



**Zimmer®  
NexGen®  
Trabecular Metal™  
Augments**

Abbreviated  
Surgical Technique



An Innovative Option for Revision TKA

## Femoral Instructions

# 1 Trabecular Metal Femoral Augment Assembly

Assemble and initially tighten the femoral augments to the femoral component using the Augment Starter Screwdriver. When the augments are properly positioned, the outer periphery of the augment will be flush with the outer rail of the femoral component. Confirm that the outer edge of the augment, in the area of the 45-degree chamfer, does not protrude outside of the edge of the femoral component. Confirm that, when distal and posterior augments are used together, there is no direct contact between the augments.

*Note: When both distal and posterior augments will be used, it is recommended to assemble the distal augments first. This will facilitate assembly of the posterior augments.*



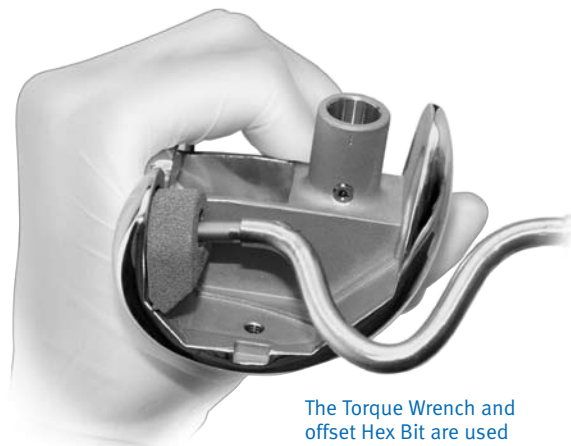
Starter Screwdriver will facilitate assembly

**Trabecular Metal Augments may only be used with the NexGen LCCK or Rotating Hinge Knees. When used with the LCCK, the augments may be cemented or cementless. When used with the Rotating Hinge Knee, the augment must be cemented.**

# 2 Tighten Trabecular Metal Femoral Augment onto Femoral Component

Final tightening must be performed using the Torque Wrench. Insert the appropriate hex driver bit onto the Torque Wrench. The straight hex driver is used with distal augments. For the posterior augments, the offset hex driver is used. Tighten the augment attachment screw using the Torque Wrench until the wrench “clicks and releases”, indicating that the proper torque level has been achieved. Final positioning of the augment must be completed before the cement begins to cure.

*Caution: The Torque Wrench must be used to assure proper attachment screw torque. Undertightening may result in augment and/or screw loosening. Over tightening may result in damage to Trabecular Metal material and/or the screw thread.*



The Torque Wrench and offset Hex Bit are used for final tightening of posterior augments.

## Tibial Instructions

# 1 Trabecular Metal Tibial Augment Assembly

Screws or cement may be used to attached these augments to the tibial base. Assemble the tibial augments to the tibial base using the straight-hex head driver. Assure that the augments are properly positioned.

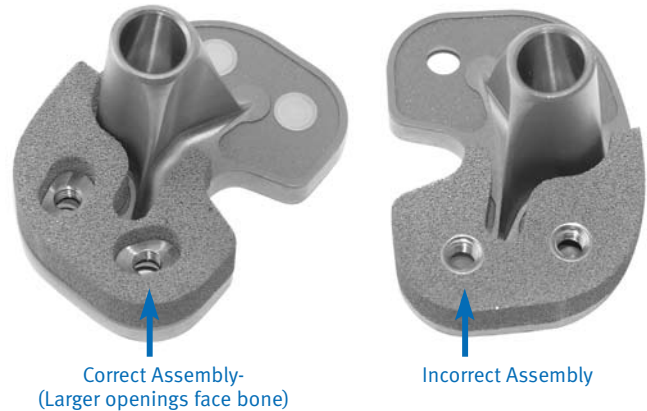
*Note: The tibial augments are provided in Right Lateral/ Left Medial as well as Left Lateral/Right Medial versions. When the 5mm and 10mm augments are positioned on the correct side of the tibial base, the elongated openings in the tibial augment will be facing toward bone. Refer to figures at right for correct and incorrect placement of 5mm and 10mm Half Block Augments.*

*Warning: If the incorrect side is assembled to the base plate, holding capacity between the base plate and augment may be seriously compromised.*

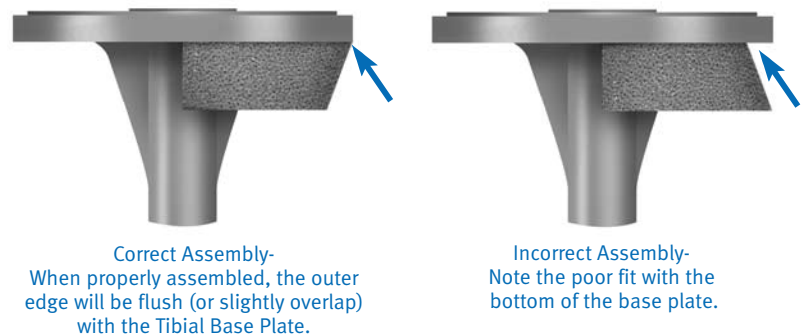
The 15mm, 20mm, and 30mm Half Block Augments are tapered. Screws or cement may be used to attach these augments to the tibial base plate when used with LCKK. Half Block Augments must be cemented to the Rotating Hinge Knee Tibial Base Plate.

Both *NexGen* LCKK and Rotating Hinge Knee Full Block Augments must be attached to the Tibial Base Plate with bone cement.

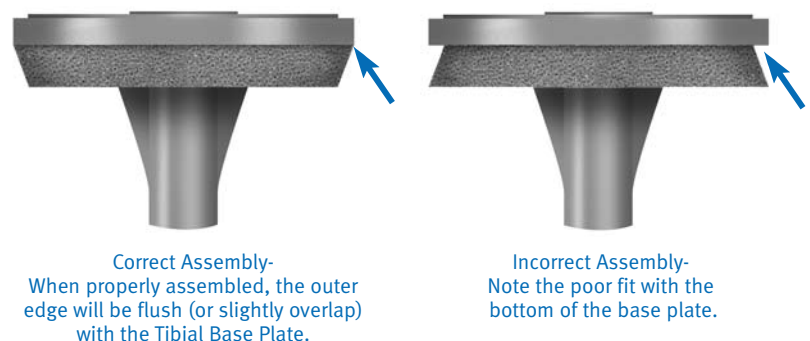
### Assembly of 5mm and 10mm Tibial Half Block Augments



### Assembly of 15mm, 20mm, and 30mm Tibial Half Block Augments



### Assembly of Full Tibial Block Augments



# 2

When properly positioned, the outer periphery of the augment will be flush (or will slightly overlap) the outer rim of the tibial plate. When two tibial half block augments are used together, there should be no direct contact between the augments.

Outer edge of Augment will be flush or overlap  
Tibial Base Plate



# 3

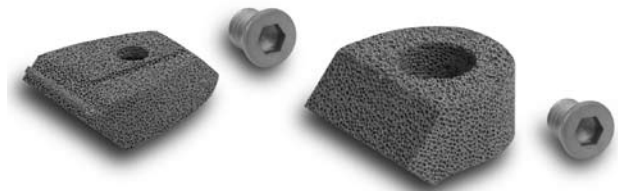
When using screws final tightening must be performed using the Torque Wrench. Attach the straight hex driver to the Torque Wrench. Tighten the augment attachment screw using the Torque Wrench until the wrench “clicks and releases” indicating that the proper torque level has been achieved. If cement is to be used in conjunction with attachment screws, final tightening must be completed before the cement begins to cure.

*Caution: The Torque Wrench must be used to assure proper attachment screw torque. Undertightening may result in augment and/or screw loosening.*

*Over tightening may result in damage to Trabecular Metal material and/or the screw thread.*



## Trabecular Metal Augment Blocks for NexGen Femoral Components



Prod. No.	Description
00-5490-030-00	Kit includes 2 of each for 5 and 10mm sizes
00-5490-030-01	Kit includes 2 of each for 15 & 20mm sizes
00-5490-033-01	5mm Posterior Fem Augment, Size C
00-5490-033-02	10mm Posterior Fem Augment, Size C
00-5490-033-10	5mm Distal Fem Augment, Size C
00-5490-033-20	10mm Distal Fem Augment, Size C
00-5490-033-23	15mm Distal Only Fem Augment, Size C
00-5490-033-24	20mm Distal only Fem Augment, Size C
00-5490-034-01	5mm Posterior Fem Augment, Size D
00-5490-034-02	10mm Posterior Fem Augment, Size D
00-5490-034-10	5mm Distal Fem Augment, Size D
00-5490-034-20	10mm Distal Fem Augment, Size D
00-5490-034-23	15mm Distal Only Fem Augment, Size D
00-5490-034-24	20mm Distal Only Fem Augment, Size D
00-5490-035-01	5mm Posterior Fem Augment, Size E
00-5490-035-02	10mm Posterior Fem Augment, Size E
00-5490-035-10	5mm Distal Fem Augment, Size E
00-5490-035-20	10mm Distal Fem Augment, Size E
00-5490-035-23	15mm Distal Only Fem Augment, Size E
00-5490-035-24	20mm Distal Only Fem Augment, Size E
00-5490-036-01	5mm Posterior Fem Augment, Size F
00-5490-036-02	10mm Posterior Fem Augment, Size F
00-5490-036-10	5mm Distal Fem Augment, Size F
00-5490-036-20	10mm Distal Fem Augment, Size F
00-5490-036-23	15mm Distal Only Fem Augment, Size F
00-5490-036-24	20mm Distal Only Fem Augment, Size F



## Augment Assembly Instruments

Prod. No.	Description
00-5979-010-00	<i>Trabecular Metal</i> Augment Instrument Kit
00-7053-001-00	Augment Torque Wrench
00-7053-002-00	Torque Wrench Straight Hex Screw Bit
00-5987-092-02	Torque Wrench Offset Hex Screw Bit
00-5987-092-03	Augment Starter Screwdriver (2 ea. per set)
00-5888-012-20	Generic Case



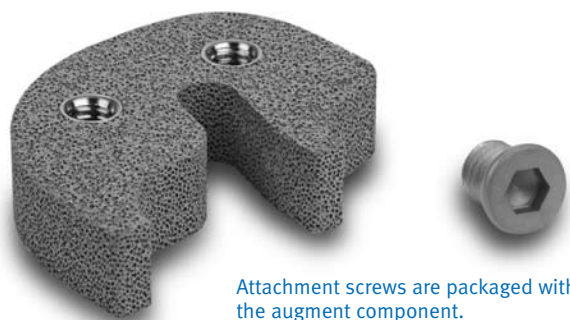
## Spare Items Not in Kits

Prod. No.	Description
00-5490-092-10	Femoral Augment Screw
00-5490-091-10	Tibial Attachment Screw, 5 & 10mm
00-5490-091-20	Tibial Attachment Screw 15, 20 & 30mm



## Trabecular Metal Augment Blocks – Use With LCKK or Rotating Hinge Knees and Finned Stem Tibial Components Only

Prod. No.	Description	Prod. No.	Description
00-5448-096-00	Kit includes 1 of each 5mm & 10mm Tibial Augments	00-5448-005-36	5mm Tibial Augment Block, Lt Lat/Rt Med, Size 5
00-5448-096-01	Kit includes 1 of each 15mm & 20mm Tibial Augments	00-5448-005-37	10mm Tibial Augment Block, Lt Lat/Rt Med, Size 5
00-5448-096-02	Kit includes 1 of each 30mm Tibial Augments	00-5448-005-38	15mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 5
00-5448-002-26	5mm Tibial Augment Block, Rt Lat/Lt Med, Size 2	00-5448-005-39	20mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 5
00-5448-002-27	10mm Tibial Augment Block, Rt Lat/Lt Med, Size 2	00-5448-005-40	30mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 5
00-5448-002-28	15mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 2	00-5448-006-26	5mm Tibial Augment Block, Rt Lat/Lt Med, Size 6
00-5448-002-29	20mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 2	00-5448-006-27	10mm Tibial Augment Block, Rt Lat/Lt Med, Size 6
00-5448-002-36	5mm Tibial Augment Block, Lt Lat/Rt Med, Size 2	00-5448-006-28	15mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 6
00-5448-002-37	10mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 2	00-5448-006-29	20mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 6
00-5448-002-38	15mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 2	00-5448-006-30	30mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 6
00-5448-002-39	20mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 2	00-5448-006-36	5mm Tibial Augment Block, Lt Lat/Rt Med, Size 6
00-5448-003-26	5mm Tibial Augment Block, Rt Lat/Lt Med, Size 3	00-5448-006-37	10mm Tibial Augment Block, Lt Lat/Rt Med, Size 6
00-5448-003-27	10mm Tibial Augment Block, Rt Lat/Lt Med, Size 3	00-5448-006-38	15mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 6
00-5448-003-28	15mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 3	00-5448-006-39	20mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 6
00-5448-003-29	20mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 3	00-5448-006-40	30mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 6
00-5448-003-30	30mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 3	00-5448-007-26	5mm Tibial Augment Block, Rt Lat/Lt Med, Size 7
00-5448-003-36	5mm Tibial Augment Block, Lt Lat/Rt Med, Size 3	00-5448-007-27	10mm Tibial Augment Block, Rt Lat/Lt Med, Size 7
00-5448-003-37	10mm Tibial Augment Block, Lt Lat/Rt Med, Size 3	00-5448-007-28	15mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 7
00-5448-003-38	15mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 3	00-5448-007-29	20mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 7
00-5448-003-39	20mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 3	00-5448-007-36	5mm Tibial Augment Block, Lt Lat/Rt Med, Size 7
00-5448-003-40	30mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 3	00-5448-007-37	10mm Tibial Augment Block, Lt Lat/Rt Med, Size 7
00-5448-004-26	5mm Tibial Augment Block, Rt Lat/Lt Med, Size 4	00-5448-007-38	15mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 7
00-5448-004-27	10mm Tibial Augment Block, Rt Lat/Lt Med, Size 4	00-5448-007-39	20mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 7
00-5448-004-28	15mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 4	00-5448-096-10	Kit includes 1 of each 10mm NexGen Full Block Augment
00-5448-004-29	20mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 4	00-5448-002-10	10mm Full Block Tibial Augment, Size 2
00-5448-004-30	30mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 4	00-5448-003-10	10mm Full Block Tibial Augment, Size 3
00-5448-004-36	5mm Tibial Augment Block, Lt Lat/Rt Med, Size 4	00-5448-004-10	10mm Full Block Tibial Augment, Size 4
00-5448-004-37	10mm Tibial Augment Block, Lt Lat/Rt Med, Size 4	00-5448-005-10	10mm Full Block Tibial Augment, Size 5
00-5448-004-38	15mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 4	00-5448-006-10	10mm Full Block Tibial Augment, Size 6
00-5448-004-39	20mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 4	00-5448-007-10	10mm Full Block Tibial Augment, Size 7
00-5448-004-40	30mm Tibial Augment Block, Lt Lat/Rt Med (Tapered), Size 4	00-5880-096-10	Kit includes 1 of each 10mm Rotating Hinge Knee Full Block Augment
00-5448-005-26	5mm Tibial Augment Block, Rt Lat/Lt Med, Size 5	00-5880-022-10	10mm Rotating Hinge Knee Full Block Tibial Augment, Size 2
00-5448-005-27	10mm Tibial Augment Block, Rt Lat/Lt Med, Size 5	00-5880-023-10	10mm Rotating Hinge Knee Full Block Tibial Augment, Size 3
00-5448-005-28	15mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 5	00-5880-024-10	10mm Rotating Hinge Knee Full Block Tibial Augment, Size 4
00-5448-005-29	20mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 5	00-5880-025-10	10mm Rotating Hinge Knee Full Block Tibial Augment, Size 5
00-5448-005-30	30mm Tibial Augment Block, Rt Lat/Lt Med (Tapered), Size 5	00-5880-026-10	10mm Rotating Hinge Knee Full Block Tibial Augment, Size 6



Attachment screws are packaged with the augment component.



Contact your Zimmer representative or visit us at [www.zimmer.com](http://www.zimmer.com)



Please refer to package insert for complete product information, including contraindications, warnings, precautions and adverse effects.