

# iBalance® TKA

iBalance® TKA Tibial Component w/Stems and Augments

Surgical Technique



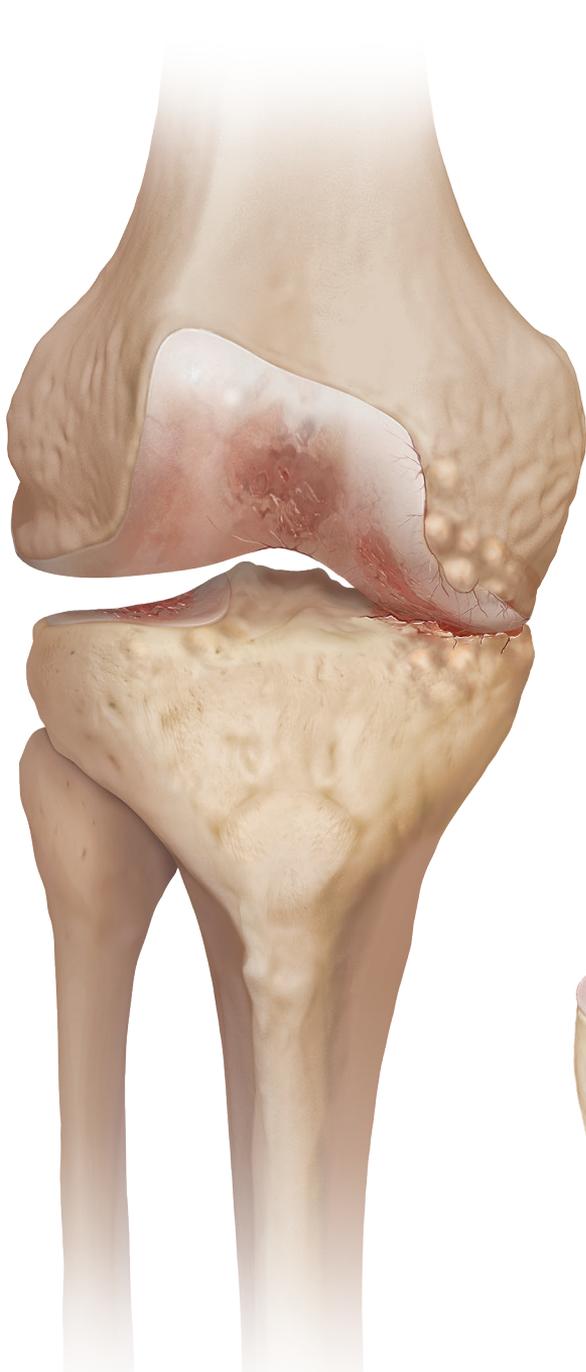
Tibial Stems and Augments



## Tibial Stems and Augments Surgical Technique

In a situation where there is deficient bone stock at the tibial plateau and/or the proximal tibia, a 5 mm or 10 mm medial, lateral, or complete augment may be used. If additional support is needed for the implant construct, a 50 mm or 100 mm stem, in varying diameters, may be used.

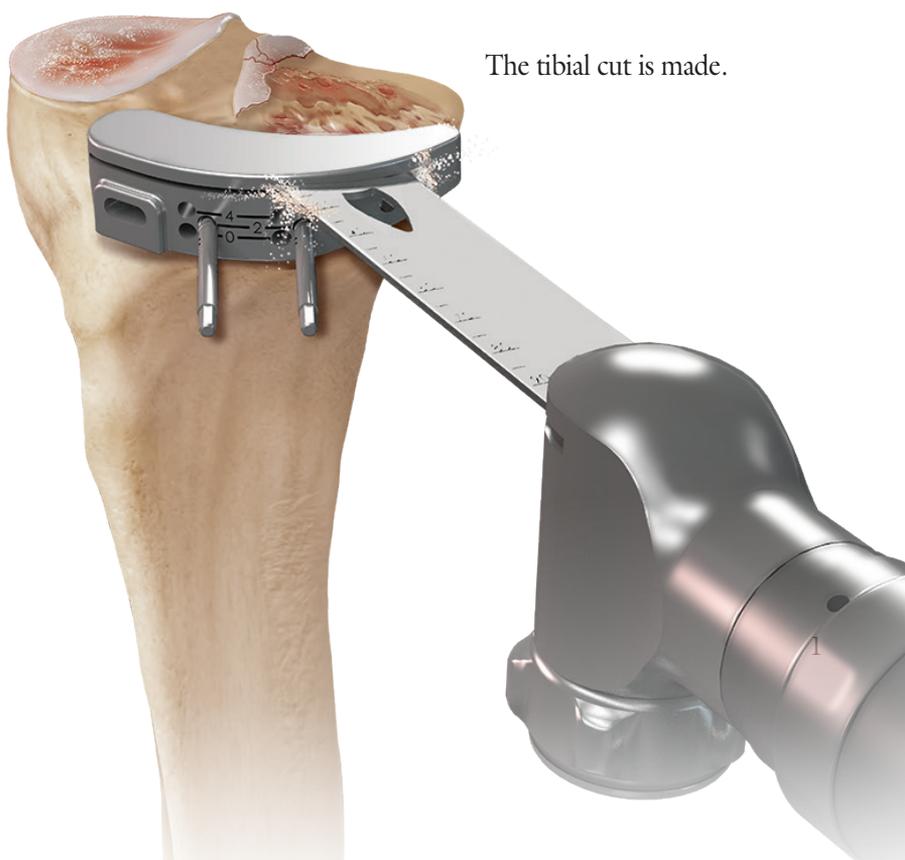
### Tibial Bone Preparation



A defect on the tibial plateau (*medial side in this example*) is present and there may not be sufficient bone stock to support the tibial baseplate at the level of the desired tibial resection.



The IM or EM guide (as shown) is placed in the standard fashion and the least deficient side is referenced for the baseline tibial resection.

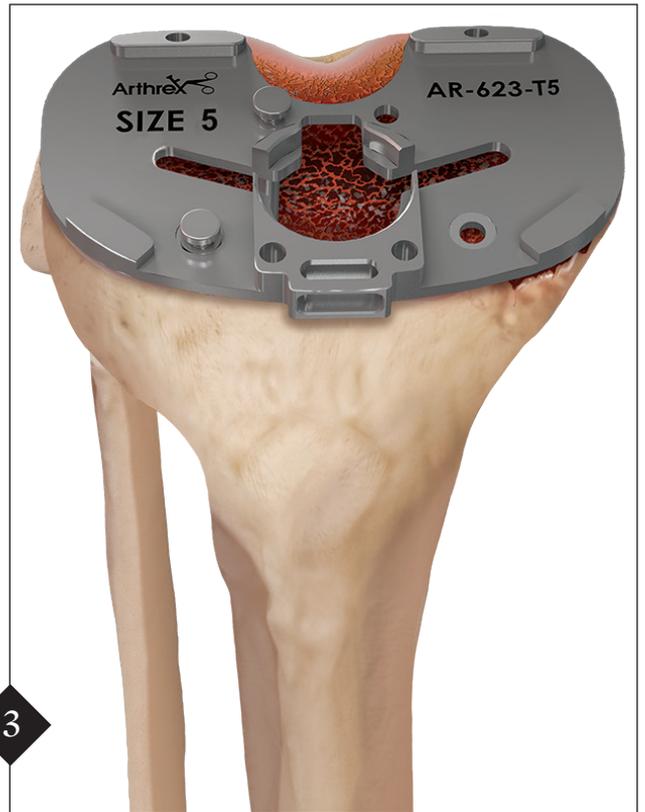


The tibial cut is made.



2

Once the baseline tibial cut has been made, a discernable defect is still present on the posterior medial tibial plateau, which will need an augment.



3

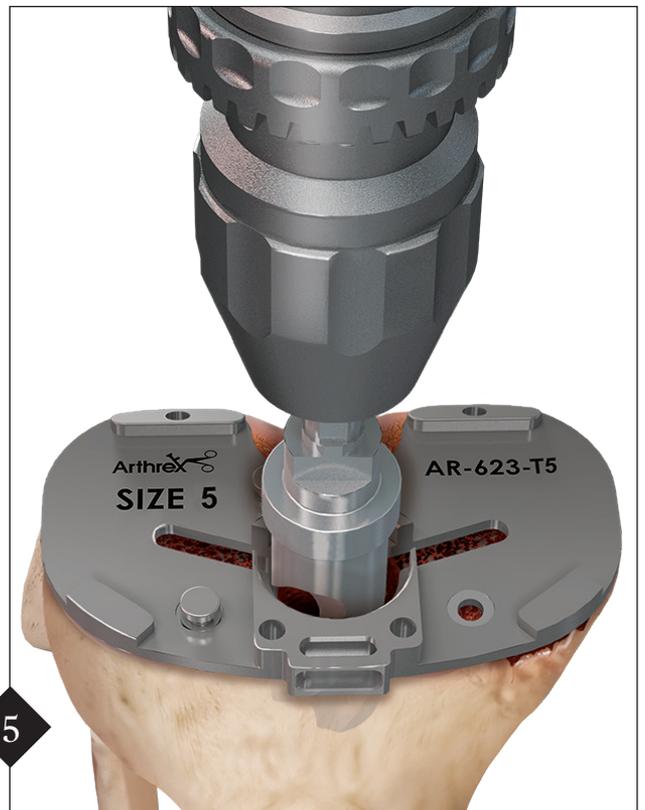
A tibial baseplate trial of the appropriate size is chosen, placed onto the tibia in the proper rotational orientation and pinned into place. *Note: There are anterior and posterior pin holes on each side of the trial for proper fixation.*



4

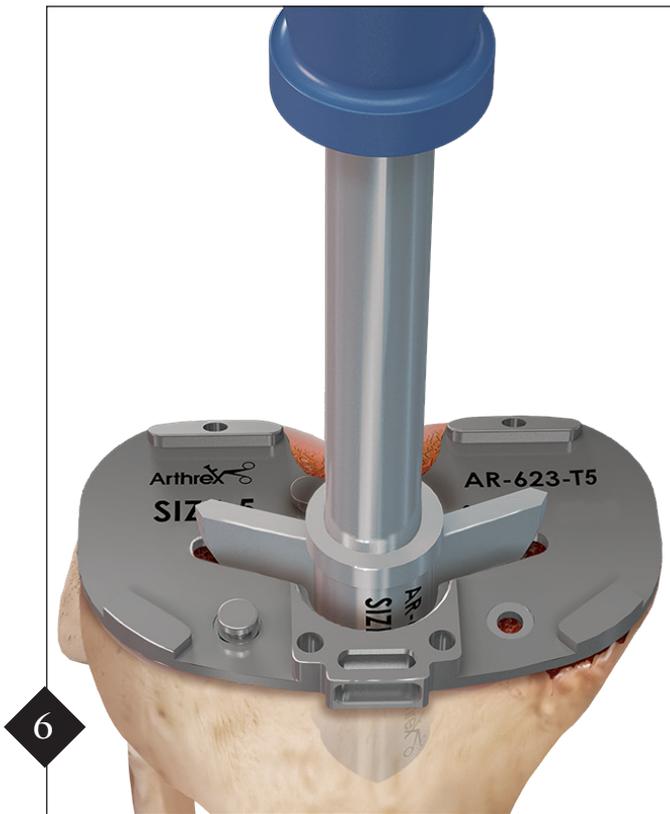
The tibial canal is reamed. The reamers are provided in 1 mm increments, allowing the surgeon to ream sequentially if desired and to determine either a line-to-line fit with the stem or to build in a cement mantle, based on the quality of the tibial bone stock.

The corresponding diameter of the Reamer Guide is assembled to the tibial baseplate trial and the canal is reamed to the depth of the first mark along the length of the reamer for a 50 mm stem or to the second mark for a 100 mm stem.

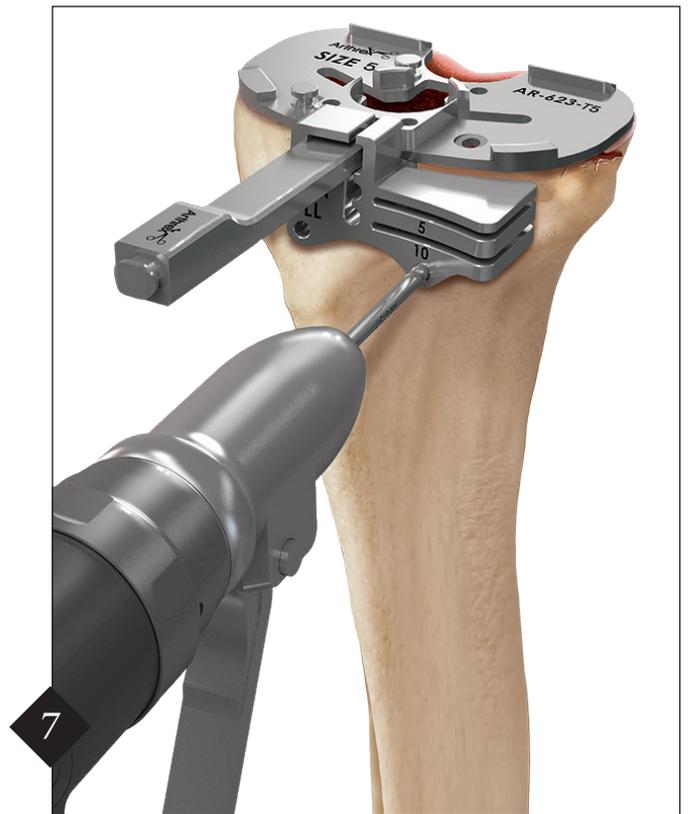


5

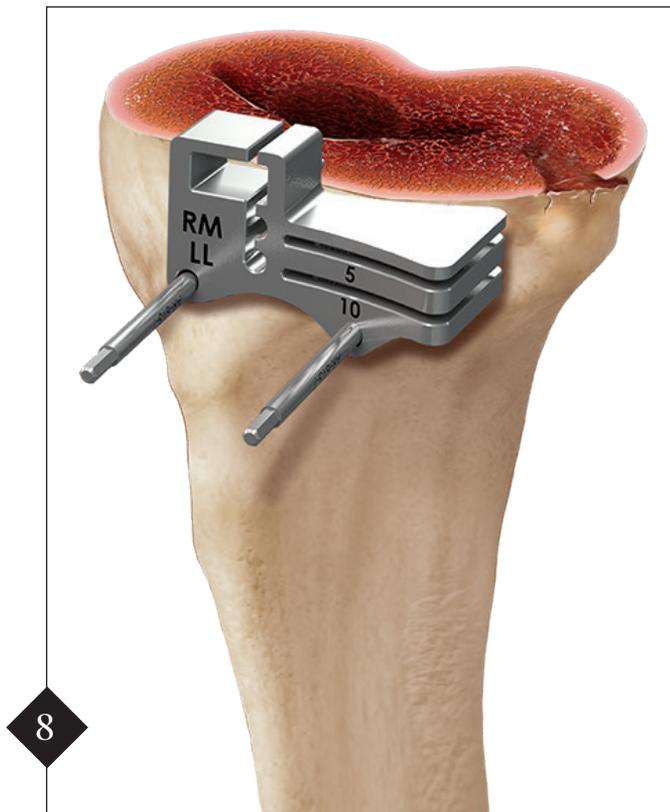
The keel is prepared next. If there is dense cortical bone, the keel reamer may be used to open up to the 16 mm diameter of the keel.



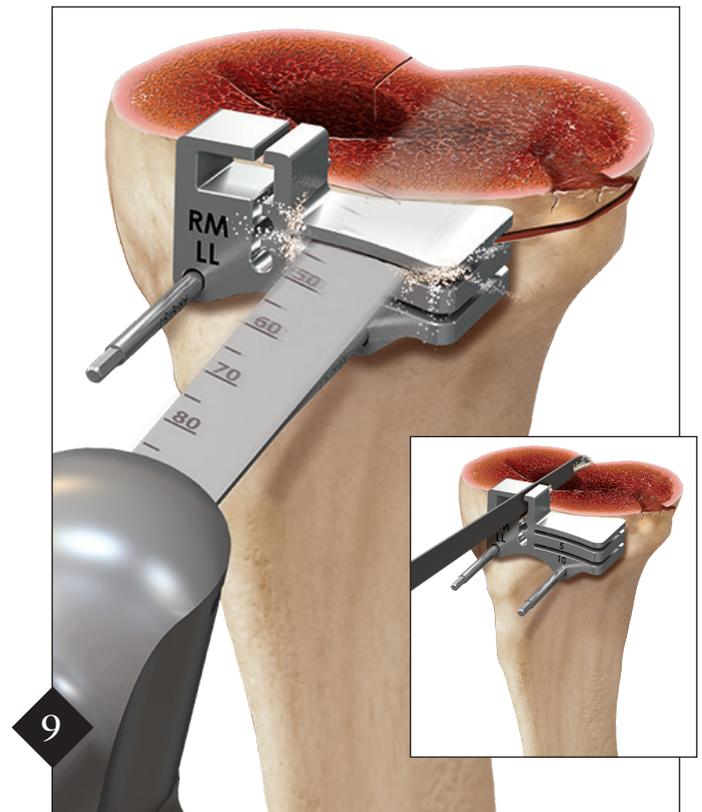
6 The keel is punched with the matching keel punch for the chosen baseplate size. *Do not retain the keel punch in the tibia.*



7 The augment cutting guide is assembled to the outrigger, the outrigger is fixed to the baseplate trial and the block is pinned into place.

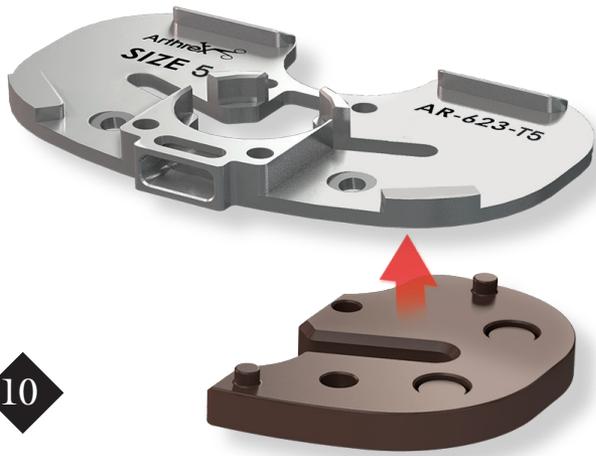


8 The baseplate trial and outrigger are removed, leaving the augment cutting guide in place.



9 The vertical cut is made to the depth of the planned augment thickness and the transverse cut is made in the cutting slot matching the chosen augment thickness (5 mm or 10 mm). If the 5 mm cut is made and determined not to be adequate, repeat the cut through the 10 mm slot.

10



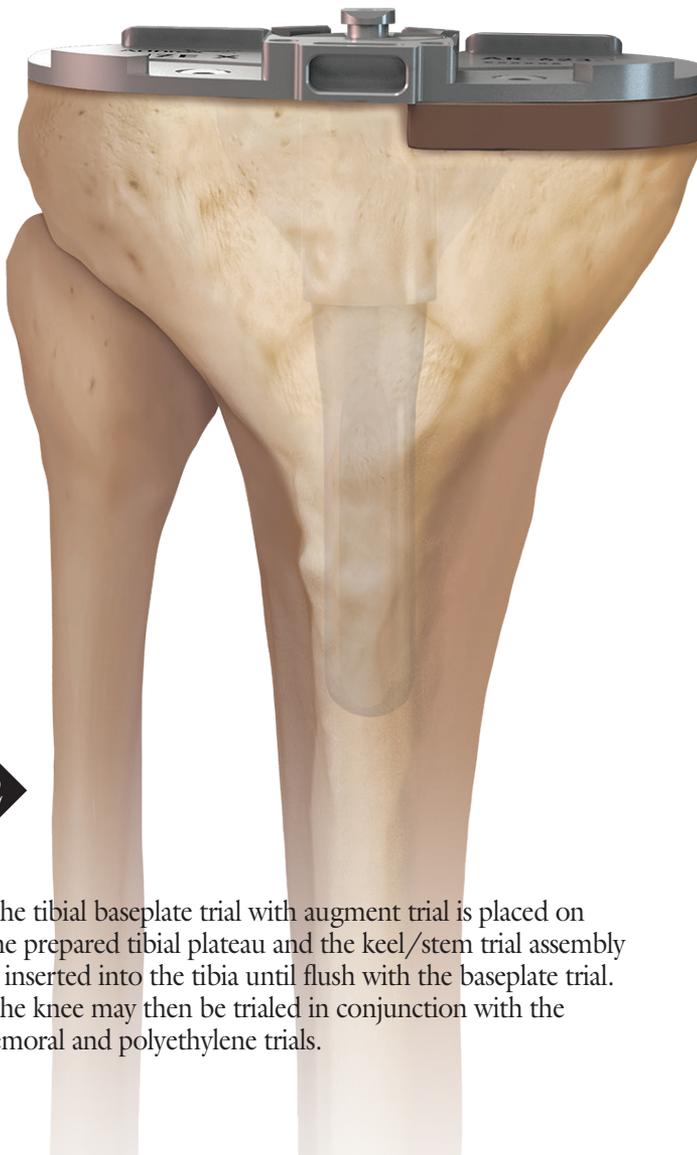
The selected augment trial is attached to the tibial baseplate trial and the selected stem trial is screwed into the provisional keel. The keel/stem trial assembly is then loaded onto the universal handle for insertion into the tibia.

11



12

The tibial baseplate trial with augment trial is placed on the prepared tibial plateau and the keel/stem trial assembly is inserted into the tibia until flush with the baseplate trial. The knee may then be trialed in conjunction with the femoral and polyethylene trials.



## Component Assembly and Implantation

The tibial component comes with a 15 mm Stem Extension assembled to the baseplate.

1

To remove this 15 mm stem extension, first remove the screw from the topside of the baseplate.

2

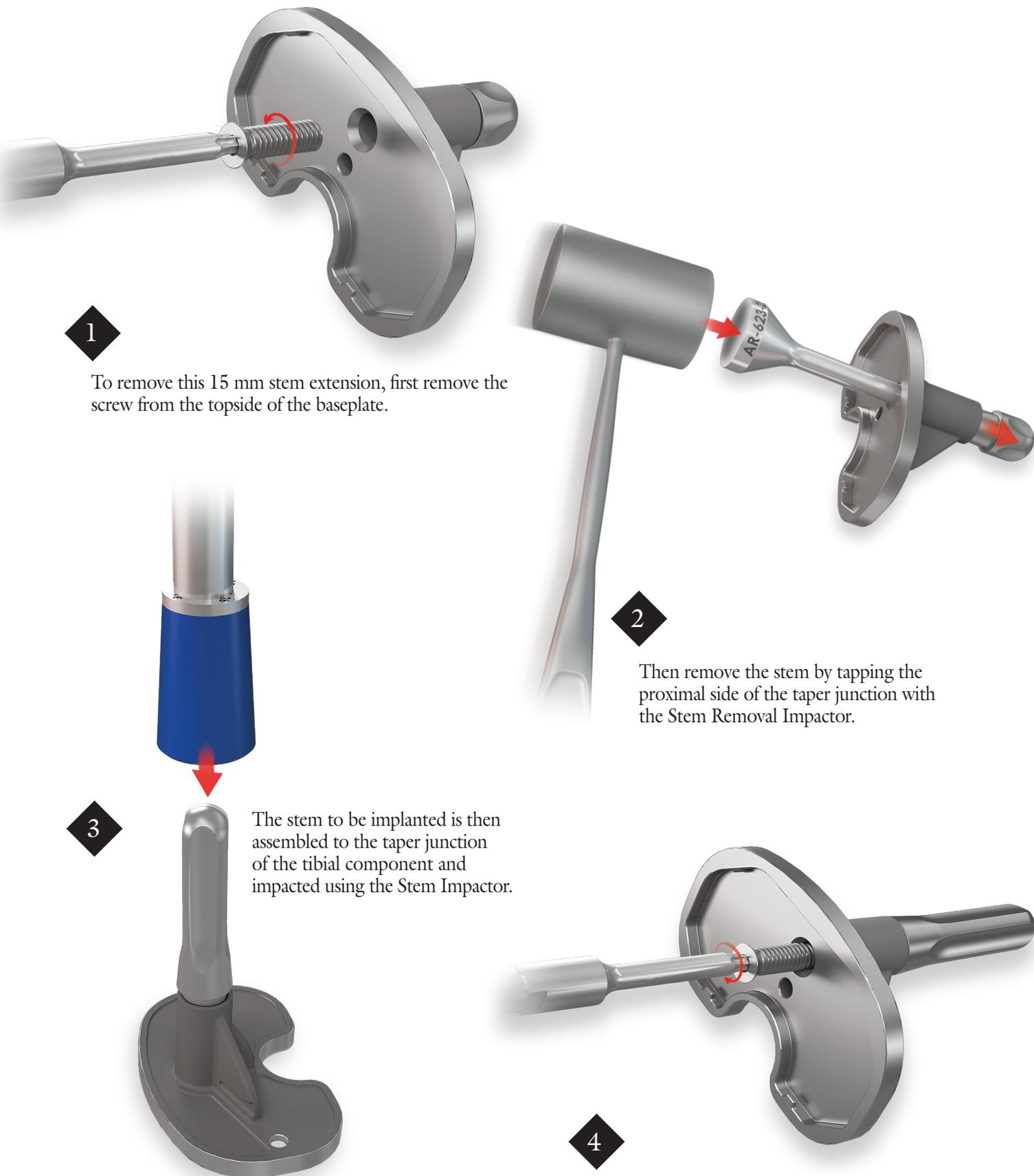
Then remove the stem by tapping the proximal side of the taper junction with the Stem Removal Impactor.

3

The stem to be implanted is then assembled to the taper junction of the tibial component and impacted using the Stem Impactor.

4

The included screw is threaded into the topside of the baseplate and tightened to 3-4 Nm using the torque indicating driver.





5

The augment is assembled to the baseplate by sliding the augment onto the associated rail on the keel of the tibial component. If any resistance is encountered while sliding the augment onto the rail, protect the surface of the implant and tap the augment into place using a mallet.



6

Tighten the included augment screw to 3-4 Nm using the torque indicating driver.



7

The tibial component, stems and augments are indicated for implantation with bone cement. In the traditional manner, the bottom side of the tibial baseplate, augment and stem (*if so desired*) are coated with bone cement. The prepared tibial bone is also coated with bone cement and the construct is impacted into the prepared tibia with the tibial impactor.

# Ordering Information

## Tibial Stem Extensions w/ Screws

Stem Extension, 10 mm x 50 mm	AR-513-1050
Stem Extension, 10 mm x 100 mm	AR-513-10100
Stem Extension, 12 mm x 50 mm	AR-513-1250
Stem Extension, 12 mm x 100 mm	AR-513-12100
Stem Extension, 14 mm x 50 mm	AR-513-1450
Stem Extension, 14 mm x 100 mm	AR-513-14100

## Tibial Augments w/Screws

### 5 mm

Tibial Augment, 5 mm, Size 1, LM/RL	AR-513-RL15
Tibial Augment, 5 mm, Size 2, LM/RL	AR-513-RL25
Tibial Augment, 5 mm, Size 3, LM/RL	AR-513-RL35
Tibial Augment, 5 mm, Size 4, LM/RL	AR-513-RL45
Tibial Augment, 5 mm, Size 5, LM/RL	AR-513-RL55
Tibial Augment, 5 mm, Size 6, LM/RL	AR-513-RL65
Tibial Augment, 5 mm, Size 7, LM/RL	AR-513-RL75
Tibial Augment, 5 mm, Size 8, LM/RL	AR-513-RL85
Tibial Augment, 5 mm, Size 9, LM/RL	AR-513-RL95
Tibial Augment, 5 mm, Size 10, LM/RL	AR-513-RL105
Tibial Augment, 5 mm, Size 1, RM/LL	AR-513-RM15
Tibial Augment, 5 mm, Size 2, RM/LL	AR-513-RM25
Tibial Augment, 5 mm, Size 3, RM/LL	AR-513-RM35
Tibial Augment, 5 mm, Size 4, RM/LL	AR-513-RM45
Tibial Augment, 5 mm, Size 5, RM/LL	AR-513-RM55
Tibial Augment, 5 mm, Size 6, RM/LL	AR-513-RM65
Tibial Augment, 5 mm, Size 7, RM/LL	AR-513-RM75
Tibial Augment, 5 mm, Size 8, RM/LL	AR-513-RM85
Tibial Augment, 5 mm, Size 9, RM/LL	AR-513-RM95
Tibial Augment, 5 mm, Size 10, RM/LL	AR-513-RM105

### 10 mm

Tibial Augment, 10 mm, Size 1, LM/RL	AR-513-RL110
Tibial Augment, 10 mm, Size 2, LM/RL	AR-513-RL210
Tibial Augment, 10 mm, Size 3, LM/RL	AR-513-RL310
Tibial Augment, 10 mm, Size 4, LM/RL	AR-513-RL410
Tibial Augment, 10 mm, Size 5, LM/RL	AR-513-RL510
Tibial Augment, 10 mm, Size 6, LM/RL	AR-513-RL610
Tibial Augment, 10 mm, Size 7, LM/RL	AR-513-RL710
Tibial Augment, 10 mm, Size 8, LM/RL	AR-513-RL810
Tibial Augment, 10 mm, Size 9, LM/RL	AR-513-RL910
Tibial Augment, 10 mm, Size 10, LM/RL	AR-513-RL1010
Tibial Augment, 10 mm, Size 1, RM/LL	AR-513-RM110
Tibial Augment, 10 mm, Size 2, RM/LL	AR-513-RM210
Tibial Augment, 10 mm, Size 3, RM/LL	AR-513-RM310
Tibial Augment, 10 mm, Size 4, RM/LL	AR-513-RM410
Tibial Augment, 10 mm, Size 5, RM/LL	AR-513-RM510
Tibial Augment, 10 mm, Size 6, RM/LL	AR-513-RM610
Tibial Augment, 10 mm, Size 7, RM/LL	AR-513-RM710
Tibial Augment, 10 mm, Size 8, RM/LL	AR-513-RM810
Tibial Augment, 10 mm, Size 9, RM/LL	AR-513-RM910
Tibial Augment, 10 mm, Size 10, RM/LL	AR-513-RM1010

### Extra Screws

Tibial Augment Screw, 5 mm	AR-513-T15
Tibial Augment Screw, 10 mm	AR-513-T110

### Instrumentation

Tibial Stems and Augments Instrumentation Set	AR-623-S
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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.*



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