

## MUSHROOM<sup>◊</sup> Intraoperative Femoral Template





# Using the MUSHROOM<sup>◇</sup> Intraoperative Femoral Template with the BIRMINGHAM HIP<sup>◇</sup> Resurfacing System

The MUSHROOM Intraoperative Femoral Template is intended for use in hip resurfacing surgery as an instrument to assist in proper femoral component sizing and positioning. The instrument allows for real time assessment during the operation and serves as an additive step in assisting with positioning and femoral component sizing.

The following surgical technique describes the essential steps for using the MUSHROOM Intraoperative Femoral Template in conjunction with the BIRMINGHAM HIP Resurfacing System. This guide describes only the steps used for the Intraoperative template and is meant to serve as an addendum to the standard BIRMINGHAM HIP Resurfacing System surgical technique (Reference 4567-0103).

It is important to regard all indications, contraindications, warnings and precautions, as well as all steps for manual pre-operative planning and templating, described in the standard BIRMINGHAM HIP Resurfacing System surgical technique for all procedures.

## Disclaimer

It is the responsibility of the treating physician to determine and utilize the appropriate products and techniques according to their own clinical training and judgment for each of their patients. For more information on any product referenced herein, including indications for use, contraindications, effects, precautions and warnings, please consult the product's Instructions for Use (IFU) prior to use.

### **Nota Bene**

The technique description herein is made available to the healthcare professional to illustrate the suggested treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is that which addresses the needs of the specific patient.

# Preoperative

Perform preoperative planning and templating. Refer to BIRMINGHAM HIP<sup>®</sup> Resurfacing System surgical technique (Reference 4567-0103). Templates should be prepared with standard sterilization protocols.

## Surgical Technique

1. Expose the femoral head.
2. An assessment is made of the femoral neck diameter using the head/neck template (Figure 1 and 2). This provides vital information as to minimum head component size that can be safely used and also the minimum acetabular size that can be utilized. If significant osteophyte formation is present on the femoral neck then this should be removed with rongeurs before definitive assessment of femoral neck diameter is made. This will also provide an initial selection for the intraoperative femoral template.

**Note:** Care should be taken to avoid damage to the soft tissue and blood supply during osteophyte removal.

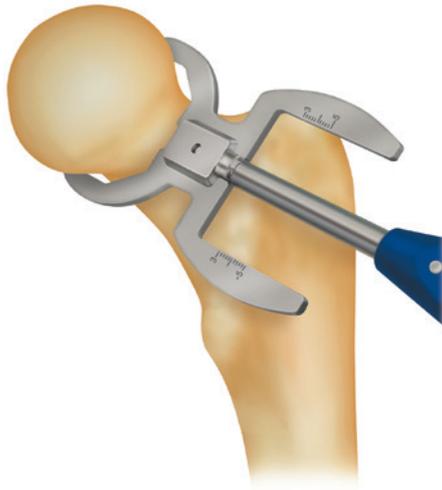


Figure 1



Figure 2

- Determine appropriate size and coverage of the femoral head by placing alternative size MUSHROOM<sup>®</sup> Templates on the femoral head (Figure 3). Different head – neck ratios will require different MUSHROOM Templates for a given neck size.



Figure 3

The MUSHROOM Template must never be smaller than the neck size indicated in Step 2. Place the MUSHROOM Template over the femoral head and tilt into valgus by approximately 5 – 7° (Figure 4).

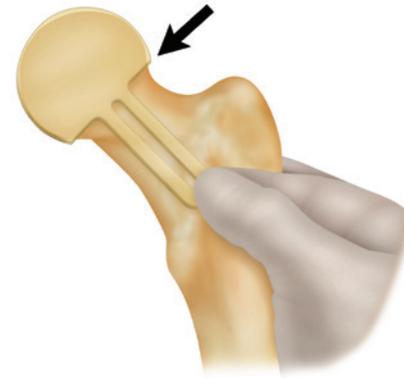


Figure 4: This image highlights appropriate positioning of the MUSHROOM Template.

- Verify the head-neck junction and place the template in the desired valgus position. Check that there is adequate space between the superior aspect of the femur and the template. This is necessary to avoid notching the femoral neck.

**Note:** The slight valgus placement of the template.

**Note:** Care should be taken to avoid varus and inferior placement of the template as this would lead to inappropriate implant placement (Figure 6).

Inappropriate MUSHROOM placement in varus

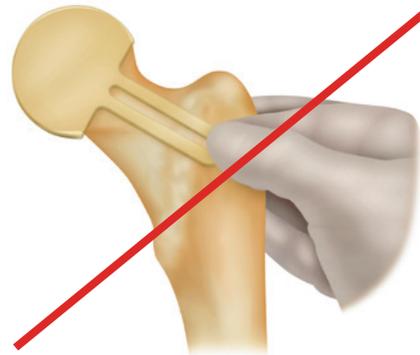


Figure 5: Various positioning of template should be avoided

Inappropriate MUSHROOM placement in varus and inferior

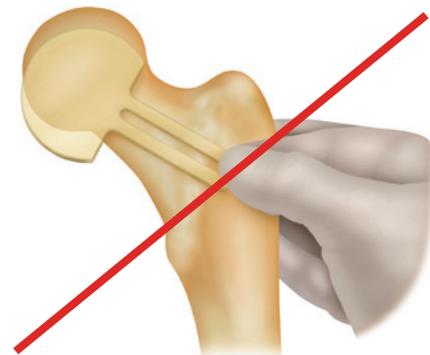


Figure 6: Varus and inferior placement should be avoided

5. Use the slot on the template to mark a point or line on the intertrochanteric crest (Figure 7).

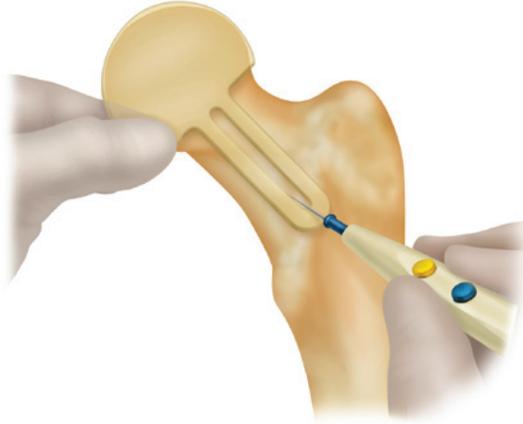


Figure 7

6. Insert a short pin (9012-9125). This will serve to attach the short alignment jig (9012-8255) (Figure 8). Only the short arm jig is compatible with the MUSHROOM® Templates.

The alignment guide is hooked onto the short pin. The drill should be angled with the slope of the pin to aid in preventing the jig from slipping off during positioning of the alignment jig.



Figure 8

7. The alignment jig can now be used to correctly position the long guide wire and ultimately achieve correct implant positioning (Figure 9).

The operation of the short arm jig remains consistent with the traditional alignment jig as described in the BHR<sup>®</sup> Surgical Technique (4567-0103).

On correct positioning of the long guide wire, the alignment guide assembly is released from the femur by first removing the short pin.

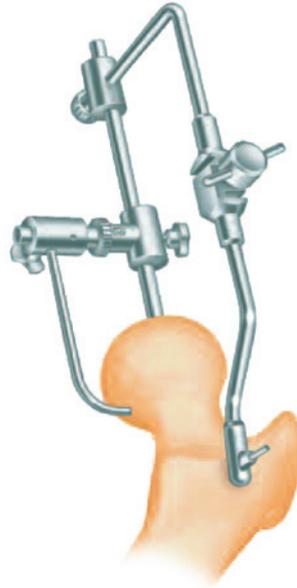


Figure 9

8. As a final check, re-insert the stylus on the guide wire or pivot rod and verify that it passes unobstructed around the femoral neck, and engages the head.

**Note:** A re-drill guide is available for minor adjustments (9012-8760).

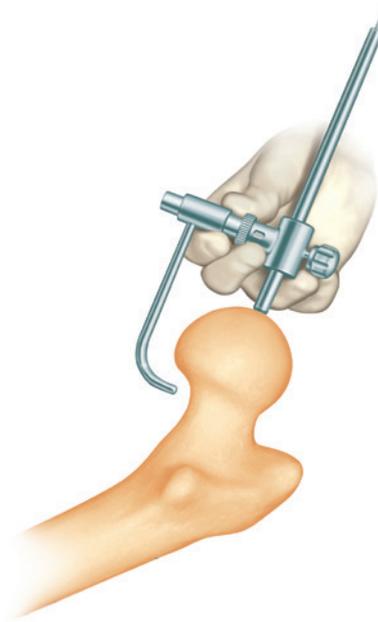


Figure 10

# Catalog

## MUSHROOM<sup>°</sup> Intraoperative Femoral Template

Cat. No.	Description
9012-6048	48mm Template
9012-6049	50mm Template
9012-6050	52mm Template
9012-6051	54mm Template
9012-6052	56mm Template
9012-6053	58mm Template

\*For US market only.

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