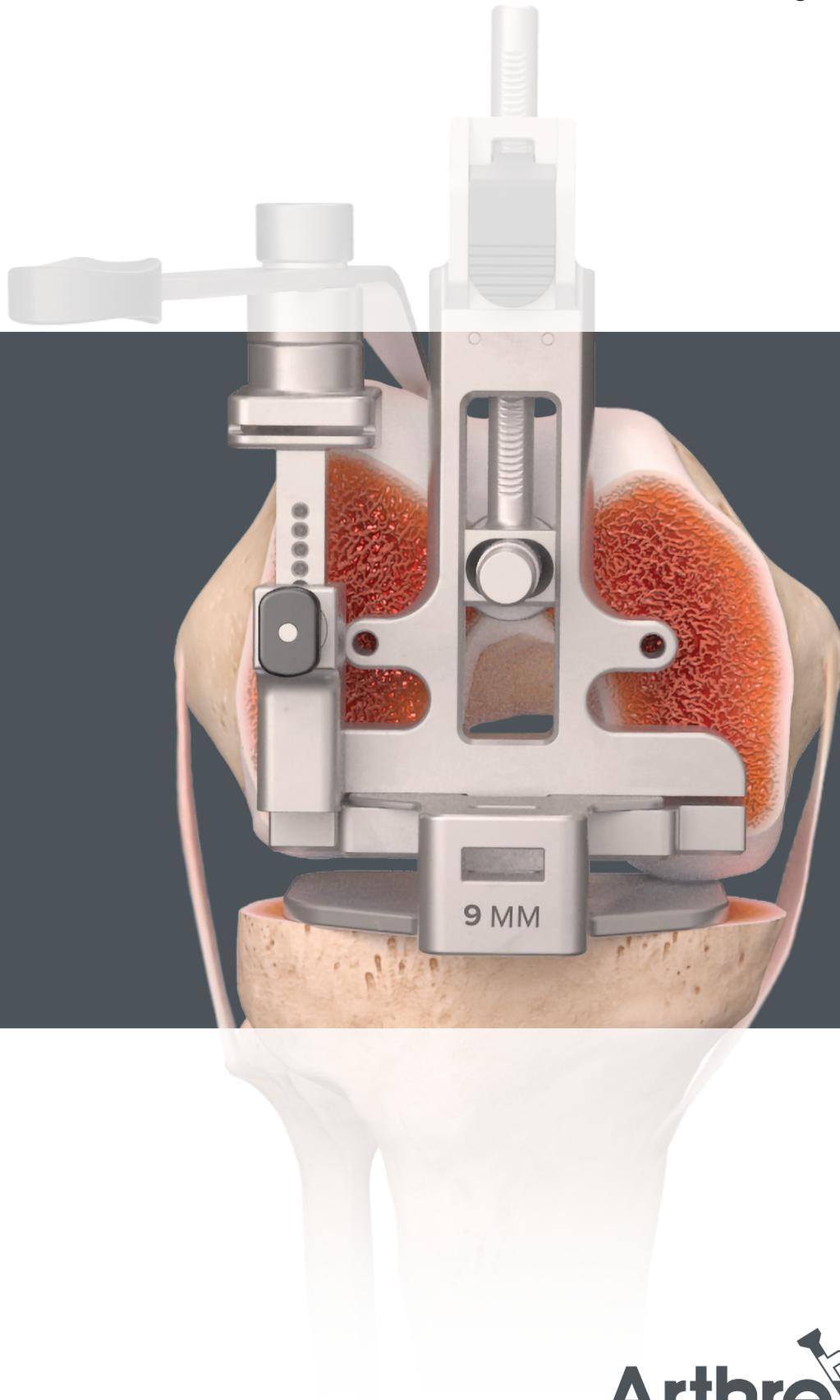


iBalance[®] TKA Ligament Balancing System

Surgical Technique

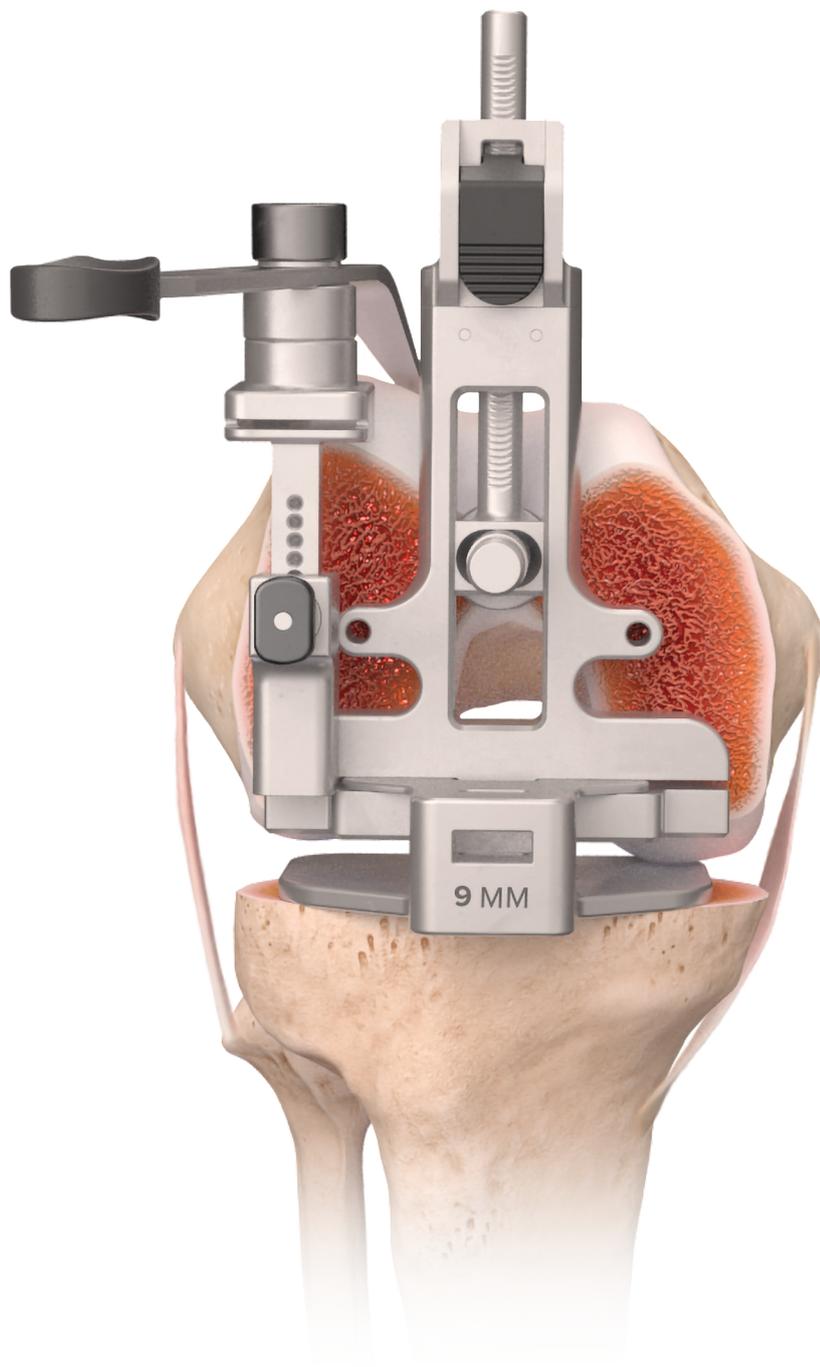


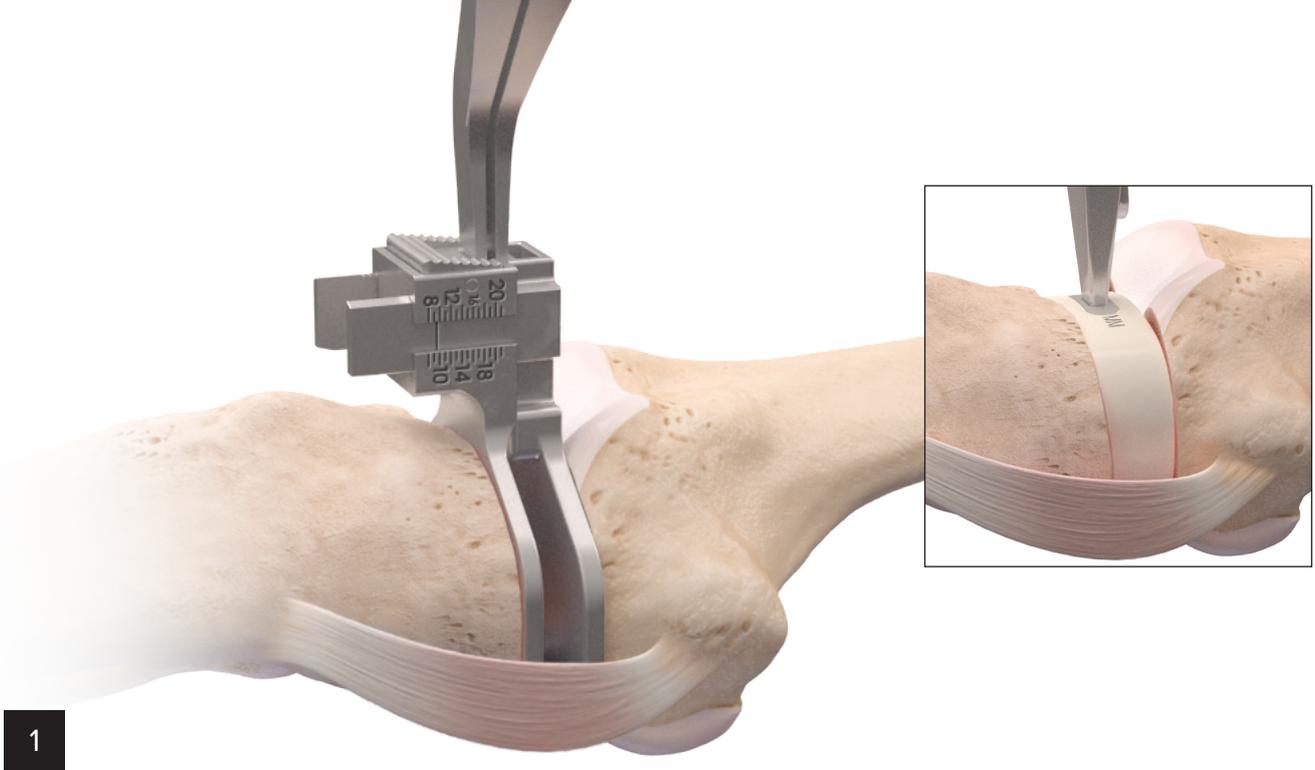
Arthrex[®] 

iBalance

iBalance® TKA Ligament Balancing System

The iBalance TKA ligament balancing system, designed to be an adjunct to standard iBalance TKA instruments, allows tensioning of the flexion gap to match the extension gap, setting the femoral rotation and position for optimal balancing of the knee. Carry out the distal femoral and proximal tibial resections in the standard fashion to create a mechanically aligned extension gap.

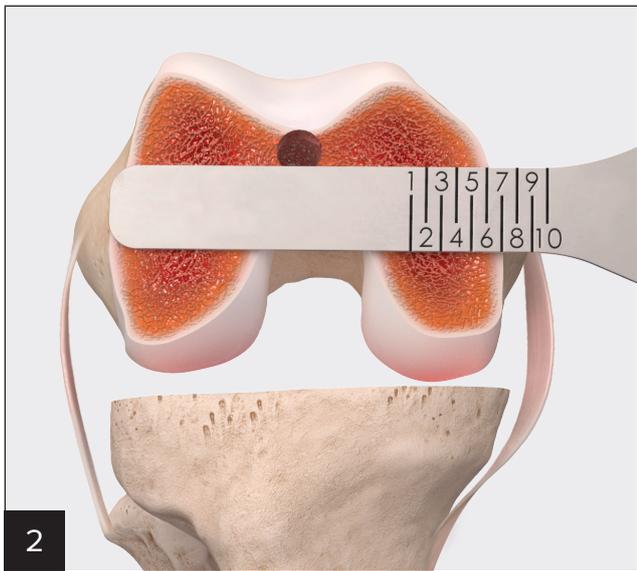




1

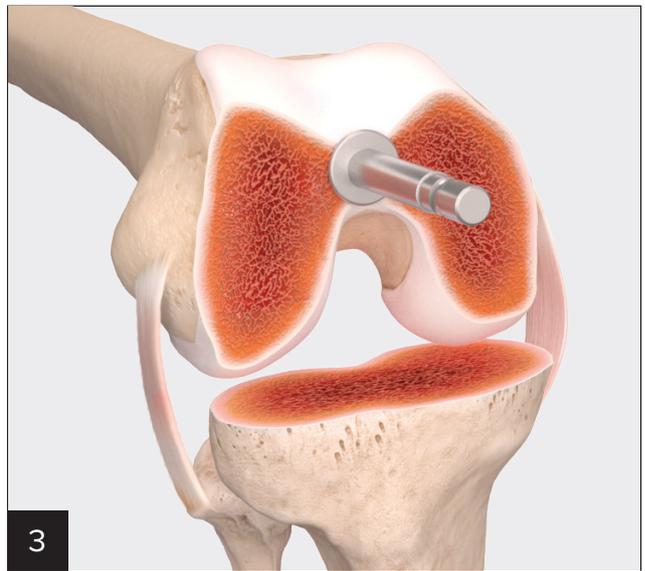
After making the standard, mechanically aligned distal femoral and proximal tibial cuts, assess the extension gap. Place the limb in extension and insert the adjustable spacer block into the knee. Use the lamina spreader to tension the block. Once the collateral ligaments have been tensioned and the extension gap has been determined, note the measurement of the estimated poly thickness (as read on the adjustable spacer block).

Alternatively, the fixed spacer blocks from the primary iBalance® TKA system can be used to assess the extension space.



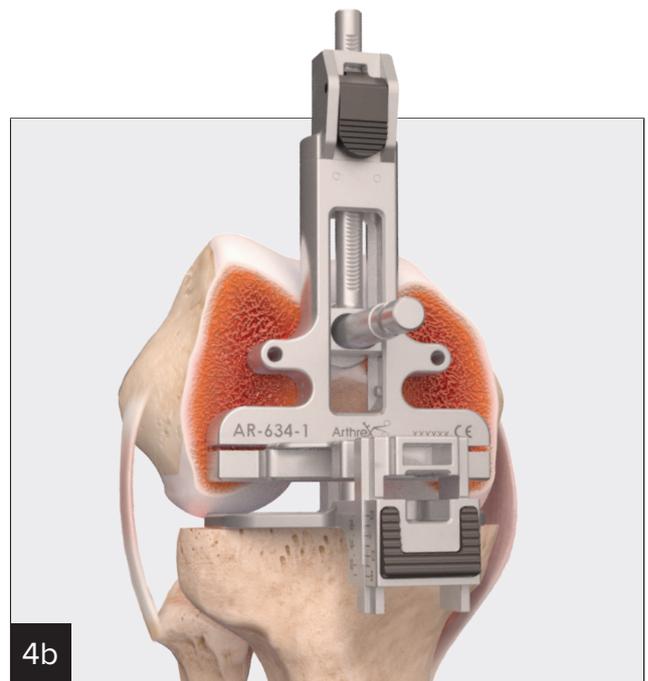
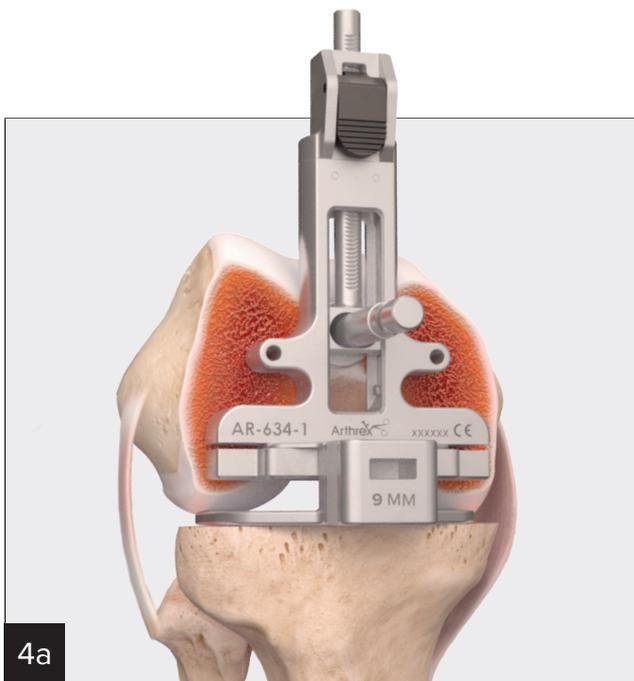
2

Once the extension space has been assessed, the knee is brought into 90° of flexion and attention is turned to the flexion space. The angel wing is used to estimate the M/L size of the femoral component relative to the resected distal femur and create a sizing expectation as the technique is carried out.

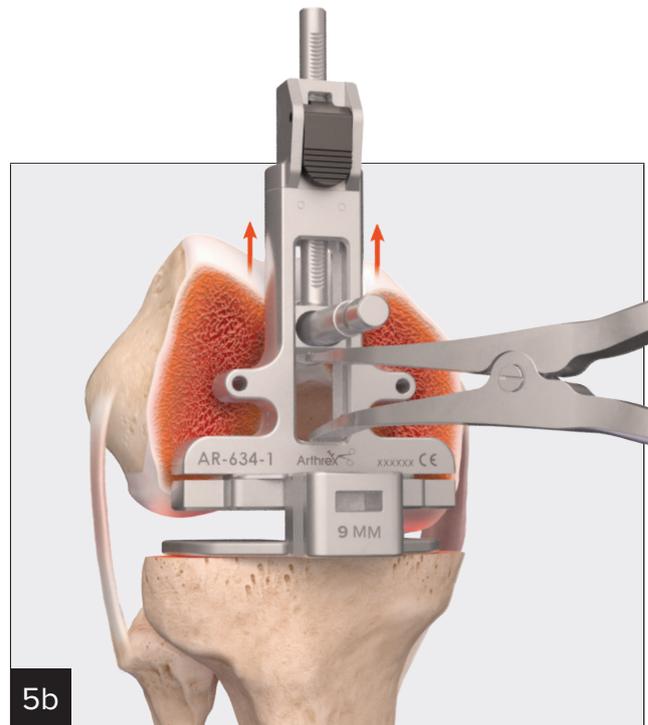
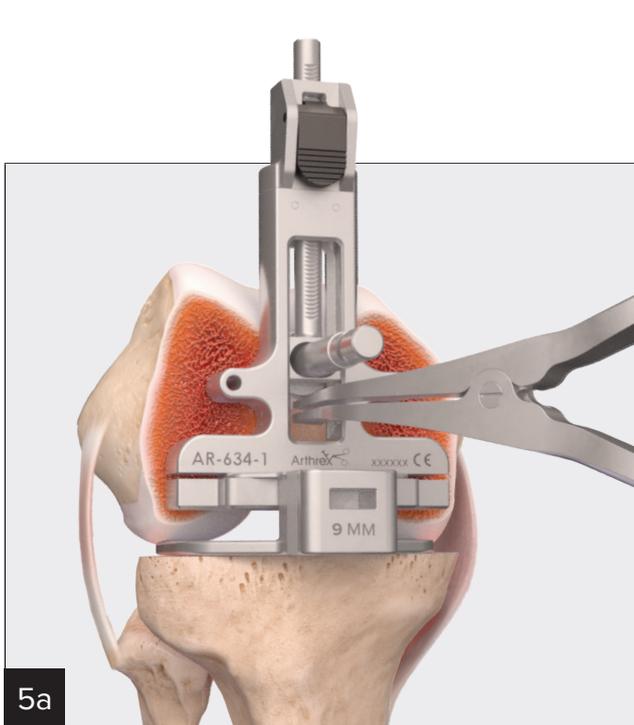


3

The short collared intramedullary (IM) rod is connected to the T-handle and inserted into the IM canal of the femur until the collar is flush with the hole.



With a spacer matching the measurement of the estimated poly thickness attached (eg, 9 mm), assemble the tensioner body onto the exposed IM rod and seat flush against the resected distal femur. **Note: The adjustable spacer block with spacer foot attached (as shown in Figure 4b) can be used in lieu of the fixed spacer block.**



Insert the lamina spreader into the space directly below the IM rod and tension the collateral ligaments similar to the extension space.



6
 Insert the femoral sizing stylus into the posterior cutting slot on the tensioner body and place the tip of the stylus on the deep sulcus of the trochlea. Note the femoral sizing readout along the scale on the sizer.

The angel wing may be used to assess the depth of the anterior femoral resection and ensure the femur will not be notched. The femoral size should closely match the M/L size assessed in step 2. **Note: If the sizer reads between 2 sizes, release the tension on the tensioner body and retension the ligaments until the sizer reads the smaller of the 2 sizes.**



As the flexion space is tensioned, it is important to **avoid overtensioning** the ligaments

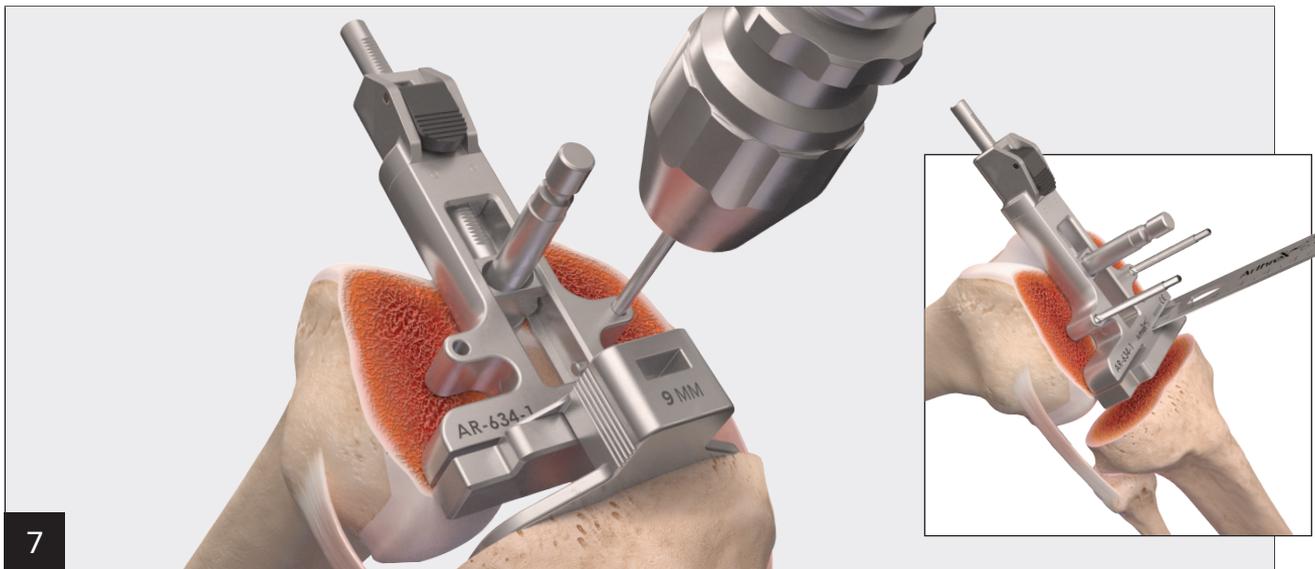
Overtensioning will cause:

- Posterior shifting of the femoral component position
- Increased external rotation
- False oversizing of the component
- Increased risk of femoral notching
- Improper reduction of the posterior femoral resection

It is also important to **avoid undertensioning** the ligaments

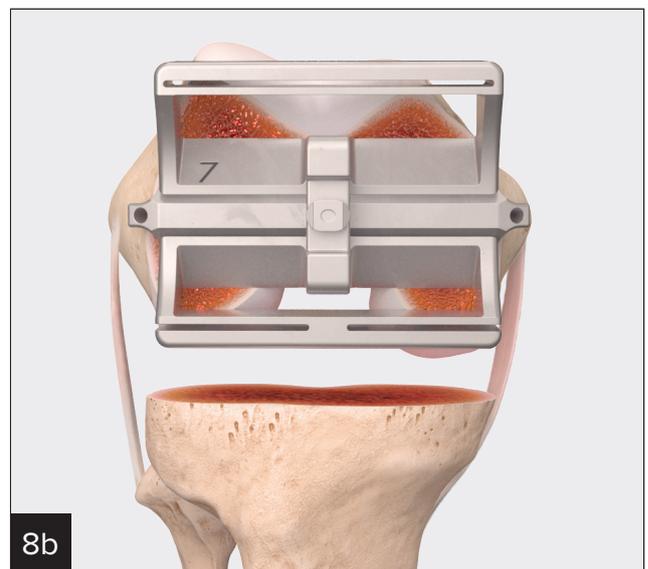
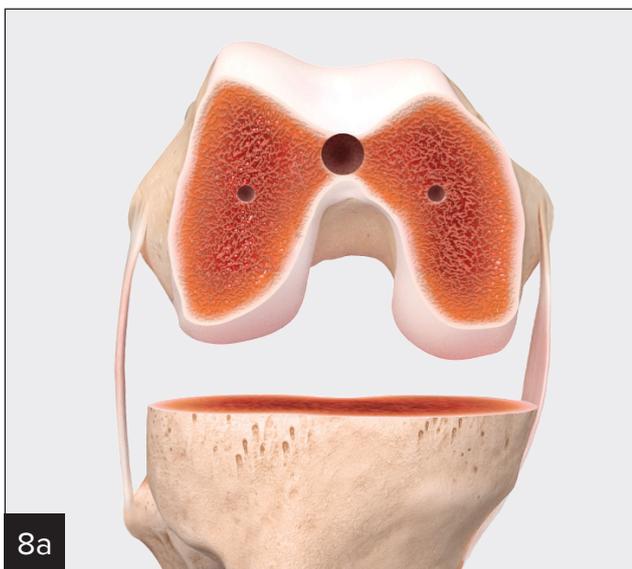
Undertensioning will cause:

- Anterior shifting of the femoral component position
- Decreased external rotation
- False downsizing of the component
- Increased posterior resection

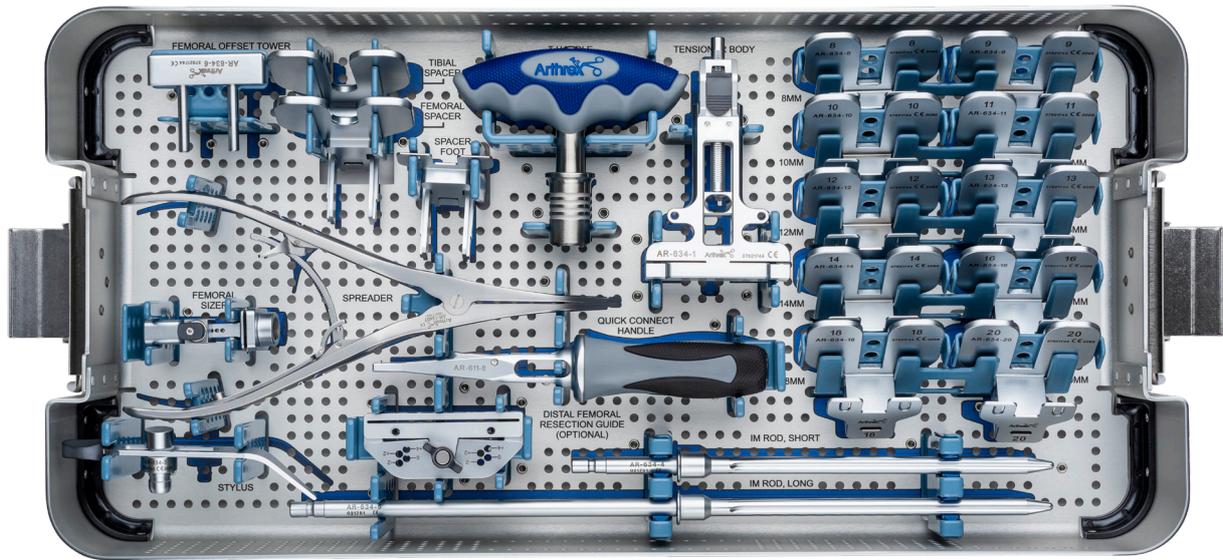


7
Once the femoral component size is determined to be correct, use the drill pin to prepare the pinholes for the 4-in-1 block.

Alternatively, the tensioner body can be pinned in place with 2 drill pins and the posterior femoral resection can be completed through the cutting slots on the tensioner body.



8a
8b
Remove the tensioner body and IM rod from the femur. Place the 4-in-1 block matching the size measured on the femoral sizer onto the distal femur. Complete the femoral preparation in the standard fashion.



Ordering Information

iBalance® TKA Ligament Balancing System (AR-634-S)

Product Description	Item Number
Spreader	AR-1340T
Quick Connect T-Handle	AR-611-8
Tensioner Body	AR-634-1
Femoral Sizer	AR-634-2
Femoral Stylus	AR-634-3
Collared IM Rod, Short	AR-634-4
Collared IM Rod, Long	AR-634-5
Offset Tower	AR-634-6
Adjustable Distal Femoral Cutting Guide	AR-634-7
Spacer, 8 mm	AR-634-8
Spacer, 9 mm	AR-634-9
Spacer, 10 mm	AR-634-10
Spacer, 11 mm	AR-634-11
Spacer, 12 mm	AR-634-12
Spacer, 13 mm	AR-634-13
Spacer, 14 mm	AR-634-14
Spacer, 16 mm	AR-634-16
Spacer, 18 mm	AR-634-18
Spacer, 20 mm	AR-634-20
Tibial Spacer, Adjustable Spacer Block	AR-634-30
Femoral Spacer, Adjustable Spacer Block	AR-634-31
Guide Spacer, Adjustable Spacer Block	AR-634-32
Instrument Case	AR-634-C

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This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's Directions For Use. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes.

View U.S. patent information at www.arthrex.com/corporate/virtual-patent-marking

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