Surgical Technique

Tahoe Uni Knee System

Shalby Advanced Technologies, Inc.
Restoring Mobility, Improving Lives.

INDICATIONS AND USAGE

The Tahoe Unicompartmental Knee System (TUKS) is designed as a system and is not intended for substitution of components from other systems.

The indications for use are as follows:

A. Primary medial or lateral compartmental intervention of (1) primary non-inflammatory degenerative disease, including osteoarthritis, traumatic arthritis, or osteonecrosis; (2) post-traumatic degenerative disease; (3) varus or valgus deformities; and (4) damage due to previous surgical intervention when the opposite compartment is preserved and when the anterior cruciate, posterior cruciate, medial collateral, and lateral collateral ligaments are present and functional.
B. All TUKS implants are single use only and are intended for implantation only with bone cement.

Contraindications

A. Any active or suspected latent infection in or about the knee joint.
B. Mental or neuromuscular disorders which would create unacceptable risk of prosthesis instability or complications in post-operative care.
C. Bone stock compromised by disease, infection, or prior implantation that cannot provide adequate support and fixation of the device.
D. Ligamentous or severe muscle laxity or inadequate soft tissue coverage to allow for the normal healing process and for proper mechanics to be re-established.
E. Conditions which tend to place increased loads on implants, such as age, weight, and activity level which are incompatible with a satisfactory clinical long-term result.
F. Severe deterioration of the opposite compartment or the patellofemoral joint.

Tahoe Uni Knee System (TUKS)

Surgical Technique

Table of Contents

Design Rationale

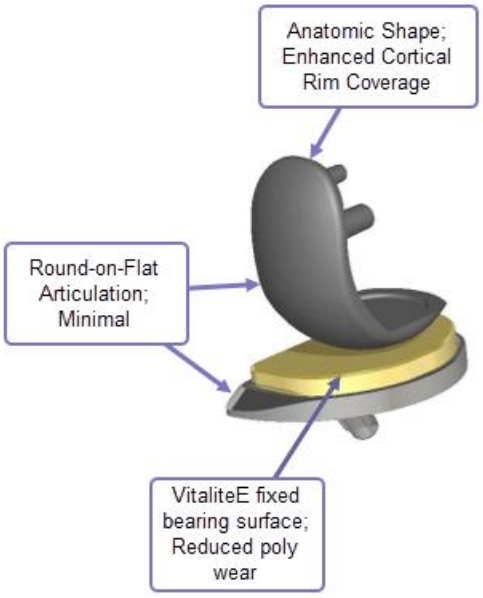
Overview

- The Tahoe Uni Knee System (TUKS) provides a complete unicompartmental knee system offering the surgeon a high level of flexibility and user-friendly instrumentation to restore the affected medial or lateral knee compartments.
- The TUKS is designed with a fixed-bearing round-on-flat articulation, a wide range of sizing, cutting-edge materials, and anatomical features to deliver optimal knee stability, ample range-of-motion, minimal poly wear, maximum bone coverage, maximum bone preservation, and minimal soft tissue impact.
- The TUKS instrument platform offers a streamlined, user-friendly approach to optimize intra-operative time and flexibility.

Design Rationale (Continued)

Femoral Component

Femoral components are manufactured from CoCr alloy and are available in eight symmetric sizes (1, 2, 3, 4, 5, 6, 7, 8). The highly polished articular surface incorporates a triple sagittal radius and constant coronal radius for a more natural fit and similar loading conditions over a large area regardless of flexion angle. The sagittal and coronal radii form a true spherical surface from 10 degrees flexion to 120 degrees flexion (R1) to restore near-natural knee kinematics in flexion and minimize posterior overhang. The sagittal radius becomes larger distally to minimize contact stresses in full extension (R2). The anterior radius pulls the articular surface inward to prevent anterior impingement (R3). The grit blasted backside surface employs a contoured distal surface, a posterior facet, dual pegs, and pockets to enhance bone conservation and cement fixation.



Tibial Baseplate

Tibial baseplates are manufactured from CoCr alloy and are available in nine asymmetric sizes (0, 1, 2, 3, 4, 5, 6, 7, 8, RM/LL, RL/LM). Baseplates incorporate a fully enclosed peripheral rim to allow encapsulation of the tibial insert. Their anatomical shape is designed to maximize cortical rim coverage. There grit-blasted backside surface employs a keel, angled peg, and pockets to enhance cement fixation.

Tibial Insert

Tibial inserts are available in Vitamin-E polyethylene (VitalitE) Inserts come standard in nine symmetric sizes (0, 1, 2, 3, 4, 5, 6, 7, 8) and seven tibial thicknesses (8, 9, 10, 11, 12, 13, 14mm). The superior articular surface is flat to allow unconstrained motion of the femur. Inserts are secured to the baseplate via anterior and posterior locking mechanisms. Peripheral stabilizer tabs on the insert aid to minimize micro motion.

Implant Size Compatibility

- Due to the round-on-flat tibiofemoral articulation, all femoral component sizes are compatible with all tibial insert sizes.
- The tibial insert must be the exact size as the tibial baseplate.

Trial Size Compatibility

- Due to the round-on-flat tibiofemoral articulation, all femoral trial sizes are compatible with all tibial insert trial sizes.
- With the exception of size 0, tibial insert trial sizes are compatible with multiple tibial baseplate trial sizes as shown.

Sizing Charts

Tibial Baseplate Implant	Tibial Insert Implant								
	0	1	2	3	4	5	6	7	8
0	x								
1		x							
2			x						
3				x					
4					x				
5						x			
6							x		
7								x	
8									x

Tibial Baseplate Implant / Trial	Tibial Insert Trial				
	0	1/2	3/4	5/6	7/8
0	x				
1		x			
2		x			
3			x		
4			x		
5				x	
6				x	
7					x
8					x

Tibial Insert Implant	Femoral Component Implant / Trial							
	1	2	3	4	5	6	7	8
0	x	x	x	x	x	x	x	x
1	x	x	x	x	x	x	x	x
2	x	x	x	x	x	x	x	x
3	x	x	x	x	x	x	x	x
4	x	x	x	x	x	x	x	x
5	x	x	x	x	x	x	x	x
6	x	x	x	x	x	x	x	x
7	x	x	x	x	x	x	x	x
8	x	x	x	x	x	x	x	x

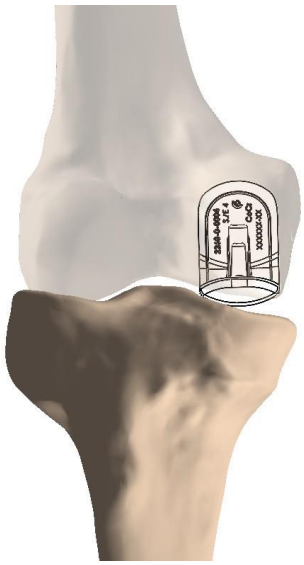
Tibial Insert Trial	Femoral Component Implant / Trial							
	1	2	3	4	5	6	7	8
0	x	x	x	x	x	x	x	x
1/2	x	x	x	x	x	x	x	x
3/4	x	x	x	x	x	x	x	x
5/6	x	x	x	x	x	x	x	x
7/8	x	x	x	x	x	x	x	x

Pre-Operative Planning

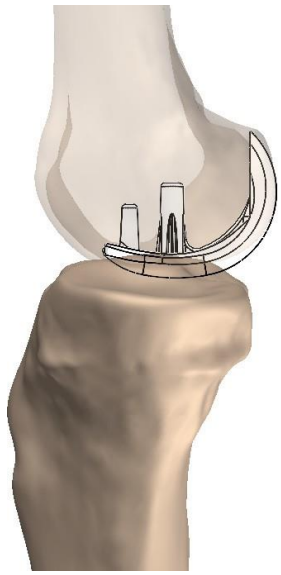
X-ray Templating

- The femoral component can be sized pre-operatively using X-ray templating.
- Lateral View
    - Accurate sizing is achieved using a true lateral radiograph.
- AP View
    - Accurate sizing is achieved using a true axial radiograph.
- In both views, reference the posterior femoral condyle to establish the best fit. Select the smaller size if borderline.
- Final sizing is achieved intra-operatively using the femoral sizer and/or femoral drill guide.

AP Template



LAT Template

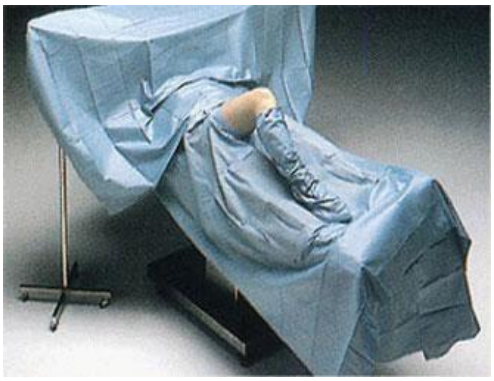


Surgical Technique

Medial Compartment

Surgical Approach

Limb Positioning



- Drape and tourniquet the leg in the supine position.
- Abduct the ipsilateral hip so that the leg hangs free.
- Ensure 120 degrees of flexion is possible.

Incision and Exposure

- Flex knee to 90 degrees.
- Make medial parapatellar incision into joint capsule. Extend the skin incision from superomedial pole of the patella to the medial border of the tibial tuberosity.
- Retract patella laterally, using a bent Hohmann retractor.
- Expose synovial cavity.
- Inspect articular surfaces for cartilage loss.
    - Verify cruciate and collateral ligaments are intact.
    - Excise medial meniscus, avoiding release of MCL fibers.
    - Insert a "Z" retractor to protect MCL fibers.
    - Inspect the lateral and patella femoral compartments for cartilage loss.

Osteophyte Resection

- Remove osteophytes from medial side of femoral condyle and both sides of intercondylar notch to facilitate sizing and avoid obstruction with ACL and MCL.
- Remove osteophytes from tibial plateau anterior to ACL insertion and from top of intercondylar notch.
- Remove any large osteophytes from around the patella.

Tibial Alignment
#3000-0-0081

Ankle Strap
#3000-0-0068

Tibial Cut Block
#3000-1-00XX

Tibial Stylus
#3000-0-0071

Pin Driver
#2801-0-0301

Initial Tibial Prep

Tibial Alignment Guide

- With the knee in flexion, place the tibial alignment guide and tibial cut block against the anterior aspect of the tibia. Initially orient the guide shafts parallel to the long axis of the tibial diaphysis in the sagittal and coronal planes.
- Point the V-shaped ankle clamp towards the medial malleolus just above the ankle. Secure the ankle clamp to the leg with the silicone ankle strap (not shown).
- Adjust the proximal end of the guide so that the tibial cut block lies against the exposed anterior cortex of the proximal tibia. Position the cut block at the desired posterior slope. The guide incorporates a built-in 7 deg posterior slope.
- Place the tibial stylus flat against the deepest part of the defect on the tibial plateau with the built-in 2mm depth gage. After setting the cut depth, the angel wing end of the tibial stylus may be used to visualize the cut profile around the peripheral cortex of tibial plateau.
- Secure the cut block with two parallel pins and an auxiliary A-P pin. A pin driver is available for inserting the auxiliary pin to avoid impingent with the alignment guide.
- Verify adequate tibial slope and that a neutral varus/valgus cut is achieved. A 1-2 degree of varus is ideal. A varus cut is preferable over a valgus cut.

Tibial Resection

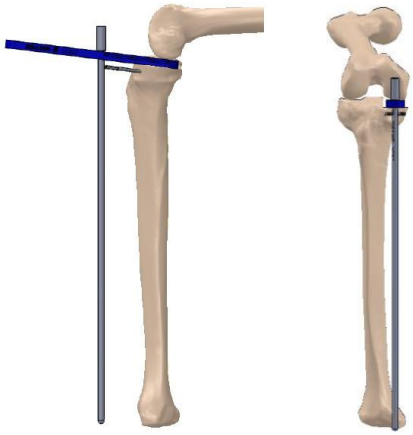
- With the knee in flexion, make the vertical tibial cut with a reciprocating saw down to the established cut depth. Point the saw blade towards the femoral head to ensure adequate A-P tracking in flexion and extension. Cut as close as possible to the ACL and avoid cutting too deep beyond the posterior cortex.
- Make the horizontal tibial cut with an oscillating saw at the established cut depth Avoid undercutting the ACL and cutting too deep beyond the posterior cortex. The reciprocating saw blade may remain in place for use as a guide.

Evaluate Cut Depth

- Verify that ample posterior plateau is removed.
- This can be accomplished by inspecting the posterior plateau and the resected tibial plateau.
- Similar anterior and posterior thickness indicated a well-matched tibial slope.
- Utilize an 8mm spacer to verify that the FG is appropriate and assess slope.
- Too tight, if spacer is difficult to insert.
- Too loose, if there is minimal friction.

Spacer Block
#3000-0-XXXX

Alignment Rod
#3000-0-6416



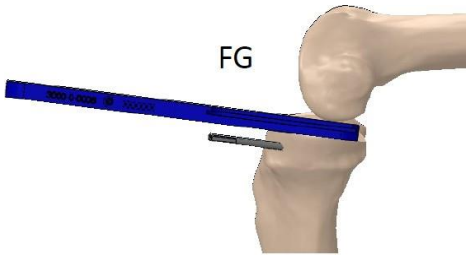
Evaluate Cut Placement

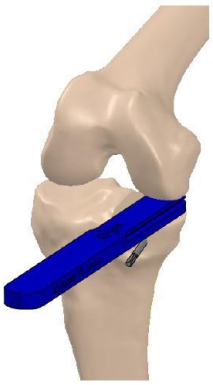
- Remove the A-P auxiliary pin and cut block, leaving the two parallel pins in place.
- With the knee in flexion, evaluate cut placement using a spacer block and alignment rod.
- Insert the 8mm spacer block into the resected joint space. The spacer block thickness represents the combined tibial baseplate and insert thickness, therefore select the minimum thickness (at least 8mm) that best fits the resected joint space.
- If the spacer block does not slide in freely, resect additional tibial bone as required. The tibial cut block can be reinserted onto the parallel pins at either 2mm or 4mm below the original horizontal cut.
- If the spacer block fits too loose, then select a thicker spacer block until the spacer block slides in freely, but with minimal play.
- Slide the alignment rod through the hole in the spacer block. The hole is sloped by 7 deg, to match the posterior slope of the tibial alignment guide. Tap the fixation pins further into bone if the pins interfere with the alignment rod.
- Verify adequate orientation of the alignment rod with respect to the long axis of the tibial diaphysis in both planes.

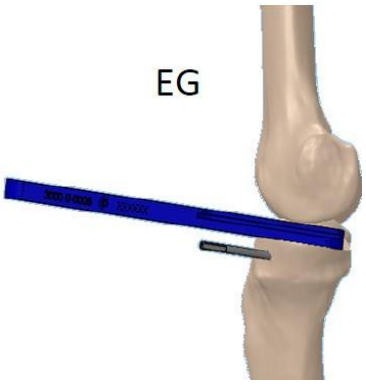
Flexion/Extension Gap (Before Femoral Resection)

Record Flexion Gap

- Remove the alignment rod, leaving the spacer block in place.
- With the knee in flexion, confirm adequate spacer block thickness and record this thickness as the Flexion Gap (FG).
- Remove the spacer block.
- With the knee in full extension, re-insert the 8mm spacer block into the resected joint space.
- Determine the minimum tibial thickness (at least 8mm) that best first the resected joint space. Record this thickness as the Extension Gap (EG).
- If the 8mm spacer block does not slide in freely due to a tight fit, then adjust the tibial cut depth until the 8mm spacer block slides in freely.
- Re-evaluate tibial alignment, FG, and EG if adjustments are made to the horizontal cut.
- Remove spacer block and fixation pins.







Spacer Block
#3000-0-XXXX

Pin Puller
#2801-0-0532

Alignment Rod
#3000-0-6416

Compute Distal Femoral Cut Depth

- Compute the Distal Femoral Cut Depth (DFCD) to determine the sleeve setting on the femoral starter reamer in subsequent steps.
- The cut depth on the starter reamer ranges from 1 to 6mm in 1mm increments.

DFCD=4mm + FG -EG

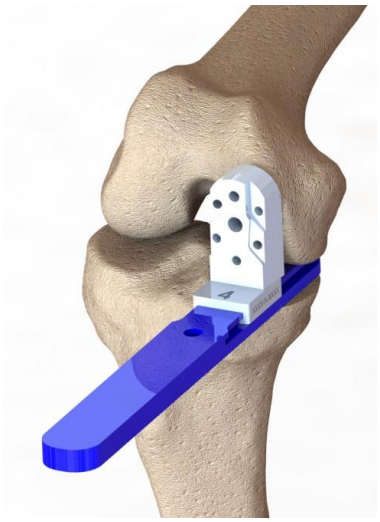
where: 4mm = Distal Femoral component thickness

Dist Fem Thick	FG	EG	Delta (FG-EG)	DFCD Starter Reamer setting [mm]
4	8	8	0	4
4	9	8	1	5
4	10	8	2	6
4	11	8	3	7*
4	12	8	4	8*
4	14	8	6	10*
4	8	9	-1	3
4	9	9	0	4
4	10	9	1	5
4	11	9	2	6
4	12	9	3	7*
4	14	9	5	9*
4	8	10	-2	2
4	9	10	-1	3
4	10	10	0	4
4	11	10	1	5
4	12	10	2	6
4	14	10	4	8*
4	8	11	-3	1
4	9	11	-2	2
4	10	11	-1	3
4	11	11	0	4
4	12	11	1	5
4	14	11	3	7*
4	8	12	-4	0
4	9	12	-3	1
4	10	12	-2	2
4	11	12	-1	3
4	12	12	0	4
4	14	12	2	6
4	8	14	-6	-2*
4	9	14	-5	-1*
4	10	14	-4	0
4	11	14	-3	1
4	12	14	-2	2
4	14	14	0	4

Note: All values in (mm); *Exceeds depth range of femoral starter reamer.

Femoral Sizing

- Determine the appropriate size femoral component with the femoral sizer and or femoral drill guide.
- Femoral Sizer
    - With the knee in flexion, place the tibial spacer block into the joint space.
    - Place the distal profile end of the femoral sizer against the distal femoral condyle and support the posterior end of the sizer on the spacer block.
- Femoral Drill Guide
    - Assemble the femoral drill guide onto the spacer block.
    - With the knee in flexion, insert the spacer block into the joint space and press the drill guide against the distal femoral condyle.
- Size the femoral component in the axial view. Under sizing is preferred to avoid impingement with the patella and surrounding soft tissues.
- Remove all hardware.



Femoral Sizer
#3000-1-160X

Spacer Block
#3000-0-XXXX

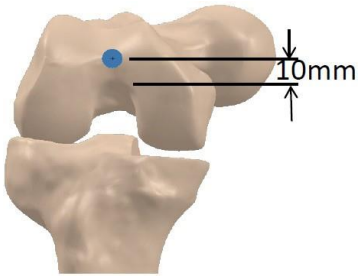
Femoral Drill Guide
#3000-1-170X

IM Drill Guide
#3000-0-4801

Femoral IM
Starter Drill
#3000-0-4802

IM Rod 4mm
#3000-0-4350

IM Rod Cap
#3000-0-0079

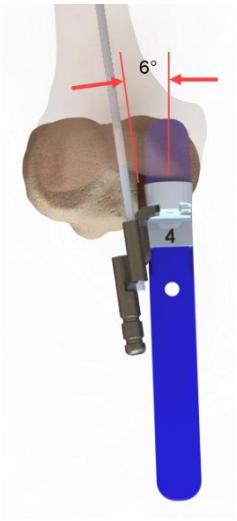


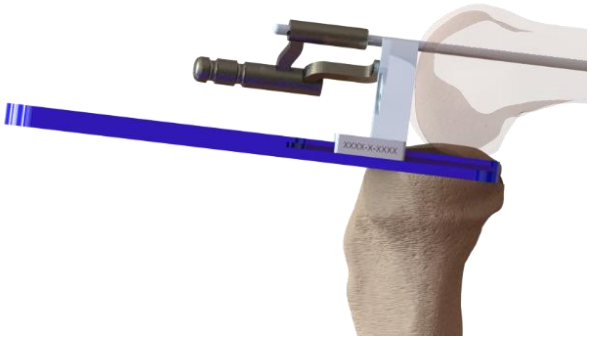
Femoral Alignment (IM Technique)

- With the knee in flexion, drill a hole into the femoral IM canal using the IM drill guide and the Femoral IM starter drill bit.
- Center the drill hole approximately 10mm anterior to the anteromedial corner of the intercondylar notch (or 10mm anterior to PCL insertion) and 2-3 mm lateral to the medial wall of the intercondylar notch.
- Remove the drill bit and insert IM rod into the 4.8mm hole.
- Attach IM Rod Cap to impact the
- IM Rod, leaving the 4mm IM rod exposed by 40-50mm.

Femoral Alignment (Continued)

- Slide the femoral drill guide onto the spacer block that best fits the flexion gap, as previously determined.
- With the knee in flexion, insert the spacer block and press the femoral drill guide against the distal femoral condyle.
- Slide the Femoral IM Linkage onto the IM Rod.
- Insert the Femoral IM Linkage pin into the appropriate linkage hole (RM or LM) on the Femoral Drill Guide.
- The linkage will hold the IM rod parallel to the resected tibial slope when viewed laterally and parallel to the 6 deg valgus side wall of the femoral drill guide when viewed from above. This results in placing the drill guide in-line with the femoral mechanical axis.
- NOTE – Femoral sizing is possible using the femoral drill guide prior to drilling the peg holes since the overall height of the drill guide relative to the superior surface of the spacer block and overall width of the drill guide match those of the femoral component. However, further femoral sizing is not possible after drilling the peg holes.





Spacer Block
#3000-0-XXXX

Femoral Drill Guide
#3000-1-170X

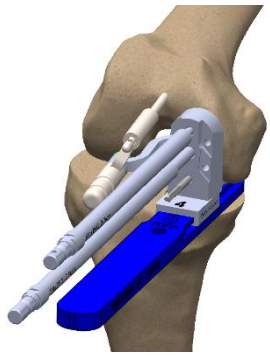
Femoral IM Linkage
#3000-0-0111

Femoral IM Linkage
#3000-0-0111

3.7mm Femoral
Stop Drill
#3000-1-0037

5.2mm Femoral
Stop Drill
#3000-1-0052

IM Rod Extractor
T Handle
#3000-0-0076



Initial Femoral Prep

Femoral Peg Prep

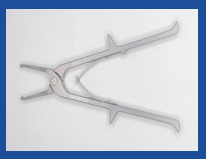
- Ensure the IM linkage is fully seated.
- Pin the femoral drill guide to the distal femoral condyle with a 3.2mm fixation pin placed through the posterior auxiliary hole. A pin driver may be necessary to clear the spacer block.
- Drill the smaller anterior peg hole with the 3.7mm femoral stop drill Leave the stop drill in place to help support the drill guide.
- Drill the larger posterior hole with the 5.2mm femoral stop drill.
- Remove both stop drills and remaining hardware.
- Use the IM rod extractor T-handle, into the hole in the IM rod to remove the IM rod.

Initial Femoral Prep

Initial Femoral Prep

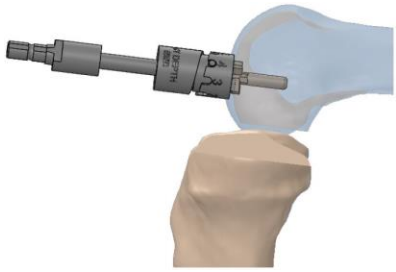
- With the knee in flexion, slide the anterior and posterior pegs of the femoral posterior cut block into their respective peg holes.
- Pin the cut block with a 3.2m fixation pin through the auxiliary pin hole oriented oblique and pointing towards the intercondylar notch.
- Make the femoral posterior cut with an oscillating saw. Position the saw blade against and press the saw blade against the inferior cutting surface to maintain a flat cutting plane. The posterior cut block is designed to remove 6mm of bone and cartilage to match the posterior thickness of the femoral component.
- Remove all hardware for preparation of the distal femoral cut.
- Use the Femoral Extractor forceps style to remove the cutting block.

Femoral Cut Block
#3000-1-151X



Femoral Extractor
Forceps Style
#3000-0-0077

Femoral Starter Reamer #3000-0-0100



DFCD = 4mm + (FG – EG)
where:
4mm = Distal femoral component thickness

Distal Femoral Cut Depth (DFCD)

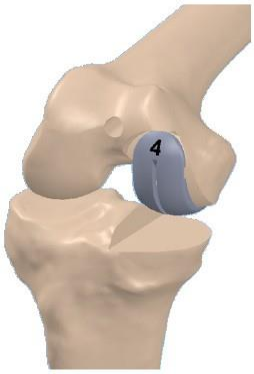
Femoral Spherical Reamer #3000-1-010X

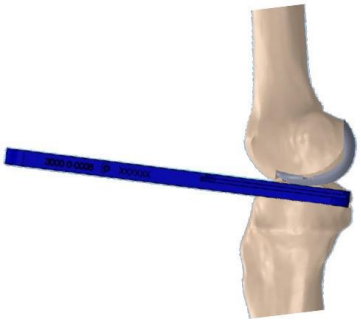
Distal Femoral Resection

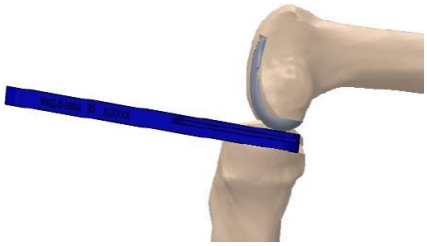
- Set the cut depth on the femoral starter reamer to match the Distal Femoral Cut Depth (DFCD previously computed from the Flexion Gap (FG and Extension Gap (EG).
- The markings on the sleeve represent the computed DFCD ranging from 1mm to 6mm in 1 mm increments. The cut depth will be 4mm when FG and EG are equal.
- With the knee in flexion, insert the pilot tip of the starter reamer into the larger peg hole (posterior to the smaller peg hole) and ream a counter bore until the sleave bottoms out. The base of the counter bore establishes the depth of the femoral spherical reamer in the next step.
- Remove the starter reamer.
- Select the appropriate size spherical reamer.
- Insert the pilot tip of the spherical reamer into the larger posterior peg hole and ream to the desired depth achieved with the starter reamer. The spherical reamer should bottom out against the base of the counter bore formed by the starter reamer.
- Tangentially trim any remaining bone and/or osteophytes posterior to the reamed surface to allow full seating of the femoral component.

Flexion / Extension Gap after Femoral Resection with Femoral Trial

- With the knee in flexion, tap the appropriate size femoral trial flush against the prepared femoral condyle using the plastic tibial/femoral impactor.
- Flexion Gap (FG)
    - Insert a spacer block into the joint space and verify adequate FG. If the 8mm spacer block fits too tight, then remove additional bone from the tibial plateau to achieve an 8mm FG. Avoid further resection of the femoral posterior cut.
- Extension Gap (EG)
    - Remove the spacer block before placing the knee in full extension.
    - With the knee in full extension, insert a spacer block into the joint space and verify adequate EG. If the 8mm spacer block fits too tight, then remove additional bone from the distal femoral condyle to achieve at least an 8mm EG, or whichever matches the FG.
- The flexion and extension gaps should be equal.







Femoral Trial
#3260-1-000X

Plastic Tibial /
Femoral Impactor
#3000-0-0061

Tibial Sizer
Feeler Gage
#3600-0-0110

Tibial Prep/Trial
#3603-0-010X

Tibial Sizing

- With the knee in flexion, remove the femoral trial and place the tibial sizer feeler- gage into the joint space. Hang the 90 deg hook over the posterior cortex and pull anterior on the sizer until the hook engages the posterior cortex. This ensures maximum coverage and minimal overhang posteriorly.
- Select the size that best matches the resected tibial plateau.
- Introduce the selected tibial prep guide.
- If the sizer overhangs medially by 2mm or more, select a smaller size or remove additional bone from the vertical cut being careful not to damage the ACL.

Tibial Prep

- With the knee in flexion, secure the appropriate size Tibial Prep Guide Chisel onto the resected tibial plateau.
- Apply the sizer handle while pressing the prep guide firmly against the horizontal and vertical cuts.
- Create the keel cavity using the Sized Tibial Prep Guide. Each Prep Guide has a chisel on its underside to prepare the tibial plateau.
- Impact the Prep Guide with the C-impactor until it is flush with the tibial resection.
- The Tibial Prep Guide remains in-place as all prep and trialing are completed.

Tibial Prep/Trial
#3603-0-010X

C Impactor
#3000-0-0073

Tibial Peg
Stop Drill
#3000-0-0110

Final Tibial Prep

- With the knee in flexion, insert the tibial stop drill into the guide hole of the tibial prep guide.
- Remove the stop drill and leave the tibial prep guide in place for trial reduction.

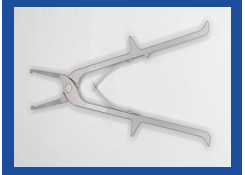
Trial Reduction

- With the knee in flexion, tap the appropriate size femoral trial flush against the prepared femoral condyle using the plastic tibial/femoral impactor.
- Select a tibial insert trial of appropriate size and thickness; and slide the tibial insert trial onto the tibial prep guide.
- Run the knee through its range of motion to verify adequate joint stability and the absence of impingement.
- Ensure that 1-2mm of distraction is possible between implant bearing surfaces when a valgus force is applied to the knee at 20 degrees flexion.
- The femoral component should fit relatively firm against the tibial insert with minimal distraction at full extension.

Femoral Trial
#3260-1-000X

Plastic Tibial /
Femoral Impactor
#3000-0-0061

Tibial Insert Trial
#3060-0-XXXX



Femoral Extractor Forceps Style #3000-0-0077

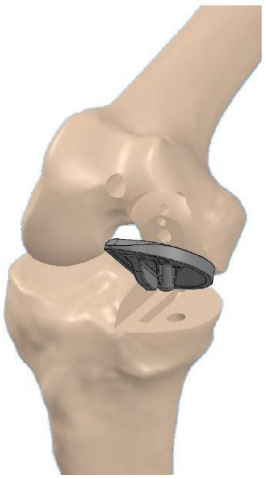
Final Femoral Prep

- Remove the tibial prep guide to make room for femoral keel preparation.
- With the knee in flexion, insert a reciprocating saw blade into the sagittal slot of the femoral trial. Saw until the blade bottoms out against the base of the slot.
- Remove the saw blade.
- Remove the femoral trial which can be done using the Femoral Extractor Tool.

Implantation

Tibial Baseplate

- Apply cement to the prepared tibial plateau, pressing cement into the keel cavity and peg hole.
- Select the appropriate size tibial baseplate and apply cement over the entire backside of the implant.
- With the knee in flexion, tap the baseplate flush against the resected tibial plateau using the baseplate impactor. Tap in-line with the peg hole, which is angled 30 degrees posterior.
- Remove excess cement from around the implant and clear any debris from the top side surfaces for proper engagement with the tibial insert.



Femoral Component

- Apply cement to the prepared femoral condyle, pressing cement into the larger femoral peg hole.
- Select the appropriate size femoral component and apply cement over the entire backside surface of the implant.
- With the knee in flexion, tap the femoral component flush against the prepared femoral condyle using the plastic tibial/femoral impactor. Install in-line with the femoral pegs.
- Remove excess cement from around the implant.

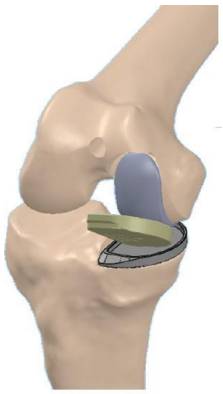
Cement Pressurization

- Temporarily install the tibial insert trial to pressurize the cement during polymerization. Hold the knee at 45 degrees flexion while the cement sets. Do not fully extend or flex the knee while setting the cement as this may loosen the implants.
- Remove the tibial insert trial after the cement has set. Clear remaining cement debris from around the implants.
- Reassess the tibiofemoral gap using the tibial insert trial to check for gap closure due to the cement mantle.

Tibial Insert

WARNING: TIBIAL INSERT ENGRAVING MARKS MUST BE PLACED INFERIORLY TO LOCK INSERT INTO THE BASEPLATE. SURGEON TO CONFIRM INSTALLATION.

- With the knee in flexion, snap the appropriate size thickness tibial insert onto the baseplate.
- Seat the tibial insert posterior first then impact the anterior rim.
- Close the wound.



Surgical Technique

Lateral Compartment

Key Differences from Medial Compartment

Surgical Approach

- Make lateral parapatellar incision into joint capsule.
- Extend skin incision from superolateral pole of the
- patella to the lateral border of the tibial tuberosity.
- Retract patella medially.
- Excise lateral meniscus, avoiding release of LCL fibers.
- Remove osteophytes from lateral side of femoral condyle.

Initial Tibial Prep

- Align tibial cut block for lateral tibial resection.
- Align vertical cut with plane internally rotated by 10-15 deg to compensate for screw-home mechanism (Pennington et al., 2006).

Flexion / Extension Gaps (before Femoral Resection)

- Same general procedure.

Femoral Sizing

- Same general procedure.

Femoral Alignment

- Slide IM linkage pin into RL or LL pin hole of the femoral drill guide.

Initial Femoral Prep

- Same general procedure.

Flexion / Extension Gap after Femoral Resection with Femoral Trial

- Same general procedure.

Tibial Sizing and Final Tibial Prep

- Lateral overhang should be less than 2mm.

Trial Reduction

- Same general procedure.

Final Femoral Prep

- Same general procedure.

Implantation

- Same general procedure.

References

- Pennington DW, Swienckowski JJ, Lutes WB, Drake GN. Lateral Unicompartmental Knee Arthroplasty Survivorship and Technical Considerations at an Average Follow-Up of 12.4 Years. The Journal of Arthroplasty, v21, n1, p13-17, 2006