

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 size of head and the size of blade which is needed for acetabular cup removal. The head size corresponds to the inner diameter of the cup. The blade size corresponds to the outer diameter of the cup.

STEP 3. HEAD ASSEMBLY

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

Thread the head tightly onto the instrument. Ensure a firm fixation using the wrench and the hex key to prevent loosening of the head during cup removal. Place a head of same size onto each of both instruments.

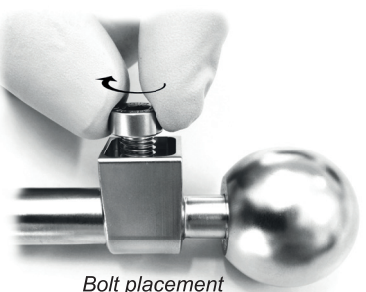
STEP 4. BLADE ASSEMBLY

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

- Screw the bolt into the instrument's thread. The bolt contains two threads. Screw the bolt with both threads into the instrument.
- Place the blade beneath the bolt's head and ensure the blade is entirely enclosed by the instrument. When the blade does not fit beneath the bolt, screw the bolt a few turns counter clockwise 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.
- Place the starter blade in one instrument and the corresponding finisher blade in the second instrument.



Head assembly



Bolt placement



Blade placement



Blade fixation

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

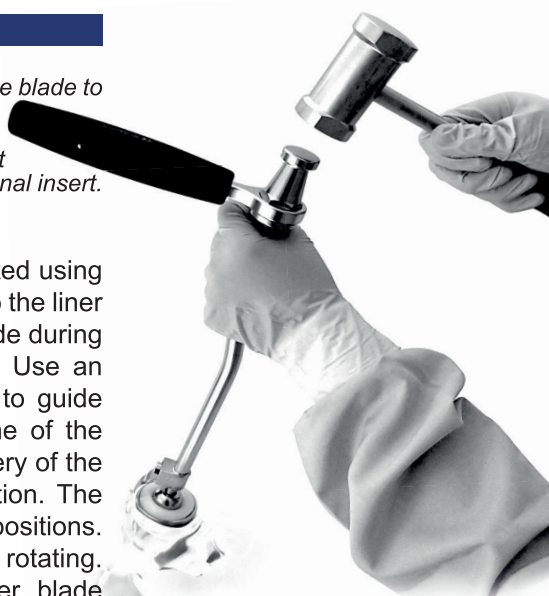
SURGICAL TECHNIQUE

STEP 5. CUP RESECTING

Warning: Ensure a proper centering of the blade to prevent blade-prosthesis impingement and to minimize acetabular bone loss. If the cup liner is damaged or has an offset liner, 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 instrument 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 instrument and starter blade when the upper part of the cup is resected from bone.



Impaction

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.



Wrench in six positions



Starter blade



Finisher blade

INSTRUMENT DISASSEMBLY

STEP 6. BLADE DISASSEMBLY

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

Disassemble the blade from the instrument by unscrewing the bolt using the hex key. To switch blades, unscrew the bolt only for a few turns. To clean and sterilize the instrument, completely unscrew the bolt from the instrument. The bolt can only be completely unscrewed by hand instead of using the hex key.

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.

STEP 7. HEAD DISASSEMBLY

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

Disassemble the head using the hex key. Use the wrench at the same time when application of a higher torque is required.