

Surgical Technique – Summary

1. Distal femoral resection

Ensure there is contact between the valgus alignment guide and the distal femur. Resection from the distal femur will measure from the depth indicated on the cutting guide. The minimal recommended femoral resection is 9.5mm from distal medial condyle.

Note A 1.35mm thickness sawblade is required for all cutting blocks.

Note If there is significant medial wear consider resecting less distal femur to restore the pre-arthritic medial joint line.

2. Proximal tibial resection

Attach the tibial stylus to the tibial cutting block by inserting the stylus foot into the cutting slot.

Lower the cutting block until the stylus touches the center point on the least affected side of the tibia. The stylus can be adjusted for a 1-13 mm tibial resection by twisting the knob on top of the stylus. If the medial plateau is to be used as a reference, the depth should be set at 9.5mm. If the lateral side is used as a reference, the depth should be set at 12mm.

The JOURNEY II TKA system is designed to restore the body's natural joint line. This is accomplished through variable resection depths of the respective compartments creating a 3° anatomic joint line.

3. Extension gap assessment

The 10mm Spacer Block should insert easily and the leg should drop passively into full extension to ensure 1mm of laxity.

If the 10mm Spacer Block doesn't fit and sufficient tibia has been resected consider removing 2mm more distal femur.

Note Tibial bone fragment on lateral side should be 10.5 - 11mm thick.

4. Flexion gap assessment

The 10mm Tibial Spacer Block should insert easily between the posterior condyles and the resected tibia in flexion. If the 10mm Tibial Spacer Block feels too loose or too tight, simply exchange the 10mm Shim to achieve balance (e.g. 11mm or 9mm respectively).

Remember the difference between the extension and flexion spacers (e.g. 10mm Ext - 11mm Flex = -1mm Flex Imbalance).

5. Femoral sizing

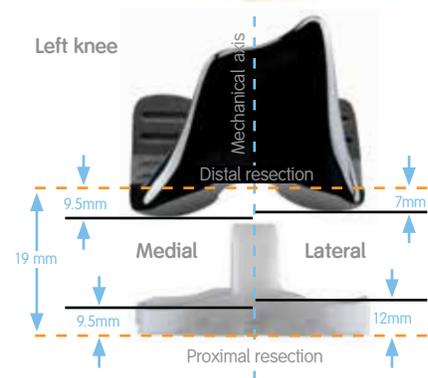
Placement: Mate sizing guide flush to the distal resection. Mate the medial paddle with the apex of the medial posterior condyle. Pin above the medial paddle.

Rotation: Set rotation relative to anatomic landmarks (Posterior Condyle, AP Axis and Epicondylar Axis)

Balance: Adjust AP position to account for any Extension/Flexion mismatch (eg, -1mm)

Finalize: Drill through the holes to set the final AP position and rotation. Then estimate AP Femur size with the stylus (see image for placement).

Note 3mm between femoral A/P sizes.



6. Femoral A/P and chamfer resections

Select the AP cutting block size that minimizes anterior/posterior adjustment to avoid overstuffing the patella femoral joint or femoral notching.

Tip Lock the black knob with 3.5mm hex driver prior to pinning.

With the flexed posterior cut, use retractors and take precautions to protect the popliteus tendon.

Tip After completing all cuts re-face the anterior cut.

7. JOURNEY® II BCS box preparation

Once the anterior flange of the femoral trial is fully seated, place one 30mm rimmed SPEED PIN® through the antero-lateral flange before removing the impactor. Slide the appropriately sized Box Prep Guide onto the femoral trial anterior to posterior. Ream anterior then posterior. Finish prep by chiseling anterior then posterior.

Tip If the femoral doesn't sit down fully, remove it, replace A/P cutting block and re-face all the cuts.

8. Baseplate alignment

Set position of the tibial baseplate based upon the anatomic landmarks of the tibia (best fit, coverage, and medial 1/3 of the tubercle). Pin the baseplate using two 30mm rimmed SPEED PINs.

Tip Alternatively, if free floating is preferred, a single 30mm SPEED PIN in the medial hole of the baseplate will allow rotational freedom while preventing the baseplate from sliding around.

9. Component trialing

The knee should drop passively into full extension.

Under varus/valgus stress, 1-2mm of laxity should be observed throughout the ROM (i.e., 0, 30, 60, 90 and 120°).

After trialing, mark the rotational laseretches with cautery and then punch for the appropriate keel size.

10. Final implantation and closure

Suction the keel prep hole and avoid contaminating implant cement interface surface with fat or other fluids prior to cement application and apply generous amounts of cement to the dry underside of the baseplate, keel and into the keel prep hole.

Engage the articular insert with the leg in 110° of flexion, bring the leg to full extension and lock it in with the Articular Insert Assembly Tool.

During closure, align the extensor mechanism anatomically or close with the knee in flexion.

Refer to the JOURNEY II BCS Surgical Technique (POD# 7128-1582) for additional information.

Nota Bene

The technique description herein is made available to the healthcare professional to illustrate the author's suggested treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is that which addresses the needs of the specific patient.

