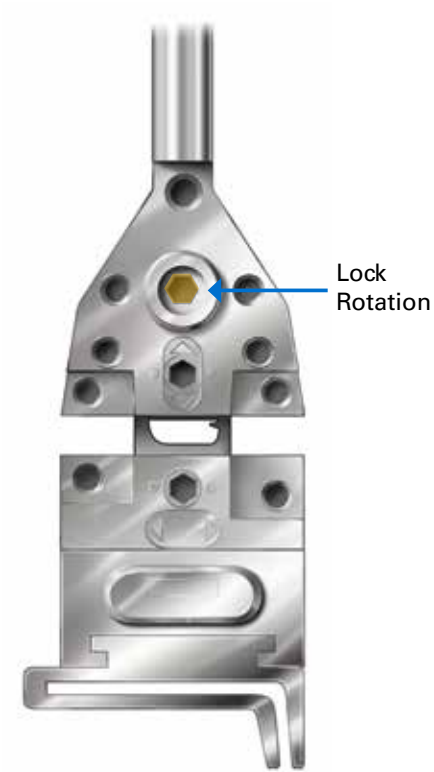
To determine rotation, the second ray of the foot is recommended as an indicator of the A/P direction. To assess the orientation of the talus, place the **Medial Shim** into the medial gutter. This will indicate the rotation of the native talus. Place the **Rotation Alignment Rod** into the Tibial Cutting Block. Adjust rotation of the distal block so the Medial Shim and alignment rod are parallel (*Figure 8*).

This orientation will guide the direction of the tibial implant and prevent inadvertent resection of the posterior medial portion of the medial malleolus.

**Note:** *In lax ankles or those with valgus deformity, the Medial Shim may not stay in place. In these cases, it may be held against the medial malleolus or the alignment rod oriented with the second ray.*

 An anterior fluoroscopic image should be taken to ensure alignment between the cutting block and the medial gutter of the tibia. This should be done using a mortise view (*Figure 9*).

 Signifies fluoroscopic image



**Figure 10**  
Lock Rotation



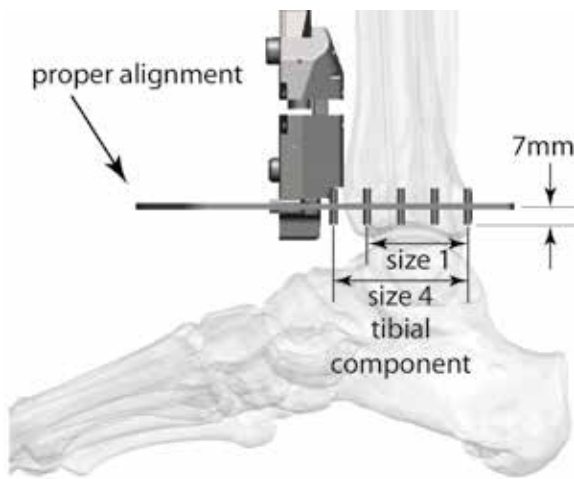
**Figure 11**  
Adjust Varus/Valgus Alignment

To lock the rotation, use the **1/8" Standard Hex Driver** in the central locking screw. With the c-arm still in place, the varus/valgus alignment of the guide should be confirmed (*Figure 10*).

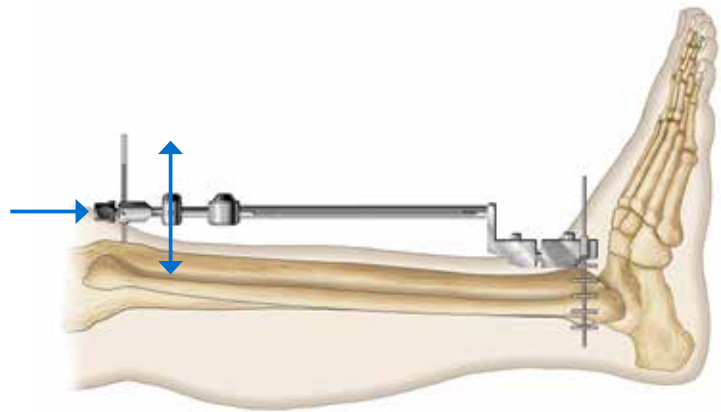
Varus/valgus adjustments may be made at the proximal end of the alignment guide by sliding the shaft of the guide in the medial-lateral direction (*Figure 11*).

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH




**Figure 12**  
Adjust Resection Level

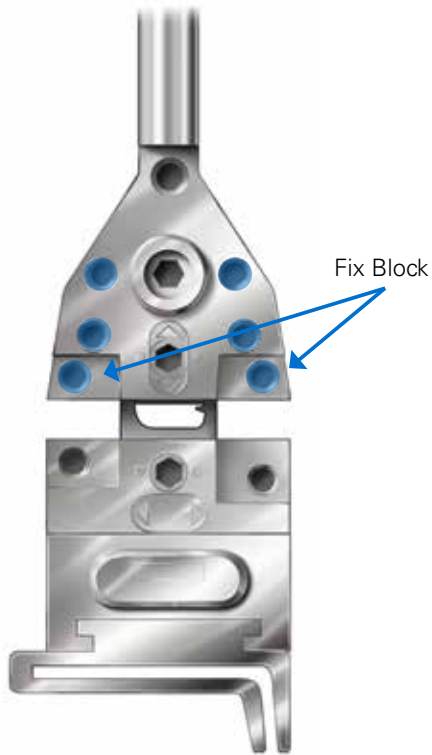


**Figure 13**  
Alignment Guide with Angel Wing - Lateral View

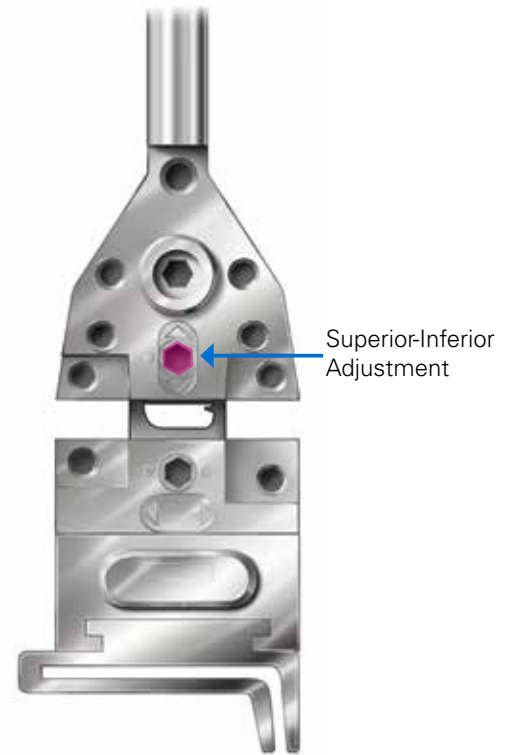
Insert the **Angel Wing** into the tibial cutting block and make adjustments at the proximal pin to ensure a neutral cut at a level 7mm proximal to the tibial plafond (*Figure 12*).

 A lateral fluoroscopic image should be taken at this point to assess the slope of the tibial cut and the position of the cut relative to the plafond. The slope may be adjusted by sliding the proximal guide along the tubercle pin shaft (*Figure 13*). Adjust to the middle mark of the alignment guide.

 Signifies fluoroscopic image



**Figure 14**  
Pin the Proximal Block for Stability



**Figure 15**  
Adjust Superior-Inferior Position

When the proper orientation is achieved, pin the upper portion of the block in any of the holes depending on the best bony purchase (*Figure 14*).

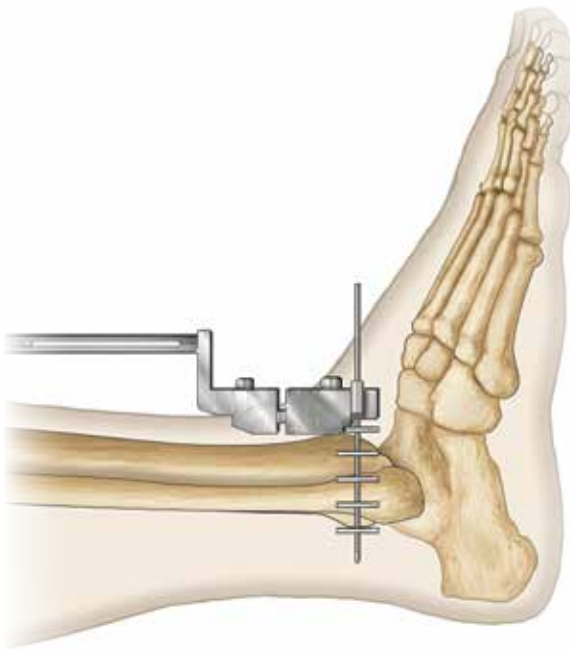
The level of the cut may be adjusted using the superior-inferior adjustment on the guide (*Figure 15*).

**SURGICAL PEARL**

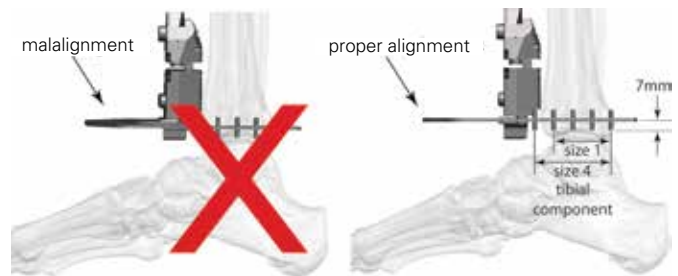
Proximal holes are symmetric, however the tibial bone tends to bow lateral, so care should be taken to ensure the bone is below the guide.

# DETAILED OPERATIVE TECHNIQUE


## SURGICAL APPROACH



**Figure 16**  
Check Alignment of Angel Wing Pins  
Using Tibial Plafond

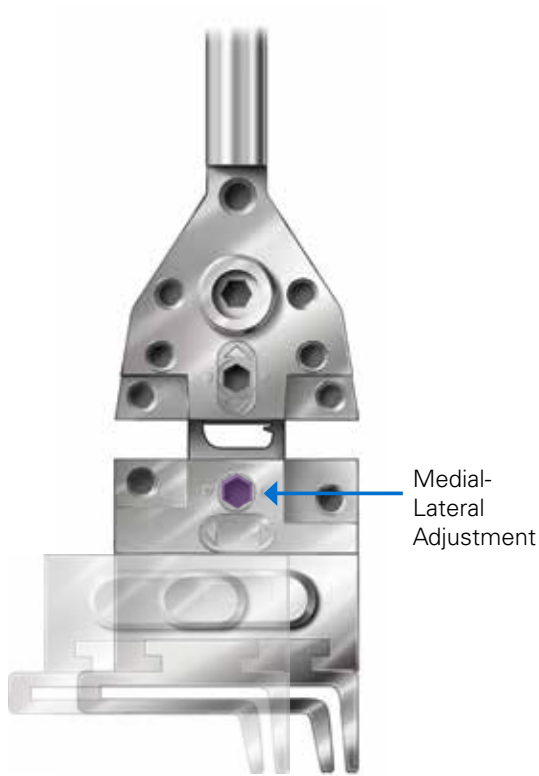


**Figure 17**  
Ensure Proper Alignment of the Guide to Gauge Both the  
Resection Depth and A/P Size of the Tibial Component

 Adjust the Tibial Cutting Block in the S/I direction so the pins on the Angel Wing Guide are aligned with the top of the tibial plafond. This will place the tibial resection 7mm above the plafond (Figure 16).

For tight ankles, this resection is recommended to make space for the implant assembly. In ankles with laxity, a shallower cut may be taken (Figure 17).

 Signifies fluoroscopic image




**Figure 18**  
Adjust Medial-Lateral Position



**Figure 19**  
Adjust Tibial Block Medial-Laterally

Adjust the medial-lateral position of the Tibial Cutting Block to align the vertical slot on the cutting block with the medial gutter (Figure 18).

**Note:** Cutting blocks are aligned to medial malleolus and width grows laterally. The widest option that stays medial of the fibula should be chosen.

 Align the c-arm and take an A/P fluoroscopic image to check the alignment of the Tibial Cutting Block in the M/L direction, looking specifically at the lateral holes in the cutting block. These indicate the width of the tibial components and will identify the largest component that fits between the malleoli. Adjust the Tibial Cutting Block in the M/L direction as needed to best fit the tibial geometry (Figure 19).

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 20**  
Pin the Tibial Cutting Block



**Figure 21**  
Remove Tibial Resection

Pin the Tibial Cutting Block on the medial and lateral sides to protect the malleoli during the distal tibial resection.

Cut the distal tibia using an oscillating saw, taking care not to penetrate through the posterior capsule where the neurovascular bundle is located. A reciprocating saw may be used to cut the bone along the medial malleoli. A portion of the anterior lateral tibia may remain after the initial cut. This should be cleared to make room for the anterior flange of the tibial component (*Figure 20*).

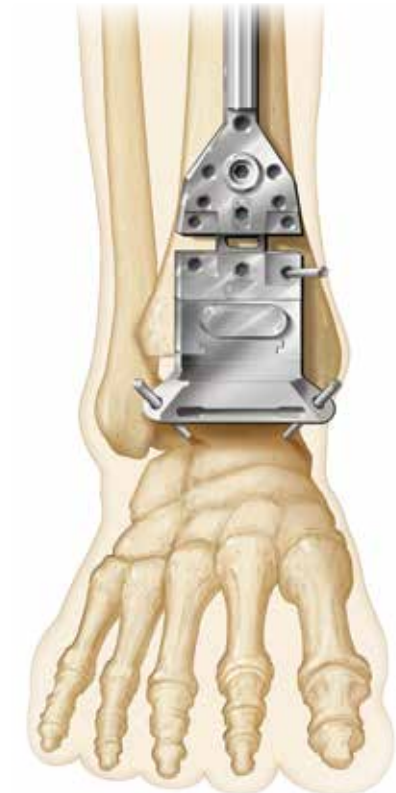
#### **SURGICAL PEARL**

*When removing the resected tibial bone, cut the bone into small pieces with the reciprocating saw and then a rongeur to remove the bone until all the bone is cleared from the joint. Be sure to get any posterior bone fragments, as these can cause impingement post-operatively if not removed (*Figure 21*).*





**Figure 22**  
Place Talar Cutting Block



**Figure 23**  
Pin Talar Block

After clearing the resected tibial bone, the **Talar Cutting Block** is placed onto the alignment guide. The alignment guide should be extended as far as possible distally to tension the soft tissues. Care should be taken to ensure the paddle is contacting the talar bone. The Standard 4mm Talar Cutting Block is recommended for tight ankles. The **2mm Talar Cutting Block** may be used to take additional talar bone if needed (*Figure 22*).

Holding the foot in neutral dorsiflexion position and the heel in slight valgus, the two talar block stabilizing pins are inserted and the talar cut is made with the oscillating saw (*Figure 23*).

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 24**

Clear Tibial and Talar Resections



**Figure 25**

Verify Resection Gap



**Figure 26**

Assess Tibial Size

Clear the talar bone to ensure a rectangular opening. Use the **Gap Check Tool** to verify that a minimum amount of bone has been resected to accommodate the implant (*Figure 24*).

#### **SURGICAL PEARL**

Do not remove alignment guide until you verify with the Gap Check Tool. This will make the process easier if you need to recut.

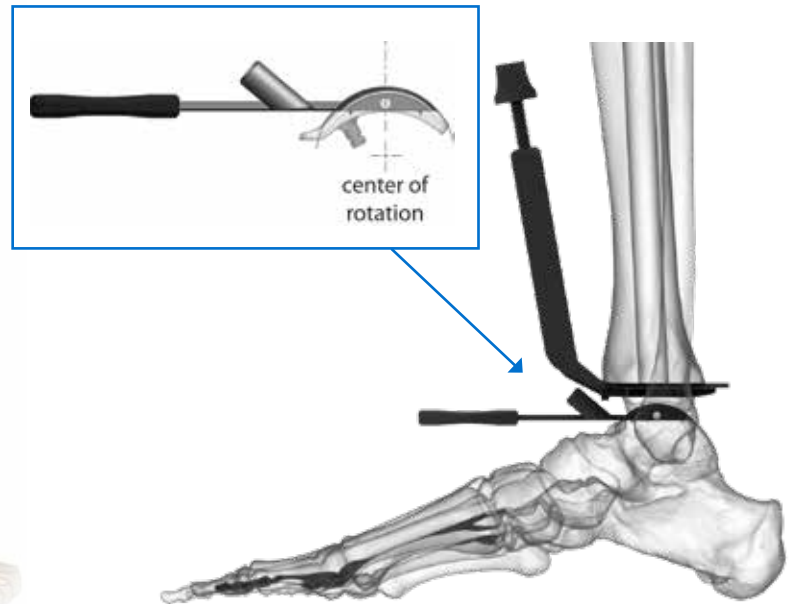
The Gap Check Tool represents the smallest tibial shape and minimum implant thickness. It will identify risk of impingement laterally with the fibula. Impingement at this point may be corrected by resecting more of the medial malleolus (*Figure 25*).

Asses the tibial size using the **A/P Sizing Tool** (*Figure 26*).



**Figure 27**


Place Talar Lollipop with Distractor Tool to Apply Soft Tissue Tension



**Figure 28**

Place Curvature in Line with Existing Surface

The **Talar Lollipop** should be placed onto the resected talar dome to identify the proper coverage. The handle is meant to align in the A/P direction (second ray). The **Distraction Tool** may be used to tension the soft tissue and hold the lollipop in place (*Figure 27*). Check to ensure the lollipop covers the bone medial to lateral without overhang into the gutters in order to avoid impingement.

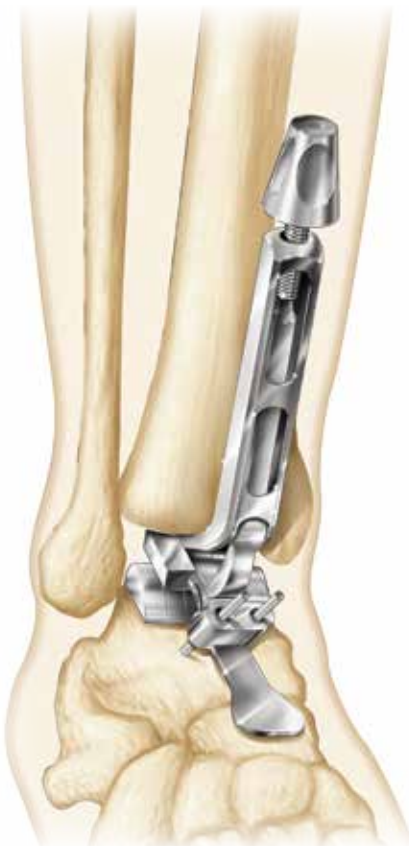
 A lateral fluoroscopic image should be taken to ensure complete coverage of the resected talus (*Figure 28*).

 **SURGICAL PEARL**

A circular fluoroscopic hole should be above the lateral process.

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 29**

Place Anterior Pins Through Talar Lollipop



**Figure 30**

Remove Talar Lollipop

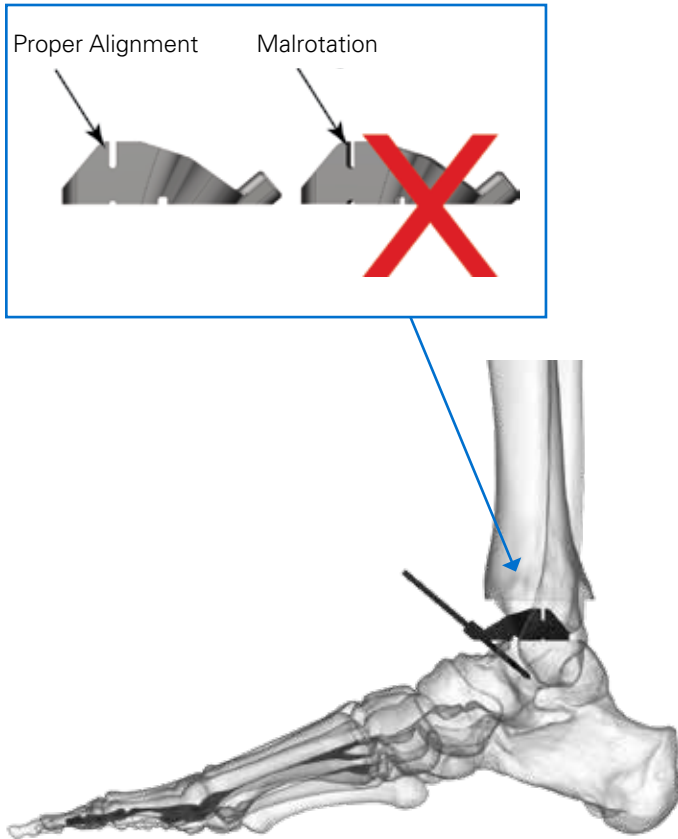
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Once the desired position is achieved, two anterior pins should be placed into the talus through the lollipop for stability (*Figure 29*).

The **Ankle Foot Distractor** and **Lollipop Guide** are then removed from the joint, leaving the two alignment pins (*Figure 30*).



Signifies fluoroscopic image



**Figure 31**


Place Talar Mill Block - Ensure Block Seats on Talar Surface



**Figure 32**

Check and Resect Posterior Chamfer Cut

The corresponding-sized Talar Cutting Block is placed over the alignment pins and held onto the cut talar surface.

 A lateral fluoroscopic image can be taken to verify the block is in complete contact with the cut surface, as posterior lift off will bias the cut surface in dorsiflexion. A distractor should be used to hold the block in place and tension the joint prior to placing the 2.4mm pins (Figure 31).

**SURGICAL PEARL**

The fluoroscopic notch should be directly above the lateral process.

Check the posterior chamfer slot on the Talar Cutting Block to ensure the blade makes contact with the posterior bone prior to inserting the stabilizing pins. If the blade misses the bone posteriorly, a different block should be chosen or the block should be shifted anteriorly.

With the distractor in place, the two stabilizing **Olive Pins** are placed into the block to hold it to the talus during preparation. Alternatively, **2.4mm x 3.5" Fluted Olive Pin Pouch** may be used in place of the standard Olive Pin. These Olive Pins are provided in the set to prevent the pins from penetrating to the sinus tarsi and potentially damaging the talar blood supply.

The first posterior chamfer cut may be made using the oscillating saw through the posterior slot (Figure 32).

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 33**  
Use Anterior Mill Bit in First Slot



**Figure 34**  
Remove Anterior Pins

---

The **Anterior Mill Tool** should be used through the two anterior slots to create the faceted surfaces (*Figure 33*).

The anterior pins should be removed at this point to allow the saw to clear the second posterior chamfer cut (*Figure 34*).

---

#### **SURGICAL PEARL**

Milling in sequential shallow passes or drilling holes and connecting them is more effective than plunging to depth and attempting to pull the bit medial to lateral.

---



**Figure 35**

Remove Pins and Blocks to View Faceted Talar Surface



**Figure 36**

Remove High Spots with Talar Rasp

All pins and block are removed revealing a faceted talar surface (*Figure 35*). Depending on osteophyte formation, the talar neck region may need to be cleared using a rongeur.

The **Curved Rasp** should be used to smooth high spots on the talar bone leaving a curved surface that will mate with the talar implant.

**Note:** The facets on the bony surface may create space between the implant and bone. This is meant to be taken up by the cement (*Figure 36*).

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 37**

Place Talar Trial – Lateral View



**Figure 38**

Place Talar Trial – Anterior View

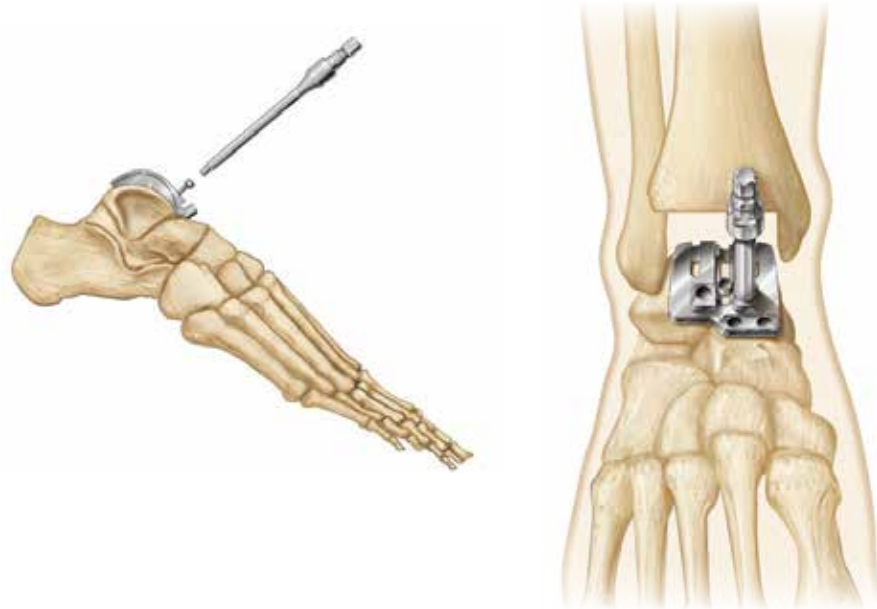
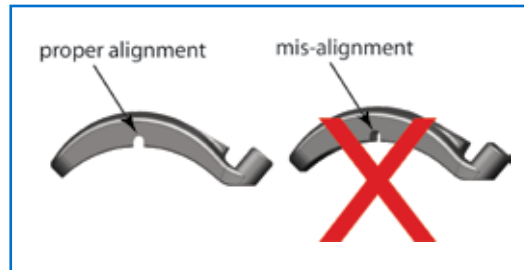
The **Talar Trial** should be placed onto the cut surface to identify any osteophytes on the anterior talus that may need to be removed (*Figure 37*).

The Talar Trial should now be centered on the cut talar surface. A **Talar Trial Screw** is placed into the center slot to hold the trial component onto the bone during motion assessment (*Figure 38*). Alternatively, the **Talar Trial Screw Pouch** can be used in place of the Talar Trial Screw. The former is the same instrument as the Talar Trial Screw but is packaged in a sterile pouch.



Signifies fluoroscopic image





**Figure 39**

Place Central Screw to Hold Talar Trial

- 
- ⌚ Check the talar orientation using a lateral fluoroscopic image. Once the proper orientation is achieved, drill the talar holes (*Figure 39*).

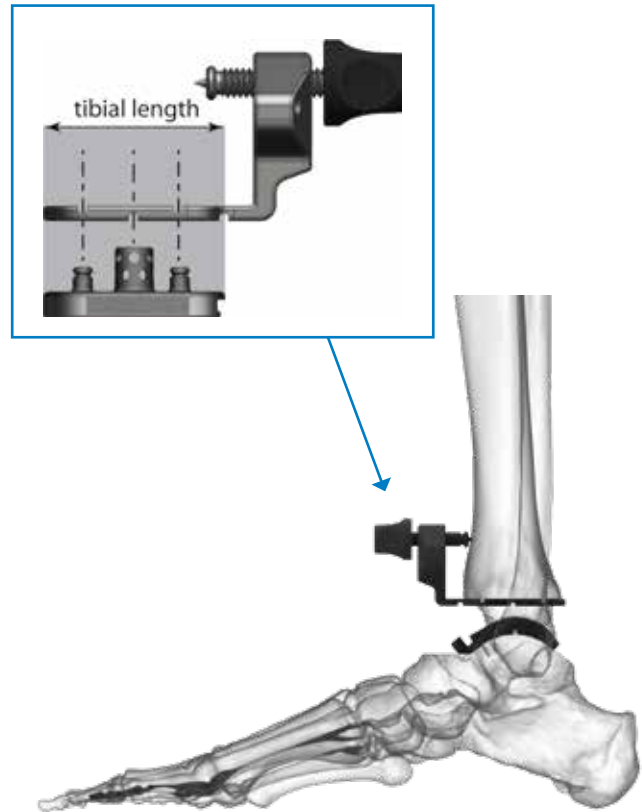
## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 40**


Place Appropriately-Sized Tibial Punch Guide



**Figure 41**

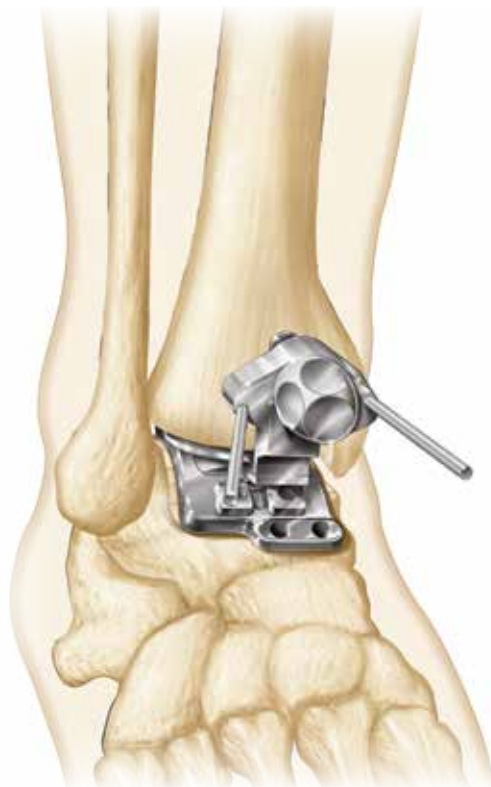
Confirm Tibial Size and Placement - Lateral View

Choose the appropriately-sized **Tibial Punch Guide** and place it and the **Punch Liner** that is appropriate for the Talar Trial. Articulate the joint and ensure the rotation of the tibial component is correct. Check the range of motion and look for evidence of lift-off during articulation (*Figure 40*). This confirms proper alignment between the tibia and talus.

 **Check the A/P position of the tibial component. A lateral fluoroscopic image will show where the cage will be located.** Adjust using the anterior knob. The punch guide has markings for the anterior and posterior pegs as well as the center cage. The A/P size of the implant is marked by a large notch anteriorly and by the posterior edge of the punch guide. Once the position is correct, use any of the 2.4mm diameter pins to lock the position. The **Fluted Pin Pouch** (2.5" or 3.5" diameter) can be used the same as any 2.4mm pins and is packaged in its own sterile pouch. A final check of the articulation is used to validate placement and identify risk of talar impingement. This determines the rotation of the tibial component (*Figure 41*).

 **Signifies fluoroscopic image**

Remove the Punch Liner to create space.



**Figure 42**  
Pin Tibial Punch Guide in Place

---

Remove the Talar Trial component, leaving the punch guide attached to the distal tibia. Apply pressure to the anterior tibial cortex by tightening the anterior screw. This forces the punch guide plate into the distal tibia for better stability (*Figure 42*).

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 43**  
Prepare Center Cage

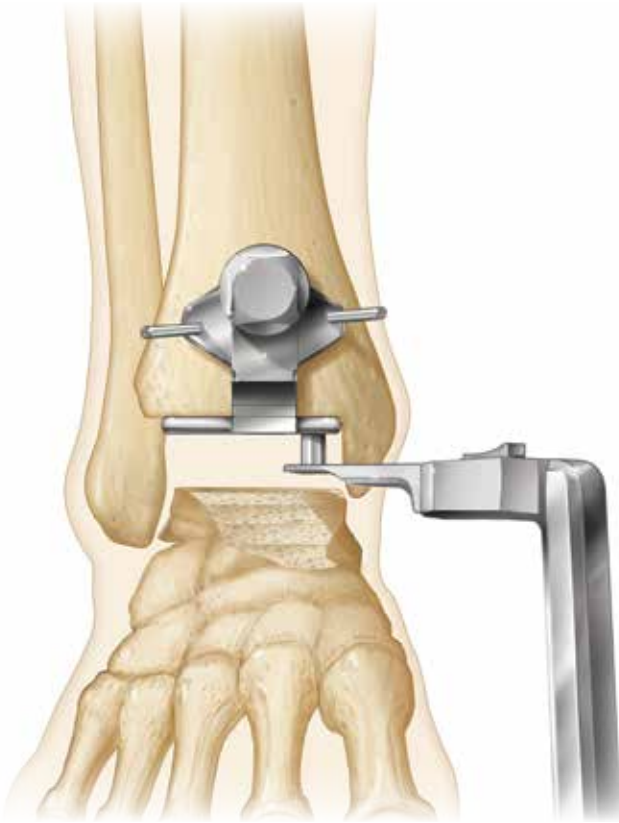


**Figure 44**  
Center Cage Punch

---

Insert the **Center Cage Punch** into the punch guide. It may be helpful to angle the impactor toward the fibula during insertion (*Figure 43*).

Once in place, impact the punch into the distal tibia until it is fully seated in the guide (*Figure 44*).



**Figure 45**

Punch Peripheral Pegs Through Guide



**Figure 46**

Impact Tibial Component

Repeat this process using the **Peripheral Peg Punch** on the three-peg holes (*Figure 45*).

Now, prepare the cement. Cement should be placed on the superior surface of the tibial component to act as a grout, sealing it to the distal tibial cut.

Remove the punch guide and manually insert the tibial component into the joint. You can also insert the tibial component using the **Tibial Inserter**. See instructions for

use on page 30. Insert the **Tibial Protector** into the tibial component to prevent damage during impaction.

Assemble the **Tibial Impactor Tip** onto the impactor handle assembly (*Figure 46*).

Impact the tibial component up into the distal tibia ensuring that it is fully seated.

Place cement on the inferior surface of the talar component to fill in any gaps between the implant and the prepared bony surface.

Leave the tibial protector in place as the talar component is placed onto the talus bone to prevent damage.

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



**Figure 47**  
Impact Talus

---

Attach the **Talar Impactor Cover** to the **Talar Impactor Frame** and then to the **Modular Impactor Handle**. This may require plantarflexion of the foot to seat the impactor tip. Ensure the component is fully seated onto the bone (Figure 47).

**Note:** *The tibial component is not shown in this image.*



**Figure 48**  
Insert Final Liner Component



**Figure 49**  
Lock Tibial Clip - Pre-Locking



**Figure 50**  
Lock Tibial Clip - Final Assembly

Using the **Scissor Inserter Handles**, remove the tibial protector and insert the **Tibial Liner Trial** to verify the proper liner thickness for proper ligament tensioning. Take care not to scratch the polished talar surface when the tibial protector is removed. After the proper liner thickness is verified, remove the trial using the Scissor Inserter Handles, insert the final Activit-E Tibial Insert, and place the Tibial Locking Clip in place (*Figure 49*).

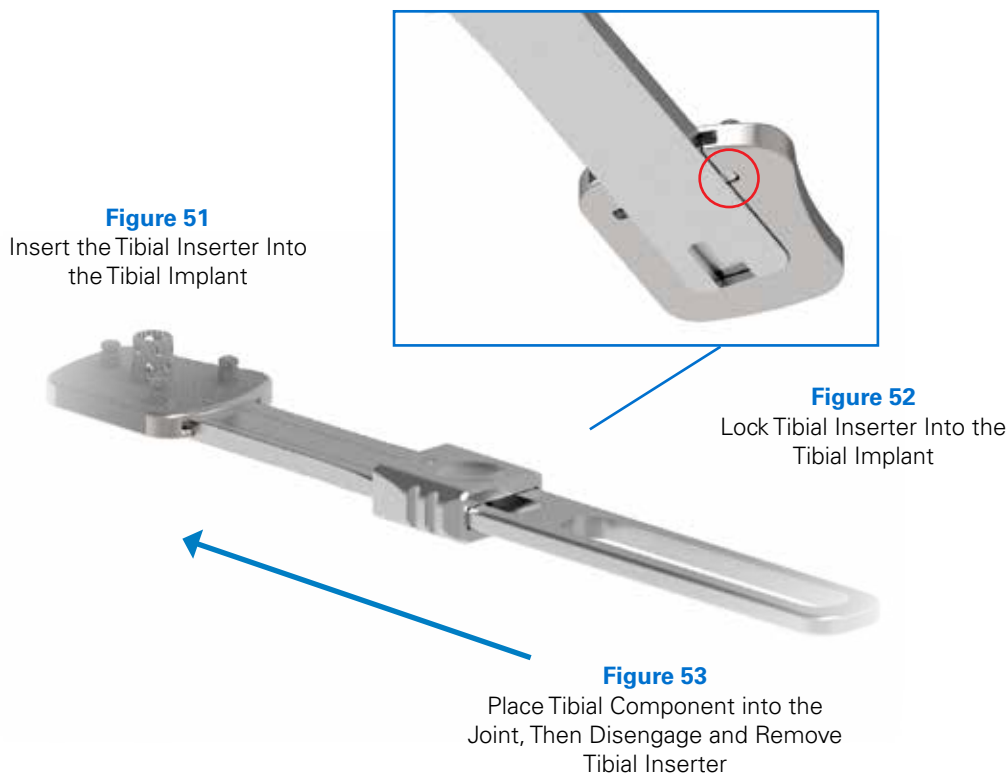
**SURGICAL PEARL**

The locking clip is based on the tibial size, and the polyethylene size is determined by the talar component (*Figure 50*).

The entire wound is irrigated with antibiotic solution and a closed suction drainage system is placed. The deep tissue and extensor retinaculum are closed in an interrupted fashion. The subcutaneous tissue is closed. Skin edges are approximated with an interrupted skin closure. A sterile compression dressing and short-leg cast are applied with the ankle in neutral position.

## DETAILED OPERATIVE TECHNIQUE

### SURGICAL APPROACH



#### TIBIAL INSERTER (351-17-03)

The **Tibial Inserter** is an optional instrument and can be used to insert the tibial component into the joint as opposed to inserting it by hand as shown on page 27.

To use the Tibial Inserter, follow the steps in this technique up to page 27 such that the cement has been applied to the superior surface of the tibial component, and such that the Tibial Punch Guide has been removed from the joint space.

Next, insert the Tibial Inserter into the T-slot of the tibial component (*Figure 51*).

Slide the button forward toward the tibial component to lock it (*Figure 52*). The Tibial Inserter is fully engaged when the knob is fully mated to the locking mechanism on the tibial

implant (*Figure 52*). Ensure that the Tibial Inserter is locked into the tibial implant to avoid dropping the implant. Insert the tibial component into the joint and line up the fixation features on the tibial component with the prepped holes in the distal tibia (*Figure 53*).

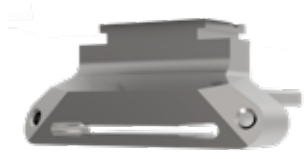







**Note:** Do not impact the Tibial Inserter as this action may result in damage to the tibial component, the Tibial Inserter and/or the bone.

Once the tibial component is in place, slide the button back to disengage the Tibial Inserter and remove it (*Figure 53*).





## INSTRUMENT LISTING

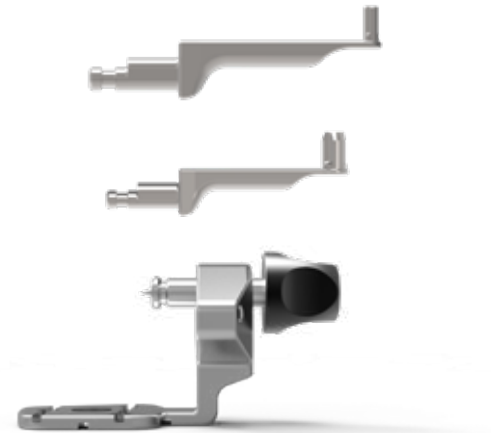
CATALOG NO.	PART DESCRIPTION	
351-00-01	Talar Cutting Block +4mm Talar Cut	
351-00-02	Talar Cutting Block +2mm Talar Cut	
351-01-01	Lollipop Guide - Size 1	
351-01-02	Lollipop Guide - Size 2	
351-01-03	Lollipop Guide - Size 3	
351-01-04	Lollipop Guide - Size 4	
351-01-05	Lollipop Guide - Size 5	
351-01-10	Scissor Style Inserter Handle	
351-02-01	Mill Talar Block - Size 1	
351-02-02	Mill Talar Block - Size 2	
351-02-03	Mill Talar Block - Size 3	
351-02-04	Mill Talar Block - Size 4	
351-02-05	Mill Talar Block - Size 5	
351-03-01	Talar Trial - Size 1 - Left	
351-03-02	Talar Trial - Size 2 - Left	
351-03-03	Talar Trial - Size 3 - Left	
351-03-04	Talar Trial - Size 4 - Left	
351-03-05	Talar Trial - Size 5 - Left	
351-04-01	Talar Trial - Size 1 - Right	
351-04-02	Talar Trial - Size 2 - Right	
351-04-03	Talar Trial - Size 3 - Right	
351-04-04	Talar Trial - Size 4 - Right	
351-04-05	Talar Trial - Size 5 - Right	
351-05-00	Talus Drill	
351-05-01	Rasp - Size 1	
351-05-02	Rasp - Size 2	
351-05-03	Rasp - Size 3	
351-05-04	Rasp - Size 4	
351-05-05	Rasp - Size 5	
351-05-10	Talar Mill Bit	

## INSTRUMENT LISTING

CATALOG NO.	PART DESCRIPTION	
351-07-03	Talar Impactor Frame	
351-07-04	Talar Impactor Cover	
351-10-00	Tibial Alignment Guide	
351-10-01	Tibial Cutting Block Size 1-2 - Left	
351-10-02	Tibial Cutting Block Size 1-2 - Right	
351-10-03	Tibial Cutting Block Size 3-4 - Left	
351-10-04	Tibial Cutting Block Size 3-4 - Right	
351-10-07 (blue)	Fixed Bearing Gap Check Tool - Size 1 & 2	
351-10-08 (grey)	Fixed Bearing Gap Check Tool - Size 3 & 4	
351-10-11	Rotation Alignment Rod	
351-10-12	Medial Shim	
351-10-13	Modular Impactor Arm	
351-10-14	Angel Wing	
351-10-15	A/P Sizing Tool	
351-10-16	Ankle Foot Distractor	

## INSTRUMENT LISTING

CATALOG NO.	PART DESCRIPTION
351-10-25	Peripheral Peg Punch
351-10-26	Center Peg Punch
351-11-01	Tibial Punch Guide - Left - Size 1
351-11-02	Tibial Punch Guide - Left - Size 2
351-11-03	Tibial Punch Guide - Left - Size 3
351-11-04	Tibial Punch Guide - Left - Size 4
351-12-01	Tibial Punch Guide - Right - Size 1
351-12-02	Tibial Punch Guide - Right - Size 2
351-12-03	Tibial Punch Guide - Right - Size 3
351-12-04	Tibial Punch Guide - Right - Size 4
351-15-01	Punch Liner - Size 1 - 6mm
351-15-02	Punch Liner - Size 2 - 6mm
351-15-03	Punch Liner - Size 3 - 6mm
351-15-04	Punch Liner - Size 4 - 6mm
351-15-05	Punch Liner - Size 5 - 6mm
351-15-11	Punch Liner - Size 1 - 7mm
351-15-12	Punch Liner - Size 2 - 7mm
351-15-13	Punch Liner - Size 3 - 7mm
351-15-14	Punch Liner - Size 4 - 7mm
351-15-15	Punch Liner - Size 5 - 7mm
351-15-21	Punch Liner - Size 1 - 8mm
351-15-22	Punch Liner - Size 2 - 8mm
351-15-23	Punch Liner - Size 3 - 8mm
351-15-24	Punch Liner - Size 4 - 8mm
351-15-25	Punch Liner - Size 5 - 8mm
351-15-31	Punch Liner - Size 1 - 9mm
351-15-32	Punch Liner - Size 2 - 9mm
351-15-33	Punch Liner - Size 3 - 9mm
351-15-34	Punch Liner - Size 4 - 9mm
351-15-35	Punch Liner - Size 5 - 9mm
351-15-41	Punch Liner - Size 1 - 10mm
351-15-42	Punch Liner - Size 2 - 10mm
351-15-43	Punch Liner - Size 3 - 10mm
351-15-44	Punch Liner - Size 4 - 10mm
351-15-45	Punch Liner - Size 5 - 10mm

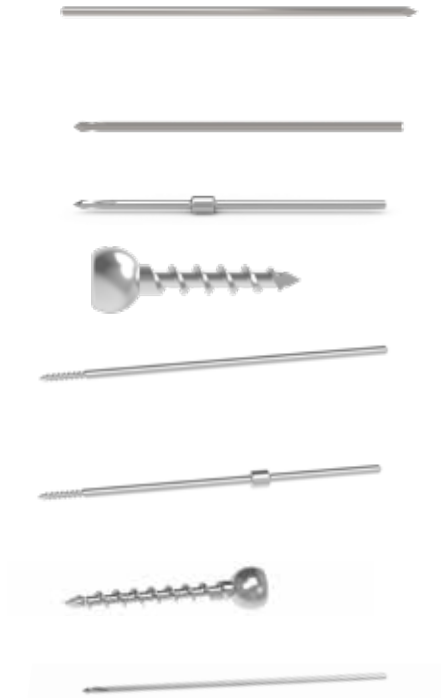


CATALOG NO.	PART DESCRIPTION	
351-15-51	Punch Liner - Size 1 - 11mm	
351-15-52	Punch Liner - Size 2 - 11mm	
351-15-53	Punch Liner - Size 3 - 11mm	
351-15-54	Punch Liner - Size 4 - 11mm	
351-15-55	Punch Liner - Size 5 - 11mm	
351-15-61	Punch Liner - Size 1 - 12mm	
351-15-62	Punch Liner - Size 2 - 12mm	
351-15-63	Punch Liner - Size 3 - 12mm	
351-15-64	Punch Liner - Size 4 - 12mm	
351-15-65	Punch Liner - Size 5 - 12mm	
351-17-00	Tibial Impactor Tip	
351-17-01	Tibial Protector	
351-17-03	Tibial Inserter	
351-21-01	Liner Trial - Fixed Bearing - Size 1- Left - 6mm	
351-21-02	Liner Trial - Fixed Bearing - Size 2 - Left - 6mm	
351-21-03	Liner Trial - Fixed Bearing - Size 3 - Left - 6mm	
351-21-04	Liner Trial - Fixed Bearing - Size 4 - Left - 6mm	
351-21-05	Liner Trial - Fixed Bearing - Size 5 - Left - 6mm	
351-22-01	Liner Trial - Fixed Bearing - Size 1 - Right - 6mm	
351-22-02	Liner Trial - Fixed Bearing - Size 2 - Right - 6mm	
351-22-03	Liner Trial - Fixed Bearing - Size 3 - Right - 6mm	
351-22-04	Liner Trial - Fixed Bearing - Size 4 - Right - 6mm	
351-22-05	Liner Trial - Fixed Bearing - Size 5 - Right - 6mm	
351-21-11	Liner Trial - Fixed Bearing - Size 1 - Left - 7mm	
351-21-12	Liner Trial - Fixed Bearing - Size 2 - Left - 7mm	
351-21-13	Liner Trial - Fixed Bearing - Size 3 - Left - 7mm	
351-21-14	Liner Trial - Fixed Bearing - Size 4 - Left - 7mm	
351-21-15	Liner Trial - Fixed Bearing - Size 5 - Left - 7mm	

## INSTRUMENT LISTING

<b>CATALOG NO.</b>	<b>PART DESCRIPTION</b>
351-22-11	Liner Trial - Fixed Bearing - Size 1 - Right - 7mm
351-22-12	Liner Trial - Fixed Bearing - Size 2 - Right - 7mm
351-22-13	Liner Trial - Fixed Bearing - Size 3 - Right - 7mm
351-22-14	Liner Trial - Fixed Bearing - Size 4 - Right - 7mm
351-22-15	Liner Trial - Fixed Bearing - Size 5 - Right - 7mm
351-21-21	Liner Trial - Fixed Bearing - Size 1 - Left - 8mm
351-21-22	Liner Trial - Fixed Bearing - Size 2 - Left - 8mm
351-21-23	Liner Trial - Fixed Bearing - Size 3 - Left - 8mm
351-21-24	Liner Trial - Fixed Bearing - Size 4 - Left - 8mm
351-21-25	Liner Trial - Fixed Bearing - Size 5 - Left - 8mm
351-22-21	Liner Trial - Fixed Bearing - Size 1 - Right - 8mm
351-22-22	Liner Trial - Fixed Bearing - Size 2 - Right - 8mm
351-22-23	Liner Trial - Fixed Bearing - Size 3 - Right - 8mm
351-22-24	Liner Trial - Fixed Bearing - Size 4 - Right - 8mm
351-22-25	Liner Trial - Fixed Bearing - Size 5 - Right - 8mm
351-21-31	Liner Trial - Fixed Bearing - Size 1 - Left - 9mm
351-21-32	Liner Trial - Fixed Bearing - Size 2 - Left - 9mm
351-21-33	Liner Trial - Fixed Bearing - Size 3 - Left - 9mm
351-21-34	Liner Trial - Fixed Bearing - Size 4 - Left - 9mm
351-21-35	Liner Trial - Fixed Bearing - Size 5 - Left - 9mm
351-22-31	Liner Trial - Fixed Bearing - Size 1 - Right - 9mm
351-22-32	Liner Trial - Fixed Bearing - Size 2 - Right - 9mm
351-22-33	Liner Trial - Fixed Bearing - Size 3 - Right - 9mm
351-22-34	Liner Trial - Fixed Bearing - Size 4 - Right - 9mm
351-22-35	Liner Trial - Fixed Bearing - Size 5 - Right - 9mm
351-21-41	Liner Trial - Fixed Bearing - Size 1 - Left - 10mm
351-21-42	Liner Trial - Fixed Bearing - Size 2 - Left - 10mm
351-21-43	Liner Trial - Fixed Bearing - Size 3 - Left - 10mm
351-21-44	Liner Trial - Fixed Bearing - Size 4 - Left - 10mm
351-21-45	Liner Trial - Fixed Bearing - Size 5 - Left - 10mm
351-22-41	Liner Trial - Fixed Bearing - Size 1 - Right - 10mm
351-22-42	Liner Trial - Fixed Bearing - Size 2 - Right - 10mm
351-22-43	Liner Trial - Fixed Bearing - Size 3 - Right - 10mm
351-22-44	Liner Trial - Fixed Bearing - Size 4 - Right - 10mm
351-22-45	Liner Trial - Fixed Bearing - Size 5 - Right - 10mm
351-21-51	Liner Trial - Fixed Bearing - Size 1 - Left - 11mm
351-21-52	Liner Trial - Fixed Bearing - Size 2 - Left - 11mm
351-21-53	Liner Trial - Fixed Bearing - Size 3 - Left - 11mm
351-21-54	Liner Trial - Fixed Bearing - Size 4 - Left - 11mm
351-21-55	Liner Trial - Fixed Bearing - Size 5 - Left - 11mm

CATALOG NO.	PART DESCRIPTION
351-22-51	Liner Trial - Fixed Bearing - Size 1 - Right - 11mm
351-22-52	Liner Trial - Fixed Bearing - Size 2 - Right - 11mm
351-22-53	Liner Trial - Fixed Bearing - Size 3 - Right - 11mm
351-22-54	Liner Trial - Fixed Bearing - Size 4 - Right - 11mm
351-22-55	Liner Trial - Fixed Bearing - Size 5 - Right - 11mm
351-21-61	Liner Trial - Fixed Bearing - Size 1 - Left - 12mm
351-21-62	Liner Trial - Fixed Bearing - Size 2 - Left - 12mm
351-21-63	Liner Trial - Fixed Bearing - Size 3 - Left - 12mm
351-21-64	Liner Trial - Fixed Bearing - Size 4 - Left - 12mm
351-21-65	Liner Trial - Fixed Bearing - Size 5 - Left - 12mm
351-22-61	Liner Trial - Fixed Bearing - Size 1 - Right - 12mm
351-22-62	Liner Trial - Fixed Bearing - Size 2 - Right - 12mm
351-22-63	Liner Trial - Fixed Bearing - Size 3 - Right - 12mm
351-22-64	Liner Trial - Fixed Bearing - Size 4 - Right - 12mm
351-22-65	Liner Trial - Fixed Bearing - Size 5 - Right - 12mm
351-90-00	Tibial Tubercle Pin, 14mm
351-90-01	2.4mm x 3.5" Fluted Drill Bit
351-90-02	2.4mm x 2.5" Fluted Drill Bit
351-90-03	2.4mm x 3.5" Olive Pin
351-90-04	Talar Trial Screw
351-90-05	2.4mm x 3.5" Threaded Pin
351-90-06	2.4mm x 3.5" Threaded Olive Pin
351-90-07	Long Talar Trial Screw
351-90-08	2.4mm x 4.5" Fluted Pin
351-90-20	Tibial Tubercle Pin Pouch (sterile)
351-90-21	2.4mm x 3.5" Fluted Pin Pouch (sterile)
351-90-22	2.4mm x 2.5" Fluted Pin Pouch (sterile)
351-90-23	2.4mm x 3.5" Fluted Olive Pin Pouch (sterile)
351-90-24	Talar Trial Screw Pouch (sterile)



## INSTRUMENT & IMPLANT LISTING

### CATALOG NO. PART DESCRIPTION

351-91-02 Komet Saw Blade, KMS0812.S63 STE  
 351-91-03 Reciprocating Komet Saw Blade, KM252R STE

351-93-01 Modular Impactor Handle

351-93-02 Hex Driver with Zimmer/Hudson Connection



350-01-01 Talar Implant - Size 1 - Left

350-01-02 Talar Implant - Size 2 - Left

350-01-03 Talar Implant - Size 3 - Left

350-01-04 Talar Implant - Size 4 - Left

350-01-05 Talar Implant - Size 5 - Left

350-02-01 Talar Implant - Size 1 - Right

350-02-02 Talar Implant - Size 2 - Right

350-02-03 Talar Implant - Size 3 - Right

350-02-04 Talar Implant - Size 4 - Right

350-02-05 Talar Implant - Size 5 - Right



350-03-01 Flat Cut Talus - Size 1 - Left

350-03-02 Flat Cut Talus - Size 2 - Left

350-03-03 Flat Cut Talus - Size 3 - Left

350-03-04 Flat Cut Talus - Size 4 - Left

350-03-05 Flat Cut Talus - Size 5 - Left

350-04-01 Flat Cut Talus - Size 1 - Right

350-04-02 Flat Cut Talus - Size 2 - Right

350-04-03 Flat Cut Talus - Size 3 - Right

350-04-04 Flat Cut Talus - Size 4 - Right

350-04-05 Flat Cut Talus - Size 5 - Right



350-10-01 Locking Clip - Size 1

350-10-02 Locking Clip - Size 2

350-10-03 Locking Clip - Size 3

350-10-04 Locking Clip - Size 4



350-11-01 Tibial Implant - Fixed Bearing - Size 1 - Left

350-11-02 Tibial Implant - Fixed Bearing - Size 2 - Left

350-11-03 Tibial Implant - Fixed Bearing - Size 3 - Left

350-11-04 Tibial Implant - Fixed Bearing - Size 4 - Left

350-12-01 Tibial Implant - Fixed Bearing - Size 1 - Right

350-12-02 Tibial Implant - Fixed Bearing - Size 2 - Right

350-12-03 Tibial Implant - Fixed Bearing - Size 3 - Right

350-12-04 Tibial Implant - Fixed Bearing - Size 4 - Right





CATALOG NO.	PART DESCRIPTION
350-23-01	Activit-E Fixed Bearing Tibial Insert - Left - Size 1 - 6mm
350-23-02	Activit-E Fixed Bearing Tibial Insert - Left - Size 2 - 6mm
350-23-03	Activit-E Fixed Bearing Tibial Insert - Left - Size 3 - 6mm
350-23-04	Activit-E Fixed Bearing Tibial Insert - Left - Size 4 - 6mm
350-23-05	Activit-E Fixed Bearing Tibial Insert - Left - Size 5 - 6mm
350-23-11	Activit-E Fixed Bearing Tibial Insert - Left - Size 1 - 7mm
350-23-12	Activit-E Fixed Bearing Tibial Insert - Left - Size 2 - 7mm
350-23-13	Activit-E Fixed Bearing Tibial Insert - Left - Size 3 - 7mm
350-23-14	Activit-E Fixed Bearing Tibial Insert - Left - Size 4 - 7mm
350-23-15	Activit-E Fixed Bearing Tibial Insert - Left - Size 5 - 7mm
350-23-21	Activit-E Fixed Bearing Tibial Insert - Left - Size 1 - 8mm
350-23-22	Activit-E Fixed Bearing Tibial Insert - Left - Size 2 - 8mm
350-23-23	Activit-E Fixed Bearing Tibial Insert - Left - Size 3 - 8mm
350-23-24	Activit-E Fixed Bearing Tibial Insert - Left - Size 4 - 8mm
350-23-25	Activit-E Fixed Bearing Tibial Insert - Left - Size 5 - 8mm
350-23-31	Activit-E Fixed Bearing Tibial Insert - Left - Size 1 - 9mm
350-23-32	Activit-E Fixed Bearing Tibial Insert - Left - Size 2 - 9mm
350-23-33	Activit-E Fixed Bearing Tibial Insert - Left - Size 3 - 9mm
350-23-34	Activit-E Fixed Bearing Tibial Insert - Left - Size 4 - 9mm
350-23-35	Activit-E Fixed Bearing Tibial Insert - Left - Size 5 - 9mm
350-23-41	Activit-E Fixed Bearing Tibial Insert - Left - Size 1 - 10mm
350-23-42	Activit-E Fixed Bearing Tibial Insert - Left - Size 2 - 10mm
350-23-43	Activit-E Fixed Bearing Tibial Insert - Left - Size 3 - 10mm
350-23-44	Activit-E Fixed Bearing Tibial Insert - Left - Size 4 - 10mm
350-23-45	Activit-E Fixed Bearing Tibial Insert - Left - Size 5 - 10mm
350-23-51	Activit-E Fixed Bearing Tibial Insert - Left - Size 1 - 11mm
350-23-52	Activit-E Fixed Bearing Tibial Insert - Left - Size 2 - 11mm
350-23-53	Activit-E Fixed Bearing Tibial Insert - Left - Size 3 - 11mm
350-23-54	Activit-E Fixed Bearing Tibial Insert - Left - Size 4 - 11mm
350-23-55	Activit-E Fixed Bearing Tibial Insert - Left - Size 5 - 11mm
350-23-61	Activit-E Fixed Bearing Tibial Insert - Left - Size 1 - 12mm
350-23-62	Activit-E Fixed Bearing Tibial Insert - Left - Size 2 - 12mm
350-23-63	Activit-E Fixed Bearing Tibial Insert - Left - Size 3 - 12mm
350-23-64	Activit-E Fixed Bearing Tibial Insert - Left - Size 4 - 12mm
350-23-65	Activit-E Fixed Bearing Tibial Insert - Left - Size 5 - 12mm



## IMPLANT LISTING

<b>CATALOG NO.</b>	<b>PART DESCRIPTION</b>
350-24-01	Activit-E Fixed Bearing Tibial Insert - Right - Size 1 - 6mm
350-24-02	Activit-E Fixed Bearing Tibial Insert - Right - Size 2 - 6mm
350-24-03	Activit-E Fixed Bearing Tibial Insert - Right - Size 3 - 6mm
350-24-04	Activit-E Fixed Bearing Tibial Insert - Right - Size 4 - 6mm
350-24-05	Activit-E Fixed Bearing Tibial Insert - Right - Size 5 - 6mm
350-24-11	Activit-E Fixed Bearing Tibial Insert - Right - Size 1 - 7mm
350-24-12	Activit-E Fixed Bearing Tibial Insert - Right - Size 2 - 7mm
350-24-13	Activit-E Fixed Bearing Tibial Insert - Right - Size 3 - 7mm
350-24-14	Activit-E Fixed Bearing Tibial Insert - Right - Size 4 - 7mm
350-24-15	Activit-E Fixed Bearing Tibial Insert - Right - Size 5 - 7mm
350-24-21	Activit-E Fixed Bearing Tibial Insert - Right - Size 1 - 8mm
350-24-22	Activit-E Fixed Bearing Tibial Insert - Right - Size 2 - 8mm
350-24-23	Activit-E Fixed Bearing Tibial Insert - Right - Size 3 - 8mm
350-24-24	Activit-E Fixed Bearing Tibial Insert - Right - Size 4 - 8mm
350-24-25	Activit-E Fixed Bearing Tibial Insert - Right - Size 5 - 8mm
350-24-31	Activit-E Fixed Bearing Tibial Insert - Right - Size 1 - 9mm
350-24-32	Activit-E Fixed Bearing Tibial Insert - Right - Size 2 - 9mm
350-24-33	Activit-E Fixed Bearing Tibial Insert - Right - Size 3 - 9mm
350-24-34	Activit-E Fixed Bearing Tibial Insert - Right - Size 4 - 9mm
350-24-35	Activit-E Fixed Bearing Tibial Insert - Right - Size 5 - 9mm
350-24-41	Activit-E Fixed Bearing Tibial Insert - Right - Size 1 - 10mm
350-24-42	Activit-E Fixed Bearing Tibial Insert - Right - Size 2 - 10mm
350-24-43	Activit-E Fixed Bearing Tibial Insert - Right - Size 3 - 10mm
350-24-44	Activit-E Fixed Bearing Tibial Insert - Right - Size 4 - 10mm
350-24-45	Activit-E Fixed Bearing Tibial Insert - Right - Size 5 - 10mm
350-24-51	Activit-E Fixed Bearing Tibial Insert - Right - Size 1 - 11mm
350-24-52	Activit-E Fixed Bearing Tibial Insert - Right - Size 2 - 11mm
350-24-53	Activit-E Fixed Bearing Tibial Insert - Right - Size 3 - 11mm
350-24-54	Activit-E Fixed Bearing Tibial Insert - Right - Size 4 - 11mm
350-24-55	Activit-E Fixed Bearing Tibial Insert - Right - Size 5 - 11mm
350-24-61	Activit-E Fixed Bearing Tibial Insert - Right - Size 1 - 12mm
350-24-62	Activit-E Fixed Bearing Tibial Insert - Right - Size 2 - 12mm
350-24-63	Activit-E Fixed Bearing Tibial Insert - Right - Size 3 - 12mm
350-24-64	Activit-E Fixed Bearing Tibial Insert - Right - Size 4 - 12mm
350-24-65	Activit-E Fixed Bearing Tibial Insert - Right - Size 5 - 12mm



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For additional device information, refer to the Exactech Vantage® Total Ankle—Instructions for Use for a device description, indications, contraindications, precautions, and warnings. For further product information, please contact Customer Service, Exactech, Inc., 2320 NW 66th Court, Gainesville, Florida 32653-1630, USA. (352) 377-1140, (800) 392-2832 or FAX (352) 378-2617.

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**EXACTECH, INC.**  
2320 NW 66TH COURT  
GAINESVILLE, FL 32653 USA

+1 352.377.1140  
+1 800.EXACTECH  
+1 352.378.2617 (FAX)  
[www.exac.com](http://www.exac.com)