

# Triathlon® All-Polyethylene Tibial Component

## Surgical Protocol Addendum

Posterior Stabilizing (PS)  
and Condylar Stabilizing (CS)





# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

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# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

### ***Indications***

General Total Knee Arthroplasty (TKA) Indications include:

- Painful, disabling joint disease of the knee resulting from non-inflammatory degenerative joint disease (including osteoarthritis, traumatic arthritis or avascular necrosis) rheumatoid arthritis or post-traumatic arthritis.
- Post-traumatic loss of knee joint configuration and function.
- Moderate varus, valgus, or flexion deformity in which the ligamentous structures can be returned to adequate function and stability.
- Revision of previous unsuccessful knee replacement or other procedure.
- Fracture of the distal femur and/or proximal tibia that cannot be stabilized by standard fracture management techniques.

The Triathlon Total Knee System beaded and beaded with Peri-Apatite components are intended for uncemented use only.

The Triathlon All-Polyethylene tibial components are indicated for cemented use only.

### ***Additional Indications for Posterior Stabilized (PS)***

#### ***Components:***

- Ligamentous instability requiring implant bearing surface geometries with increased constraint.
- Absent or non-functioning posterior cruciate ligament.
- Severe anteroposterior instability of the knee joint.

#### ***Contraindications***

- Any active or suspected latent infection in or about the knee joint.
- Distant foci of infection which may cause hematogenous spread to the implant site.
- Any mental or neuromuscular disorder which would create an unacceptable risk of prosthesis instability, prosthesis fixation failure, or complications in post-operative care.
- Bone stock compromised by disease, infection or prior implantation which cannot provide adequate support and/or fixation to the prosthesis.
- Skeletal immaturity.
- Severe instability of the knee joint secondary to the absence of collateral ligament integrity and function.

See package insert for warnings, precautions, adverse effects, information for patients and other essential product information.

### ***Before using All-Polyethylene Tibia instrumentation, verify:***

- Instruments have been properly disassembled prior to cleaning and sterilization.
- Instruments have been properly assembled post-sterilization.
- Instruments have maintained design integrity.
- Proper size configurations are available.

For Instructions for Cleaning, Sterilization, Inspection and Maintenance of Orthopaedic Medical Devices, refer to LSTPI-B.

## **Acknowledgments**

Stryker Orthopaedics thanks the global Triathlon All-Polyethylene Tibia Surgeon Panel for their dedication to the development and refinement of the Triathlon All-Polyethylene Tibial Components and instrumentation.

## **Introduction**

The Triathlon All-Polyethylene Tibial Components, or Triathlon All-Poly Tibias, are designed to provide surgeons with another tibial component option for their patients.

Available in Condylar Stabilizing (CS) and Posterior Stabilizing (PS) options, the Triathlon All-Poly Tibias are designed to provide the same Triathlon tibio-femoral articulation offered by the modular Triathlon baseplates and inserts.

The Triathlon All-Poly Tibias are made from conventional polyethylene. The components are sterilized with gamma radiation in vacuum and packaged in Nitrogen gas (N<sub>2</sub>Vac). The Triathlon All-Poly Tibias are indicated for use with cement only.

This protocol addendum contains instructions for preparation of Triathlon All-Poly Tibias only. Please refer to the Triathlon Knee System surgical protocol for the rest of the surgical steps.

# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

Implant Offering

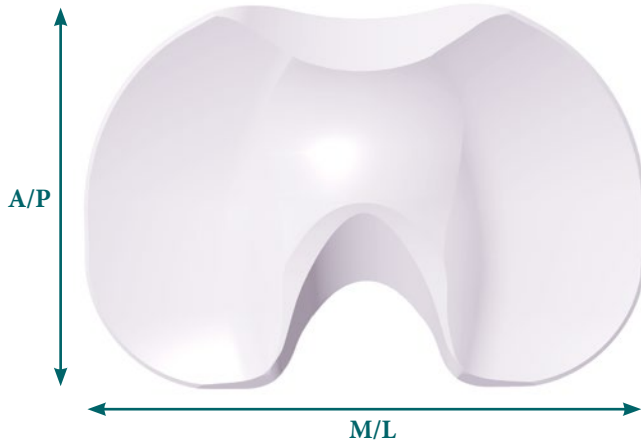


Figure 1

### Implant Offering and Dimensions

► The Triathlon All-Poly Tibia is available in the following sizes:

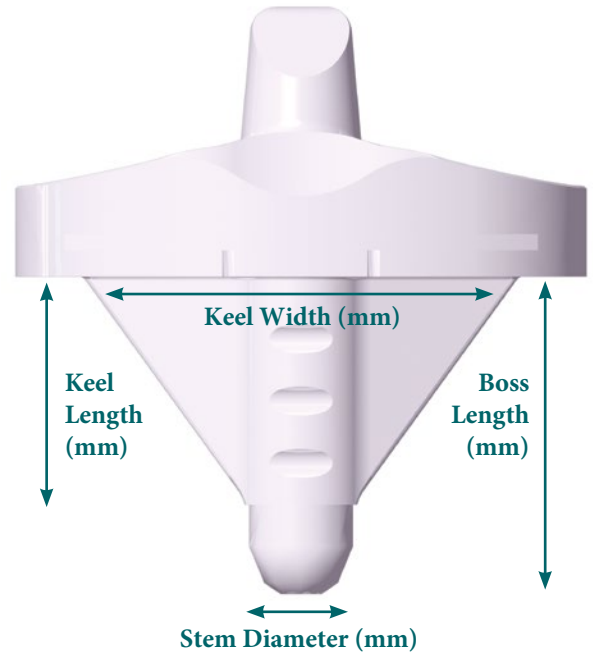
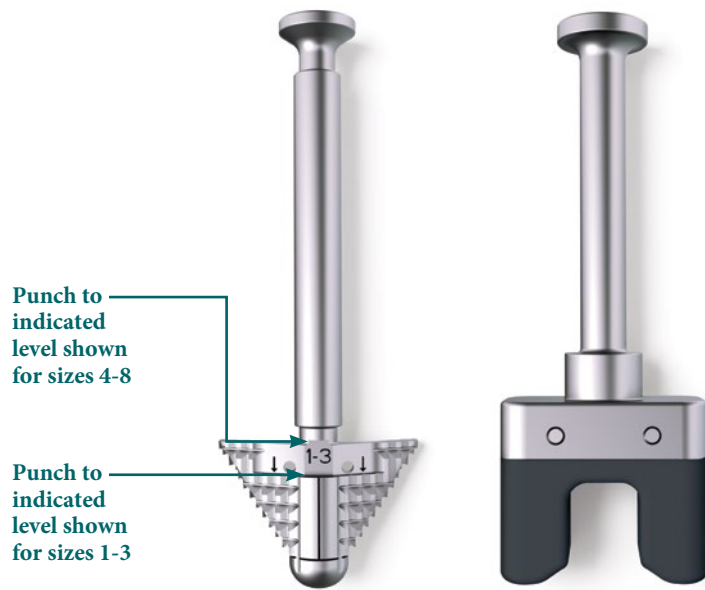


Figure 2

Size	Thickness (mm)	M/L (mm)	A/P (mm)	Boss Length (mm)	Keel Length (mm)	Keel Width (mm)	Stem Diameter (mm)
1	9,11,13,16	61	40	40	20	42	16
2	9,11,13,16	64	42	40	20	42	16
3	9,11,13,16	67	44	40	20	42	16
4	9,11,13,16	70	46	40	28	53	16
5	9,11,13,16	74	49	40	28	53	16
6	9,11,13,16	77	52	40	28	53	16
7	9,11,13,16	80	56	40	28	53	16
8	9,11,13,16	85	60	40	28	53	16

#### Tibio-Femoral Compatibility:

The Triathlon All-Poly Tibia is designed to articulate with Triathlon femurs of the same size as well as one size lower and one size higher (1-up, 1-down compatibility).



*Figure 3*

### All-Poly Tibia Specific Instrumentation

There is one finishing Keel Punch and one Impactor available for all tibial sizes 1-8.

#### All-Poly Tibia Keel Punch

- ▶ For sizes 1-3: punch up to the indicated depth as shown in the image above.
- ▶ For sizes 4-8: punch all the way to the top of the Keel Punch fin. Please see section on keel preparation for procedure.

## Instrument Bar

6541-2-018

Triathlon All-Poly Tibia Keel Punch



6541-4-817

Triathlon All-Poly Tibia Impactor



All-Poly  
Instruments

# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

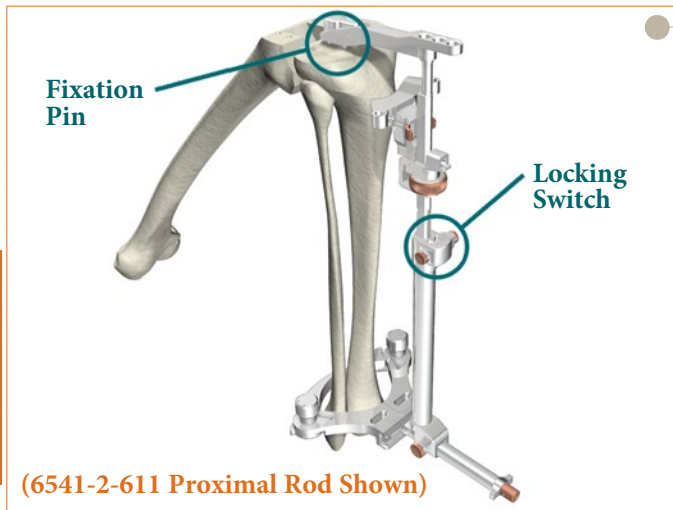


Figure 4

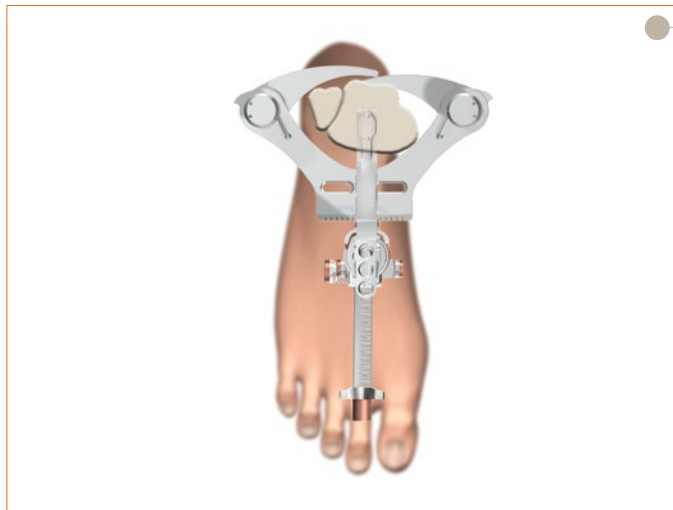


Figure 5

### Triathlon All-Poly Tibia – Surgical Procedure

- ▶ There are two options for tibial preparation: extramedullary (EM) referencing alignment and intramedullary (IM) referencing alignment.
- ▶ The Tibial Resection Guide, available in left and right configurations, and the Universal Resection Guide are designed to avoid soft tissue impingement.

#### Option 1 – Extramedullary Referencing

- ▶ The tibial resection assembly has five parts: the appropriate Tibial Resection Guide, the Ankle Clamp, the Distal Assembly, the Proximal Rod and the Tibial Adjustment Housing. These are assembled first.

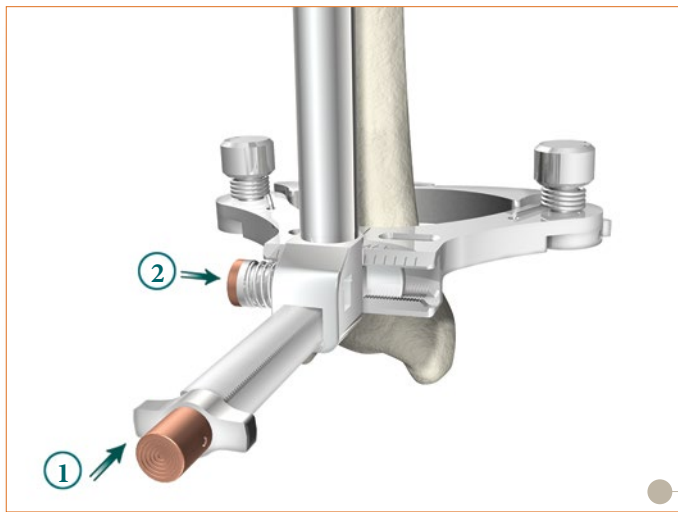
**Note:** The Tibial Adjustment Housing is available in 0° slope (optional) and 3° slope.

#### Tibial Slope

- ▶ Place the ankle clamp around the ankle and unlock the locking switch.
- ▶ Tibial Slope is correct when the long axis of the assembly parallels the mid-coronal plane of the tibia. Tibial Slope can be checked by verifying that the long axis of the assembly is parallel to the tibia.

**Caution:** The center of the ankle is generally in line with the second metatarsal, unless ankle and foot deformity is present. The assembly should be aligned over the center of the ankle.





**Figure 6**

### ***Varus/Valgus Alignment***

- ▶ Medial/Lateral offset can be adjusted by pushing the bronze button (1) and sliding the assembly medially until the shaft intersects the center of the tibia.
- ▶ Once triaxial alignment is achieved, release the bronze button.

### ***Tibial Slope Adjustment***

**Note:** If the Proximal Rod is parallel to the tibia, the slope is 0° or 3° depending on which Tibial Adjustment Housing is used.

- ▶ Tibial slope can be adjusted by pressing the bronze button (2).

### ***Rotational Alignment***

- ▶ Rotate the entire assembly to ensure that the base of the assembly is aligned with the center of the ankle. The center of the ankle is generally in line with the second metatarsal.

Once alignment is confirmed, set the bronze locking switch on the Distal Assembly to the locked position.

## **Instrument Bar**

**Right 6541-2-700**  
**Left 6541-2-701**

Tibial Resection Guide



**6541-2-610**

Tibial Alignment Distal Assembly EM



**6541-2-609**

Tibial Alignment Ankle Clamp EM



**6541-2-611**

Tibial Alignment Proximal Rod EM



**0° slope 6541-2-704**

**3° slope 6541-2-705**

Tibial Adjustment Housing



**6541-2-611E**

Express Proximal Rod EM



# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

Tibial Preparation

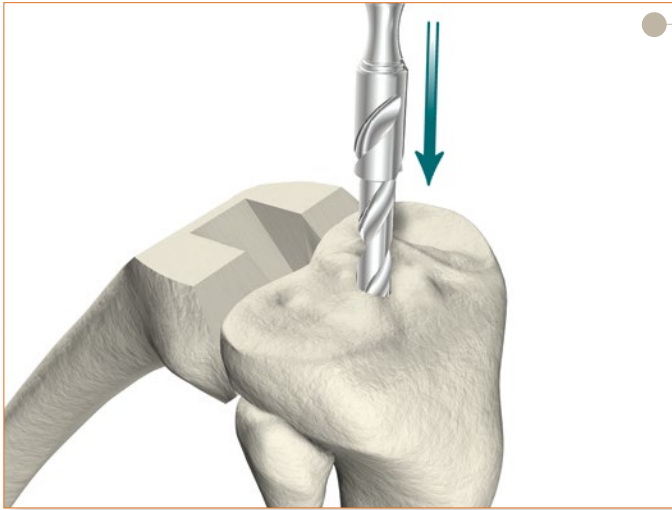


Figure 7

### Option 2 – Intramedullary Referencing

- ▶ Attach the 3/8" IM Drill to the Universal Driver and create a hole in the location determined by the preoperative X-rays to align with the IM canal.

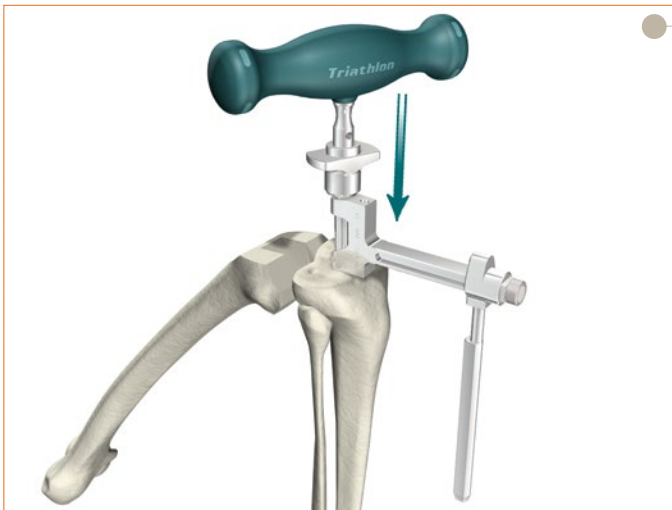


Figure 8

- ▶ Attach the T-Handle Driver to the 5/16" IM Rod and slowly pass into the canal, ensuring clearance. Remove the 5/16" IM Rod and insert it into the body of the Tibial Alignment Jig IM. The assembly is then inserted into the canal beyond the isthmus to the physal scar of the ankle if possible.

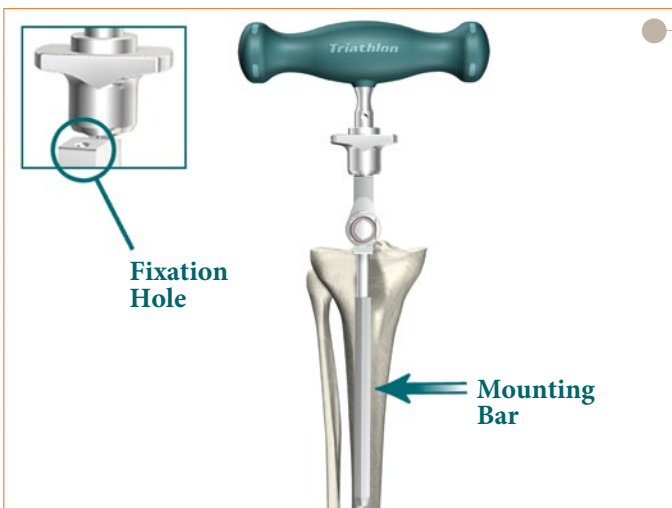


Figure 9

### Rotational Alignment

With the body of the Tibial Alignment Jig IM resting on the proximal tibia, proper rotational alignment is achieved by rotating the instrument about the 5/16" IM Rod so that the vertical mounting bar is at the junction of the medial and middle 1/3rd of the tibial tubercle. A Headless Pin or the 1/8" Drill are then inserted into the fixation hole to fix rotation (See Inset).

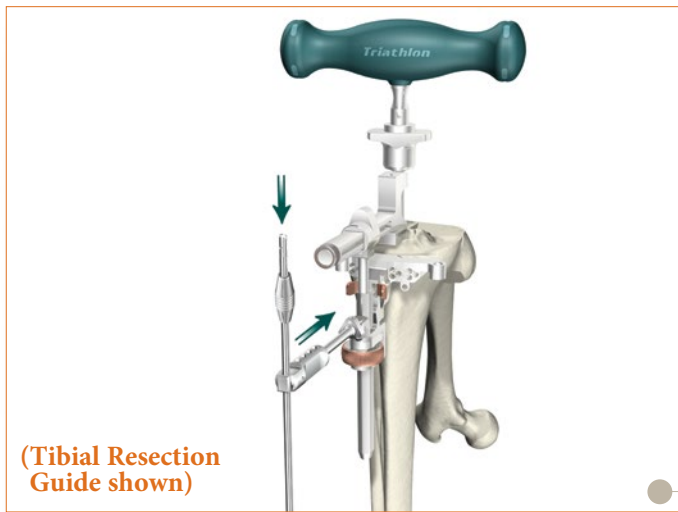


Figure 10

### Varus/Valgus Alignment

- ▶ Assemble the appropriate Tibial Resection Guide (left, right or Universal Resection Guide) on the Tibial Adjustment Housing.

**Note:** The Tibial Adjustment Housing is available in 0° slope (optional) and 3° slope.

- ▶ Attach the assembly onto the mounting bar by pressing the bronze wheel on the Tibial Adjustment Housing. Attach the Universal Alignment Handle to the Tibial Resection Guide and slide a Universal Alignment Rod through the handle for sagittal assessment.
- ▶ When alignment is confirmed, the Universal Alignment Handle should be centered over the ankle.

## Instrument Bar

6541-4-538  
3/8" IM Drill



6541-4-801  
Universal Driver



6541-4-800  
T-Handle Driver



6541-4-516  
5/16" IM Rod



6541-2-600  
Tibial Alignment Jig IM



0° slope 6541-2-704  
3° slope 6541-2-705  
Tibial Adjustment Housing



Right 6541-2-700  
Left 6541-2-701  
Tibial Resection Guide



6541-4-602  
Universal Alignment Rods



6541-1-721  
Universal Resection Guide



# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

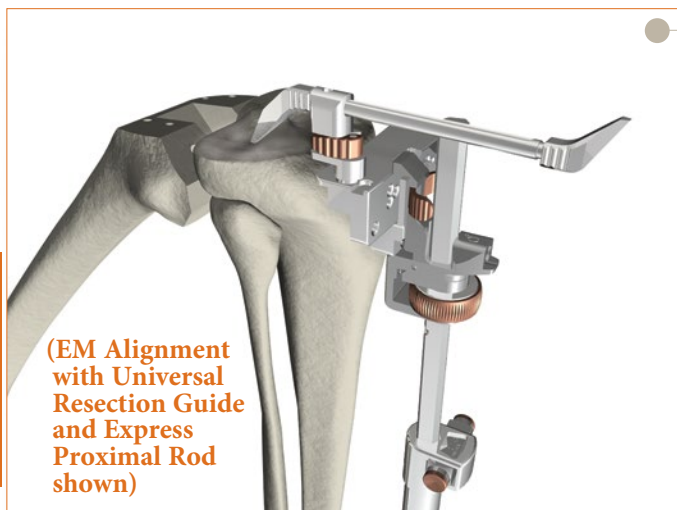


Figure 11

[The following applies to both extramedullary and intramedullary alignment.]

### *Establish Tibial Resection Level*

- ▶ The Tibial Stylus attaches to the Tibial Resection Guide or Universal Resection Guide with the “9” end referencing the lowest level of the unaffected compartment.
- ▶ 9mm of bone will be resected. Alternatively, if the “2” end of the Tibial Stylus is used, the amount of bone resected will be 2mm below the tip of the stylus.
- ▶ The height of the Tibial Resection Guide, Tibial Stylus and Tibial Adjustment Housing can be adjusted using the bronze wheel on the Tibial Adjustment Housing. For coarse adjustment, press the bronze wheel and slide the assembly up or down. For fine adjustment, turn the bronze wheel to the right to move the assembly up the Proximal Rod or turn left to move the assembly down the Proximal Rod.
- ▶ Pin the Tibial Resection Guide in place.
- ▶ Remove all alignment instruments leaving only the Tibial Resection Guide in place.

**Note:** Rotate bronze wheel one extra turn, as stylus should be under tension to ensure the minimum amount of bone necessary is resected.

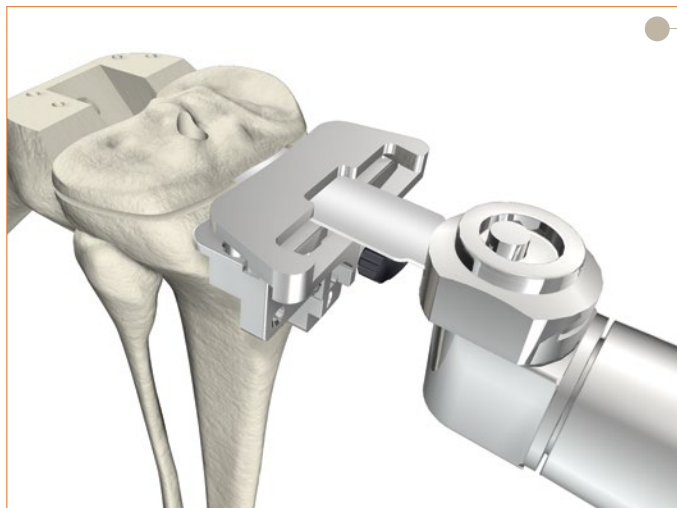


Figure 12

### *Tibial Resection*

- ▶ Resect the proximal tibia. An optional Tibial Resection Guide Modular Capture (Left or Right) may be added.
- ▶ Remove the Tibial Resection Guide.

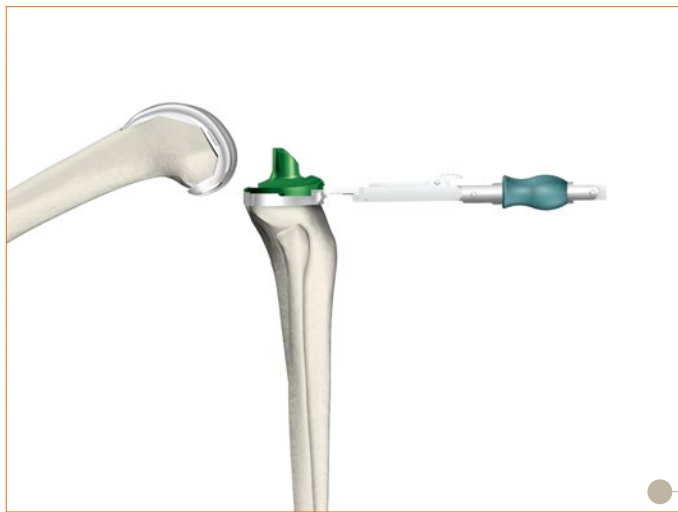


Figure 13

### Tibial Component Sizing

- ▶ Place the PS or CR Femoral Trial on the femur.
- ▶ Draw the tibia anteriorly. Assemble a Universal Tibial Template, Alignment Handle and a PS or CS Tibial Insert Trial.
- ▶ Place the assembly on the resected tibial plateau and choose the size that best addresses rotation and coverage.
- ▶ Perform a trial reduction to assess overall component fit, ligament stability and joint range of motion.

**Note:** Ensure all excess debris (bone and soft tissue) is cleared from the Universal Tibial Template. Do not impact the Tibial Insert Trial.

## Instrument Bar

6541-2-611E

Express Proximal Rod EM



Right 6541-2-700

Left 6541-2-701

Tibial Resection Guide



0° slope 6541-2-704

3° slope 6541-2-705

Tibial Adjustment Housing



6541-4-806

Universal Alignment Handle



6541-2-611

Tibial Alignment Proximal Rod EM



6541-2-429

Tibial Stylus



6541-1-721

Universal Resection Guide



6541-1-723

Modular Capture - Distal Resection



Right 6541-2-702

Left 6541-2-703

Tibial Resection Guide Modular Capture



See Catalog

CR & PS Femoral Trials



See Catalog

Universal Tibial Template



See Catalog

CS & PS Tibial Insert Trials



# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

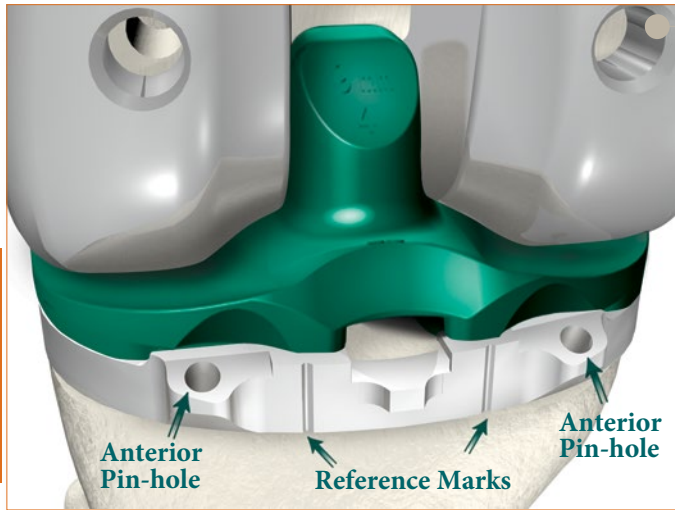


Figure 14



Figure 15

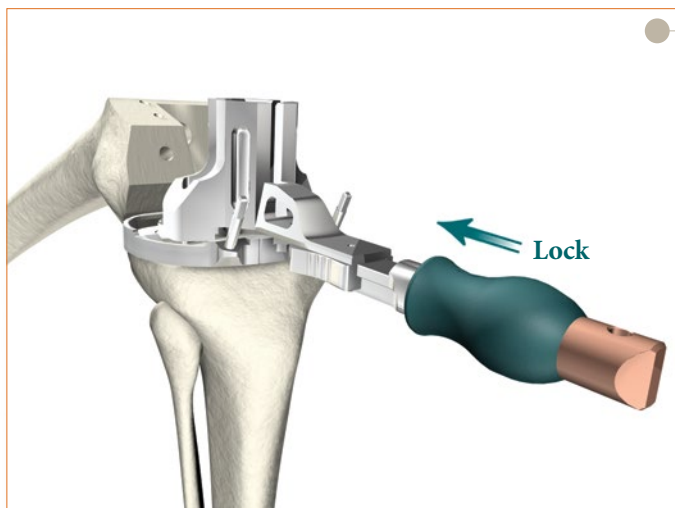


Figure 16

- ▶ There are two options to secure the Universal Tibial Template to the tibia:
  - Option 1: Once satisfactory alignment and tibial component orientation are achieved, remove the PS or CR Femoral Trial. Place two Headed or Headless Pins in the anterior holes of the Universal Tibial Template, disassemble the Tibial Trial Insert from the Universal Tibial Template, and secure by pinning.

**Tip:** In dense bone, anterior holes may be pre-drilled using the 1/8" drill (3170-0000).

- Option 2: Once satisfactory alignment and tibial component orientation are achieved, mark the anterior tibial cortex in line with the reference marks on the anterior border of the Universal Tibial Template. Remove the PS or CR Femoral Trial and disassemble the Tibial Trial Insert from the Universal Tibial Template. Reposition the Universal Tibial Template (if required) by aligning the anterior reference marks on the template with the reference marks on the anterior cortex. The template is positioned flush to the anterior tibial cortex. Place two Headless Pins in the anterior holes to secure the Universal Tibial Template.

**Note:** The Tibial Insert Trial can be removed by hand or with the aid of a retractor.

- ▶ The Triathlon All-Poly Tibias have two reference marks located anteriorly. These reference marks coincide with the reference marks on the Universal Tibial Template (as shown).
- ▶ Once rotation is confirmed and the Universal Tibial Template has been secured with pins, the tibia may be marked with a pen so these reference marks may aid as a visual guide during implantation.

### Tibial Keel Punching

- ▶ Assemble the Keel Punch Guide to the Universal Tibial Template by inserting at a slight angle to the top of the Universal Tibial Template (into the two locating slots toward the posterior portion of the Universal Tibial Template). Allow the Keel Punch Guide to sit flat on the Universal Tibial Template and push forward on the handle to lock the Keel Punch Guide to the Universal Tibial Template.



## Instrument Bar

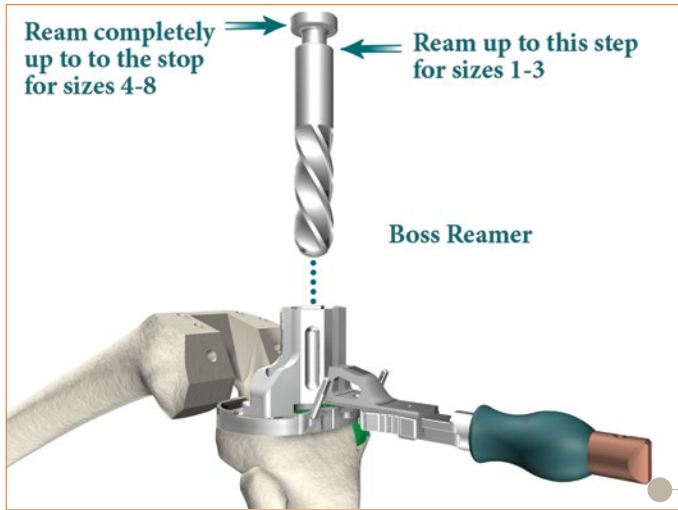


Figure 17

- ▶ Attach the Boss Reamer to the Universal Driver. Place the Boss Reamer into the Keel Punch Guide. Ream to the appropriate depth marker indicated by the step on the Reamer shank (Up to the step for Size 1-3 Keel Punch Guide and all the way to the stop for Size 4-8 Keel Punch guide).

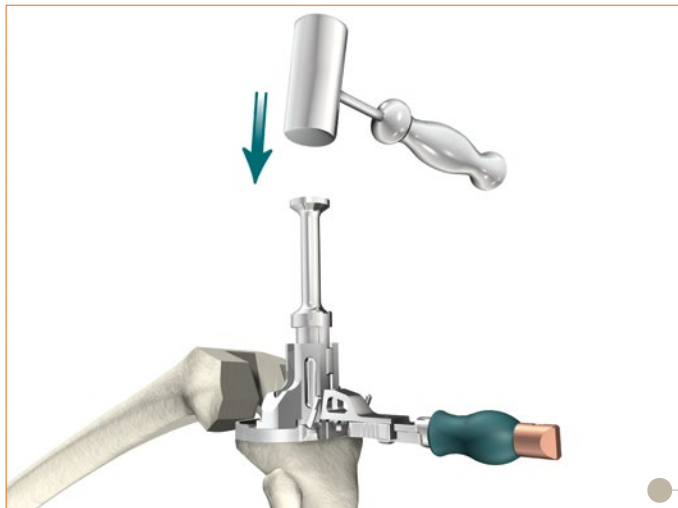


Figure 18

- ▶ Place the appropriate Keel Punch into the Keel Punch Guide. Use a mallet to impact the Keel Punch. Advance the Keel Punch until it seats fully in the Keel Punch Guide. In sclerotic bone, the use of a saw prior to the Keel Punch may be advisable.



See Catalog

CR & PS Femoral Trials



See Catalog

Universal Tibial Template

6541-4-003

Headless Pins - 3"



6541-4-809

Headless Pin Driver



6541-4-801

Universal Driver



Size 1, 2, 3 - 6541-2-713

Size 4, 5, 6, 7, 8 - 6541-2-748

Keel Punch Guide



Sizes 1, 2, 3 - 6541-2-013

Sizes 4, 5, 6 - 6541-2-046

Sizes 7, 8 - 6541-2-078

Keel Punch



6543-4-517

Tibial Boss Reamer



# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

Tibial Preparation

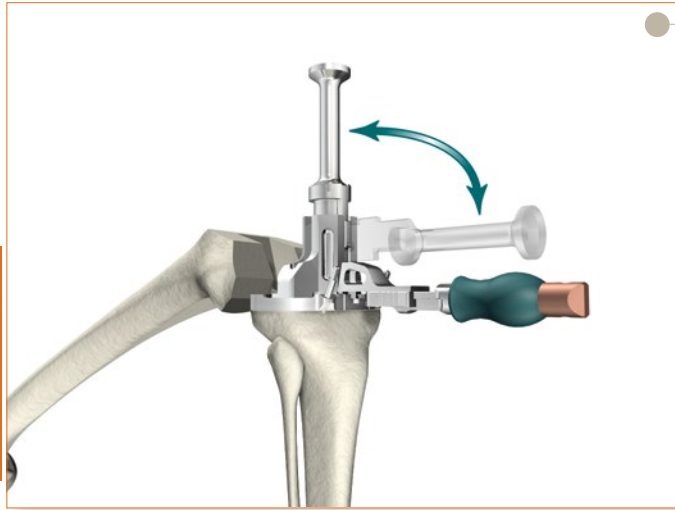


Figure 19

- ▶ To extract the Keel Punch, lift up on the Keel Punch Guide handle and pull the handle to cantilever the Keel Punch out of the tibia.
- ▶ Remove the Headless Pins with the Headless Pin Extractor and remove the Universal Tibial Template.

**Note:** All above instruments must be removed prior to proceeding.



Figure 20

### Keel Preparation for Triathlon All-Poly Tibia

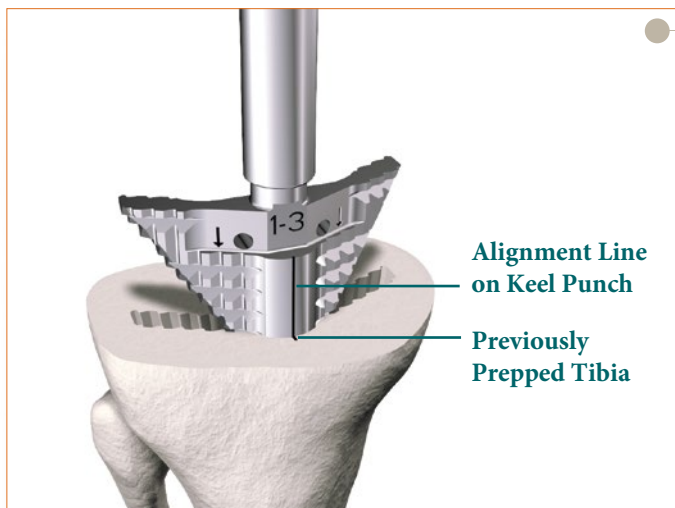


Figure 21

- ▶ Align the Triathlon All-Poly Tibia Keel Punch to the prepared tibia as shown. Use the alignment line provided on the keel punch to ensure rotation is accurate.



# Instrument Bar

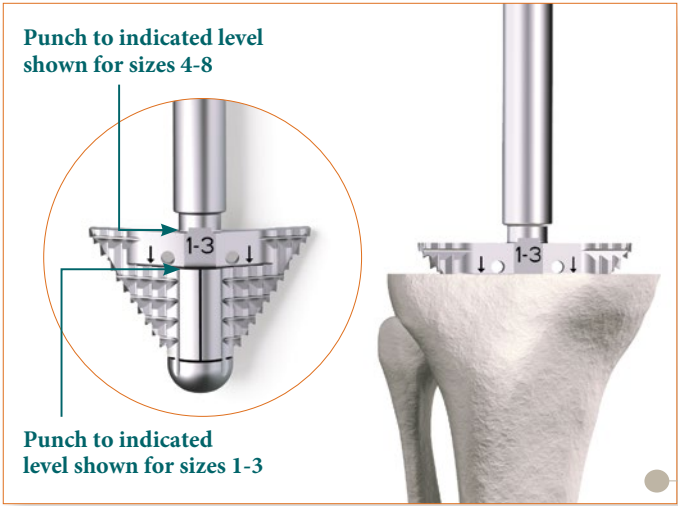


Figure 22

- ▶ There is one All-Poly Tibia Keel Punch for all 8 sizes. It is important that the All-Poly Tibia Keel Punch is aligned perpendicular to the tibial resection throughout the punching process.

**Sizes 1-3**

- ▶ Punch up to the line marked 1-3 as shown.

**Caution:** Ensure slow incremental punching with the mallet to ensure preparation to the appropriate depth during impaction. Ensure impaction is up to indicated depth on the Keel Punch for the specific size range. Do not over impact.



Figure 23

**Sizes 4-8**

- ▶ For sizes 4-8, punch all the way to the top of the Keel Punch fin as shown in the image.

6541-4-810  
Impaction Handle



6541-2-018  
Triathlon All-Poly Tibia Keel Punch



6541-4-803  
Triathlon Slap Hammer



6541-4-804  
Headless Pin Extractor



Tibial Preparation

# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum



Figure 24

- ▶ Remove the Triathlon All-Poly Keel Punch using the Quick Release Slap Hammer (as shown) or a mallet.
- ▶ Take care to keep the handle perpendicular to the tibial resection throughout the extraction process.

### *Tibial Component Impaction*

- ▶ Lavage prior to implantation.
- ▶ The resected and punched surfaces are prepared for bone cement using standard cementing techniques.
- ▶ The cement groove on the underside of the Triathlon All-Poly Tibia needs to be completely filled with cement. This can be done by pre-coating the underside of the implant prior to implantation or coating the proximal tibia with enough cement to fill the cement groove. Surgeons can use both methods to ensure filling of the cement groove if preferred.
- ▶ After the preferred cementing technique has been performed, place the All-Poly Tibial Components into the prepared tibia.
- ▶ Position and align the implant over the prepared keel. Partially seat the implant by hand followed by final seating with the All-Poly Tibia Impactor. Ensure impaction is perpendicular (axial) to the tibial resection throughout the impaction process. After the cement is cured, the knee is thoroughly cleaned and lavaged.
- ▶ Ensure implant is fully seated on the tibia.

**Caution:** Do not use excessive force during impaction.

Ensure over-hanging cement is completely removed from around the entire periphery of the implant.

**Tip:** If intramedullary referencing was used for tibial resection, surgeons may plug the hole in the IM canal with bone prior to cementing to prevent cement from extravasating into the prepared hole.



Figure 25



Figure 26

Impacted All-Poly Tibial Components CS & PS



Figure 27

▶ Assess the joint in flexion and extension.

## Instrument Bar



6541-4-817

Triathlon All-Poly Tibia Impactor



See Catalog

CS & PS Triathlon All-Polyethylene Tibial Components

Component  
Implantation

# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

Catalog #	Description	Quantity in Kit
<b>Miscellaneous Instruments Kit Contents</b>		
3170-0000	1/8" Drill	2
6541-4-003	Headless Pins - 3"	4
6541-4-300	Headed Nail Impactor Extractor (Optional)	1
6541-4-400	Bladerunner	1
6541-4-515	Headed Nails - 1 1/2" (Optional)	2
6541-4-516	5/16" IM Rod	1
6541-4-518	1/8" Peg Drill	1
6541-4-525	1/4" Peg Drill	1
6541-4-538	3/8" IM Drill	1
6541-4-575	Headed Nails - 3/4" (Optional)	2
6541-4-602	Universal Alignment Rods	1
6541-4-610	Adjustable Spacer Block (Optional)	1
6541-4-700	Bone File (Optional)	1
6541-4-709	Box Chisel	1
6541-4-710	Posterior Osteophyte Removal Tool (Optional)	1
6541-4-800	T-Handle Driver	1
6541-4-801	Universal Driver	1
6541-4-802	1/8" Hex Drive (Optional)	1
6541-4-803	Slap Hammer	1
6541-4-804	Headless Pin Extractor	1
6541-4-805	Tibial Baseplate Impactor Extractor	1
6541-4-806	Universal Alignment Handle	1
6541-4-807	Femoral Impactor Extractor	1
6541-4-809	Headless Pin Driver	1
6541-4-810	Impaction Handle	2
6541-4-811	Femoral Impactor	1
6541-4-812	Tibial Baseplate Impactor	1
6541-4-813	Tibial Insert Impactor	1
6541-4-825	Slip Torque Handle (Optional)	1
6541-8-004	Triathlon Miscellaneous Upper Tray	1
6541-8-104	Triathlon Miscellaneous Lower Tray	1
6541-9-000	Triathlon Case	1
		<b>Total Quantity 39</b>

Catalog #	Description	Sizes	Qty
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### Triathlon All-Poly Tibia Preparation Instruments

6543-4-517	Triathlon Universal Baseplate Tibial Boss Reamer		1
6541-2-018	Triathlon All-Poly Tibia Keel Punch		1
6541-4-817	Triathlon All-Poly Tibia Impactor		1

**Note:**

You may use the Triathlon patella tray 6541-8-105 or the Triathlon Express patella tray 6541-8-105E for these instruments.

### Size 3-6 Femoral & Tibial Preparation Kit Contents

6541-1-600	Adjustment Block	X = 1, 2, 3, 4, 5, 6, 7 and 8	1 Each Size
6541-1-603	Femoral Sizer		1
6541-1-605	Femoral Stylus		1
6541-1-657	Femoral Alignment Guide		1
6541-1-70XE	Express 4:1 Cutting Block	X=3, 4, 5, and 6	4
6541-1-721	Universal Resection Guide		1
6541-1-723	Modular Capture - Distal Resection		1
6541-2-013	Size 1-3 Keel Punch		1
6541-2-046	Size 4-6 Keel Punch		1
6541-2-429	Tibial Stylus		1
6541-2-600	Tibial Alignment Jig IM (Optional)		1
6541-2-60X	Universal Tibial Template	X=3, 4, 5, and 6	4
6541-2-609	Tibial Alignment Ankle Clamp EM		1
6541-2-610	Tibial Alignment Distal Assembly EM		1
6541-2-611E	Tibial Alignment Proximal Rod EM		1
6541-2-620	Tibial Template Converter		1
6541-2-700	Tibial Resection Guide Right		1
6541-2-701	Tibial Resection Guide Left		1
6541-2-702	Tibial Resection Guide Modular Capture Right		1
6541-2-703	Tibial Resection Guide Modular Capture Left		1
6541-2-704	Tibial Adjustment Housing - 0° slope (Optional)		1
6541-2-705	Tibial Adjustment Housing - 3° slope		1
6541-2-713	Size 1-3 Keel Punch Guide		1
6541-2-748	Size 4-8 Keel Punch Guide		1
6541-2-807	Tibial Alignment Handle		1
6541-8-002	Triathlon Size 3-6 Upper Tray		1
6541-8-102	Triathlon Size 3-6 Lower Tray		1
6541-9-000	Triathlon Case		1

Total Quantity 34

# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

Catalog #	Description	Sizes	Qty
<b>Triathlon Size 3-6 PS Femoral &amp; Tibial Trialing Kit Contents</b>			
5511-T-X01	Triathlon PS Femoral Trial Left	X=3, 4, 5, and 6	4
5511-T-X02	Triathlon PS Femoral Trial Right	X=3, 4, 5, and 6	4
5532-T-X09A	Triathlon PS Tibial Insert Trial - 9mm	X=3, 4, 5, and 6	4
5532-T-X11A	Triathlon PS Tibial Insert Trial - 11mm	X=3, 4, 5, and 6	4
5532-T-X13A	Triathlon PS Tibial Insert Trial - 13mm	X=3, 4, 5, and 6	4
5532-T-X16A	Triathlon PS Tibial Insert Trial - 16mm	X=3, 4, 5, and 6	4
5532-T-X19A	Triathlon PS Tibial Insert Trial - 19mm	X=3, 4, 5, and 6	4
6541-5-71X	MIS PS Box Cutting Guide	X=3, 4, 5, and 6	4
6541-8-009	Triathlon 3-6 PS Upper Tray		1
6541-8-109	Triathlon 3-6 PS Lower Tray		1
6541-9-000	Triathlon Case		1
			<b>Total Quantity 35</b>

### Triathlon Size 3-6 CR Femoral & Tibial Trialing Kit Contents

The Triathlon All-Polyethylene Tibial components are only available in CS and PS configurations.

5510-T-X01	Triathlon CR Femoral Trial Left	X=3, 4, 5, and 6	4
5510-T-X02	Triathlon CR Femoral Trial Right	X=3, 4, 5, and 6	4
5530-T-X09A	Triathlon CR Tibial Insert Trial - 9mm	X=3, 4, 5, and 6	4
5530-T-X11A	Triathlon CR Tibial Insert Trial - 11mm	X=3, 4, 5, and 6	4
5530-T-X13A	Triathlon CR Tibial Insert Trial - 13mm	X=3, 4, 5, and 6	4
5530-T-X16A	Triathlon CR Tibial Insert Trial - 16mm	X=3, 4, 5, and 6	4
5530-T-X19A	Triathlon CR Tibial Insert Trial - 19mm	X=3, 4, 5, and 6	4
6541-8-008	Triathlon 3-6 CR Upper Tray		1
6541-8-108	Triathlon 3-6 CR Lower Tray		1
6541-9-000	Triathlon Case		1
			<b>Total Quantity 31</b>

Catalog #	Description	Sizes	Qty
<b>Triathlon Size 1, 8 PS Femoral &amp; Tibial Trialing Kit Contents</b>			
5511-T-X01	Triathlon PS Femoral Trial Left	X=1 and 8	2
5511-T-X02	Triathlon PS Femoral Trial Right	X=1 and 8	2
5532-T-X09A	Triathlon PS Tibial Insert Trial - 9mm	X=1 and 8	2
5532-T-X11A	Triathlon PS Tibial Insert Trial - 11mm	X=1 and 8	2
5532-T-X13A	Triathlon PS Tibial Insert Trial - 13mm	X=1 and 8	2
5532-T-X16A	Triathlon PS Tibial Insert Trial - 16mm	X=1 and 8	2
5532-T-X19A	Triathlon PS Tibial Insert Trial - 19mm	X=1 and 8	2
6541-5-71X	MIS PS Box Cutting Guide	X=1 and 8	2
6541-2-078	Size 7-8 Keel Punch (Optional)		1
6541-2-60X	Universal Tibial Template (Optional)	X=1 and 8	2
6541-8-113	Triathlon 1 & 8 PS Lower Tray		1
6541-9-000	Triathlon Case		1
			<b>Total Quantity 21</b>

### Triathlon Size 1,8 CR Femoral & Tibial Trialing Kit Contents

The Triathlon All-Polyethylene Tibial components are only available in CS and PS configurations.

5510-T-X01	Triathlon CR Femoral Trial Left	X=1 and 8	2
5510-T-X02	Triathlon CR Femoral Trial Right	X=1 and 8	2
5530-T-X09A	Triathlon CR Tibial Insert Trial - 9mm	X=1 and 8	2
5530-T-X11A	Triathlon CR Tibial Insert Trial - 11mm	X=1 and 8	2
5530-T-X13A	Triathlon CR Tibial Insert Trial - 13mm	X=1 and 8	2
5530-T-X16A	Triathlon CR Tibial Insert Trial - 16mm	X=1 and 8	2
5530-T-X19A	Triathlon CR Tibial Insert Trial - 19mm	X=1 and 8	2
6541-2-078	Size 7-8 Keel Punch		1
6541-2-60X	Universal Tibial Template	X=1 and 8	2
6541-8-112	Triathlon 1 & 8 CR Lower Tray		1
6541-9-000	Triathlon Case		1
			<b>Total Quantity 19</b>

# Triathlon All-Polyethylene Tibial Component

## Surgical Protocol Addendum

Catalog #	Description	Sizes	Qty
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### Triathlon Size 2, 7 PS Femoral & Tibial Trialing Kit Contents

5511-T-X01	Triathlon PS Femoral Trial Left	X=2 and 7	2
5511-T-X02	Triathlon PS Femoral Trial Right	X=2 and 7	2
5532-T-X09A	Triathlon PS Tibial Insert Trial - 9mm	X=2 and 7	2
5532-T-X11A	Triathlon PS Tibial Insert Trial - 11mm	X=2 and 7	2
5532-T-X13A	Triathlon PS Tibial Insert Trial - 13mm	X=2 and 7	2
5532-T-X16A	Triathlon PS Tibial Insert Trial - 16mm	X=2 and 7	2
5532-T-X19A	Triathlon PS Tibial Insert Trial - 19mm	X=2 and 7	2
6541-1-70XE	Express 4:1 Cutting Block (Optional)	X=2 and 7	2
6541-5-71X	MIS PS Box Cutting Guide	X=2 and 7	2
6541-2-078	Size 7-8 Keel Punch (Optional)		1
6541-2-60X	Universal Tibial Template (Optional)	X=2 and 7	2
6541-8-022	Triathlon 2 & 7 PS Upper Tray		1
6541-9-000	Triathlon Case		1

Total Quantity 23

### Triathlon CS Tibial Trialing Kit Contents

5531-T-X09	Triathlon CS Tibial Insert Trial - 9mm	X=1, 2, 3, 4, 5, 6, 7, and 8	8
5531-T-X11	Triathlon CS Tibial Insert Trial - 11mm	X=1, 2, 3, 4, 5, 6, 7, and 8	8
5531-T-X13	Triathlon CS Tibial Insert Trial - 13mm	X=1, 2, 3, 4, 5, 6, 7, and 8	8
5531-T-X16	Triathlon CS Tibial Insert Trial - 16mm	X=1, 2, 3, 4, 5, 6, 7, and 8	8
5531-T-X19	Triathlon CS Tibial Insert Trial - 19mm	X=1, 2, 3, 4, 5, 6, 7, and 8	8
5531-T-X22	Triathlon CS Tibial Insert Trial - 22mm	X=1, 2, 3, 4, 5, 6, 7, and 8	8
5531-T-X25	Triathlon CS Tibial Insert Trial - 25mm	X=1, 2, 3, 4, 5, 6, 7, and 8	8
6541-8-301	CS Trials Sterilization Tray		1
6541-9-000	Triathlon Case		1

Total Quantity 58



Catalog #	Description	Sizes	Qty
<b>Triathlon All-Polyethylene Tibial Component</b>			
5535-A-X09	PS All-Polyethylene Tibial Component 9mm	X = 1, 2, 3, 4, 5, 6, 7 and 8	8
5535-A-X11	PS All-Polyethylene Tibial Component 11mm	X = 1, 2, 3, 4, 5, 6, 7 and 8	8
5535-A-X13	PS All-Polyethylene Tibial Component 13mm	X = 1, 2, 3, 4, 5, 6, 7 and 8	8
5535-A-X16	PS All-Polyethylene Tibial Component 16mm	X = 1, 2, 3, 4, 5, 6, 7 and 8	8
5534-A-X09	CS All-Polyethylene Tibial Component 9mm	X = 1, 2, 3, 4, 5, 6, 7 and 8	8
5534-A-X11	CS All-Polyethylene Tibial Component 11mm	X = 1, 2, 3, 4, 5, 6, 7 and 8	8
5534-A-X13	CS All-Polyethylene Tibial Component 13mm	X = 1, 2, 3, 4, 5, 6, 7 and 8	8
5534-A-X16	CS All-Polyethylene Tibial Component 16mm	X = 1, 2, 3, 4, 5, 6, 7 and 8	8
			<b>Total Quantity 64</b>



## Femoral Component/ Insert Compatibility

Size Matching: One up, one down, e.g., size 5 femur with size 4 or 6 insert/ baseplate.

**Note:** Cementless implants are not to be used with cement.

		Insert Type			
		CR	CS	PS	TS
<b>Cementless</b>	CR Cemented	✓	✓	No	No
	PS Cemented	No	✓	✓	✓
	TS Cemented	No	No	✓	✓
	CR Beaded	✓	✓	No	No
	PS Beaded	No	No	✓	No
	CR Beaded with PA	✓	✓	No	No
	PS Beaded with PA	No	No	✓	No

## Femoral Component/ Patella Compatibility

Size Matching: Every patella articulates with every femur due to a common radius across all sizes.

		Patella Type			
		Asymmetric	Asymmetric Metal Backed	Symmetric Metal Backed	Symmetric
<b>Cementless</b>	CR Cemented	✓	✓	✓	✓
	PS Cemented	✓	✓	✓	✓
	TS Cemented	✓	✓	✓	✓
	CR Beaded	✓	✓	✓	✓
	PS Beaded	✓	✓	✓	✓
	CR Beaded with PA	✓	✓	✓	✓
	PS Beaded with PA	✓	✓	✓	✓

## Tibial Insert/Baseplate Compatibility

Size Matching: Size Specific, e.g., size 4 insert to be used only with size 4 baseplate.

**Note:** TS insert can only be used with the cemented universal baseplate.

		Insert Type			
		CR	CS	PS	TS
<b>Cementless</b>	Cemented Cruciform	✓	✓	✓	No
	Cemented Universal	✓	✓	✓	✓
	Beaded Cruciform	✓	✓	✓	No
	Beaded Screw Fix	✓	✓	✓	No
	Beaded with PA Cruciform	✓	✓	✓	No
	Beaded with PA Screw Fix	✓	✓	✓	No
	Tritanium	✓	✓	✓	No

## Triathlon TS Augments

Distal Augments are for use with both the medial and lateral portions of the side indicated, e.g. #4 right is used for medial and lateral compartments on a right femur.

Posterior Augments are universal size specific, e.g. size 4 posterior augments are for the size 4 femur.

Tibial Augments are size specific and come in left medial/right lateral or right medial/left lateral configurations.

## Reconstructive

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