ELEOS™ Limb Salvage System

Surgical Technique
Distal Femoral Replacement
Featuring Reamer Trials

The ELEOS Limb Salvage System offers options for patients with significant bone loss due to cancer, trauma, or previous surgical procedures. The locking taper design has a history of clinical use in a variety of orthopaedic applications. With an array of options in a multitude of sizes, the ELEOS system provides the surgeon the ability to meet a variety of patient needs.

ONKOS SURGICAL®

ELEOS Limb Salvage System
DISTAL FEMORAL REPLACEMENT

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Proper surgical procedures and techniques are the responsibility of the medical professional. The following guidelines are furnished for informational purposes only. Each surgeon must evaluate the appropriateness of the procedures based on his or her personal medical training, experience and patient condition. Prior to the use of the system, the surgeon should refer to the product package insert for additional warnings, precautions, indications, contraindications and adverse effects. Instruction for use package inserts are available at www.onkossurgical.com/ELEOS/IFU.

PRODUCT DESCRIPTION

The ELEOS Distal Femoral System consists of eight components that create a hinged knee; the Segmental Stem, Optional Midsection, Distal Femoral Component, Tibial Hinge Component, Axial Pin, Tibial Baseplate, Tibial Polyethylene Spacer, and Optional Stem Extension.

NOTE | A Cemented Resurfacing Patella and Block Augments are available if needed.

The Distal Femoral Component (2500000(X)E) features a deepened patellar groove and a 5° valgus angle to assist in the restoration of patello-femoral kinematics, reduction of patellar subluxation and promotion of normal loading patterns. Internal/external rotation of the hinge can be controlled with a component that has a stop set for +/- 15° or a hinge component without a stop can be used.

Segmental Stems are available in a variety of diameter and length in both cemented and canal filling options. Cemented Stems provide flutes to enhance mechanical interlock of bone cement. Canal filling stems are splined and slotted (Bowed only) and have plasma spray to enhance initial fixation.

Table 1.

Segmental Stems – Cemented			
Stem	**Description**	**Length**	**Stem Diameter (mm) / Collar Diameter (mm)**
CS-XX100-03M	Straight, Cylindrical, Fluted, Cobalt Chrome	100mm	9/24, 10/24
CS-XX120-03M	Straight, Cylindrical, Fluted, Cobalt Chrome	120mm	11/28, 13/28, 15/32, 17/36
CB-XX152-03M	Bowed, Cylindrical, Fluted, Titanium	152mm	11/28, 13/28, 15/32, 17/36
CB-XX200-03M	Bowed, Cylindrical, Fluted, Titanium	200mm	11/28, 13/28, 15/32, 17/36
CB-11255-03M	Bowed, Cylindrical, Fluted, Titanium	255mm	11/32
Segmental Stems – Canal Filling			
FS-XX120-03M	Straight, Cylindrical, Splined, Full Plasma Spray, Titanium	120mm	11/28, 12/28, 13/28, 14/32, 15/32, 16/36, 17/36, 18/36, 19/36, 20/36, 21/36
FB-XX152-03M	Bowed Cylindrical, Splined, 2/3 Plasma Spray, Slotted, Titanium	152mm	11/28, 12/28, 13/28, 14/32, 15/32, 16/36, 17/36, 18/36, 19/36, 20/36, 21/36

Seven lengths of optional Midsection components (25001(XX)0E) are interchangeable with all ELEOS Systems to allow for precise length determination intraoperatively. Lengths ranging from 40-140mm accommodate bone resections in various increments.

The Tibial Baseplate (2500220(X)E) is available in five sizes for optimal tibial coverage. The Tibial Baseplate accepts cemented and canal filling Stem Extensions in a variety of lengths and diameters.

Table 2.

Stem Extensions – Cemented				
Stem	**Description**	**Length**	**Diameter**	**Collar**
KSC01530E	Straight, Cylindrical, Fluted, Titanium (bullet tip)	30mm	15mm	None
KSC0(XX)65E	Straight, Cylindrical, Fluted, Titanium	65mm	10, 12, 14, 16mm	None
KSC(XX)100E	Straight, Cylindrical, Fluted, Titanium	100mm	10, 12, 14, 16mm	None
Stem Extensions – Canal Filling				
KSP(XX)100E	Straight, Cylindrical, Splined, Slotted, Titanium	100mm	11, 12, 13, 14, 15, 16, 17, 18, 19, 20mm	None
KSP(XX)140E	Straight, Cylindrical, Splined, Slotted, Titanium	140mm	11, 12, 13, 14, 15, 16, 17, 18, 19, 20mm	None

The Tibial Baseplate also accepts optional Block Augments that can be independently placed on the medial or lateral compartment to address specific patient bone deficiencies. The augments are available in three thicknesses (5, 10 and 15mm) and are size specific to the tibial tray used. **| Table 3**

Table 3.

Block Augments		
Part #	**Description**	**Size**
KTAGB(XXX)E	Tibial Block Augment	(1, 2, 3, 4, 5) X (5, 10, 15mm)

The Tibial Polyethylene Spacer (250012(XX)E) is available in 8, 10, 12, 16 and 20mm thicknesses.

TABLE 4.

FEMORAL BONE RESECTION

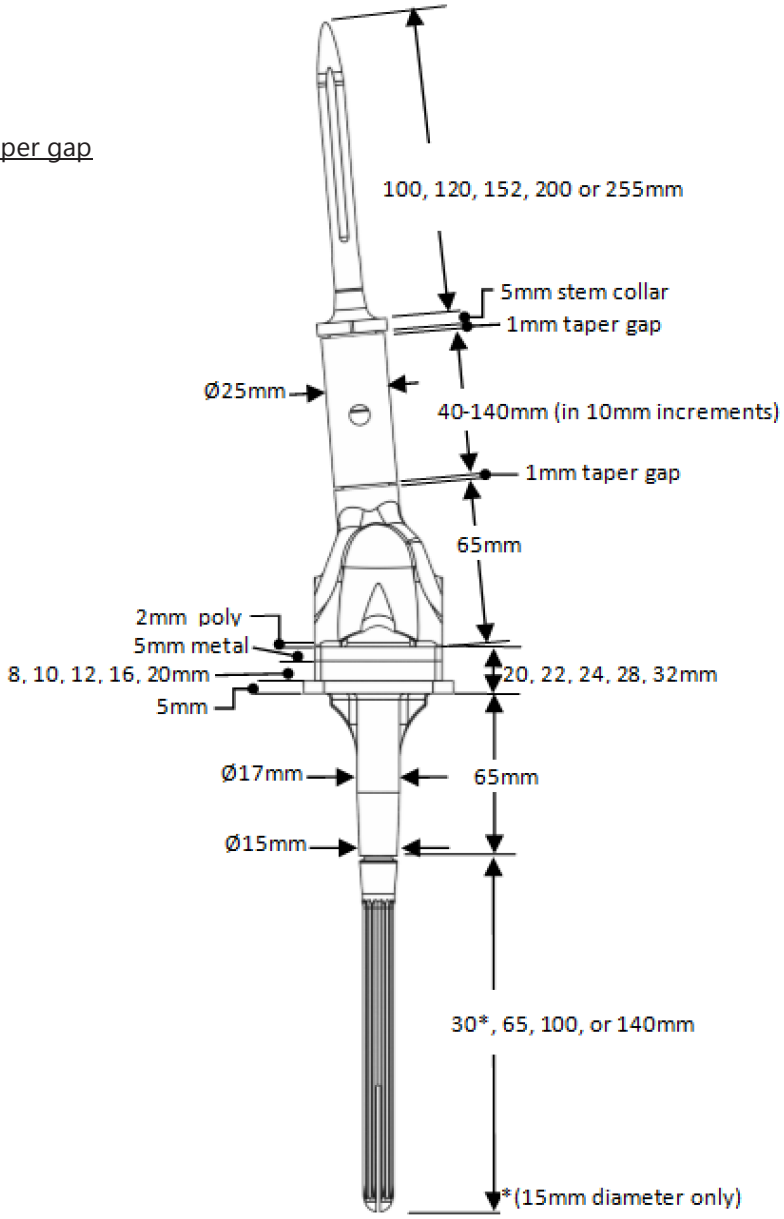
Part Number	Component	Resection
2500000(X)E	Distal Femur	65mm
N/A	Stem Collar	5mm +1mm taper gap =71mm
	Midsections	
25001040E*	40mm	112mm
25001050E	50mm	122mm
25001060E	60mm	132mm
25001070E	70mm	142mm
25001090E	90mm	162mm
25001110E	110mm	182mm
25001140E	140mm	212mm

TIBIAL BONE RESECTION

Part Number	Component	Resection
N/A	Tibial Assembly⁺	20mm⁺

*Two 40mm Midsections are available to achieve desired resection lengths in 10mm increments

⁺The 20mm Tibial Resection is with an 8mm polyethylene spacer and the thickness of the Tibial Hinge Component (5mm metal and 2mm poly). The actual resection may be less depending on joint line positioning and ligament compliance.



SURGICAL TECHNIQUE STEPS

FEMORAL PREPARATION

FEMORAL RESECTION

Preoperatively assess the amount of femoral and tibial bone to be resected. The amount of bone to be resected is determined by clinical evaluation.

> **NOTE |** Following tumor resection, it is surgeon preference if the femoral resection or tibial resection is done first.

> **CAUTION |** Preoperative templating is intended for estimation purposes only. Final component size and position should be determined intraoperatively. Accurate pre-operative planning requires good quality standardized radiographs of the appropriate anatomy.

> **CAUTION |** A full femoral x-ray and/or 3-dimensional image or MRI must be reviewed prior to surgery to ensure adequate bone stock is available for resection and proper reaming.

A Distal Femoral Resection Template is available. When using the template, measure the level of resection from the distal end of the medial condyle

Mark the level of resection determined during templating as seen in **| FIGURE 1.**

Resect the distal femur at the marked location, making a transverse cut **| FIGURE 2.**

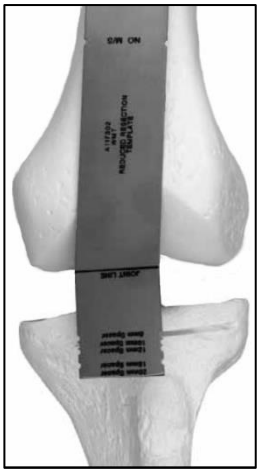


FIGURE 1

FIGURE 2

FEMORAL REAMING AND PLANING – STRAIGHT SEGMENTAL STEMS

Based on preoperative planning, it is suggested to start by using a Reamer Trial at least 2 millimeters less than the assessed canal diameter. Progressively ream in 1/2mm or 1mm increments until cortical chatter is achieved. Ream the (femoral) canal using Reamer Trials by inserting to the full 120mm depth to face ream the resection area ensuring collar contact on the cortices.| **FIGURE 3.**

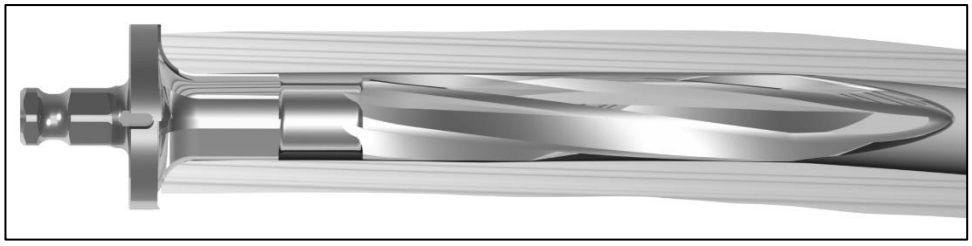


FIGURE 3

Select a stem diameter that corresponds to the appropriate cement mantle or canal filling fit based on clinical evaluation **| Table 1. (PAGE 2)**

NOTE | Use the Reamer Trial Adapter **| FIGURE 4** with Reamer Trials to ream under power. To assemble the Reamer Trial Adapter, lift the sliding portion of the quick connect mechanism of the adapter, engage the post, aligning the hexagon, then release. The T-Handle can also be used with the Reamer Trial Adapter for manual reaming. The Reamer Trials are used for both reaming and subsequent trialing.

FIGURE 4

NOTE | The Segmental Cemented Stem diameters from Table 1 are equal to Reamer Trial diameters. When determining the appropriate Reamer Trial size for the desired cement mantle, the difference will represent the cement mantle. For instance, reaming to a 13mm diameter will provide a line-to-line fit with a 13mm stem. Reaming to a 14mm will provide a 0.5mm cement mantle per side, while reaming to 15mm will provide a 1mm cement mantle per side.

NOTE | The Segmental Canal Filling Stem diameters from Table 1 are larger by 0.5mm than the packaged stem size due to the addition of the plasma spray. When determining the appropriate Reamer Trial size for the desired press fit, the difference between the Reamer Trial size and the stem size will represent the press fit. For instance, reaming to a 12.5mm

diameter will provide a 1mm press fit with a 13mm stem. A 13mm Reamer Trial will provide a 0.5mm press fit and a 13.5mm Reamer Trial will provide a line-to-line fit.

CAUTION | Canal filling stems require appropriate clinical evaluation for sizing. Use of a canal filling stem may increase the risk of fracture during implantation. Intraoperative fluoroscopy during reaming and implantation will decrease this risk. Depending on patient bone quality, the canal may require reaming to the same diameter as the actual stem implant diameter.

CAUTION | Canal filling stems are 0.5mm larger in diameter than the corresponding diameter reamer trials. As with any plasma spray process, there may be slight variations to the overall diameter. The canal filling stems should be inserted through the various holes of the Ring Gauge to measure the actual stem implant diameter of the chosen stem. Additional reaming may be performed to achieve the desired press fit based on this information and based on the patient's bone quality **| FIGURE 5.**

NOTE | Cerclage wire can be used at the surgeon's discretion to address stresses in the bone that are inherent during the implantation of canal filling stems.

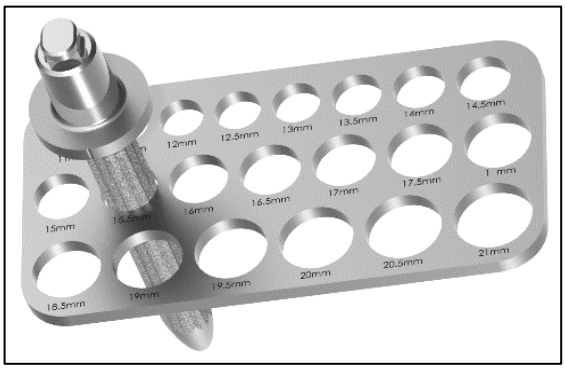


FIGURE 5

If a straight stem (100mm or 120mm) is planned to be utilized, this final diameter Reamer Trial is disconnected from the Reamer Trial Adapter and should be left in the distal femoral canal as it also functions as the stem trial.

FEMORAL REAMING AND PLANING – BOWED SEGMENTAL STEMS

If a bowed stem is chosen, a set of flexible reamers can be used from the hospital's general surgical OR instrumentation. Based on preoperative planning, it is suggested to start by using a flexible reamer at least 2 millimeters less than the assessed canal diameter. Progressively ream in 1/2mm or 1mm increments until cortical chatter is achieved. Follow the flexible reamer with the appropriate size Bowed Stem Planer, based on chosen stem diameter, to face ream the resection area and prepare for the stem taper geometry ensuring collar contact on the cortices and mates with the proximal femur. **| TABLE 5.**

CAUTION | It is important to utilize the Bowed Stem Planer that matches the desired stem size to be implanted. This will assure that the correct proximal geometry is prepared in the bone to match the implanted stem.

NOTE | Use the Reamer Trial Adapter **| FIGURE 6** with Bowed Planar to ream under power. To assemble the Reamer Trial Adapter, lift the sliding portion of the quick connect mechanism of the adapter, engage the post, aligning the hexagon, then release.

TABLE 5.

Bowed Stem Planers		
Part #	**Description**	**Use with Bowed Stem Diameters**
BP-1113S-03N	Bowed Planer Small	11mm-13mm
BP-1417M-03N	Bowed Planer Medium	14mm-17mm
BP-1821L-03N	Bowed Planer Large	18mm-21mm

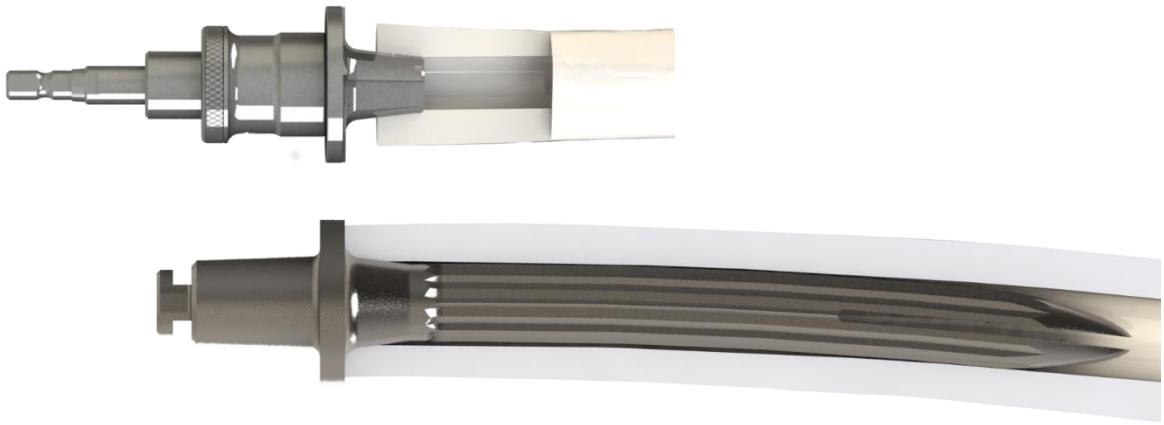


FIGURE 6

Select a stem diameter that corresponds to the appropriate cement mantle or canal filling fit based on clinical evaluation. **| Table 1. (PAGE 2)**

NOTE | The bowed trials diameters are line to line with the marked size. For example a 12mm bowed stem trial is 12mm actual outside diameter.

NOTE | The Segmental Cemented Stem diameters from **Table 1.** are equal to bowed stem trial diameters. When determining the appropriate bowed stem trial size for the desired cement mantle, the difference will represent the cement mantle. For instance, reaming to a 13mm diameter will provide a line-to-line fit with a 13mm stem. Reaming to a 14mm will provide a 0.5mm cement mantle per side, while reaming to 15mm will provide a 1mm cement mantle per side.

NOTE | The Bowed Segmental Canal Filling Stem diameters from **Table 1.** are larger by 0.5mm than the packaged stem size due to the addition of the plasma spray. When determining the appropriate Bowed Segmental Stem Trial for the desired press fit, the difference between the Bowed Segmental Stem Trial size and the Bowed Segmental Canal Filling Stem size will represent the press fit. For instance, reaming to a 12.5mm diameter will provide a 1mm press fit with a 13mm stem. A 13mm Reamer Trial will provide a 0.5mm press fit and a 13.5mm Reamer Trial will provide a line-to-line fit.

CAUTION | Canal filling stems require appropriate clinical evaluation for sizing. Use of a canal filling stem may increase the risk of fracture during implantation. Intraoperative

fluoroscopy during reaming and implantation will decrease this risk. Depending on patient bone quality, the canal may require reaming to the same diameter as the actual stem implant diameter.

CAUTION | Bowed Segmental Canal Filling Stem Canal filling stems are 0.5mm larger in diameter than the corresponding diameter reamer trials. As with any plasma spray process, there may be slight variations to the overall diameter. The canal filling stems should be inserted through the various holes of the Ring Gauge to measure the actual stem implant diameter of the chosen stem similar to that shown in **FIGURE 5.** Additional reaming may be performed to achieve the desired press fit based on this information and based on the patient's bone quality.

NOTE | Due to the bow of the stem, the Bowed Segmental Canal Filling Stem may not insert fully to the collar in the Ring Gauge. The size of the plasma spray can be assessed when the stem is inserted partially prior to reaching the bow.

NOTE | Cerclage wire can be used at the surgeon's discretion to address stresses in the bone that are inherent during the implantation of canal filling stems.

TIBIAL PREPARATION

The tibial resection is performed using Intramedullary (IM) Referencing instrumentation. Consider that the Tibial Components (Tibial Baseplate, Tibial Polyethylene Spacer, and Tibial Hinge Component) will add 20mm of length when using an 8mm spacer; confirm that enough tibial bone is removed.

NOTE | The ELEOS Tibial implants are designed for a perpendicular tibial base orientation to the IM canal. Hence, IM instrumentation helps ensure a neutral resection.

TIBIAL REAMING

A Starter Drill Bit 3/8 in. is used to initiate an opening in the proximal tibia just posterior to the anterior cruciate ligament tibial attachment.

NOTE | Drill to approximately 1-1.5 inches in depth and toggle the drill to increase the opening diameter to allow the 11 in. Reamer/IM Rod to locate the central axis.

Attach the Quick Disconnect T-handle to the 11 in. Reamer/ IM Rod and ream to establish the anatomical axis of the proximal tibia **| FIGURE 7** and to allow for the assembly of the IM Tibial Alignment Guide.

FIGURE 7

NOTE | If Stem Extensions are to be used, continue reaming with consecutive larger reamer diameters until the desired diameter is achieved after the tibial resection has been made. See "Tibial Stem Extensions (Optional)."

CAUTION | Hand reaming is recommended when a patient has poor bone quality.

TIBIAL RESECTION

Preassemble the IM Tibial Alignment guide and IM Tibial Resection guide on the back table. Remove the Quick Disconnect T-Handle from the 11 in. Reamer/IM Rod.

Slide the IM Tibial Alignment and Resection Guide Assembly onto the 11 in. Reamer/ IM Rod until the bottom surface of the guide rests against the tibial surface**| FIGURE 8.**

Turn the locking screw to lock the guide to the 11 in. Reamer/IM Rod **A IN | FIGURE 8.**

The Depth Stylus and/or Dual Reference Gauge (also known as crab claw/angel wing) can be used to set the proximal/distal position of the IM Tibial Resection guide to the desired level of tibial resection **B IN | FIGURE 8.**

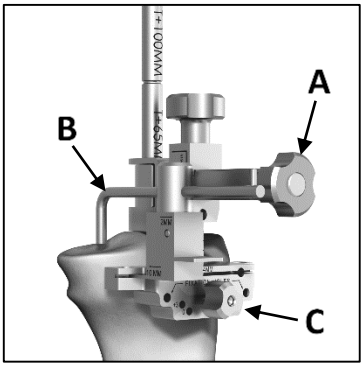


FIGURE 8

The Depth Stylus can be set to measure a depth of resection of 2mm or 10mm.

NOTE | The IM Tibial Resection Guide can be moved an additional 3mm down if the initial pin is placed in the "0" hole to get the desired resection level. Due to patient specific anatomy or pathology, greater resection may be required to accommodate the hinge component. The Distal Femoral Resection Template may aid in identifying the tibial resection and minimize the need for additional resections. The required resection can be verified by template measurement per **| FIGURE 1 (PAGE 5).**

After desired resection level is achieved, tighten the knob on the IM Tibial Resection Guide. **C IN | FIGURE 8.**

Pin the IM Tibial Resection Guide to the proximal tibia.

After the desired alignment is achieved and pins are in place, loosen the locking screw **A IN | FIGURE 8** and knob on the IM Tibial Resection Guide **C IN | FIGURE 8.** Remove the top of the IM Tibial Alignment Guide leaving the IM Tibial Resection Guide pinned into the tibia.

Make the tibial resection and remove the IM Tibial Resection Guide.

TIBIAL STEM EXTENSIONS (OPTIONAL)

Stem Extensions are available in either canal filling or cemented options | **See Table 2(PAGE 3).** If a Stem Extension is to be used, continue reaming with consecutive larger reamer diameters until the desired diameter is achieved.

Cylindrical Reamers are available in 10mm-21mm diameters in 1mm increments and are marked for 30mm, 65mm, 100mm, and 140mm stem lengths. The markings should be visible to the resected tibia to signify the stem to be used as shown by **A IN | FIGURE 9.**

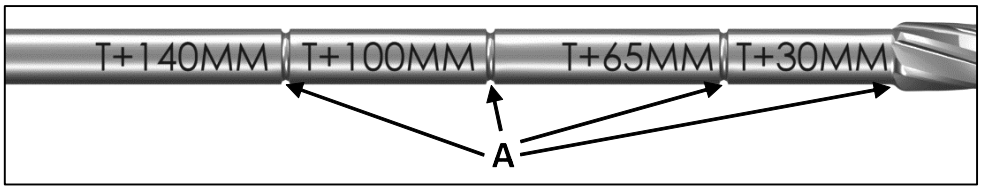


FIGURE 9

CAUTION | Hand reaming may be appropriate to avoid thinning the tibial cortex which could result in a fracture.

NOTE | The Stem Extension diameters from Table 2 are equal to Reamer diameters. When determining the appropriate Cylindrical Reamer size for the desired cement mantle, the difference will represent the cement mantle. For instance, reaming to a 13mm diameter will provide a line-to-line fit with a 13mm stem. Reaming to a 14mm will provide a 0.5mm cement mantle per side, while reaming to 15mm will provide a 1mm cement mantle per side. When determining the appropriate Cylindrical Reamer size for the canal filling stems, the difference will represent the fit. For instance, reaming to a 13mm diameter will provide a line-to-line fit with a 13mm stem, while reaming to 12mm will provide a 1mm press fit.

With desired reaming complete, ensure the Reamer provides a stable construct for additional tibial preparation.

TIBIAL BASEPLATE PREPARATION

Select the Trial Tibial Baseplate Template that provides the optimal proximal tibial bone coverage **| FIGURE 10**

> **NOTE |** If Augments are used, see "Block Augments (Optional)" on **Page 17** and attach the appropriate size and thickness Trial Augment to the Trial Tibial Baseplate Template.

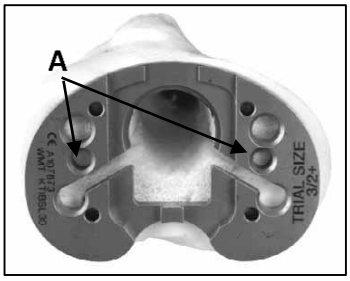


FIGURE 10

Place the Trial Tibial Baseplate Template on the proximal tibia.

> **NOTE |** To ensure optimal Trial Tibial Baseplate Template sizing and location, the template may be initially placed over the Cylindrical Reamer. Slide the Trial Tibial Base Handle/Drill Guide over the reamer until it interfaces with the template, centering the template on the tibial canal. **| FIGURE 11.** Change the template size if required to optimize proximal tibial bone coverage.

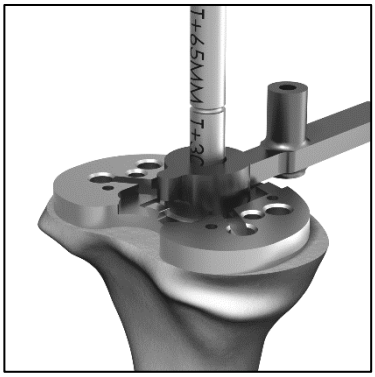


FIGURE 11

Once size and alignment are confirmed, pin the Trial Tibial Baseplate Template to the proximal tibia using Tibial Fixation Pins. After pinning, remove the reamer and attach the Trial Tibial Base Handle/Drill Guide and External Check Rod to the Trial Tibial Baseplate Template **| FIGURE 12.**

> **NOTE |** Align the distal end of the External Check Rod with the second toe.

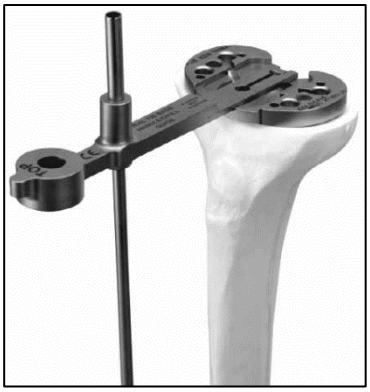


FIGURE 12

Remove the Tibial Baseplate Handle and External Check Rod.

Loosely attach the Keel Punch Guide Handle to the Keel Punch Guide. Align the pegs on the bottom of the Keel Punch Guide to the center holes in the Trial Tibial Baseplate Template **A IN |FIGURE 10**

Secure the Keel Punch Guide to the Trial Tibial Baseplate by turning the knurled handle, ensuring that the Keel Punch Guide Handle is in the correct orientation shown in **A IN | FIGURE 13**

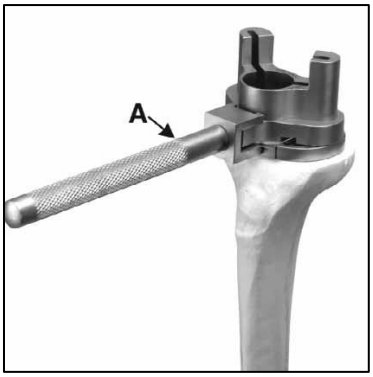


FIGURE 13

TIBIAL BASEPLATE REAMING

Align the Press Fit Reamer Guide or Cemented Reamer Guide through the Keel Punch Guide **A IN | FIGURE 14.** If a thin
cement mantle is preferred, utilize the Press Fit Reamer Guide and Press Fit Reamer; if a thicker cement mantle is preferred, use the Cemented Reamer Guide and Cemented Reamer.

> **NOTE |** The Press Fit Reamer Guide and Reamer provide a 0.5mm overall undersize fit. The Cemented Reamer Guide and Reamer provide a 0.5mm per side cement mantle.

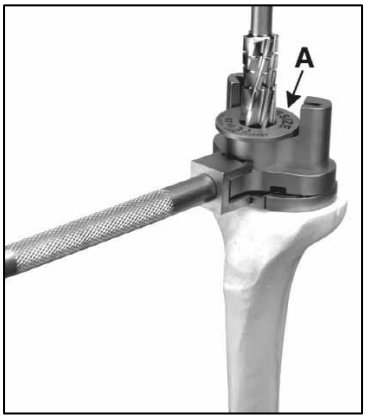


FIGURE 14

Using the appropriate reamer, ream until no teeth are visible above the Reamer Guide **| FIGURE 14.**

> **NOTE |** Make certain that the Tibial Baseplate Template stays flush to the resection surface during the reaming and punching steps.

Remove the Reamer Guide from Keel Punch Guide.

TIBIAL BASEPLATE KEEL PUNCH

Using the Keel Punch Impactor and the Press Fit or Cemented Keel Punch, slide the punch through the guide until the punch is fully seated **| FIGURE 15 AND FIGURE 16.** If Stem Extension reaming was performed, attach appropriate size Trial Stem Extension to the chosen Keel Punch.

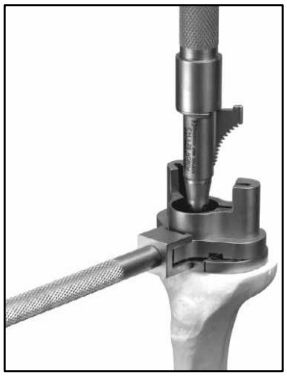


FIGURE 15

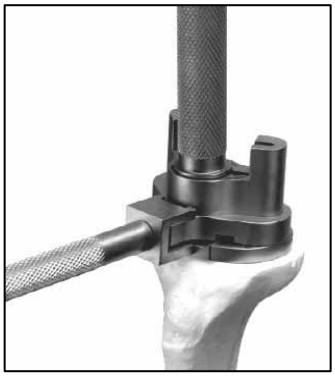


FIGURE 16

Disassemble and remove all tibial preparation instruments. Use the Pin Puller to remove fixation pins.

TRIALING

REAMER TRIAL ASSEMBLY

Assemble the Trial Distal Femur and any necessary Trial Midsections to the in-situ Reamer Trial to reproduce the appropriate resected length.

> **NOTE |** To reproduce the appropriate resection length within 10mm increments, two 40mm Trial Midsections are available in the instrumentation tray.

To assemble the Trial Midsections to the Reamer Trials, lift the sliding portion of the quick connect mechanism of the trial component, engage the post, aligning the tab with the slot, then release **| FIGURE 17**

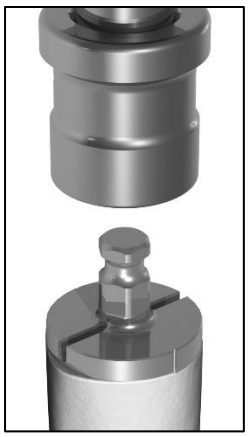


FIGURE 17

BOWED TRIAL ASSEMBLY

Assemble the Trial Distal Femur and any necessary Trial Midsections to the Bowed Trial Stem to reproduce the appropriate resected length.

> **NOTE |** When assembling a Bowed Trial Stem, ensure that the bow is in alignment with the curve of the bone.

> **NOTE |** To reproduce the appropriate resected length within 10mm increments, two 40mm Trial Midsections are available in the instrumentation tray.

To assemble the Trial Midsections to the Bowed Stem Trials, lift the sliding portion of the quick connect mechanism of the trial component, engage the post, aligning the tab with the slot, then release **| FIGURE 18.**

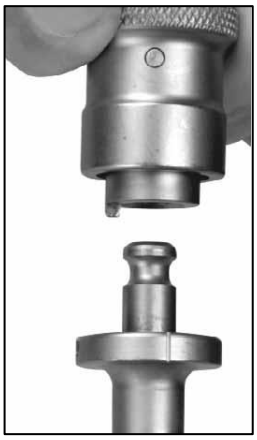


FIGURE 18

After assembly, insert the femoral trial construct into the femoral canal.

> **CAUTION |** If the construct is difficult to insert into the femoral canal, replace the Bowed Stem Trial with the next smallest size until insertion is feasible.

TIBIAL TRIAL ASSEMBLY

Assemble the Trial Tibial Baseplate, Trial Stem Extension (optional), Trial Tibial Poly Spacer and Trial Tibial Hinge Component according to previously determined sizes chosen **| FIGURE 19 - FIGURE 21**

Insert the trial tibial component assembly into the tibia **| FIGURE 20.**

Reduce the trial femoral construct onto the trial hinge component. Next, insert the Trial Axial Pin to attach the Trial Distal Femur to the Trial Tibial Hinge Component to secure the construct for trial reduction **| FIGURE 21.**

> **NOTE |** The Trial Axial Pin can be inserted from the medial or lateral side **| FIGURE 22.**

FIGURE 19

FIGURE 20

FIGURE 21

FIGURE 22

TRIAL REDUCTION

Perform a trial reduction. Align the tibial trial components in the planned expected rotation. The tibia and soft tissue will determine the subsequent proper femoral rotation alignment. To ensure proper patella-femoral tracking is achieved, mark or re-mark the rotational position on the bone from the notch on the collar of the Reamer Trial at the resection level based on the interface with the trial hinge component after trial reduction is performed. This will mark the position for the final implant. If the overall leg length requires adjustment or soft tissue tensioning, minor changes can be accomplished by selecting alternate poly spacers. More significant adjustments may require altering the choice of midsection lengths and/or changing the resection level.

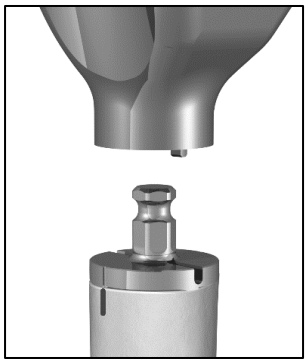


FIGURE 23

> **CAUTION |** To avoid malrotation of the tibial components, align the tibial components first and set the femoral rotation based off the planned expected tibial rotation. If previously marked, the linea aspera can be used as a secondary check reference for rotational alignment of the distal femur using the notch on the collar of the Reamer Trial. **| FIGURE 23.**

NOTE | To reproduce femoral rotation, the Reamer Trial can be rotated counter-clockwise within the canal to achieve desired femoral rotation utilizing the T-Handle attached to the Reamer Trial Adapter or with the Distal Femur Trial itself. To assemble the Reamer Trial Adapter, lift the sliding portion of the quick connect mechanism of the adapter, engage the post, aligning the hexagon, then release.

COMPONENT ASSEMBLY

FEMORAL COMPONENT

If a Midsection is to be used, assemble the Distal Femur and Midsection. On a rigid part of the back table, such as over or near the support legs, place the Distal Femur and Midsection in the Femoral Assembly Platform using the Trial Axial Pin, and assemble with five hard mallet blows using the Midsection Assembly Impactor. Repeat for each midsection used **| FIGURE 24.**

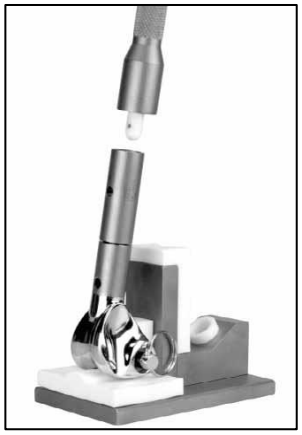


FIGURE 24

FIGURE 25

Place the Segmental Stem into the Midsection Component or into the Distal Femur if no Midsection was used and assemble with five hard mallet blows using the Stem Assembly Impactor **| FIGURE 25.**

NOTE | Recommend using 2lb mallet from the hospital's general surgical OR instrumentation.

TIBIAL COMPONENT

If a Stem Extension is to be used, place the Tibial Baseplate on the Tibial Baseplate Assembly Platform on the back table as described above. Assemble the Stem Extension onto the Tibial Baseplate using five hard mallet blows directly on the tip of the stem with Stem Assembly Impactor **| FIGURE 26.**

NOTE | Make sure to remove the protective cap on the tip of the Stem Extension before assembly.

FIGURE 26

If augments are to be used see "Block Augments (Optional)."

PREPARATION OF CEMENT

Cement mixing begins and the femoral and tibial canals are cleaned using pulsating lavage and then dried with a femoral sponge or tampon. If desired, a cement restrictor (plug) can be placed in the canal. Cement is injected in a pressurized retrograde fashion.

COMPONENT INSERTION

TIBIAL COMPONENT

If a cementation for both femoral and tibial components is chosen by the surgeon, the tibia is best done first, followed by the femur. The femoral component requires stable positioning in order to avoid rotation as the cement cures. The tibial component is more stable during polymerization.
A marking on the anterior portion of the Tibial Baseplate boss provides a reference to align the slot of the Stem Extension when a canal filling stem is indicated. Please note that usual orientation for the slot is in the AP direction for the tibial component as shown **| FIGURE 27.**

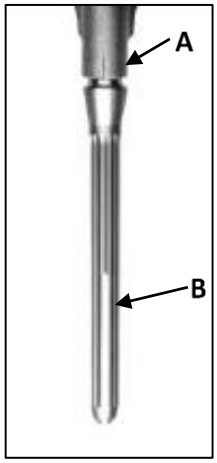


FIGURE 27


FIGURE 28

> **NOTE |** The slot on the Stem Extension **B IN | FIGURE 27** should align with the marking on the Tibial Baseplate boss **A IN | FIGURE 27.**

Place the Tibial Baseplate and Tibial Poly Spacer into the canal using the Tibial Impactor **| FIGURE 28.** Care should be taken to anchor the final components in the appropriate position until the cement has set fully.

FEMORAL COMPONENT

Place the assembled implant in the femoral canal, aligning the mark on the stem with the mark on the femur previously made **| FIGURE 29.** Guide and impact the stem into the canal with the Femoral Impactor until the stem is fully seated at the resected plane **| FIGURE 30.** Remove excess cement. Proper position of the implant should be maintained until the cement cures.


FIGURE 29


FIGURE 30

TIBIAL HINGE ASSEMBLY

Insert the Tibial Hinge Component into the Tibial Poly Spacer **| FIGURE 31.**

Align the Distal Femur with the Tibial Hinge Component **| FIGURE 32.**

Insert the Distal Femur Axial Pin using the Axial Pin Inserter/Extractor Instrument **| FIGURE 33 THRU FIGURE 37.**

FIGURE 31

FIGURE 32

FIGURE 33

FIGURE 34

FIGURE 35

FIGURE 36

FIGURE 37

The Distal Femur Axial Pin can be inserted either on the medial or lateral side. The Axial Pin key must fall into the corresponding keyway in the femoral component. Make sure the Axial Pin is flush with the side of the Distal Femur **| FIGURE 36.**

> **NOTE |** To help align the components, the Trial Axial Pin can be inserted part way into the opposite side of the final Axial Pin insertion. Then insert the Axial Pin into the other end and advance the pin forward, ejecting the Trial Axial Pin. Engage the Axial Pin until it is flush on both sides of the Distal Femur.

PATELLAR RECONSTRUCTION (Optional)

Patella resurfacing is determined based on medical judgment of the clinical situation. If severe degeneration or arthritis is present on the articular surface of the patella, resurfacing may be indicated. If the patella is otherwise normal, such as in a tumor case, and has not been removed for malignant considerations, it may be acceptable to resurface the patella or to leave it in its natural state.

RESURFACING PATELLA

The Resurfacing Patella Resection Guide can be used with or without Resection Depth Gauges or Minimum Thickness Gauges **| FIGURE 38.** When used without gauges, the Resection Guide is positioned at the desired level of resection.

FIGURE 38

Securely clamp the jaws into the patella and resect the patellar bone. For a calibrated resection, the appropriate Resection Depth Gauge corresponding to the implant thickness should be attached to the top of the resection guide with the lock screw. Position the resection guide jaws parallel to the articular margin and securely clamp the guide to the bone, assuring the gauge is contacting the apex of the articular surface. The gauge can be removed to increase visibility. Resurfacing Patella Minimum Thickness Gauges are available for preservation of 10mm or 15mm bone stock. Use of the Minimum Thickness Gauge is based on intraoperative assessment of bone quality and thickness.

Table 6

Resurfacing Patella, All-Poly, Tri-Peg			
Part Number	**Description**	**Diameter**	**Thickness**
KPONTP29E	ELEOS RESURFACING PATELLA	29mm	8mm
KPONTP32E	ELEOS RESURFACING PATELLA	32mm	8mm
KPONTP35E	ELEOS RESURFACING PATELLA	35mm	8mm
KPONTP38E	ELEOS RESURFACING PATELLA	38mm	10mm
KPONTP41E	ELEOS RESURFACING PATELLA	41mm	11mm

The Resurfacing Peg Drill Guide is used to size the patella and prepare holes in the bone for the implant pegs. Attach the Resurfacing Peg Drill Guide to the Patella Clamp. The Drill Guide has grooves on the surface indicating the patella diameter options. The Resurfacing Patella Peg Drill is used to prepare the peg holes **| FIGURE 39.**

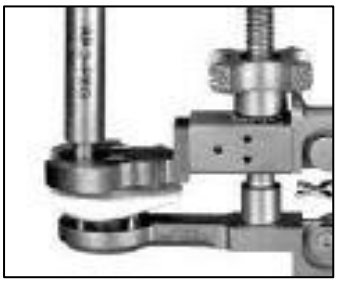


FIGURE 39

NOTE | The Resurfacing Patella have the same peg patterns between sizes and can be easily changed during trial reduction.

NOTE | A Patella / Femoral Head Sizing Caliper is available for assessment of thickness.

Remove the Resurfacing Patella Drill Guide from the Patella Clamp and insert the Patella Clamp Seater in its place.

Once the patella surface is prepared, mix cement, wash and dry the bone, pressurize the cement, and insert the patella pegs into the prepared holes. Use the Patella Clamp with the Patella Clamp Seater attached to fully seat the Patella. Remove residual cement and keep the Patella Clamp in place until cement is cured.

BLOCK AUGMENTS (Optional)

During the tibial resection step of the surgical technique, if Block Augments are necessary, begin by making a proximal "clean-up" resection along the most prominent condyle through the 0mm resection slot marked “STD” in the Revision Block Augment Resection Guide **A IN | FIGURE 40.**

> **NOTE |** The Revision Block Augment Resection Guide is available in a right and left-hand version.

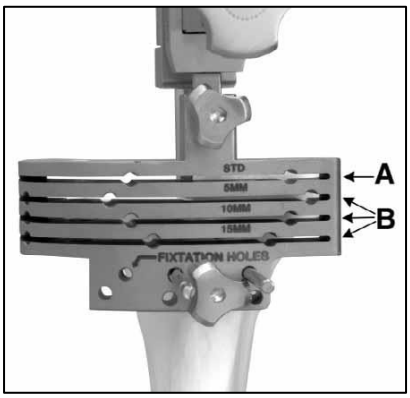


FIGURE 40

If block augmentation is needed, the Revision Block Augment Resection Guide provides resection slots for the 5mm, 10mm, and 15mm Augments **B IN | FIGURE 40.**

These Augments can be placed independently on the medial or lateral side of the tibia.

During tibial baseplate preparation, if an Augment is to be used, attach the appropriate size Block Augment to the Trial Tibial Baseplate Template and proceed with tibial preparation, as specified in **| FIGURE 41.**

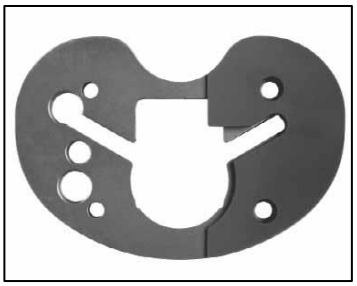


FIGURE 41

During component assembly, attach the Augment by aligning the three centering pegs on the Tibial Augment with the three recessed areas of the Tibial Baseplate.
Using the packaged screws, assemble the augments through the Tibial Baseplate. Plastic starter handles are provided with each augment screw and should be removed once the screw is tightened **| FIGURE 42.**

A final tightening of the Augment should be completed with a standard 3.5mm hex head screwdriver.

FIGURE 42

COMPONENT DISASSEMBLY

To disengage the ELEOS segmental tapers, insert the Taper Disassembly Tool into the hole on the side of the implant. Strike the end of the tool with a mallet until the components separate **| FIGURE 43 AND FIGURE 44.**

Support the implant during disassembly. Alternatively, or in concert with disassembly tools, insert the Taper Disassembly Fork around the outside of the implant, below the seam between the two components to be disassembled. Strike the end of the fork to disengage the tapers **| FIGURE 43 THRU FIGURE 46.** Again, support the implant during disassembly.

FIGURE 43

FIGURE 44

FIGURE 45

FIGURE 46

EXPLANTATION INFORMATION

In a revision case, when Segmental Stem explantation is required, use the Stem Extractor Attachment and attach to the Slap Hammer Extractor Handle to remove the stem. To disengage Stem Extensions, use the Stem Implant Extractor-Adaptor. Assemble it to the Slap Hammer Pin Extractor. Next, thread the full assembly to the Stem Extension that needs to be removed. A Trephine from the hospital's general surgical OR instrumentation can also be used to remove the stem by placing the Trephine over the stem to ream the interface between the stem and the bone.

IMPLANTS

SEGMENTAL STEMS (CEMENTED)

PART NUMBER	DESCRIPTION	SIZE
CS-09100-03M	ELEOS SEGMENTAL STEM	9MM X 100MM
CS-10100-03M	ELEOS SEGMENTAL STEM	10MM X 100MM
CS-11120-03M	ELEOS SEGMENTAL STEM	11MM X 120MM
CS-13120-03M	ELEOS SEGMENTAL STEM	13MM X 120MM
CS-15120-03M	ELEOS SEGMENTAL STEM	15MM X 120MM
CS-17120-03M	ELEOS SEGMENTAL STEM	17MM X 120MM
CB-11152-03M	ELEOS SEGMENTAL STEM	11MM X 152MM
CB-13152-03M	ELEOS SEGMENTAL STEM	13MM X 152MM
CB-15152-03M	ELEOS SEGMENTAL STEM	15MM X 152MM
CB-17152-03M	ELEOS SEGMENTAL STEM	17MM X 152MM
CB-11200-03M	ELEOS SEGMENTAL STEM	11MM X 200MM
CB-13200-03M	ELEOS SEGMENTAL STEM	13MM X 200MM
CB-15200-03M	ELEOS SEGMENTAL STEM	15MM X 200MM
CB-17200-03M	ELEOS SEGMENTAL STEM	17MM X 200MM
CB-11255-03M	ELEOS SEGMENTAL STEM	11MM X 255MM

SEGMENTAL STEMS (CANAL FILLING)

PART NUMBER	DESCRIPTION	SIZE
FS-11120-03M	ELEOS SEGMENTAL STEM	11MM X 120MM
FS-12120-03M	ELEOS SEGMENTAL STEM	12MM X 120MM
FS-13120-03M	ELEOS SEGMENTAL STEM	13MM X 120MM
FS-14120-03M	ELEOS SEGMENTAL STEM	14MM X 120MM
FS-15120-03M	ELEOS SEGMENTAL STEM	15MM X 120MM
FS-16120-03M	ELEOS SEGMENTAL STEM	16MM X 120MM
FS-17120-03M	ELEOS SEGMENTAL STEM	17MM X 120MM
FS-18120-03M	ELEOS SEGMENTAL STEM	18MM X 120MM
FS-19120-03M	ELEOS SEGMENTAL STEM	19MM X 120MM
FS-20120-03M	ELEOS SEGMENTAL STEM	20MM X 120MM
FS-21120-03M	ELEOS SEGMENTAL STEM	21MM X 120MM
FB-11152-03M	ELEOS SEGMENTAL STEM	11MM X 152MM
FB-12152-03M	ELEOS SEGMENTAL STEM	12MM X 152MM
FB-13152-03M	ELEOS SEGMENTAL STEM	13MM X 152MM
FB-14152-03M	ELEOS SEGMENTAL STEM	14MM X 152MM
FB-15152-03M	ELEOS SEGMENTAL STEM	15MM X 152MM
FB-16152-03M	ELEOS SEGMENTAL STEM	16MM X 152MM
FB-17152-03M	ELEOS SEGMENTAL STEM	17MM X 152MM
FB-18152-03M	ELEOS SEGMENTAL STEM	18MM X 152MM
FB-19152-03M	ELEOS SEGMENTAL STEM	19MM X 152MM
FB-20152-03M	ELEOS SEGMENTAL STEM	20MM X 152MM
FB-21152-03M	ELEOS SEGMENTAL STEM	21MM X 152MM

MALE-FEMALE MIDSECTIONS

PART NUMBER	DESCRIPTION	SIZE
25001040E	ELEOS MALE-FEMALE MIDSECTION	40MM
25001050E	ELEOS MALE-FEMALE MIDSECTION	50MM
25001060E	ELEOS MALE-FEMALE MIDSECTION	60MM
25001070E	ELEOS MALE-FEMALE MIDSECTION	70MM
25001090E	ELEOS MALE-FEMALE MIDSECTION	90MM
25001110E	ELEOS MALE-FEMALE MIDSECTION	110MM
25001140E	ELEOS MALE-FEMALE MIDSECTION	140MM

DISTAL FEMURS

PART NUMBER	DESCRIPTION	SIZE
25000009E	ELEOS DISTAL FEMUR RIGHT, SEGMENTAL	65MM
25000007E	ELEOS DISTAL FEMUR LEFT, SEGMENTAL	65MM

DISTAL FEMUR AXIAL PIN

PART NUMBER	DESCRIPTION	SIZE
25002111E	ELEOS DISTAL FEMUR AXIAL PIN	ONE SIZE

TIBIAL HINGE COMPONENTS

PART NUMBER	DESCRIPTION	SIZE
25002100E	ELEOS TIBIAL HINGE COMPONENT W/ ROTATIONAL STOP	ONE SIZE
25002101E	ELEOS TIBIAL HINGE COMPONENT W/O ROTATIONAL STOP	ONE SIZE

TIBIAL POLY SPACERS

PART NUMBER	DESCRIPTION	SIZE
25001208E	ELEOS TIBIAL POLY SPACER	8MM
25001210E	ELEOS TIBIAL POLY SPACER	10MM
25001212E	ELEOS TIBIAL POLY SPACER	12MM
25001216E	ELEOS TIBIAL POLY SPACER	16MM
25001220E	ELEOS TIBIAL POLY SPACER	20MM

TIBIAL BASEPLATES

PART NUMBER	DESCRIPTION	SIZE
25002201E	ELEOS TIBIAL BASEPLATE SIZE 1	60MM M/L
25002202E	ELEOS TIBIAL BASEPLATE SIZE 2	65MM M/L
25002203E	ELEOS TIBIAL BASEPLATE SIZE 3	70MM M/L
25002204E	ELEOS TIBIAL BASEPLATE SIZE 4	75MM M/L
25002205E	ELEOS TIBIAL BASEPLATE SIZE 5	80MM M/L

STEM EXTENSIONS (CEMENTED)

PART NUMBER	DESCRIPTION	SIZE
KSC01500E	MODULAR TIBIAL BASE STEM CAP	ONE SIZE
KSC01530E	ELEOS STEM EXTENSION	15MM X 30MM
KSC01065E	ELEOS STEM EXTENSION	10MM X 65MM
KSC01265E	ELEOS STEM EXTENSION	12MM X 65MM
KSC01465E	ELEOS STEM EXTENSION	14MM X 65MM
KSC01665E	ELEOS STEM EXTENSION	16MM X 65MM
KSC10100E	ELEOS STEM EXTENSION	10MM X 100MM
KSC12100E	ELEOS STEM EXTENSION	12MM X 100MM
KSC14100E	ELEOS STEM EXTENSION	14MM X 100MM
KSC16100E	ELEOS STEM EXTENSION	16MM X 100MM

STEM EXTENSIONS (CANAL FILLING)

PART NUMBER	DESCRIPTION	SIZE
KSP10100E	ELEOS STEM EXTENSION	11MM X 100MM
KSP11100E	ELEOS STEM EXTENSION	12MM X 100MM
KSP12100E	ELEOS STEM EXTENSION	13MM X 100MM
KSP13100E	ELEOS STEM EXTENSION	14MM X 100MM
KSP14100E	ELEOS STEM EXTENSION	15MM X 100MM
KSP15100E	ELEOS STEM EXTENSION	16MM X 100MM
KSP16100E	ELEOS STEM EXTENSION	17MM X 100MM
KSP17100E	ELEOS STEM EXTENSION	18MM X 100MM
KSP18100E	ELEOS STEM EXTENSION	19MM X 100MM
KSP20100E	ELEOS STEM EXTENSION	21MM X 100MM
KSP10140E	ELEOS STEM EXTENSION	11MM X 140MM
KSP11140E	ELEOS STEM EXTENSION	12MM X 140MM
KSP12140E	ELEOS STEM EXTENSION	13MM X 140MM
KSP13140E	ELEOS STEM EXTENSION	14MM X 140MM
KSP14140E	ELEOS STEM EXTENSION	15MM X 140MM
KSP15140E	ELEOS STEM EXTENSION	16MM X 140MM
KSP16140E	ELEOS STEM EXTENSION	17MM X 140MM
KSP17140E	ELEOS STEM EXTENSION	18MM X 140MM
KSP18140E	ELEOS STEM EXTENSION	19MM X 140MM
KSP20140E	ELEOS STEM EXTENSION	21MM X 140MM

RESURFACING PATELLAS

PART NUMBER	DESCRIPTION	SIZE
KPONTP29E	ELEOS RESURFACING PATELLA, ALL-POLY, TRI-PEG	29MM
KPONTP32E	ELEOS RESURFACING PATELLA, ALL-POLY, TRI-PEG	32MM
KPONTP35E	ELEOS RESURFACING PATELLA, ALL-POLY, TRI-PEG	35MM
KPONTP38E	ELEOS RESURFACING PATELLA, ALL-POLY, TRI-PEG	38MM
KPONTP41E	ELEOS RESURFACING PATELLA, ALL-POLY, TRI-PEG	41MM

BLOCK AUGMENTS

PART NUMBER	DESCRIPTION	SIZE
KTAGB105E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 1 X 5MM
KTAGB110E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 1 X 10MM
KTAGB115E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 1 X 15MM
KTAGB205E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 2 X 5MM
KTAGB210E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 2 X 10MM
KTAGB215E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 2 X 15MM
KTAGB305E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 3 X 5MM
KTAGB310E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 3 X 10MM
KTAGB315E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 3 X 15MM
KTAGB405E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 4 X 5MM
KTAGB410E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 4 X 10MM
KTAGB415E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 4 X 15MM
KTAGB505E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 5 X 5MM
KTAGB510E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 5 X 10MM
KTAGB515E	ELEOS TIBIAL BLOCK AUGMENT	SIZE 5 X 15MM

INSTRUMENTS

REAMERS

PART NUMBER	DESCRIPTION	SIZE
K0051010E	CYLINDRICAL REAMER	10MM
K0051011E	CYLINDRICAL REAMER	11MM
K0051012E	CYLINDRICAL REAMER	12MM
K0051013E	CYLINDRICAL REAMER	13MM
K0051014E	CYLINDRICAL REAMER	14MM
K0051015E	CYLINDRICAL REAMER	15MM
K0051016E	CYLINDRICAL REAMER	16MM
K0051017E	CYLINDRICAL REAMER	17MM
K0051018E	CYLINDRICAL REAMER	18MM
K0051019E	CYLINDRICAL REAMER	19MM
K0051020E	CYLINDRICAL REAMER	20MM
K0051021E	CYLINDRICAL REAMER	21MM
001-03-00017	REAMERS (TRAY 17)	ONE SIZE
001-03-00028	TRAY LID FULL	ONE SIZE

REAMER TRIALS

PART NUMBER	DESCRIPTION	SIZE
RT-09000-03N	REAMER TRIAL	9MM X 100MM
RT-10000-03N	REAMER TRIAL	10MM X 100MM
RT-10500-03N	REAMER TRIAL	10.5MM X 120MM
RT-11000-03N	REAMER TRIAL	11MM X 120MM
RT-11500-03N	REAMER TRIAL	11.5MM X 120MM
RT-12000-03N	REAMER TRIAL	12MM X 120MM
RT-12500-03N	REAMER TRIAL	12.5MM X 120MM
RT-13000-03N	REAMER TRIAL	13MM X 120MM
RT-13500-03N	REAMER TRIAL	13.5MM X 120MM
RT-14000-03N	REAMER TRIAL	14MM X 120MM
RT-14500-03N	REAMER TRIAL	14.5MM X 120MM
RT-15000-03N	REAMER TRIAL	15MM X 120MM
RT-15500-03N	REAMER TRIAL	15.5MM X 120MM
RT-16000-03N	REAMER TRIAL	16MM X 120MM
RT-16500-03N	REAMER TRIAL	16.5MM X 120MM
RT-17000-03N	REAMER TRIAL	17MM X 120MM
RT-17500-03N	REAMER TRIAL	17.5MM X 120MM
RT-18000-03N	REAMER TRIAL	18MM X 120MM
RT-18500-03N	REAMER TRIAL	18.5MM X 120MM
RT-19000-03N	REAMER TRIAL	19MM X 120MM
RT-19500-03N	REAMER TRIAL	19.5MM X 120MM
RT-20000-03N	REAMER TRIAL	20MM X 120MM
RT-20500-03N	REAMER TRIAL	20.5MM X 120MM
RT-21000-03N	REAMER TRIAL	21MM X 120MM
RT-ADAPT-03N	REAMER TRIAL ADAPTER	ONE SIZE
25107400E	STEM EXTRACTOR ATTACHMENT	ONE SIZE
RG-RINGS-03N	RING GAGES	ONE SIZE
001-03-00018	REAMER TRIALS (TRAY 18)	ONE SIZE
001-03-00028	TRAY LID FULL	ONE SIZE

BOWED SEGMENTAL STEM TRIALS

PART NUMBER	DESCRIPTION	SIZE
BT-11152-03N	BOWED STEM TRIAL	11MM X 152MM
BT-12152-03N	BOWED STEM TRIAL	12MM X 152MM
BT-13152-03N	BOWED STEM TRIAL	13MM X 152MM
BT-14152-03N	BOWED STEM TRIAL	14MM X 152MM
BT-15152-03N	BOWED STEM TRIAL	15MM X 152MM
BT-16152-03N	BOWED STEM TRIAL	16MM X 152MM
BT-17152-03N	BOWED STEM TRIAL	17MM X 152MM
BT-18152-03N	BOWED STEM TRIAL	18MM X 152MM
BT-19152-03N	BOWED STEM TRIAL	19MM X 152MM
BT-20152-03N	BOWED STEM TRIAL	20MM X 152MM
BT-21152-03N	BOWED STEM TRIAL	21MM X 152MM
BP-1113S-03N	BOWED STEM PLANER	11MM – 13MM
BP-1417M-03N	BOWED STEM PLANER	14MM – 17MM
BP-1821L-03N	BOWED STEM PLANER	18MM – 21MM
001-03-00019	BOWED STEM TRIALS (TRAY 19)	ONE SIZE
001-03-00028	TRAY LID FULL	ONE SIZE

LONG BOWED SEGMENTAL STEM TRIALS

PART NUMBER	DESCRIPTION	SIZE
BT-11200-03N	BOWED STEM TRIAL	11MM X 200MM
BT-13200-03N	BOWED STEM TRIAL	13MM X 200MM
BT-15200-03N	BOWED STEM TRIAL	15MM X 200MM
BT-17200-03N	BOWED STEM TRIAL	17MM X 200MM
BT-11255-03N	BOWED STEM TRIAL	11MM X 255MM
001-03-00020	LONG BOWED SEGMENTAL STEM TRIALS (TRAY 20)	ONE SIZE
001-03-00029	TRAY LID HALF	ONE SIZE

ASSEMBLY/DISASSEMBLY INSTRUMENTS

PART NUMBER	DESCRIPTION	SIZE
18041000E	UNIVERSAL SLAP HAMMER	ONE SIZE
25100008E	TIBIAL BASEPLATE ASSEMBLY PLATFORM	ONE SIZE
25107000E	TAPER DISASSEMBLY TOOL	ONE SIZE
25107001E	TAPER DISASSEMBLY FORK	ONE SIZE
25107101E	FEMORAL ASSEMBLY PLATFORM	ONE SIZE
25107500E	MIDSECTION ASSEMBLY IMPACTOR	ONE SIZE
SI-7501E-03N	STEM IMPACTOR	ONE SIZE
25107600E	FEMORAL IMPACTOR	ONE SIZE
25107601E	DISTAL FEMORAL EXTRACTOR	ONE SIZE
25107602E	TIBIAL IMPACTOR	ONE SIZE
001-03-00002	ASSEMBLY/DISASSEMBLY INSTRUMENTS (TRAY 2)	ONE SIZE
001-03-00016	TRAY LID STANDARD	ONE SIZE

PROXIMAL/DISTAL FEMORAL SEGMENTAL TRIALS

PART NUMBER	DESCRIPTION	SIZE
18052205E	TRIAL FEMORAL HEAD	22MM
18052206E	TRIAL FEMORAL HEAD	22MM
18056007E	TRIAL FEMORAL HEAD	32MM
18056008E	TRIAL FEMORAL HEAD	32MM
18056009E	TRIAL FEMORAL HEAD	32MM
18056010E	TRIAL FEMORAL HEAD	32MM
18056020E	TRIAL FEMORAL HEAD	36MM
18056021E	TRIAL FEMORAL HEAD	36MM
18056022E	TRIAL FEMORAL HEAD	36MM
18056023E	TRIAL FEMORAL HEAD	36MM
18056050E	TRIAL FEMORAL HEAD	28MM
18056051E	TRIAL FEMORAL HEAD	28MM
18056052E	TRIAL FEMORAL HEAD	28MM
18056053E	TRIAL FEMORAL HEAD	28MM
18056054E	TRIAL FEMORAL HEAD	28MM
18080279E	PROXIMAL FEMUR IMPACTOR	ONE SIZE
18810211E	UNIVERSAL IMPACTOR	ONE SIZE
25100001E	TRIAL PROXIMAL FEMUR	ONE SIZE
25100003E	TRIAL DISTAL FEMUR RIGHT	ONE SIZE
25100005E	TRIAL DISTAL FEMUR LEFT	ONE SIZE
25100040E	TRIAL MALE-FEMALE MIDSECTION	40MM
25100050E	TRIAL MALE-FEMALE MIDSECTION	50MM
25100060E	TRIAL MALE-FEMALE MIDSECTION	60MM
25100070E	TRIAL MALE-FEMALE MIDSECTION	70MM
25100090E	TRIAL MALE-FEMALE MIDSECTION	90MM
25100110E	TRIAL MALE-FEMALE MIDSECTION	110MM
25100140E	TRIAL MALE-FEMALE MIDSECTION	140MM
25102113E	TRIAL AXIAL PIN	ONE SIZE
25107502E	PROXIMAL FEMORAL RESECTION TEMPLATE	ONE SIZE
25107504E	DISTAL FEMORAL RESECTION TEMPLATE	ONE SIZE
001-03-00004	PROXIMAL DISTAL FEMORAL SEGMENTAL TRIALS (TRAY 4)	ONE SIZE
001-03-00016	TRAY LID STANDARD	ONE SIZE

STEM EXTENSION TRIALS

PART NUMBER	DESCRIPTION	SIZE
K0050010E	TRIAL STEM EXTENSION	10MM X 100MM
K0050011E	TRIAL STEM EXTENSION	11MM X 100MM
K0050012E	TRIAL STEM EXTENSION	12MM X 100MM
K0050013E	TRIAL STEM EXTENSION	13MM X 100MM
K0050014E	TRIAL STEM EXTENSION	14MM X 100MM
K0050015E	TRIAL STEM EXTENSION	15MM X 100MM
K0050016E	TRIAL STEM EXTENSION	16MM X 100MM
K0050017E	TRIAL STEM EXTENSION	17MM X 100MM
K0050018E	TRIAL STEM EXTENSION	18MM X 100MM
K0050020E	TRIAL STEM EXTENSION	20MM X 100MM
K0050022E	TRIAL STEM EXTENSION	22MM X 100MM
K0051005E	STEM IMPLANT EXTRACTOR-ADAPTOR	ONE SIZE
K0051410E	TRIAL STEM EXTENSION	10MM X 140MM
K0051411E	TRIAL STEM EXTENSION	11MM X 140MM
K0051412E	TRIAL STEM EXTENSION	12MM X 140MM
K0051413E	TRIAL STEM EXTENSION	13MM X 140MM
K0051414E	TRIAL STEM EXTENSION	14MM X 140MM
K0051415E	TRIAL STEM EXTENSION	15MM X 140MM
K0051416E	TRIAL STEM EXTENSION	16MM X 140MM
K0051417E	TRIAL STEM EXTENSION	17MM X 140MM
K0051418E	TRIAL STEM EXTENSION	18MM X 140MM
K0051420E	TRIAL STEM EXTENSION	20MM X 140MM
K0051530E	TRIAL STEM EXTENSION	15MM X 30MM
K0056510E	TRIAL STEM EXTENSION	10MM X 65MM
K0056512E	TRIAL STEM EXTENSION	12MM X 65MM
K0056514E	TRIAL STEM EXTENSION	14MM X 65MM
K0056516E	TRIAL STEM EXTENSION	16MM X 65MM
K0056518E	TRIAL STEM EXTENSION	18MM X 65MM
001-03-00005	STEM EXTENSION TRIALS (TRAY 5)	ONE SIZE
001-03-00016	TRAY LID STANDARD	ONE SIZE

TIBIAL RESURFACING TRIALS

PART NUMBER	DESCRIPTION	SIZE
25101208E	TRIAL TIBIAL POLY SPACER	8MM
25101210E	TRIAL TIBIAL POLY SPACER	10MM
25101212E	TRIAL TIBIAL POLY SPACER	12MM
25101216E	TRIAL TIBIAL POLY SPACER	16MM
25101220E	TRIAL TIBIAL POLY SPACER	20MM
25102100E	TRIAL TIBIAL HINGE COMPONENT W/STOP	ONE SIZE
25102301E	TRIAL TIBIAL BASEPLATE	SIZE 1
25102302E	TRIAL TIBIAL BASEPLATE	SIZE 2
25102303E	TRIAL TIBIAL BASEPLATE	SIZE 3
25102304E	TRIAL TIBIAL BASEPLATE	SIZE 4
25102305E	TRIAL TIBIAL BASEPLATE	SIZE 5
001-03-00006	TIBIAL RESURFACING TRIALS (TRAY 6)	ONE SIZE
001-03-00015	TRAY LID SMALL	ONE SIZE

TIBIAL RESURFACING PREPARATION INSTRUMENTS

PART NUMBER	DESCRIPTION	SIZE
18410135E	SCREWDRIVER	ONE SIZE
25107104E	PRESS FIT REAMER GUIDE	ONE SIZE
25107105E	CEMENTED REAMER GUIDE	ONE SIZE
25107110E	KEEL PUNCH GUIDE	ONE SIZE
2510SL10E	TRIAL TIBIAL BASEPLATE TEMPLATE	SIZE 1
2510SL20E	TRIAL TIBIAL BASEPLATE TEMPLATE	SIZE 2
2510SL30E	TRIAL TIBIAL BASEPLATE TEMPLATE	SIZE 3
2510SL40E	TRIAL TIBIAL BASEPLATE TEMPLATE	SIZE 4
2510SL50E	TRIAL TIBIAL BASEPLATE TEMPLATE	SIZE 5
K0001112E	KEEL PUNCH IMPACTOR	ONE SIZE
K0020211E	DEPTH STYLUS 2MM / 10MM	ONE SIZE
K0021012E	TRIAL TIBIAL BASE HANDLE / DRILL GUIDE	ONE SIZE
K0027101E	KEEL PUNCH GUIDE HANDLE	ONE SIZE
K0040040E	VARUS/VALGUS TIBIAL RESECTION GUIDE	ONE SIZE
K0041000E	IM TIBIAL ALIGNMENT GUIDE	ONE SIZE
K0041010E	IM TIBIAL RESECTION GUIDE	ONE SIZE
K0050001E	PRESS FIT KEEL PUNCH SIZE 1, 1+, & 2	ONE SIZE
K0050002E	CEMENTED KEEL PUNCH SIZE 1, 1+, & 2	ONE SIZE
001-03-00007	TIBIAL RESURFACING PREPARATION INSTRUMENTS (TRAY 7)	ONE SIZE
001-03-00016	TRAY LID STANDARD	ONE SIZE

GENERAL RESURFACING INSTRUMENTS

PART NUMBER	DESCRIPTION	SIZE
18055001E	UNIVERSAL HUDSON ADAPTOR	ONE SIZE
25102211E	AXIAL PIN INSERTER/ EXTRACTOR	ONE SIZE
25107613E	TIBIAL BASEPLATE PRESS FIT REAMER	ONE SIZE
25107614E	TIBIAL BASEPLATE CEMENTED REAMER	ONE SIZE
K0000900E	EXTERNAL CHECK GUIDE	ONE SIZE
K0000901E	EXTERNAL CHECK ROD	ONE SIZE
K0001002E	STARTER DRILL BIT 3/8 IN	ONE SIZE
K0001005E	DRILL BIT 1/8 X 65MM	ONE SIZE
K0001006E	QUICK DISCONNECT FOR 1/8" DRILL BIT	ONE SIZE
K0001015E	DRILL BIT 1/8IN X 100MM	ONE SIZE
K0001016E	QUICK DISCONNECT T-HANDLE	ONE SIZE
K0001101E	11 IN REAMER/IM ROD	ONE SIZE
K0002007E	TIBIAL BASEPLATE FIXATION PIN	ONE SIZE
K0002008E	SLAP HAMMER PIN EXTRACTOR	ONE SIZE
K0002010E	PIN PULLER	ONE SIZE
K0002011E	FIXATION PIN, HEADLESS	80MM
K0002015E	PIN INSERTER	ONE SIZE
K0014407E	DUAL REFERENCE GAUGE	ONE SIZE
001-03-00014	PIN CADDY	ONE SIZE
001-03-00008	GENERAL RESURFACING INSTRUMENTS (TRAY 8)	ONE SIZE
001-03-00016	TRAY LID STANDARD	ONE SIZE

PATELLA INSTRUMENTS

PART NUMBER	DESCRIPTION	SIZE
18410213E	PATELLA SIZING CALIPER	ONE SIZE
18810210E	RESURFACING PATELLA RESECTION DEPTH GAUGE	10MM
18810220E	RESURFACING PATELLA RESECTION GUIDE	ONE SIZE
18810228E	RESURFACING PATELLA RESECTION DEPTH GAUGE	8MM
18811210E	RESURFACING PATELLA MINIMUM THICKNESS GAUGE	10MM
18811215E	RESURFACING PATELLA MINIMUM THICKNESS GAUGE	15MM
18812211E	RESURFACING PATELLA THICKNESS RESECTION DEPTH GAUGE	11MM
K0031000E	PATELLA CLAMP	ONE SIZE
K0031001E	PATELLA CLAMP SEATER	ONE SIZE
K0031002E	RESURFACING PATELLA PEG DRILL GUIDE	ONE SIZE
K0031013E	RESURFACING PATELLA PEG DRILL	ONE SIZE
KPTRTP32E	TRIAL RESURFACING PATELLA	32MM X 8MM
KPTRTP35E	TRIAL RESURFACING PATELLA	35MM X 8MM
KPTRTP38E	TRIAL RESURFACING PATELLA	38MM X 10MM
KPTRTP41E	TRIAL RESURFACING PATELLA	41MM X 11MM
001-03-00010	PATELLA INSTRUMENTS (TRAY 10)	ONE SIZE
001-03-00016	TRAY LID STANDARD	ONE SIZE

AUGMENT PREPARATION & TRIALING INSTRUMENTS

PART NUMBER	DESCRIPTION	SIZE
K0052002E	REVISION BLOCK AUGMENT RESECTION GUIDE, RIGHT	ONE SIZE
K0052003E	REVISION BLOCK AUGMENT RESECTION GUIDE, LEFT	ONE SIZE
K0053013E	TRIAL BLOCK AUGMENT 5MM	1 X 5MM, LFT LAT/RT MED
K0053014E	TRIAL BLOCK AUGMENT 5MM	1 X 5MM, RT LAT/LFT MED
K0053015E	TRIAL BLOCK AUGMENT 5MM	2 X 5MM, LFT LAT/RT MED
K0053016E	TRIAL BLOCK AUGMENT 5MM	2 X 5MM, RT LAT/LFT MED
K0053017E	TRIAL BLOCK AUGMENT 5MM	3 X 5MM, LFT LAT/RT MED
K0053018E	TRIAL BLOCK AUGMENT 5MM	3 X 5MM, RT LAT/LFT MED
K0053019E	TRIAL BLOCK AUGMENT 5MM	4 X 5MM, LFT LAT/RT MED
K0053020E	TRIAL BLOCK AUGMENT 5MM	4 X 5MM, RT LAT/LFT MED
K0053021E	TRIAL BLOCK AUGMENT 5MM	5 X 5MM, LFT LAT/RT MED
K0053022E	TRIAL BLOCK AUGMENT 5MM	5 X 5MM, RT LAT/LFT MED
K0053025E	TRIAL BLOCK AUGMENT 10MM	1 X 10MM, LFT LAT/RT MED
K0053026E	TRIAL BLOCK AUGMENT 10MM	1 X 10MM, RT LAT/LFT MED
K0053027E	TRIAL BLOCK AUGMENT 10MM	2 X 10MM, LFT LAT/RT MED
K0053028E	TRIAL BLOCK AUGMENT 10MM	2 X 10MM, RT LAT/LFT MED
K0053029E	TRIAL BLOCK AUGMENT 10MM	3 X10MM, LFT LAT/RT MED
K0053030E	TRIAL BLOCK AUGMENT 10MM	3 X 10MM, RT LAT/LFT MED
K0053031E	TRIAL BLOCK AUGMENT 10MM	4 X 10MM, LFT LAT/RT MED
K0053032E	TRIAL BLOCK AUGMENT 10MM	4 X 10MM, RT LAT/LFT MED
K0053033E	TRIAL BLOCK AUGMENT 10MM	5 X 10MM, LFT LAT/RT MED
K0053034E	TRIAL BLOCK AUGMENT 10MM	5 X 10MM, RT LAT/LFT MED
K0053037E	TRIAL BLOCK AUGMENT 15MM	1 X 15MM, LFT LAT/RT MED
K0053038E	TRIAL BLOCK AUGMENT 15MM	1 X 15MM, RT LAT/LFT MED
K0053039E	TRIAL BLOCK AUGMENT 15MM	2 X 15MM, LFT LAT/RT MED
K0053040E	TRIAL BLOCK AUGMENT 15MM	2 X 15MM, RT LAT/LFT MED
K0053041E	TRIAL BLOCK AUGMENT 15MM	3 X 15MM, LFT LAT/RT MED
K0053042E	TRIAL BLOCK AUGMENT 15MM	3 X 15MM, RT LAT/LFT MED
K0053043E	TRIAL BLOCK AUGMENT 15MM	4 X 15MM, LFT LAT/RT MED
K0053044E	TRIAL BLOCK AUGMENT 15MM	4 X 15MM, RT LAT/LFT MED
K0053045E	TRIAL BLOCK AUGMENT 15MM	5 X 15MM, LFT LAT/RT MED
K0053046E	TRIAL BLOCK AUGMENT 15MM	5 X 15MM, RT LAT/LFT MED
001-03-00013	AUGMENT PREPARATION AND TRIALING INSTRUMENTS (TRAY 13)	ONE SIZE
001-03-00016	TRAY LID STANDARD	ONE SIZE

The ELEOS Limb Salvage System is compatible with the following MicroPort Orthopedics systems trademarked by MicroPort Guardian, Advance, Gladiator, Lineage, and Transcend.

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