Pre-op planning

Stryker’s EZout System is intended to remove hemispherical, non-cemented cups.

a. Identify and remove any screws from the cup.

b. Identify whether fins/spikes are present and will need to be cut around.
Step 1: Size the centering plug

The centering plug size is determined by the outer diameter of the liner. Accurate sizing is required.

a. Remove the acetabular liner.
   
   **Note:** Use the femoral head component to determine the plug size for implants without a liner.

b. Center the bottom of the liner in the liner template. The correct size will have the smallest gap between the bottom and sides of the liner.
   
   **Note:** For resurfacing cups, subtract 4mm from the size indicated by the plug sizing template.

c. Select the plug size based on the liner measurement and place it into the cup.

d. Assess the fit of the plug in the cup.
   
   • If the plug has excessive movement from side to side, try the next larger plug size.
   
   • If the plug has excessive rocking, try the next smaller plug size. If rocking still occurs, use the original plug size selected (per step c) with a riser ring.
   
   **Note:** The final plug size should not be more than +/- one size away from the initially identified plug size.

Step 2: Size the blade

The blade size is determined by the outer diameter of the cup.

a. Completely expose a portion of the cup’s rim.

b. Attach the blade sizing tool to the trial rod and place it into the centering plug.

c. Determine the blade size by assessing which numbered segment of the sizing tool most closely meets or exceeds the outer rim of the cup.

   Hold the trial rod perpendicular to the cup for an accurate measurement.

   Compare the sizing tool to the edge of the cup, not the plug.
Step 3: Remove the cup

**Important:** Ensure the attachment is perpendicular to the cup for the duration of cutting. Do not rock or tilt.

a. Pre-lubricate the centering plug with saline. Always use irrigation while cutting.

b. Pull the attachment handle toward the handpiece to fully retract the blade and insert the attachment into the centering plug.

c. With the attachment perpendicular to the cup, advance the blade to assess proper fit of the blade to the edge of the cup.

d. Fully retract the blade, then engage the trigger to oscillate the blade. Engage the blade with the bone by gently sliding the attachment handle toward the cup while vigorously rotating the handle back and forth.

   **Note:** The blade is designed for scraping, not plunging. Rotate the handle quickly back and forth with very little pressure on the blade. Retract the blade if bogging occurs and focus more on the scraping motion.

e. Continuously and quickly rotate the handle back and forth while gently advancing the oscillating blade down the side of the cup. Cut around the circumference of the cup with the short blade, making a final full pass around the cup.

   **Note:** Always verify that the short blade can move freely around the entire circumference of the cup before switching to the long blade. Ensure the green indicator ring is flush with the back of the attachment to confirm full depth. Failure to cut a clear path with the short blade will cause the long blade to bog down.

f. Remove the short blade and assemble the long blade, or swap attachments with the long blade assembled.

g. Insert the long blade into the existing cut channel, then insert the tip of the attachment into the centering plug.

h. Continue cutting with the long blade, making a final full pass around the cup or until the cup is removed. Do not use the attachment or blade to pry the cup out.

   **Note:** If the cup is still attached after cutting with the long blade, use other methods to cut the final portion of bone.
Assembling the EZout Tool

Ensure the speed selector on the handpiece is in safe mode prior to assembly.

a. Pull back the locking sleeve to insert the attachment into the handpiece.

b. Turn the attachment rod to align the keyed feature of the attachment with the keyed feature of the handpiece.

c. Slide the attachment handle away from the handpiece, press the blade latch button, insert the short blade and release the button. Gently tug on the blade to assure it’s fully connected.

d. Attach the battery to the handpiece.

EZout System components

1. Handpiece
2. Attachment
3. Plug sizing templates
4. Centering plugs
5. Blade sizing tools
6. Trial rod
7. Riser rings
8. Insert tray