

## SURGICAL TECHNIQUE

### RAZOR Single-Use Acetabular Reaming in Total Hip Arthroplasty

Preparation of the acetabulum in total hip arthroplasty requires reaming of the acetabulum with reamers to obtain an appropriate size for placement of the component.

It is important to understand that all RAZOR Medical Instruments, Inc. (RAZOR) Single-Use Acetabular Reamers are marked with true dimensions (Figure 1). The reamers are all 180° (Figure 2).

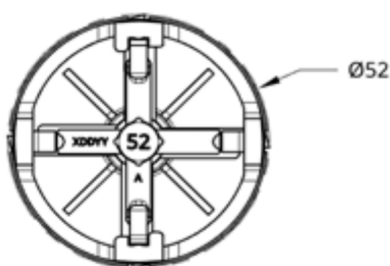


Figure 1: RAZOR Single-Use Acetabular Reamers are marked to actual dimension (Example depicts a 52mm)

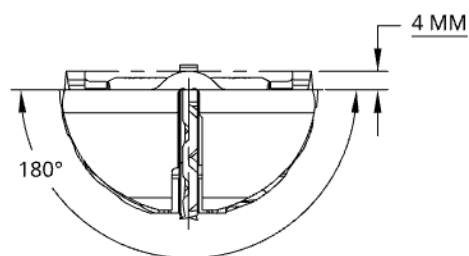


Figure 2: RAZOR Single-Use Acetabular Reamers have a 180° hemispherical dimension

This surgical technique describes reaming methods for acetabular preparation in total hip arthroplasty using RAZOR Single-Use Acetabular Reamers for use with surgeon-recognized hip surgical techniques and associated instrumentation.

#### **Pre-operative Planning and Templating**

Templating of the hip is performed, and cup size noted for the known magnification of the image.

#### **Acetabular Reaming**

Keep the protective cover on the RAZOR Single-Use Acetabular Reamer during assembly onto the reamer handle but cut the flanges off the protective cover to allow for assembly to the reamer handle.

Attach the RAZOR Single-Use Acetabular Reamer to the reamer handle by pushing down and applying a quarter-turn to lock in place.

Remove the protective cover from the RAZOR Single-Use Acetabular Reamer by peeling back the cover and dispose. Take care when removing the reamer cover to avoid injury to the user and damage to the cutting edges of the RAZOR Single-Use Acetabular Reamer.

Standard approach to the hip is performed followed by osteotomy of the femoral head.

The head is sized and then compared to the digital sized template image. The femoral head is usually 3-4 mm smaller than the final ream of the acetabulum. If the surgeon prefers a technique requiring initial centralized reaming, begin with a RAZOR Single-Use Acetabular Reamer that is the same size as the measured size of the femoral head.

The RAZOR Single-Use Acetabular Reamers are very sharp. Start the reamer with light pressure only and at half the normal reaming speed, to avoid the RAZOR Single-Use Acetabular Reamer locking into bone.

- NOTE: The RAZOR Single-Use Acetabular Reamer provides a smooth surface cut generating a true hemisphere, eliminating the need to rock the handle.

Progressively larger diameter reamers could be used until final desired sizing is achieved. Final RAZOR Single-Use Acetabular Reamer size should be 3 to 4mm larger than the femoral head size.

- NOTE: Depending on bone quality and surgeon preference, the surgeon determines the amount of interference and appropriate amount of reaming.

Removal of the RAZOR Single-Use Acetabular Reamer from the handle is performed by pulling back on the locking sleeve and rotating the RAZOR Single-Use Acetabular Reamer head a quarter-turn in a clockwise direction.

Care should be taken so as not to enlarge or distort the acetabulum by eccentric reaming.

Apply constant light pressure in the recommended final implant orientation as determined by the surgeon.

Final acetabular reaming ideally shows the hemispherical acetabulum denuded of cartilage, with the subchondral plate preferably intact, and the anterior and posterior acetabular walls preserved.

**CAUTION:** The RAZOR Single-Use Acetabular Reamers are very sharp and care should be taken to protect the RAZOR Single-Use Acetabular Reamer from unnecessary handling, as dull or damaged cutting edges may cause improper reaming. This situation may result in an irregularly shaped or enlarged acetabulum preparation.

<b>RAZOR Single-Use Acetabular Reamer Catalog Number</b>	<b>Description</b>	<b>Diameter (mm)</b>
1000-0046	46 mm Acetabular Reamer	46
1000-0047	47 mm Acetabular Reamer	47
1000-0048	48 mm Acetabular Reamer	48
1000-0049	49 mm Acetabular Reamer	49
1000-0050	50 mm Acetabular Reamer	50
1000-0051	51 mm Acetabular Reamer	51
1000-0052	52 mm Acetabular Reamer	52
1000-0053	53 mm Acetabular Reamer	53
1000-0054	54 mm Acetabular Reamer	54

## **Further Information**

Please contact the manufacturer at [QA@RazorMI.com](mailto:QA@RazorMI.com) or call (800) 358-0434 to report any issues relating to the use of the instrument.

Visit [www.RazorMI.com](http://www.RazorMI.com) or use the QR Code to locate the RAZOR Single-Use Acetabular Reamer eIFU.



Patents issued: 10,485,560, 10,631,883; other patents pending.



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This publication sets forth detailed recommended procedures for using RAZOR Single-Use Acetabular Reamers. It offers guidance that you should heed, but, as with any such technical guide, each surgeon must consider the particular needs of each patient and make appropriate adjustments when and as required.

This document is intended for surgeons and is not intended for laypersons. Each surgeon should exercise his or her own independent judgment in the diagnosis and treatment of an individual patient, and this information is not intended to replace the comprehensive training surgeons have received. The technique used in each case will depend on the surgeon's medical judgment as the best treatment for each patient.

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**1060-0200**  
**Rev. 1**  
**03/10/2021**