

Section: Division of Nursing
Approval: _____

PROCEDURE

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HACKETTSTOWN REGIONAL MEDICAL CENTER

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OR
(Scope)

TITLE: STRYKER ROTARY HANDPIECE 4103 SYSTEM 4

PURPOSE: To outline procedure for proper use of System 4 Rotary Handpiece.

SUPPORTIVE DATA: The Stryker System 4 Rotary Handpiece when used with different attachments is intended for orthopedic procedures involving drilling, reaming and driving wire or pins.

- EQUIPMENT LIST:**
1. 2 - Handpieces
 2. 2 – 1:1 Hudson Modified Trinkle
 3. 1 – 3.25:1 Hudson Modified Trinkle
 4. 1 – 4:1 Hudson Modified Trinkle
 5. 1 – 1:1 Trinkle
 6. 2 – 1:1 Synthesis attachment
 7. 1 – 1:1 1/4 Jacobs Chuck – Drill Mode
 8. 1 – 3:25:1 1/4 Jacobs Chuck
 9. 2 – Chuck Keys
 10. Battery Pack

CONTENT:

PROCEDURE STEPS:

1. Rotate the trigger switch to safe position.
2. Position the attachment's J – notch to the side while inserting the attachment with a gradual rotating motion until it snaps into place.
3. Install the desired accessory.
4. Battery pack installation.
 - a. Slide fully charged battery pack firmly onto handpiece until it snaps.
 - b. Test the operation of the handpiece by rotating the trigger to the forward or reverse position and squeezing the trigger.

KEY POINTS:

- Rotate the trigger to a horizontal position for safe.
- If resistance is felt, rotate the nose of the attachment, this will turn the shaft until it properly aligns.
Tug the attachment to ensure it is secure.
To remove attachment slide actuator button down.
- Rotate the trigger to a horizontal position for safe.
- To remove battery pack, slide the latch toward the back of the instrument and pull battery out.
- Rotating the trigger to a vertical position (dot at 12 o'clock) enables the handpiece to run clockwise (forward).
Rotating the trigger to a vertical position (dot at 6 o'clock) enables the handpiece to run counterclockwise (reverse).

- c. Return the handpiece to the safe position until ready for use. The handpiece has a variable speed motor which is controlled by slight pressure variations on the trigger.

- 5. Attachment Use.
 - a. Jacobs In difference gear ratios holds wires, pins and bits up to 6.4mm diameter.
 - 1. Use chuck key to open chuck jaws.
 - 2. Insert tool
 - 3. Use chuck key to close jaws. Make sure tool is centered in jaws. Tug on tool to check for proper retention before us.

- 6. Drill attachments.
 - a. Synthesis 1:1. Accepts synthesis tools (drill bits, taps, screw drivers).
 - b. Hudson modified trinkle 1:1. Accepts tools with Hudson or modified trinkle fittings.
 - c. Trinkle 1:1. Accepts tools with standard trinkle fittings.

- 7. Reamer attachments.
 - a. Modified Hudson trinkle 3:25:1. Accepts tools with Hudson or modified trinkle fittings. Provides low speed and high torque.
 - b. Modified Hudson trinkle 4:1. Accepts tools with Hudson or modified trinkle fittings. Provides low speed and high torque.

- 8. Tool installation. Drill and reamer attachments.
 - a. Slide back the retaining collar.
 - b. Insert the desired tool.
 - c. Release the retaining collar. Twist and pull tool to check for proper retention prior to use.

WARNINGS:

- 1. Remove battery pack from handpiece when not in use.
- 2. Prior to each use, system components should be operated and inspected for any damage or loose components.