

Surgical technique of the Noviomagus Cup Resector

Application: This device is solely meant for the removal of an uncemented acetabular cup during revision hip arthroplasty.



STEP 1. PREOPERATIVE EXAMINATION

Examine the presence of adjunctive fixation, such as screws, pegs or spikes. If applicable, remove the screws and pegs from the cup. If applicable, determine whether to cut between the spikes or to use a larger *Blade* size to cut around the spikes.

INSTRUMENT ASSEMBLY

STEP 2. INSTRUMENT SELECTION

Warning: do not use visually damaged instruments or blades.

Determine the *Head* size and the *Blade* size which is needed for acetabular cup removal. The *Head* size corresponds to the inner diameter of the cup. If the *Head* does not fit inside the cup, select one *Head* size smaller. The *Blade* size corresponds to the outer diameter of the cup. If the *Blade* does not fit around the cup, select one *Blade* size larger.

STEP 3. HEAD ASSEMBLY

Warning: first assemble the Head before assembling the Blade. Blade edges are sharp.

Place the *Head* onto the *Shaft* end. Ensure a complete fixation by sliding the *Head* over the *Shaft* until it clicks, to prevent loosening of the *Head* during cup removal. When using two *Shafts*, place a *Head* of same size onto each of both *Shafts*.

STEP 4. BLADE ASSEMBLY

Warning: first assemble the Head before assembling the Blade. Blade edges are sharp.

- Screw the *Bolt* into the *Shaft's* thread.
- Place the *Blade* beneath the *Bolt's* head and ensure the *Blade* is entirely enclosed by the *Shaft*. When the *Blade* does not fit beneath the *Bolt*, screw the *Bolt* a few turns counterclockwise and place the *Blade* again.
- Screw the *Bolt* tightly using the *Hex Key*. Ensure a firm fixation to prevent loosening of the *Bolt* during cup removal.
- Check concentricity of the *Blade* with the *Head* after assembly.
- When using two *Shafts*, place the *Starter Blade* in one *Shaft* and the corresponding *Finisher Blade* in the second *Shaft*.



Head placement



Bolt placement



Blade placement

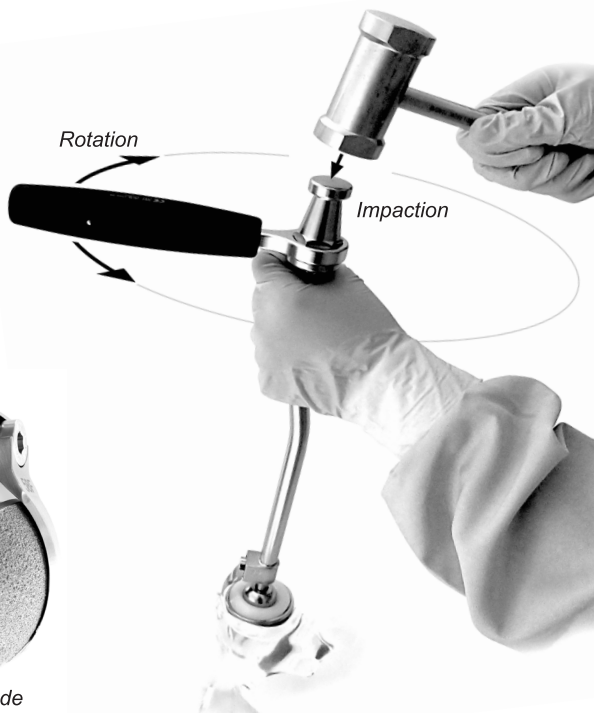


Blade fixation

- For instructions for use see document "Instructions for use of reusable surgical instrumentation" (IFU-MOI001) and "Instructions for use of single-use instruments for sterile use" (IFU-MOI002).
- For reprocessing instructions see document "Reprocessing of reusable medical devices" (REP-MOI005).



Wrench in six positions



Starter Blade



Finisher Blade

SURGICAL TECHNIQUE

STEP 5. CUP RESECTING

Warning: Ensure a proper centering of the Blade to prevent Blade-cup impingement and to minimize acetabular bone loss. If the cup liner is damaged or has an offset, remove the liner and use a provisional insert.

Starter Blade

The cup resecting procedure is started using the *Starter Blade*. Place the *Head* into the liner of the cup. The *Head* works as a guide during cutting around the cup's periphery. Use an impactor to hit the *Shaft* and to guide the *Blade* into the surrounding bone of the cup. Create slots around the periphery of the cup. Use the *Wrench* for axial rotation. The *Wrench* can be used in six different positions. Alternate between impacting and rotating. Remove the *Shaft* with *Starter Blade* when the upper part of the cup is resected from bone.

Finisher Blade

The *Finisher Blade* is used to completely resect the acetabular cup. Use the same technique described for the *Starter Blade*. Alternate between impacting and rotating until the cup is resected completely.

INSTRUMENT DISASSEMBLY

STEP 6. BLADE DISASSEMBLY

Warning: first disassemble the Blade before disassembling the Head. Blade edges are sharp.

Disassemble the *Blade* from the *Shaft* by unscrewing the *Bolt* using the *Hex Key*. To switch *Blades*, unscrew the *Bolt* only for a few turns. To clean and sterilize the instruments, completely unscrew the *Bolt* from the *Shaft*.

Warning: do not use damaged Blades. It is recommended to discard both Starter and Finisher Blade after cup resection. Possible wear or deformation of Blades can hinder effective cup resection in following surgery. In case of single-use Blades discard the Blades after cup resection.

STEP 7. HEAD DISASSEMBLY

Warning: first disassemble the Blade before disassembling the Head. Blade edges are sharp.

Disassemble the *Head* from the *Shaft* end. Pull away the *Head* from the *Shaft*.