United®
Orthopedic Corporation

U2 PSA™ Revision Knee

Surgical Protocol

Table of Contents

1 Component Removal

When removing the components, great care must be taken to preserve as much of the remaining bone stock as possible and to avoid the risk of fracture of the residual bone stock. Through the use of small flexible osteotomes, saws, and high-speed burring instruments, bone preservation can usually be achieved.

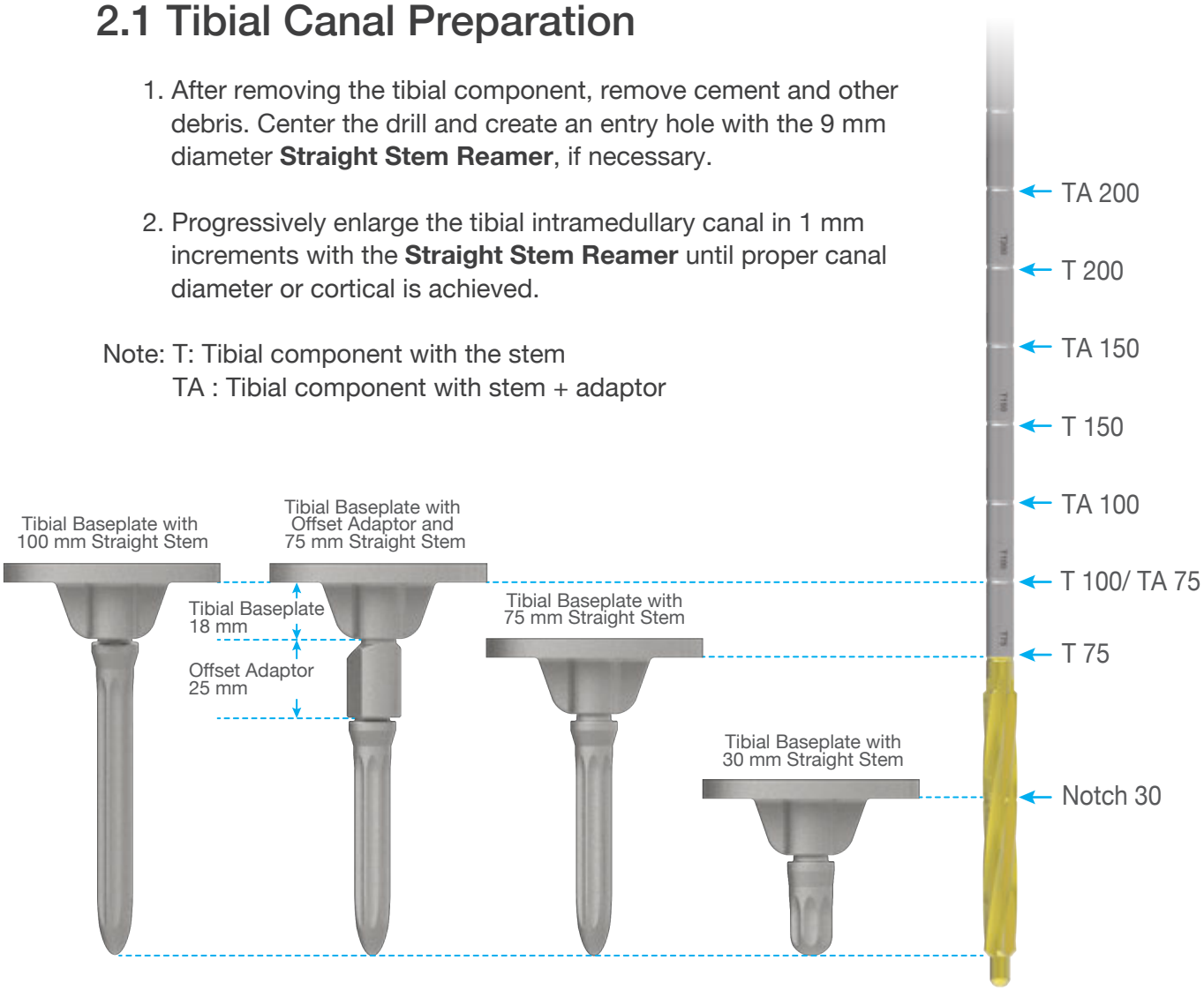
2 Tibial Preparation

2.1 Tibial Canal Preparation

1. After removing the tibial component, remove cement and other debris. Center the drill and create an entry hole with the 9 mm diameter **Straight Stem Reamer**, if necessary.

2. Progressively enlarge the tibial intramedullary canal in 1 mm increments with the **Straight Stem Reamer** until proper canal diameter or cortical is achieved.

Note: T: Tibial component with the stem
TA : Tibial component with stem + adaptor



Instruments

Straight Stem Reamer
Cat. No. varies by size

2.2 Proximal Tibial Resection

1. Attach the **IM Guide Collar** to the **Tibial IM Alignment Guide**.

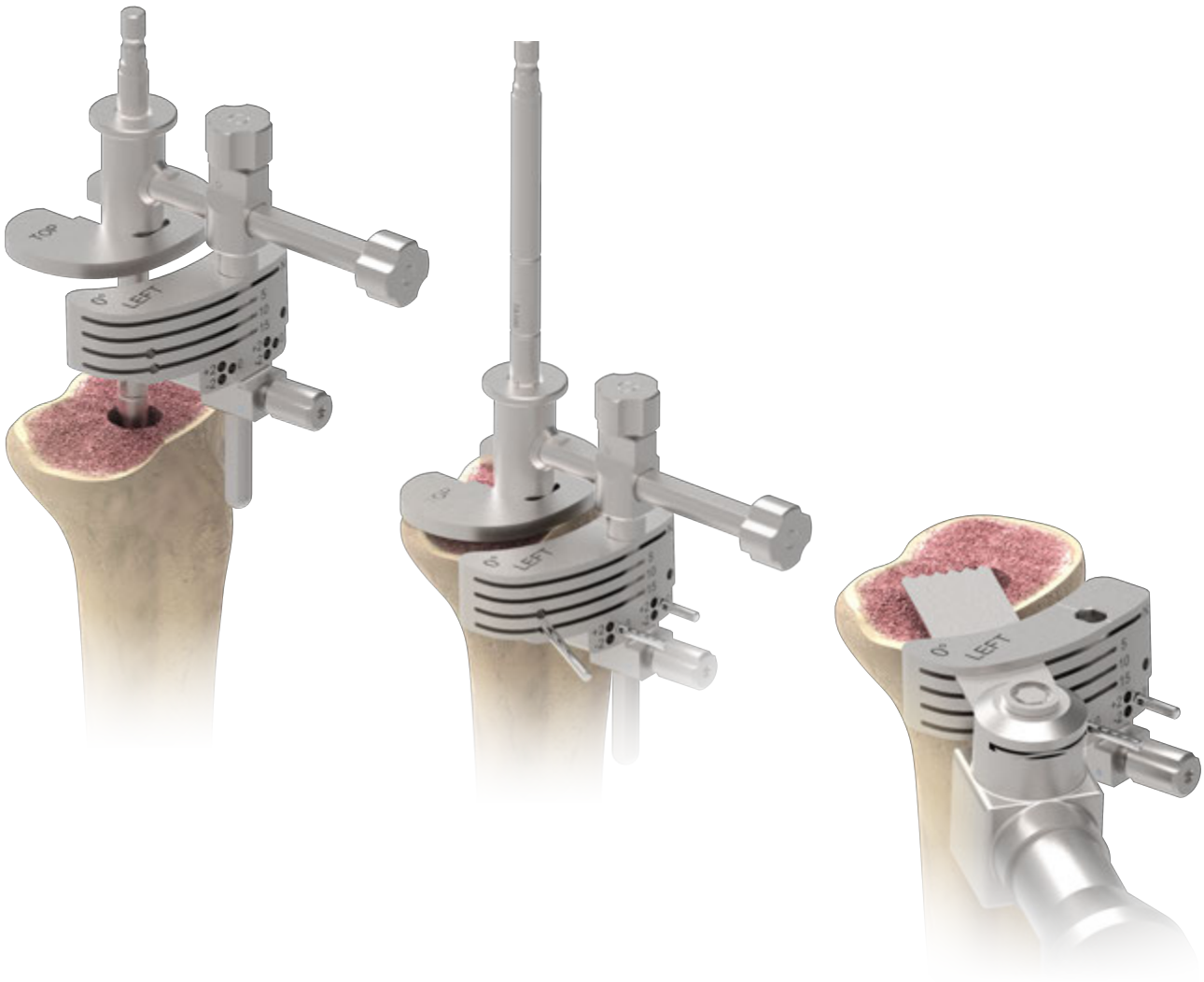
2. Slide the **Tibial Resection Guide** onto the **Tibial IM Alignment Guide**.

Instruments

IM Guide Collar
S: 9403-2311
M: 9403-2313
L: 9403-2315

Tibial IM Alignment Guide
9403-2310

Tibial Resection Guide
Left: 9403-2321-RB
Right: 9403-2322-RB



3. Place the appropriate **Straight Stem Reamer** (or the **Tibial IM Rod**) in the tibial cavity.

4. Insert the assembly onto the reamer until the **IM Guide Collar** against the proximal tibial surface. Then tighten the **Tibial IM Alignment Guide** to the reamer.

5. Move the **Tibial Resection Guide** until it against the anterior tibia, then secure the position.

6. Pin the resection guide through the central holes marked 0, then perform a 2 mm clean cut through the "N" slot.

7. +2 or -2 mm resection holes allow the resection guide to be shifted for additional adjustments.

Instruments

Straight Stem Reamer
Cat. No. varies by size

IM Guide Collar
S: 9403-2311
M: 9403-2313
L: 9403-2315

Tibial IM Alignment Guide
9403-2310

Tibial Resection Guide
Left: 9403-2321-RB
Right: 9403-2322-RB

Tibial IM Rod
9403-3201

Pin
9303-3207

2.3 Non Offset Tibial Preparation

2.3.1 Sizing and Placement

1. Select the proper size **Tibial Sizing Template** that provides desired tibial coverage and attach it to the **Tibial Sizing Template Handle**.

2. Place the assembly over the reamer onto the resected proximal tibia to assess the A-P and M-L size.

3. Slide the **Tibial Neutral Bushing** onto the reamer. To confirm alignment, insert the **Alignment Rod** into the handle. If adequate coverage and position is not achieved, refer to **2.4 Offset Tibial Trial Preparation**.

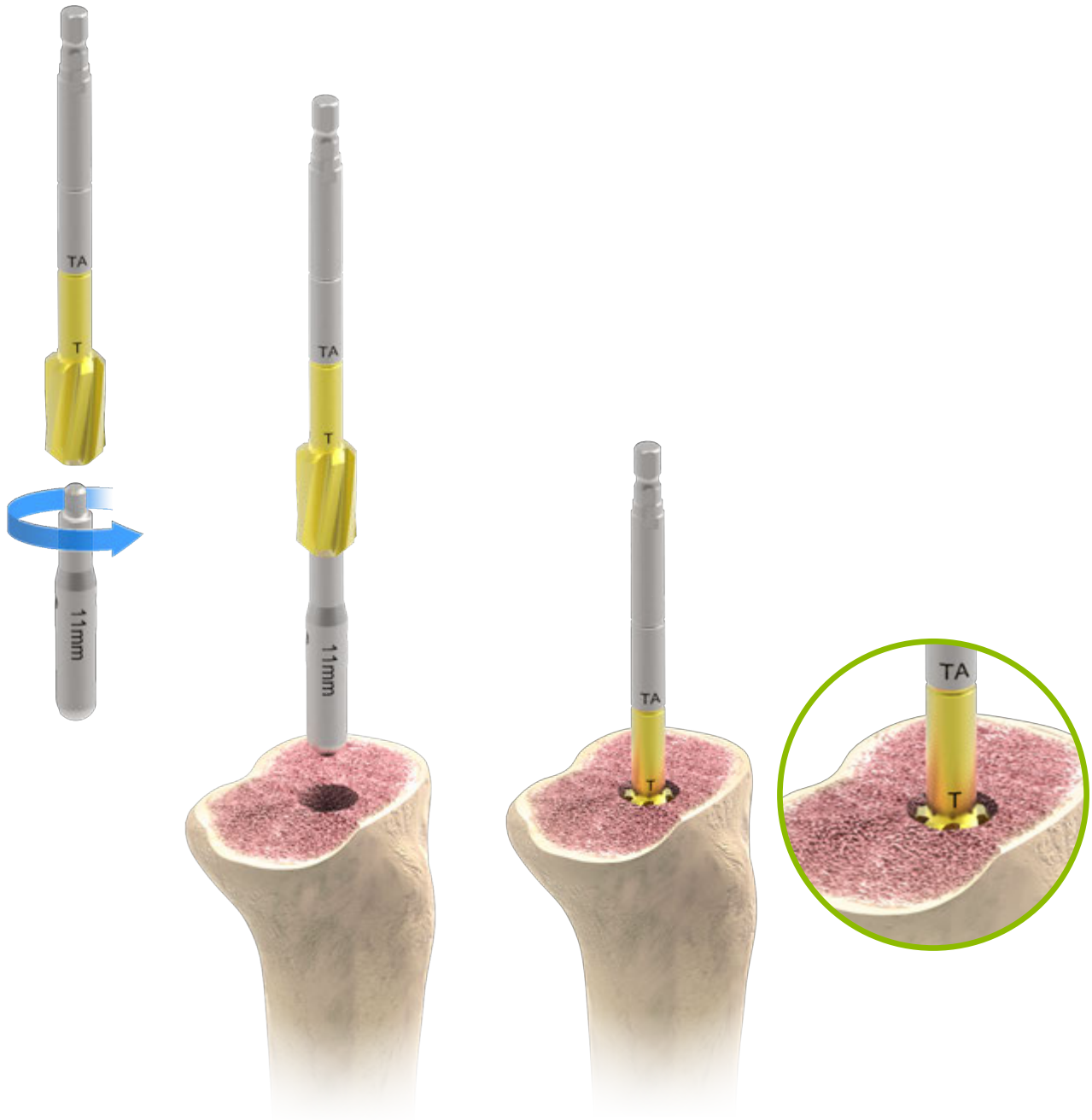
Instruments

Tibial Sizing Template
Cat. No. varies by size

Tibial Sizing Template Handle
9403-1203

Tibial Neutral Bushing
9403-5315

Alignment Rod
9403-2202



4. Choose the **Reamer Guide Rod** corresponding to the diameter of the last reamer used. Attach the **Reamer Guide Rod** to the **Boss Reamer**. Ream until the depth reaches to the laser marked “T” on the boss reamer. The boss reaming process will not be necessary if the last reamer used is larger than 16 mm.

Instruments

Reamer Guide Rod
Cat. No. varies by size

Boss Reamer
9403-3300

2.3.2 Tibial Trial Assembly

1. The tibial trial is assembled by pushing the appropriate size **Straight Stem Trial** into the **Tibial Baseplate Trial** through the bayonet locking mechanism.

2. Insert the tibial trial assembly into the tibial canal.

Instruments

Straight Stem Trial
Cat. No. varies by size

Tibial Baseplate Trial
Cat. No. varies by size

5 o'clock direction

2.4 Offset Tibial Trial Preparation

2.4.1 Offset Sizing and Placement

1. If the position of the **Tibial Sizing Template** is not satisfactory, conduct the offset procedure.

2. Insert the 2 mm or 4 mm **Tibial Offset Bushing** onto the reamer and use the **Offset Bushing Wrench** to rotate it until the proper tibial coverage is achieved. Use the **Alignment Rod** to confirm alignment.

3. Make a note of the number on the offset bushing that lines to the laser mark on the **Tibial Sizing Template**. (eg. 5 o'clock position shown above)

Instruments

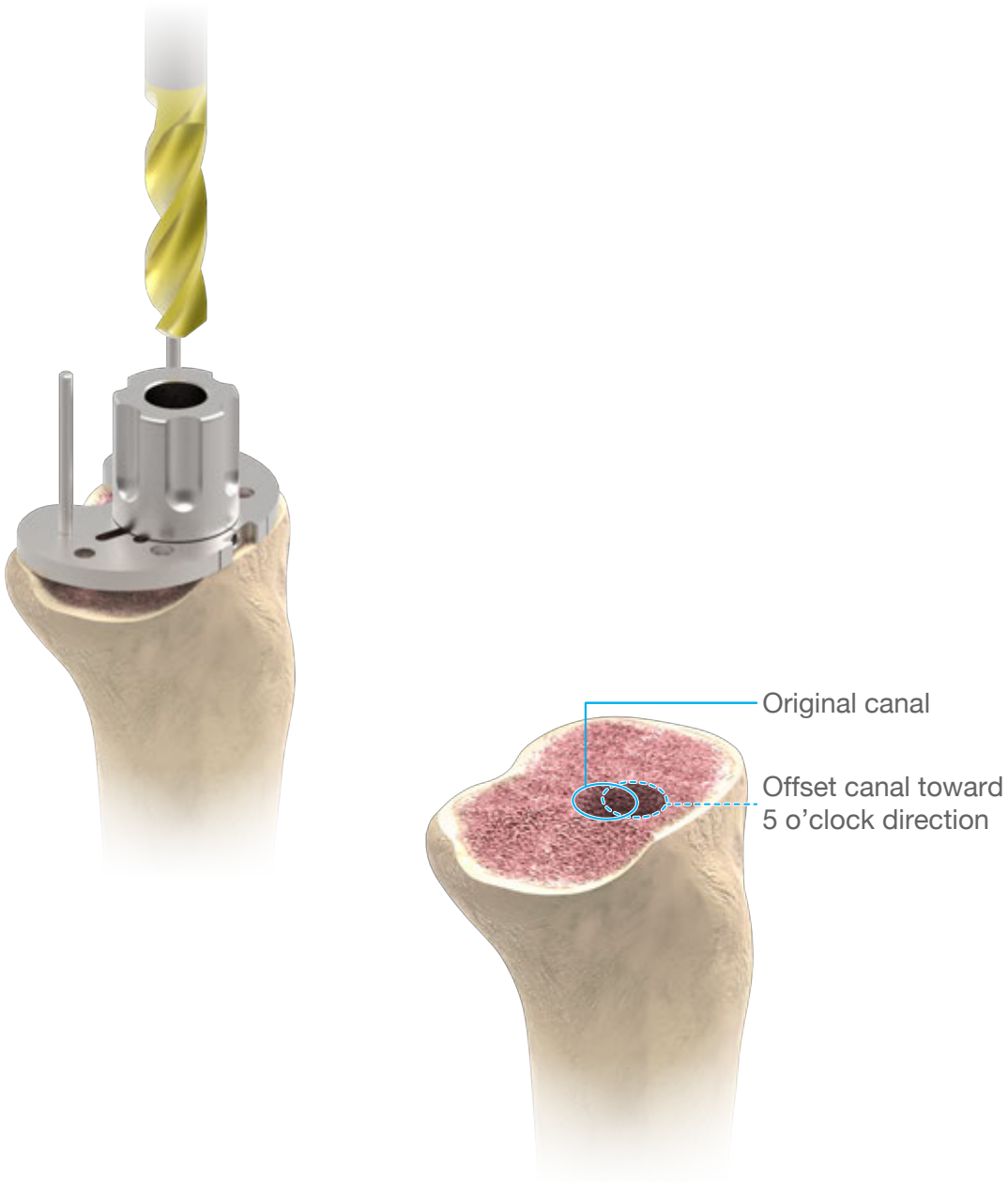
Tibial Sizing Template
Cat. No. varies by size

Tibial Sizing Template Handle
9403-1203

Alignment Rod
9403-2202

Tibial Offset Bushing
2 mm: 9403-5316
4 mm: 9403-5317

Offset Bushing Wrench
9403-5333



2.4.2 Offset Tibial Canal Preparation

1. Fix the **Tibial Sizing Template** with two pins. Assemble **Tibial Stem Drill Guide** to the **Tibial Sizing Template**. Prepare the offset canal by applying the **Tibial Stem Drill** through the guide until a positive stop is achieved.

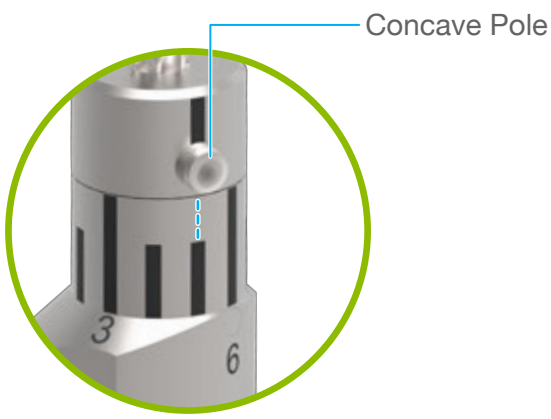
Instruments

Tibial Sizing Template
Cat. No. varies by size

Tibial Stem Drill Guide
9403-2414

Tibial Stem Drill
9403-3314

Reamer Guide Rod
Cat. No. varies by size



2.4.3 Offset Tibial Trial Assembly

1. Assemble the **Screw Driver Adaptor** to **Driver Handle**, and utilize it to loosen the **Offset Adaptor Trial**.

2. Align the concave pole on the adaptor trial to the predetermined number then tighten the **Offset Adaptor Trial**.

Instruments

Screw Driver Adaptor
9403-5331-RA

Driver Handle
9403-1302-RA

Offset Adaptor Trial
2 mm: 2903-2010
4 mm: 2903-2020
6 mm: 2903-2030

3. Connect the **Offset Adaptor Trial** to the **Tibial Baseplate Trial** through the bayonet locking, and ensure the correct laser mark on the offset adaptor is aligned to the line marking on the baseplate trial.

4. Then attach the trial assembly with the appropriate **Straight Stem Trial**.

5. Insert the tibial trial assembly into the tibial canal.

Instruments

Straight Stem Trial
Cat. No. varies by size

Tibial Baseplate Trial
Cat. No. varies by size

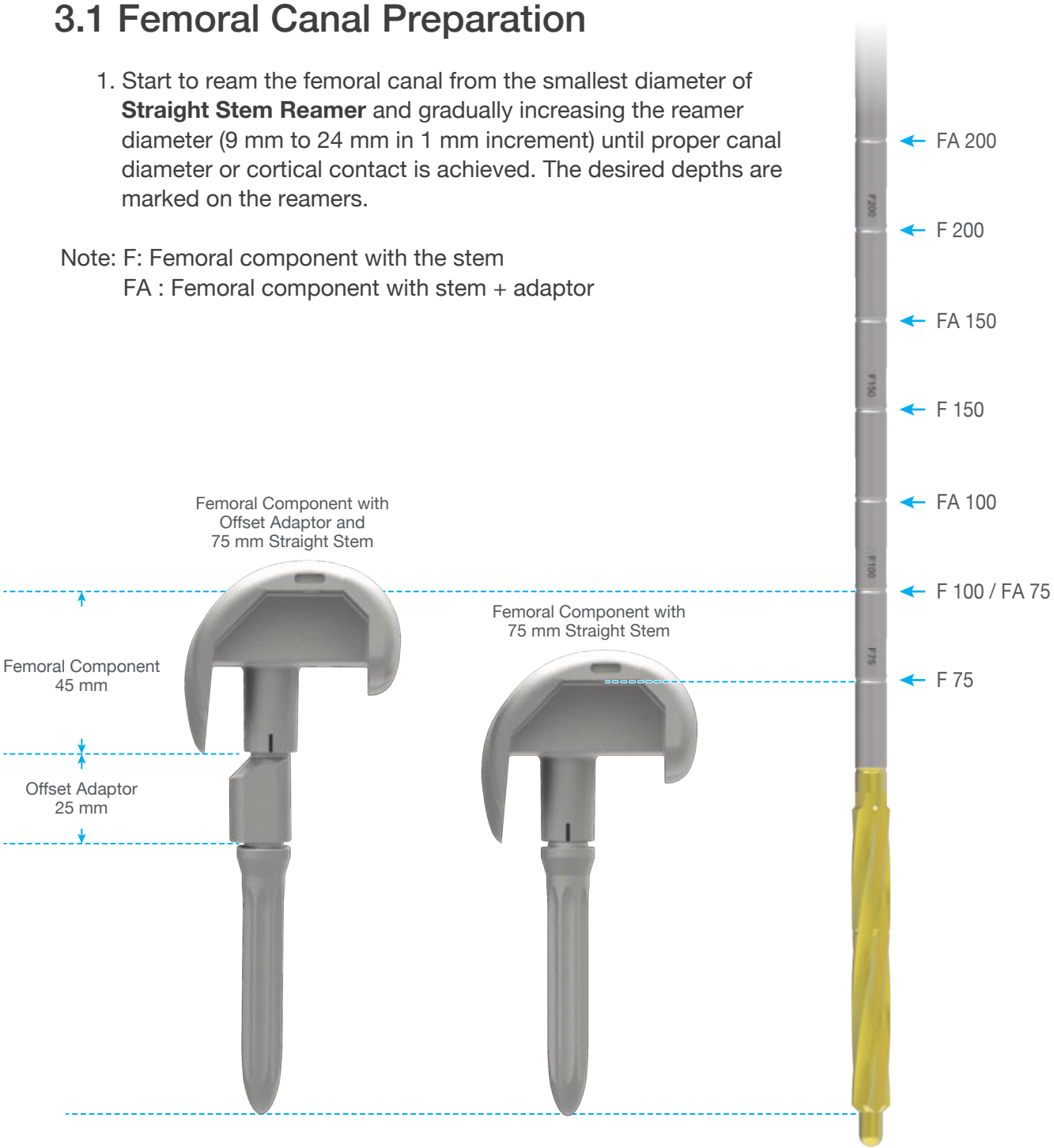
Offset Adaptor Trial
2 mm: 2903-2010
4 mm: 2903-2020
6 mm: 2903-2030

3 Femoral Preparation

3.1 Femoral Canal Preparation

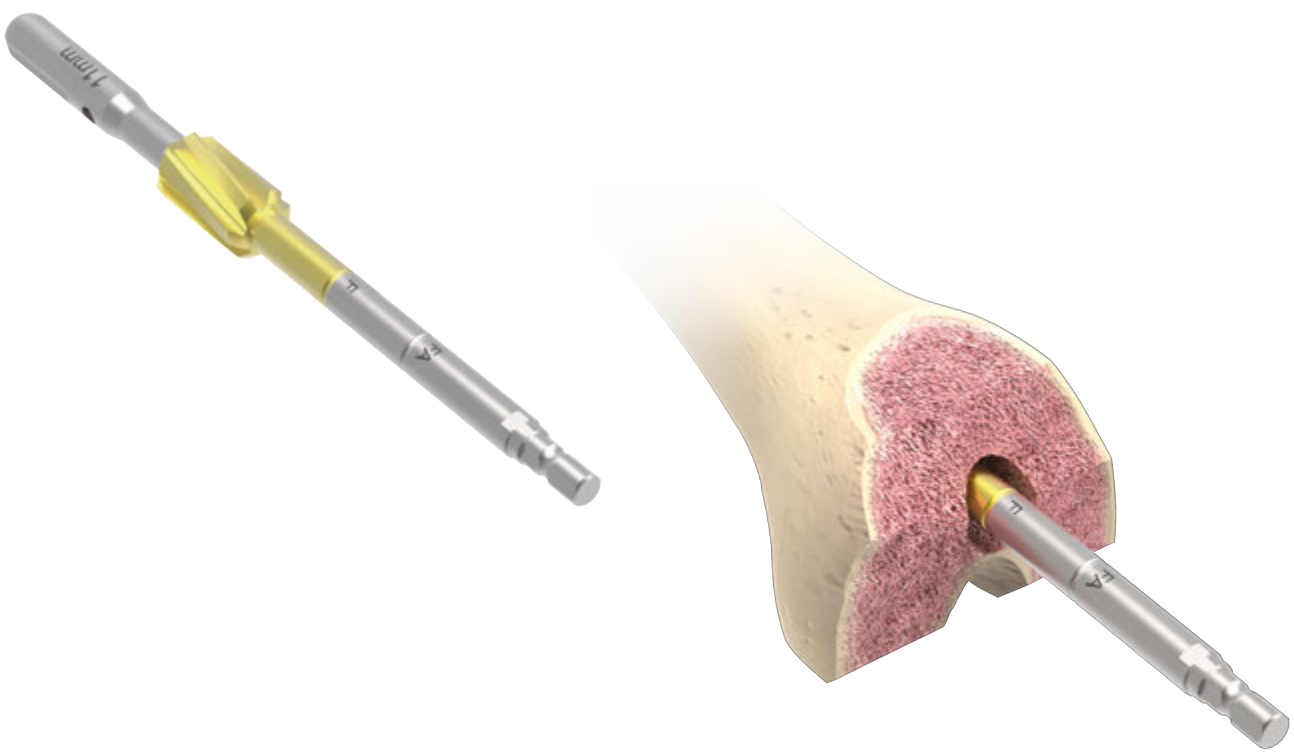
1. Start to ream the femoral canal from the smallest diameter of **Straight Stem Reamer** and gradually increasing the reamer diameter (9 mm to 24 mm in 1 mm increment) until proper canal diameter or cortical contact is achieved. The desired depths are marked on the reamers.

Note: F: Femoral component with the stem
FA : Femoral component with stem + adaptor



Instruments

Straight Stem Reamer
Cat. No. varies by size



3. Choose the **Reamer Guide Rod** corresponding to the diameter of the last reamer used. Attach the **Reamer Guide Rod** to the **Boss Reamer**. Then ream the femoral canal to the depth until the indicator mark “F” on the **Boss Reamer** line up with the entry hole. The boss reaming process will not be necessary if the last reamer used is larger than 16 mm.

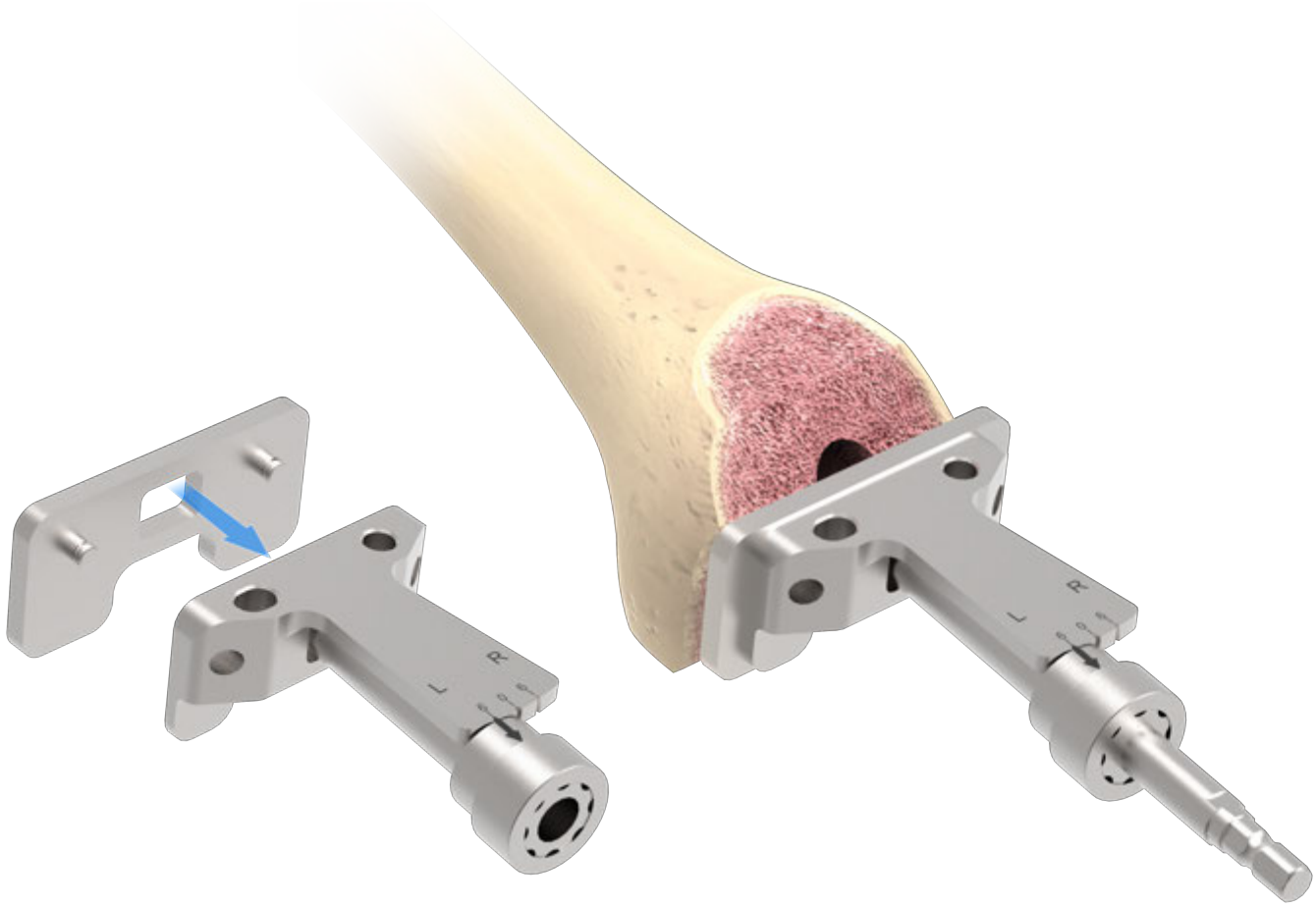
4. As the reaming process is completed, place the appropriate reamer (or the **Femoral IM Rod**) in the femoral cavity.

Instruments

Reamer Guide Rod
Cat. No. varies by size

Boss Reamer
9403-3300

Femoral IM Rod
9303-3210



3.2 Distal Femoral Resection

1. Attach the **Distal Femoral Plate** to the **Femoral IM Alignment Guide** and slide the assembly onto the reamer until it contacts to the distal femur. U2 PSA knee **Femoral IM Alignment Guide** offers a fixed 6 degrees valgus angle.

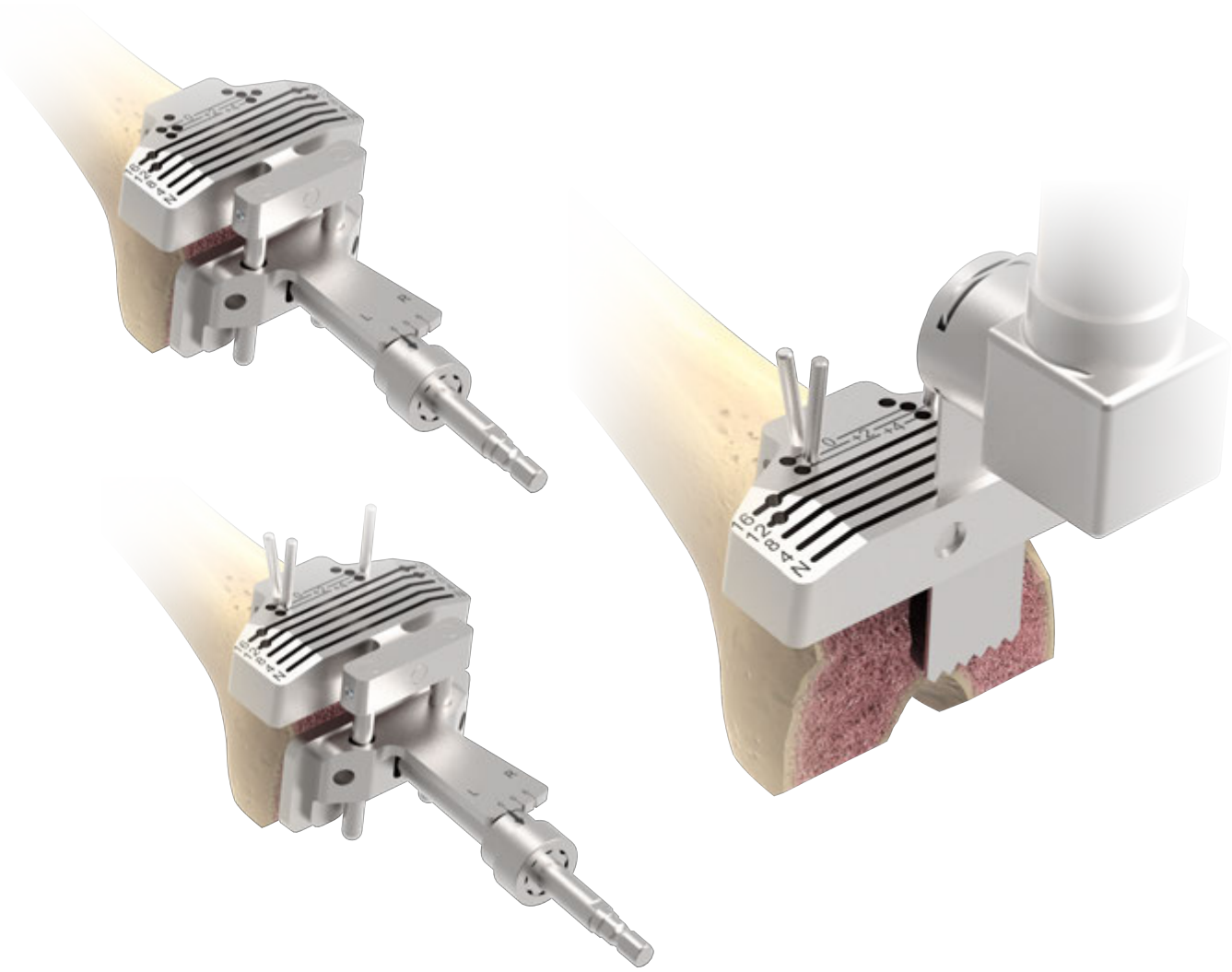
Instruments

Distal Femoral Plate
S: 9303-2701
M: 9303-2703
L: 9303-2705

Femoral IM Alignment Guide
9303-2706

Straight Stem Reamer
Cat. No. varies by size

Femoral IM Rod
9303-3210



2. Attach the Distal **Femoral Alignment Guide** to the **Distal Femoral Resection Guide**, and then slide the assembly onto the **Femoral IM Alignment Guide**.

3. Pin the **Distal Femoral Resection Guide**. Then remove the alignment guides assembly from the reamer.

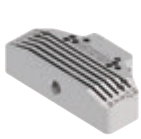
4. Perform a 2 mm clean cut when resecting through the “N” slot on the **Distal Femoral Resection Guide**.

Note: If adjustment for the resection is needed, utilize the +2 or +4 holes to relocate the **Distal Femoral Resection Guide** accordingly.

Instruments

Femoral IM Alignment Guide
9303-2706

Distal Femoral Alignment Guide
9303-2707



Distal Femoral Resection Guide
9303-2708-RB

Pin
9303-3207

3.3 Non Offset Femoral Sizing and Placement

3.3.1 Femoral Sizing Preparation

1. Assemble the **Femoral Valgus Adaptor** to the appropriate size of **Straight Stem Trial**.

2. Insert the **Femoral Valgus Adaptor** onto the **Femoral Sizing Template** and depress it until it is fully engaged to the sizing template.

3. Connect the **Screw Driver Adaptor** to the **Driver Handle**, then tighten the adaptor to the sizing template with screw driver.

Instruments

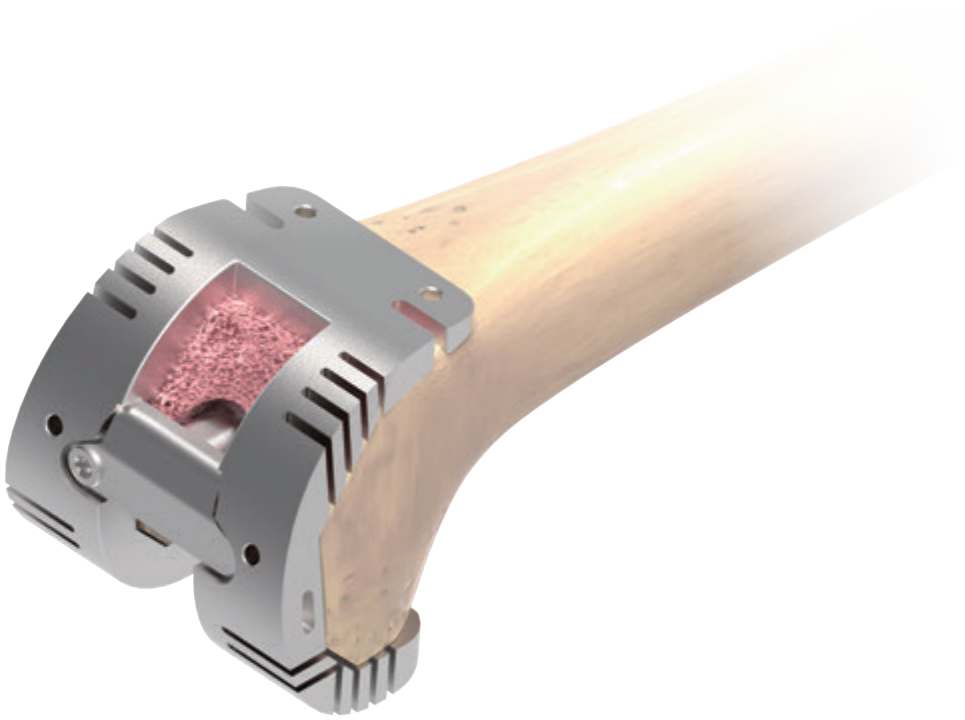
Straight Stem Trial
Cat. No. varies by size

Screw Driver Adaptor
9403-5331-RA

Driver Handle
9403-1302-RA

Femoral Valgus Adaptor
Left: 9303-5333-RB
Right: 9303-5334-RB

Femoral Sizing Template
Cat. No. varies by size



4. Insert the femoral sizing assembly into the canal and assess proper A-P / M-L size and position in relation to the femur.

3.4 Joint Line Evaluation and Flexion/Extension Gap Balancing

1. Once A-P and M-L position of the femoral sizing assembly has been determined, leave the femoral sizing assembly on the femur, and place the proper size **Tibial Spacer Base** on the tibial baseplate assembly with the appropriate thickness **Tibial Spacer**.

2. Perform the joint line evaluation. If the femoral sizing assembly does not contact the distal end of the femur during the evaluation, a **Femoral Distal Spacer** can be utilized as temporary augment.

3. After restore appropriate joint line, balance the extension and flexion gaps.

Instruments

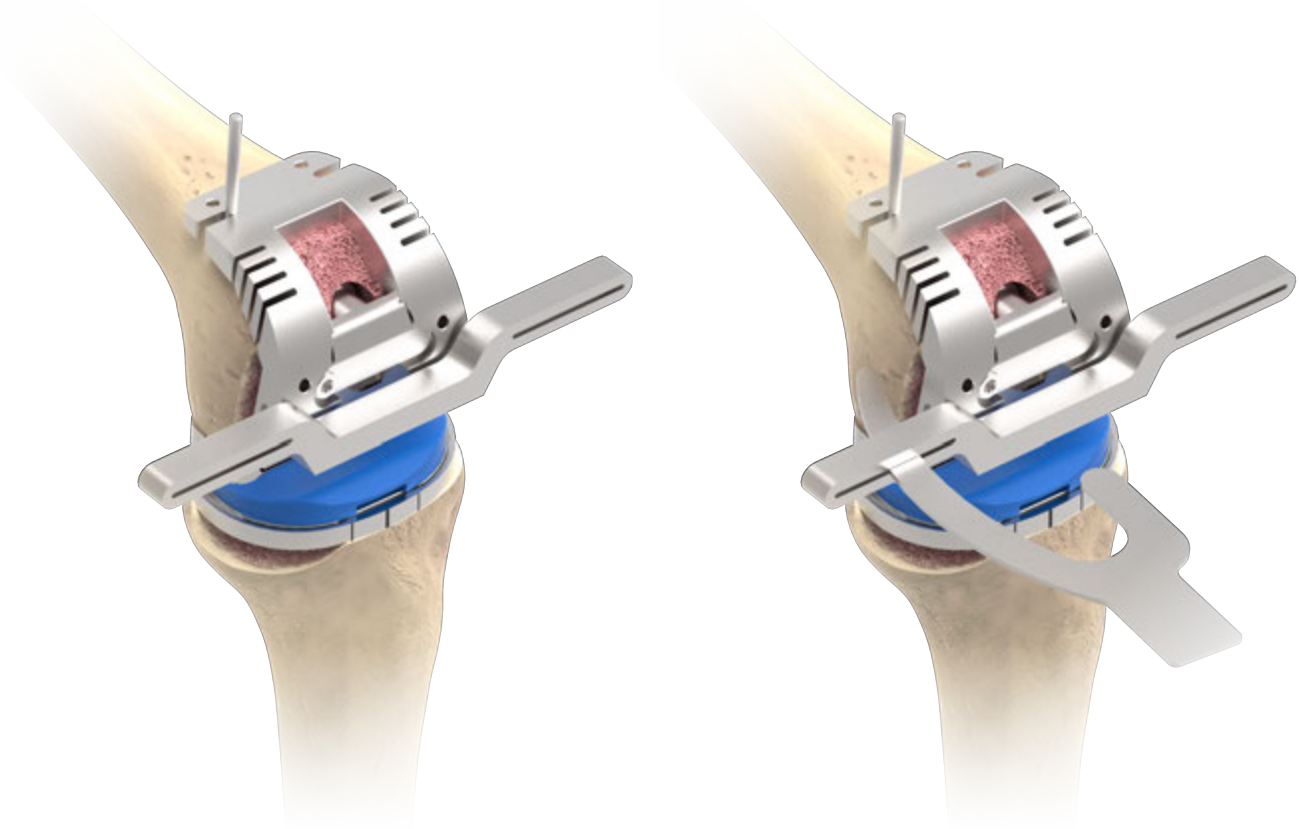
Femoral Valgus Adaptor
Left: 9303-5333-RB
Right: 9303-5334-RB

Femoral Sizing Template
Cat. No. varies by size

Tibial Spacer Base
Cat. No. varies by size

Tibial Spacer
Cat. No. varies by size

Femoral Distal Spacer
2 mm: 9303-5202
4 mm: 9303-5204
6 mm: 9303-5206
8 mm: 9303-5208



3.5 Establish Femoral Rotation

1. Once the joint line has been determined, fix the sizing template with a **Pin** in the upper slot.

2. Attach the **Femoral Rotation Guide** to the **Femoral Sizing Template** by inserting the rotation guide into the slots on the sizing template.

3. To achieve the proper rotation, utilize the **Lower Point Gauge** to align with the transepicondylar axis.

4. If the sizing template is in proper alignment and rotation, secure in place with two **Pins** in the upper two holes.

5. Once the joint line and femoral rotation is confirmed, additional bone resection can be performed if needed. The augment space is prepared through 4/8/12/16 resection slots on the **Femoral Sizing Template**.

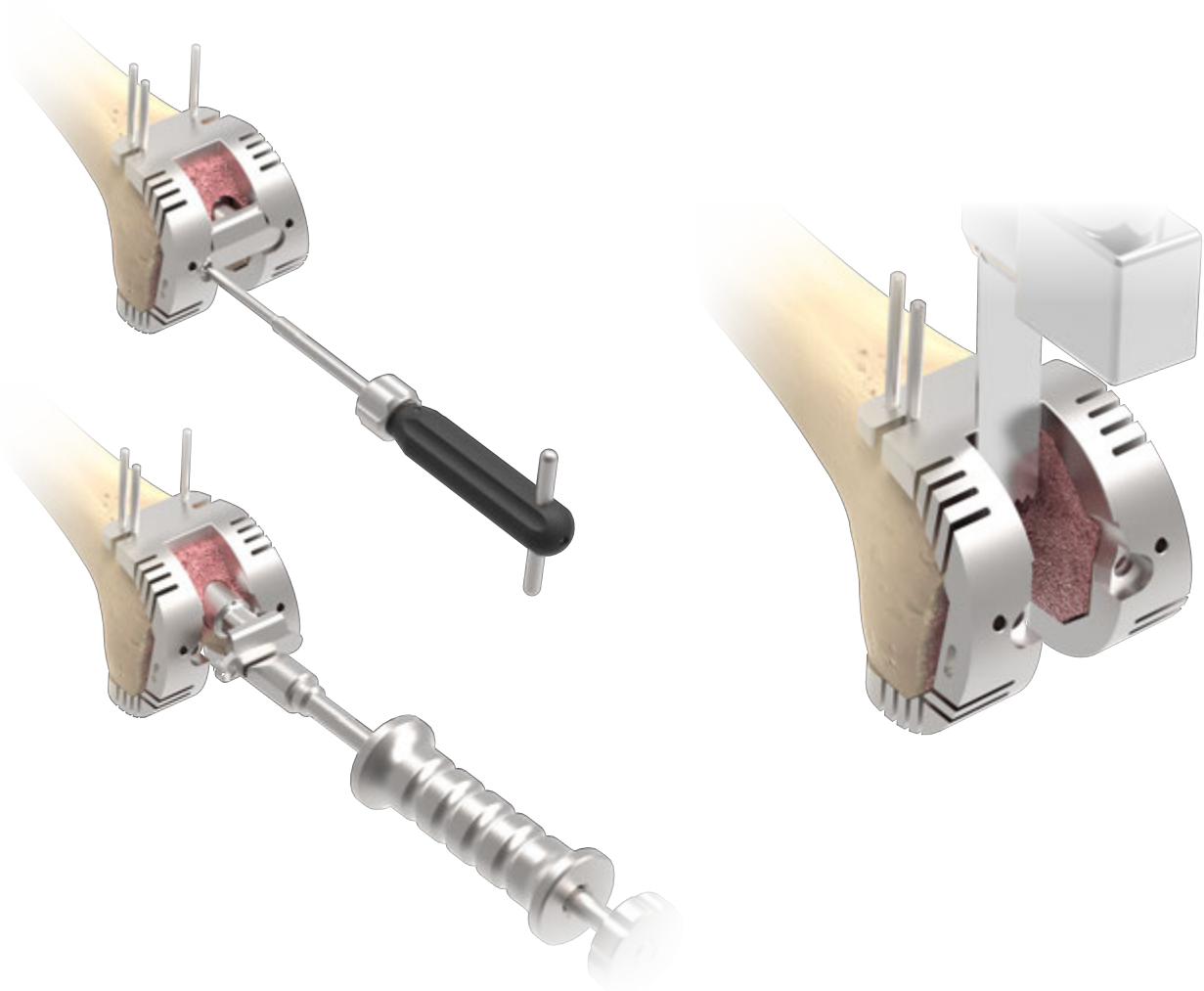
Instruments

Pin
9303-3207

Femoral Sizing Template
Cat. No. varies by size

Femoral Rotation Guide
9303-5315

Lower Point Gauge
9301-2251



3.6 Femoral Box Preparation

1. Disassemble the **Femoral Valgus Adaptor** and the **Femoral Sizing Template** with the screw driver.

2. Utilize the **Sliding Hammer** together with the **Valgus Adaptor Remover** to remove the Femoral Valgus **Adaptor** and the **Stem Trial**.

3. Then complete the resection.

Instruments

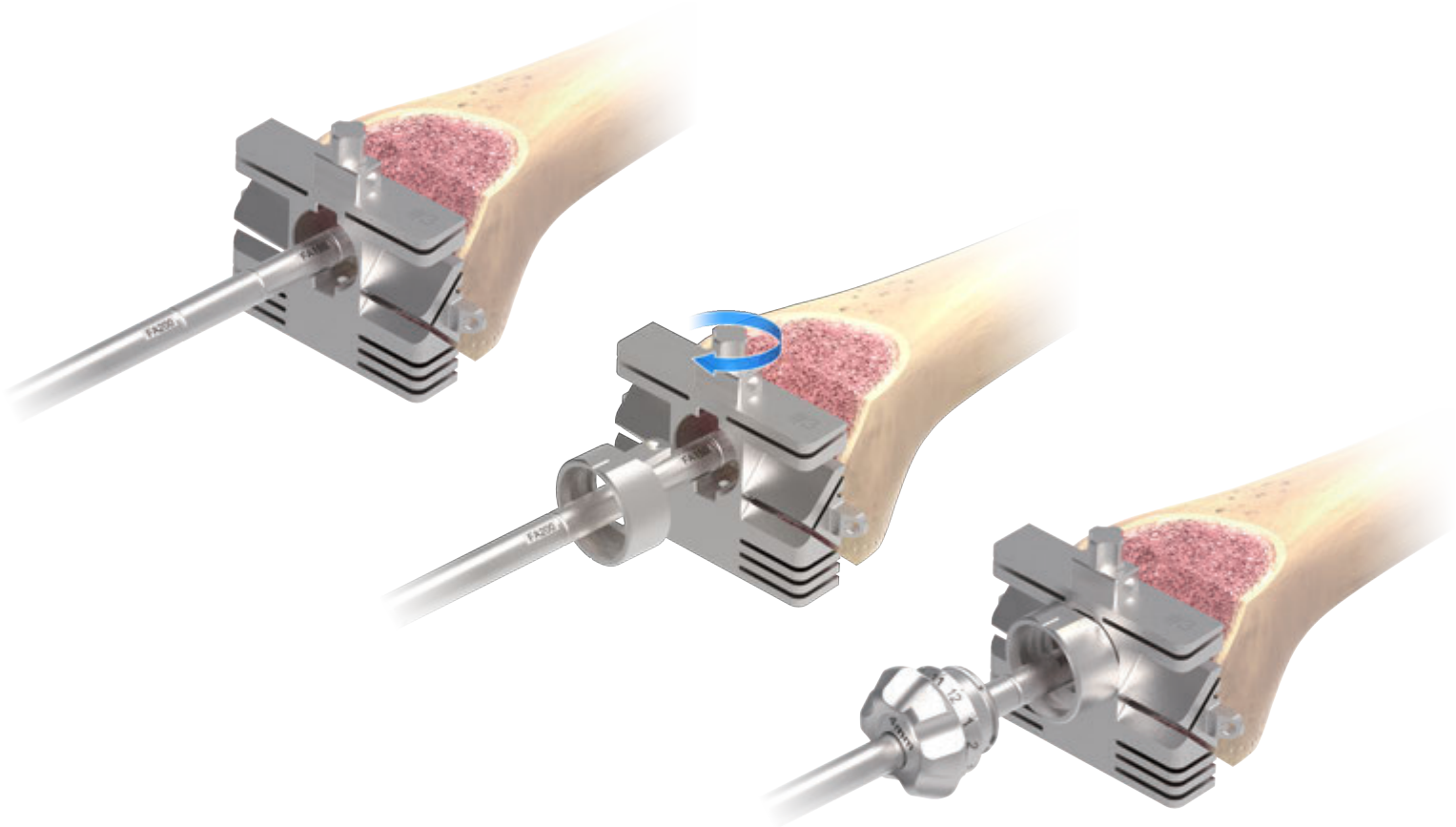
Straight Stem Trial
Cat. No. varies by size

Femoral Valgus Adaptor
Left: 9303-5333-RB
Right: 9303-5334-RB

Femoral Sizing Template
Cat. No. varies by size

Sliding Hammer
9303-5311

Valgus Adaptor Remover
9303-5126



3.7 Offset Femoral Preparation

3.7.1 Offset Sizing and Placement

1. Access the proper ML size with the **Femoral Cutting Guide** over the **Straight Stem Reamer** and against the surface of distal femur.

2. Attach the **Femoral Offset Adaptor** to the **Femoral Cutting Guide** thus creating 6 degrees valgus angle for left knee or right knee (by referring to the indicator). Then, secure the adaptor with the upper knob.

3. Evaluate the appropriate offset level with **Femoral Offset Bushing**.

Note: The **Femoral Cutting Guide** can be stabilized on the distal femur by assembling the **Cutting Guide Spacer** through the backside groove of the **Femoral Cutting Guide**.

Instruments

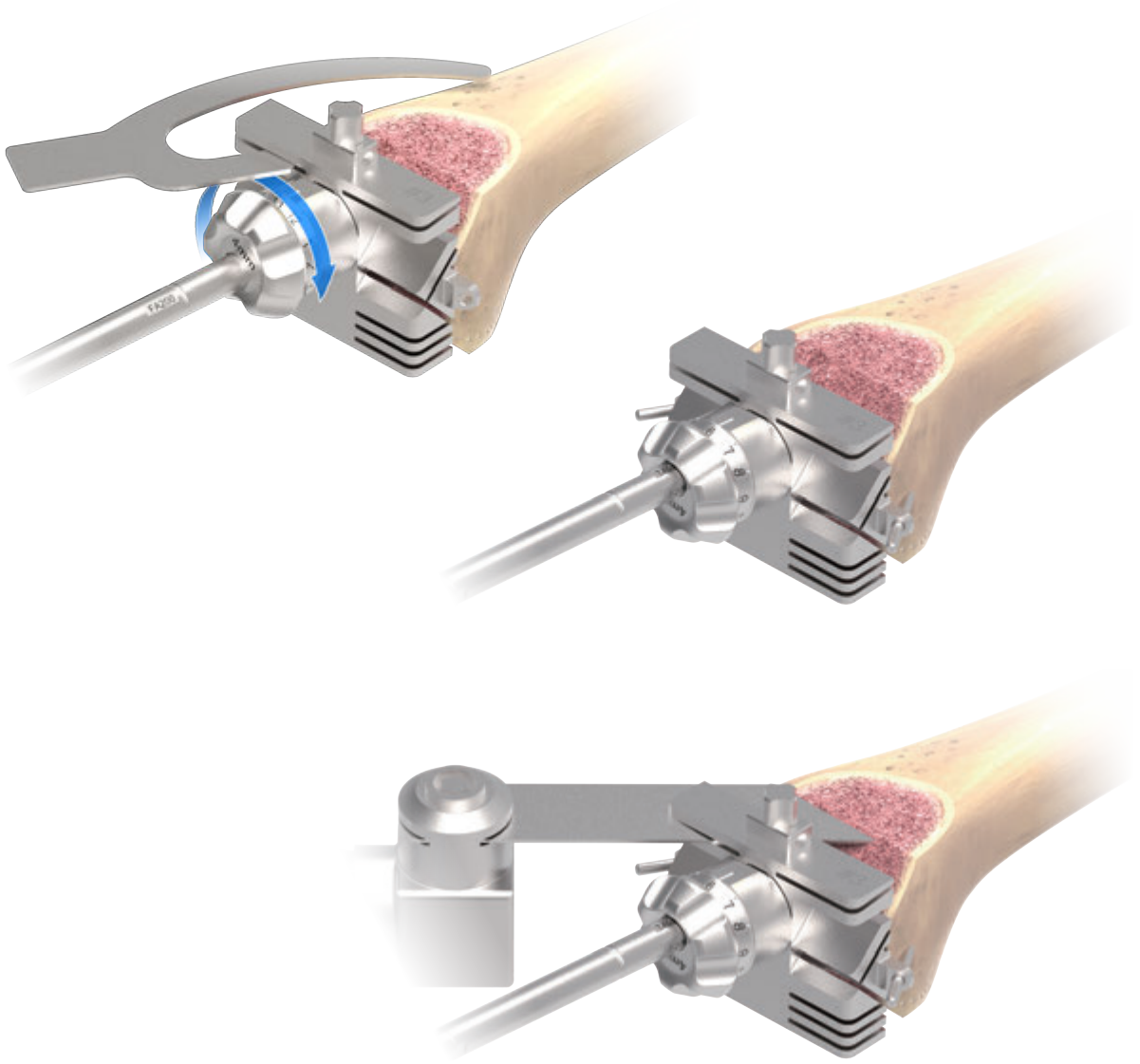
Straight Stem Reamer
Cat. No. varies by size

Femoral Cutting Guide
Cat. No. varies by size

Femoral Offset Adaptor
9303-5311-RA

Femoral Offset Bushing
Neutral: 9303-5310
2 mm: 9303-5312
4 mm: 9303-5314

Cutting Guide Spacer
2 mm: 9303-5402
4 mm: 9303-5404
6 mm: 9303-5406
8 mm: 9303-5408



4. Dial the **Femoral Offset Bushing** until the **Femoral Cutting Guide** is positioned appropriately for medial and lateral coverage as well as anterior and posterior bone cut. Check the resection level with the **Lower Point Gauge**.

5. Fix the **Femoral Cutting Guide** to the distal femur with two **Pins**. Then**,** complete the A/P and chamfer cuts.

Instruments

Straight Stem Reamer
Cat. No. varies by size

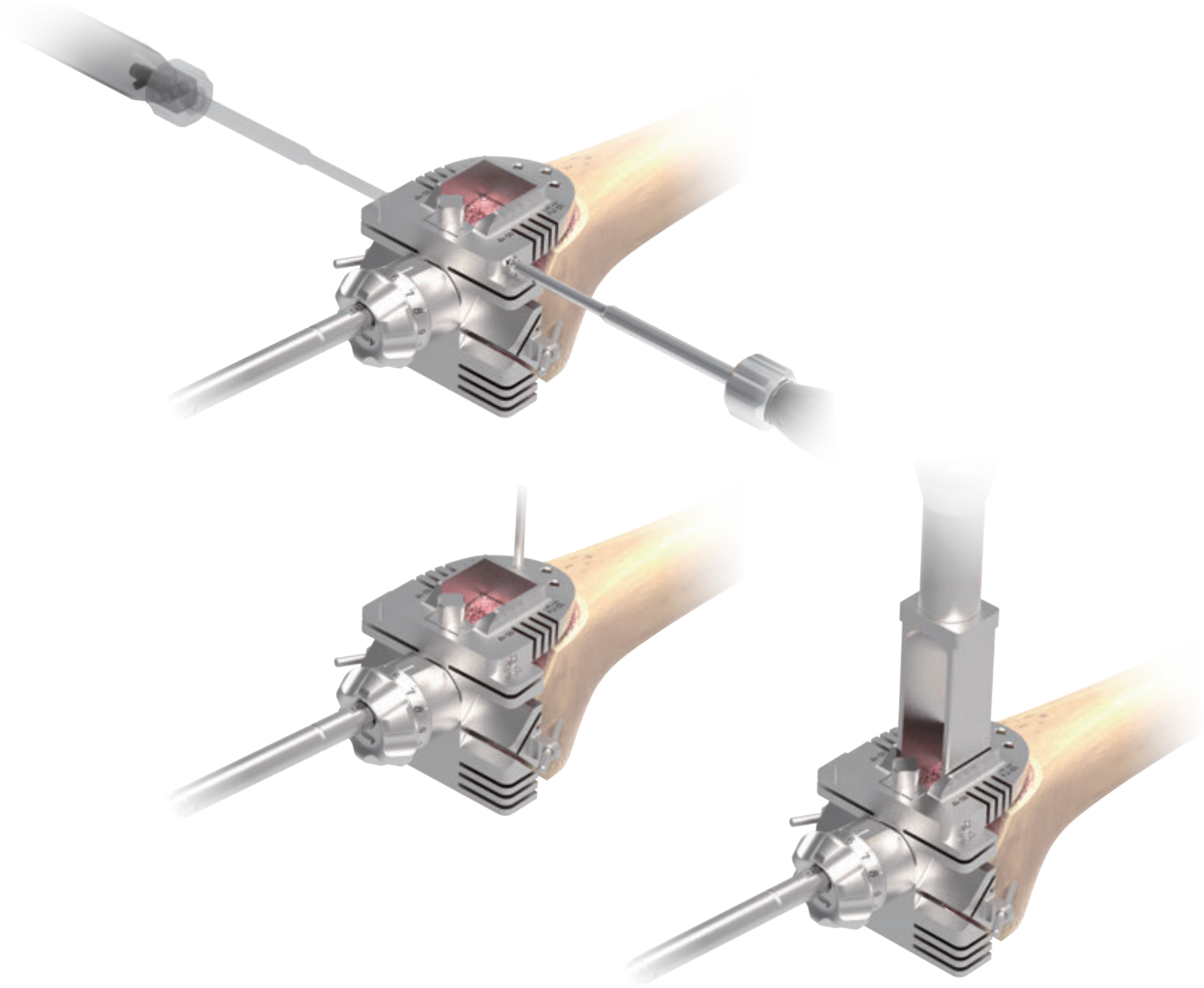
Femoral Cutting Guide
Cat. No. varies by size

Femoral Offset Adaptor
9303-5311-RA

Femoral Offset Bushing
Neutral: 9303-5310
2 mm: 9303-5312
4 mm: 9303-5314

Lower Point Gauge
9301-2251

Pin
9303-3207



3.7.2 Intercondylar Box and Offset Femoral Boss Preparation

1. Place the **Box Cutting Plate** on the anterior femur and secure the **Box Cutting Plate** to the **Femoral Cutting Guide** with the Screw Driver.

2. Pin the **Box Cutting Plate** on the medial side of anterior femur to enhance fixation.

3. Advance the **PS Notch Punch** into the **Box Cutting Plate** until a positive stop is achieved.

Instruments

Femoral Cutting Guide
Cat. No. varies by size

Femoral Offset Adaptor
9303-5311-RA

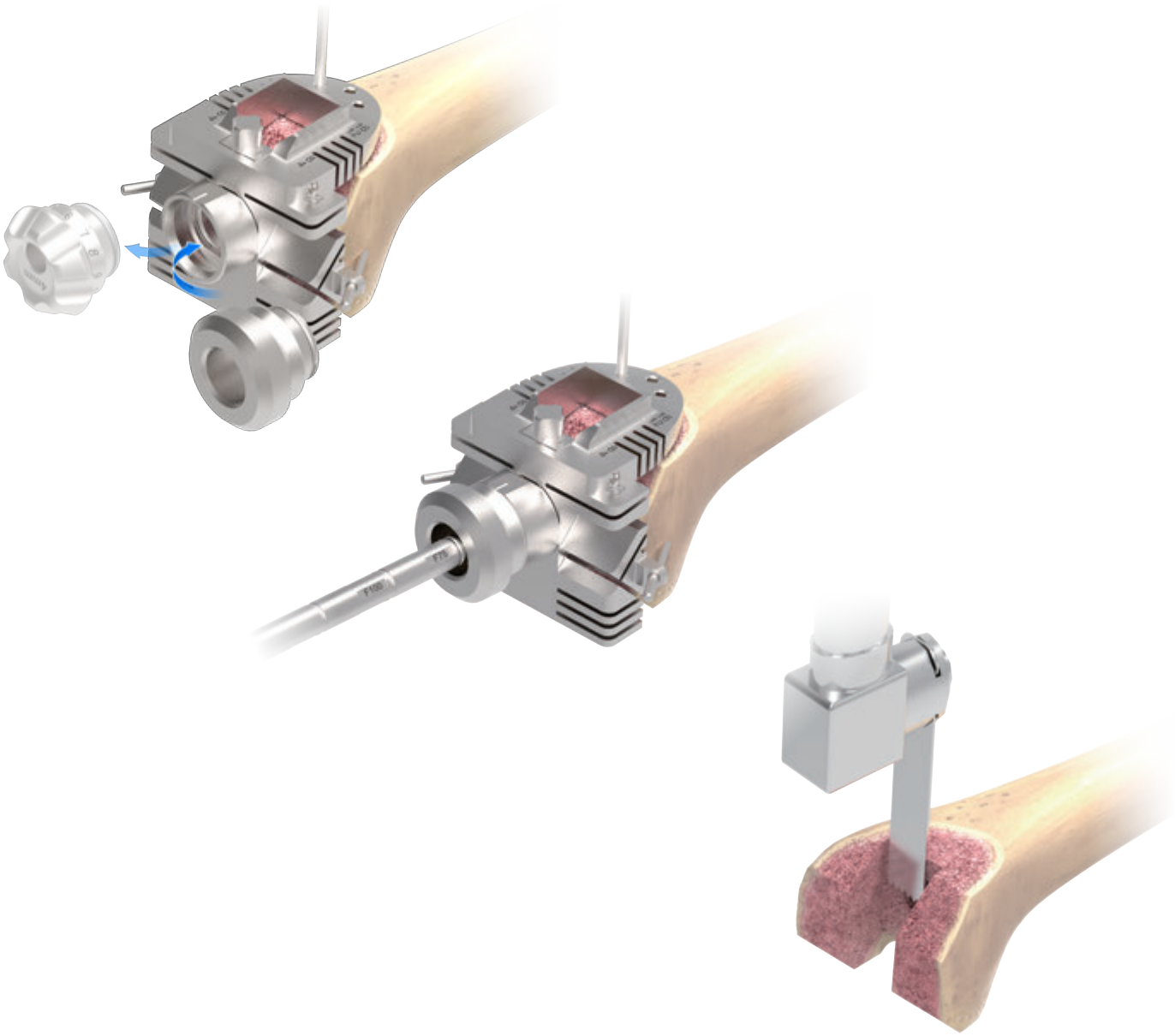
Femoral Offset Bushing
Neutral: 9303-5310
2 mm: 9303-5312
4 mm: 9303-5314

Box Cutting Plate
9303-2738-RA

Screw Driver Adaptor
9403-5331-RA

Driver Handle
9403-1302-RA

PS Notch Punch
9303-5125



4. Replace the **Femoral Offset Bushing** with the **Femoral Offset Drill Guide**.

5. Advance the 16 mm **Straight Stem Reamer** into the **Femoral Offset Drill Guide** until the depth marked “F 75” in line with the **Femoral Offset Drill Guide**.

6. Remove the assembly from the distal femur and complete the intercondylar box resection.

Instruments

Straight Stem Reamer
Cat. No. varies by size

Femoral Cutting Guide
Cat. No. varies by size

Femoral Offset Adaptor
9303-5311-RA

Femoral Offset Drill Guide
9303-5316

Pin
9303-3207

Box Cutting Plate
9303-2738-RA

4 Final Trial Reduction

4.1 Femoral Trial Preparation

1. Attach the appropriate **Femoral Posterior Augment Trial**, and/or the **Femoral Distal Augment Trial** to the proper **Femoral Trial** by snapping into place.

2. Assemble the **Femoral Trial** to the **Straight Stem Trial** and the **Offset Adaptor Trial**, if desired.

Instruments

Straight Stem Trial
Cat. No. varies by size

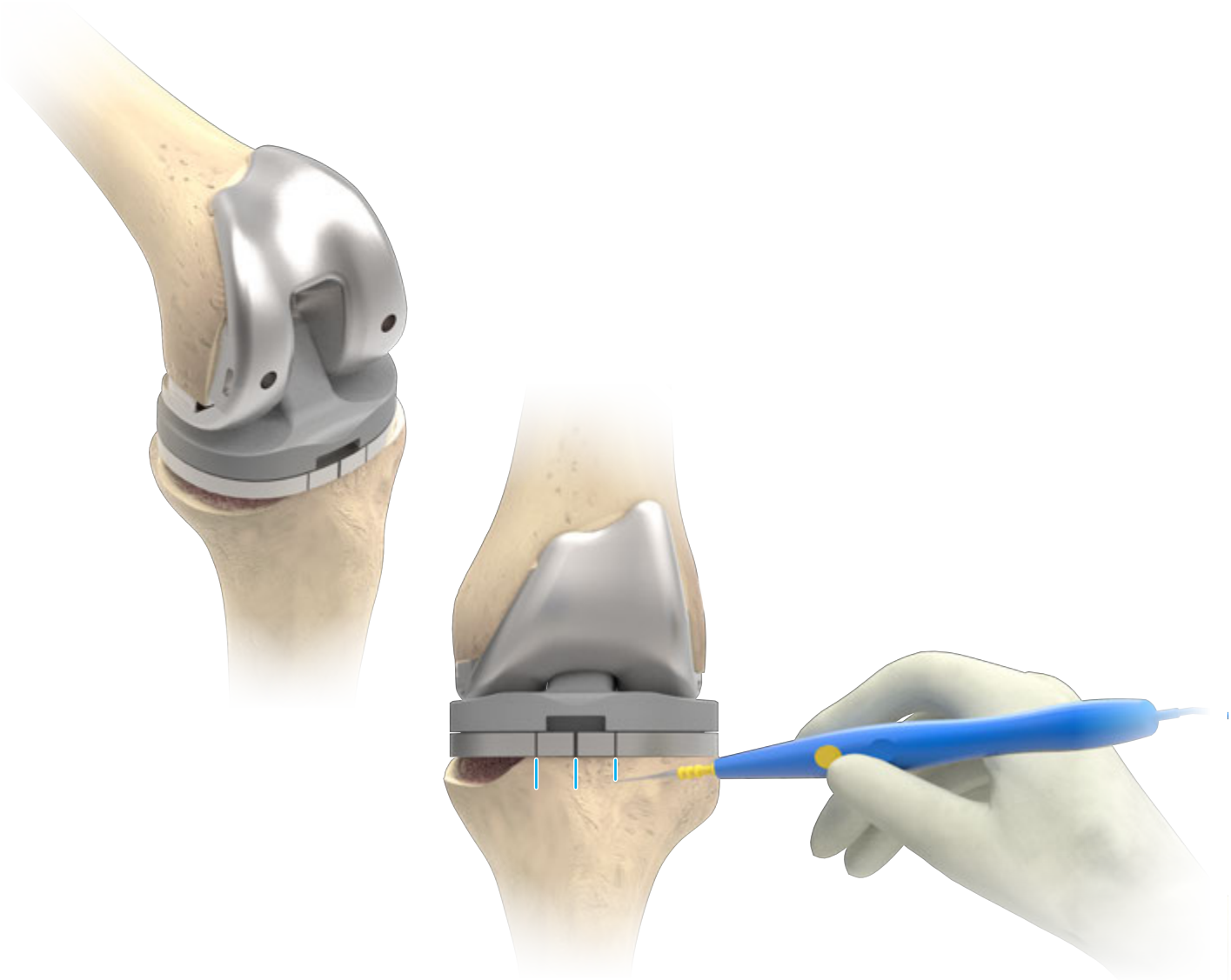
Offset Adaptor Trial
2 mm: 2903-2010
4 mm: 2903-2020
6 mm: 2903-2030

Femoral Posterior Augment Trial
Cat. No. varies by size

Femoral Distal Augment Trial
Cat. No. varies by size

Femoral Distal Augment Trial
Cat. No. varies by size

Femoral Trial
Cat. No. varies by size



3. Remove **Tibial Spacer Base** and **Tibial Spacer** from the **Tibial Baseplate Trial**.

4. With the tibial trial assembly in the tibia and the femoral trial assembly in the femur, insert the appropriate size **Tibial Insert Trial**.

5. Perform a trial reduction and use the three anterior laser marks on the **Tibial Baseplate Trial** as references to mark on the tibia.

Instruments

Tibial Baseplate Trial
Cat. No. varies by size

Tibial Spacer Base
Cat. No. varies by size

Tibial Spacer
Cat. No. varies by size

Tibial Insert Trial
Cat. No. varies by size

4.2 Final Tibial Preparation

4.2.1 Tibial Augment Resection

1. If tibial augments are needed, use two **Pins** through the **Tibial Baseplate Trial** and pin the baseplate trial into the proximal tibia to lock the rotational orientation.

2. Remove the tibial trial, and place the proper **Tibial Sizing Template** on the proximal tibial surfece through the pins. Make sure the laser marks on the sizing template align to the marks on the anterior tibia. Then attach the **Tibial Alignment Sleeve** on the top of the template.

3. Reposition the tibial resection assembly and fix it with two **Pins** to the anterior tibia.

4. Remove the template, sleeve and alignment guide, leaving the **Tibial Resection Guide** in place. Additional resection of 5,10, or 15 mm may now be performed.

Instruments

Tibial Sizing Template
Cat. No. varies by size

Tibial IM Alignment Guide
9403-2310

Tibial Resection Guide
Left: 9403-2321-RB
Right: 9403-2322-RB

Pin
9303-3207

Tibial Alignment Sleeve
9403-2316

4.2.2 Tibial Fin Punching

1. If necessary attach the appropriate **Tibial Augment Trials** to the distal aspect of the **Tibial Sizing Template**, then replace the template assembly to the proximal tibial surface.

2. Assemble the proper size **Tibial Punch** to the **Tibial Punch Handle**, insert the punch into the proximal tibial template and impact until fully seated.

Instruments

Tibial Sizing Template
Cat. No. varies by size

Tibial Augment Trials
Cat. No. varies by size

Tibial Punch Handle
9403-1101-RC

Tibial Punch
S: 9403-6011
M: 9403-6021
L: 9403-6031

4.2.3 Final Trial Reduction

1. Assemble the appropriate **Tibial Baseplate Trial**, **Straight Stem Trial**, **Tibial Augment Trial**, and/or **Offset Adaptor Trial** for which the tibia has been prepared.

2. Insert the final assembly into the tibia and place the proper **Tibial Insert Trial**.

3. Check the range of motion, joint stability and perform any necessary soft tissue releases.

Instruments

Straight Stem Trial
Cat. No. varies by size

Tibial Baseplate Trial
Cat. No. varies by size

Offset Adaptor Trial
2 mm: 2903-2010
4 mm: 2903-2020
6 mm: 2903-2030

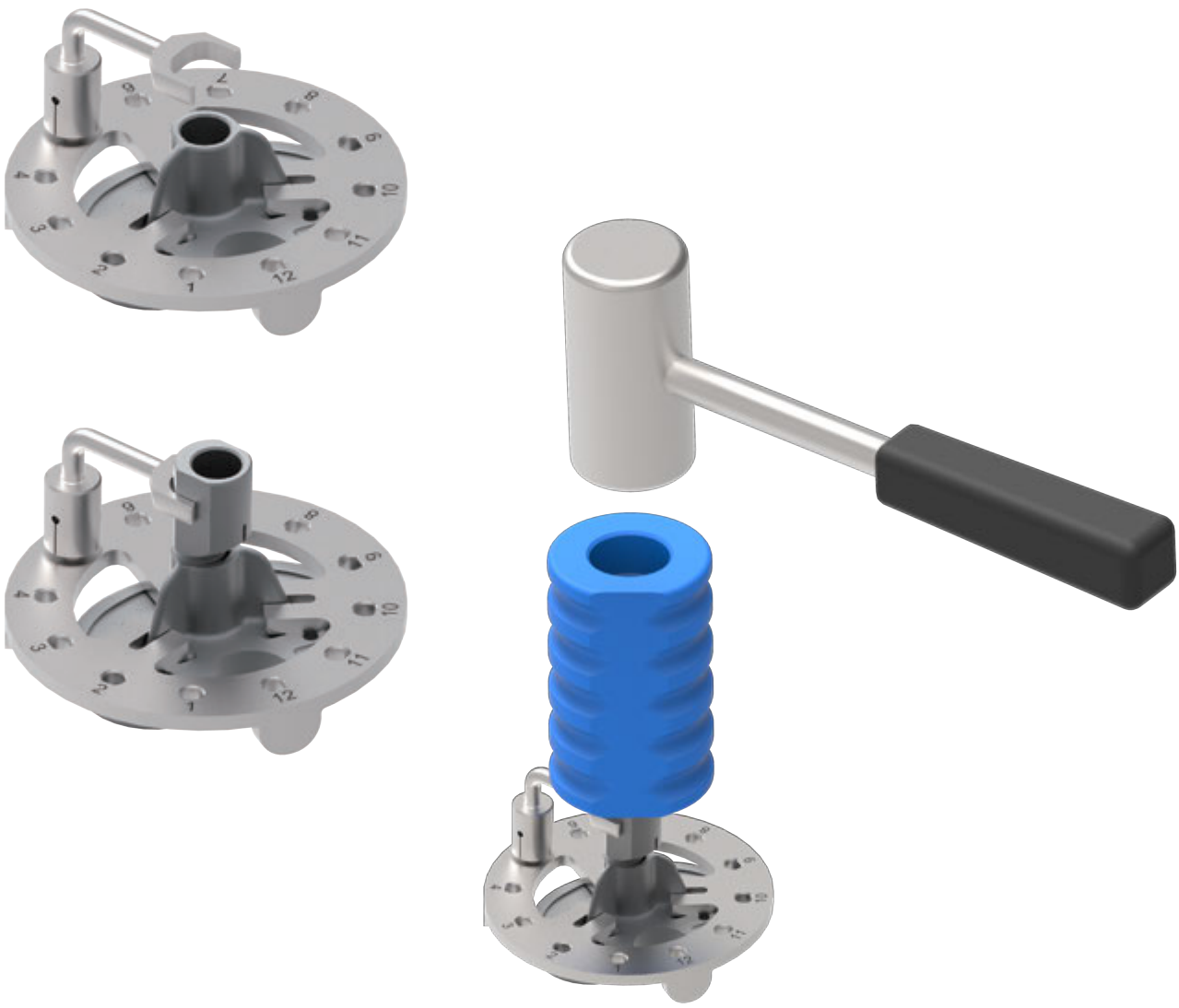
Tibial Insert Trial
Cat. No. varies by size

Tibial Augment Trials
Cat. No. varies by size

5 Implantation

5.1 Tibial Component Preparation

1. If the Offset Stem Adaptor is needed, set the **Tibial Offset Fixture** on the tibial baseplate implant and hold the adaptor with **Tibial Offset Wrench**, which is positioned in the number that was determined. Place the **Stem Impactor** on the adaptor, and impact on the impactor solidly to ensure the taper lock is properly engaged between the adaptor and the baseplate implant.



Instruments

Tibial Offset Fixture
9403-5320

Tibial Offset Wrench
9403-5322

Stem Impactor
9403-5340

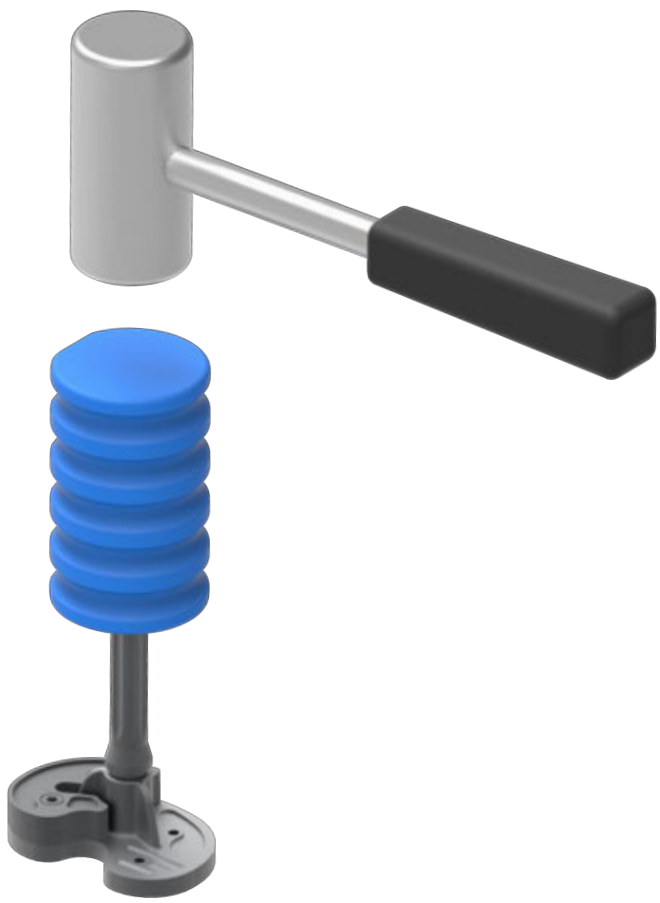
2. If the augment(s) is needed, screw the appropriate tibial augment(s) into the distal aspect of the tibial baseplate implant with **Screw Driver**.

3. Secure the augments by applying moderate torque to tighten the screw.

Instruments

Screw Driver Adaptor
9403-5331-RA

Driver Handle
9403-1302-RA



4. Choose the appropriate length and diameter stem that was used for the tibial trial.

5. Insert the stem extension implant into the offset adaptor and/or the tibial baseplate implant, and protect the stem by placing the **Stem Impactor** on the tip of the stem.

6. Impact on the impactor solidly to ensure the taper lock is properly engaged.

Instruments

Stem Impactor
9403-5340

5.2 Femoral Component Preparation

1. Select the size of femoral component implant and stem that was used for the femoral trial.

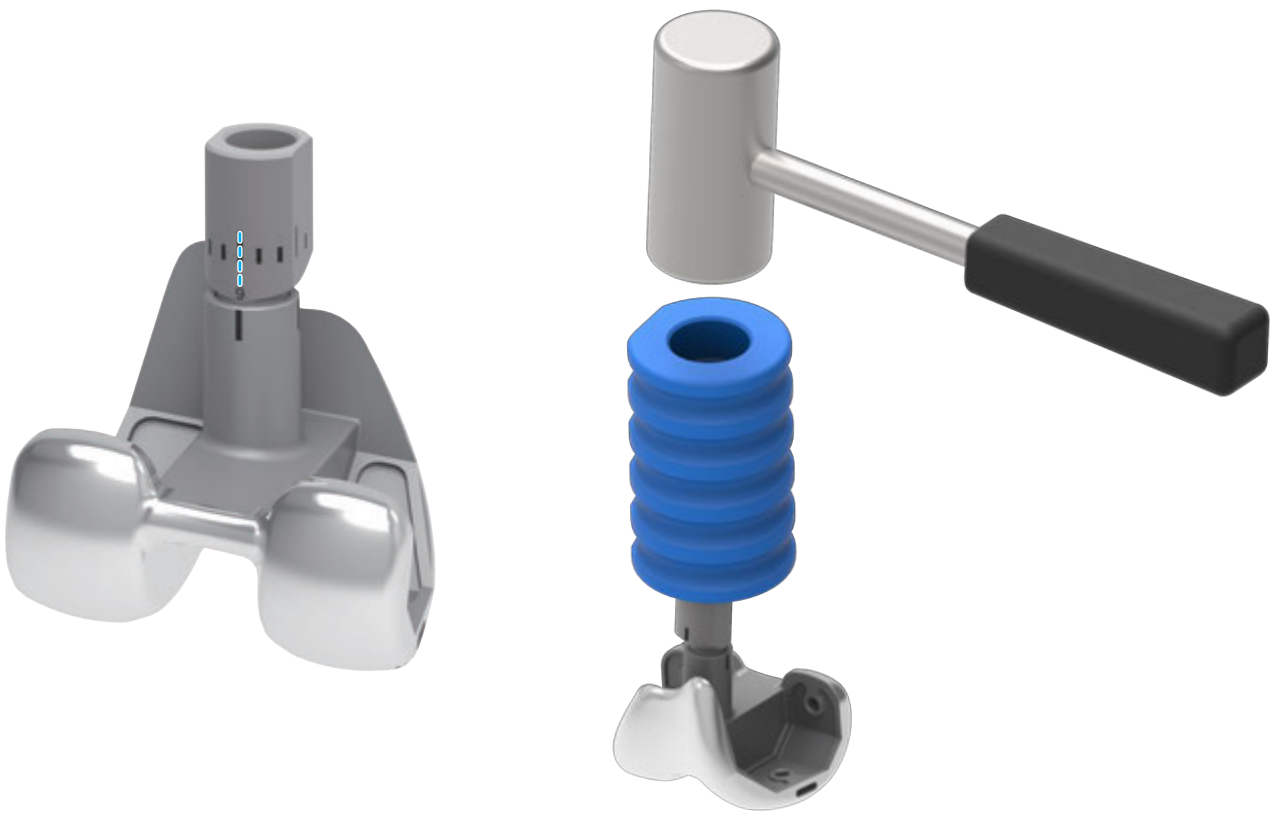
2. If the femoral distal augments or/and posterior augments are needed, select the appropriate size femoral distal or/and posterior augments and utilize the assembly of the **Screw Driver Adaptor** / **Screw Driver Adaptor L** and **Driver Handle** to secure the augments.

Instruments

Screw Driver Adaptor
9403-5331-RA

Driver Handle
9403-1302-RA

Screw Driver Adaptor L
9303-5329



3. If the offset adaptor is needed, take the adaptor trial as a reference (obtained previously in the **3.4 Offset Femoral Sizing and Placement section**, p.17) and aligns the predetermined clock position on the offset adaptor with the etched line on the posterior side of the femoral component. Insert the offset adaptor into the femoral implant. Place the **Stem Impactor** on the adaptor and impact on the impactor solidly to ensure the taper lock is properly engaged.

Instruments

Stem Impactor
9403-5340

4. Select the appropriate length and diameter stem that was used for the femoral trial.

5. Insert the stem extension implant into the offset adaptor and/or femoral component implant, and protect the stem by placing the **Stem Impactor** on the tip of the stem.

6. Impact on the impactor solidly twice to ensure the taper lock is properly engaged.

7. After the stem has been impacted into the femoral component, insert the femoral screw into the intercondylar hole.

8. Utilize the assembly of the **Screw Driver Adaptor** and **Driver Handle**, then apply moderate torque to tighten the femoral screw to the femoral component and the stem/offset adaptor.

Instruments

Screw Driver Adaptor
9403-5331-RA

Driver Handle
9403-1302-RA

5.3 Implant Fixation

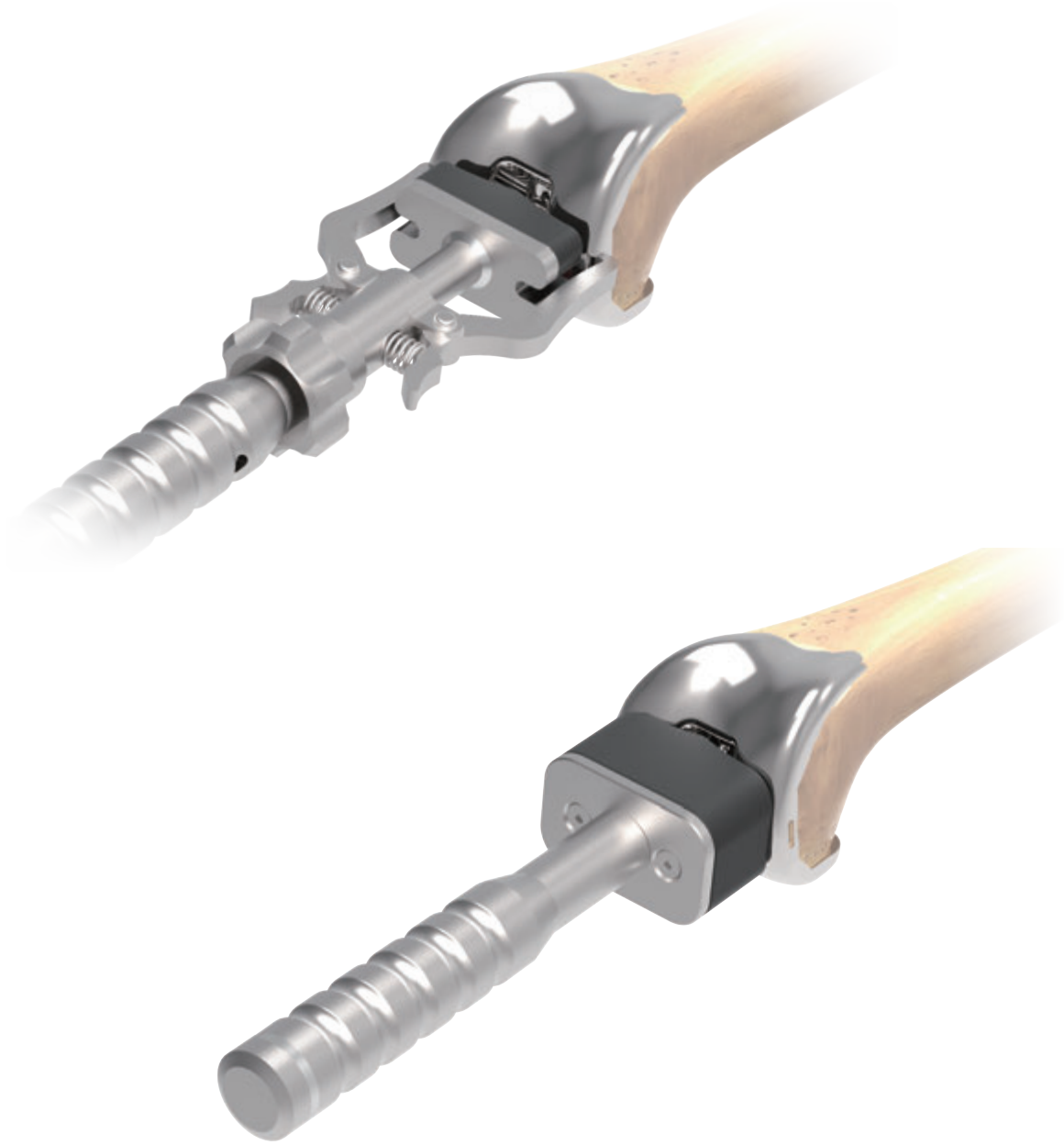
1. Apply cement under the tibial baseplate and insert the tibial implant into the position with the **Tibial Baseplate Driver**.

2. Impact the tibial baseplate implant with the **Tibial Baseplate Impactor** and remove excess cement.

Instruments

Tibial Baseplate Driver
9403-5101-RC

Tibial Baseplate Impactor
9403-5102-RF



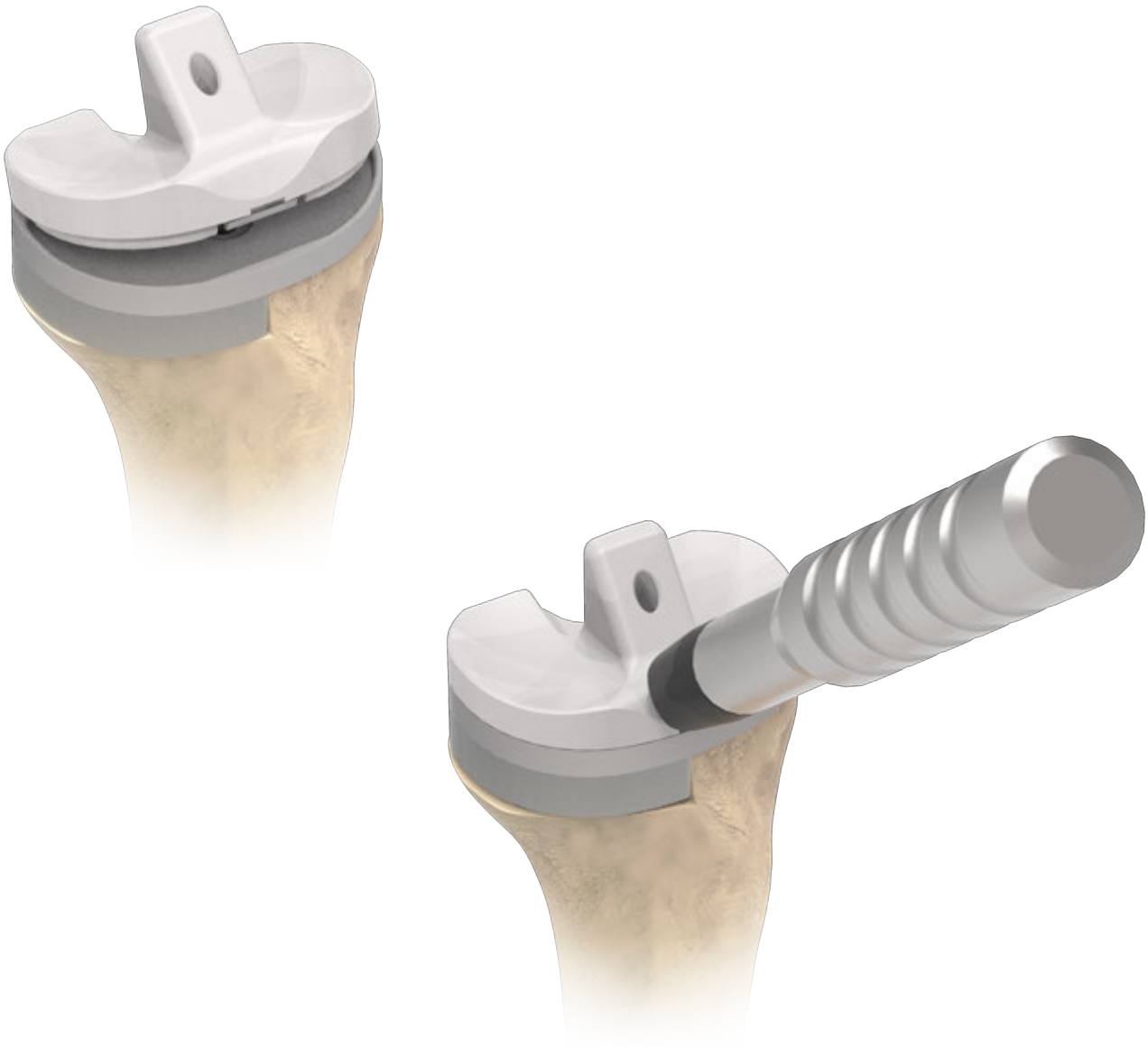
3. Place cement onto the surface of the femoral component implant and insert the implant into the position with the **Femoral Driver**.

4. Impact the implant with the **Femoral Impactor** and remove excess cement.

Instruments

Femoral Driver
9303-5110-RD

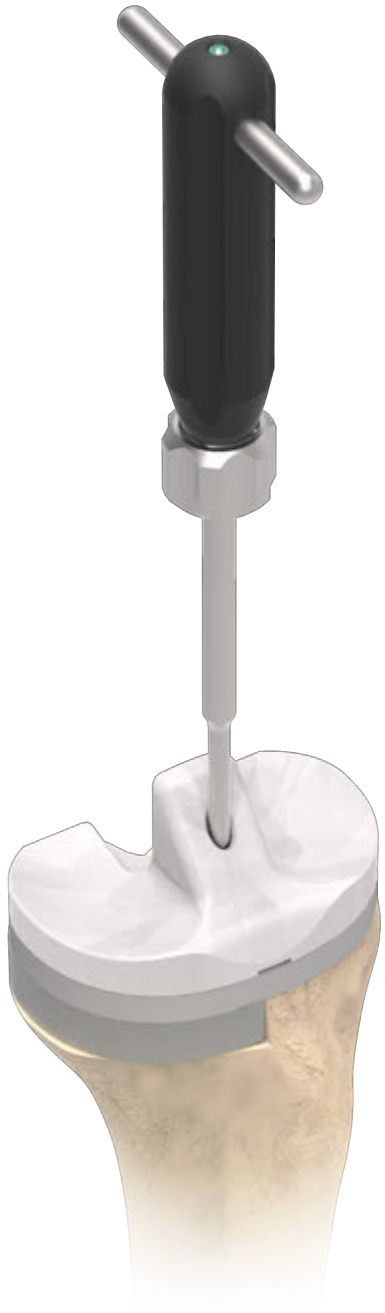
Femoral Impactor
9303-5103-RB



5. Place the appropriate size tibial insert on the tibial baseplate and use the **Universal Impactor** to fully seat the insert.

Instruments

Universal Impactor
9303-5119-RB



6. After the tibial insert is emplaced, tighten the screw that is inside the tibial insert with the assembly of the **Screw Driver Adaptor** and **Driver Handle**.

Instruments

Screw Driver Adaptor
9403-5331-RA

Driver Handle
9403-1302-RA

Component

Special Order Items

Femoral Component

	Left	Right
#1	2103-5110	2103-5210
#2	2103-5120	2103-5220
#3	2103-5130	2103-5230
#4	2103-5140	2103-5240
#5	2103-5150	2103-5250
#6	2103-5160	2103-5260

Tibial Baseplate

#1	2203-5210
#2	2203-5220
#3	2203-5230
#4	2203-5240
#5	2203-5250
#6	2203-5260

Tibial Insert

	UHMWPE							
	9 mm	11 mm	13 mm	15 mm	18 mm	21 mm	25 mm	30 mm
#1	2303-5011	2303-5012	2303-5013	2303-5014	2303-5015	2303-5016	2303-5017	2303-5018
#2	2303-5021	2303-5022	2303-5023	2303-5024	2303-5025	2303-5026	2303-5027	2303-5028
#3	2303-5031	2303-5032	2303-5033	2303-5034	2303-5035	2303-5036	2303-5037	2303-5038
#4	2303-5041	2303-5042	2303-5043	2303-5044	2303-5045	2303-5046	2303-5047	2303-5048
#5	2303-5051	2303-5052	2303-5053	2303-5054	2303-5055	2303-5056	2303-5057	2303-5058
#6	2303-5061	2303-5062	2303-5063	2303-5064	2303-5065	2303-5066	2303-5067	2303-5068

	XPE							
	9 mm	11 mm	13 mm	15 mm	18 mm	21 mm	25 mm	30 mm
#1	2303-5611	2303-5612	2303-5613	2303-5614	2303-5615	2303-5616	2303-5617	2303-5618
#2	2303-5621	2303-5622	2303-5623	2303-5624	2303-5625	2303-5626	2303-5627	2303-5628
#3	2303-5631	2303-5632	2303-5633	2303-5634	2303-5635	2303-5636	2303-5637	2303-5638
#4	2303-5641	2303-5642	2303-5643	2303-5644	2303-5645	2303-5646	2303-5647	2303-5648
#5	2303-5651	2303-5652	2303-5653	2303-5654	2303-5655	2303-5656	2303-5657	2303-5658
#6	2303-5661	2303-5662	2303-5663	2303-5664	2303-5665	2303-5666	2303-5667	2303-5668

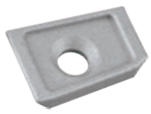
Tibial Insert, Low Constrained

	XPE, LC type							
	9 mm	11 mm	13 mm	15 mm	18 mm	21 mm	25 mm	30 mm
#1	2303-5211	2303-5212	2303-5213	2303-5214	2303-5215	2303-5216	2303-5217	2303-5218
#2	2303-5221	2303-5222	2303-5223	2303-5224	2303-5225	2303-5226	2303-5227	2303-5228
#3	2303-5231	2303-5232	2303-5233	2303-5234	2303-5235	2303-5236	2303-5237	2303-5238
#4	2303-5241	2303-5242	2303-5243	2303-5244	2303-5245	2303-5246	2303-5247	2303-5248
#5	2303-5251	2303-5252	2303-5253	2303-5254	2303-5255	2303-5256	2303-5257	2303-5258
#6	2303-5261	2303-5262	2303-5263	2303-5264	2303-5265	2303-5266	2303-5267	2303-5268

Component

Special Order Items

Femoral Augment Set



	Distal				Distal		Posterior	
	4 mm LM/RL	4 mm LL/RM	8 mm LM/RL	8 mm LL/RM	12 mm	16 mm	4 mm	8 mm
#1	2603-5111	2603-5211	2603-5112	2603-5212	2603-5313	2603-5314	2603-5011	2603-5012
#2	2603-5121	2603-5221	2603-5122	2603-5222	2603-5323	2603-5324	2603-5021	2603-5022
#3	2603-5131	2603-5231	2603-5132	2603-5232	2603-5333	2603-5334	2603-5031	2603-5032
#4	2603-5141	2603-5241	2603-5142	2603-5242	2603-5343	2603-5344	2603-5041	2603-5042
#5	2603-5151	2603-5251	2603-5152	2603-5252	2603-5353	2603-5354	2603-5051	2603-5052
#6	2603-5161	2603-5261	2603-5162	2603-5262	2603-5363	2603-5364	2603-5061	2603-5062

Tibial Augment




					Ti Plasma Spray	
	5 mm	10 mm	15 mm LM/RL	15 mm LL/RM	15 mm LM/RL	15 mm LL/RM
#1	2803-5211	2803-5212	2803-5113	2803-5213	2803-5313	2803-5413
#2	2803-5221	2803-5222	2803-5123	2803-5223	2803-5323	2803-5423
#3	2803-5231	2803-5232	2803-5133	2803-5233	2803-5333	2803-5433
#4	2803-5241	2803-5242	2803-5143	2803-5243	2803-5343	2803-5443
#5	2803-5251	2803-5252	2803-5153	2803-5253	2803-5353	2803-5453
#6	2803-5261	2803-5262	2803-5163	2803-5263	2803-5363	2803-5463

Extension Stem



	Straight Stem					Curved Stem	
	30 mm	75 mm	100 mm	150 mm	200 mm	150 mm	200 mm
Ø10	N/A	2703-5011	2703-5021	2703-5051	2703-5061	2703-5031	2703-5041
Ø12	N/A	2703-5012	2703-5022	2703-5052	2703-5062	2703-5032	2703-5042
Ø14	2703-5003	2703-5013	2703-5023	2703-5053	2703-5063	2703-5033	2703-5043
Ø16	N/A	2703-5014	2703-5024	2703-5054	2703-5064	2703-5034	2703-5044
Ø18	N/A	2703-5015	2703-5025	2703-5055	2703-5065	2703-5035	2703-5045
Ø20	N/A	2703-5016	2703-5026	2703-5056	2703-5066	2703-5036	2703-5046

Offset Stem Adaptor

2 mm	2903-1010
4 mm	2903-1020
6 mm	2903-1030

Femoral Screw

M5 x 14 mm	2903-1014

Instrument

Special Order Items

Femoral Trial

	Left	Right
#1	2103-6110	2103-6210
#2	2103-6120	2103-6220
#3	2103-6130	2103-6230
#4	2103-6140	2103-6240
#5	2103-6150	2103-6250
#6	2103-6160	2103-6260

Tibial Baseplate Trial

#1	2203-6010
#2	2203-6020
#3	2203-6030
#4	2203-6040
#5	2203-6050
#6	2203-6060

Tibial Insert Trial

	9 mm	11 mm	13 mm	15 mm	18 mm	21 mm	25 mm	30 mm
#1	2303-6011	2303-6012	2303-6013	2303-6014	2303-6015	2303-6016	2303-6017	2303-6018
#2	2303-6021	2303-6022	2303-6023	2303-6024	2303-6025	2303-6026	2303-6027	2303-6028
#3	2303-6031	2303-6032	2303-6033	2303-6034	2303-6035	2303-6036	2303-6037	2303-6038
#4	2303-6041	2303-6042	2303-6043	2303-6044	2303-6045	2303-6046	2303-6047	2303-6048
#5	2303-6051	2303-6052	2303-6053	2303-6054	2303-6055	2303-6056	2303-6057	2303-6058
#6	2303-6061	2303-6062	2303-6063	2303-6064	2303-6065	2303-6066	2303-6067	2303-6068

Femoral Augment Trial Set

	Distal				Distal		Posterior	
	4 mm LM/RL	4 mm LL/RM	8 mm LM/RL	8 mm LL/RM	12 mm	16 mm	4 mm	8 mm
#1	2603-6111	2603-6211	2603-6112	2603-6212	2603-6313	2603-6314	2603-6011	2603-6012
#2	2603-6121	2603-6221	2603-6122	2603-6222	2603-6323	2603-6324	2603-6021	2603-6022
#3	2603-6131	2603-6231	2603-6132	2603-6232	2603-6333	2603-6334	2603-6031	2603-6032
#4	2603-6141	2603-6241	2603-6142	2603-6242	2603-6343	2603-6344	2603-6041	2603-6042
#5	2603-6151	2603-6251	2603-6152	2603-6252	2603-6353	2603-6354	2603-6051	2603-6052
#6	2603-6161	2603-6261	2603-6162	2603-6262	2603-6363	2603-6364	2603-6061	2603-6062

Instrument

Special Order Items

Tibial Augment Trial

	5 mm Left	10 mm Left	5 mm Right	10 mm Right	15 mm LM/RL	15 mm LL/RM
#1	2803-6111	2803-6112	2803-6211	2803-6212	2803-6113	2803-6213
#2	2803-6121	2803-6122	2803-6221	2803-6222	2803-6123	2803-6223
#3	2803-6131	2803-6132	2803-6231	2803-6232	2803-6133	2803-6233
#4	2803-6141	2803-6142	2803-6241	2803-6242	2803-6143	2803-6243
#5	2803-6151	2803-6152	2803-6251	2803-6252	2803-6153	2803-6253
#6	2803-6161	2803-6162	2803-6261	2803-6262	2803-6163	2803-6263

Extension Stem Trial

	Straight Stem					Curved Stem	
	30 mm	75 mm	100 mm	150 mm	200 mm	150 mm	200 mm
Ø10	N/A	2703-6011	2703-6021	2703-6051	2703-6061	2703-6031	2703-6041
Ø12	N/A	2703-6012	2703-6022	2703-6052	2703-6062	2703-6032	2703-6042
Ø14	2703-6003	2703-6013	2703-6023	2703-6053	2703-6063	2703-6033	2703-6043
Ø16	N/A	2703-6014	2703-6024	2703-6054	2703-6064	2703-6034	2703-6044
Ø18	N/A	2703-6015	2703-6025	2703-6055	2703-6065	2703-6035	2703-6045
Ø20	N/A	2703-6016	2703-6026	2703-6056	2703-6066	2703-6036	2703-6046

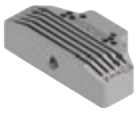
Offset Stem Adaptor Trial

2 mm	2903-2010
4 mm	2903-2020
6 mm	2903-2030

Instrument

	Catalog Number	Description
	9301-2251	Lower Point Gauge, 1.30 mm
	9301-2282	Extramedullary Alignment Tower
	9301-3207	Spike, Short
	9301-5107	Spike Remover
	9303-1101	Stem Trial Driver
	9303-1300	T-handle
	9303-2701 9303-2703 9303-2705	Distal Femoral Plate, S Distal Femoral Plate, M Distal Femoral Plate, L
	9303-2706	Femoral IM Alignment Guide

Instrument

	Catalog Number	Description
	9303-2707	Distal Femoral Alignment Guide
	9303-2708-RB	Distal Femoral Resection Guide
	9303-2731-RA 9303-2732-RA 9303-2733-RA 9303-2734-RA 9303-2735-RA 9303-2736-RA	Femoral Cutting Guide, #1 Femoral Cutting Guide, #2 Femoral Cutting Guide, #3 Femoral Cutting Guide, #4 Femoral Cutting Guide, #5 Femoral Cutting Guide, #6
	9303-2738-RA	Box Cutting Plate
	9303-3009	Twist Drill, 8 mm
	9303-3203 9303-3204	Twist Drill, 3.2 mm Short Twist Drill, 3.2 mm Long
	9303-3207	Pin, 3.2 x 70 mm
	9303-3210	Femoral IM Rod, Ø 9 x 400 mm

Instrument

	Catalog Number	Description
	9303-5001-RA	Quick Pin Driver
	9303-5002	Pin Extractor
	9303-5103-RB	Femoral Impactor
	9303-5110-RD	Femoral Driver
	9303-5119-RB	Universal Impactor
	9303-5125	PS Notch Punch
	9303-5126	Valgus Adaptor Remover
	9303-5202 9303-5204 9303-5206 9303-5208	Femoral Distal Spacer, 2 mm Femoral Distal Spacer, 4 mm Femoral Distal Spacer, 6 mm Femoral Distal Spacer, 8 mm

Instrument

	Catalog Number	Description
	9303-5310	Femoral Offset Bushing, Neutral
	9303-5311	Sliding Hammer
	9303-5311-RA	Femoral Offset Adaptor
	9303-5312 9303-5314	Femoral Offset Bushing, 2mm Femoral Offset Bushing, 4mm
	9303-5315	Femoral Rotation Guide
	9303-5316	Femoral Offset Drill Guide
	9303-5329	Screw Driver Adaptor L
	9303-5333-RB 9303-5334-RB	Femoral Valgus Adaptor, Left Femoral Valgus Adaptor, Right

Instrument

	Catalog Number	Description
	9303-5402	Cutting guide spacer, 2mm
	9303-5404	Cutting guide spacer, 4mm
	9303-5406	Cutting guide spacer, 6mm
	9303-5408	Cutting guide spacer, 8mm
	9303-7311-RB	Femoral Sizing Template #1
	9303-7312-RB	Femoral Sizing Template #2
	9303-7313-RB	Femoral Sizing Template #3
	9303-7314-RB	Femoral Sizing Template #4
	9303-7315-RB	Femoral Sizing Template #5
	9303-7316-RB	Femoral Sizing Template #6
	9303-8071-RA	U2 Knee PSA Case #1
	9303-8072	U2 Knee PSA Case #2
	9303-8073-RA	U2 Knee PSA Case #3
	9303-8074	U2 Knee PSA Case #4
	9303-8075	U2 Knee PSA Case #5
	9303-8079	U2 Knee Femoral Offset Case
	9403-1101-RC	Tibial Punch Handle CM
	9403-1203	Tibial Sizing Template Handle
	9403-1302-RA	Driver Handle, 3/8”
	9403-2202	Alignment Rod

Special Order Items

	Catalog Number	Description
	9403-2310	Tibial IM Alignment Guide
	9403-2311	IM Gguide Collar, S
	9403-2313	IM Gguide Collar, M
	9403-2315	IM Gguide Collar, L
	9403-2316	Tibial Augment Alignment Sleeve
	9403-2321-RB	Tibial Resection Guide, 0°, Left
	9403-2322-RB	Tibial Resection Guide, 0°, Right
	9403-2414	Tibial Stem Drill Guide, Ø 14 mm
	9403-3009-RB	Straight Stem Reamer, Ø 9 mm
	9403-3010-RB	Straight Stem Reamer, Ø 10 mm
	9403-3011-RB	Straight Stem Reamer, Ø 11 mm
	9403-3012-RB	Straight Stem Reamer, Ø 12 mm
	9403-3013-RB	Straight Stem Reamer, Ø 13 mm
	9403-3014-RB	Straight Stem Reamer, Ø 14 mm
	9403-3015-RB	Straight Stem Reamer, Ø 15 mm
	9403-3016-RB	Straight Stem Reamer, Ø 16 mm
	9403-3017-RB	Straight Stem Reamer, Ø 17 mm
	9403-3018-RB	Straight Stem Reamer, Ø 18 mm
	9403-3019-RB	Straight Stem Reamer, Ø 19 mm
	9403-3020-RB	Straight Stem Reamer, Ø 20 mm
	9403-3201	Tibial IM Rod, Ø 9 x 430 mm

Instrument

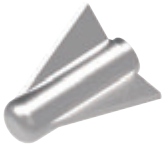
	Catalog Number	Description
	9403-3300	Boss Reamer
	9403-3314	Tibial Stem Drill, Ø 14 mm
	9403-5101-RC	Tibial Baseplate Driver
	9403-5102-RF	Tibial Baseplate Impactor
	9403-5104	Tibial Insert Extractor
	9403-5315	Tibial Neutral Bushing
	9403-5316 9403-5317	Tibial Offset Bushing, 2 mm Tibial Offset Bushing, 4 mm
	9403-5320	Tibial Offset Fixture

Instrument

	Catalog Number	Description
	9403-5322	Tibial Offset Wrench
	9403-5331-RA	Screw Driver Adaptor
	9403-5333	Offset Bushing Wrench
	9403-5334	Stem Trial Remover
	9403-5340	Stem Impactor
	9403-5352	Stem Extractor Adaptor
	9403-5353	Tibial Insert Screw Holder

Special Order Items

Catalog Number	Description
9403-5361	Reamer Guide Rod, Ø 9 mm
9403-5362	Reamer Guide Rod, Ø 10 mm
9403-5363	Reamer Guide Rod, Ø 11 mm
9403-5364	Reamer Guide Rod, Ø 12 mm
9403-5365	Reamer Guide Rod, Ø 13 mm
9403-5366	Reamer Guide Rod, Ø 14 mm
9403-5367	Reamer Guide Rod, Ø 15 mm
9403-5368	Reamer Guide Rod, Ø 16 mm
9403-5369	Reamer Guide Rod, Ø 17 mm
9403-5370	Reamer Guide Rod, Ø 18 mm
9403-5371	Reamer Guide Rod, Ø 19 mm



9403-6011	Tibial Punch, S
9403-6021	Tibial Punch, M
9403-6031	Tibial Punch, L

9403-7301	Tibial Sizing Template #1
9403-7302	Tibial Sizing Template #2
9403-7303	Tibial Sizing Template #3
9403-7304	Tibial Sizing Template #4
9403-7305	Tibial Sizing Template #5
9403-7306	Tibial Sizing Template #6

9403-7310	Tibial Spacer Base #1
9403-7320	Tibial Spacer Base #2
9403-7330	Tibial Spacer Base #3
9403-7340	Tibial Spacer Base #4
9403-7350	Tibial Spacer Base #5
9403-7360	Tibial Spacer Base #6

9403-7311	Tibial Spacer, 9 mm
9403-7312	Tibial Spacer, 11 mm
9403-7313	Tibial Spacer, 13 mm
9403-7314	Tibial Spacer, 15 mm
9403-7315	Tibial Spacer, 18 mm
9403-7316	Tibial Spacer, 21 mm
9403-7317	Tibial Spacer, 25 mm
9403-7318	Tibial Spacer, 30 mm

Safety Statement

INDICATIONS

This device is indicated in knee arthroplasty in skeletally mature patients with severe knee pain and disability due to rheumatoid arthritis, osteoarthritis, primary and secondary traumatic arthritis, polyarthritis, collagen disorders, avascular necrosis of the femoral condyle or pseudogout, posttraumatic loss of joint configuration, particularly when there is patellofemoral erosion, dysfunction or prior patellectomy, moderate valgus, varus, or flexion contraction. This device is intended for use in patients who require augmentation and/or stem extensions due to inadequate bone stock and/or require increased stabilization for tibiofemoral joint due to soft tissue imbalance. The femoral and tibial augments are to be attached to their respective components with a fixation screw or screws.

Note: In the US, this device is for cemented use only.

Please refer to the product-specific package inserts for important information, including indications, contraindications, warnings, precautions, and potential adverse effects.
For Reprocessing Instructions for Reusable Surgical Instruments, please check at www.uoc.com.tw

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