Acto® **MEDIAL** PARTIAL KNEE SYSTEM



Surgical Technique

Joint

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CAUTION

- 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. Pins extraction must be performed as to avoid pin bending. This results in axial alignment between the pin and the dedicated extractor
- 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.

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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 posttraumatic 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.



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.



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 OSTEOPHYTE RESECTION

Remove osteophytes from the medial femoral condyle, medial patella 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. TIBIAL RESECTION

4.1 ASSEMBLING AND POSITIONING THE EXTRA-MEDULLARY ALIGNMENT GUIDE

The tibial extramedullary system consists of the following components:



- A Tibia cutting guide Right or Left
- B Shim (0mm, +1mm, +2mm, +3mm, +4mm, +5mm) - 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.



Slide the thickest shim (0mm) onto the dedicated tracks at the top of the tibia cutting guide. Secure the shim at the top of the tibia cutting guide, by turning (with the screwdriver) the dedicated peg clockwise (right guide) or counterclockwise (left guide).



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.



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.



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



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



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 2mm 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.





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.



- 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



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 tibia 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.





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 2-3mm lateral 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

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.





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.

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.



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.



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 21). This will allow for a +3mm tibial resection.





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 2-3mm of varus/valgus opening in flexion. A target flexion gap of "9" is recommended as it provides the surgeon with +/- 1mm 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 +1mm, +2mm, +3mm, +4mm, or +5mm. A resection of +6mm is obtained by directly cutting on the tibia cutting guide, with no shim applied.



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 0mm 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".



EXAMPLE

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

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







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 7.4 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:



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



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 under-correction 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 flexion-extension angle.

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) and "7"/"8".



- 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 1-2mm 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.

OPTION

Stand alone distal cutting guides for 4mm, 5mm, 6mm, 7mm and 8mm are available as an optional solution (Figure 30).



- Reference fixation and repositioning holes
- Oblique fixation holes

CAUTION

Reference fixation holes, repositioning holes and oblique fixation holes of the stand alone distal cutting guides do not correspond to the ones of the standard distal cutting guides highlighted in Figure 29.

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 5mm 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)



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 desired laxity.

Fix the cutting guide by means of two headless threaded pins inserted in the central parallel holes (green in Figure 29, yellow in Figure 30). If additional fixation is desired, a threaded headed pin may be added in one of the oblique holes (blue in Figure 29, purple in Figure 30).



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.



TIP

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



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 1-2mm of varus/valgus opening in extension.

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



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



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



5.4 POSTERIOR FEMORAL CONDYLE PRE-CUT

After the initial tibial resection a posterior femoral condyle (PFC) pre-cut can be used to achieve the target "9" flexion gap, instead of or in combination with a shim aided tibial re-cut.

There are two instances where a pre-cut is particularly useful:

- 1 In a knee where the flexion gap is significantly tighter than the extension gap
- 2 In a knee where tibial bone preservation is prioritized by minimizing the depth of the tibial resection

A 1mm posterior pre-cut can be accomplished by simply rasping the posterior apex of cartilage on the femoral condyle. A posterior pre-cut of 2mm or 3mm can be performed using the dedicated posterior shaving guides.





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 +2mm 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] + [+2mm PFC pre-cut] = "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 +2mm femoral pre-cut to get the target "9" flexion.

["5" gap spacer] + [+2mm shim] + [+2mm PFC pre-cut] = "9" flexion gap

The 2mm or 3mm pre-cut is to be performed after the distal femoral resection, providing more stable positioning of the shaving guide on the femur. Take this option into account when planning the tibia recut needed to achieve the target "9" flexion gap.

In case a 2mm or 3mm pre-cut has been planned to achieve the target "9" flexion gap, position the chosen shaving guide onto the cut surface of the distal femur and the posterior plate in contact with the posterior condyle.

Fix the guide with pins and cut through the saw capture slot.



After having performed the pre-cut, check the flexion gap again with gap spacers.

5.5 FEMORAL SIZING AND POSTERIOR CUT AND CHAMFER

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



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.

The sizer allows for a +2mm resection with respect to the implant thickness (posterior decompression). This will anteriorize the femoral component by 2mm as well as opens the flexion space by 2mm because it accounts for the intact cartilage in the flexion space.



OPTION

A 2mm thick shim is available to be coupled with the femoral sizers, allowing for a resection equal to the implant thickness (line-to-line resection of the posterior femoral condyle).





With the knee in flexion, apply the appropriate sizer to the distal femoral cut. Either using the shim or not, the sizer must be placed flush on the distal resection surface and the posterior plate must be placed in contact with the posterior condyle.

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



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 the opportunity to adjust medial/lateral positioning after trial reduction.

When the proper size is selected and positioned, drill the upper hole with the 3.2mm 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.





TIP

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





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.





Fixation holes

+ 2mm 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.



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.



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 52).



With the knee in flexion, and MCL retractor in position, first perform the posterior cut through the posterior slot of the cutting block (shown in green in the Figure 53).



Next perform the posterior chamfer resection through the chamfer slot of the cutting block (shown in blue in the Figure 54).



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.



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.





6. TIBIA FINISHING

6.1 TIBIAL SIZING AND KEEL PREPARATION

Assess the tibial size using the tibia 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 tibia cortex.

Select the template that best covers the resected proximal tibia in both the antero-posterior and medio-lateral 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.





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 tibia template sizer flush on the tibial surface, insert a short-headed screw into the anterior fixation hole to fix the position of the tibia sizer. The screw is in the same position as the anterior peg of the final tibia implant.



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

Make sure the keel preparation impactor sits flush on the tibia template sizer surface. Hammer on the top of the impactor.







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 tibia template sizer.

Select the proper size tibial baseplate trial with integrated keel.



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



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.



The medio-lateral aspect of the trial baseplate is 1mm 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 12mm stop drill bit. Peg holes are angled 5° posteriorly to facilitate drilling, to prevent impingement with the femur and to allow for a 1mm cement mantel around the pegs.





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.





CAUTION

The 7mm thick trial is only available as an on-demand item for use with the 7mm E-Cross poly implant. Before surgery, check with the Medacta representative if the instrumentation includes the 7mm trial insert and if the E-Cross 7mm poly is available to be implanted.

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 tibia 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.



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 1-2mm opening in extension, and 2-3mm opening in flexion. It is imperative, however, that knee alignment is not over-corrected into valgus.



TIP

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







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

Re-apply the posterior cutting block previously used to the distal femur, fixing it with the prior threaded headed pin (green A hole shown in the Figure 75). Drill the holes marked (blue) with the 3.2mm 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 B hole) and repeat the posterior and chamfer cuts. This will increase the flexion gap by 2mm.



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

CAUTION

Pay particular attention to the coverage, specifically if a femoral size 3 or 8 was chosen. The +2mm 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.

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 guide centering cylinder in correspondance of the two trial peg holes. Insert the drill into the guide for the femoral fixation pegs.

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





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





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.



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.



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.



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.





9.3 INSERT COMPONENT

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



TIP

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



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 2mm plastic spacer.





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





Extension gap check. Alignment check



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



Flexion gap check



Confirm "15"* extension gap



**Posterior femoral condyle pre-cut (option)



Femur sizing and holes preparation



Trialing



M/L position adjustment and peg holes preparation



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.



| | | | | | TIBIAL | INSERT | | | |
|------|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Size | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | 1 | \checkmark | | | | | | | |
| ш | 2 | | \checkmark | | | | | | |
| LAT | 3 | | | \checkmark | | | | | |
| SEP | 4 | | | | \checkmark | | | | |
| L BA | 5 | | | | | \checkmark | | | |
| IBIA | 6 | | | | | | \checkmark | | |
| F | 7 | | | | | | | \checkmark | |
| | 8 | | | | | | | | \checkmark |

TABLE 2: MATCHING CAPABILITIES FOR TIBIAL INSERTS AND FEMORAL COMPONENTS

| | | | | | TIBIAL | INSERT | | | |
|-------|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Size | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | 1 | ✓ | \checkmark | ✓ | \checkmark | ✓ | \checkmark | ~ | \checkmark |
| | 2 | \checkmark |
| ENT | 3 | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | ~ | \checkmark |
| NO | 4 | \checkmark |
| OMF | 5 | \checkmark |
| AL C | 6 | ✓ | \checkmark | \checkmark | \checkmark | \checkmark | \checkmark | ~ | ✓ |
| IOR/ | 7 | \checkmark |
| N E N | 8* | \checkmark | \checkmark | \checkmark | ✓ | \checkmark | ✓ | ✓ | \checkmark |
| | 9* | \checkmark |
| | 10* | \checkmark |

* 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.

FEMORAL COMPONENT TINBN

| LEFT MEDIAL SIDE | SIZE | RIGHT MEDIAL SIDE |
|------------------|------|-------------------|
| 02.18.701LM | 1 | 02.18.701RM |
| 02.18.702LM | 2 | 02.18.702RM |
| 02.18.703LM | 3 | 02.18.703RM |
| 02.18.704LM | 4 | 02.18.704RM |
| 02.18.705LM | 5 | 02.18.705RM |
| 02.18.706LM | б | 02.18.706RM |
| 02.18.707LM | 7 | 02.18.707RM |
| 02.18.708LM* | 8 | 02.18.708RM* |
| 02.18.709LM* | 9 | 02.18.709RM* |
| 02.18.710LM* | 10 | 02.18.710RM* |

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 | | 8 | 02.18.IF1.08.RM | 02.18.IF5.08.LM | | 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 | 1 | 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 | | 8 | 02.18.IF2.08.RM | 02.18.IF6.08.LM | | 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 | 2 | 10 | 02.18.IF2.10.RM | 02.18.IF6.10.LM | 6 | 10 | 02.18.IF6.10.RM |
| 02.18.IF2.11.LM | 2 | 11 | 02.18.IF2.11.RM | 02.18.IF6.11.LM | 0 | 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 |
| 02.18.IF2.14.LM | | 14 | 02.18.IF2.14.RM | 02.18.IF6.14.LM | | 14 | 02.18.IF6.14.RM |
| 02.18.IF3.08.LM | | 8 | 02.18.IF3.08.RM | 02.18.IF7.08.LM | | 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 | 2 | 10 | 02.18.IF3.10.RM | 02.18.IF7.10.LM | 7 | 10 | 02.18.IF7.10.RM |
| 02.18.IF3.11.LM | 3 | 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 | | 8 | 02.18.IF4.08.RM | 02.18.IF8.08.LM | | 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 | 4 | 11 | 02.18.IF4.11.RM | 02.18.IF8.11.LM | Ö | 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 |

E-CROSS TIBIAL INSERT

| LEFT MEDIAL SIDE | SIZE | LABEL HEIGHT | RIGHT MEDIAL SIDE | LEFT MEDIAL SIDE | SIZE | LABEL HEIGHT | RIGHT MEDIAL SIDE |
|---------------------|------|-----------------|----------------------|---------------------|------|-----------------|----------------------|
| 02.18.EIF1.07.LM | | 7 | 02.18.EIF1.07.RM | 02.18.EIF5.07.LM | | 7 | 02.18.EIF5.07.RM |
| 02.18.EIF1.08.LM | | 8 | 02.18.EIF1.08.RM | 02.18.EIF5.08.LM | | 8 | 02.18.EIF5.08.RM |
| 02.18.EIF1.09.LM | | 9 | 02.18.EIF1.09.RM | 02.18.EIF5.09.LM | _ | 9 | 02.18.EIF5.09.RM |
| 02.18.EIF1.10.LM | 1 | 10 | 02.18.EIF1.10.RM | 02.18.EIF5.10.LM | 5 | 10 | 02.18.EIF5.10.RM |
| 02.18.EIF1.11.LM | | 11 | 02.18.EIF1.11.RM | 02.18.EIF5.11.LM | | 11 | 02.18.EIF5.11.RM |
| 02.18.EIF1.12.LM | | 12 | 02.18.EIF1.12.RM | 02.18.EIF5.12.LM | | 12 | 02.18.EIF5.12.RM |
| 02.18.EIF1.14.LM | | 14 | 02.18.EIF1.14.RM | 02.18.EIF5.14.LM | | 14 | 02.18.EIF5.14.RM |
| 02.18.EIF2.07.LM | | 7 | 02.18.EIF2.07.RM | 02.18.EIF6.07.LM | | 7 | 02.18.EIF6.07.RM |
| 02.18.EIF2.08.LM | | 8 | 02.18.EIF2.08.RM | 02.18.EIF6.08.LM | | 8 | 02.18.EIF6.08.RM |
| 02.18.EIF2.09.LM | | 9 | 02.18.EIF2.09.RM | 02.18.EIF6.09.LM | | 9 | 02.18.EIF6.09.RM |
| 02.18.EIF2.10.LM | 2 | 10 | 02.18.EIF2.10.RM | 02.18.EIF6.10.LM | 6 | 10 | 02.18.EIF6.10.RM |
| 02.18.EIF2.11.LM | | 11 | 02.18.EIF2.11.RM | 02.18.EIF6.11.LM | | 11 | 02.18.EIF6.11.RM |
| 02.18.EIF2.12.LM | | 12 | 02.18.EIF2.12.RM | 02.18.EIF6.12.LM | | 12 | 02.18.EIF6.12.RM |
| 02.18.EIF2.14.LM | | 14 | 02.18.EIF2.14.RM | 02.18.EIF6.14.LM | | 14 | 02.18.EIF6.14.RM |
| 02.18.EIF3.07.LM | | 7 | 02.18.EIF3.07.RM | 02.18.EIF7.07.LM | | 7 | 02.18.EIF7.07.RM |
| 02.18.EIF3.08.LM | | 8 | 02.18.EIF3.08.RM | 02.18.EIF7.08.LM | | 8 | 02.18.EIF7.08.RM |
| 02.18.EIF3.09.LM | | 9 | 02.18.EIF3.09.RM | 02.18.EIF7.09.LM | | 9 | 02.18.EIF7.09.RM |
| 02.18.EIF3.10.LM | 3 | 10 | 02.18.EIF3.10.RM | 02.18.EIF7.10.LM | 7 | 10 | 02.18.EIF7.10.RM |
| 02.18.EIF3.11.LM | | 11 | 02.18.EIF3.11.RM | 02.18.EIF7.11.LM | | 11 | 02.18.EIF7.11.RM |
| 02.18.EIF3.12.LM | | 12 | 02.18.EIF3.12.RM | 02.18.EIF7.12.LM | | 12 | 02.18.EIF7.12.RM |
| 02.18.EIF3.14.LM | | 14 | 02.18.EIF3.14.RM | 02.18.EIF7.14.LM | | 14 | 02.18.EIF7.14.RM |
| 02.18.EIF4.07.LM | | 7 | 02.18.EIF4.07.RM | 02.18.EIF8.07.LM | | 7 | 02.18.EIF8.07.RM |
| 02.18.EIF4.08.LM | | 8 | 02.18.EIF4.08.RM | 02.18.EIF8.08.LM | | 8 | 02.18.EIF8.08.RM |
| 02.18.EIF4.09.LM | | 9 | 02.18.EIF4.09.RM | 02.18.EIF8.09.LM | | 9 | 02.18.EIF8.09.RM |
| 02.18.EIF4.10.LM | 4 | 10 | 02.18.EIF4.10.RM | 02.18.EIF8.10.LM | 8 | 10 | 02.18.EIF8.10.RM |
| 02.18.EIF4.11.LM | | 11 | 02.18.EIF4.11.RM | 02.18.EIF8.11.LM | | 11 | 02.18.EIF8.11.RM |
| 02.18.EIF4.12.LM | | 12 | 02.18.EIF4.12.RM | 02.18.EIF8.12.LM | | 12 | 02.18.EIF8.12.RM |
| 02.18.EIF4.14.LM | | 14 | 02.18.EIF4.14.RM | 02.18.EIF8.14.LM | | 14 | 02.18.EIF8.14.RM |

13. INSTRUMENTATION NOMENCLATURE

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

| REF. | DESCRIPTION |
|------------|--|
| 02.18S.201 | MOTO Medial Partial Knee - Tibial & Distal cut |
| 02.18S.202 | MOTO Medial Partial Knee - Femoral |
| 02.18S.203 | MOTO Medial Partial Knee - Trial inserts |

MOTO Medial Partial Knee INSTRUMENT - Tibial & Distal cut 02.18S.201

| REF. | DESCRIPTION | QUANTITY |
|---------------|------------------------------------|----------|
| 02.18.10.0001 | Extramedullary guide - distal part | 1 |
| 02.18.10.0002 | Ankle clamp | 1 |
| 02.18.10.0277 | Tibia cutting guide - Right | 1 |
| 02.18.10.0278 | Tibia cutting guide - Left | 1 |
| 02.18.10.0006 | Shim +0mm - Right | 1 |
| 02.18.10.0007 | Shim +1mm - Right | 1 |
| 02.18.10.0008 | Shim +2mm - Right | 1 |
| 02.18.10.0009 | Shim +3mm - Right | 1 |
| 02.18.10.0010 | Shim +4mm - Right | 1 |
| 02.18.10.0011 | Shim +5mm - Right | 1 |
| 02.18.10.0012 | Shim +0mm - Left | 1 |
| 02.18.10.0013 | Shim +1mm - Left | 1 |
| 02.18.10.0014 | Shim +2mm - Left | 1 |
| 02.18.10.0015 | Shim +3mm - Left | 1 |
| 02.18.10.0016 | Shim +4mm - Left | 1 |
| 02.18.10.0017 | Shim +5mm - Left | 1 |
| 02.18.10.0018 | Gap spacer 4-5 | 1 |
| 02.18.10.0019 | Gap spacer 6-7 | 1 |
| 02.18.10.0020 | Gap spacer 8-9 | 1 |
| 02.18.10.0021 | Gap spacer 10-11 | 1 |
| 02.18.10.0022 | Gap spacer 12-13 | 1 |
| 02.18.10.0023 | Gap spacer 14-15 | 1 |
| 02.18.10.0024 | Gap spacer 16-17 | 1 |
| 02.18.10.0281 | Gap spacer 18-19 | 1 |
| 02.18.10.0025 | Distal spacer 8 | 1 |
| 02.18.10.0026 | Distal spacer 9 | 1 |
| 02.18.10.0027 | Distal spacer 10 | 1 |
| 02.18.10.0028 | Distal spacer 11 | 1 |
| 02.18.10.0029 | Distal spacer 12 | 1 |
| 02.18.10.0280 | Distal spacer 13 | 1 |



| REF. | DESCRIPTION | QUANTITY |
|-----------------|--|-----------|
| 02.18.10.0030 | Distal spacer 14 | 1 |
| 02.18.10.0031 | Connector rod for distal spacer | 1 |
| 02.18.10.0032 | Offset alignment connector - Right | 1 |
| 02.18.10.0260 | Distal cutting guide 7-8 | 1 |
| 02.18.10.0259 | Distal cutting guide 6 | 1 |
| 02.18.10.0258 | Distal cutting guide 4-5 | 1 |
| 02.18.10.0209 | Telescopic alignment rod | 1 |
| 02.18.10.0270 | Tibial template size 1-2 | 1 |
| 02.18.10.0271 | Tibial template size 3-4 | 1 |
| 02.18.10.0272 | Tibial template size 5-6 | 1 |
| 02.18.10.0273 | Tibial template size 7-8 | 1 |
| 02.18.10.0500 | Trial tibial tray size 1 - Right | 1 |
| 02.18.10.0502 | Trial tibial tray size 2 - Right | 1 |
| 02.18.10.0504 | Trial tibial tray size 3 - Right | 1 |
| 02.18.10.0506 | Trial tibial tray size 4 - Right | 1 |
| 02.18.10.0508 | Trial tibial tray size 5 - Right | 1 |
| 02.18.10.0510 | Trial tibial tray size 6 - Right | 1 |
| 02.18.10.0512 | Trial tibial tray size 7 - Right | 1 |
| 02.18.10.0514 | Trial tibial tray size 8 - Right | 1 |
| 02.18.10.0501 | Trial tibial tray size 1 - Left | 1 |
| 02.18.10.0503 | Trial tibial tray size 2 - Left | 1 |
| 02.18.10.0505 | Trial tibial tray size 3 - Left | 1 |
| 02.18.10.0507 | Trial tibial tray size 4 - Left | 1 |
| 02.18.10.0509 | Trial tibial tray size 5 - Left | 1 |
| 02.18.10.0511 | Trial tibial tray size 6 - Left | 1 |
| 02.18.10.0513 | Trial tibial tray size 7 - Left | 1 |
| 02.18.10.0515 | Trial tibial tray size 8 - Left | 1 |
| 02.18.10.0275 | Trial tibia impactor | 1 |
| 02.18.10.0276 | Adapter for tibial implant impactor | 1 |
| 02.07.10.0532 | Caliper | 1 |
| 02.18.10.0274 | Keel Impactor | 1 |
| 02.18.10.0208 | Drill bit for tibia pegs | 1 |
| 02.07.10.4742 | Pin Adaptor Hudson Coupling - Conical Assembly | 1 |
| 02.18.10.0206 | Screwdriver T10 | 1 |
| 02.02.10.0146 | Pin impactor | on demand |
| 02.07.10.4673 | Rasp | 1 |
| 02.18.10.0207 | Motorized screwdriver Torx T10 | 1 |
| 02.18.10.0087 | Screw HA5 - L=20mm | 6 |
| 02.02.10.0130 | Drill Ø3.2mm L=130mm | 1 |
| 02.02.10.0145/A | Pin Ø3.2mm L=70mm | on demand |
| 02.02.10.0145/B | Pin Ø3.2mm L=90mm | on demand |
| 02.07.10.2295 | Pin Ø3.2mm L=70mm ISO5835-Meche-Head-Triangle | 3 |
| 02.07.10.2294 | Pin Ø3.2mm L=40mm ISO5835-Meche-Head-Triangle | 3 |

| REF. | DESCRIPTION | QUANTITY |
|---------------|---|-----------|
| 02.07.10.2297 | Pin Ø3.2mm L=70mm ISO5835-Meche-Triangle | 3 |
| 02.07.10.2194 | Sword Pin Ø3.2mm L=22mm | on demand |
| 02.08.10.0120 | UKM Pin Ø3.2mm L=55mm | on demand |
| 02.07.10.4740 | Threaded Pin Ø3.2mm L=70mm longer connection | 3 |
| 02.07.10.4741 | Threaded Pin Ø3.2mm L=85mm longer connection | on demand |
| U40.211.15 | Angled osteotome 15mm / 23cm | 1 |
| 02.08.10.0003 | Angel wing | 1 |
| 02.18.10.0003 | Lace for ankle clamp | 5 |
| 02.18.10.0268 | Trial peg | 4 |
| 02.18.10.0267 | Pin Ø3.2mm L=55mm HA3.5 Meche Head Triangle | 3 |
| 02.18.10.0279 | Ø3.2mm stop drill bit for built-in pins | 1 |
| 02.18.10.8001 | MOTO Medial Partial Knee - Tibial & Distal cut Tray | 1 |
| 02.18.10.0336 | 4mm distal cutting guide | On Demand |
| 02.18.10.0337 | 5mm distal cutting guide | On Demand |
| 02.18.10.0338 | 6mm distal cutting guide | On Demand |
| 02.18.10.0339 | 7mm distal cutting guide | On Demand |
| 02.18.10.0340 | 8mm distal cutting guide | On Demand |



| | MOTO Medial | Partial Knee | INSTRUMENT | - Femoral | 02.18S.202 |
|--|-------------|--------------|------------|-----------|------------|
|--|-------------|--------------|------------|-----------|------------|

| REF. | DESCRIPTION | QUANTITY |
|---------------|--|-----------|
| 02.18.10.0036 | Femoral gauge S1 Right | 1 |
| 02.18.10.0037 | Femoral gauge S2 Right | 1 |
| 02.18.10.0038 | Femoral gauge S3 Right | 1 |
| 02.18.10.0039 | Femoral gauge S4 Right | 1 |
| 02.18.10.0040 | Femoral gauge S5 Right | 1 |
| 02.18.10.0041 | Femoral gauge S6 Right | 1 |
| 02.18.10.0042 | Femoral gauge S7 Right | 1 |
| 02.18.10.0043 | Femoral gauge S8 Right | on demand |
| 02.18.10.0044 | Femoral gauge S9 Right | on demand |
| 02.18.10.0045 | Femoral gauge S10 Right | on demand |
| 02.18.10.0261 | Posterior cutting guide #1-2 Right | 1 |
| 02.18.10.0263 | Posterior cutting guide #3-7 Right | 1 |
| 02.18.10.0265 | Posterior cutting guide #8-10 Right | on demand |
| 02.18.10.0063 | Posterior chamfer recutting guide S2 to S3 - Right | 1 |
| 02.18.10.0065 | Posterior chamfer recutting guide S7 to S8 - Right | on demand |
| 02.18.10.0376 | Trial femur S1 - Right | 1 |
| 02.18.10.0378 | Trial femur S2 - Right | 1 |
| 02.18.10.0380 | Trial femur S3 - Right | 1 |
| 02.18.10.0382 | Trial femur S4 - Right | 1 |
| 02.18.10.0384 | Trial femur S5 - Right | 1 |
| 02.18.10.0386 | Trial femur S6 - Right | 1 |
| 02.18.10.0388 | Trial femur S7 - Right | 1 |
| 02.18.10.0390 | Trial femur S8 - Right | on demand |
| 02.18.10.0392 | Trial femur S9 - Right | on demand |
| 02.18.10.0394 | Trial femur S10 - Right | on demand |
| 02.18.10.0056 | 2-3mm spacer for femoral gauges | 2 |
| 02.18.10.1269 | Drill bit for femoral pegs | 1 |
| 02.18.10.0211 | UKA femoral impactor - slide hammer | 1 |
| 02.08.10.0227 | Femoral Impactor | 1 |
| 02.18.10.0222 | 2mm posterior condyle precut - RM-LL | 1 |
| 02.18.10.0224 | 2mm posterior condyle precut - LM-RL | 1 |
| 02.18.10.0282 | 3mm posterior condyle precut - RM-LL | 1 |
| 02.18.10.0283 | 3mm posterior condyle precut - LM-RL | 1 |
| 02.18.10.1304 | Drill guide | 1 |
| 02.18.10.0262 | Posterior cutting guide #1-2 Left | 1 |
| 02.18.10.0264 | Posterior cutting guide #3-7 Left | 1 |
| 02.18.10.0266 | Posterior cutting guide #8-10 Left | on demand |
| 02.18.10.0064 | Posterior chamfer recutting guide S2 to S3 - Left | 1 |
| 02.18.10.0066 | Posterior chamfer recutting guide S7 to S8 - Left | on demand |
| 02.18.10.0046 | Femoral gauge S1 Left | 1 |
| 02.18.10.0047 | Femoral gauge S2 Left | 1 |
| 02.18.10.0048 | Femoral gauge S3 Left | 1 |
| 02.18.10.0049 | Femoral gauge S4 Left | 1 |
| 02.18.10.0050 | Femoral gauge S5 Left | 1 |

| REF. | DESCRIPTION | QUANTITY |
|---------------|---|-----------|
| 02.18.10.0051 | Femoral gauge S6 Left | 1 |
| 02.18.10.0052 | Femoral gauge S7 Left | 1 |
| 02.18.10.0053 | Femoral gauge S8 Left | on demand |
| 02.18.10.0054 | Femoral gauge S9 Left | on demand |
| 02.18.10.0055 | Femoral gauge S10 Left | on demand |
| 02.18.10.0377 | Trial femur S1 - Left | 1 |
| 02.18.10.0379 | Trial femur S2 - Left | 1 |
| 02.18.10.0381 | Trial femur S3 - Left | 1 |
| 02.18.10.0383 | Trial femur S4 - Left | 1 |
| 02.18.10.0385 | Trial femur S5 - Left | 1 |
| 02.18.10.0387 | Trial femur S6 - Left | 1 |
| 02.18.10.0389 | Trial femur S7 - Left | 1 |
| 02.18.10.0391 | Trial femur S8 - Left | on demand |
| 02.18.10.0393 | Trial femur S9 - Left | on demand |
| 02.18.10.0395 | Trial femur S10 - Left | on demand |
| 02.18.10.0212 | Shim for femoral gauge S1 | 1 |
| 02.18.10.0213 | Shim for femoral gauge S2 | 1 |
| 02.18.10.0214 | Shim for femoral gauge S3 | 1 |
| 02.18.10.0215 | Shim for femoral gauge S4 | 1 |
| 02.18.10.0216 | Shim for femoral gauge S5 | 1 |
| 02.18.10.0217 | Shim for femoral gauge S6 | 1 |
| 02.18.10.0218 | Shim for femoral gauge S7 | 1 |
| 02.18.10.0219 | Shim for femoral gauge S8 | on demand |
| 02.18.10.0220 | Shim for femoral gauge S9 | on demand |
| 02.18.10.0221 | Shim for femoral gauge S10 | on demand |
| 02.02.10.0788 | Pin extractor | on demand |
| 02.18.10.8002 | MOTO Medial Partial Knee - Femoral Tray | 1 |



| MOTO Medial Partial Knee INSTRUMENT - Trial inserts | 02.18S.203 |
|---|------------|
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| REF. | DESCRIPTION | QUANTITY |
|---------------|---------------------------|----------|
| 02.18.10.0110 | Trial insert size 1R - 8 | 1 |
| 02.18.10.0111 | Trial insert size 1R - 9 | 1 |
| 02.18.10.0112 | Trial insert size 1R - 10 | 1 |
| 02.18.10.0113 | Trial insert size 1R - 11 | 1 |
| 02.18.10.0114 | Trial insert size 1R - 12 | 1 |
| 02.18.10.0115 | Trial insert size 1R - 14 | 1 |
| 02.18.10.0116 | Trial insert size 2R - 8 | 1 |
| 02.18.10.0117 | Trial insert size 2R - 9 | 1 |
| 02.18.10.0118 | Trial insert size 2R - 10 | 1 |
| 02.18.10.0119 | Trial insert size 2R - 11 | 1 |
| 02.18.10.0120 | Trial insert size 2R - 12 | 1 |
| 02.18.10.0121 | Trial insert size 2R - 14 | 1 |
| 02.18.10.0122 | Trial insert size 3R - 8 | 1 |
| 02.18.10.0123 | Trial insert size 3R - 9 | 1 |
| 02.18.10.0124 | Trial insert size 3R - 10 | 1 |
| 02.18.10.0125 | Trial insert size 3R - 11 | 1 |
| 02.18.10.0126 | Trial insert size 3R - 12 | 1 |
| 02.18.10.0127 | Trial insert size 3R - 14 | 1 |
| 02.18.10.0128 | Trial insert size 4R - 8 | 1 |
| 02.18.10.0129 | Trial insert size 4R - 9 | 1 |
| 02.18.10.0130 | Trial insert size 4R - 10 | 1 |
| 02.18.10.0131 | Trial insert size 4R - 11 | 1 |
| 02.18.10.0132 | Trial insert size 4R - 12 | 1 |
| 02.18.10.0133 | Trial insert size 4R - 14 | 1 |
| 02.18.10.0134 | Trial insert size 5R - 8 | 1 |
| 02.18.10.0135 | Trial insert size 5R - 9 | 1 |
| 02.18.10.0136 | Trial insert size 5R - 10 | 1 |
| 02.18.10.0137 | Trial insert size 5R - 11 | 1 |
| 02.18.10.0138 | Trial insert size 5R - 12 | 1 |
| 02.18.10.0139 | Trial insert size 5R - 14 | 1 |
| 02.18.10.0140 | Trial insert size 6R - 8 | 1 |
| 02.18.10.0141 | Trial insert size 6R - 9 | 1 |
| 02.18.10.0142 | Trial insert size 6R - 10 | 1 |
| 02.18.10.0143 | Trial insert size 6R - 11 | 1 |
| 02.18.10.0144 | Trial insert size 6R - 12 | 1 |
| 02.18.10.0145 | Trial insert size 6R - 14 | 1 |
| 02.18.10.0146 | Trial insert size 7R - 8 | 1 |
| 02.18.10.0147 | Trial insert size 7R - 9 | 1 |
| 02.18.10.0148 | Trial insert size 7R - 10 | 1 |
| 02.18.10.0149 | Trial insert size 7R - 11 | 1 |
| 02.18.10.0150 | Trial insert size 7R - 12 | 1 |
| 02.18.10.0151 | Trial insert size 7R - 14 | 1 |
| 02.18.10.0152 | Trial insert size 8R - 8 | 1 |

| REF. | DESCRIPTION | QUANTITY |
|---------------|---------------------------|----------|
| 02.18.10.0153 | Trial insert size 8R - 9 | 1 |
| 02.18.10.0154 | Trial insert size 8R - 10 | 1 |
| 02.18.10.0155 | Trial insert size 8R - 11 | 1 |
| 02.18.10.0156 | Trial insert size 8R - 12 | 1 |
| 02.18.10.0157 | Trial insert size 8R - 14 | 1 |
| 02.18.10.0158 | Trial insert size 1L - 8 | 1 |
| 02.18.10.0159 | Trial insert size 1L - 9 | 1 |
| 02.18.10.0160 | Trial insert size 1L - 10 | 1 |
| 02.18.10.0161 | Trial insert size 1L - 11 | 1 |
| 02.18.10.0162 | Trial insert size 1L - 12 | 1 |
| 02.18.10.0163 | Trial insert size 1L - 14 | 1 |
| 02.18.10.0164 | Trial insert size 2L - 8 | 1 |
| 02.18.10.0165 | Trial insert size 2L - 9 | 1 |
| 02.18.10.0166 | Trial insert size 2L - 10 | 1 |
| 02.18.10.0167 | Trial insert size 2L - 11 | 1 |
| 02.18.10.0168 | Trial insert size 2L - 12 | 1 |
| 02.18.10.0169 | Trial insert size 2L - 14 | 1 |
| 02.18.10.0170 | Trial insert size 3L - 8 | 1 |
| 02.18.10.0171 | Trial insert size 3L - 9 | 1 |
| 02.18.10.0172 | Trial insert size 3L - 10 | 1 |
| 02.18.10.0173 | Trial insert size 3L - 11 | 1 |
| 02.18.10.0174 | Trial insert size 3L - 12 | 1 |
| 02.18.10.0175 | Trial insert size 3L - 14 | 1 |
| 02.18.10.0176 | Trial insert size 4L - 8 | 1 |
| 02.18.10.0177 | Trial insert size 4L - 9 | 1 |
| 02.18.10.0178 | Trial insert size 4L - 10 | 1 |
| 02.18.10.0179 | Trial insert size 4L - 11 | 1 |
| 02.18.10.0180 | Trial insert size 4L - 12 | 1 |
| 02.18.10.0181 | Trial insert size 4L - 14 | 1 |
| 02.18.10.0182 | Trial insert size 5L - 8 | 1 |
| 02.18.10.0183 | Trial insert size 5L - 9 | 1 |
| 02.18.10.0184 | Trial insert size 5L - 10 | 1 |
| 02.18.10.0185 | Trial insert size 5L - 11 | 1 |
| 02.18.10.0186 | Trial insert size 5L - 12 | 1 |
| 02.18.10.0187 | Trial insert size 5L - 14 | 1 |
| 02.18.10.0188 | Trial insert size 6L - 8 | 1 |
| 02.18.10.0189 | Trial insert size 6L - 9 | 1 |
| 02.18.10.0190 | Trial insert size 6L - 10 | 1 |
| 02.18.10.0191 | Trial insert size 6L - 11 | 1 |
| 02.18.10.0192 | Trial insert size 6L - 12 | 1 |
| 02.18.10.0193 | Trial insert size 6L - 14 | 1 |
| 02.18.10.0194 | Trial insert size 7L - 8 | 1 |
| 02.18.10.0195 | Trial insert size 7L - 9 | 1 |



| REF. | DESCRIPTION | QUANTITY |
|---------------|---|-----------|
| 02.18.10.0196 | Trial insert size 7L - 10 | 1 |
| 02.18.10.0197 | Trial insert size 7L - 11 | 1 |
| 02.18.10.0198 | Trial insert size 7L - 12 | 1 |
| 02.18.10.0199 | Trial insert size 7L - 14 | 1 |
| 02.18.10.0200 | Trial insert size 8L - 8 | 1 |
| 02.18.10.0201 | Trial insert size 8L - 9 | 1 |
| 02.18.10.0202 | Trial insert size 8L - 10 | 1 |
| 02.18.10.0203 | Trial insert size 8L - 11 | 1 |
| 02.18.10.0204 | Trial insert size 8L - 12 | 1 |
| 02.18.10.0205 | Trial insert size 8L - 14 | 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 |
| 02.18.10.8003 | MOTO Medial Partial Knee - Trial inserts Tray | 1 |
| 02.18.10.0599 | Trial insert size 1R - 7mm | On demand |
| 02.18.10.0600 | Trial insert size 1L - 7mm | On demand |
| 02.18.10.0601 | Trial insert size 2R - 7mm | On demand |
| 02.18.10.0602 | Trial insert size 2L - 7mm | On demand |
| 02.18.10.0603 | Trial insert size 3R - 7mm | On demand |
| 02.18.10.0604 | Trial insert size 3L - 7mm | On demand |
| 02.18.10.0605 | Trial insert size 4R - 7mm | On demand |
| 02.18.10.0606 | Trial insert size 4L - 7mm | On demand |
| 02.18.10.0607 | Trial insert size 5R - 7mm | On demand |
| 02.18.10.0608 | Trial insert size 5L - 7mm | On demand |
| 02.18.10.0609 | Trial insert size 6R - 7mm | On demand |
| 02.18.10.0610 | Trial insert size 6L - 7mm | On demand |
| 02.18.10.0611 | Trial insert size 7R - 7mm | On demand |
| 02.18.10.0612 | Trial insert size 7L - 7mm | On demand |
| 02.18.10.0613 | Trial insert size 8R - 7mm | On demand |
| 02.18.10.0614 | Trial insert size 8L - 7mm | On demand |

NOTES

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Part numbers subject to change.

NOTE FOR STERILISATION

The instrumentation is not sterile upon delivery. It must be cleaned before use and sterilised in an autoclave in accordance with the regulations of the country, EU directives where applicable and following the instructions for use of the autoclave manufacturer. For detailed instructions please refer to the document "Recommendations for cleaning decontamination and sterilisation of Medacta International orthopaedic devices" available at www.medacta.com.



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