EXACTECH | **KNEE**

Operative Technique

OPTETRAK LOGIC®

Comprehensive Revision System

Exactech®

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INTRODUCTION

The Logic CC Revision Knee System delivers a high-performance portfolio of implants and instruments for reproducible results in a streamlined revision procedure. The comprehensive system offers implant choices orthopaedic surgeons need to address the unique challenges in revision total knee arthroplasty. Intuitive instrumentation provides modularity and supports a streamlined technique to more quickly and efficiently prepare bone resections.

DESCRIPTION

IMPLANTS

The Optetrak Logic® CC Total Knee™ System includes the following:

- Constrained Condylar (CC) Femoral Components
- Modular CC Tibial Components
- Stem Extensions and Adapters
- Femoral and Tibial Augment Blocks
- Screws for Component/Component Fixation

The Optetrak Logic CC Total Knee System includes non-porous knee prostheses for use in total knee joint replacement procedures. In the U.S., the Optetrak Logic CC Total Knee System is indicated for cemented use only. The system includes various sizes and types of modular femoral components, tibial components and accessories for use in primary and revision applications.

INDICATIONS

The Optetrak Logic CC Total Knee System is indicated for use in skeletally mature individuals undergoing primary surgery for total knee replacement due to osteoarthritis, osteonecrosis, rheumatoid arthritis and/or post-traumatic degenerative problems. They are also indicated for revision of failed previous reconstructions where sufficient bone stock and soft tissue integrity are present.

The Optetrak Logic CC Total Knee System is indicated for cemented use only.

CONTRAINDICATIONS

The Optetrak Logic CC Total Knee System is contraindicated in the following situations:

- patients with suspected or confirmed systemic infection or a secondary remote infection,
- patients without sufficient bone stock to allow appropriate insertion and fixation of the prosthesis,
- patients without sufficient soft tissue integrity to provide adequate stability,
- patients with either mental or neuromuscular disorders that do not allow control of the knee joint, or
- patients whose weight, age, or activity level might cause extreme loads and early failure of the system.

Thank you for considering the Logic CC Revision Knee System. We began the product development process by drawing from our collective experiences to identify the present and future unmet needs for the revision total knee surgery. Our goal was to develop a comprehensive, integrated system of implants and instruments that allows surgeons to address the complexities of knee revision surgery with a predictable, consistent and streamlined technique. These following design goals were the foundation for the new system:

- Achieve reproducibility of outcomes by providing a comprehensive range of implants (augments, stems and variably constraining inserts) with an easy-to-use instrumentation approach;
- Develop intuitive instrumentation with visual, audible and tactile feedback that allows accurate assessment of the pre-revision condition, a simplified progressive technique to address bone and soft tissue deficiencies accurately and tools to assess the final outcome of the intervention;
- Provide a straightforward conversion technique when revision implants are required for complex primary arthroplasty;
- Provide easily visualized and accommodated 360-degree offset techniques with implants to improve the surgeon's ability to achieve the alignment and balancing goals necessary for a highly functional and durable arthroplasty.

We welcome your feedback, and hope that you come to agree that together, with the use of the Logic CC Revision Knee System, we can help you achieve success in your revision knee procedures.

Respectfully,

Daniel C. Allison, MD
James Huddleston, MD
Richard Parkinson, FRCS (Orth)
Bernard Stulberg, MD
Geoffrey Westrich, MD

OPERATIVE TECHNIQUE OVERVIEW

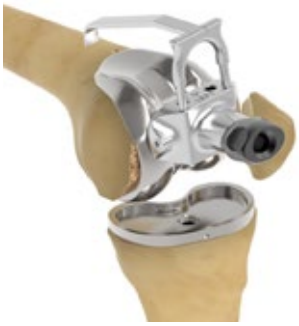

Figure A
Reference the Joint Line

Figure B
Component Sizing

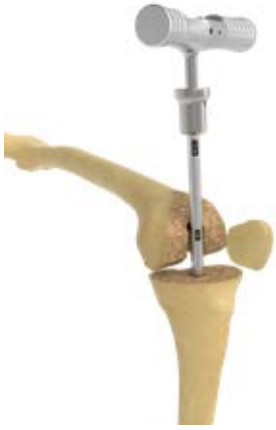

Figure C
Tibial IM Pilot Reaming

Figure D
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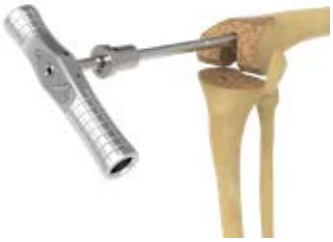

Figure E
Femoral IM Pilot Reaming

Figure F
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Figure G
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Figure H
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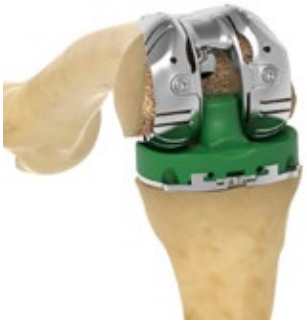

Figure J
Trial Reduction

Figure K
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Figure L
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Figure M
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Implant Femoral Component

DETAILED OPERATIVE TECHNIQUE

PRE-OPERATIVE PLANNING/TEMPLATING

Figure 1
Stylus and Alignment Guide Assembly

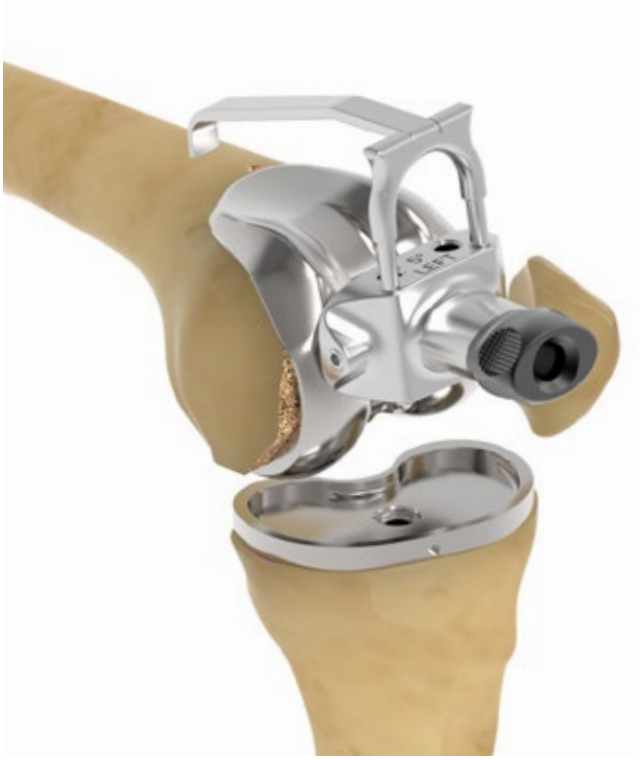


Figure 2
Reference the Joint Line

Pre-operative planning is important in knee replacement revision surgery to assist in an adequate management plan for the soft tissues (skin, capsule, ligaments); it also helps recreate the knee joint line properly and allow for the joint to be balanced in flexion and extension.

Pre-operative templating can help the surgeon determine:

1. the approximate size femoral component required,
2. the amount of augmentation that may be necessary to restore the normal joint line
3. the length and diameter of femoral and tibial stems. If the contralateral knee has not been replaced, pre-operative templating for determination of these three parameters could also be done on the non-operative side.

JOINT LINE REFERENCING

The **CC Joint Line Reference Stylus** is designed to reference the existing joint line position prior to extraction of the implanted femoral component. This provides a reference to establish the joint line position for the revision component.

Assemble the Joint Line Reference Stylus with the **CC Distal Femoral Valgus Alignment Guide** *(Figure 1)*. The Valgus Alignment Guide should be positioned on the distal condyles of the previously implanted femoral component *(Figure 2)*.

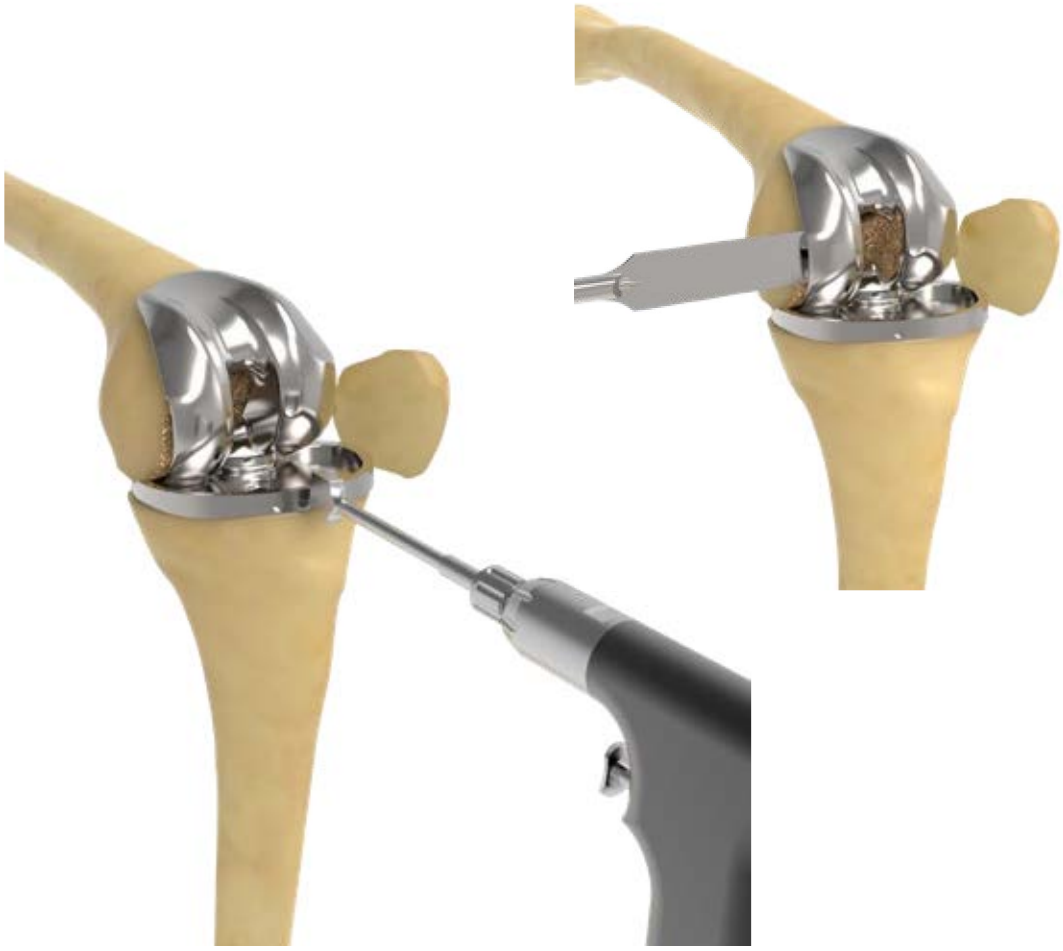


Figure 3
Femoral Component Removal and Tibial Component Removal

To be sure the face of the Valgus Alignment Guide rests on the most distal position of the femoral condyles, the horizontal portion of the stylus shaft should be aligned parallel with the shaft of the femur so there is no hyperextension or flexion of the instrument.

A mark on the bone is made where the stylus contacts the anterior cortex by using electrocautery, or by drilling a small hole. Remove the assembly from the operative site.

REMOVAL OF EXISTING COMPONENTS

Remove the existing femoral and tibial components, and perform debridement of the distal femur *(Figure 3)*. The AcuDriver® Automated Osteotome System can be used to loosen and remove the femoral and tibial components. Thin, pneumatic osteotomes will break the cement or porous interface using controlled bursts in either single or multi-shot mode. Reference the AcuDriver Operative Technique for more information.

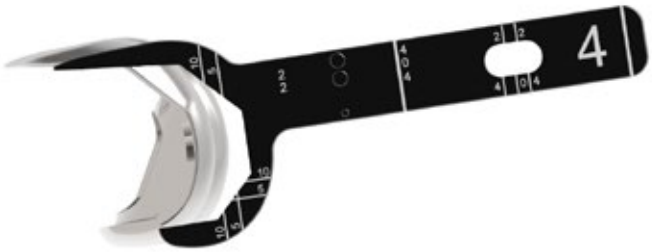


Figure 4
Anterior/Posterior Femoral Component Sizing

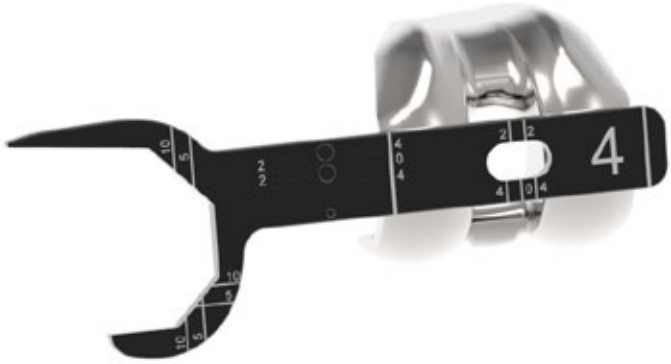


Figure 5
Medial/Lateral Femoral Component Sizing

FEMORAL COMPONENT SIZING

With the posterior condyles absent, standard sizing techniques cannot be used. Therefore, it is important to use the existing femoral component and the remaining bone as indicators of the appropriate revision component size. The **CC Femoral Template** should help determine component size. It is important to note that the previously implanted femoral component may have been over or undersized, therefore templating with the bone may provide more accurate sizing than the explanted femoral component.

The extent of bone loss can be estimated by comparing the CC Femoral Template to the removed component and to the remaining femoral bone. Align the template with the lateral aspect of the explanted femoral component for an A/P size-to-size comparison. Align the template with the frontal aspect of the explanted femoral component for an M/L size-to-size comparison. The markings on the template handle represent the M/L width of the femoral component *(Figures 4-5).*

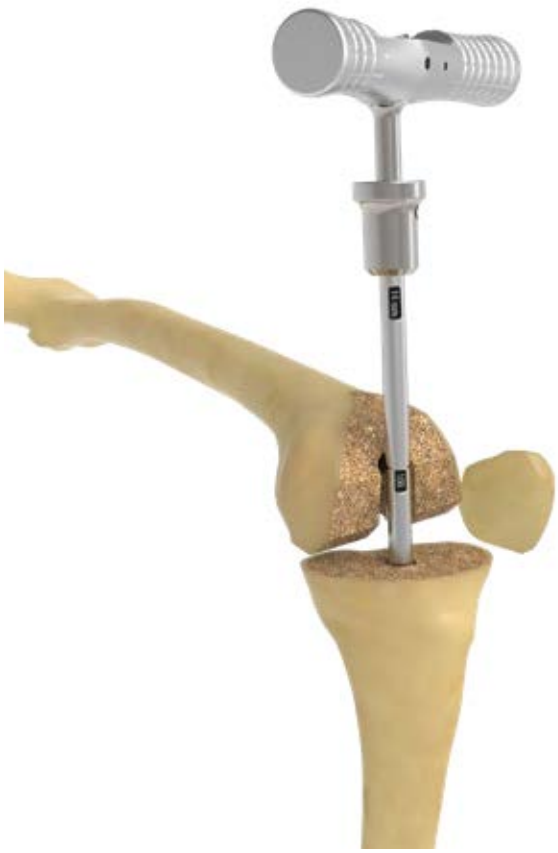


Figure 6
Tibial IM Reaming

INITIAL TIBIAL PREPARATION

Tibial Canal Preparation

In revision surgery, the intramedullary canal is often the only reliable landmark for the placement of the instruments. The cutting guides in the Optetrak Logic CC knee system use a **Stem Extension Reamer** placed in the intra-medullary canal as their reference point. This reamer, and subsequently the stem position in the tibia, will determine the A/P and M/L positions of the tibial component. This landmark is more reliable if the surgeon has the ability to double-check the alignment with an external rod.

Note: *A stem extension is required on the tibial tray if a constrained insert is used. If no stem extension is required for tibial stability, use the Optetrak 12 x 11 stem extension.*

Assemble the **Ratcheting T-Handle** to the **10mm Intra-Medullary Pilot Drill**. Insert the IM Pilot Drill into the intra-medullary canal. Progressively ream without power using the stem extension reamers until cortical chatter is obtained and a sufficient depth is achieved in order to assure neutral alignment and a stable reamer. When reamer stability is established, the reamer should be left in place and disconnected from the T-Handle *(Figure 6).*

DETAILED OPERATIVE TECHNIQUE

INITIAL TIBIAL PREPARATION

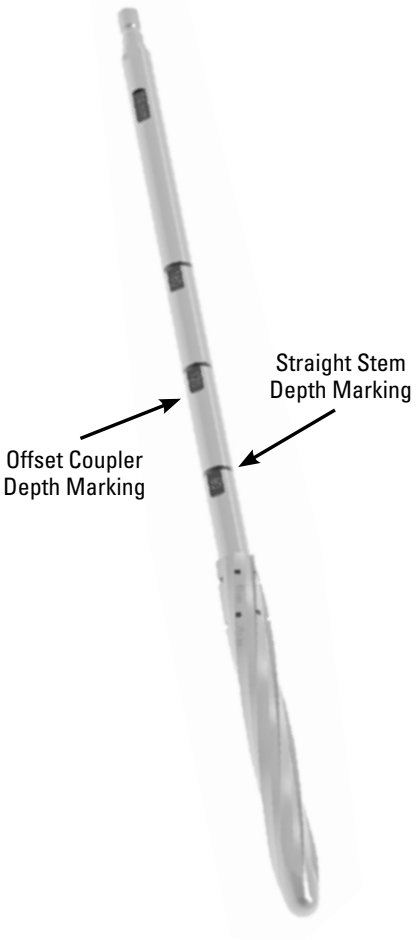


Figure 7
Reamer Depth Markings

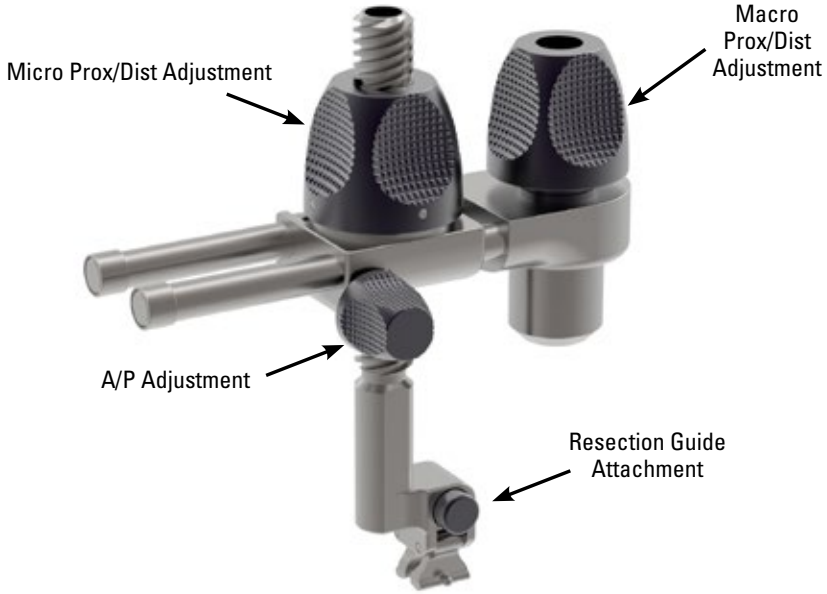


Figure 8
Tibial Resection Guide Assembly

The length markings on the reamer indicate the appropriate reaming depth to accommodate stem extensions of that length *(Figure 7).* Although not required at this step, it is important to ream deep enough to accommodate the selected stem extension length (i.e. the depth marking should be flush with the proximal tibia). If using an offset coupler, the reamer depth must be adjusted for the additional 30mm in length. Instead of reaming to the depth marking, ream to the beginning of the black box outlining the next measurement (i.e. for an 80mm stem with an offset coupler, ream to the beginning of the 120mm box).

Proximal Tibial Cut

The **CC Fixed Intramedullary (IM) Tibial Guide** is used to guide the proximal tibia cut. The reference point for this guide is the IM canal and reamer left in place from the previous step. The position of the stem in the IM canal will determine the position of the tibial implant. Therefore, the proximal tibial cut should be perpendicular to the reamer.

Attach the appropriate side-specific **Tibial Resection Guide** to the Fixed IM Tibial Guide by pressing the black push-button guide attachment *(Figure 8).* Slide the LPI Cut Line Predictor or the CC Tibial Stylus into the tibial resection guide slot. The stylus has both a 0mm and 5mm paddle. When using the tibial resection guide, insert the "0mm paddle" into the resection slot. Place the assembly over the Stem Extension Reamer and lower it until the tibial stylus contacts the least

Figure 9
Secure Resection Guide

affected tibial plateau. Position the Tibial Stylus at a point where a cleanup cut will provide a smooth, flat surface for the tibial implant. Typically 1 or 2 mm is a sufficient cleanup cut. The stylus allows the resection depth to be adjusted from 1 to 10mm depending on surgeon preference. If a bone defect is present on one side, do not position the stylus on the defect since it will remove the additional bone stock on the other least affected side. Tighten the macro proximal/distal depth adjustment knob around the reamer to lock the position.

Move the Tibial Resection Guide posteriorly until it is touching the anterior tibia. Tighten the A/P adjustment small black knob to lock the A/P position of the Tibial Resection Guide.

Micro proximal/distal depth adjustments can be made by turning the black knob on the threaded shaft of the IM Tibial Guide. Once the correct position is established, use the pins to secure the resection guide to the tibia through the neutral pin holes. Holes at +/- 2mm and +4mm allow adjustments to the resection depth without re-pinning the Tibial Resection Guide *(Figure 9)*. If desired, the **Mauldin-Multi Tool** and **Extra-Medullary Tibial Alignment Rod** can be attached to the Tibial Resection Guide to verify alignment prior to making the tibial resection. Proceed with the tibial resection.

Note: *The IM Tibial Guide may stay attached to the Resection Guide to provide additional stability while making the resection.*

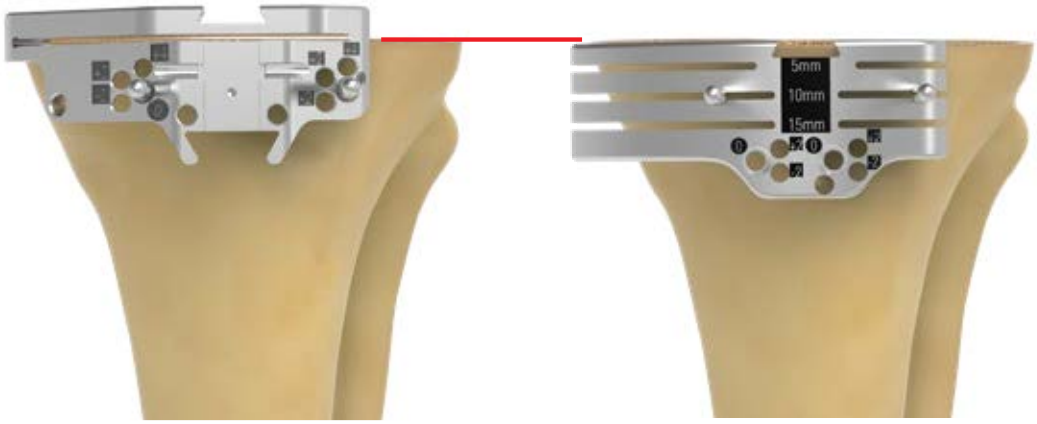


Figure 10
Resection Guide Alignment

If a defect is present, the **Tibial Augment Resection Guide** should be used in place of the standard Tibial Resection Guide in order to make the appropriate cut for augmentation. The Tibial Augment Resection Guide has 5, 10, and 15mm cutting slots to prepare the bone for either 1/2 or 1/3 tibial augments. To verify the resection amount, the 5mm paddle on the tibial stylus should be inserted into the 5mm slot on the tibial augment resection guide.

Note: *The 1/2 tibial augments are standard in the Logic CC system; the 1/3 tibial augments are special order only.*

Position the augment resection guide with the same steps as the standard tibial resection guide. If the standard tibial resection guide is pinned to the tibia using the neutral holes, the tibial augment resection guide may be placed over the same pins. The resection slot on the standard tibial resection guide should align with the most proximal surface of the tibial augment resection guide for a 0mm cut off the top of the resection guide *(Figure 10)*. If tibial offset is required, the tibial augment cut can be made at a later time in the procedure. It is important to verify proper rotational alignment before making any resections. Proceed with the tibial resection.

If you want to finish the tibial preparation before preparing the femur, continue to the "Final Tibial Prep–Determination of Tibial Coverage and Offset" step. Otherwise, continue to the next step for the distal femoral resection.

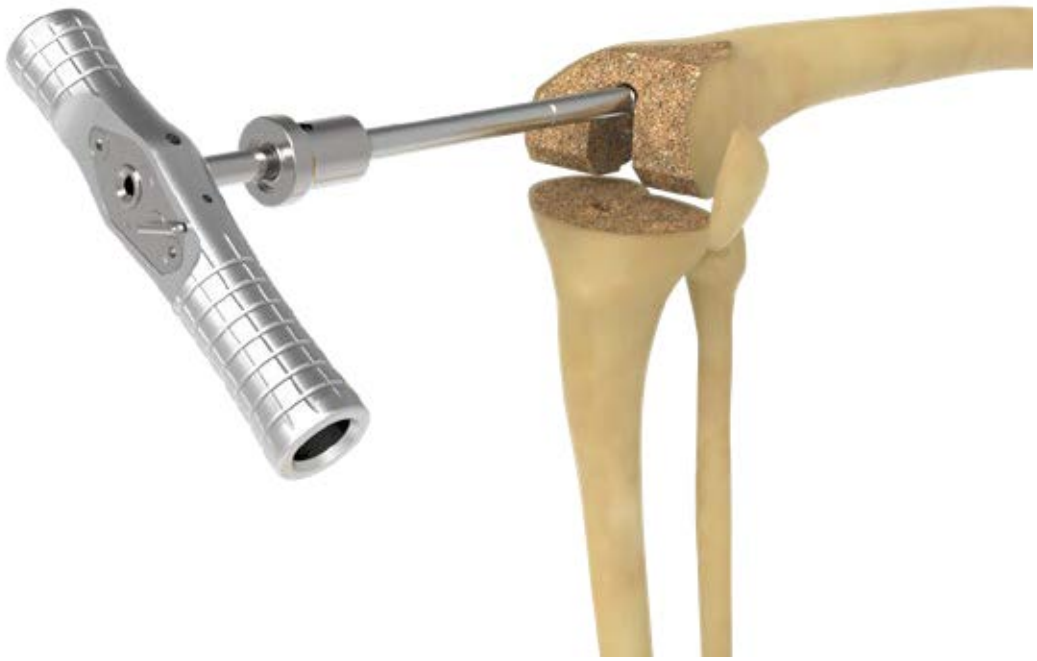


Figure 11
Femoral IM Reaming

INITIAL FEMORAL PREPARATION

Femoral Canal Preparation

In revision surgery, the intramedullary canal is often the only reliable landmark for the placement of the instruments. The cutting guides in the Optetrak Logic CC knee system use a Stem Extension Reamer placed in the IM canal as their reference point. This reamer, and subsequently the stem position in the femur, should determine the A/P and M/L positions of the femoral component.

Assemble the Ratcheting T-Handle to the reamers *(Figure 11).* Depending on bone quality, the IM canal can be opened with either the 10mm IM pilot drill or the 10mm stem extension reamer. Progressively ream using the stem extension reamers until cortical chatter is obtained. When reamer stability is achieved, leave the reamer in place and disconnect from the T-Handle.

To assure coaxial alignment with the IM canal and to verify the correct size and position, attach the Femoral Template to the reamer by using the reamer guide. Attach the reamer guide to the CC Femoral Template and slide the reamer through the cylindrical hole in the reamer guide. The alignment of the handle relative to the medullary canal gives a suggestion of required A/P offset. The slots in the template correspond to the amount of offset for the femoral component. If a gap is present anteriorly or posteriorly, shift the template to allow for a better fit with the bone. The

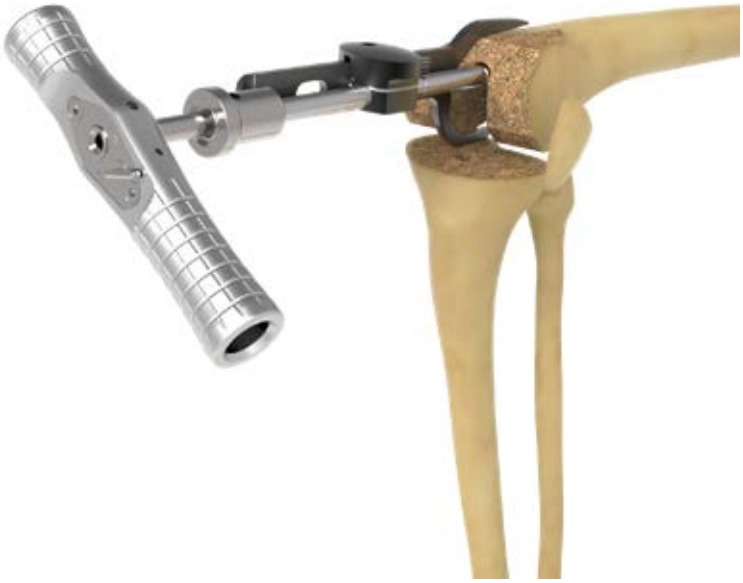


Figure 12
Secure Reamer Guide

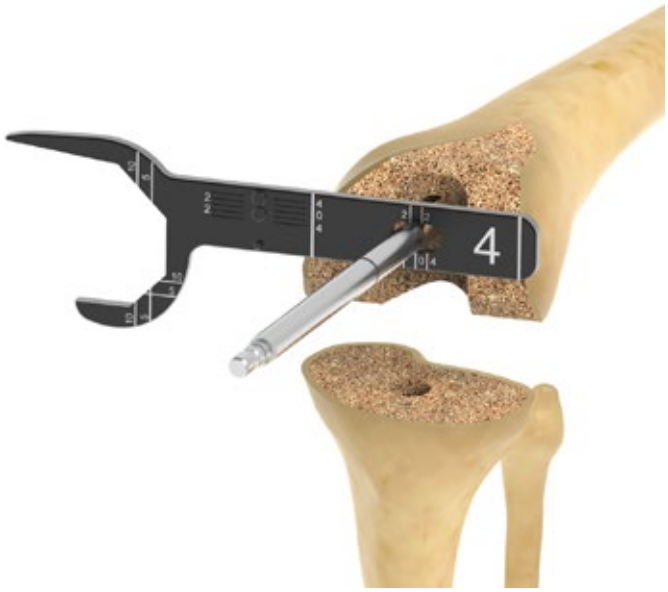


Figure 13
Determine M/L Size and Position

reamer guide "clicks" into any of the six slots in the template to represent the need for offset *(Figure 12).*

Additionally, the femoral template may be placed over the reamer to assess the M/L size and position. This step does not require attaching the reamer guide to the femoral template. Instead, slide the reamer through the oval hole in the handle of the femoral template and assess the M/L size *(Figure 13).* The vertical markings on the template handle represent the M/L width of the femoral component.

Distal Femoral Resection

The distal femoral resection instrumentation allows for a minimal distal resection (to freshen the bone surface). It also features slots that can be used to create a surface for any necessary distal augmentation.The reference mark on the anterior cortex made during the "Joint Line Referencing" step should be used to reestablish the joint line in its original position. Adjustments can be made to move the femoral component position more proximal or more distal as desired.

Figure 14
Distal Femoral Resection Guide Assembly

Figure 15
Adjustable Distal Resection Coupler Set to "O"

Assemble the **CC Adjustable Distal Resection Coupler** to the Valgus Alignment Guide by verifying the proper left or right designation on the Valgus Alignment Guide is pointing anteriorly, and slide the coupler pegs into the holes. The Valgus Alignment Guide is fixed at 5 degrees valgus. The black knobs on both instruments should be aligned in the same plane when assembled correctly. Attach the **CC Distal Femoral Resection Guide** to the Adjustable Distal Resection Coupler via the t-slot. If the Joint Line Reference Stylus is being used, slide the pegs into the holes on the Valgus Alignment Guide to assemble *(Figure 14)*.

Verify the black knob on the Adjustable Distal Resection Coupler is set to "0" before placing the assembly on the bone *(Figure 15)*. The distal resection amount can be adjusted from 0-10mm by turning the black knob. Each "click" of the knob changes the distal resection amount by 1mm and adjusts the joint line location. For example, turning the knob to 3mm moves the joint line 3mm proximally.

Place the assembly onto the reamer with the Joint Line Reference Stylus and the CC Distal Femoral Resection Guide raised to clear the anterior bone until the tip of the Joint Line Reference Stylus touches the reference point previously marked on the bone. When the assembly is positioned correctly, the black knob on the Valgus Alignment Guide can

Figure 16
Pin Through "O" Holes

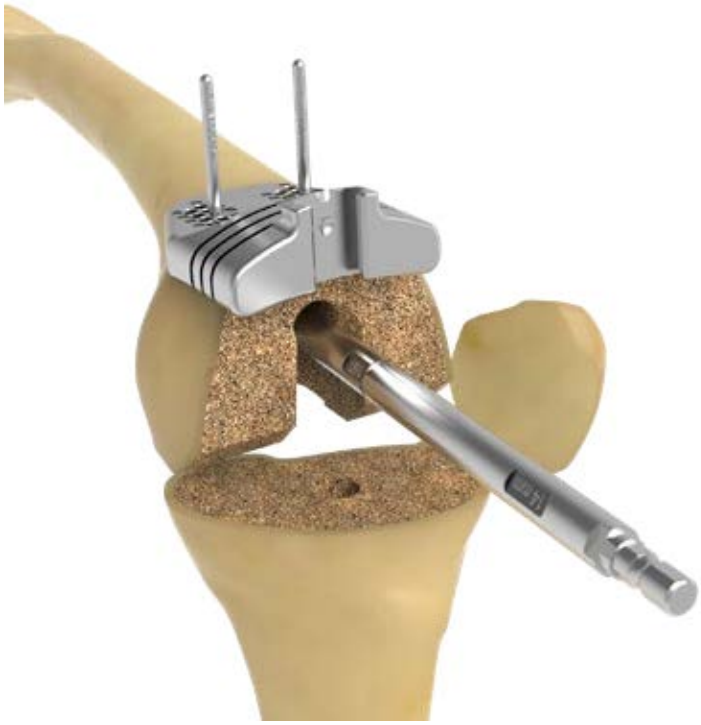


Figure 17
Leave Reamer and Guide In Place

be turned to lock to the reamer. The Distal Femoral Resection Guide is pinned to the bone through the "0" holes *(Figure 16).* Headless pins are recommended to provide the most flexibility/adjustments.

Remove the Joint Line Reference Stylus. The Adjustable Distal Resection Coupler and Valgus Alignment Guide can be left in place for additional stability or they may be removed at this point. Leave the Reamer and the CC Distal Femoral Resection Guide in place *(Figure 17).*

The position of the CC Distal Femoral Resection Guide may be changed when headless pins are used if an adjustment to the joint line position is needed. This is done by sliding the CC Distal Femoral Resection Guide onto either the more proximal or more distal hole positions, or by turning the Adjustable Distal Resection Coupler.

Insert the LPI Cut Line Predictor through the 0, 5 and 10mm slots on both the medial and lateral sides to evaluate remaining bone.

a) If the distal femur extends to the "0" resection slot on both sides and the Cut Line Predictor contacts the bone, recut bone through this slot.

b) If the distal femur is deficient on either the medial or lateral condyle and the Cut Line Predictor does not contact bone in the "0" slot on that side, insert the Cut Line Predictor in the 5mm augment slot. If it contacts

Figure 18
Assess Extension Gap

bone, recut bone through this slot. This will provide a freshened surface for a single distal augment. If the Cut Line Predictor does not contact bone, insert it in the 10mm augment slot and prepare the bone for a 10mm distal augment.

c) If the distal femur is deficient on both sides, cuts should be made through the augmentation slots on both sides to freshen the bone for two distal augments. This will maintain the joint line to the desired position.

Complete the distal cut and remove the CC Distal Femoral Resection Guide. Remove the reamer if the optional gap assessment step is performed next. If not, keep the reamer in place.

Note: *If the CC Distal Femoral Resection Guide is used for a primary TKA with intact femoral condyles, the 0mm slot will resect 10mm of distal femoral bone.*

EXTENSION GAP ASSESSMENT (OPTIONAL)

Using the **Flexion/Extension Spacer Blocks**, choose the correct thickness that will allow the joint to achieve full extension. An acceptable degree of M/L laxity should be allowed. The use of spacer blocks ensures that a rectangular extension space has been created. The size markings of the spacer blocks refer to the corresponding tibial insert thickness and take into consideration the thickness of the femoral component and tibial tray *(Figure 18)*.

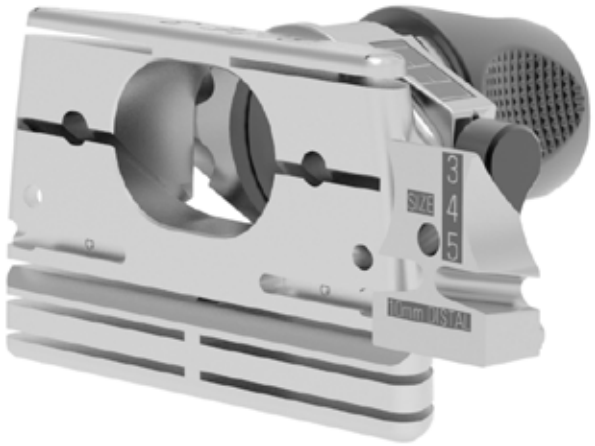


Figure 19
Attach Distal Augments

Figure 20
Bushing and Guide Assembly

FEMORAL PREPARATION

Offset 4-in-1 Resection Technique

If removed, insert the reamer back into the femoral IM canal. The **CC Femoral Finishing Guide** uses the Stem Extension Reamer as the reference point for the proper M/L and A/P position. Markings on the anterior and posterior sides of the Femoral Finishing Guide correspond to the M/L width of the femoral implant. Rotation of the femoral component is determined by the rotation of the CC Femoral Finishing Guide. Determine the rotation by locating the transepicondylar axis and aligning the CC Femoral Finishing Guide along that axis. If distal augments are required, attach the appropriate **CC Distal Femoral Augment Trial** to the distal side of the CC Femoral Finishing Guide *(Figure 19).*

Distal Femoral Augment Trials are grouped by femoral sizes 1-2 and 3-5 and are available in 5, 10 and 15mm thicknesses. Augment trials are stackable for distal augments greater than 15mm. A Cut Line Predictor may be used to assess the remaining bone anteriorly and posteriorly. Augments can be stacked both distally and posteriorly. Whenever a 15mm or larger augment trial is used, the adjacent posterior or distal aspect of the femoral component will only accept a 5mm augment (i.e. 15mm posterior augment and 5mm distal or 15mm distal augment and 5mm posterior).

Assemble the appropriate **CC Offset Bushing** (0, 2, 4, 6, or 8mm) to the **CC Femoral Offset Bushing Guide** with the lever in the "release" position *(Figures 20-21).*

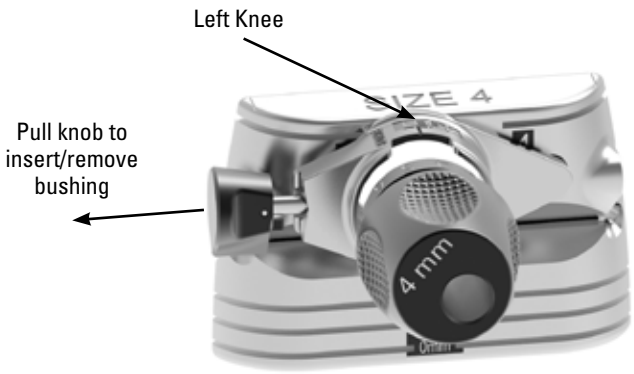


Figure 21
"Release" Position

Figure 22
"Lock" Position

Figure 23
"Rotate" Position

Because the offset bushing guide is designed with 5 degrees of valgus, the appropriate "left" or "right" marking on the offset bushing guide should face anteriorly. Attach the assembly to the appropriate CC Femoral Finishing Guide and verify its orientation.

Three orientations are designated on the lever as follows:

1) "Release" is the open position that allows for the bushing to be taken in or out. Pull the lever to release the bushing *(Figure 21)*.

2) "Lock" position is when the lever arrow is pointing towards the center of the bushing *(Figure 22)*.

3) "Rotate" allows you to determine the correct offset position. The lever can either be turned up or down 90 degrees *(Figure 23)*.

Depending on whether femoral offset is required, proceed with either the "No Offset" or "Offset" technique.

No Offset "0mm Bushing" Technique

Select the 0mm offset bushing, and assemble with the femoral offset bushing guide and femoral finishing guide. Pull the lever out to assemble the bushing with the guide. Release the lever to lock the bushing to the guide. Be sure the proper "right" or "left" indication is facing up on the Femoral Offset Bushing Guide. Place the CC Femoral Finishing Guide assembly onto the Reamer and position it to align with the transepicondylar axis.

At this point, the Cut Line Predictor can be used to assess the remaining bone anteriorly and posteriorly. The amount and location of offset can be adjusted by choosing different bushings and rotating them until the orientation is appropriate. If offset is needed, please proceed to the "offset technique" section.

If the CC Femoral Finishing Guide is in proper alignment, and in proper rotation, pin the block in place with two pins.

Offset "2/4/6/8mm Bushing" Technique

If the position of the CC Femoral Finishing Guide indicates a less than optimal position for the femoral component, femoral offset may be considered. To prepare for the offset, use the **2/4/6/8mm Offset Bushing** in place of the 0mm Bushing. Insert the Bushing into the **Femoral Offset Bushing Guide**.

Figure 24
Femoral Offset Bushing Guide Orientation

The femoral implant can be shifted 2, 4, 6, or 8mm from the shaft of the reamer in any direction. Rotate the Bushing within the guide until an optimal position is determined. As the Bushing is rotated, the femoral finishing guide rotates around the stem extension to different positions on the femur. The offset bushing has 12 positions and is similar to a clock. For example, at position 12 the final implant would be positioned directly anterior of the reamer/IM canal. Once the proper position is determined, move the lever to the "lock" position to secure the orientation, similar to the no offset technique *(Figure 22).*

Note the orientation of the Bushing by observing the numbers and marks in the Proximal window of the Femoral Offset Bushing Guide *(Figure 24).* This reference will be needed to assemble trials and implants. When the position of the CC Femoral Finishing Guide has been established, confirm appropriate external rotation and pin the block in place with two pins.

Figure 25
Perform Resections

Figure 26
Prepare for Femoral Boss Resection

Femoral Resections
Cuts should be made through the anterior, anterior chamfer and posterior chamfer slots. For easier saw access, removing the offset bushing and femoral offset bushing guide prior to making the resections is suggested. If the femoral component requires distal augments, there may not be any chamfer bone to resect. Posterior bone loss should be evaluated on the medial and lateral posterior condyles. The bone should be resected through the slots that provide a minimal cut and maximum bone contact independently on the medial and lateral posterior condyles. The CC Femoral Finishing Guides have resection slots to prepare the bone for 0, 5 and 10mm **CC Posterior Femoral Augment Trials** *(Figure 25).* After all resections have been made, remove the reamer from the CC Femoral Finishing Guide.

Note: *When stacking distal augment trials (>15mm augments), the CC Femoral Finishing Guide can not be pinned on the stacked side. Leave the CC Offset Bushing and CC Femoral Offset Bushing Guide over the reamer and pin the side without stacked trials to stabilize the femoral finishing guide. Anterior and posterior resections can be performed with the bushing attached. Chamfer resections can not be completed, but these are typically not required when using distal augments greater than 15mm. Alternatively, femoral finishing guide handles are available in the set.*

The system provides flexibility by offering various offset positions and reamer diameters. However, it is important to verify that the combination of offset and diameter chosen does not penetrate the cortex of the femoral bone when preparing the femoral boss in the next step.

Figure 27
Attach Femoral Augments

Figure 28
Femoral Trial Assembly

The stem boss on the constrained femoral prosthesis is 16mm in diameter. If the femur was prepared without offset, additional reaming is required if the canal has been reamed less than 16mm. If the femur is prepared with offset, additional reaming is required regardless of the size. To accommodate the boss in the canal, the **CC Femoral Boss Prep Reamer** should be used to ream the distal canal 2cm deep to the distal cut. Attach the **CC Femoral Boss Prep Guide** to the CC Femoral Finishing Guide and use the Femoral Boss Prep Reamer to prepare the bone *(Figure 26)*. The Femoral Boss Prep Reamer should be advanced into the femur until the depth stop is engaged. Remove the CC Femoral Finishing Guide and the reamer from the femur.

Note: *If the combination of the Stem Extension Reamer diameter and desired offset does not easily allow the femoral boss to be prepared through the Femoral Finishing Guide, it can be prepared through the CC Notch Guide. Attach the CC Femoral Boss Prep Guide to the Notch Guide. With this approach, the distal pin holes on the Femoral Base Trial can not be used. Proceed with the Femoral Boss Prep Reamer.*

FINAL FEMORAL PREPARATION

Femoral Base Trial Assembly

Select the appropriate size Femoral Base Trial that corresponds to the previously determined femoral component size. If distal or posterior femoral augments are needed, the appropriate trial should be attached to the distal or posterior side of the Femoral Base Trial *(Figures 27-28)*. Augment Trials are grouped by femoral sizes 1-2 and 3-5 and available in 5, 10, and 15mm thicknesses. Augment Trials are stackable for augments greater than 15mm.

Figure 29 a and b
Stem Adaptor Assembly

Figure 30
Secure the Femoral Base Trial

If additional bone cuts are required for augments, the bone can be prepared directly through the femoral trial.

Note: *The Femoral Base Trial is symmetric but has cutouts on the anterior flange that represent the profile of the left and right implants.*

Femoral Trialing: Stem Extension Only

After preparing the A/P femoral cuts with the Femoral Finishing Guide, assemble the Logic Femoral Base Trial with the **CC Femoral Stem Adaptor** and appropriate **Stem Extension Trial and Offset Coupler Trial (if required)** to assess the fit of the components prior to preparing the notch resection. Insert the Stem Extension Trial taper into the Logic CC Femoral Stem Adaptor and tighten the captured screw using the **3.5mm Hex Driver** and **Torque-Limiting Screwdriver Handle**. If an Offset Coupler Trial is required, align the appropriate number on the offset coupler trial with the line on the femoral stem adaptor. The location (number) of the offset was determined previously. The stem extension trial is then attached to the coupler trial. The stem extension assembly is attached to the femoral base trial and the screws are tightened. Place the assembly on the bone and pin it in place using either the distal or anterior flange pin holes. *(Figures 29-30).*

Caution: *do not engage the breakaway torque feature to tighten the screws. Over tightening the screws may damage the instruments.*

Note: *The offset couplers add 30mm of additional length to a straight stem extension. Ensure reamer depth is sufficient as described on page 8.*

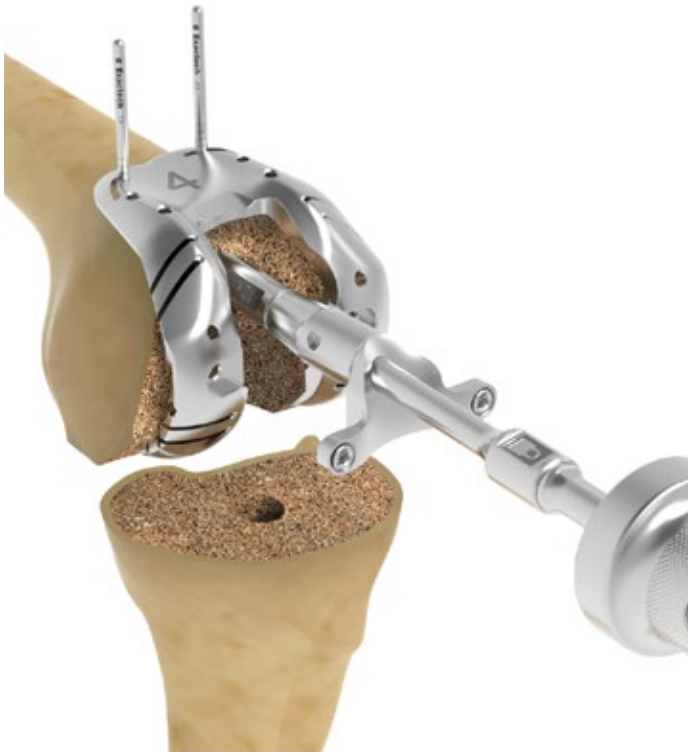


Figure 31
Stem Extension Trial Removal

Figure 32
Assemble CC Notch Guide

It is critical to securely pin the femoral base trial prior to removing the stem trial and adaptor *(Figure 30)*. If the femoral base trial moves after it is removed, the stem trial must be re-inserted and reattached to the femoral trial to reestablish the femoral position relative to the canal. Pin the femoral trial securely prior to moving to the femoral notch resection step.

Once the femoral base trial is pinned, use the hex driver to loosen the screws by attaching the femoral stem adaptor to the femoral base trial. Attach the **CC Trial Extractor** to the **LPI Slaphammer** and insert the extractor into the stem adaptor. Turn it 90 degrees until the lock symbol is facing anteriorly and then remove the femoral stem adaptor and stem extension trial *(Figure 31)*.

Notch Resection

Assemble the **CC Notch Guide** to the Femoral Base Trial using the **3.5mm Hex Driver** to tighten both screws.

Caution: *Do Not Engage The Breakaway Torque Feature To Tighten The Screws. Over tightening the screws may damage the instruments (Figure 32).*

Figure 33
Perform Cylindrical Resection

Figure 34
Trim Medial and Lateral Sides of Notch

Attach the **Notch Cutter** to a power drill. With the knee in flexion, introduce the Notch Cutter into the Notch Guide, making sure that the drill is set on the "drill" setting. Once the teeth on the Notch Cutter have cleared the black bushing and before the teeth contact the bone, activate the drill. Apply pressure to the Notch Cutter as it travels posteriorly and ream until the Notch Guide prevents the Notch Cutter from further travel *(Figure 33).*

Turn the power drill off and remove the Notch Cutter from the Notch Guide. Do not activate the drill while removing the Notch Cutter to prevent the cutting teeth from scoring the black bushing.

Due to the cylindrical shape of the Notch Cutter, it is necessary to remove any existing bone remnants from the distal femur. It is recommended to use a sagittal saw to remove the bone remnants, aligning the saw to the inner surfaces of the Notch Guide and trim the medial and lateral sides of the notch *(Figure 34).* Remove the Notch Guide after all cuts are performed.

Preparation for the Optetrak Logic CC femoral component is complete.

Figure 35a and b
Attach Stem Extension Trial

Figure 36
Attach the Modular Femoral Box Trial

Femoral Trial Assembly

Select the **CC Modular Femoral Box Trial** corresponding to the appropriate size and orientation (left or right) Femoral Base Trial. Attach the appropriate length and diameter stem extension trial to the Modular Femoral Box Trial. If an Offset Coupler Trial is required, align the appropriate number on the offset coupler trial with the line on the modular femoral box trial. The location (number) of the offset should have been determined previously. *The stem extension trial is then attached to the coupler trial. (Figures 35-36)*

Attach the Modular Femoral Box Trial and Stem Extension Trial to the Femoral Base Trial using the 3.5mm hex driver and two screws on the distal surface.

Figure 37
Insert Modular Insert Spine Trial

Figure 38
Attach Tibial Augment Trial

Trial Reduction (Optional)
If desired, a trial reduction can be done prior to determining the final tibial rotation and preparation.

Select the **Logic CC LPI Tibial Tray Trial** size that provides the desired tibial coverage by placing the compatible sizes onto the resected tibial surface. The Optetrak Logic knee system allows the tibia to be same size, up-size or down-size from the selected femoral size.

Insert the appropriate **CC Modular Insert Spine Trial** into the chosen **Modular Tibial Insert Trial**. The Spine Trial color should match that of the Tibial Insert Trial, which should match the color of the Femoral Base Trial *(Figure 37).*

The Logic CC femur accepts PS, PSC and CC tibial inserts. If less constraint is desired, the **PS Modular Insert Spine Trial** or **PSC Modular Insert Spine Trial** can be used instead.

If cuts have been made for tibial augmentation, the appropriate FIT Augment Trial(s) should be attached to the underside of the Tibial Tray Trial. The augment trials are side specific (left/right) and each have two captured screws. Select the appropriate augment trial and match it with the profile of the tibial tray trial. Using the 3.5mm hex driver, tighten both screws *(Figure 38).* Place the tibial tray trial on the resected proximal tibial surface.

Figure 39
Exchange Tibial Insert Trials

Figure 40
Assess in Flexion and Extension

Assemble the Tibial Insert Trial with the Tibial Tray Trial. Slide the tibial insert trial from anterior to posterior into the tibial tray trial until full engagement is achieved. Next, exchange the Tibial Insert Trials using the **Tibial Trial Insert Handle** until a "best fit" is achieved. Keep in mind the size of the femur must always match the size of the tibial insert in order to maintain the system's 0.96 femoral/tibial congruency *(Figure 39)*.

Assess the knee in both flexion and extension *(Figures 39-40)*. Once the desired result is achieved, the trials can be removed from the bone.

Figure 41
Extract Box and Stem Extension Trials

Remove the Modular Tibial Insert Trial using the Insert Trial Handle. At this point the femoral base trial can be removed from the bone.

Attach the CC Trial Extractor to the LPI Slaphammer and insert the extractor into the modular femoral box trial. Turn it 90 degrees until the lock symbol is facing anteriorly and then remove the box trial and stem extension trial *(Figure 41).*

FINAL TIBIAL PREPARATION

Determination of Tibial Coverage and Offset

When the Logic FIT Tibial Tray and stem assembly is introduced into the canal, the M/L and A/P positions will be influenced by the stem fit in the canal. Additionally, the stem of the FIT tray must be prepared with the appropriate tamp. Proper placement of the tray relative to the intramedullary canal is determined by using the Reamer and Offset Bushings as reference points.

Select the Logic CC LPI Tibial Tray Trial size that provides the desired tibial coverage by placing the compatible sizes onto the resected tibial surface. The Optetrak Logic knee system allows the tibia to be same size, up-size or down-size from the selected femoral size.

Figure 42
FIT Tibial Drill Guides

Insert the reamer into the tibial intramedullary canal. The Tibial Tray Trial is placed on the cut surface of the tibia over the Reamer. If cuts have been made for tibial augmentation, the appropriate FIT Tibial Augment Trial(s) should be attached to the underside of the Tibial Tray Trial. If tibial augment resections have not been made but are required, they can be made later with the **Offset Tibial Augment Adaptor**.

Some surgeons will ream until the depth markings are flush with the bone, however because resection depth varies slightly for each size, **FIT Tibial Drill Guides** are available for each diameter reamer. Because the FIT tray keel varies in length for each size, the drill guides are used to verify the reamer depth is sufficient for the chosen length stem extension and FIT tray. This is assured when the depth indicator marking on the reamer aligns with the window on the drill guide. Remove the FIT tibial drill guide *(Figure 42)*.

Note: *The offset couplers add 30mm of additional length to a straight stem extension. Ensure reamer depth is sufficient as described on page 8.*

Depending on whether tibial offset is required, proceed with either the "No Offset" or "Offset" technique.

FINAL TIBIAL PREPARATION

Figure 43
Place Bushing Guide and Bushing

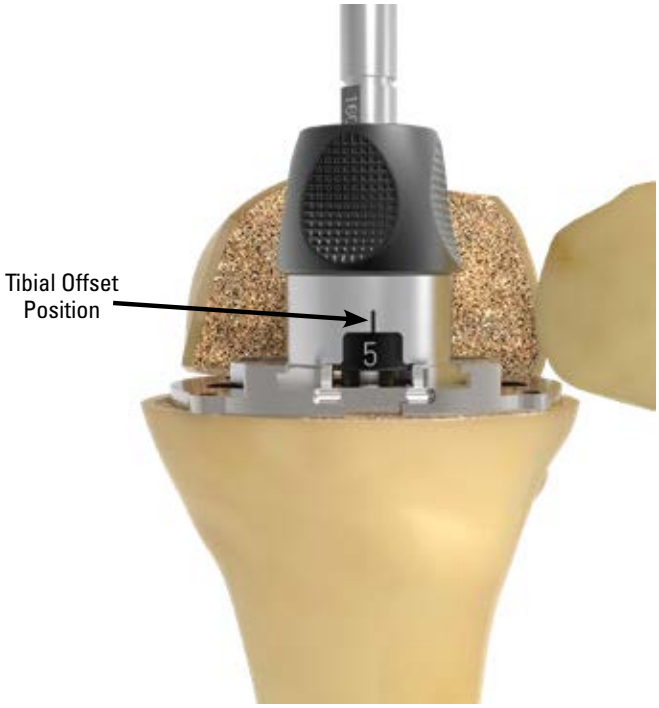


Figure 44
Observe Marking on Tibial Offset Bushing Guide

No Offset Technique

Place the **Tibial Offset Bushing Guide** and 0mm Offset Bushing over the final Reamer *(Figure 43).*

If the Tibial Tray Trial is positioned optimally, pin the trial with two short-headed pins and remove the Tibial Offset Bushing Guide, 0mm Offset Bushing and Reamer. If a tibial augment is needed, the tray must be pinned through the posterior holes. Continue to tamp the tibia. If coverage of the proximal tibial surface is not optimal, a tibial offset may be considered.

Offset Technique

To prepare for tibial offset, use the 2/4/6/8mm Offset Bushing in place of the 0mm Bushing. Insert the Offset Bushing into the Tibial Offset Bushing Guide. Rotate the bushing within the guide until an optimal position is determined.

The Offset Bushing allows the tibial implant to be shifted 2/4/6/8mm from the center of the canal in any direction. Note the orientation of the Offset Bushing by observing the numbers and marks in the window of the Tibial Offset Bushing Guide *(Figure 44).* This reference will be needed to assemble the trials and implants. When the optimal position of the Tibial Tray Trial has been established, pin the trial in place with two pins. If a tibial augment is needed, the tray must be pinned through the posterior holes.

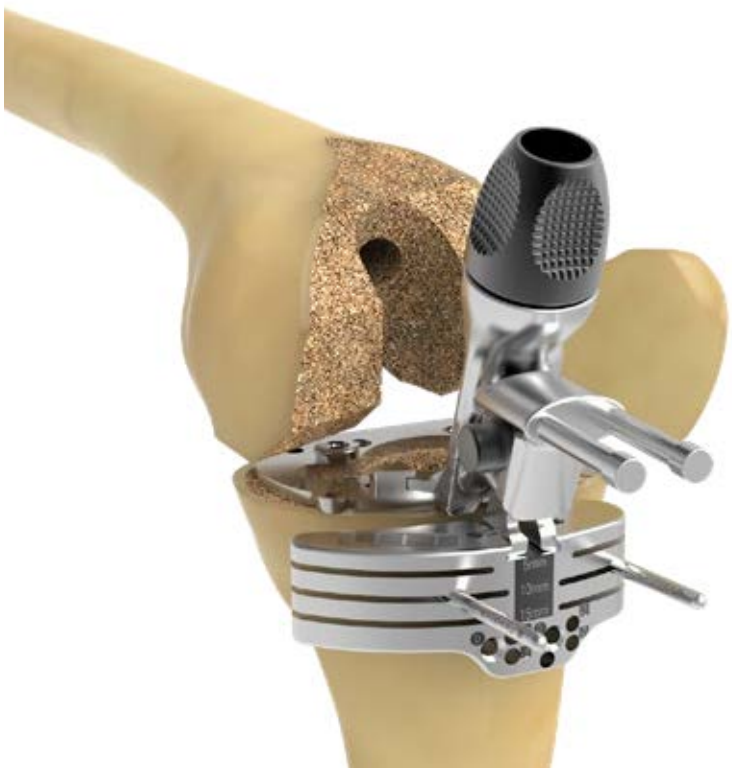


Figure 45
Perform Tibial Augment Resections

If final augment resections were not made with the initial tibial resection, attach the appropriate side-specific Tibial Augment Resection Guide to the Offset Tibial Augment Adaptor. Then, attach the assembly to the Tibial Tray Trial and pin in place using the "0" holes on the resection guide. The Tibial Augment Resection Guide's location can be adjusted anteriorly or posteriorly as needed *(Figure 45)*.

The Tibial Augment Resection Guide has 5, 10 and 15mm cutting slots to prepare the bone for either 1/2 or 1/3 tibial augments. The 1/2 tibial augments are standard in the Logic CC system and the 1/3 tibial augments are special order only. It is important to verify proper rotational alignment before making any resections. Select the appropriate slot and resect the bone. Attach the appropriate FIT Augment Trial to the tibial tray trial and place on the bone.

Note: *The system provides flexibility by offering various offset positions and reamer diameters. However, it is important to verify the combination of offset and diameter chosen does not penetrate the cortex of the tibial bone when preparing the tibial boss in the next step.*

FINAL TIBIAL PREPARATION

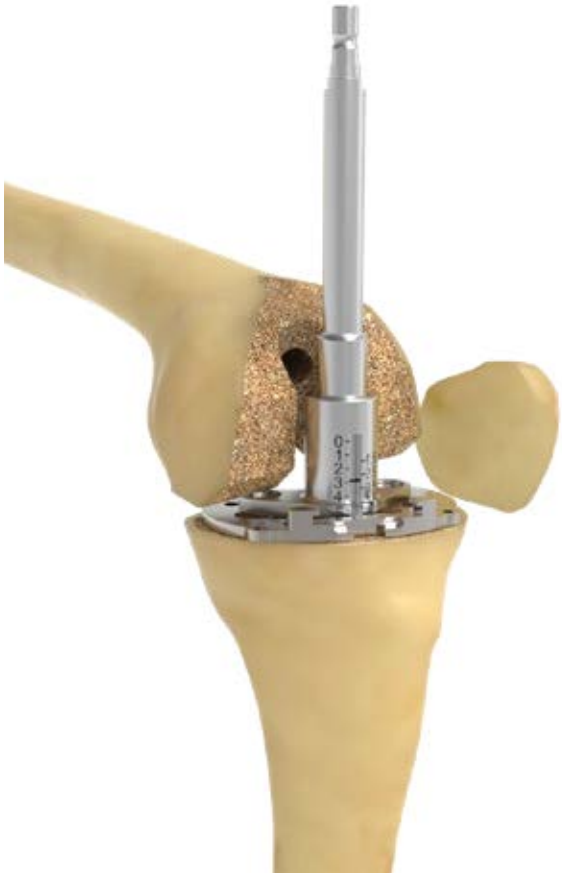


Figure 46
Prepare Bone with Boss Prep Reamer

Figure 47
FIT Tibial Tamp Assembly

If the tibia was prepared with offset, additional reaming is required. To accommodate the offset coupler in the canal, the **CC Tibial Boss Prep Reamer** should be used to prepare the proximal portion of the tibial canal for the offset coupler. Place the 14mm FIT Tibial Drill Guide on the Tibial Tray Trial and use the Tibial Boss Prep Reamer to prepare the bone *(Figure 46)*. The Tibial Boss Prep Reamer should be advanced into the tibia until the line on the reamer matches the line in the window of the appropriate tibial tray size. Remove the FIT Tibial Drill Guide and the reamer from the bone.

Tamp

Assemble the **LPI FIT Tibial Tamp** to the **LPI FIT Tibial Tamp Guide** by pressing the button on the anterior distal end of the Tibial Tamp Guide and sliding the FIT Tibial Tamp into the FIT Tibial Tamp Guide *(Figure 47)*. Select the size on the LPI FIT Tibial Tamp corresponding to the Tibial Tray size you intend to use. The size can be selected by rotating the dial at the proximal end of the tamp guide until the appropriate size is viewed in the window.

Figure 48a
Push Tamp Into Tibia Until Plate Contacts Handle

Figure 48b
Eject Tibial Tamp Using the Mauldin Tool

Figure 48c
Do Not Hit the Tamp in Retrograde

Align the Tamp Guide to the posterior pegs of the Tibial Tray Trial and seat the Tamp Guide flush and stable against the Tibial Tray Trial. The Tamp is driven into the tibia until the impaction plate contacts the handle *(Figure 48a)*.

Note: *Be sure to hold the Tamp steady during impaction to avoid tilt or lift-off.*

The Tamp should be ejected from the proximal tibia by squeezing the release lever. If the Tamp Guide does not disengage from the tibia with the release lever, a Mauldin Multi-Tool can be used to disengage it by inserting the small stud on the end of the Mauldin Multi-Tool into the hole in the handle of the Tamp, then rotating the Mauldin Multi-Tool to loosen the Tibial Tamp ***(Figure 48b)***.

CAUTION: Do not hit the tamp in retrograde. Hitting the tamp in retrograde can result in breakage of the instrument ***(Figure 48c)***.

Figure 49a and b
Assemble Tibial Trials

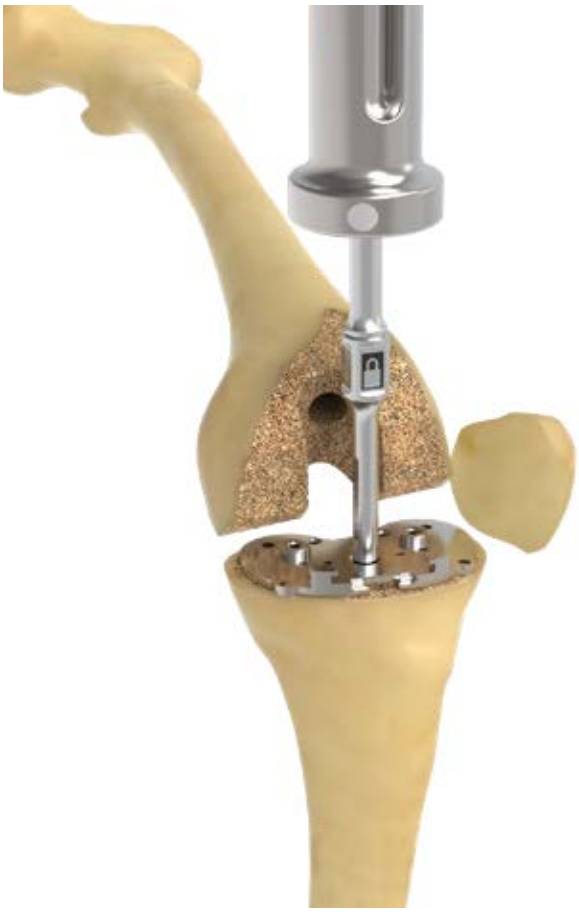


Figure 50
Remove the Trials

Tibial Trial Assembly

The **FIT Tibial Tray Trial** provides an opportunity to evaluate fit and function of the tibial tray, stem extension and any tibial augments prior to selecting the actual components. Select the appropriate Stem Extension Trial and Offset Coupler Trial (if required) that corresponds with the depth and diameter of the last reamer used. The Stem Extension Trial should be screwed into the base of the FIT Tibial Tray Trial using the 3.5mm Hex Driver. If an Offset Coupler Trial is required, align the appropriate number on the offset coupler trial with the line on the FIT Tibial Tray Trial. The location (number) of the offset was determined previously. The stem extension trial is then attached to the coupler trial.

The Tibial Augmentation Block Trial(s), if required, should now be transferred to the FIT Tibial Tray Trial *(Figure 49a & b).*

Once fit of the trial is assessed, attach the CC Trial Extractor to the LPI Slaphammer and insert the extractor into the FIT Tibial Tray Trial. Turn it 90 degrees until the lock symbol is facing anteriorly and then remove the tibial tray trial and stem extension trial *(Figure 50).*

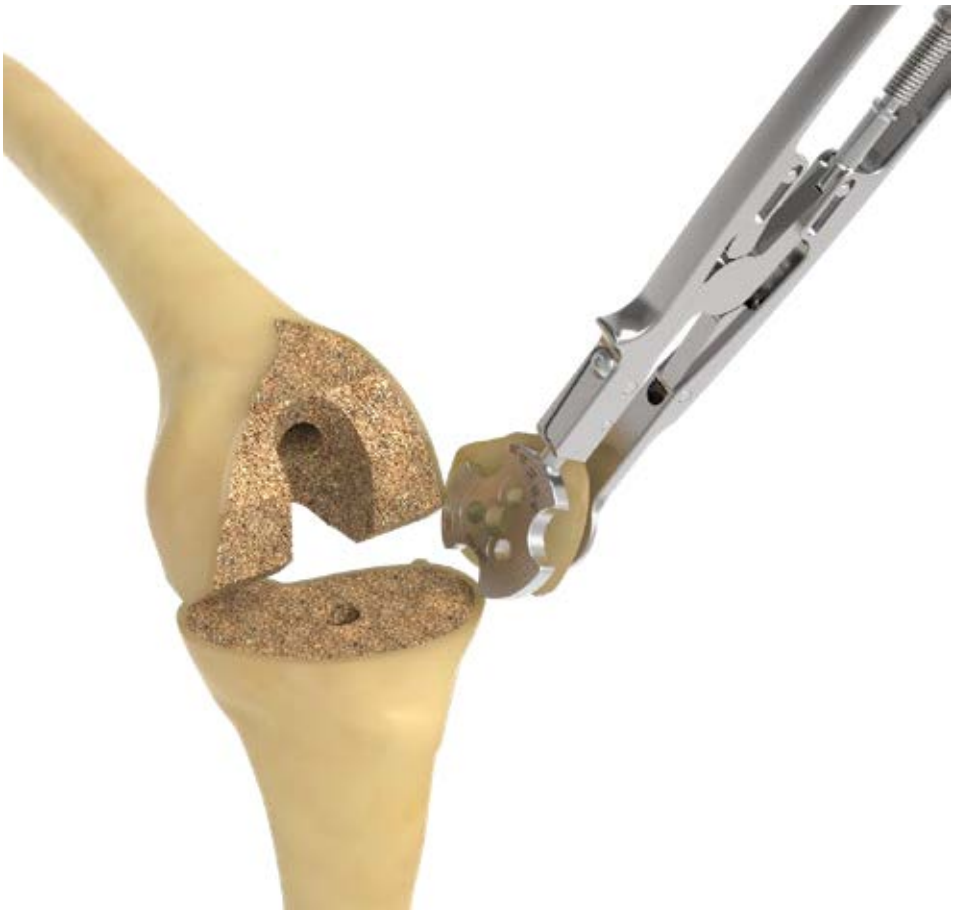


Figure 51
Size Patella and Drill Peg Holes

PATELLA RESECTION

It is not always necessary to revise the patellar component. A well-fixed component from the Optetrak system may be left. If the component is loose or found to be incompatible, determine if there is enough bone remaining to implant a new patellar component. Sufficient bone must remain to ensure the pegs from the new prosthesis do not protrude through the anterior surface.

If the decision is made to replace the primary patellar component with an Optetrak patellar component, final determination of patellar size (diameter) and hole preparation should be performed using the **LPI Patellar Universal Drill Guide** assembled to the **LPI Patella Preparation Handle**.

With the handle completely open, position the Drill Guide on the patella to determine the patellar diameter. The pattern and size of the Drill Guide holes are universal for all three-peg patella components. Clamp the patella and secure the handle by turning the knob. Holes should be drilled through the patellar universal drill guide in either the three-hole or the single-hole configuration using the appropriate **Patellar Drill**. After the holes are drilled, loosen the knob and remove the handle and Drill Guide from the patella. The appropriate size **One-Peg Patella Trial** or **Three-Peg Patella Trial** should be placed on the patella *(Figure 51).*

Figure 52
Remove Stem Plug of FIT Tibial Tray

Figure 53
Impact FIT Tray and Stem Extension

Figure 54
Offset Coupler

ASSEMBLY OF TIBIAL TRAY IMPLANTS

The FIT Tibial Tray allows for the attachment of augments in either a 1/2 or 1/3 size and 5mm, 10mm or 15mm thickness. The 15mm augments require stacking a 5 and 10mm augment together and using different screws (02-012-50-9015) that are not packaged with the augments. The FIT Tibial Tray accommodates stem extensions of various lengths and diameters.

The polyethylene plug in the stem of the FIT Tibial Tray can be removed by inserting a screwdriver through the top of the tray, turning the tibial tray and screwdriver upside down and pressing down until the plug dislodges *(Figure 52).*

No Offset Assembly

The FIT tray should be placed face down on a padded table surface and the selected stem extension inserted into the tray stem taper. The tip of the stem should be protected with padding and then impacted sharply with a mallet *(Figure 53).*

Offset Assembly

Offset couplers are packaged with both a set screw and a stem screw, as shown in *Figure 54.* The stem screw needs to be removed and placed on the back table prior to assembling the coupler with the FIT tray. If an **Offset Coupler** is required, align the appropriate number on the Offset Coupler in the same position as on the FIT Tibial Tray

Figure 55
Offset Coupler Assembly

Figure 56
Stem Screw Assembly

Trial. Because there is not a marking on the FIT Tibial Tray, the location needs to mimic the trial. Alternatively, the number can be aligned with the small anterior hole on the proximal tibial tray.

Use the CC Tibial Stem Extension Screw Trial to torque the offset coupler down to the tibial tray *(Figure 55)*.

Note: *When implanting a 2F/1T or 1F/1T tibial tray, the Gold CC Tibial Stem Extension Screw Trial will not fully seat to allow the locking tibial impactor to connect to the implant. The Blue CC Tibial Stem Extension Screw Trial is required when using the locking impactor. However, if the surgeon prefers the non- locking tibial impactor, either screw can be used.*

Screw the stem screw into the stem extension. The stem screw is packaged with the offset coupler *(Figure 56)*.

Figure 57
Impact Stem Extension in Offset Coupler

Figure 58
Tighten the Set Screw

The offset coupler is packaged with the set screw already engaged. Use the 2.5mm allen wrench to back the set screw out of the coupler most of the way and place the stem extension into the coupler. Note: The stem extension taper should seat into the coupler. If it remains proud, the set screw must be backed out further. Once the stem extension is seated into the coupler, hit the stem extension into the back side of the coupler with the mallet *(Figure 57)*.

Use the 2.5mm allen wrench to tighten the set screw. The set screw engages with the stem screw *(Figure 58)*.

Note: *Do NOT impact the offset coupler directly. It is important to use the Tibial Stem Extension Screw Trial to seat the coupler to the tibial implant before impacting. The coupler should always be assembled prior to assembling the stem extension.*

Figure 59
Attach Augments to FIT Tray

If augments are necessary, the augment type and thickness corresponding with the bone resections should be selected. The augment size must correspond with the tibial tray size identified by the number on the tray box followed by a "T." For example, the appropriate augment for 3F/2T - is size 2. The screws and augments are packaged together and come pre-assembled. Because the 5mm augments are reversible (M/L), depending on the orientation of the augment the two screws, may need to be removed and reversed. Additionally, if a 5 and 10mm augment are stacked together, all four screws must be removed and discarded, and the 15mm FIT tibial tray screw must be used *(Figure 59)*. Attach the augments to the FIT tray using the 3.5mm Hex Driver. It is not necessary to engage the torque limiting feature when assembling augments.

IMPLANTATION OF TIBIAL COMPONENT

Surgeons have different preferences in regard to the sequences used to place the prosthesis components. While a successful, standard technique sequence is described here. If the surgeon prefers another sequence, the Optetrak Logic knee system provides sufficient flexibility to accommodate adjustments in the implantation technique.

Place retractors to expose the joint. All tissue debris should be removed from resected bone surfaces. The bone trabeculae should be thoroughly cleansed with pulsed lavage.

DETAILED OPERATIVE TECHNIQUE

IMPLANTATION OF TIBIAL COMPONENT

Figure 60
Screw Trial into Tibial Tray

The tibial component may be implanted as a single unit with the tibial insert assembled to the tibial tray, or individually with the tibial tray implanted first and the insert assembled after the cement hardens.

An insert assembly screw is packaged with the CC Insert. Place the screw into the center of the tibial spine after inserting the poly into the tibial tray. The insert assembly screw locks the stem and tibial insert to the tibial tray.

Note: *A stem extension is required on the tibial tray if a constrained insert is used. If no stem extension is required for tibial stability, use the Optetrak 12 x 11 stem extension.*

If a PS or PSC tibial insert is implanted with a stem extension, an insert assembly screw is not required. Before assembling the tibial insert to the tibial tray, assemble the stem extension to the tibial tray and insert a Tibial Stem Extension Screw. Tighten the screw with the 3.5mm Hex Torque-Limiting Driver.

Either Method 1 or Method 2 can be followed for final implantation.

Figure 61
Assemble Handle with Tibial Tray

Figure 62
Introduce Tibial Component

Figure 63
Check for Balseal Damage

Method 1: Tibial Tray Only

Insert the **CC Tibial Stem Extension Screw Trial** into the center of the FIT Tibial Tray and tighten until the head of the screw is below the proximal surface of the implant if a CC tibial insert is going to be implanted. This trial temporarily secures the stem extension to the tibial tray *(Figure 60).*

Bone cement should be applied to the prosthesis and prepared bone surfaces when the cement has a viscosity low enough to promote good penetration into the trabecular bone. Apply bone cement to the proximal tibia and the distal surface of the tibial tray component, including the stem, using either a cement gun or by manually pressurizing the cement. Assure that both the bone and the bone side of the prosthesis are thoroughly coated with cement. When using the FIT tray components, ensure cement is pressed into the cement pockets.

Care should be taken to limit the amount of cement placed on the posterior lateral corner of the implant to limit cement cleanup in the posterior capsule.

Next, assemble the **LPI Impactor Handle** to the appropriate size **Locking Tibial Impactor Plate** *(Figure 61).* Introduce the tibial tray component onto the prepared tibial surface by applying a constant downward force *(Figure 62).*

NOTE: *Check for Balseal damage (Figure 63). If damage is observed return the instrument to Exactech for servicing and contact Exactech for a replacement instrument. The Balseal holds the appropriate impactor head on the impactor handle until the locking mechanism can be engaged. If the Balseal is damaged, the impactor head should be held in place manually while the locking mechanism is engaged.*

Figure 64
Insert Assembly Screw Into Tibial Insert Spine

Figure 65
Introduce Pre-assembled Tibial Components

The extraneous cement must be removed from the borders of the tibial component, starting posteriorly and working around to the sides and front. All cement must be removed from the posterior capsular area of the knee. Remove the CC Tibial Stem Extension Screw Trial from the implant if needed.

Method 2: Pre-assembled Tibial Components

Alternately, the tibial insert may be assembled to the tibial tray prior to implantation. In this case, the **Tibial Insert Driver** should be used to complete the installation of the pre-assembled tibial components. At this point, bone cement should be applied to the prosthesis and prepared bone surfaces as described in Method 1.

When implanting a CC tibial insert, the insert assembly screw should be inserted into the top of the tibial insert spine *(Figure 64)*. The Torque-Limiting Driver Handle is used to tighten the insert assembly screw until the driver releases. It is critical to apply this level of torque. This will assure that the screw is fully seated in the stem thread hole and the screw head is below the top surface of the insert spine.

Introduce the pre-assembled tibial components onto the prepared tibial surface using the **LPI Non-Locking Tibial Impactor**, applying a constant downward force *(Figure 65)*.

Figure 66
Insert Stem Extension into Femoral Component

All extraneous cement must be removed from the borders of the tibial component, starting posteriorly and working around to the sides and front. All cement must be removed from the posterior capsular area of the knee.

ASSEMBLY OF FEMORAL COMPONENT

No Offset Assembly

The Logic CC Femoral Component accommodates stem extensions of various lengths and diameters. The appropriate stem extension implant is inserted into the stem extension boss on the Logic CC Femoral Component *(Figure 66).* The distal condyles of the Logic CC Femoral Component should be placed on a padded surface, and the end of the stem should be padded. The end of the stem should be impacted sharply with a mallet. This will lock the mating tapers.

A femoral stem extension screw is packaged with the femoral component. Place the femoral stem extension screw in the intercondylar box hole of the femoral component and tighten using the 3.5mm Hex Driver and Torque-Limiting Driver Handle. The handle is preset to release when the appropriate torque has been achieved. It is critical to apply this level of torque.

Offset Assembly

Offset couplers are packaged with both a set screw and a stem screw, as shown in *Figure 54.* The stem screw needs to be removed and placed on the back table prior to assembling the coupler with the Logic CC Femoral Component. If an Offset Coupler is required, align the appropriate number on the Offset Coupler with the line on

Figure 67
Offset Coupler Assembly

Figure 68
Stem Screw Assembly

the distal surface of the femoral component stem extension boss. The location (number) of the offset should have been determined previously. Verify the orientation matches the previously assembled trial.

A femoral stem extension screw is packaged with the femoral component. Place the femoral stem extension screw in the intercondylar box hole of the femoral component and tighten using the 3.5mm Hex Driver and Torque-Limiting Driver Handle. The handle is preset to release when the appropriate torque has been achieved. It is critical to apply this level of torque.

Use the femoral stem extension screw to torque the offset coupler down to the femoral component *(Figure 67)*.

Screw the stem screw into the stem extension. The stem screw is packaged with the offset coupler *(Figure 68)*.

Figure 69
Impact Stem Extension in Offset Coupler

Figure 70
Tighten the Set Screw

The offset coupler is packaged with the set screw already engaged. Use the 2.5mm allen wrench to back the set screw out of the coupler most of the way and place the stem extension into the coupler.

Note: *The stem extension taper should seat into the coupler. If it remains proud, the set screw must be backed out further. Once the stem extension is seated into the coupler, hit the stem extension into the back side of the coupler with the mallet (Figure 69).*

Use the 2.5mm allen wrench to tighten the set screw. The set screw engages with the stem screw *(Figure 70).*

Note: *Do NOT impact the offset coupler directly. It is important to use the femoral stem extension screw to seat the coupler to the femoral implant before impacting. The coupler should always be assembled prior to assembling the stem extension.*

Figure 71
Assemble Distal and Posterior Augments

Figure 72
Attach Femur to Locking Impactor

Logic CC Femoral Components feature stackable distal and posterior augments *(Figure 71).* The 5 and 10mm augments can be stacked with the use of special locking screws, up to 30mm (3 x10mm blocks). Augments can be stacked both distally and posteriorly. Whenever blocks are stacked, the ipsilateral aspect of the femoral component only accepts a 5mm augment (i.e. 15mm posterior augment and 5mm distal or 15mm distal augment and 5mm posterior). It is important to note that although the trials are available in 5-15mm thicknesses, the implants are only available in 5-10mm thicknesses. Assemble the appropriate augments to the femoral component using the 3.5mm hex driver. It is not necessary to engage the torque limiting feature when assembling augments.

IMPLANTATION OF FEMORAL COMPONENT

With the femoral component assembled to the **LPI Locking Femoral Impactor**, apply bone cement to the bone mating surface of the femoral component, including the stem extension *(Figure 72).* Take care to apply only a thin layer of cement on the posterior surface of the prosthesis in order to avoid excessive cement extrusion posteriorly where it could be difficult to remove.

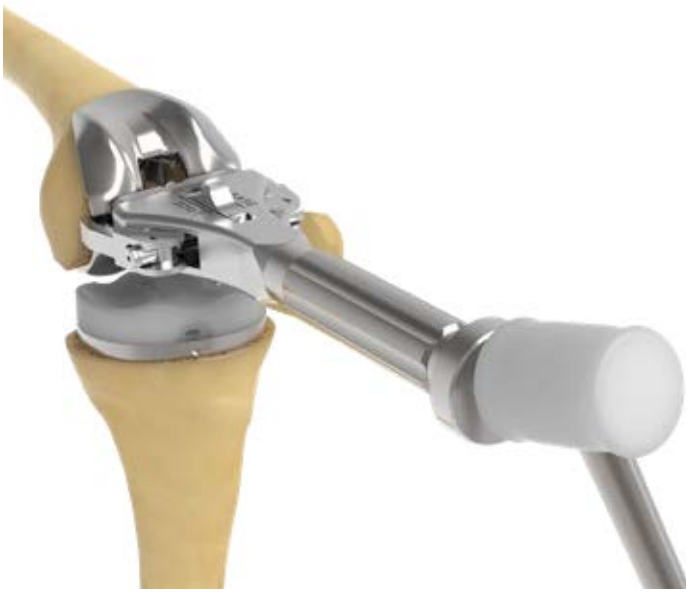


Figure 73
Position Femoral Component on Distal Femur

Figure 74
Impact with the Non-Locking Femoral Impactor

Apply bone cement to the anterior, chamfer and distal surfaces of the prepared femur. Avoid placing cement on the posterior bone surface to prevent excessive cement extrusion posteriorly. Using the Locking Femoral Impactor, position the femoral component onto the distal femur *(Figure 73)*. Slight upward pressure should be applied to the Impactor Handle as the component is being impacted to prevent the femoral component from rotating into flexion.

To assemble the **Non-locking Femoral Impactor** to the LPI Impactor Handle, place the lever on the LPI Impactor Handle to the "release" position, attach the Non-locking Femoral Impactor onto the handle then move the lever to the "locked" position. Final impaction of the femoral component is performed with the Non-locking Femoral Impactor assembled to the LPI Impactor Handle *(Figure 74)*.

Care should be taken to remove all excess bone cement.

Figure 75
Clamp the Patella

Figure 76
Push the Polyethylene Insert Until Fully Engaged

IMPLANTATION OF PATELLAR COMPONENT

If the patella was revised, coat the resected patella surface and bone-mating surface of the patellar component with cement. Align the pegs of the patellar implant with the previously drilled peg hole(s) in the patella bone and press the implant onto the patella.

Assemble the **LPI Patella Clamp Head** to the LPI Patellar Preparation Handle *(Figure 75).* Clamp the patellar component onto the patella bone with the LPI Patella Preparation Handle and Clamp Head, avoiding excessive clamping pressure as it may damage the patella, especially when the bone is soft. Lock the handle by adjusting the locking nut.

POLYMERIZATION OF CEMENT

A Tibial Insert Trial should be used when pressurizing the cement during polymerization. Hold axial pressure across the joint during cement polymerization, avoiding either hyperextension or flexion which may tip the prosthesis into either flexion or extension.

This is important in every case, but especially in osteopenic bone. Avoid any movement of the prosthesis until the bone cement has completely polymerized.

Figure 77
Complete Assembly with Tibial Insert Driver

Figure 78
Insert Assembly Screw Into Tibial Insert Spine

TIBIAL POLYETHYLENE INSERT IMPLANTATION

If a CC Tibial Stem Extension Screw Trial is still assembled with the tibial tray, remove it from the implants. After polymerization of the cement, introduce the polyethylene insert into the previously implanted tibial tray taking care that the posterior feet of the insert appropriately engage the undercuts of the posterior aspect of the metal tibial tray.

Be sure to check for any soft tissue or bony remnants that could interfere with implant assembly. Continue pushing the polyethylene insert back with two thumbs until the insert is fully engaged and the anterior gap between the tray and the insert is closed *(Figure 76).*

The Tibial Insert Driver should be used to complete the assembly of the tibial components *(Figure 77).* A mallet should be used for final impaction of the tibial component. Be sure to check to be certain that the tibial insert is fully seated in the metal tibial tray.

Insert the assembly screw into the top of the tibial insert spine *(Figure 78).* The Torque-Limiting Driver Handle is used to tighten the insert assembly screw until the driver releases. It is critical to apply this level of torque. This will assure that the screw is fully seated in the stem thread hole and the screw head is below the top surface of the insert spine.

FINAL CHECK AND CLOSURE

Final check includes the following:

1. Removal of any remaining extruded cement
2. Final assessment of:

    ALIGNMENT,

    STABILITY,

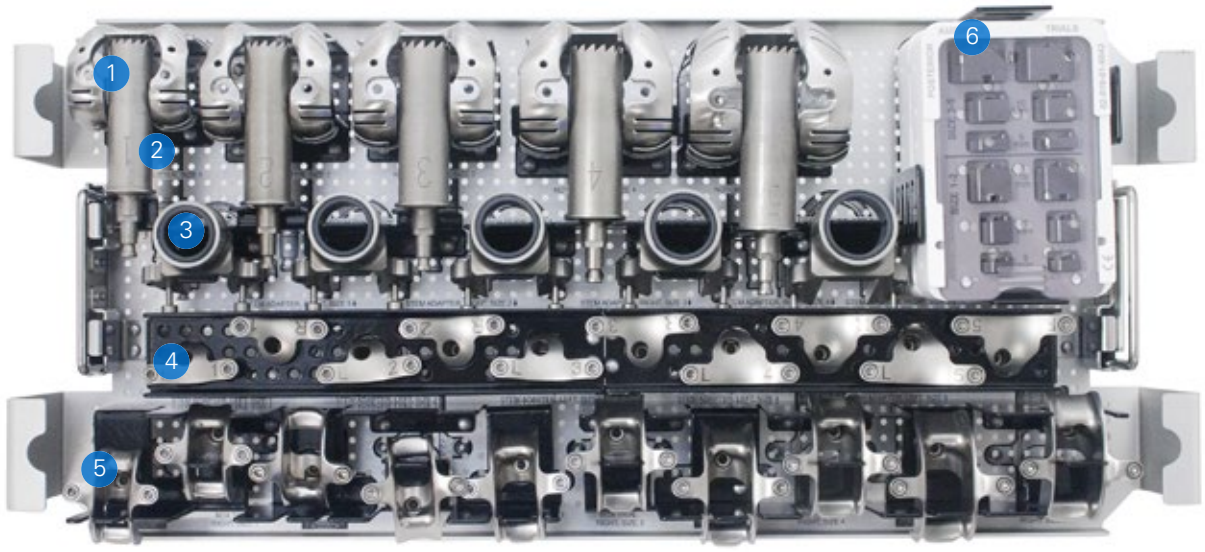
    MOTION and

    PATELLAR TRACKING

A standard closure technique preferred by the surgeon may be used.

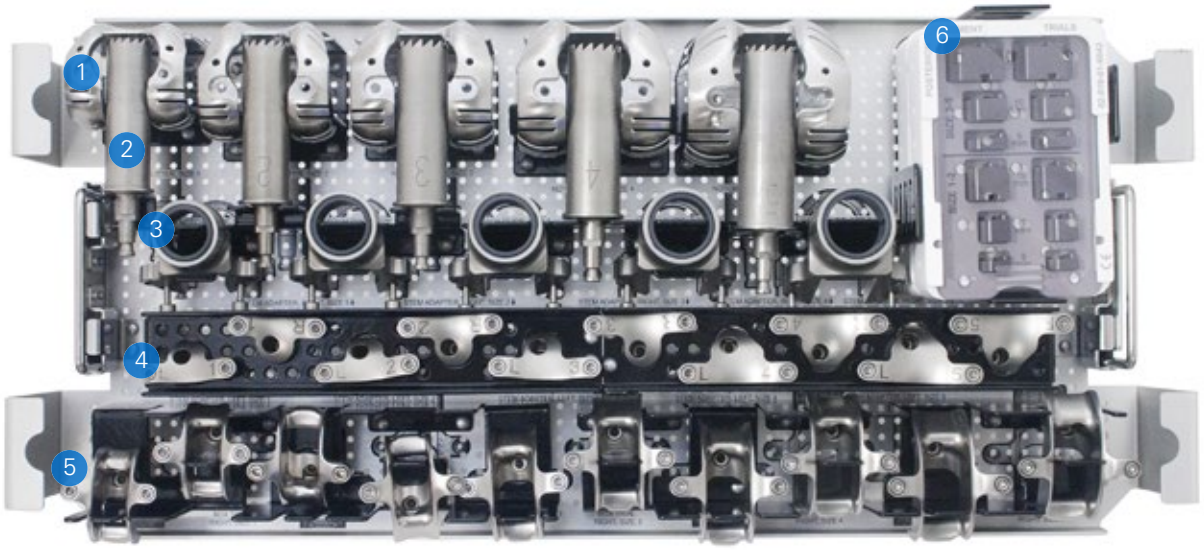
NOTES:

TRAY LAYOUT



02-019-01-6040 | CC FEMORAL TRIAL INSTRUMENT TRAY

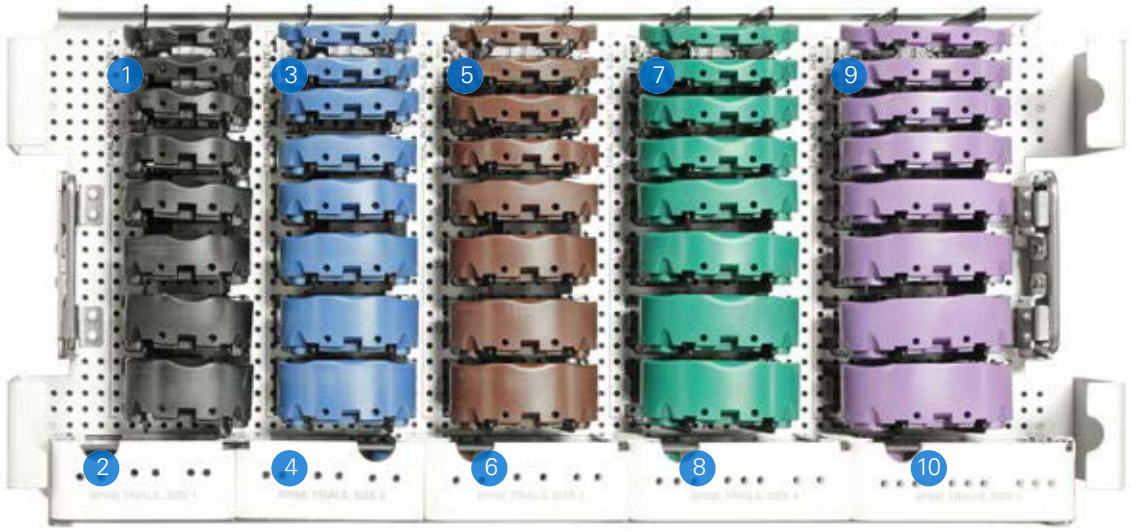
Site	Qty	Item	Item Description
1	1	02-011-06-0110	Femoral Base Trial, Size 1, Left And Right
	1	02-011-06-0120	Femoral Base Trial, Size 2, Left And Right
	1	02-011-06-0130	Femoral Base Trial, Size 3, Left And Right
	1	02-011-06-0140	Femoral Base Trial, Size 4, Left And Right
	1	02-011-06-0150	Femoral Base Trial, Size 5, Left And Right
2	1	02-019-11-0010	Notch Cutter, Size 1
	1	02-019-11-0020	Notch Cutter, Size 2
	1	02-019-11-0030	Notch Cutter, Size 3
	1	02-019-11-0040	Notch Cutter, Size 4
	1	02-019-11-0050	Notch Cutter, Size 5
3	1	02-019-10-0210	CC Notch Guide, Size 1
	1	02-019-10-0220	CC Notch Guide, Size 2
	1	02-019-10-0230	CC Notch Guide, Size 3
	1	02-019-10-0240	CC Notch Guide, Size 4
	1	02-019-10-0250	CC Notch Guide, Size 5
4	1	02-011-06-0810	CC Femoral Stem Adaptor, Size 1, Left
	1	02-011-06-0820	CC Femoral Stem Adaptor, Size 2, Left
	1	02-011-06-0830	CC Femoral Stem Adaptor, Size 3, Left
	1	02-011-06-0840	CC Femoral Stem Adaptor, Size 4, Left
	1	02-011-06-0850	CC Femoral Stem Adaptor, Size 5, Left
	1	02-011-06-0910	CC Femoral Stem Adaptor, Size 1, Right
	1	02-011-06-0920	CC Femoral Stem Adaptor, Size 2, Right
	1	02-011-06-0930	CC Femoral Stem Adaptor, Size 3, Right
	1	02-011-06-0940	CC Femoral Stem Adaptor, Size 4, Right
	1	02-011-06-0950	CC Femoral Stem Adaptor, Size 5, Right



02-019-01-6040 | CC FEMORAL TRIAL INSTRUMENT TRAY *(CONTINUED)*

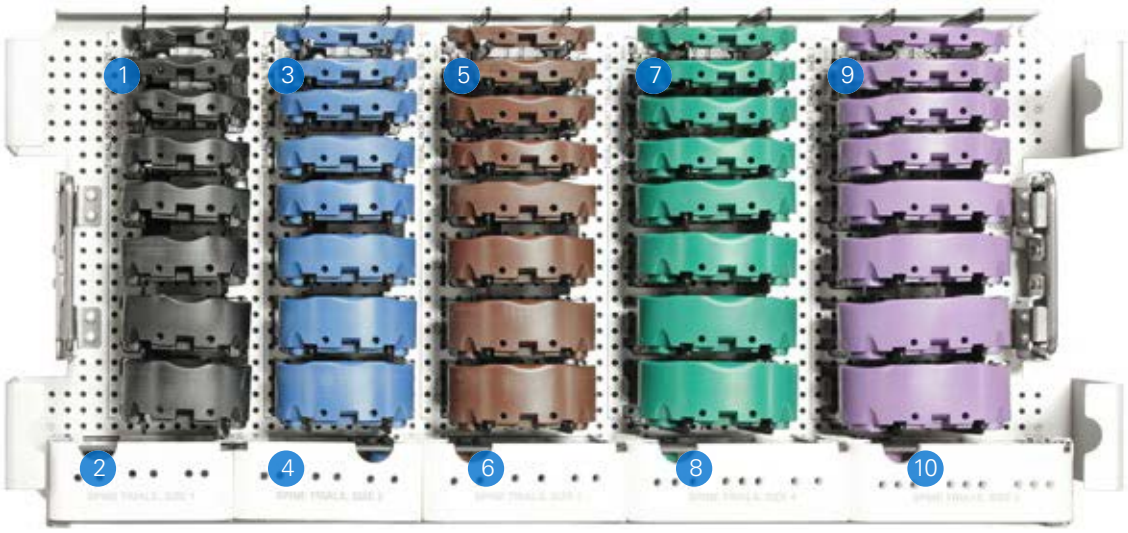
Site	Qty	Item	Item Description
5	1	02-011-06-0610	CC Modular Femoral Box Trial, Size 1, Left
	1	02-011-06-0620	CC Modular Femoral Box Trial, Size 2, Left
	1	02-011-06-0630	CC Modular Femoral Box Trial, Size 3, Left
	1	02-011-06-0640	CC Modular Femoral Box Trial, Size 4, Left
	1	02-011-06-0650	CC Modular Femoral Box Trial, Size 5, Left
	1	02-011-06-0710	CC Modular Femoral Box Trial, Size 1, Right
	1	02-011-06-0720	CC Modular Femoral Box Trial, Size 2, Right
	1	02-011-06-0730	CC Modular Femoral Box Trial, Size 3, Right
	1	02-011-06-0740	CC Modular Femoral Box Trial, Size 4, Right
	1	02-011-06-0750	CC Modular Femoral Box Trial, Size 5, Right
6	2	02-011-06-0401	CC Distal Femoral Augment Trial, Size 1-2, 5mm
	2	02-011-06-0402	CC Distal Femoral Augment Trial, Size 1-2, 10mm
	2	02-011-06-0403	CC Distal Femoral Augment Trial, Size 1-2, 15mm
	2	02-011-06-0491	CC Distal Femoral Augment Trial, Size 3-5, 5mm
	2	02-011-06-0492	CC Distal Femoral Augment Trial, Size 3-5, 10mm
	2	02-011-06-0493	CC Distal Femoral Augment Trial, Size 3-5, 15mm
	2	02-011-06-0501	CC Posterior Femoral Augment Trial, Size 1-2, 5mm
	2	02-011-06-0502	CC Posterior Femoral Augment Trial, Size 1-2, 10mm
	2	02-011-06-0503	CC Posterior Femoral Augment Trial, Size 1-2, 15mm
	2	02-011-06-0591	CC Posterior Femoral Augment Trial, Size 3-5, 5mm
	2	02-011-06-0592	CC Posterior Femoral Augment Trial, Size 3-5, 10mm
	2	02-011-06-0593	CC Posterior Femoral Augment Trial, Size 3-5, 15mm

TRAY LAYOUT



02-019-01-6050 | CC INSERT TRIAL INSTRUMENT TRAY

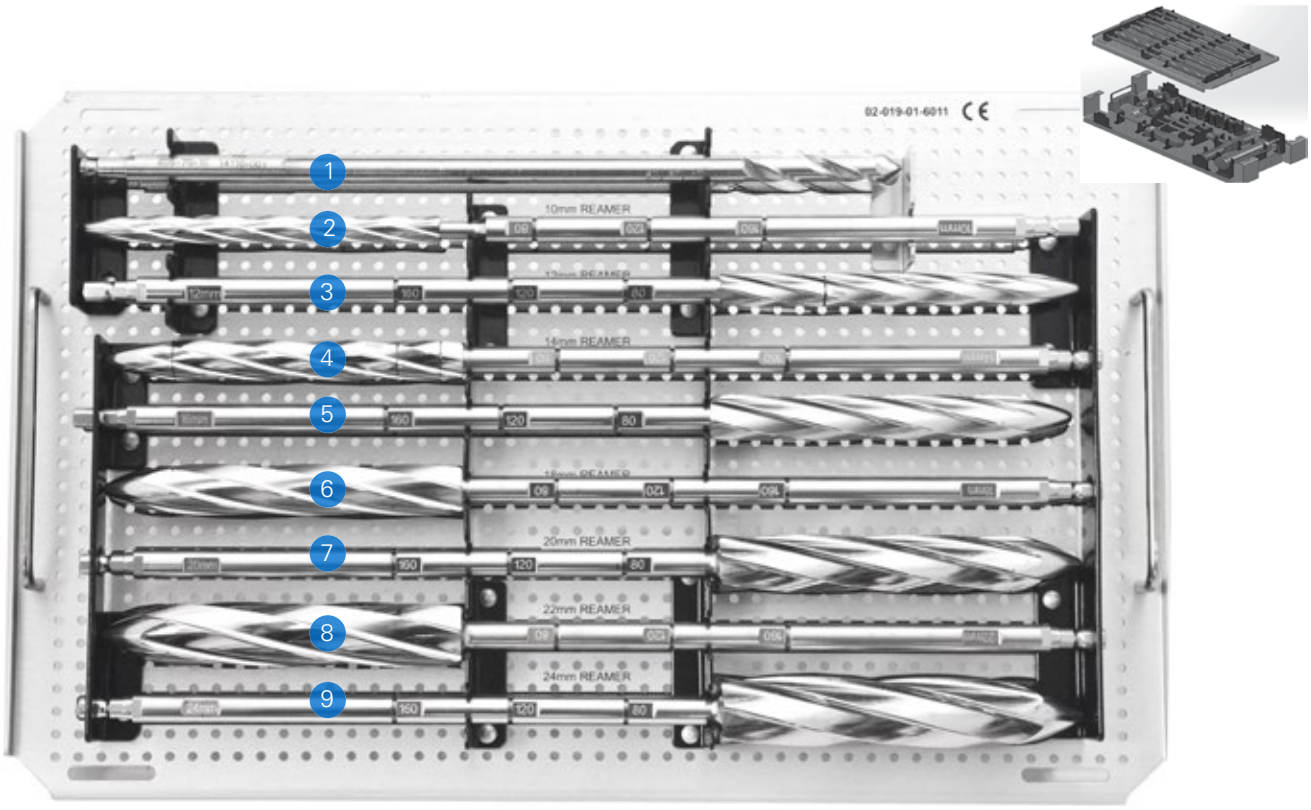
Site	Qty	Item	Item Description
1	1	02-013-65-1109	Modular Tibial Insert Trial, Size 1, 9mm
	1	02-013-65-1111	Modular Tibial Insert Trial, Size 1, 11mm
	1	02-013-65-1113	Modular Tibial Insert Trial, Size 1, 13mm
	1	02-013-65-1115	Modular Tibial Insert Trial, Size 1, 15mm
	1	02-013-65-1117	Modular Tibial Insert Trial, Size 1, 17mm
	1	02-013-65-1121	Modular Tibial Insert Trial, Size 1, 21mm
	1	02-013-65-1125	Modular Tibial Insert Trial, Size 1, 25mm
	1	02-013-65-1129	Modular Tibial Insert Trial, Size 1, 29mm
2	2	02-013-35-1000	PS Modular Insert Spine Trial, Size 1
	2	02-013-44-1000	PSC Modular Insert Spine Trial, Size 1
	2	02-013-65-1000	CC Modular Insert Spine Trial, Size 1
3	1	02-013-65-2109	Modular Tibial Insert Trial, Size 2, 9mm
	1	02-013-65-2111	Modular Tibial Insert Trial, Size 2, 11mm
	1	02-013-65-2113	Modular Tibial Insert Trial, Size 2, 13mm
	1	02-013-65-2115	Modular Tibial Insert Trial, Size 2, 15mm
	1	02-013-65-2117	Modular Tibial Insert Trial, Size 2, 17mm
	1	02-013-65-2121	Modular Tibial Insert Trial, Size 2, 21mm
	1	02-013-65-2125	Modular Tibial Insert Trial, Size 2, 25mm
	1	02-013-65-2129	Modular Tibial Insert Trial, Size 2, 29mm
4	2	02-013-35-2000	PS Modular Insert Spine Trial, Size 2
	2	02-013-44-2000	PSC Modular Insert Spine Trial, Size 2
	2	02-013-65-2000	CC Modular Insert Spine Trial, Size 2
5	1	02-013-65-3109	Modular Tibial Insert Trial, Size 3, 9mm
	1	02-013-65-3111	Modular Tibial Insert Trial, Size 3, 11mm
	1	02-013-65-3113	Modular Tibial Insert Trial, Size 3, 13mm
	1	02-013-65-3115	Modular Tibial Insert Trial, Size 3, 15mm
	1	02-013-65-3117	Modular Tibial Insert Trial, Size 3, 17mm
	1	02-013-65-3121	Modular Tibial Insert Trial, Size 3, 21mm
	1	02-013-65-3125	Modular Tibial Insert Trial, Size 3, 25mm
	1	02-013-65-3129	Modular Tibial Insert Trial, Size 3, 29mm



02-019-01-6050 | CC INSERT TRIAL INSTRUMENT TRAY *(CONTINUED)*

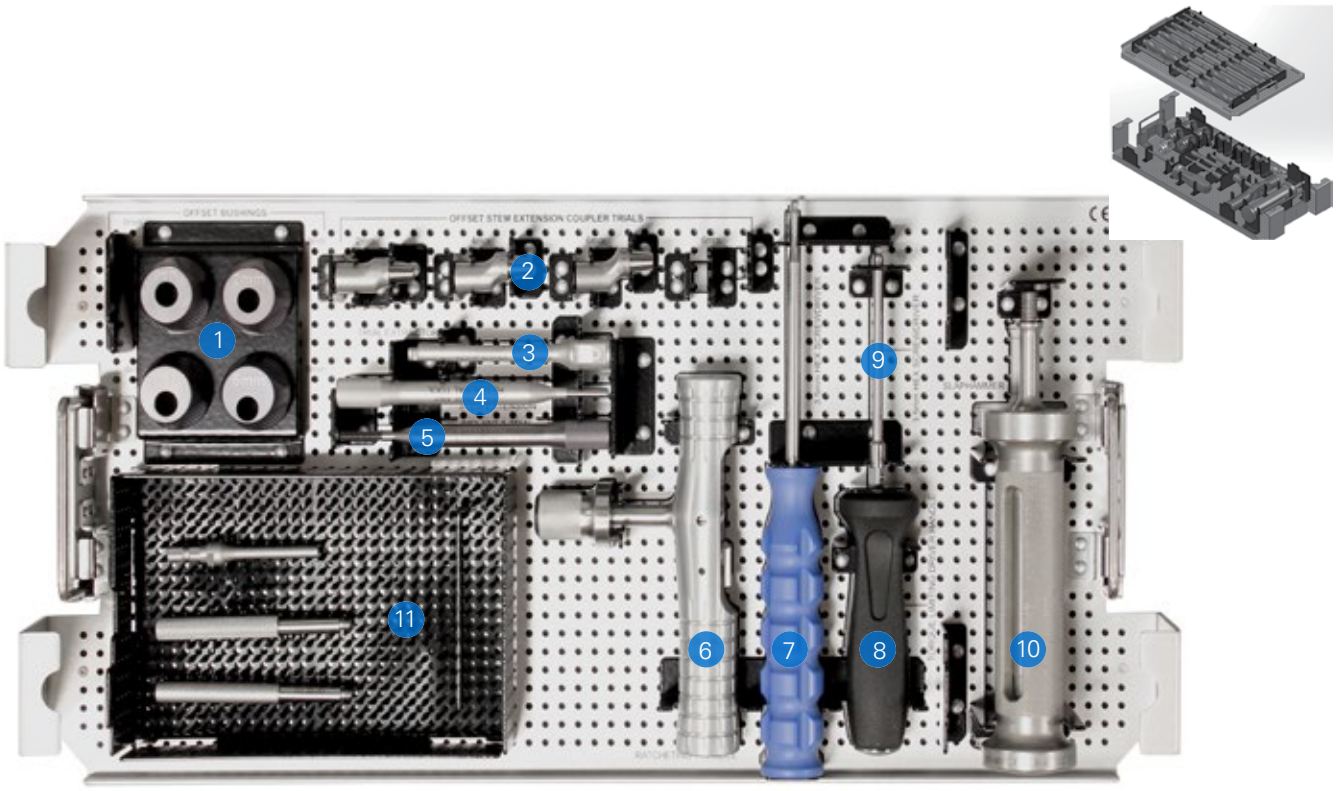
Site	Qty	Item	Item Description
6	2	02-013-35-3000	PS Modular Insert Spine Trial, Size 3
	2	02-013-44-3000	PSC Modular Insert Spine Trial, Size 3
	2	02-013-65-3000	CC Modular Insert Spine Trial, Size 3
7	1	02-013-65-4109	Modular Tibial Insert Trial, Size 4, 9mm
	1	02-013-65-4111	Modular Tibial Insert Trial, Size 4, 11mm
	1	02-013-65-4113	Modular Tibial Insert Trial, Size 4, 13mm
	1	02-013-65-4115	Modular Tibial Insert Trial, Size 4, 15mm
	1	02-013-65-4117	Modular Tibial Insert Trial, Size 4, 17mm
	1	02-013-65-4121	Modular Tibial Insert Trial, Size 4, 21mm
	1	02-013-65-4125	Modular Tibial Insert Trial, Size 4, 25mm
	1	02-013-65-4129	Modular Tibial Insert Trial, Size 4, 29mm
8	2	02-013-35-4000	PS Modular Insert Spine Trial, Size 4
	2	02-013-44-4000	PSC Modular Insert Spine Trial, Size 4
	2	02-013-65-4000	CC Modular Insert Spine Trial, Size 4
9	1	02-013-65-5109	Modular Tibial Insert Trial, Size 5, 9mm
	1	02-013-65-5111	Modular Tibial Insert Trial, Size 5, 11mm
	1	02-013-65-5113	Modular Tibial Insert Trial, Size 5, 13mm
	1	02-013-65-5115	Modular Tibial Insert Trial, Size 5, 15mm
	1	02-013-65-5117	Modular Tibial Insert Trial, Size 5, 17mm
	1	02-013-65-5121	Modular Tibial Insert Trial, Size 5, 21mm
	1	02-013-65-5125	Modular Tibial Insert Trial, Size 5, 25mm
	1	02-013-65-5129	Modular Tibial Insert Trial, Size 5, 29mm
10	2	02-013-35-5000	PS Modular Insert Spine Trial, Size 5
	2	02-013-44-5000	PSC Modular Insert Spine Trial, Size 5
	2	02-013-65-5000	CC Modular Insert Spine Trial, Size 5

TRAY LAYOUT



02-019-01-6011 | CC STEM EXTENSION PREP INSTRUMENT TRAY *(UPPER LEVEL TRAY)*

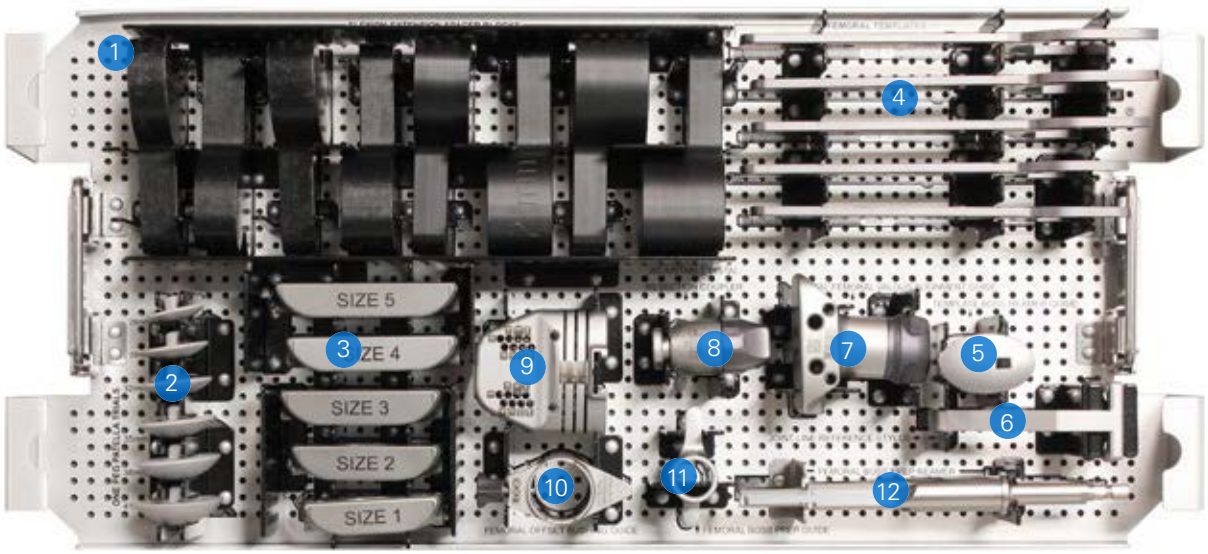
Site	Qty	Item	Item Description
1	1	205-70-10	10mm Intra-Medullary Pilot Drill
2	1	02-019-30-0110	10mm Stem Extension Reamer
3	1	02-019-30-0112	12mm Stem Extension Reamer
4	1	02-019-30-0114	14mm Stem Extension Reamer
5	1	02-019-30-0116	16mm Stem Extension Reamer
6	1	02-019-30-0118	18mm Stem Extension Reamer
7	1	02-019-30-0120	20mm Stem Extension Reamer
8	1	02-019-30-0122	22mm Stem Extension Reamer
9	1	02-019-30-0124	24mm Stem Extension Reamer



02-019-01-6010 | CC STEM EXTENSION PREP INSTRUMENT TRAY

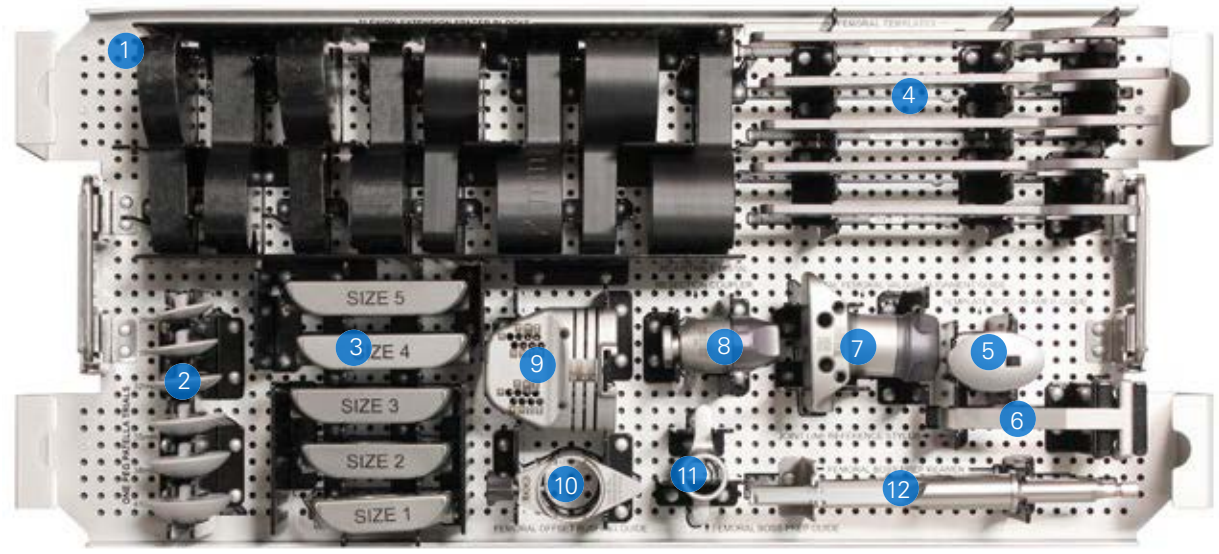
Site	Qty	Item	Item Description
1	1	02-019-30-0000	CC Offset Bushing, 0mm
	1	02-019-30-0002	CC Offset Bushing, 2mm
	1	02-019-30-0004	CC Offset Bushing, 4mm
	1	02-019-30-0006	CC Offset Bushing, 6mm
2	1	02-013-61-2000	CC Offset Coupler, 2mm
	1	02-013-61-4000	CC Offset Coupler, 4mm
	1	02-013-61-6000	CC Offset Coupler, 6mm
3	1	02-019-30-0303	CC Trial Extractor
4	1	02-019-30-0301	Stem Extension Trial Removal Guide
5	1	02-019-30-0302	Stem Extension Implant Removal Guide
6	1	01-019-00-000	Ratcheting T-Handle
7	1	521-11-04	Blue Handle 3.5mm Hex Driver
8	1	209-30-00	Torque-Limiting Screw Driver Handle
9	1	209-57-00	Hex Driver, 3.5mm
10	1	213-46-00	LPI Slaphammer
11	1	521-78-11	Pin Driver
	2	201-85-00	Femoral Finishing Guide Handles
	1	285-08-70	2.5mm Hex Key

TRAY LAYOUT



02-019-01-6030 | CC FEMORAL PREP INSTRUMENT TRAY

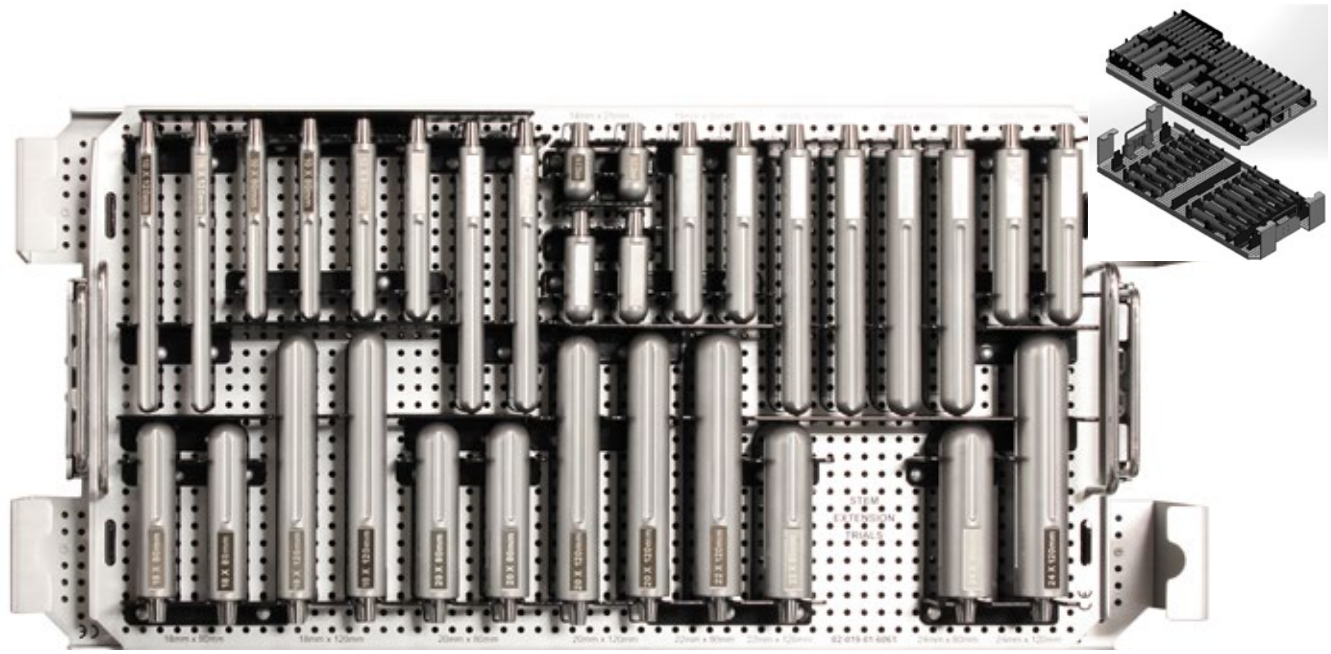
Site	Qty	Item	Item Description
1	1	205-54-09	Flexion/Extension Spacer Block, 9mm
	1	205-54-11	Flexion/Extension Spacer Block, 11mm
	1	205-54-13	Flexion/Extension Spacer Block, 13mm
	1	205-54-15	Flexion/Extension Spacer Block, 15mm
	1	205-54-17	Flexion/Extension Spacer Block, 17mm
	1	205-54-21	Flexion/Extension Spacer Block, 21mm
	1	205-54-25	Flexion/Extension Spacer Block, 25mm
	1	205-54-29	Flexion/Extension Spacer Block, 29mm
2	1	201-03-26	One Peg Patella Trial, 26mm
	1	201-03-29	One Peg Patella Trial, 29mm
	1	201-03-32	One Peg Patella Trial, 32mm
	1	201-03-35	One Peg Patella Trial, 35mm
	1	201-03-38	One Peg Patella Trial, 38mm
3	1	02-019-50-0110	CC Femoral Finishing Guide, Size 1
	1	02-019-50-0120	CC Femoral Finishing Guide, Size 2
	1	02-019-50-0130	CC Femoral Finishing Guide, Size 3
	1	02-019-50-0140	CC Femoral Finishing Guide, Size 4
	1	02-019-50-0150	CC Femoral Finishing Guide, Size 5



02-019-01-6030 | CC FEMORAL PREP INSTRUMENT TRAY *(CONTINUED)*

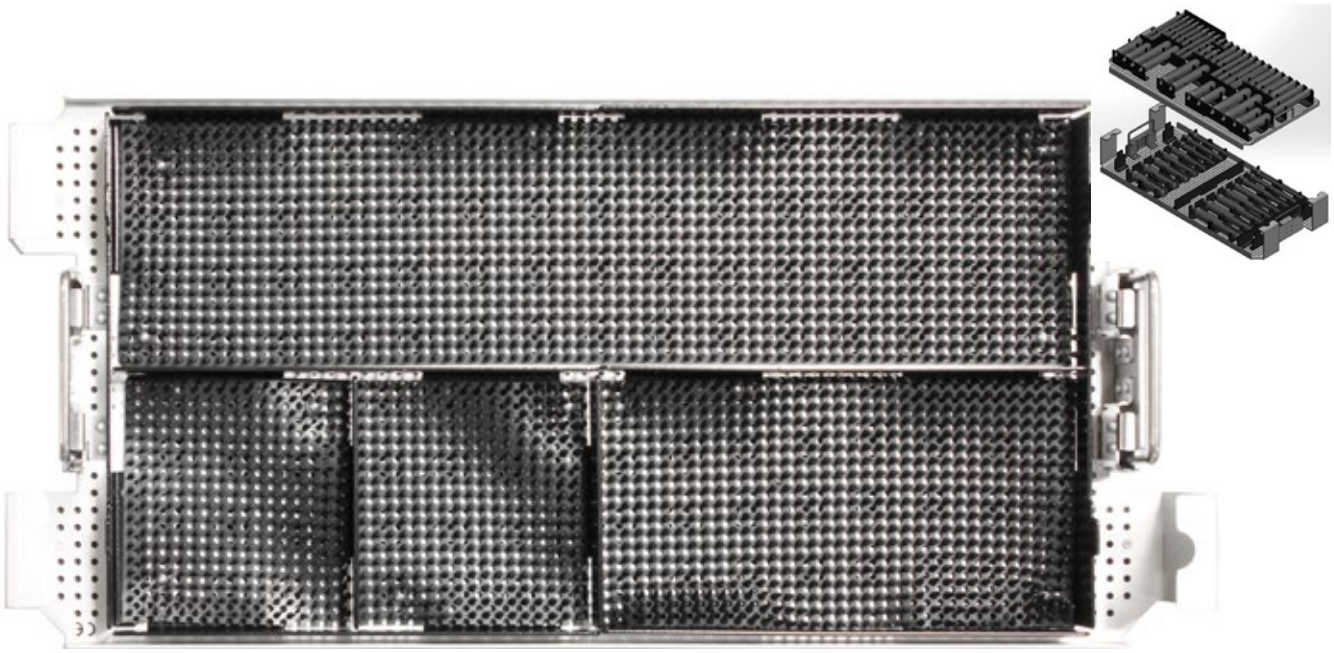
Site	Qty	Item	Item Description
4	1	02-019-50-0210	CC Femoral Template, Size 1
	1	02-019-50-0220	CC Femoral Template, Size 2
	1	02-019-50-0230	CC Femoral Template, Size 3
	1	02-019-50-0240	CC Femoral Template, Size 4
	1	02-019-50-0250	CC Femoral Template, Size 5
5	1	02-019-50-0299	CC Femoral Template Reamer Guide
6	1	02-019-50-0001	CC Joint Line Reference Stylus
7	1	02-019-50-0004	CC Distal Femoral Valgus Alignment Guide
8	1	02-019-50-0005	CC Adjustable Distal Resection Coupler
9	1	02-019-50-0002	CC Distal Femoral Resection Guide
10	1	02-019-50-0003	CC Femoral Offset Bushing Guide
11	1	02-019-50-0006	CC Femoral Boss Prep Guide
12	1	02-019-30-0201	CC Femoral Boss Prep Reamer

TRAY LAYOUT



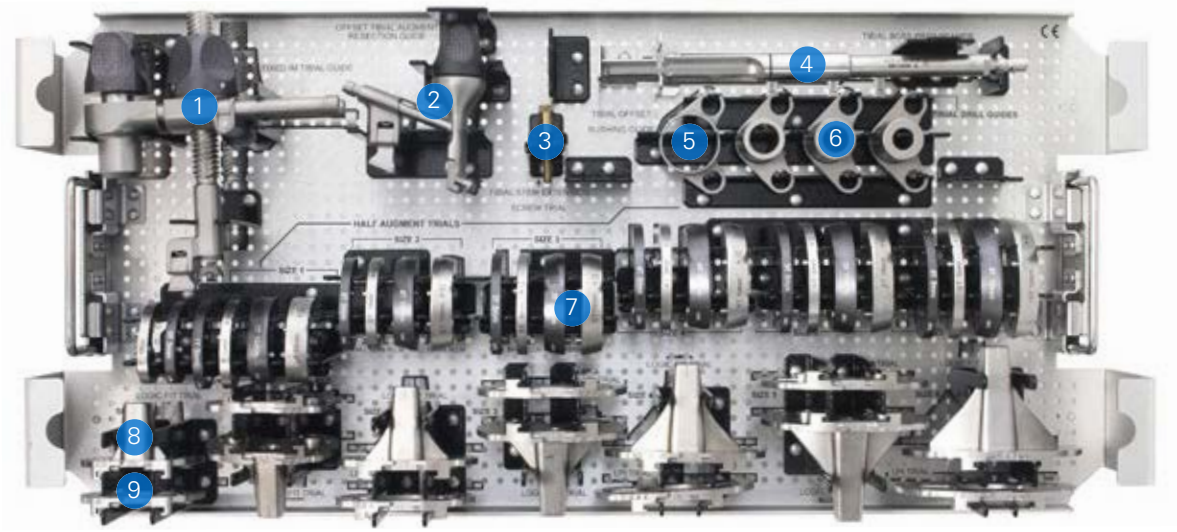
02-019-01-6061 | CC STEM EXTENSION TRIAL INSTRUMENT TRAY

Qty	Item	Item Description
2	02-013-60-1012	Straight Stem Ext Trial, 10mm X 120mm
2	02-013-60-1080	Straight Stem Ext Trial, 10mm X 80mm
2	02-013-60-1212	Straight Stem Ext Trial, 12mm X 120mm
2	02-013-60-1280	Straight Stem Ext Trial, 12mm X 80mm
2	02-013-60-1412	Straight Stem Ext Trial, 14mm X 120mm
2	02-013-60-1425	Straight Stem Ext Trial, 14mm X 25mm
2	02-013-60-1440	Straight Stem Ext Trial, 14mm X 40mm
2	02-013-60-1480	Straight Stem Ext Trial, 14mm X 80mm
2	02-013-60-1612	Straight Stem Ext Trial, 16mm X 120mm
2	02-013-60-1680	Straight Stem Ext Trial, 16mm X 80mm
2	02-013-60-1812	Straight Stem Ext Trial, 18mm X 120mm
2	02-013-60-1880	Straight Stem Ext Trial, 18mm X 80mm
2	02-013-60-2012	Straight Stem Ext Trial, 20mm X 120mm
2	02-013-60-2080	Straight Stem Ext Trial, 20mm X 80mm
1	02-013-60-2212	Straight Stem Ext Trial, 22mm X 120mm
1	02-013-60-2280	Straight Stem Ext Trial, 22mm X 80mm
1	02-013-60-2412	Straight Stem Ext Trial, 24mm X 120mm
1	02-013-60-2480	Straight Stem Ext Trial, 24mm X 80mm



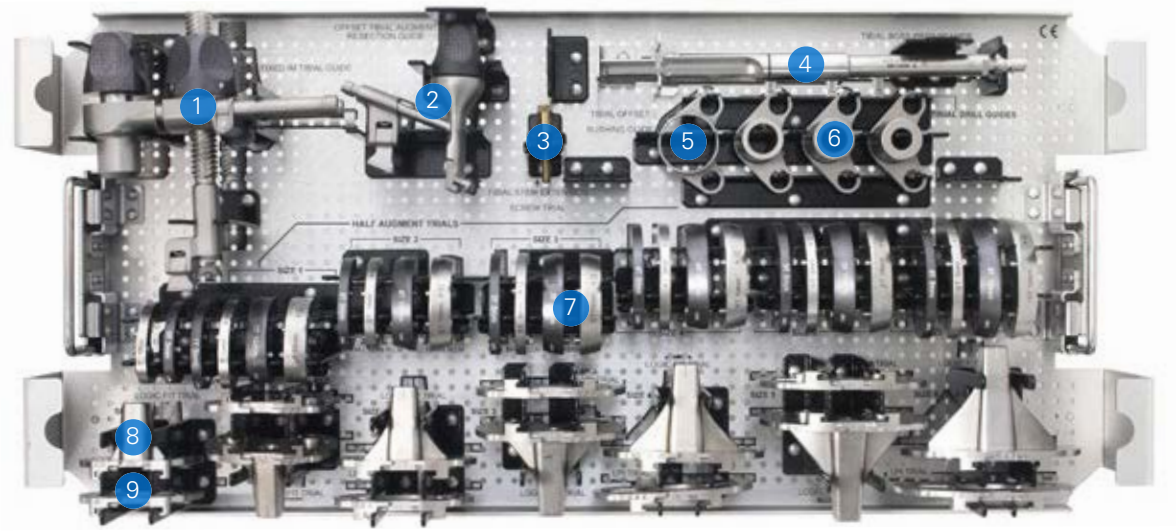
02-019-01-6060 | CC STEM EXTENSION TRIAL INSTRUMENT TRAY

TRAY LAYOUT



02-019-01-6020 | CC TIBIAL PREP INSTRUMENT TRAY

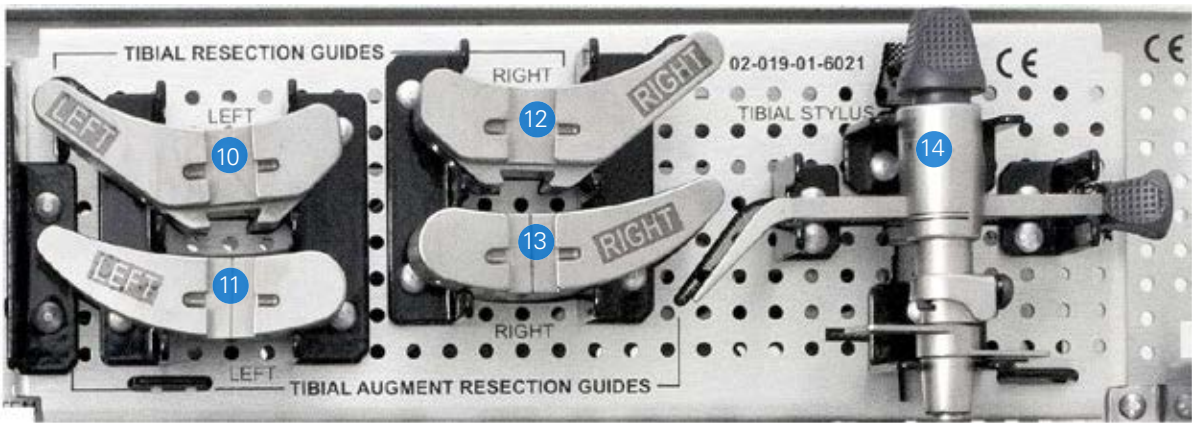
Site	Qty	Item	Item Description
1	1	02-019-70-0001	CC Fixed Intra-Medullary Tibial Guide
2	1	02-019-70-0010	Offset Tibial Augment Adaptor
3	1	209-58-00	CC Tibial Stem Extension Screw Trial
	1	209-58-01	CC Tibial Stem Extension Screw Trial, size 1
4	1	02-019-30-0202	CC Tibial Boss Prep Reamer
5	1	02-019-70-0003	Tibial Offset Bushing Guide
6	1	213-72-10	Fit Tibial Drill Guide, 10mm
	1	213-72-12	Fit Tibial Drill Guide, 12mm
	1	213-72-14	Fit Tibial Drill Guide, 14mm
7	1	02-013-50-0011	Fit 1/2 Augment Trial RM, Size 0, 5mm
	1	02-013-50-0012	Fit 1/2 Augment Trial RL, Size 0, 5mm
	1	02-013-50-1011	Fit 1/2 Augment Trial RM, Size 1, 5mm
	1	02-013-50-1012	Fit 1/2 Augment Trial RL, Size 1, 5mm
	1	02-013-50-1013	Fit 1/2 Augment Trial RM, Size 1, 10mm
	1	02-013-50-1014	Fit 1/2 Augment Trial RL, Size 1, 10mm
	1	02-013-50-2011	Fit 1/2 Augment Trial RM, Size 2, 5mm
	1	02-013-50-2012	Fit 1/2 Augment Trial RL, Size 2, 5mm
	1	02-013-50-2013	Fit 1/2 Augment Trial RM, Size 2, 10mm
	1	02-013-50-2014	Fit 1/2 Augment Trial RL, Size 2, 10mm
	1	02-013-50-3011	Fit 1/2 Augment Trial RM, Size 3, 5mm
	1	02-013-50-3012	Fit 1/2 Augment Trial RL, Size 3, 5mm
	1	02-013-50-3013	Fit 1/2 Augment Trial RM, Size 3, 10mm
	1	02-013-50-3014	Fit 1/2 Augment Trial RL, Size 3, 10mm
	1	02-013-50-4011	Fit 1/2 Augment Trial RM, Size 4, 5mm
	1	02-013-50-4012	Fit 1/2 Augment Trial RL, Size 4, 5mm
	1	02-013-50-4013	Fit 1/2 Augment Trial RM, Size 4, 10mm
	1	02-013-50-4014	Fit 1/2 Augment Trial RL, Size 4, 10mm



02-019-01-6020 | CC TIBIAL PREP INSTRUMENT TRAY *(CONTINUED)*

Site	Qty	Item	Item Description
7	1	02-013-50-5011	Fit 1/2 Augment Trial RM, Size 5, 5mm
	1	02-013-50-5012	Fit 1/2 Augment Trial RL, Size 5, 5mm
	1	02-013-50-5013	Fit 1/2 Augment Trial RM, Size 5, 10mm
	1	02-013-50-5014	Fit 1/2 Augment Trial RL, Size 5, 10mm
	1	02-013-50-6011	Fit 1/2 Augment Trial RM, Size 6, 5mm
	1	02-013-50-6012	Fit 1/2 Augment Trial RL, Size 6, 5mm
	1	02-013-50-6013	Fit 1/2 Augment Trial RM, Size 6, 10mm
	1	02-013-50-6014	Fit 1/2 Augment Trial RL, Size 6, 10mm
8	1	02-013-45-9300	Fit Tibial Tray Trial, Size 0
	1	02-013-45-9310	Fit Tibial Tray Trial, Size 1
	1	02-013-45-9320	Fit Tibial Tray Trial, Size 2
	1	02-013-45-9330	Fit Tibial Tray Trial, Size 3
	1	02-013-45-9340	Fit Tibial Tray Trial, Size 4
	1	02-013-45-9350	Fit Tibial Tray Trial, Size 5
	1	02-013-45-9360	Fit Tibial Tray Trial, Size 6
9	1	02-013-45-9400	CC LPI Tibial Tray Trial, Size 0
	1	02-013-45-9410	CC LPI Tibial Tray Trial, Size 1
	1	02-013-45-9420	CC LPI Tibial Tray Trial, Size 2
	1	02-013-45-9430	CC LPI Tibial Tray Trial, Size 3
	1	02-013-45-9440	CC LPI Tibial Tray Trial, Size 4
	1	02-013-45-9450	CC LPI Tibial Tray Trial, Size 5
	1	02-013-45-9460	CC LPI Tibial Tray Trial, Size 6

TRAY LAYOUT



02-019-01-6021 | CC TIBIAL PREP INSTRUMENT TRAY (UPPER LEVEL TRAY)

Site	Qty	Item	Item Description
10	1	02-019-70-0004	Left Tibial Resection Guide
11	1	02-019-70-0006	Left Tibial Augment Resection Guide
12	1	02-019-70-0005	Right Tibial Resection Guide
13	1	02-019-70-0007	Right Tibial Augment Resection Guide
14	1	02-019-70-0008	CC Tibial Stylus

NOTES:

Exactech is proud to have offices and distributors around the globe. For more information about Exactech products available in your country, please visit www.exac.com

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For additional device information, refer to the Exactech Knee System–Instructions for Use for a device description, indications, contraindications, precautions and warnings. For further product information, please contact Customer Service, Exactech, Inc., 2320 NW 66th Court, Gainesville, Florida 32653-1630, USA. (352) 377-1140, (800) 392-2832 or FAX (352) 378-2617.

Exactech, as the manufacturer of this device, does not practice medicine, and is not responsible for recommending the appropriate surgical technique for use on a particular patient. These guidelines are intended to be solely informational and each surgeon must evaluate the appropriateness of these guidelines based on his or her personal medical training and experience. Prior to use of this system, the surgeon should refer to the product package insert for comprehensive warnings, precautions, indications for use, contraindications and adverse effects.

 712-29-30 Rev. F 0422

CE 2797 CE Mark is not valid unless there is a CE Mark on the product label.

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