Moto® MEDIAL

PARTIAL KNEE SYSTEM

Surgical Technique

Joint | Spine | Sports Med

Medacta International

CAUTION

- Federal law (USA) restricts this device to sale distribution and use by or on the order of a physician.
- Some specific instruments are fixed to the bone by means of dedicated pins. Before using the pins, ensure that they are intact and fully functional. BENT OR DEFECTIVE PINS CANNOT BE USED AND MUST BE REPLACED BY NEW ONES. Pin extraction must be performed as to avoid pin bending.
- It is strongly recommended not to impact or hammer on any instruments unless otherwise specified in the surgical technique.

For detailed instructions contact your local Medacta® sales representative.

TABLE OF CONTENTS

1. INTRODUCTION

This brochure describes the surgical technique of the MOTO Partial Knee System for a Medial Unicompartmental Replacement.

MOTO Medial is designed to replace the medial compartment of the knee. The system contains both implants and instruments designed to enable the surgeon to perform a safe and reproducible unicondylar reconstruction of the knee; assessing soft tissue balance of the knee at each step. MOTO Medial consists of femoral, tibial base and tibial insert components.

1.1 INDICATIONS

The MOTO Partial Knee System is designed for cemented use in partial knee arthroplasty, if there is evidence of sufficient sound bone to seat and support the components. Partial replacement of the articulating surfaces of the knee is indicated when only one side of the joint is affected due to the compartmental primary degenerative or post-traumatic degenerative disease, previous tibial condyle or plateau fractures, deformity or revision of previous arthroplasty.

1.2 CONTRAINDICATIONS

Partial knee replacement is contraindicated in the following cases:

- Progressive local or systemic infection
- Muscular loss, neuromuscular disease or vascular deficiency of the affected limb, making the operation unjustifiable
- Osteoporosis or osteomalacia
- Metabolic disorders which may impair bone formation
- Rapid joint destruction, maked bone loss or bone resorption apparent on roentgenogram
- Incomplete or deficient soft tissue surrounding the knee
- Severe instability secondary to advanced destruction of condylar structures
- Unicompartmental replacement is contraindicated in patients who have a permanent valgus or varus deformity that requires correction in order for the knee to function satisfactorily post-op

Mental or neuromuscular disorders may create an unacceptable risk to the patient and can be a source of postoperative complications. It is the surgeon's responsibility to ensure that the patient has no known allergy to the materials used.

1.3 TECHNIQUE PHILOSOPHY

Unicompartmental knee arthroplasty (UKA) is primarily a soft tissue surgery, and one-millimeter resections of bone truly make a difference. The MOTO Medial technique is based on key intra-op check points and precise bone resection options with the aim to achieve soft tissue balance and stability of the knee throughout the entire range of motion.

Aim for a slight alignment under-correction and have appropriate ligamentous tension restored, with physiologic gap laxity. It is suggested to aim for a varus/valgus opening of 1-2mm in extension and 2-3mm in flexion.

The most important feature of this technique is the tibial cut, which drives the remainder of bone resections. This is a two-step procedure, performed using adjustable "Shims" and "Spacers" to evaluate the initial resection and refine it, if needed, to ensure the appropriate minimum tibial resection is achieved.
Flexion and extension gaps are then balanced independently by appropriate femoral bone resections.

2. PRE-OPERATIVE PLANNING

2.1 RADIOLOGICAL PLANNING

Full length anterior-posterior, lateral, sunrise and Rosenberg radiographs are required to determine the unique alignment and global severity of knee disease. Valgus stress x-rays are used to determine compartment compliance and lateral compartment integrity.

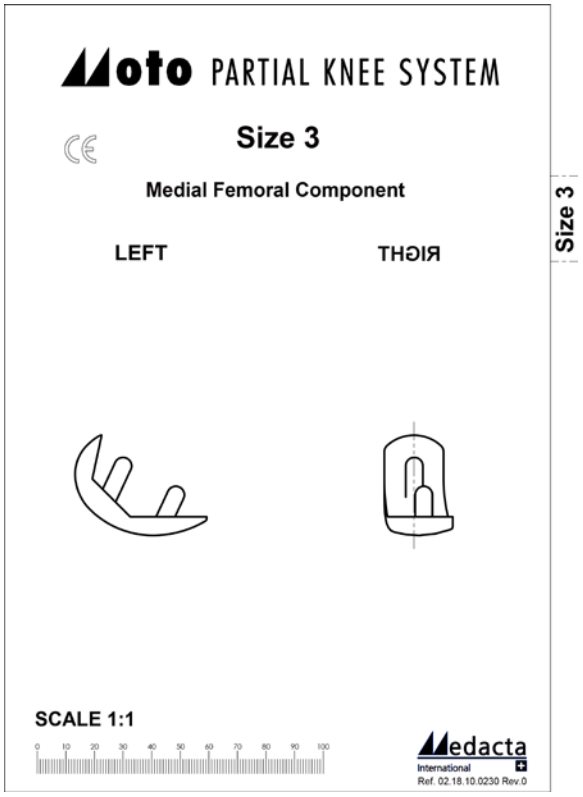
2.2 CLINICAL PLANNING

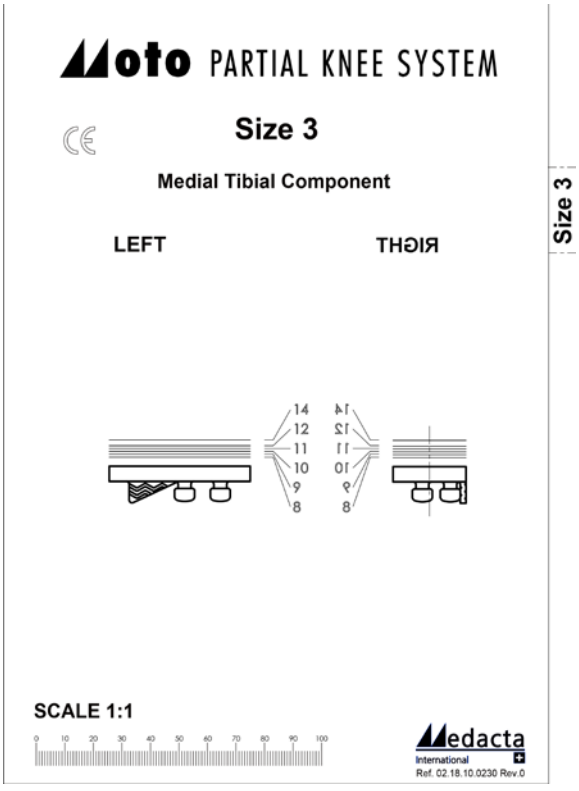
The goals are to assess the location of pain, range of motion, strength, ligamentous stability and patellofemoral function.

2.3 PREOPERATIVE X-RAY TEMPLATE

The size of both femoral and tibial components can be estimated preoperatively by means of X-ray templates.

Available templates allow for a magnification factor of: 100% (1:1, standard), 110% (available on demand) and 115% (available on demand).





3. SURGICAL APPROACH

3.1 LIMB POSITIONING

With the patient in the supine position, two common options for positioning the limb are:

- Adjustable leg holder with the standard operating table: The lower limb is prepped and draped free below the tourniquet
- Leg free hanging: The non-operative leg is placed in a leg holder and the operative leg is positioned hanging free with about 15-20 degrees of hip flexion. It is prepped and draped free below the tourniquet

1.

3.2 INCISION AND EXPOSURE

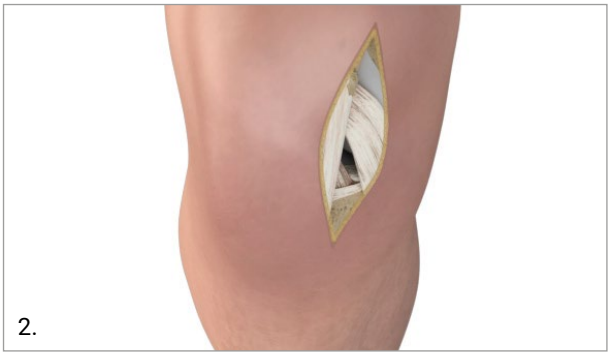
With the knee at 90 degrees of flexion, make a straight incision starting 1 cm above the superior pole of the patella. It should extend distally to just medial of the tibial tubercle, and overlap the medial 1/5 of the patella.

Use sharp dissection to expose the capsule and subcutaneous flaps.

Begin the arthrotomy along the medial border of the patella and extend distally to just medial of the tibial tubercle. At its upper end, the incision should extend approximately 1 cm into the vastus medialis.

TIP

Do not hesitate to extend the incision as needed for visualization and/or protection of soft tissues.

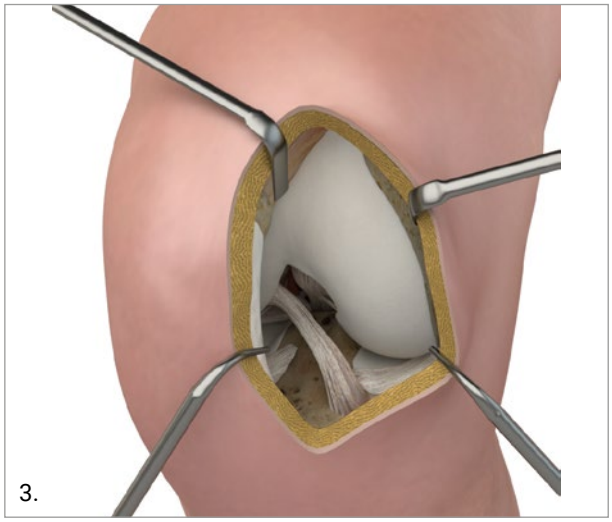


2.

Exchange the superficial retractor for a deep retractor. Resect the anterior horn of the medial meniscus and the medial portion of the retropatellar fat pad. This will expose the medial compartment and the intercondylar notch.

Perform a minimal dissection along the medial joint line from the patellar tendon, medially, to allow for tibial plateau exposure and retractor placement. Make sure not to disrupt any superficial medial collateral ligament (MCL) fibers.

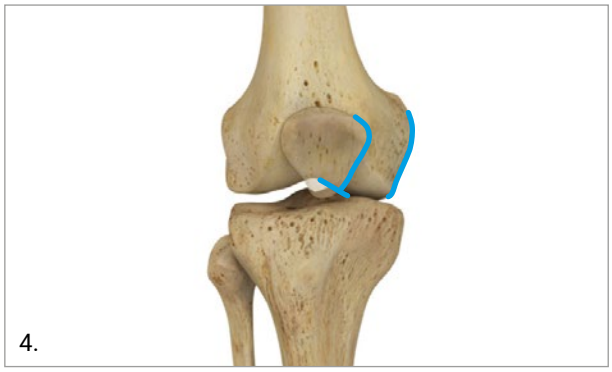
Examine the anterior cruciate ligament (ACL) and lateral compartment and confirm the antero-medial wear pattern on the medial tibial plateau.



3.

3.3 OSTEOPHYTE RESECTION

Remove osteophytes from the medial femoral condyle, medial patellar border and in the intercondylar notch, such that they do not interfere with the choice of implant size or with the assessment of joint stability (tenting of the MCL). It is critical to remove the always present notch osteophyte at the lateral border of the medial femoral condyle. This creates room to insert the sagittal saw blade into the intercondylar notch during the tibial resection, and is necessary to enable the correct trajectory of the sagittal cut.

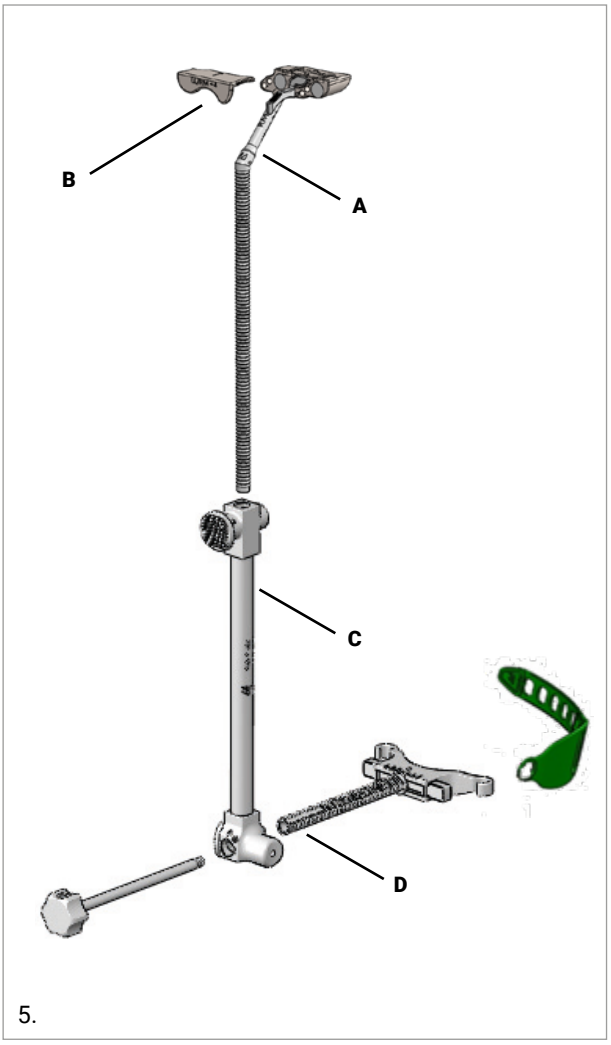


4.

4. TIBIAL RESECTION

4.1 ASSEMBLING AND POSITIONING THE EXTRAMEDULLARY ALIGNMENT GUIDE

The tibial extramedullary system consists of the following components:

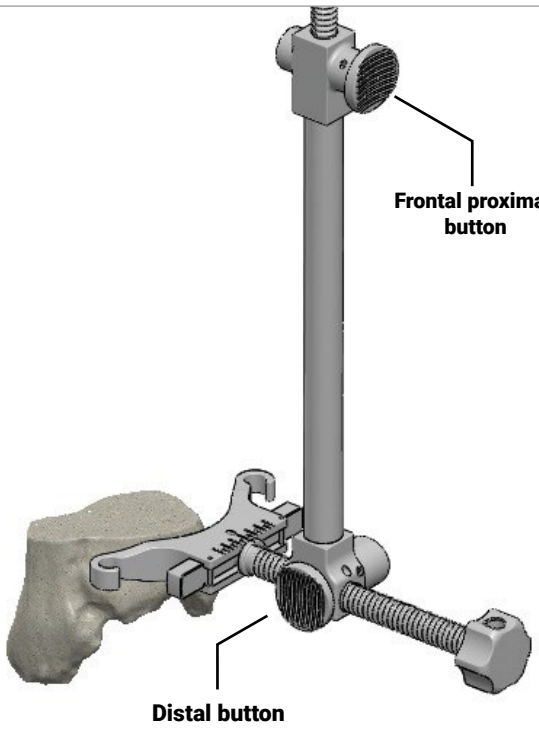


5.

- A - Tibia cutting guide - Right or Left
- B - Shim (0 mm, +1 mm, +2 mm, +3 mm, +4 mm, +5 mm) - Right or Left
- C - Extramedullary guide - distal part
- D - Ankle clamp (body + v/v regulation screw + silicon strap)

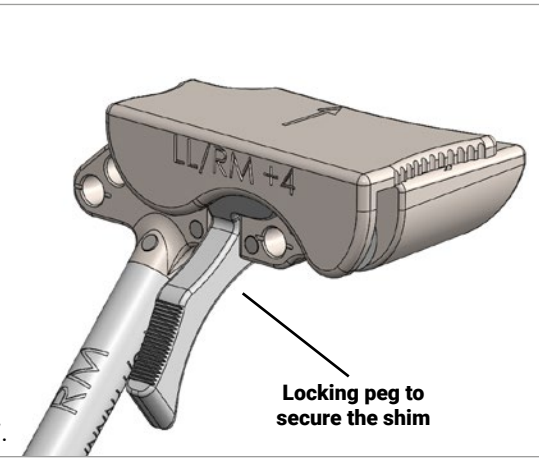
Pushing the distal button of the extramedullary guide - distal part (C), slide the ankle clamp body (D) onto the distal "D-shape" dovetail of the extramedullary guide. Release the button, insert the screw for varus/ valgus regulation and tighten the knob to temporarily hold the clamp in place.

Pushing the frontal proximal button of the extramedullary guide - distal part (C), insert the tibia cutting guide of the correct operative side (A) into the proximal end of the extramedullary guide - distal part (C) and release the button.



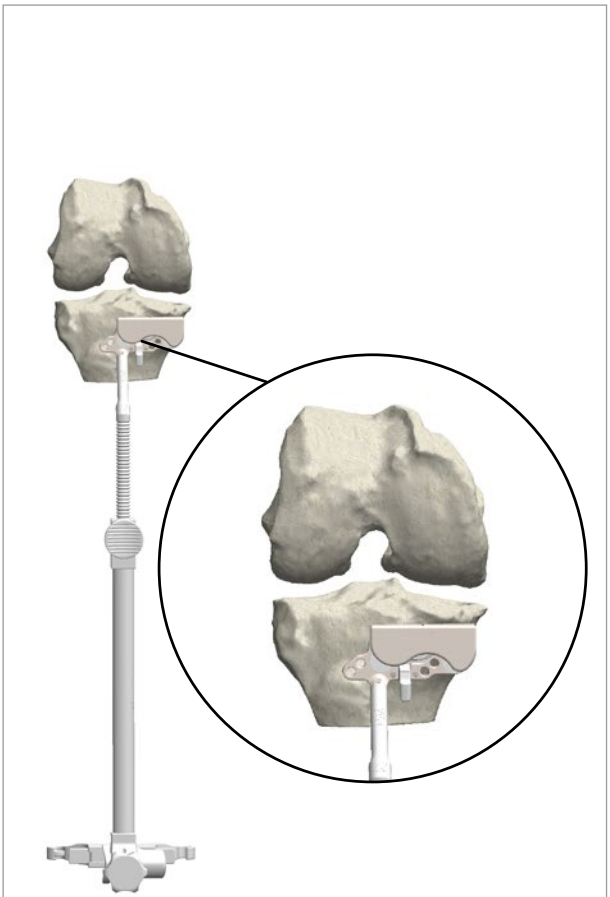
6.

Slide the thickest shim (0 mm) onto the dedicated tracks at the top of the tibia cutting guide until full engagment. The shim is secured at the top of the tibia cutting guide by the magnetic mechanism. To unlock the shim, push the dedicated lever and slide out the shim.



7.

Position the assembly on the tibia. Secure the distal portion of the assembly by placing the silicone strap around the ankle proximal to the malleoli. Make sure that the ankle clamp points towards the ankle center and the cutting guide is centered at the proximal tibia.

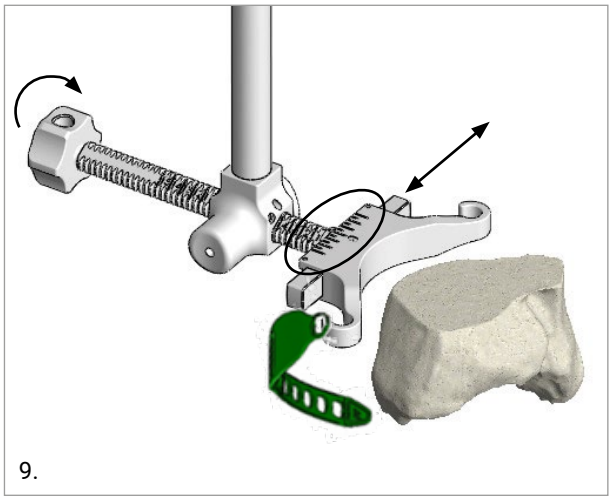


8.

4.2 SETTING THE TIBIAL TRANSVERSE RESECTION LEVEL

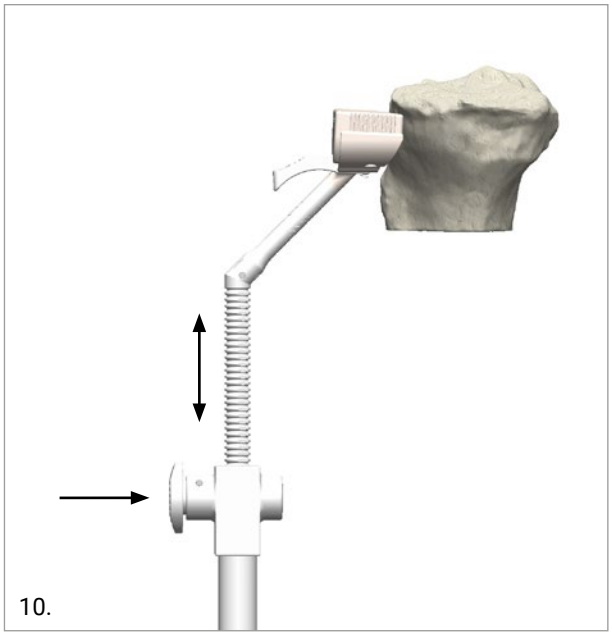
The tibial extramedullary system allows for adjustment in all three planes, coronal (height), frontal (varus/valgus) and sagittal (slope).
The numbers indicated on the malleolar clamp body allow for a reference which has no direct anatomical meaning but could be useful for repositioning or readjustment.

Unscrew the knob and adjust the varus/valgus by translating the guide medially or laterally. To achieve neutral alignment, set the guide parallel to the tibial axis (tibial spine to center of the talus, slightly medial to the midpoint of the ankle) and tighten the knob to secure it in place.



9.

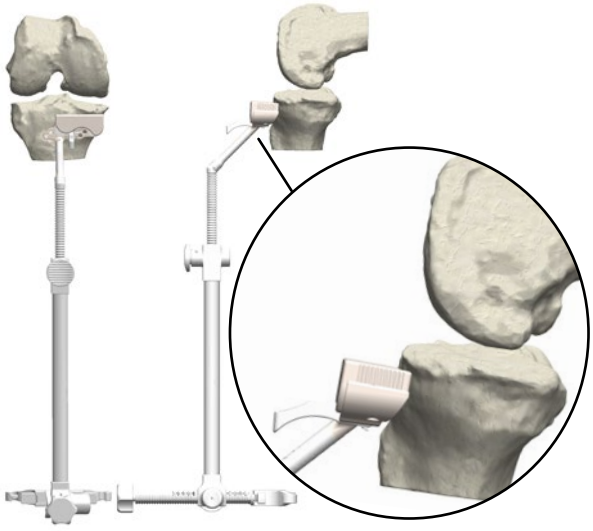
Height is adjusted with the upper push button. Push the button and slide the tibia cutting guide to adjust the height (a graduation in 2 mm increments is permitted).



10.

Use an angel wing to indicate if:

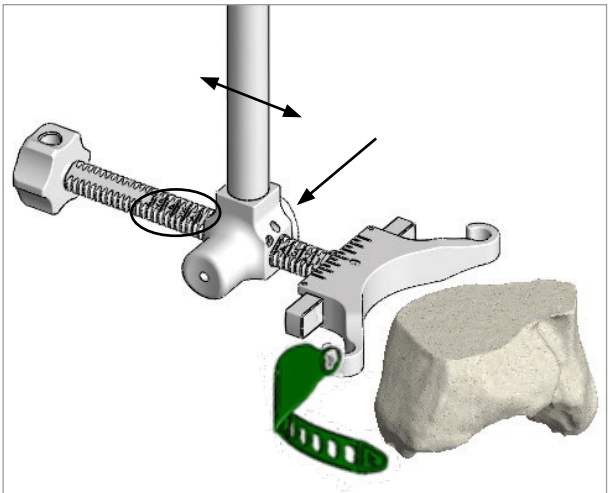
- The tibial cut will resect a conservative wafer of bone just below the lowest defect
- The cut matches the anatomic posterior tibial slope



11.

If more or less slope is required this can be adjusted by pushing the distal button and sliding the extramedullary guide anterior-posteriorly along the ankle clamp rod (a graduation in 2 mm increments is permitted). When changing the slope, ensure that the ankle clamp still points to the center of the ankle.

The tibial guide has 3 degrees of posterior slope built in. If the rod is parallel to the tibial crest, the resulting tibial cut will have a 3° slope.



12.

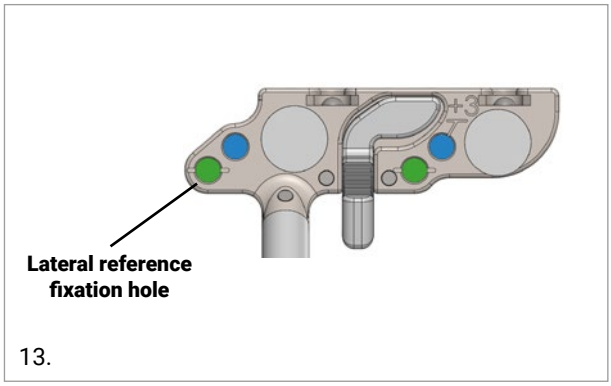
TIP

Match the anatomic slope of the patient, avoiding excessive tibial slope (ideally tibial slope should not exceed 5 degrees).

TIP

In general, setting the slope adjustment to number “13” indicated on the malleolar clamp rod is a good starting place and adjust as needed from there.

An angel wing can be placed on the plane of the tibia cut guide to confirm the desired resection level and slope. When the height adjustment, frontal alignment and posterior slope are deemed satisfactory, fix the guide with a single threaded headed pin by using one of the pin holes marked with a line (green in the Figure 13).
Add an additional pin if further fixation is required.



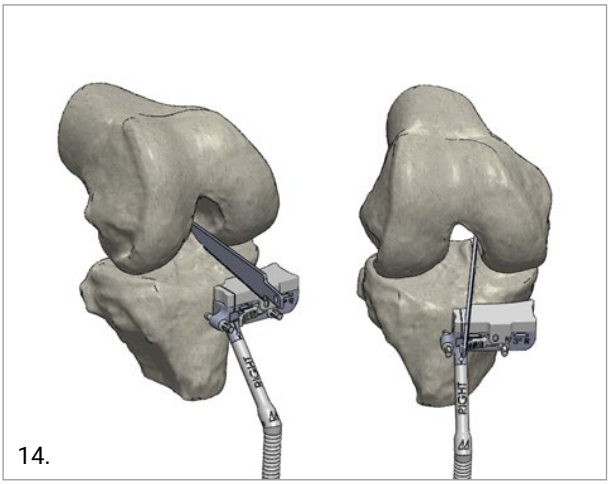
13.

- Reference holes for fixation
- Repositioning holes (+ 3mm recut)

TIP

If possible, use the lateral pin option because the hole will be located lateral to the sagittal saw cut.

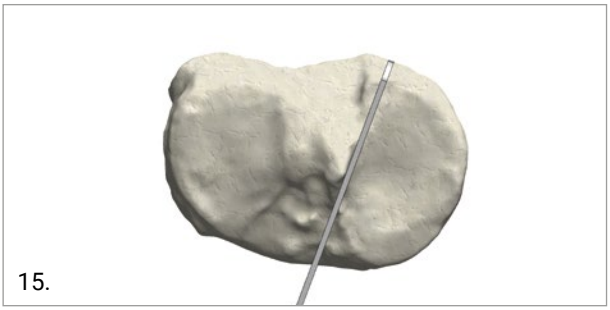
4.3 SAGITTAL RESECTION



14.

With the knee in flexion, place the tip of a single-sided reciprocating saw in the notch against the lateral wall of the medial femoral condyle, and just under the posterior cruciate ligament (PCL).

Cut freehand close to the peak of the medial tibial spine. It is imperative to keep the saw blade parallel to the guide to avoid notching of the posterior tibial cortex. The saw blade should make contact with the tibial guide anteriorly first and then complete the cut posteriorly. This helps to avoid posterior notching and tibial plateau fracture.



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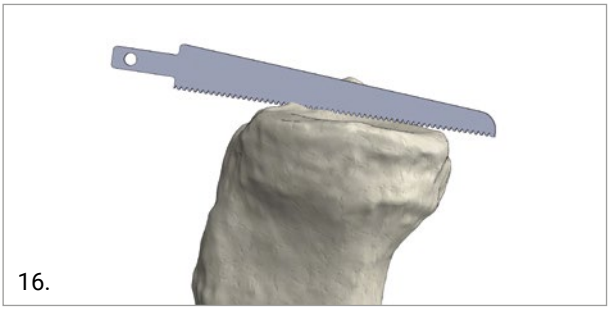


16.

CAUTION

Ensure the trajectory of the saw blade is not internally rotated. Also, the blade should not be lateral to the apex of the medial tibial spine (typically 2-3 mm to the lateral wall of the medial femoral condyle).

TIP

This cut may disrupt the medial-most fibers of the ACL as they insert onto the tibia, but should not cut into the main body of the ligament itself.

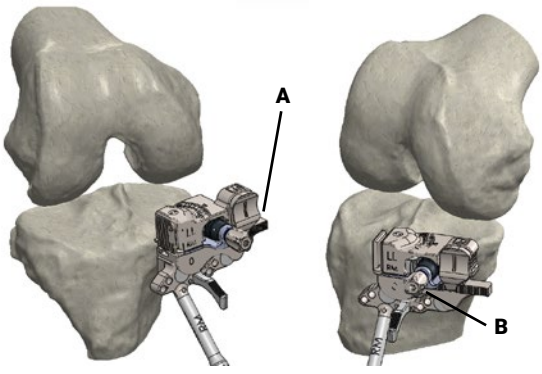
CAUTION

Avoid the following factors which can contribute to the risk of postoperative tibia fracture:

- Notching the posterior cortex during the sagittal cut
- Positioning the sagittal cut too far medial to the tip of the anterior tibial spine
- Creating more than two pin holes in the proximal tibia and/or in line with sagittal cut
- Making excessively deep tibia depth resection into softer metaphyseal bone

OPTION

Sagittal cutting guide is available for right or left side.
Combine the sagittal cutting guide and the tibia guide by sliding the sagittal cutting guide onto the dedicated tracks at the top of the tibia guide.
The ML position of the cut slot can be adjusted by pushing the frontal button (A) and sliding the top body of the sagittal cutting guide medio-laterally. The rotation of the cut slot can be adjusted in a range of ±30° by turning the frontal screw (B).
To align the sagittal cut, adjust the cutting guide so that the tip of the sagittal saw will be adjacent to the lateral border of the medial femoral condyle. Internally rotate the slot trajectory such that it covers the medial tibial plateau in both flexion and extension. Ensure the sagittal cut is set to the correct position before the osteotomy. Use a single-sided reciprocating saw blade through the vertical slot to perform the sagittal cut.

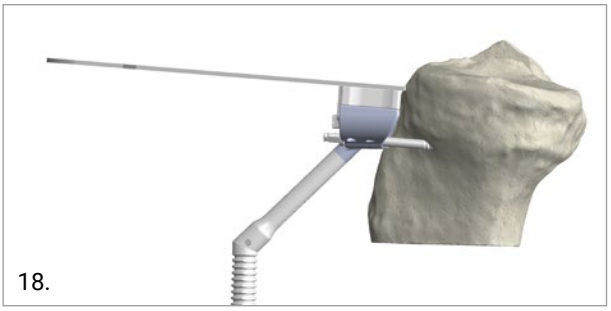


17.

4.4 TIBIAL TRANSVERSE RESECTION

Place a retractor medially to protect the MCL.

Ensure the oscillating saw blade is coplanar with the cutting guide surface. Perform the transverse tibial cut, stopping laterally once the sagittal cut is reached. Avoid undercutting the tibia spine.



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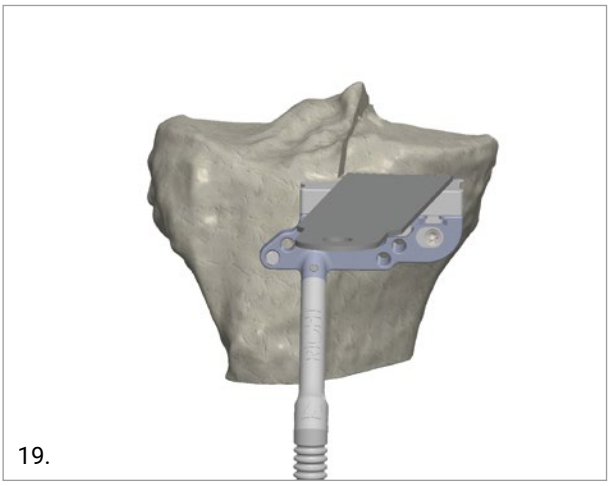


19.

TIP

To avoid undercutting the tibial spine, the free reciprocating sagittal saw blade may be placed in the sagittal bone cut.

The wafer of bone can be seen to "jump" once the sagittal and transverse resections are complete.
Remove the wafer of bone, and perform a clean-up cut on any proud areas which are directly visible. Examine the wafer of bone for thickness and slope.

Bring the knee into extension and check that the tibial bone resection completely covers the medial femoral condyle. If it does not, evaluate for the need to add more external rotation to the sagittal cut, or to lateralize the sagittal cut.

OPTION

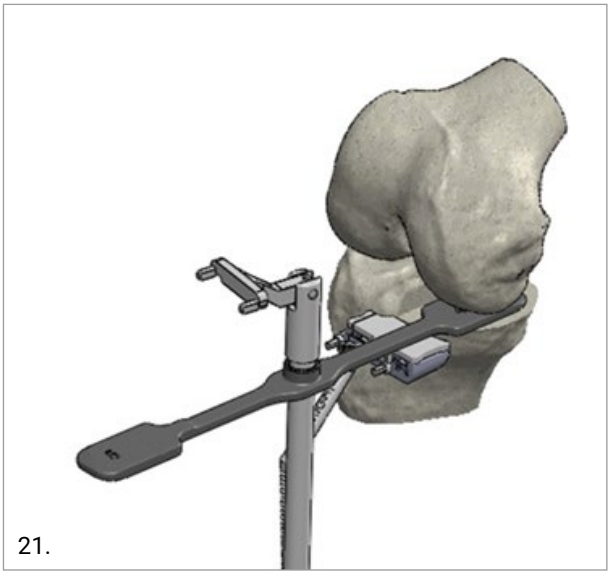
Slotted shims are available on demand for the right and left sides with the following thickness: 0 mm, +1 mm, +2 mm, +3 mm, +4 mm, +5 mm.
Use a saw blade through the horizontal slot to perform the transverse cut.

4.5 FLEXION AND EXTENSION GAP ASSESSMENT

Eight two-sided gap spacers (range 4-19) are available for gap measurements, with the following sizes: 4-5, 6-7, 8-9, 10-11, 12-13, 14-15, 16-17, 18-19.

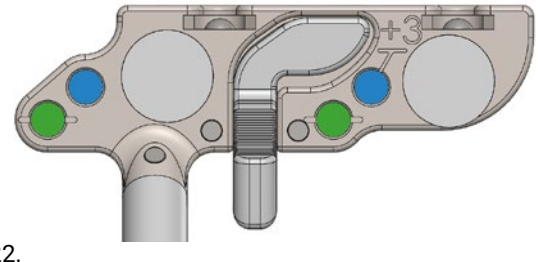
20.

With the knee at 90 degrees of flexion, insert the gap spacer to determine the flexion gap. When determining the thickness of the flexion gap, choose the thickest spacer which fits the gap with little or no resistance. Verify the varus/valgus alignment and slope of the tibial resection by means of the telescopic alignment rod through the gap spacer.



21.

If the first tibial resection is too conservative and the thinnest gap spacer ("4") cannot be inserted into the joint, recut the tibia by repositioning the tibial cutting guide. Use the top row of holes (shown in blue in the Figure 22). This will allow for a +3 mm tibial resection.



22.

Reference holes for fixation

Repositioning holes (+ 3mm recut)

At this time, determine the flexion gap with gap spacers.

Next, bring the knee into full extension. Check the extension gap using gap spacers in the same manner.
The correct spacer is the thickest spacer that fills the extension gap with little to no resistance while maintaining a slightly under-corrected varus alignment.

The information collected in the flexion and extension gap assessment will be used to determine the bone resection plan to correctly balance the knee, as described below.

The goal is a tibia resection that allows a final tibial gap of "9" in flexion, with a varus/valgus opening that corresponds to the desired laxity. The authors aim for approximately 2-3 mm of varus/valgus opening in flexion.
A target flexion gap of "9" is recommended as it provides the surgeon with +/- 1 mm of intraoperative sizing flexibility.

4.6 TIBIA CUT ADJUSTMENT

If the spacer which fits in flexion is "9", no further tibial resection is needed. If the spacer is less than "9", more resection is needed to achieve the desired "9" gap.

To recut the proximal tibia, shims are applied to the tibial cutting guide, allowing for a resection of +1 mm, +2 mm, +3 mm, +4 mm, or +5 mm. A resection of +6 mm is obtained by directly cutting on the tibia cutting guide, with no shim applied.

23.

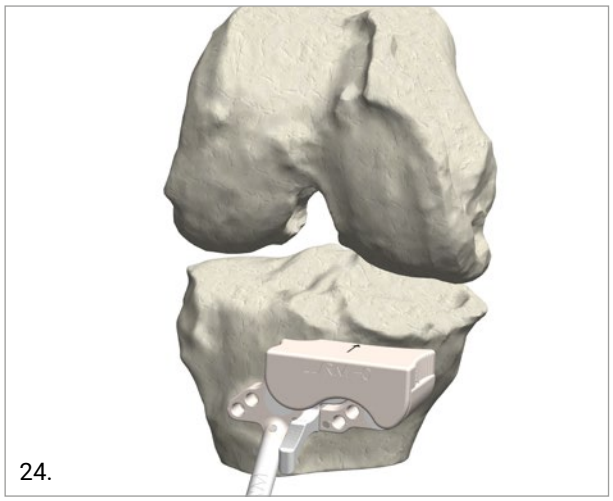
Determine the appropriate shim thickness to be used to recut the proximal tibia according to the following formula:

Gap Spacer + Shim Thickness = "9"

With the aid of the frontal lever on the tibia cutting guide, remove the 0 mm shim. Then apply the appropriate chosen shim onto the tibia cutting guide. Place a retractor medially to protect the MCL and re-cut the tibia.

If the resection is greater than 1 millimeter, deepen the sagittal cut first and then perform the transverse cut. Recut until your flexion gap is "9".

CAUTION
The slotted shims cannot be used to deepen the sagittal cut. If the tibia cut adjustment also requires a sagittal recut, position the appropriate chosen unslotted shim onto the tibia jig and use it to guide both the sagittal and the transverse recuts.

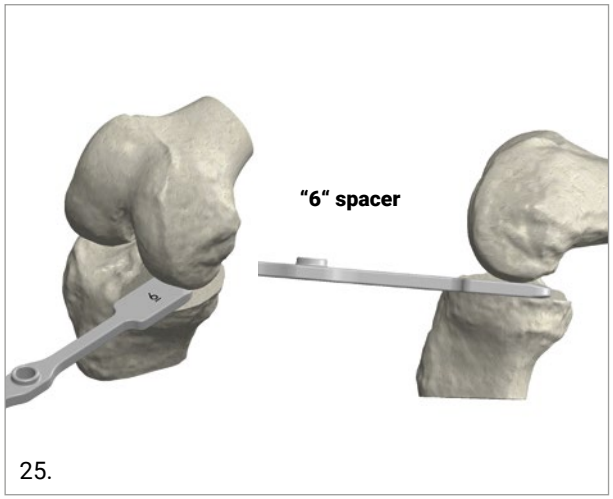


24.

EXAMPLE

After the initial tibia resection, the flexion gap is measured at “6”. Remove the 0 mm shim from the tibial guide and replace it with the +3 mm shim, allowing for another 3 mm tibial cut. This will result in a flexion gap of “9”.

[“6” gap spacer] + [+3 mm shim] = “9” flexion gap



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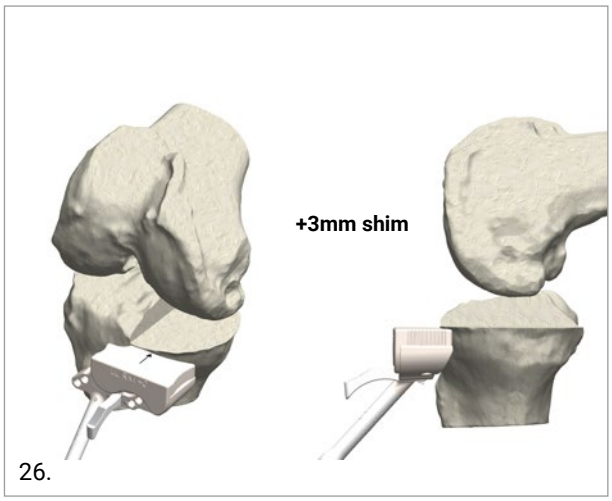

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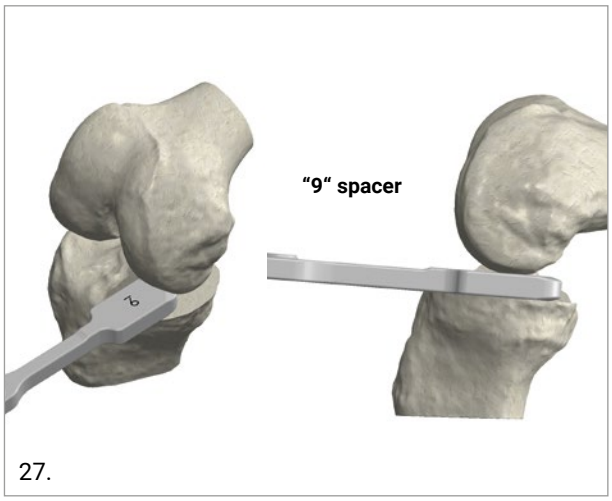


27.

Use the spacers to confirm the gaps after a tibia recut is made. When the tibia resection is deemed satisfactory, remove the pin(s) and the tibial jig.

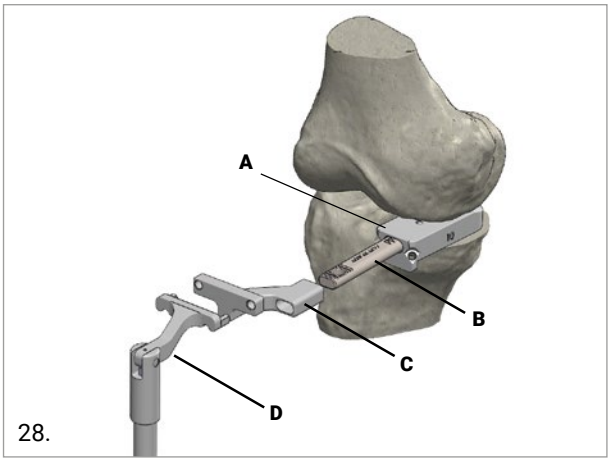
OPTION

If less tibial resection is desired, see paragraph 5.4 to review femoral precut options for increasing the flexion gap via posterior femoral condylar resections.

5. FEMORAL RESECTION

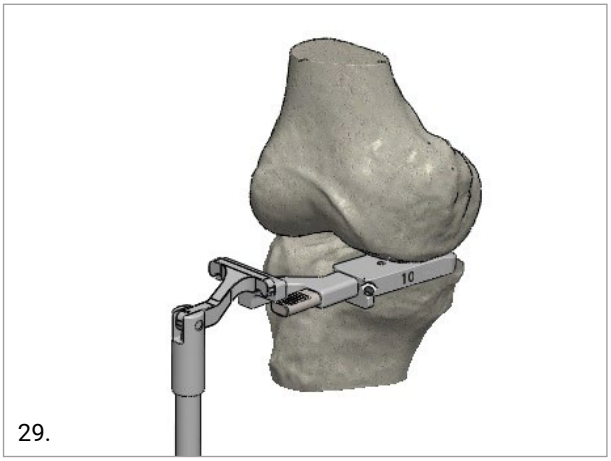
5.1 EXTENSION ALIGNMENT CHECK

The following instruments are available for checking the joint line and implant alignment:



28.

A. Distal spacers - 8, 9, 10, 11, 12, 13, 14
B. Connector for distal spacer
C. Offset alignment connector
D. Telescopic alignment rod


29.

Bring the leg into full extension and insert the appropriate distal spacer thickness into the joint until the anterior lip stops in contact with the anterior aspect of the tibia. The distal spacer thickness should equal the gap spacer thickness previously determined in extension. The spacer must be fully inserted into the joint space and sit flush on resected tibia surfaces, both on the sagittal and transverse cut.

Assemble the connector (B) and the offset alignment corrector (C) to the spacer (A). Insert the telescopic alignment rod (D) into the offset, centering it on the tibia. Assess alignment by verifying that the telescopic rod is in line with the center of the ankle and approaches the center of the hip (the degree of alignment undercorrection is a function of patient's anatomy).

Make certain that the knee is not over corrected into valgus, and allows for the desired laxity.

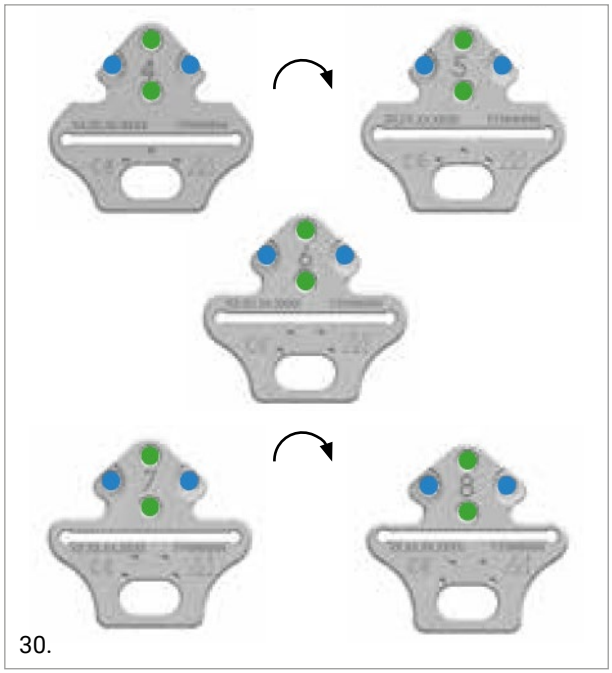
NOTICE: The tibial jig has been designed with a 3° built in posterior slope. The connector of the distal spacer is angled 3° relative to the distal spacer to compensate for the built in posterior slope of the tibial cut.

Remove the telescopic rod and the offset alignment connector.

5.2 DISTAL RESECTION

The distal femoral resection can be adjusted depending on gap balancing requirements.

Distal cutting guides are available in the following resection thicknesses: 4, 5, 6 (corresponding to the distal thickness of the femoral component), 7 and 8.


30.

- Reference fixation and repositioning holes
- Oblique fixation holes

The goal is a distal resection that allows a final extension gap of "15", with a varus/valgus opening that corresponds to the desired laxity. The authors aim for approximately 1-2 mm of varus/valgus opening in extension.

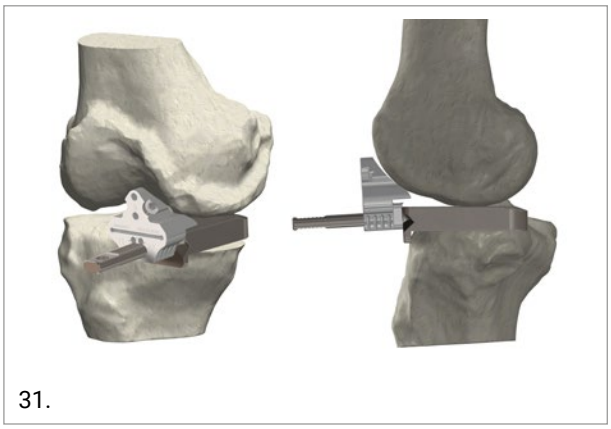
The target "15" extension gap reflects the combined thickness of the distal femoral component ("6") and the "9" tibia tray and poly thickness.

Select the distal cutting guide thickness that when combined with the validated distal spacer thickness, results in an extension gap of "15". Assemble it over the connector of the distal spacer.

EXAMPLE

After the tibial resection, the extension gap is measured at “10”. Choose the 5 mm distal cutting guide. This will result in a final extension gap of “15”.

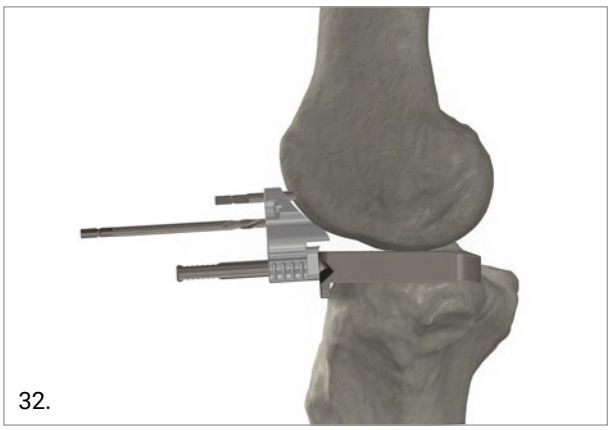
[“10” tibia only distal spacer] + [“5” distal resection] = “15” extension gap (tibia plus distal femur)



31.

Adjust rotation by confirming that the distal spacer block is flush against the sagittal cut.

Apply an axial load to make sure that the MCL is not loose and to accommodate the planned desired laxity.
Fix the cutting guide by means of two headless threaded pins inserted in the central parallel holes (shown in green in the Figure 32).
If additional fixation is desired, a threaded headed pin may be added in one of the oblique holes (shown in blue in the Figure 32).



32.

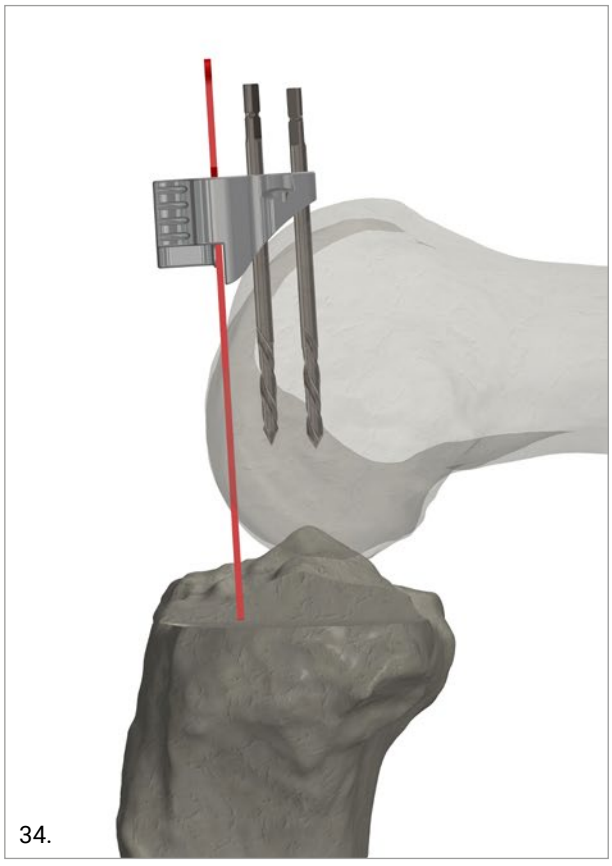
With the MCL retractor in place, perform the distal femur resection through the saw capture slot.

Once the initial cut in extension has been performed, remove the connector rod and the distal spacer block.
Flex the knee to 90 degrees and complete the distal resection to avoid inadvertent injury to the ACL and/or MCL. It is imperative that the connector rod is removed from the distal spacer block prior to flexing the knee.

33.

TIP

To facilitate the removal of the connector rod, insert a screwdriver into the hole and pull the connector rod out.



34.

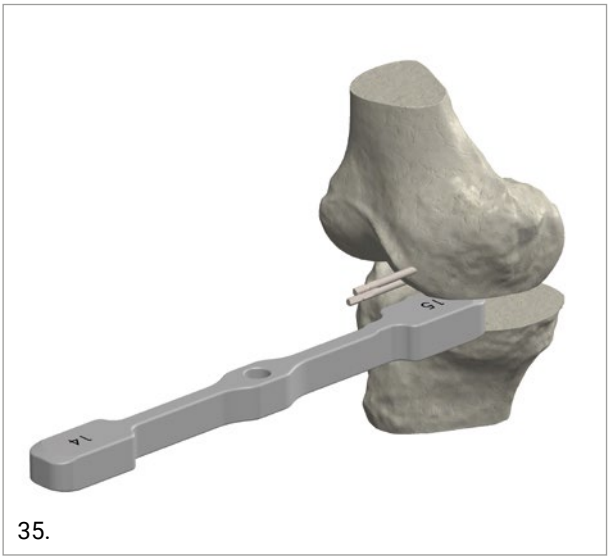
5.3 EXTENSION GAP CONTROL

Remove the distal cutting block by sliding it over the pins.

With the knee in extension check the extension gap and the knee stability by means of the "15" gap spacer, simulating the target total implant thickness (distal femur and "9" tibia tray plus poly).

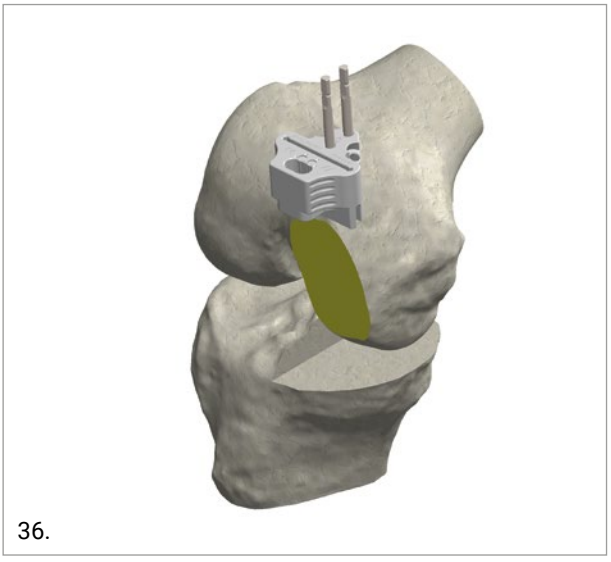
Verify that the varus/valgus opening corresponds to the desired laxity. The authors aim for approximately 1-2 mm of varus/valgus opening in extension.

Check the correct alignment by means of the telescopic alignment rod.



35.

If necessary, recut the distal femur using the appropriate distal cut guide positioned on the previous parallel pins.

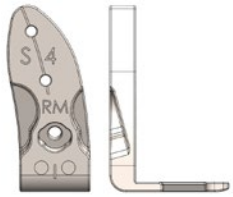


36.

Once the distal resection is complete and the correct extension gap and alignment are achieved, remove the pins.

5.4 FEMORAL SIZING AND POSTERIOR CUT AND CHAMFER

Size specific femoral sizers are available to determine the size of the femoral component and the anteroposterior positioning of the implant.



37.

One femoral gauge per size is available, in right and left versions.

The outside contour of the sizers matches the contour of the corresponding implant, both in the medio-lateral and antero-posterior direction.

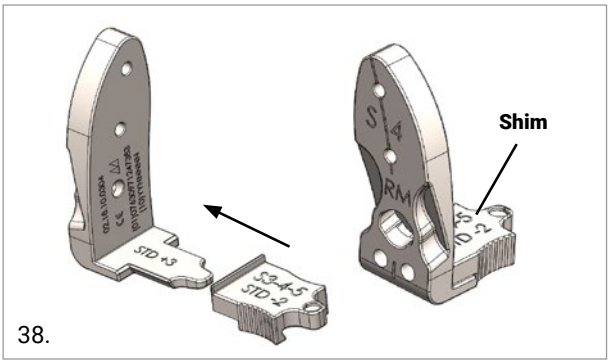
Femoral condyle posterior shims are available to be coupled with femoral gauges, producing different options for posterior femoral resections, shown in table below.

OPTIONS FOR POSTERIOR FEMORAL CONDYLE RESECTION

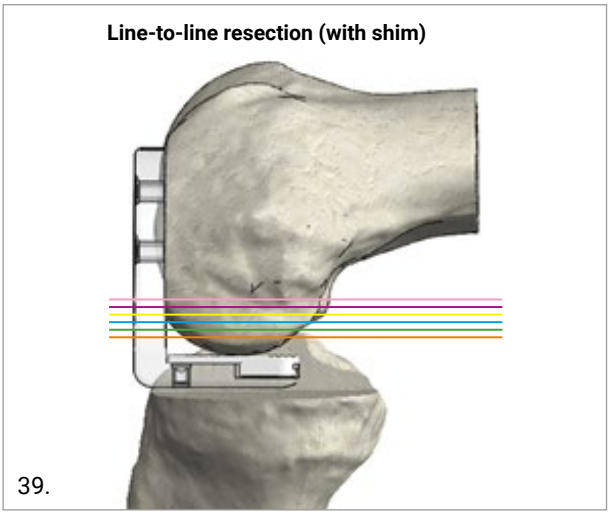
Shim	Reference system
	STD - 2 line-to-line resection of PFC
	STD - 1 1 mm of decompression
	STD 2 mm of decompression
	STD + 1 2 mm of decompression + 1 mm of PFC
	STD + 2 2 mm of decompression + 2 mm of PFC
	STD + 3 (Femoral gauge without shim) 2 mm of decompression and + 3 mm of PFC

To couple the shim and femoral gauge, slide the shim on the femoral gauge until full engagement.

With the knee in flexion, apply the appropriate femoral gauge to the distal femoral cut coupled with a shim (or without it) according to the plan previously defined to achieve the target "9" flexion gap. The sizer must be placed flush on the distal resection surface and the posterior plate must be placed in contact with the posterior condyle.



38.



39.

- resection with Shim STD -2 (line to line resection)
- resection with Shim STD-1
- resection with Shim STD (2 mm of decompression)
- resection with Shim STD+1
- resection with Shim STD+2
- resection with Femoral Gauge without Shim (STD+3)

EXAMPLE 1

After the initial tibial resection, the flexion gap is measured at "7" and the extension gap is measured at "10". Plan for a +2 mm femoral pre-cut to achieve the target "9" flexion gap without further increasing the extension gap and, at the same time, reducing the difference between flexion and extension gaps.

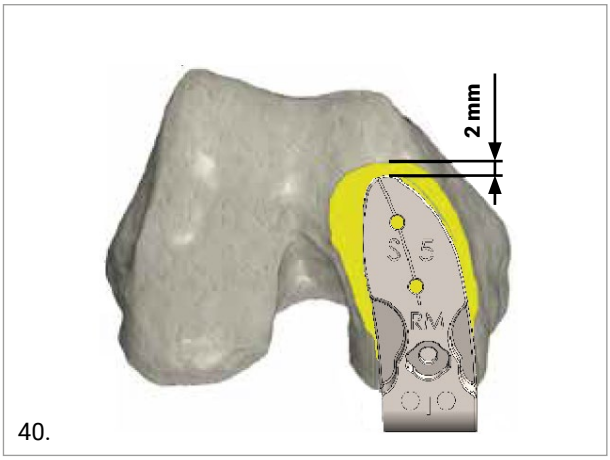
["7" gap spacer] + ["STD+2" femoral gauge] = "9" flexion gap

EXAMPLE 2

After the initial tibial resection, the flexion gap is measured at "5" and the extension gap at "7". Select the +2 shim to resect additional tibia and plan for a +2 mm femoral pre-cut to get the target "9" flexion.

["5" gap spacer] + [+2 mm shim] + ["STD +2" femoral gauge] = "9" flexion gap

Ensure there is no medial overhang present, and that the block has approximately 2 mm of cut surface at the superior tip.



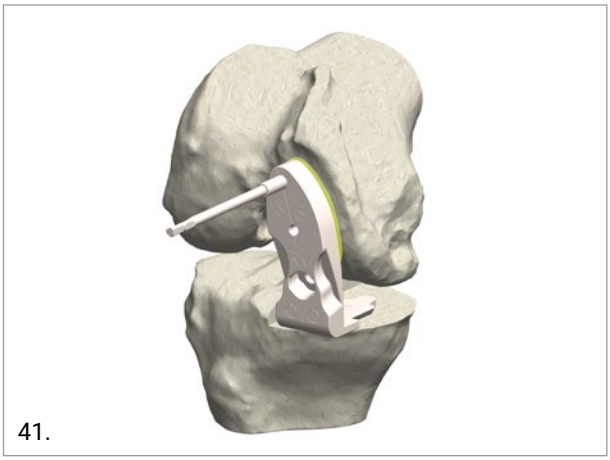
40.

TIP
If between sizes, choose the smaller size. This prevents compartment overhang and patellar impingement.

Confirm rotational alignment and medial/lateral positioning.

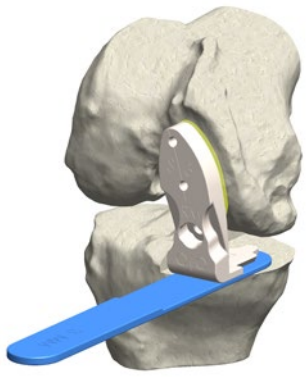
TIP
There will be an opportunity to adjust medial/lateral positioning after trial reduction.

When the proper size is selected and positioned, drill the upper hole with the 3.2 mm stop-drill. Then fix the femoral sizer position with one pin. The rotation of the component can still be adjusted.
Once the optimal coverage has been obtained, drill the lower fixation hole..


41.

TIP
To increase sizer stability while drilling, the 2 mm or 3 mm spacer can be positioned between the lower surface of the gauge and the tibial resection plane.

42.

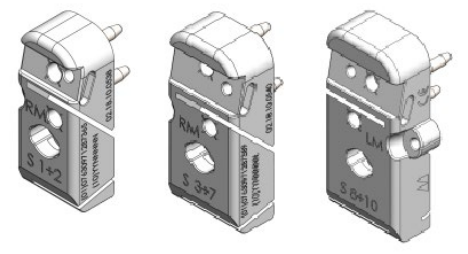


43.

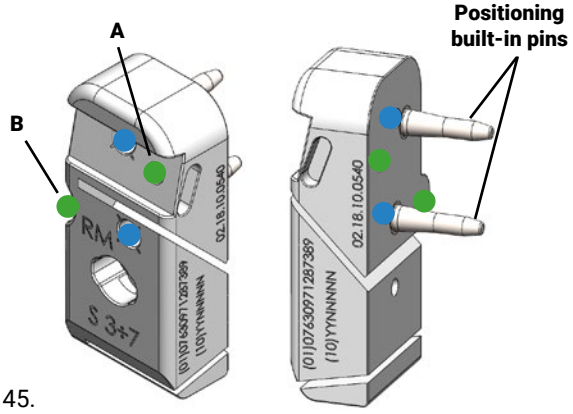
Remove the pin and sizer and position the posterior cutting guide of the corresponding size.

Femoral components are designed into three groups: sizes 1-2, 3-7, 8-10. The three groups of femoral sizes have increasing chamfers thicknesses to add mechanical strength to the biggest sizes.

Posterior cutting guides are available for each size range, in right and left versions.



44.

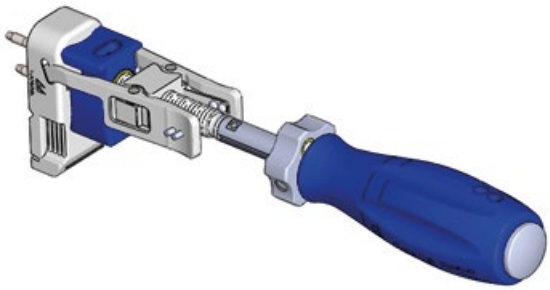


45.

Fixation holes

+ 2 mm repositioning holes for built-in pins

Position the guide by inserting the built-in pins into the two holes previously drilled through the femoral sizer.
The cutting block can be held and positioned on the bone by means of the femoral impactor - slide hammer.



46.

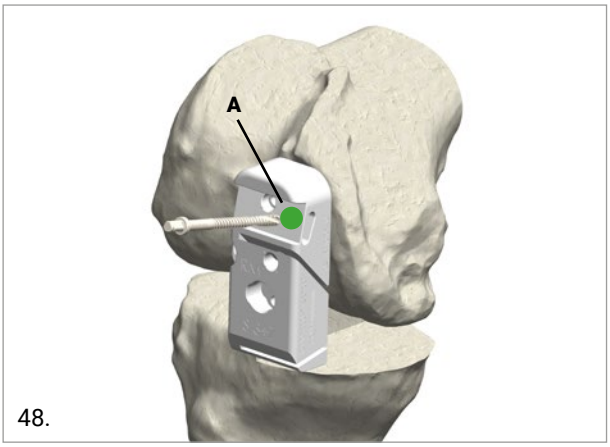
Assemble the posterior cutting guide to the femoral impactor. Open the femoral impactor by turning the handle counter-clockwise. Apply pressure to open the levers and attach the femoral impactor (with “TOP” etching facing downwards) on the lateral pockets located on the posterior cutting guide. Then release the pressure on the levers.

Turn the femoral impactor handle clockwise until the blue slider is firmly in contact with the posterior cutting guide. Then, position the posterior cutting guide onto the bone. To ensure good contact between the posterior cutting guide and the distal resection surface, unlock the ring of the impactor and use the integrated slide hammer to impact the guide on the bone.

The impaction can also be performed using a mallet on the end of the handle, being careful not to use excessive force.

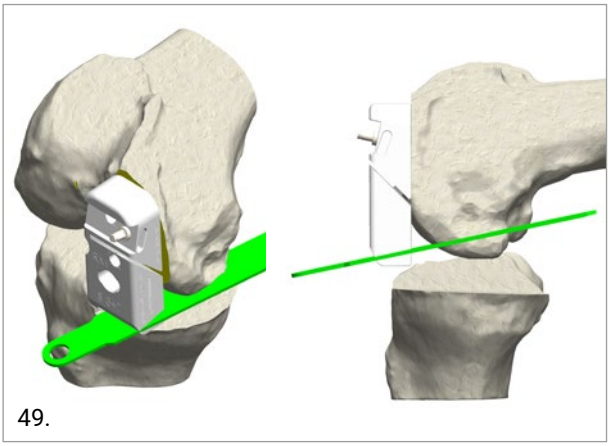
47.

Remove the impactor and check that the posterior cutting guide is perfectly in contact with the distal resection. Fix the position of the cutting guide using a short threaded headed pin (hole A shown in green in Figure 48).

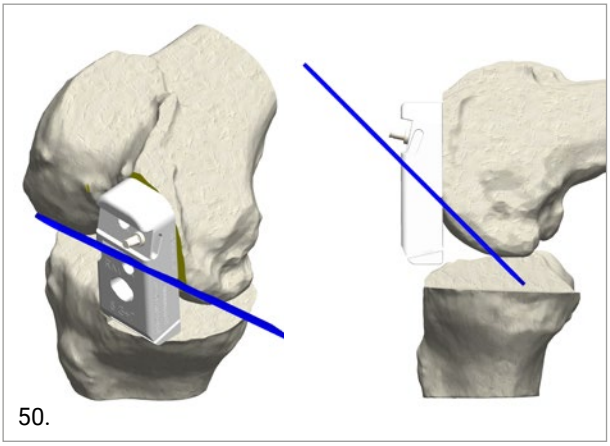


48.

With the knee in flexion, and MCL retractor in position, first perform the posterior cut through the posterior slot of the cutting block.


49.

Next perform the posterior chamfer resection through the chamfer slot of the cutting block.


50.

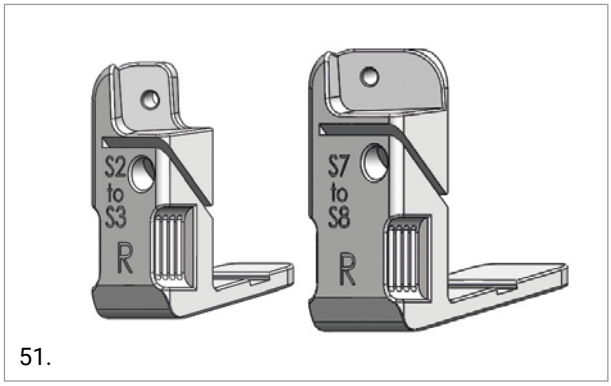
Remove the pin and cutting block and confirm cuts.
Position the trial femoral component on the bone and make sure that the resections match the internal profile of the femoral component.

CAUTION

After having performed the femoral resections, ensure that all surfaces are flat. Remove any remaining posterior osteophytes as they could limit flexion or extension, and the remainder of the medial meniscus.

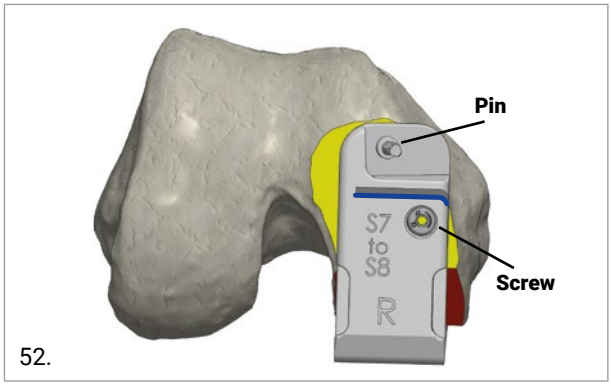
If a downsize from size 3 to 2 or from 8 to 7 is needed, there will be a slight gap at the chamfer that will have to be filled with cement.

If an upsize from 2 to 3 or from 7 to 8 is needed, it is required that the chamfer be recut. Two dedicated recut guides (right and left versions) allow for the recut of the chamfer to adapt the resections to a bigger femur size. In all other upsizing cases this step is not required.

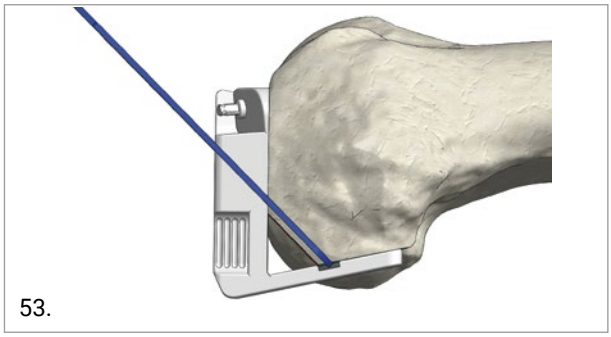


51.

Position the posterior chamfer recutting guide flush to the distal and posterior cut surfaces and fix it using a pin and a screw. Perform the chamfer recut through the slot.



52.

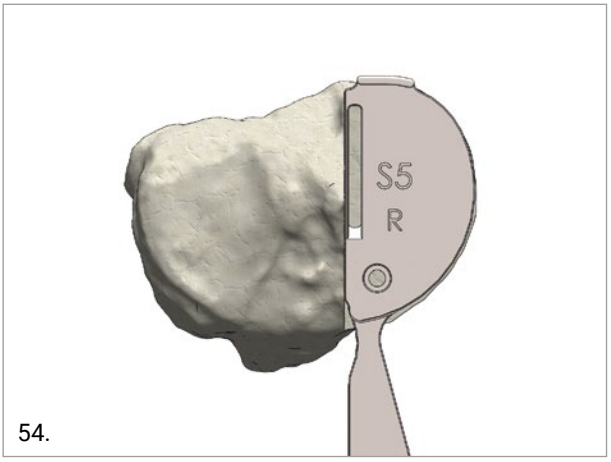

53.

6. TIBIA FINISHING

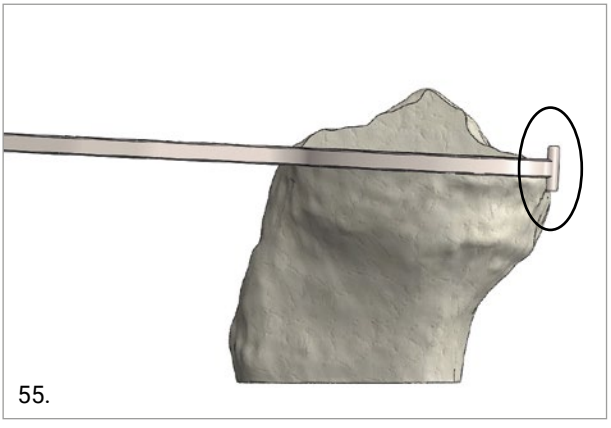
6.1 TIBIAL SIZING AND KEEL PREPARATION

Assess the tibial size using the tibial templates.
Four tibial templates, each bearing two sizes (1-2, 3-4, 5-6 and 7-8), are available. Place the template on the resected surface of the tibia. The straight edge should rest against the surface created by the sagittal cut and the posterior hook in contact with the posterior tibial cortex.

Select the template that best covers the resected proximal tibia in both the antero-posterior and mediolateral dimensions. The goal is to cover as much of the tibia as possible, without any overhang. Any margin for anterior/posterior overhang should be anterior.



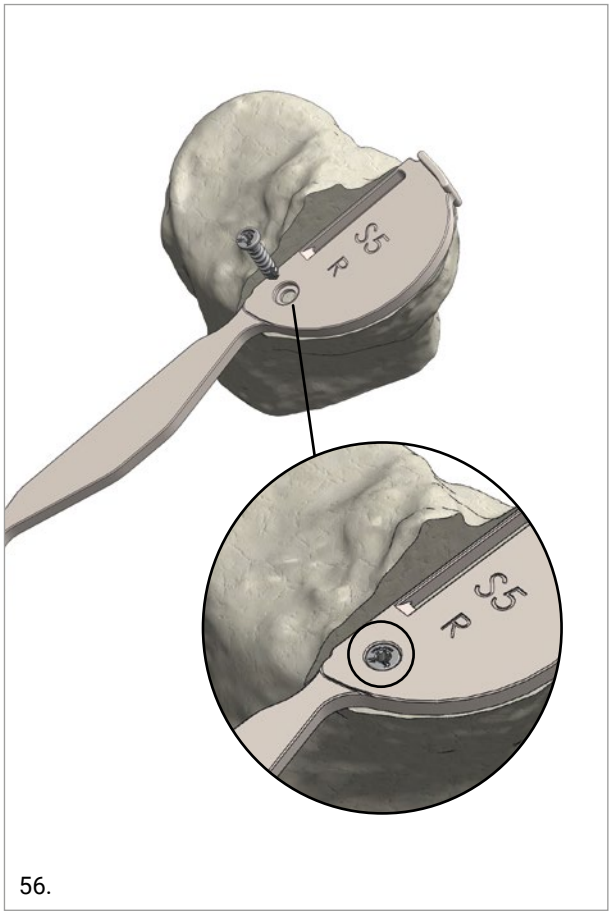
54.


55.

TIP
If the femoral component seems excessively large compared to tibial size, evaluate the sagittal cut. Consider lateralizing or adding external rotation to the sagittal cut, if appropriate, to gain a tibial component size.

CAUTION
It is very important to have the hook against the posterior tibial cortex. This will help avoid breaching the posterior cortex while preparing the keel.

Once the optimal coverage has been achieved, with the appropriate tibial template sizer flush on the tibial surface, insert a short-headed screw into the anterior fixation hole to fix the position of the tibial sizer. The screw is in the same position as the anterior peg of the final tibial implant.

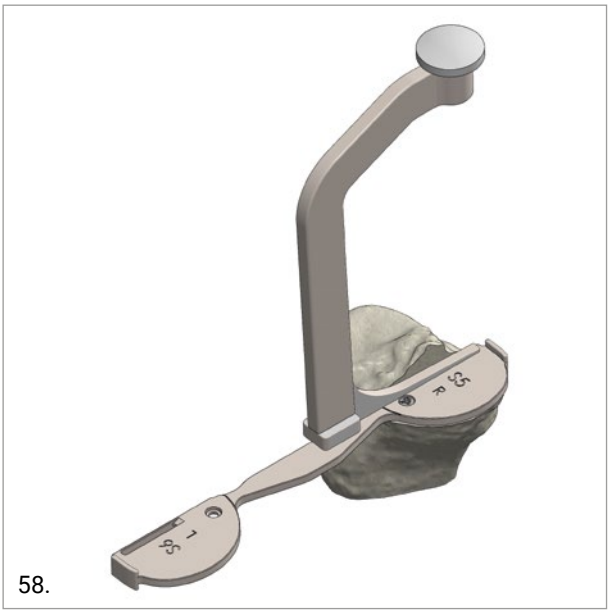


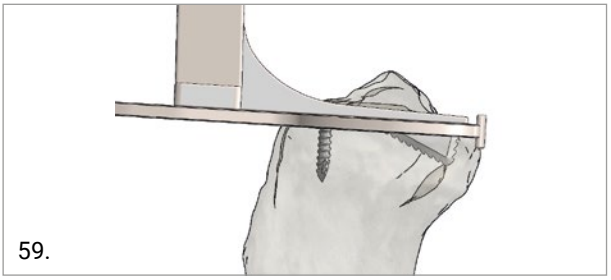
56.

To prepare the keel for the trial and final implant, use the impactor by inserting its keel into the dedicated slot of the tibial template sizer.

Make sure the keel preparation impactor sits flush on the tibial template sizer surface. When the impactor is in line with the mechanical engravings, the optimal position is reached. Hammer on the top of the impactor.


57.


58.

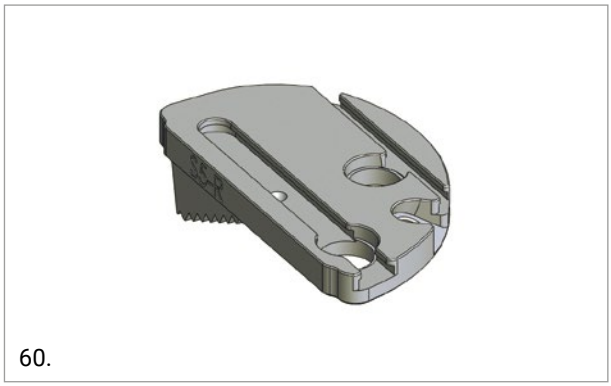

59.

TIP
If the bone is sclerotic you may need to use an osteotome prior to using the impactor for keel preparation.

6.2 TIBIAL PEGS PREPARATION

Remove the screw and the tibial template sizer.

Select the proper size tibial baseplate trial with integrated keel.


60.

Assemble the tibial trial to the tibial impactor, sliding the impactor into the dedicated rail of the chosen trial baseplate.


61.

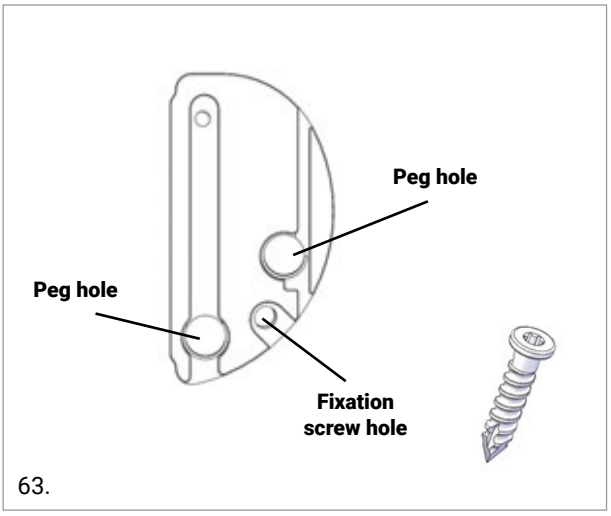
Flex the knee and position the trial baseplate onto the resected tibial surface so that the integrated keel engages into the slot previously prepared. Lightly impact the tibial baseplate so it sits flush on the tibial surface.

62.

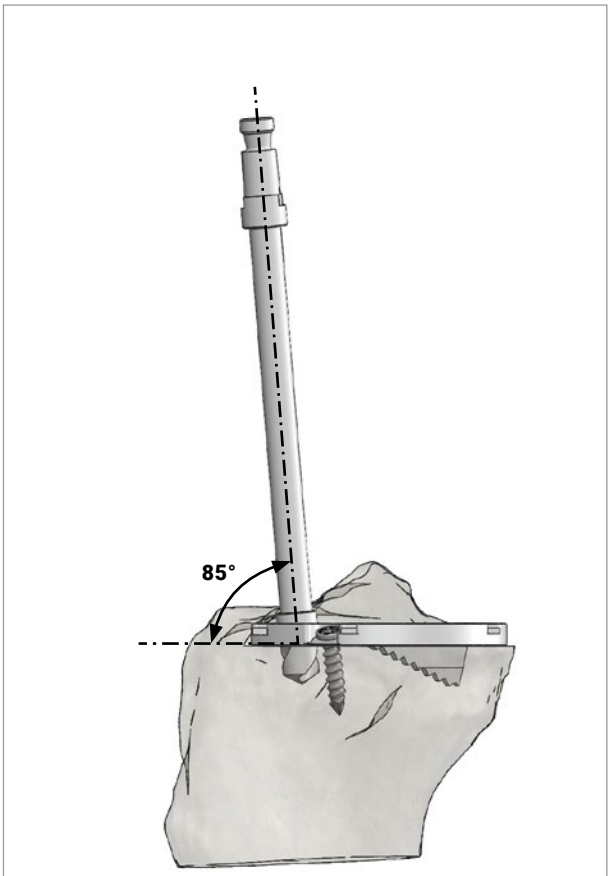
The medio-lateral aspect of the trial baseplate is 1 mm wider than the final implant. This is to avoid impingement during the liner insertion. The keel integrated into the impactor has the same size of final implant keel.

Remove the tibial impactor.

Fix the baseplate using a short-headed screw and drill the two tibial peg holes for the fixation peg using the 12 mm stop drill bit. Peg holes are angled 5° posteriorly to facilitate drilling, to prevent impingement with the femur and to allow for a 1 mm cement mantle around the pegs.



63.



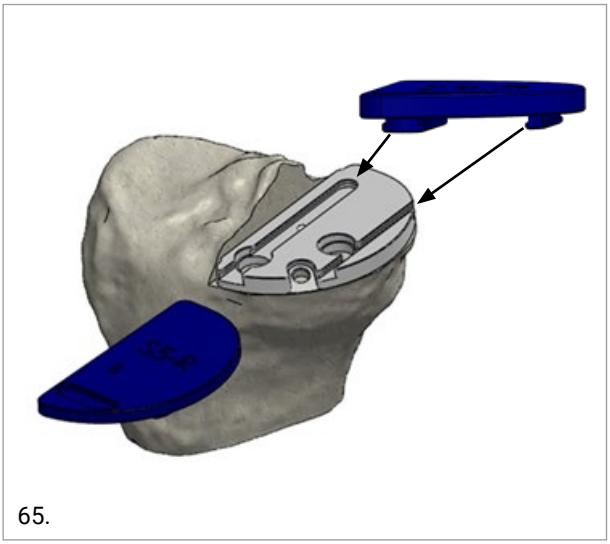
64.

TIP

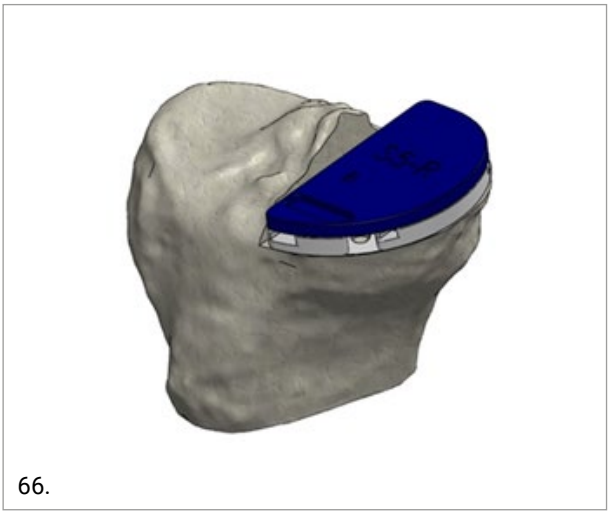
Make certain the tibial peg drill is fully inserted to allow enough depth for the implant pegs.

7. TRIALING

Choose the trial insert (typically 8 or 9) and slide it onto the rails of the trial tibial baseplate.



65.



66.

Place the trial femoral component onto the femur and adjust its medio-lateral position to best articulate with the center of the tibial trial throughout a full arc of motion.

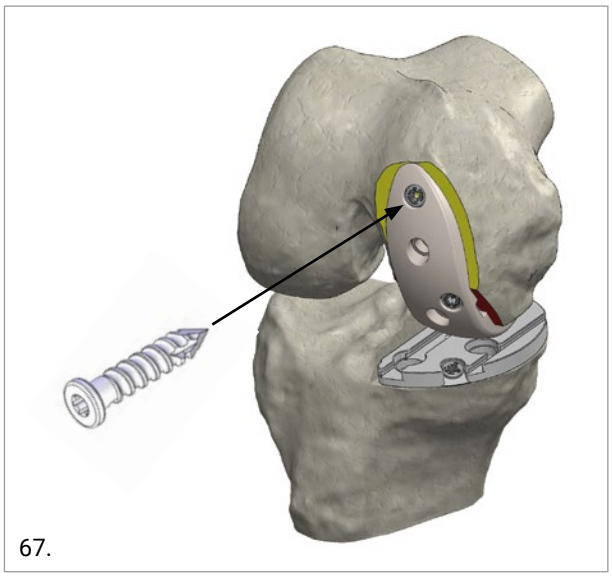
CAUTION

Remove any prominent spurs or osteophytes on the posterior femoral condyle as they could inhibit flexion. Check that there is no posterior overhang of femoral component. If this is the case, a smaller femoral size might be considered.

TIP

Determine the optimal medio-lateral position of trial femur during trial reduction, by viewing the contact between femoral component and trial tibial insert.

Once the optimal position is acquired, fix the femoral trial using one or two screws. Two fixation holes are available for sizes from 3 to 10. One fixation hole is available for small sizes 1 and 2.



67.

With all trial components in place, test the knee for stability and balance throughout the range of motion. Assess ligamentous balance.

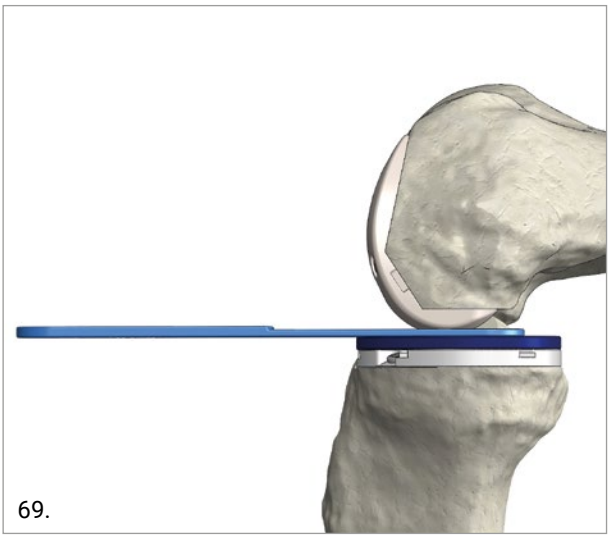
The position of the centerline engraved on the insert top surface compared to the femoral trial engraving provides an indication of the medio/lateral final implant position.

Ideally, with varus-valgus stress, there should be a 1-2 mm opening in extension, and 2-3 mm opening in flexion. It is imperative, however, that knee alignment is not over-corrected into valgus.

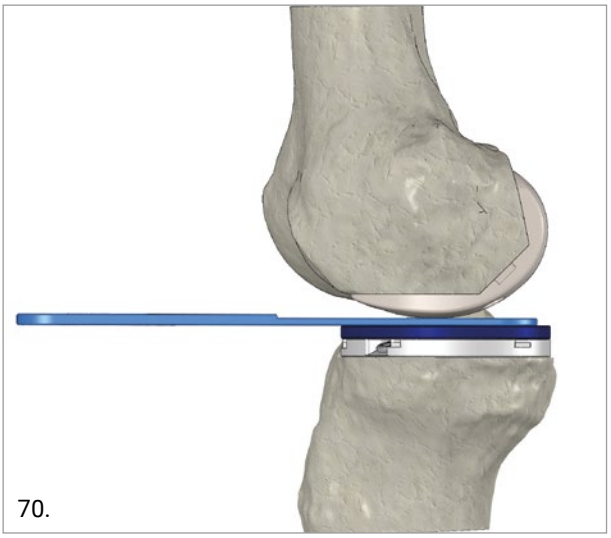
68.

TIP

Insert the 2 mm spacer to confirm flexion and extension gaps and ensure they are not too tight.



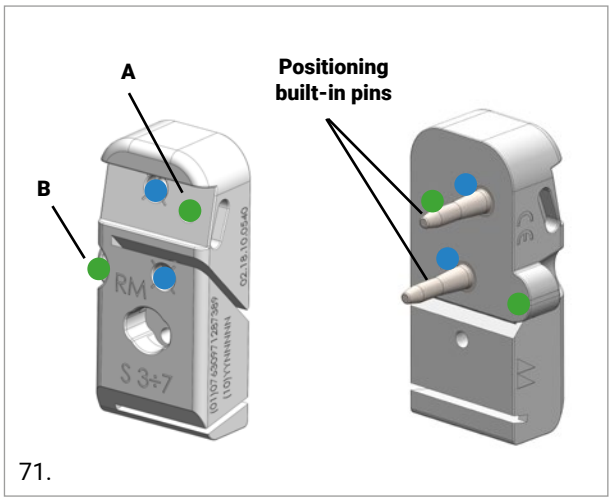
69.



70.

In the event that the trial reduction is tight in flexion and good in extension, an option is to shift the femoral component 2 mm anteriorly.

Re-apply the posterior cutting block previously used to the distal femur, fixing it with the prior threaded headed pin (green hole labeled "A" in Figure 71). Drill the holes marked (blue) with the 3.2 mm stop-drill. Remove the fixation pin and cutting block, and re-apply the cutting block to the distal femur, positioning it by inserting built in pins into the newly drilled holes (blue). Fix the cutting block with a threaded headed pin in the other hole (green hole labeled "B" in Figure 71) and repeat the posterior and chamfer cuts. This will increase the flexion gap by 2 mm.



71.

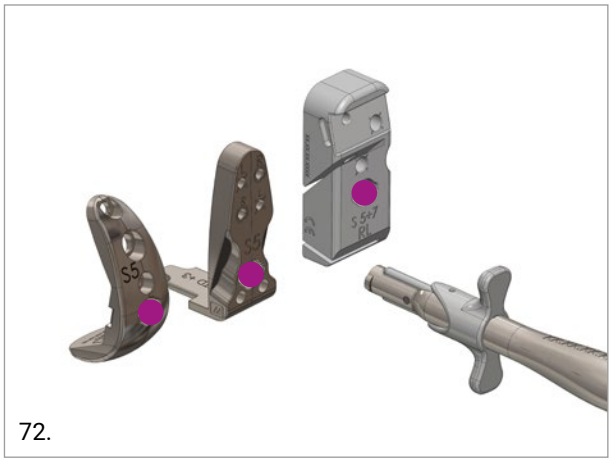
- Fixation holes
- + 2mm repositioning holes built-in pins

CAUTION

Pay particular attention to the coverage, specifically if a femoral size 3 or 8 was chosen. The +2 mm anterior shift could lead to the need to downsize the femur to a size 2 or 7, with thinner chamfers. In this case there will be a slight gap at the chamfer that will have to be filled with cement.

OPTION

Femoral gauges, posterior cutting guides and femoral trials described at surgical step 5.3 and 7, can be positioned with the multifuncional handle.



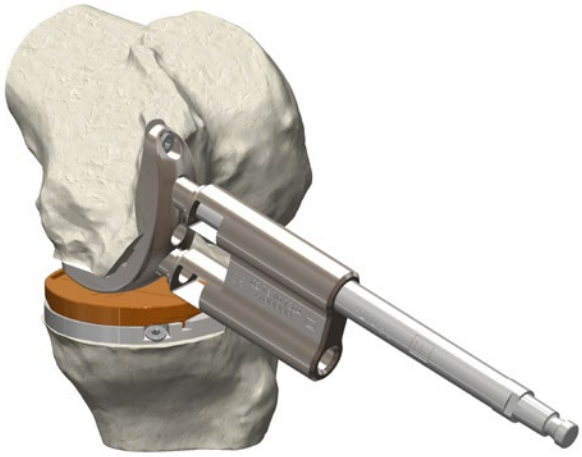
72.

- Multifunctional handle hole

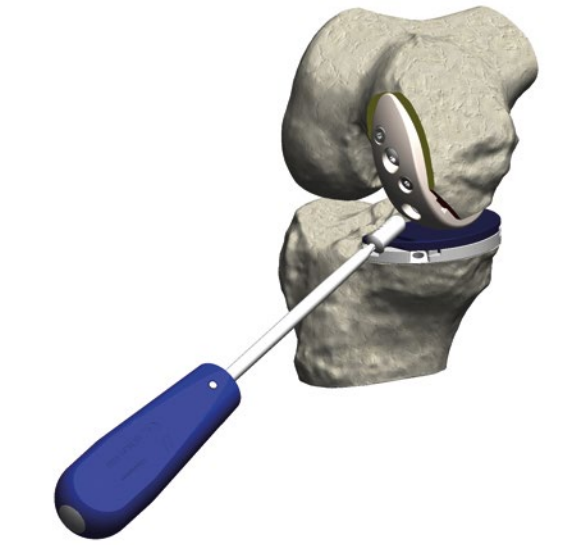
8. FEMUR FINISHING

Once proper balance is achieved, confirm the M/L position of the femoral trial. Combine the drill guide with the femoral trial, inserting the two drill guides centering the cylinder corresponding to the two trial peg holes. Insert the drill into the drill guide for preparation of the femoral fixation pegs.

Trial pegs are available to verify the proper peg hole preparation. Use the screwdriver for easier peg handling.

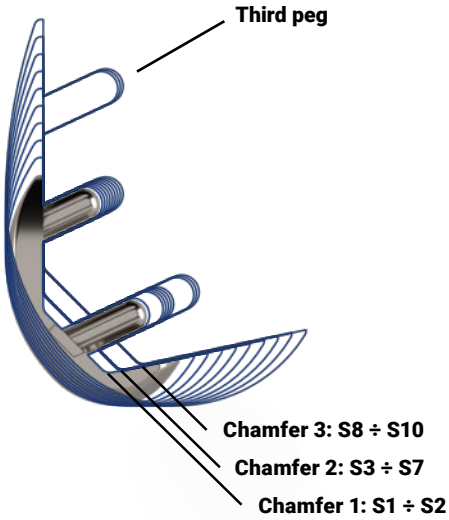


73.



74.

Size 1 through 7 femoral components have two fixation pegs in the same position. Sizes (8-10) have a third peg to increase stabilization.



75.

9. FINAL IMPLANT COMPONENTS

When the trials are satisfactory, the femoral and tibial trials can be removed. Next irrigate, the wound and bony surfaces.

If there are any sclerotic areas, these can be prepped with shallow drill holes to aid in cement interdigitation. Dry bony surfaces.

The final implant is intended to be cemented. The bone cement must be prepared according to the relevant instructions for use, provided by the cement manufacturer.

Implant the tibial component first.

9.1 TIBIAL COMPONENT

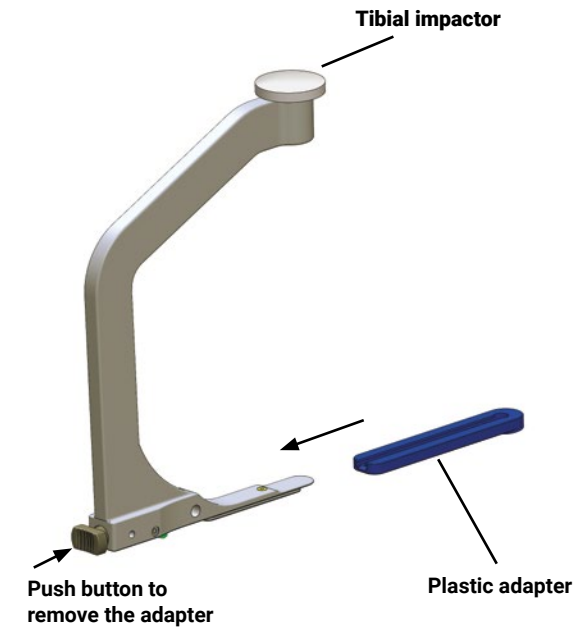
The resected surface should be thoroughly cleaned. Once the cement has reached the right viscosity according to its instructions for use, it must be applied evenly to the undersurface of the tibial baseplate to fill the cement pockets.

Apply cement, and pressurize with gun or manually into the bony surfaces and peg holes, taking care not to extrude excess cement posteriorly.

76.

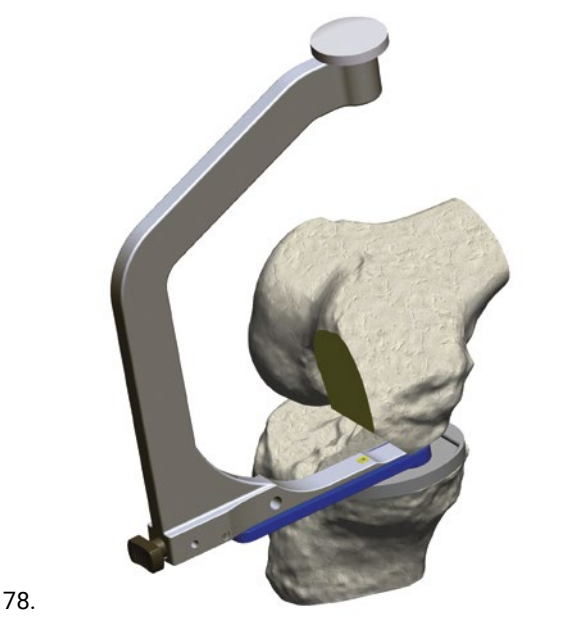
Assemble the plastic adapter on the tibial impactor.

Slide the impactor until a click is heard, confirming the adapter is firmly locked into the impactor.



77.

Place the tibial component into proper position. Apply pressure, from posterior to anterior, using the dedicated impactor to allow cement extrusion anteriorly. Tap the final tibial baseplate into position. Remove excess cement at each opportunity, carefully checking that no cement remains on the implant surface, especially in the locking mechanism grooves.



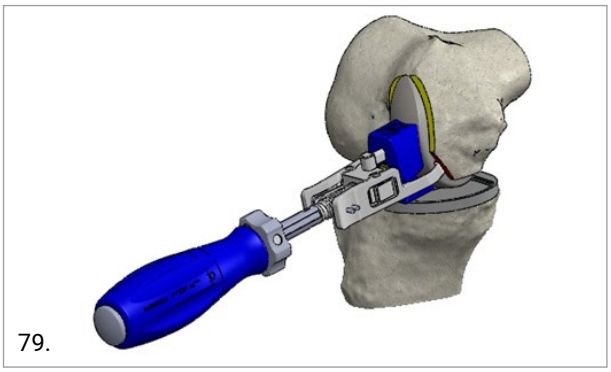
78.

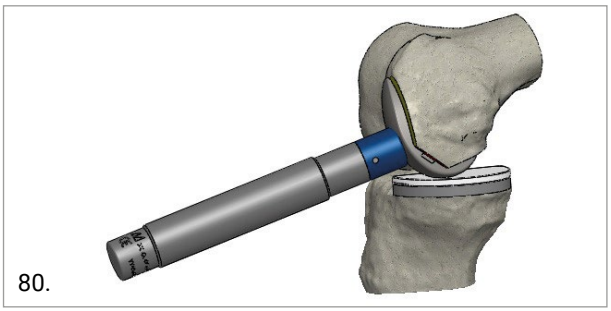
To disassemble the adapter, push the button on the back of the impactor and slide the adapter off.

9.2 FEMORAL COMPONENT

The resected surface should be thoroughly cleaned and dried. Apply cement on the internal surface of the femoral component into the corresponding cement pockets. Apply cement and pressurize with gun or manually into the bony surfaces and peg holes, taking care not to extrude excess cement posteriorly.

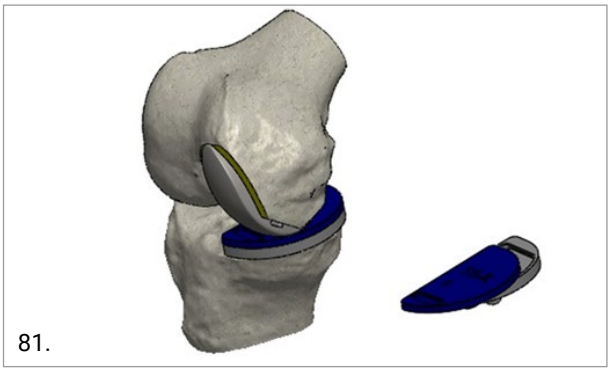
Engage the femoral impactor onto the final femoral component and complete the impaction with the knee flexed at 90° using the femoral impactor (TOP etching facing upwards). The extruded cement must be carefully cleaned from the femur, checking that no cement remains on the articular surface. Complete impaction of the femoral component using the femoral impactor.


79.


80.

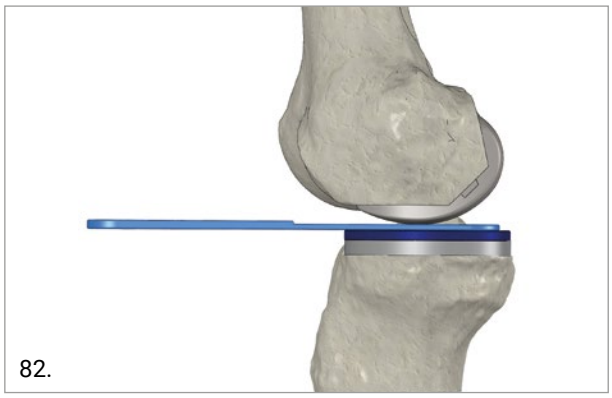
9.3 INSERT COMPONENT

Clip the trial insert to the baseplate and lightly pressurize in extension.


81.

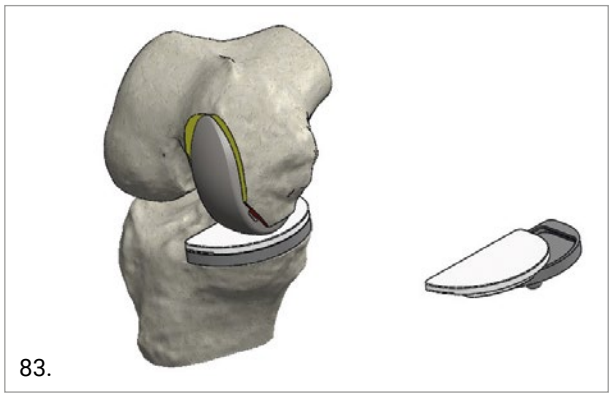
TIP

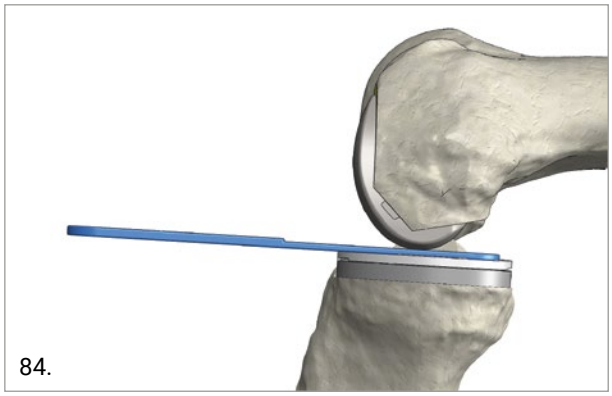
Use the 2 mm plastic spacer to enhance the pressurization. Remove excess cement.


82.

After the cement has cured, repeat the trial reduction with the trial insert clipped in the final tibial component. Confirm the appropriate thickness of the final insert by testing knee stability in flexion and extension to optimize range of motion, alignment, and stability.

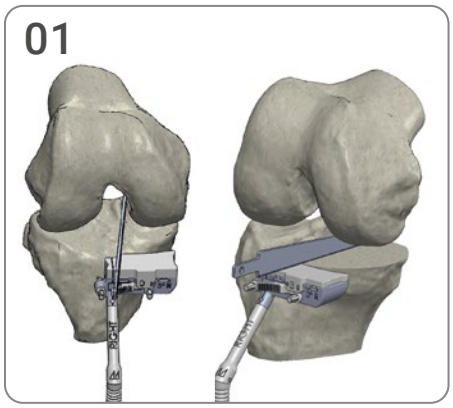
Remove any remaining excess cement and, after the cement has cured, implant the polyethylene insert to the baseplate by first engaging the posterior flange. Then apply downward pressure on the insert with 2 mm plastic spacer.


83.

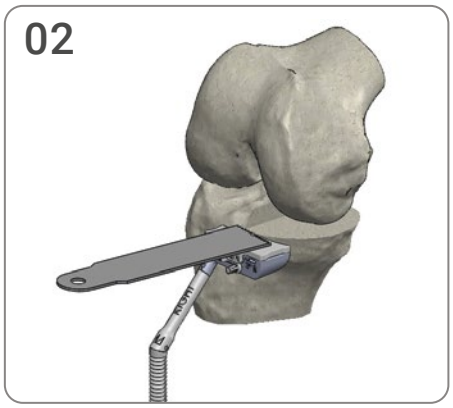

84.

Irrigate and close the wound in the standard fashion.

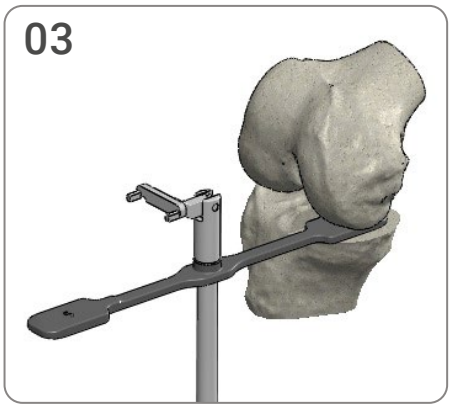
10. SUMMARY STEPS



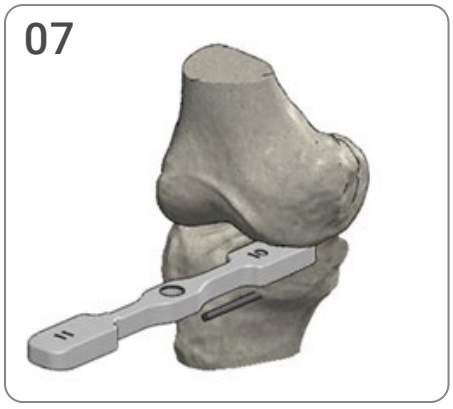
Tibial cut guide positioning.
Sagittal resection



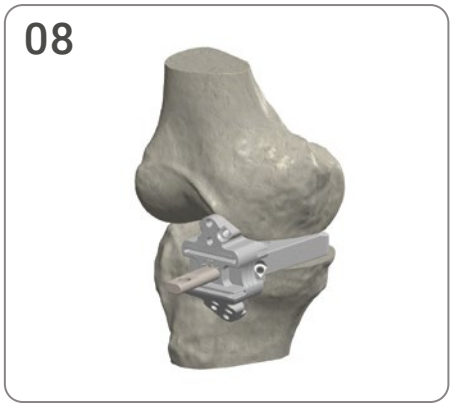
Transverse resection



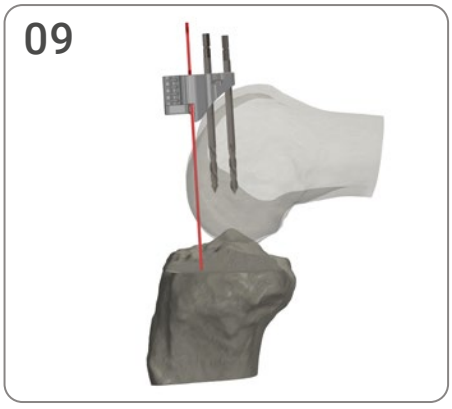
Flexion gap check.
Alignment check



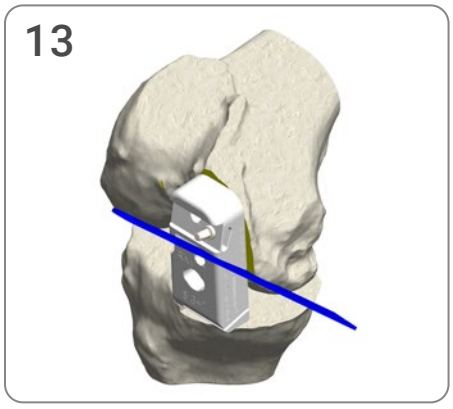
Extension gap check



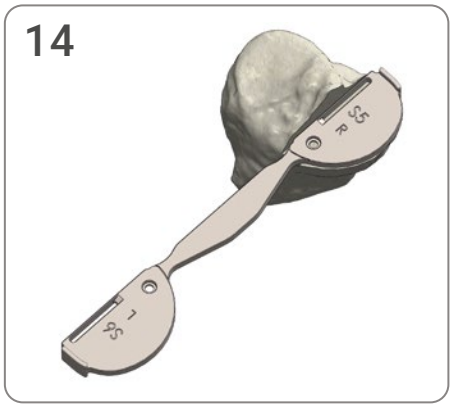
Distal spacer and distal
resection guide positioning



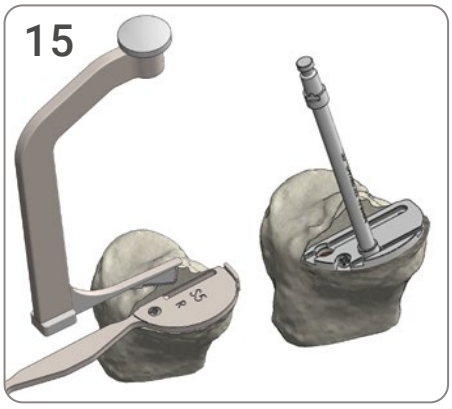
Distal resection



Posterior and chamfer
resections

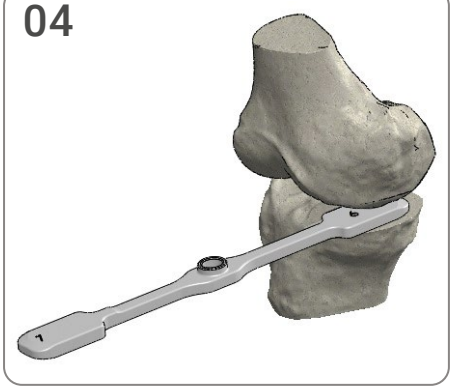


Tibia sizing



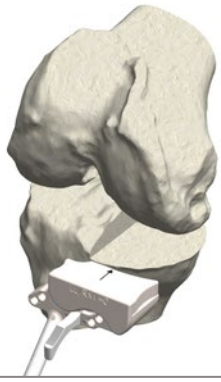
Tibial preparation:
keel and pegs

04



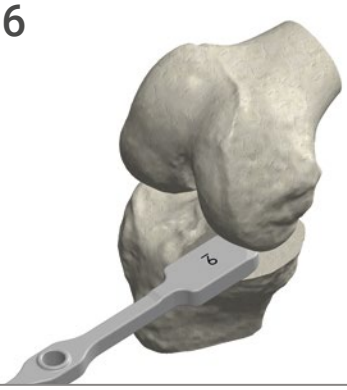
Extension gap check.
Alignment check

05



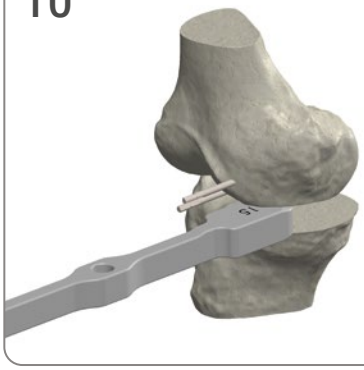
Tibia recut to achieve "9"*
flexion gap**

06



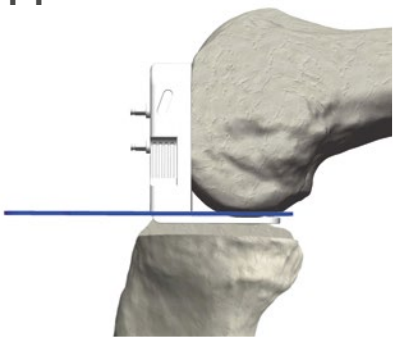
Flexion gap check

10



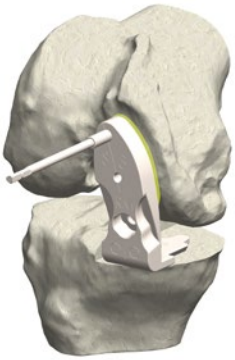
Confirm "15"* extension gap

11



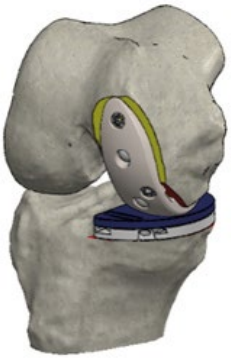
**Posterior femoral condyle
pre-cut (option)

12



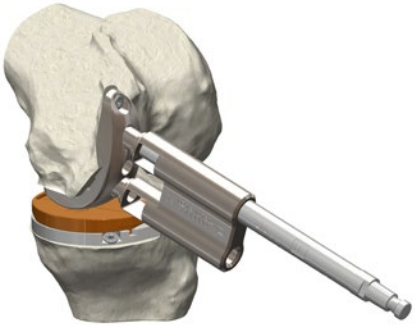
Femur sizing and holes
preparation

16



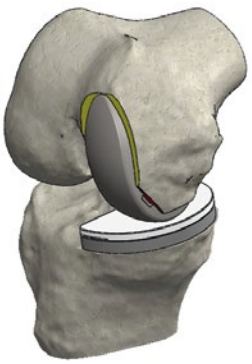
Trialing

17



M/L position adjustment
and peg holes preparation

18



Final component
implantation

* Or desired target thickness
**If you wish to minimize or avoid recutting the tibia, utilize the posterior femoral condylar precut to achieve the "9" flexion gap

11. SELECTION OF THE PROSTHETIC COMPONENTS - SIZE MATCHING

Tibial inserts must be matched with tibial trays of the same size only. Any tibial insert can be matched with all sizes of the femoral components. The matching capabilities are shown in tables 1 and 2.

TABLE 1: MATCHING CAPABILITIES FOR TIBIAL INSERTS AND TIBIAL BASEPLATE

		Tibial Insert							
	Size	1	2	3	4	5	6	7	8
Tibial Baseplate	1	✓							
	2		✓						
	3			✓					
	4				✓				
	5					✓			
	6						✓		
	7							✓	
	8								✓

TABLE 2: MATCHING CAPABILITIES FOR TIBIAL INSERTS AND FEMORAL COMPONENTS

		Tibial Insert							
	Size	1	2	3	4	5	6	7	8
Femoral Component	1	✓	✓	✓	✓	✓	✓	✓	✓
	2	✓	✓	✓	✓	✓	✓	✓	✓
	3	✓	✓	✓	✓	✓	✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓
	5	✓	✓	✓	✓	✓	✓	✓	✓
	6	✓	✓	✓	✓	✓	✓	✓	✓
	7	✓	✓	✓	✓	✓	✓	✓	✓
	8*	✓	✓	✓	✓	✓	✓	✓	✓
	9*	✓	✓	✓	✓	✓	✓	✓	✓
	10*	✓	✓	✓	✓	✓	✓	✓	✓

* On demand size: check before surgery with Medacta representative if these femoral sizes are available in hospital stock.

12. IMPLANTS NOMENCLATURE

FEMORAL COMPONENT

Left Medial Side	Size	Right Medial Side
02.18.001LM	1	02.18.001RM
02.18.002LM	2	02.18.002RM
02.18.003LM	3	02.18.003RM
02.18.004LM	4	02.18.004RM
02.18.005LM	5	02.18.005RM
02.18.006LM	6	02.18.006RM
02.18.007LM	7	02.18.007RM
02.18.008LM*	8	02.18.008RM*
02.18.009LM*	9	02.18.009RM*
02.18.010LM*	10	02.18.010RM*

* On demand size: check before surgery with Medacta representative if these femoral sizes are available in hospital stock.

TIBIAL TRAY

Left Medial Side	Size	Right Medial Side
02.18.TF1.LM	1	02.18.TF1.RM
02.18.TF2.LM	2	02.18.TF2.RM
02.18.TF3.LM	3	02.18.TF3.RM
02.18.TF4.LM	4	02.18.TF4.RM
02.18.TF5.LM	5	02.18.TF5.RM
02.18.TF6.LM	6	02.18.TF6.RM
02.18.TF7.LM	7	02.18.TF7.RM
02.18.TF8.LM	8	02.18.TF8.RM

TIBIAL INSERT

Left Medial Side	Size	Label height	Right Medial Side	Left Medial Side	Size	Label height	Right Medial Side
02.18.IF1.08.LM	1	8	02.18.IF1.08.RM	02.18.IF5.08.LM	5	8	02.18.IF5.08.RM
02.18.IF1.09.LM		9	02.18.IF1.09.RM	02.18.IF5.09.LM		9	02.18.IF5.09.RM
02.18.IF1.10.LM		10	02.18.IF1.10.RM	02.18.IF5.10.LM		10	02.18.IF5.10.RM
02.18.IF1.11.LM		11	02.18.IF1.11.RM	02.18.IF5.11.LM		11	02.18.IF5.11.RM
02.18.IF1.12.LM		12	02.18.IF1.12.RM	02.18.IF5.12.LM		12	02.18.IF5.12.RM
02.18.IF1.14.LM		14	02.18.IF1.14.RM	02.18.IF5.14.LM		14	02.18.IF5.14.RM
02.18.IF2.08.LM	2	8	02.18.IF2.08.RM	02.18.IF6.08.LM	6	8	02.18.IF6.08.RM
02.18.IF2.09.LM		9	02.18.IF2.09.RM	02.18.IF6.09.LM		9	02.18.IF6.09.RM
02.18.IF2.10.LM		10	02.18.IF2.10.RM	02.18.IF6.10.LM		10	02.18.IF6.10.RM
02.18.IF2.11.LM		11	02.18.IF2.11.RM	02.18.IF6.11.LM		11	02.18.IF6.11.RM
02.18.IF2.12.LM		12	02.18.IF2.12.RM	02.18.IF6.12.LM		12	02.18.IF6.12.RM
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02.18.IF3.08.LM	3	8	02.18.IF3.08.RM	02.18.IF7.08.LM	7	8	02.18.IF7.08.RM
02.18.IF3.09.LM		9	02.18.IF3.09.RM	02.18.IF7.09.LM		9	02.18.IF7.09.RM
02.18.IF3.10.LM		10	02.18.IF3.10.RM	02.18.IF7.10.LM		10	02.18.IF7.10.RM
02.18.IF3.11.LM		11	02.18.IF3.11.RM	02.18.IF7.11.LM		11	02.18.IF7.11.RM
02.18.IF3.12.LM		12	02.18.IF3.12.RM	02.18.IF7.12.LM		12	02.18.IF7.12.RM
02.18.IF3.14.LM		14	02.18.IF3.14.RM	02.18.IF7.14.LM		14	02.18.IF7.14.RM
02.18.IF4.08.LM	4	8	02.18.IF4.08.RM	02.18.IF8.08.LM	8	8	02.18.IF8.08.RM
02.18.IF4.09.LM		9	02.18.IF4.09.RM	02.18.IF8.09.LM		9	02.18.IF8.09.RM
02.18.IF4.10.LM		10	02.18.IF4.10.RM	02.18.IF8.10.LM		10	02.18.IF8.10.RM
02.18.IF4.11.LM		11	02.18.IF4.11.RM	02.18.IF8.11.LM		11	02.18.IF8.11.RM
02.18.IF4.12.LM		12	02.18.IF4.12.RM	02.18.IF8.12.LM		12	02.18.IF8.12.RM
02.18.IF4.14.LM		14	02.18.IF4.14.RM	02.18.IF8.14.LM		14	02.18.IF8.14.RM

13. INSTRUMENTATION NOMENCLATURE

The following trays are needed for a MOTO Medial Unicompartimental Replacement:

Ref.	Description
02.18S.301A	MOTO Partial Knee System - General Level 1
02.18S.301B	MOTO Partial Knee System - General Level 2
02.18S.302M	MOTO Partial Knee System - MOTO MED Femoral set
02.18S.303M	MOTO Partial Knee System - MOTO MED Tibial set
02.18s.203	MOTO Partial Knee System - MOTO MED Trial Inserts

MOTO PARTIAL KNEE SYSTEM - GENERAL LEVEL 1 - 02.18S.301A

Ref.	Description	Quantity
02.18.10.0002	Ankle clamp	1
02.18.10.0031	Connector for distal spacer	1
02.18.10.0275	Trial tibia baseplate impactor	1
02.18.10.0276	Adapter for tibial implant impactor	1
02.18.10.0336	4mm distal cutting guide	1
02.18.10.0337	5mm distal cutting guide	1
02.18.10.0338	6mm distal cutting guide	1
02.18.10.0339	7mm distal cutting guide	1
02.18.10.0340	8mm distal cutting guide	1
02.18.10.0516	Impactor for keel preparation 2 mm	1
02.18.10.1006	Shim +0mm - RL LM	1
02.18.10.1007	Shim +1mm – RL LM	1
02.18.10.1008	Shim +2mm – RL LM	1
02.18.10.1009	Shim +3mm – RL LM	1
02.18.10.1010	Shim +4mm – RL LM	1
02.18.10.1011	Shim +5mm - RL LM	1
02.18.10.1012	Shim +0mm – LL RM	1
02.18.10.1013	Shim +1mm – LL RM	1
02.18.10.1014	Shim +2mm – LL RM	1
02.18.10.1015	Shim +3mm – LL RM	1
02.18.10.1016	Shim +4mm – LL RM	1
02.18.10.1017	Shim +5mm - LL RM	1
02.18.10.1212	Shim for femoral gauge S1-2 STD -2	1
02.18.10.1213	Shim for femoral gauge S1-2 STD -1	1
02.18.10.1214	Shim for femoral gauge S1-2 STD 0	1
02.18.10.1215	Shim for femoral gauge S1-2 STD +1	1
02.18.10.1216	Shim for femoral gauge S1-2 STD +2	1
02.18.10.1217	Shim for femoral gauge S3-4-5 STD -2	1
02.18.10.1218	Shim for femoral gauge S3-4-5 STD -1	1
02.18.10.1219	Shim for femoral gauge S3-4-5 STD 0	1

Ref.	Description	Quantity
02.18.10.1220	Shim for femoral gauge S3-4-5 STD +1	1
02.18.10.1221	Shim for femoral gauge S3-4-5 STD +2	1
02.18.10.1222	Shim for femoral gauge S6-7 STD -2	1
02.18.10.1223	Shim for femoral gauge S6-7 STD -1	1
02.18.10.1224	Shim for femoral gauge S6-7 STD 0	1
02.18.10.1225	Shim for femoral gauge S6-7 STD +1	1
02.18.10.1226	Shim for femoral gauge S6-7 STD +2	1
02.18.10.0572	Shim for femoral gauge S8-9-10 STD -2	On Demand
02.18.10.0573	Shim for femoral gauge S8-9-10 STD -1	On Demand
02.18.10.0574	Shim for femoral gauge S8-9-10 STD 0	On Demand
02.18.10.0575	Shim for femoral gauge S8-9-10 STD +1	On Demand
02.18.10.0576	Shim for femoral gauge S8-9-10 STD +2	On Demand
02.18.10.1279	Tibial Sagittal Guide (TSG) - LL RM	1
02.18.10.1280	Tibial Sagittal Guide (TSG) - RL LM	1
02.18.10.1289	Shim +0mm SLOTTED - RL LM	On Demand
02.18.10.1290	Shim +1mm SLOTTED – RL LM	On Demand
02.18.10.1291	Shim +2mm SLOTTED – RL LM	On Demand
02.18.10.1292	Shim +3mm SLOTTED – RL LM	On Demand
02.18.10.1293	Shim +4mm SLOTTED – RL LM	On Demand
02.18.10.1294	Shim +5mm SLOTTED - RL LM	On Demand
02.18.10.1295	Shim +0mm SLOTTED – LL RM	On Demand
02.18.10.1296	Shim +1mm SLOTTED – LL RM	On Demand
02.18.10.1297	Shim +2mm SLOTTED – LL RM	On Demand
02.18.10.1298	Shim +3mm SLOTTED – LL RM	On Demand
02.18.10.1299	Shim +4mm SLOTTED – LL RM	On Demand
02.18.10.1300	Shim +5mm SLOTTED - LL RM	On Demand
02.18.10.1301	Distal cutting guide 2 mm - LLRL	1
02.18.10.1302	Distal cutting guide 3 mm - LLRL	1
02.18.10.1303	MOTO Handle	1
02.18.10.0003	Lace for ankle clamp	3
02.18.10.8006	MOTO Partial knee system tray - General 1 of 2	1
02.18.10.1269	Drill for peg preparation through Femur	1
02.07.10.0532	Caliper	1
02.18.10.0375	Drill guide MEDIAL	1
02.18.10.1304	Drill Guide MOTO LATERAL	1
02.18.10.0001	Extramedullary guide - distal part	1
02.18.10.0655	MOTO - Femoral peg drill bit Ø5mm - Cementless	On Demand

MOTO PARTIAL KNEE SYSTEM - GENERAL LEVEL 2 - 02.18S.301B

Ref.	Description	Quantity
02.02.10.0788	Pins extractor	1
02.07.10.2294	Pin Ø3.2 L=40 ISO5835-Meche-Head-Triangle	3
02.07.10.2295	Pin Ø3.2 L=70 ISO5835-Meche-Head-Triangle	On Demand
02.07.10.2297	Pin Ø3.2 L=70 ISO5835-Meche-Triangle	On Demand
02.07.10.4673	Trochlear rasp	1
02.07.10.4740	Threaded Pin Ø3.2 L70 longer connection	3
02.07.10.4742	Pin Adaptor Hudson Coupling - Conical Assembly	1
02.08.10.0003	GMK-UNI finger	1
02.08.10.0227	Femoral Impactor	1
02.18.10.0018	Gap spacer 4-5 mm	1
02.18.10.0019	Gap spacer 6-7 mm	1
02.18.10.0020	Gap spacer 8-9 mm	1
02.18.10.0021	Gap spacer 10-11 mm	1
02.18.10.0022	Gap spacer 12-13 mm	1
02.18.10.0023	Gap spacer 14-15 mm	1
02.18.10.0024	Gap spacer 16-17 mm	1
02.18.10.0281	gap spacer 18-19 mm	1
02.18.10.0056	2-3 mm spacer for femoral gauges	2
02.18.10.0087	Screw HA5 - Lenght 20	4
02.18.10.0374	Magnetic Screwdriver T10	1
02.18.10.0207	Motorized screwdriver Torx T10	1
02.18.10.0208	Drill bit for tibia pegs preparation	1
02.18.10.0209	Telescopic alignment rod	1
02.18.10.0211	UKA femoral impactor - slide hammer	1
02.18.10.0267	Pin Ø3.2 L=55mm HA3.5 Meche Head Triangle	3
02.18.10.0279	Ø3.2 drill bit for built in pins preparation	1
02.18.10.0518	Fixation Screw	4
02.18.10.0519	Insert impactor	1
02.18.10.1268	Trial peg LLRL - Ø 6.5mm	4
02.18.10.8007	MOTO Partial knee system tray - General 2 of 2	1
1112	Lombardi Tibia Cement Preparation Drill	1
U40.211.15	Flachmeissel Lexer, gewinkelt 15 mm / 23 cm.	1
02.18.10.0657	MOTO Trial peg lateral cementless	On Demand

MOTO PARTIAL KNEE SYSTEM - MOTO MED FEMORAL SET - 02.18S.302M

Ref.	Description	Quantity
02.18.10.0301	Femoral gauge S1 Right - multiple posterior shims	1
02.18.10.0302	Femoral gauge S2 Right - multiple posterior shims	1
02.18.10.0303	Femoral gauge S3 Right - multiple posterior shims	1
02.18.10.0304	Femoral gauge S4 Right - multiple posterior shims	1
02.18.10.0305	Femoral gauge S5 Right - multiple posterior shims	1
02.18.10.0306	Femoral gauge S6 Right - multiple posterior shims	1
02.18.10.0307	Femoral gauge S7 Right - multiple posterior shims	1
02.18.10.0308	Femoral gauge S8 Right - multiple posterior shims	On Demand
02.18.10.0309	Femoral gauge S9 Right - multiple posterior shims	On Demand
02.18.10.0310	Femoral gauge S10 Right - multiple posterior shims	On Demand
02.18.10.0311	Femoral gauge S1 Left - multiple posterior shims	1
02.18.10.0312	Femoral gauge S2 Left - multiple posterior shims	1
02.18.10.0313	Femoral gauge S3 Left - multiple posterior shims	1
02.18.10.0314	Femoral gauge S4 Left - multiple posterior shims	1
02.18.10.0315	Femoral gauge S5 Left - multiple posterior shims	1
02.18.10.0316	Femoral gauge S6 Left - multiple posterior shims	1
02.18.10.0317	Femoral gauge S7 Left - multiple posterior shims	1
02.18.10.0318	Femoral gauge S8 Left - multiple posterior shims	On Demand
02.18.10.0319	Femoral gauge S9 Left - multiple posterior shims	On Demand
02.18.10.0320	Femoral gauge S10 Left - multiple posterior shims	On Demand
02.18.10.0376	Trial femur S1 - Right	1
02.18.10.0377	Trial femur S1 - Left	1
02.18.10.0378	Trial femur S2 - Right	1
02.18.10.0379	Trial femur S2 - Left	1
02.18.10.0380	Trial femur S3 - Right	1
02.18.10.0381	Trial femur S3 - Left	1
02.18.10.0382	Trial femur S4 - Right	1
02.18.10.0383	Trial femur S4 - Left	1
02.18.10.0384	Trial femur S5 - Right	1
02.18.10.0385	Trial femur S5 - Left	1
02.18.10.0386	Trial femur S6 - Right	1
02.18.10.0387	Trial femur S6 - Left	1
02.18.10.0388	Trial femur S7 - Right	1
02.18.10.0389	Trial femur S7 - Left	1
02.18.10.0538	Posterior cutting guide #1÷2 Right	1
02.18.10.0539	Posterior cutting guide #1÷2 Left	1
02.18.10.0540	Posterior cutting guide #3÷7 Right	1
02.18.10.0541	Posterior cutting guide #3÷7 Left	1
02.18.10.0063	Posterior chamfer recutting guide S2 to S3 - Right	1
02.18.10.0064	Posterior chamfer recutting guide S2 to S3 - Left	1
02.18.10.0542	Posterior cutting guide #8÷10 Right	On Demand
02.18.10.0543	Posterior cutting guide #8÷10 Left	On Demand
02.18.10.0065	Posterior chamfer recutting guide S7 to S8 - Right	On Demand

Ref.	Description	Quantity
02.18.10.0066	Posterior chamfer recutting guide S7 to S8 - Left	On Demand
02.18.10.0025	8 mm distal spacer	1
02.18.10.0026	9 mm distal spacer	1
02.18.10.0027	10 mm distal spacer	1
02.18.10.0028	11 mm distal spacer	1
02.18.10.0029	12 mm distal spacer	1
02.18.10.0280	13 mm distal spacer	1
02.18.10.0030	14 mm distal spacer	1
02.18.10.0230	MOTO Medial component - Template 100%	1
02.18.10.0231	MOTO Medial component - Template 110%	On Demand
02.18.10.0232	MOTO Medial component - Template 115%	On Demand

MOTO PARTIAL KNEE SYSTEM - MOTO MED TIBIAL SET - 02.18S.303M

Ref.	Description	Quantity
02.18.10.0341	Tibial Anterior Guide RM	1
02.18.10.0342	Tibial Anterior Guide LM	1
02.18.10.0349	Tibia template size 1-2 LMRM	1
02.18.10.0350	Tibia template size 3-4 LMRM	1
02.18.10.0351	Tibia template size 5-6 LMRM	1
02.18.10.0352	Tibia template size 7-8 LMRM	1
02.18.10.0500	Trial tibial tray size 1 – RM	1
02.18.10.0501	Trial tibial tray size 2 – RM	1
02.18.10.0502	Trial tibial tray size 3 – RM	1
02.18.10.0503	Trial tibial tray size 4 – RM	1
02.18.10.0504	Trial tibial tray size 5 – RM	1
02.18.10.0505	Trial tibial tray size 6 – RM	1
02.18.10.0506	Trial tibial tray size 7 – RM	1
02.18.10.0507	Trial tibial tray size 8 – RM	1
02.18.10.0508	Trial tibial tray size 1 – LM	1
02.18.10.0509	Trial tibial tray size 2 – LM	1
02.18.10.0510	Trial tibial tray size 3 – LM	1
02.18.10.0511	Trial tibial tray size 4 – LM	1
02.18.10.0512	Trial tibial tray size 5 – LM	1
02.18.10.0513	Trial tibial tray size 6 – LM	1
02.18.10.0514	Trial tibial tray size 7 – LM	1
02.18.10.0515	Trial tibial tray size 8 – LM	1

MOTO PARTIAL KNEE SYSTEM - MOTO MED TRIAL INSERTS - 02.18S.203

Ref.	Description	Quantity
02.18.10.0110	Trial insert size 1R - 8mm	1
02.18.10.0111	Trial insert size 1R - 9mm	1
02.18.10.0112	Trial insert size 1R - 10mm	1
02.18.10.0113	Trial insert size 1R - 11mm	1
02.18.10.0114	Trial insert size 1R - 12mm	1
02.18.10.0115	Trial insert size 1R - 14mm	1
02.18.10.0116	Trial insert size 2R - 8mm	1
02.18.10.0117	Trial insert size 2R - 9mm	1
02.18.10.0118	Trial insert size 2R - 10mm	1
02.18.10.0119	Trial insert size 2R - 11mm	1
02.18.10.0120	Trial insert size 2R - 12mm	1
02.18.10.0121	Trial insert size 2R - 14mm	1
02.18.10.0122	Trial insert size 3R - 8mm	1
02.18.10.0123	Trial insert size 3R - 9mm	1
02.18.10.0124	Trial insert size 3R - 10mm	1
02.18.10.0125	Trial insert size 3R - 11mm	1
02.18.10.0126	Trial insert size 3R - 12mm	1
02.18.10.0127	Trial insert size 3R - 14mm	1
02.18.10.0128	Trial insert size 4R - 8mm	1
02.18.10.0129	Trial insert size 4R - 9mm	1
02.18.10.0130	Trial insert size 4R - 10mm	1
02.18.10.0131	Trial insert size 4R - 11mm	1
02.18.10.0132	Trial insert size 4R - 12mm	1
02.18.10.0133	Trial insert size 4R - 14mm	1
02.18.10.0134	Trial insert size 5R - 8mm	1
02.18.10.0135	Trial insert size 5R - 9mm	1
02.18.10.0136	Trial insert size 5R - 10mm	1
02.18.10.0137	Trial insert size 5R - 11mm	1
02.18.10.0138	Trial insert size 5R - 12mm	1
02.18.10.0139	Trial insert size 5R - 14mm	1
02.18.10.0140	Trial insert size 6R - 8mm	1
02.18.10.0141	Trial insert size 6R - 9mm	1
02.18.10.0142	Trial insert size 6R - 10mm	1
02.18.10.0143	Trial insert size 6R - 11mm	1
02.18.10.0144	Trial insert size 6R - 12mm	1
02.18.10.0145	Trial insert size 6R - 14mm	1
02.18.10.0146	Trial insert size 7R - 8mm	1
02.18.10.0147	Trial insert size 7R - 9mm	1
02.18.10.0148	Trial insert size 7R - 10mm	1
02.18.10.0149	Trial insert size 7R - 11mm	1
02.18.10.0150	Trial insert size 7R - 12mm	1

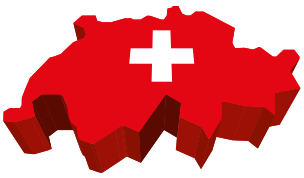
Ref.	Description	Quantity
02.18.10.0151	Trial insert size 7R - 14mm	1
02.18.10.0152	Trial insert size 8R - 8mm	1
02.18.10.0153	Trial insert size 8R - 9mm	1
02.18.10.0154	Trial insert size 8R - 10mm	1
02.18.10.0155	Trial insert size 8R - 11mm	1
02.18.10.0156	Trial insert size 8R - 12mm	1
02.18.10.0157	Trial insert size 8R - 14mm	1
02.18.10.0158	Trial insert size 1L - 8mm	1
02.18.10.0159	Trial insert size 1L - 9mm	1
02.18.10.0160	Trial insert size 1L - 10mm	1
02.18.10.0161	Trial insert size 1L - 11mm	1
02.18.10.0162	Trial insert size 1L - 12mm	1
02.18.10.0163	Trial insert size 1L - 14mm	1
02.18.10.0164	Trial insert size 2L - 8mm	1
02.18.10.0165	Trial insert size 2L - 9mm	1
02.18.10.0166	Trial insert size 2L - 10mm	1
02.18.10.0167	Trial insert size 2L - 11mm	1
02.18.10.0168	Trial insert size 2L - 12mm	1
02.18.10.0169	Trial insert size 2L - 14mm	1
02.18.10.0170	Trial insert size 3L - 8mm	1
02.18.10.0171	Trial insert size 3L - 9mm	1
02.18.10.0172	Trial insert size 3L - 10mm	1
02.18.10.0173	Trial insert size 3L - 11mm	1
02.18.10.0174	Trial insert size 3L - 12mm	1
02.18.10.0175	Trial insert size 3L - 14mm	1
02.18.10.0176	Trial insert size 4L - 8mm	1
02.18.10.0177	Trial insert size 4L - 9mm	1
02.18.10.0178	Trial insert size 4L - 10mm	1
02.18.10.0179	Trial insert size 4L - 11mm	1
02.18.10.0180	Trial insert size 4L - 12mm	1
02.18.10.0181	Trial insert size 4L - 14mm	1
02.18.10.0182	Trial insert size 5L - 8mm	1
02.18.10.0183	Trial insert size 5L - 9mm	1
02.18.10.0184	Trial insert size 5L - 10mm	1
02.18.10.0185	Trial insert size 5L - 11mm	1
02.18.10.0186	Trial insert size 5L - 12mm	1
02.18.10.0187	Trial insert size 5L - 14mm	1
02.18.10.0188	Trial insert size 6L - 8mm	1
02.18.10.0189	Trial insert size 6L - 9mm	1
02.18.10.0190	Trial insert size 6L - 10mm	1

Ref.	Description	Quantity
02.18.10.0191	Trial insert size 6L - 11mm	1
02.18.10.0192	Trial insert size 6L - 12mm	1
02.18.10.0193	Trial insert size 6L - 14mm	1
02.18.10.0194	Trial insert size 7L - 8mm	1
02.18.10.0195	Trial insert size 7L - 9mm	1
02.18.10.0196	Trial insert size 7L - 10mm	1
02.18.10.0197	Trial insert size 7L - 11mm	1
02.18.10.0198	Trial insert size 7L - 12mm	1
02.18.10.0199	Trial insert size 7L - 14mm	1
02.18.10.0200	Trial insert size 8L - 8mm	1
02.18.10.0201	Trial insert size 8L - 9mm	1
02.18.10.0202	Trial insert size 8L - 10mm	1
02.18.10.0203	Trial insert size 8L - 11mm	1
02.18.10.0204	Trial insert size 8L - 12mm	1
02.18.10.0205	Trial insert size 8L - 14mm	1

Part numbers subject to change.

NOTE FOR STERILIZATION

The instrumentation is not sterile upon delivery. Instruments must be cleaned before use and sterilized in an autoclave respecting the US regulations, directives where applicable, and following the manufacturers instructions for use of the autoclave. For detailed instructions please refer to the document “Recommendations for cleaning decontamination and sterilization of Medacta International orthopaedic devices” available at www.medacta.com.



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