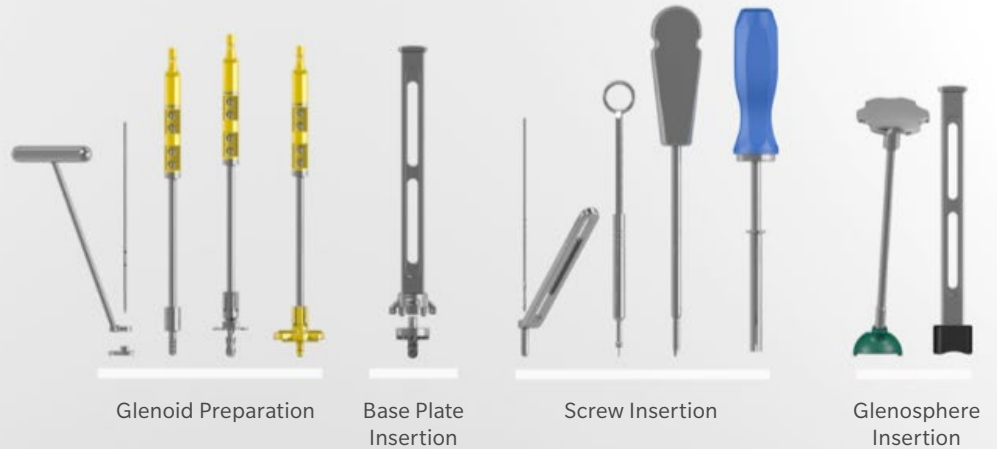


Trabecular Metal Reverse Plus™ (TMR+™) Shoulder System

Key Surgical Technique Steps involving one-step reaming and drilling option

Important: This document does not present the complete surgical technique for the TMR+ System. It depicts a few key steps in the surgical technique to familiarize the audience at a high level on the basic steps involved in TMR+ surgical technique. For the complete Surgical Technique, please visit the Zimmer Biomet website (www.zimmerbiomet.com).



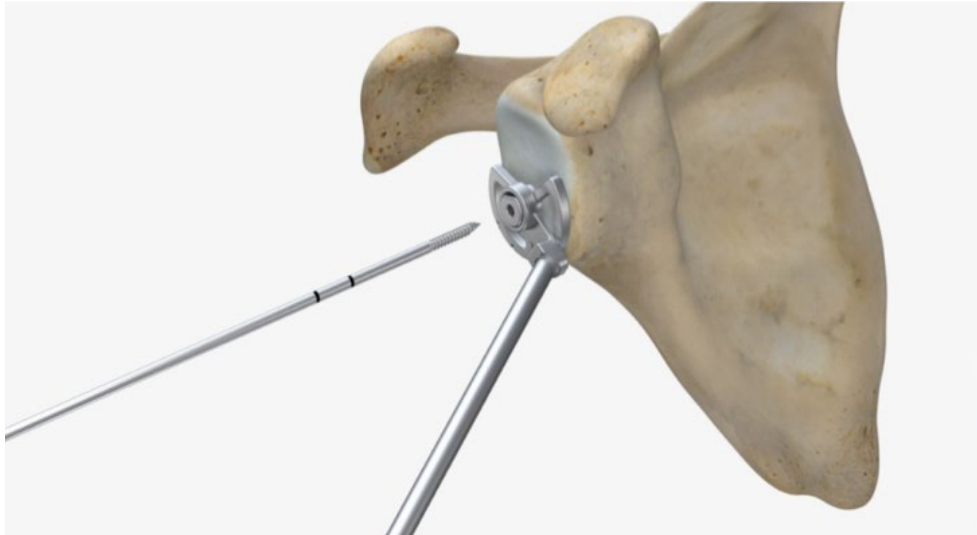
Glenoid Preparation

Base Plate
Insertion

Screw Insertion

Glenosphere
Insertion

Glenoid Preparation



Guide Pin Placement



Drill Pilot Hole

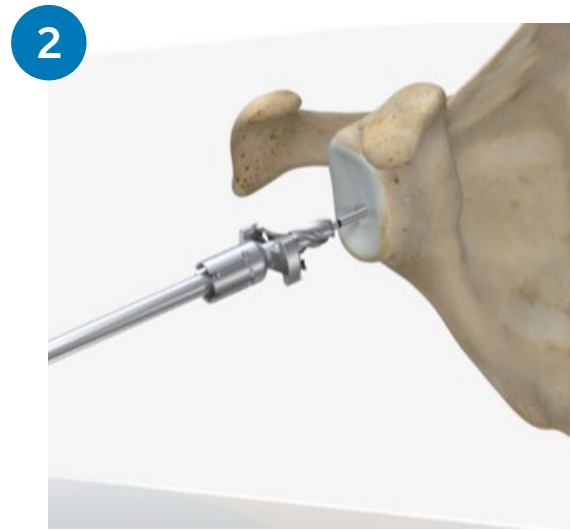
Reaming Options



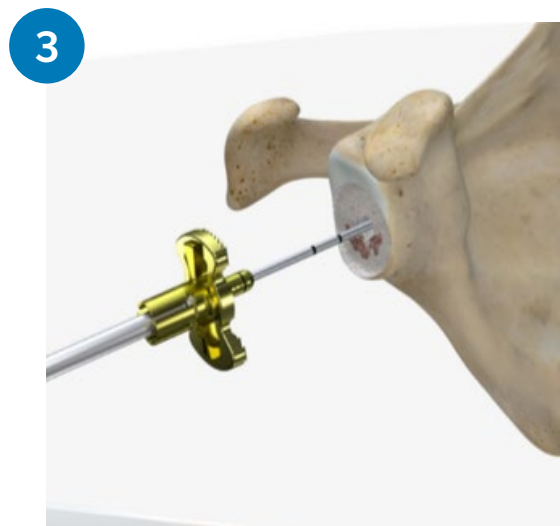
“Option 1: Ream and Drill in One Step”



Assemble reamer for reaming and drilling in one step

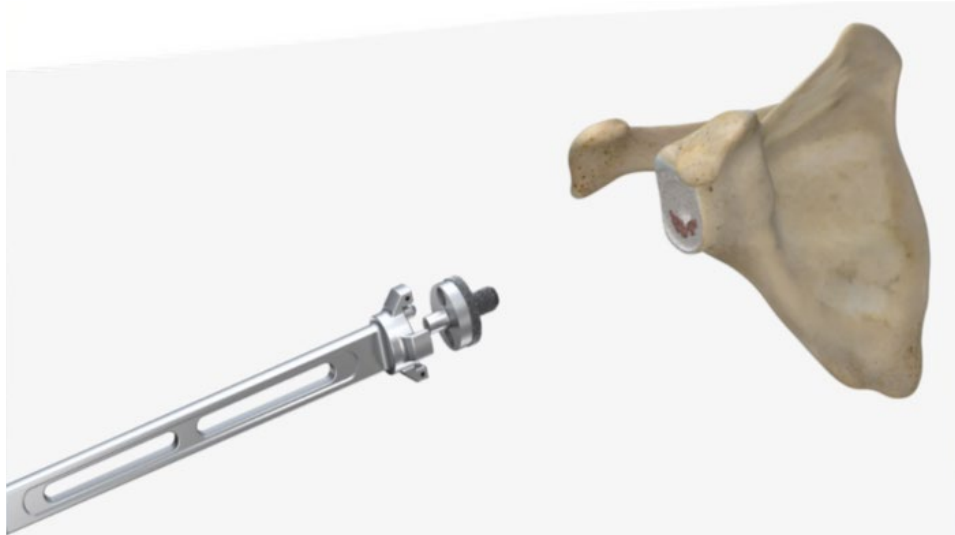


Ream and Drill for Base Plate in one step



Peripheral reaming for Glenosphere

Base Plate Insertion

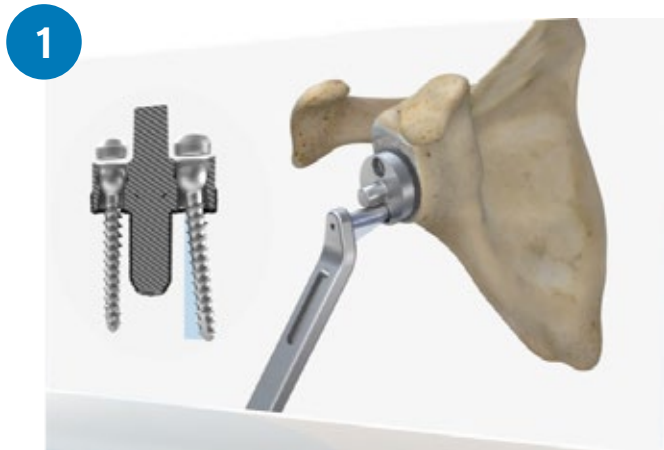


Insert Base Plate

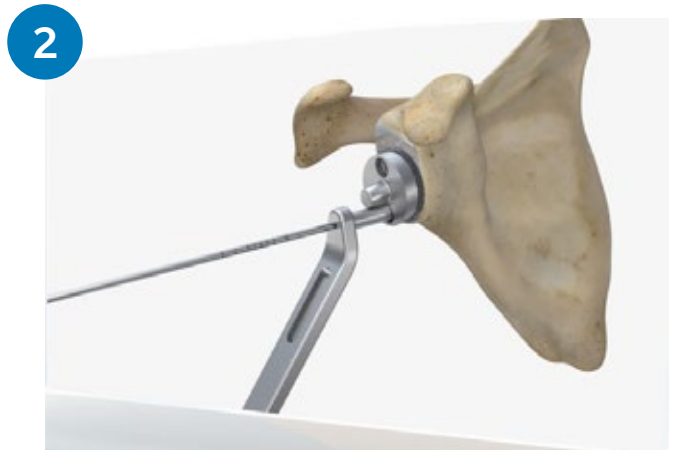


Impact Base Plate

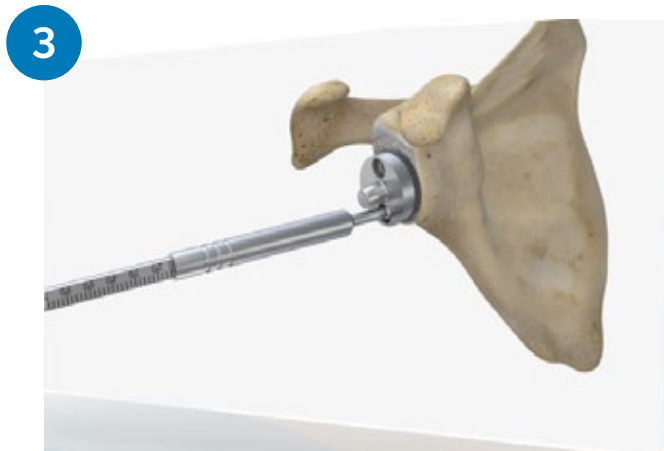
Screw Insertion



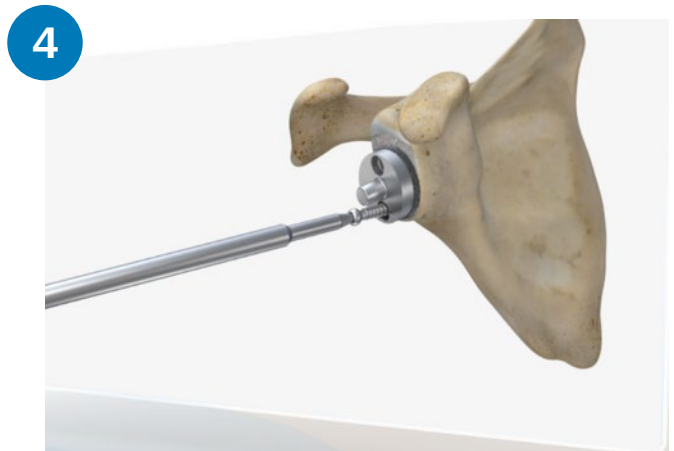
Poly axial screws



Drill screw hole x 2



Measure screw length x 2



Insert screw x 2



Locking caps for screws



Insert locking caps for screws x 2

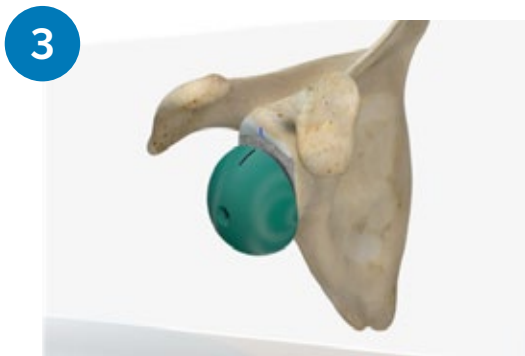
Glenosphere Insertion



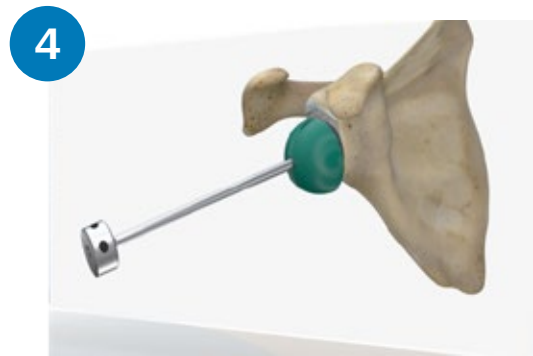
Glenosphere Trialing – inferior and lateral offsets



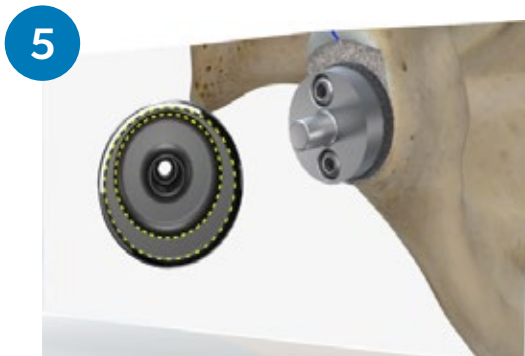
Reduce joint with trials



Mark on bone against Glenosphere Trial mark



Remove Glenosphere Trial



Choose Glenosphere based on trialing



Engage Glenosphere



Match Glenosphere etch mark with mark on bone



Impact Glenosphere

Joint reduction with implants



Reduce joint

INDICATIONS

Hemiarthroplasty/Total application:

- the treatment of severe pain or significant disability in degenerative, rheumatoid, or traumatic disease of the glenohumeral joint;
- ununited humeral head fractures of long duration;
- irreducible 3-and 4-part proximal humeral fractures;
- avascular necrosis of the humeral head, or other difficult clinical management problems where arthrodesis or resectional arthroplasty is not acceptable.

Reverse application:

- the treatment of severe pain or significant disability in degenerative, rheumatoid, or traumatic disease of the glenohumeral joint;
- ununited humeral head fractures of long duration;
- irreducible 3-and 4-part proximal humeral fractures;
- avascular necrosis of the humeral head, or other difficult clinical management problems (such as a failed total shoulder arthroplasty or grossly rotator cuff deficient joint) where arthrodesis or resectional arthroplasty is not acceptable.
- The assembled humeral component may be used alone for hemiarthroplasty or combined with the glenoid component or reverse components for total shoulder arthroplasty (conventional or reverse applications).
- The humeral components are intended for either cemented or uncemented use. The reverse base plate is intended for uncemented use, and requires two screws for fixation. When used in a total shoulder application, the all-polyethylene glenoid components are intended for cemented use only. In the USA, the Trabecular Metal Glenoid must be cemented under the base (see surgical technique for details) or fully cemented in place.

CONTRAINDICATIONS

Conventional Applications:

- Local/systemic infection
- Presence of significant injury to the upper brachial plexus
- Paralysis of the axillary nerve
- Marked bone loss
- Nonfunctional deltoid or external rotator muscles
- Any neuromuscular disease compromising the affected limb that would render the procedure unjustifiable

Reverse Applications:

- Local/systemic infection
- Presence of significant injury to the upper brachial plexus
- Paralysis of the axillary nerve
- Marked bone loss
- Nonfunctional deltoid
- Any neuromuscular disease compromising the affected limb that would render the procedure unjustifiable

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