Revolution® Cement Gun and Mixing System

Proficiency Assessment

1. Component Terminology
   Match each letter with the correct component in the right hand column and write the letter on the appropriate line.
   - Trigger
   - Cradle
   - Release Knob
   - Handle
   - Delivery Setting

2. Cement Mixing: Accessory Terminology
   Using the images, match the drilling attachments with their correct product name/description and place corresponding letter on the line provided.
   - Cement Mixing System: plastic cartridge is used to mix powder and liquid. Base tray provides a stable surface for the cartridge to avoid spilling of cement package contents.
   - Hudson Modified Trinkle: when connected, this attachment forms a secure bond with the mixing system and the drill.
   - Tibia Nozzle: one of many varieties of application nozzles. The nozzle design is specific to the type of surgical procedure.
   - Drill: this is used to mix the powder and liquid consistently and efficiently. The drill, Hudson attachment, and the mixing system work together to mix the cement material (hand mixing attachment also available).

3. Basic Functionality*
   *Refer to “Step by Step” Instructions for detailed mixing procedures.
   1. Demonstrate proper procedure to open and set up Cement Mixing System.
   2. Combine cement components using correct sequence per Manufacturer’s recommendations.
   3. Apply Vacuum Pressure
   4. a. If using power; connect rotary to the base of the mixer.
      b. If mixing by hand; connect mixing handle to the base of the mixer.
   5. Mix cement, remove vacuum pressure, and install chose application nozzle.
   6. Place cartridge into the cradle of the cement gun and secure. Squeeze trigger to fill nozzle until bone cement reaches the tip of the nozzle.
1. The ___ setting is designed to deliver 13 to 15cc of bone cement per squeeze of the trigger (used to rapidly fill the application nozzle and distal femur).
   Select the best possible answer.
   a. Pressurize
   b. Overload
   c. Fill
   d. Permanent Press

2. In the event your Revolution Gun is in need of repair you should:
   a. Take it home and tinker with it until it is fixed.
   b. Use plenty of tape and glue to fix your problem.
   c. Contact a Stryker representative and arrange to send it in for repair.
   d. Throw away the broken device.

3. The Revolution Mixing System can hold a maximum of ____ batches of Simplex Cement at one time.
   a. 7
   b. 3
   c. 1
   d. 4

4. Applying excessive pressure or force to the cement gun may cause the cartridge to break when handling.
   Circle the correct answer.
   True ______ False ______

***For further information and complete Operating and Care Instructions please refer to the corresponding IFU supplied with your Stryker Revolution Cement Gun and Mixing System. For a copy of the IFU please contact your local Stryker Surgical Sales Representative.

For other troubleshooting tips and suggestions consult the Instructions for Use manual, or contact your local ProCare® Specialist.

Completed By: ______________

Supervisor/Trainer (if required): ______________

Print Name ____________________________

Signature ____________________________

Date:   /   /   

Print Name ____________________________

Signature ____________________________

Date:   /   /   

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**Answer Key**

**Component Terminology**
Match each letter with the correct component in the right hand column and write the letter on the appropriate line.

- B: Trigger
- C: Cradle
- D: Release Knob
- E: Handle
- A: Delivery Setting

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**Cement Mixing: Accessory Terminology**

Using the images, match the drilling attachments with their correct product name/description and place corresponding letter on the line provided.

- B: Cement Mixing System; plastic cartridge is used to mix powder and liquid. Base tray provides a stable surface for the cartridge to avoid spilling of cement package contents.
- C: Hudson Modified Trinkle; when connected, this attachment forms a secure bond with the mixing system and the drill.
- A: Tibia Nozzle; one of many varieties of application nozzles. The nozzle design is specific to the type of surgical procedure.
- D: Drill; this is used to mix the powder and liquid consistently and efficiently. The drill, Hudson attachment, and the mixing system work together to mix the cement material (hand mixing attachment also available).

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**Basic Functionality**

*Refer to “Step by Step” instructions for detailed mixing procedures.

1. Demonstrate proper procedure to open and set up Cement Mixing System.
2. Combine cement components using correct sequence per Manufacturer’s recommendations.
3. Apply Vacuum Pressure
4. a. If using power; connect rotary to the base of the mixer.
   b. If mixing by hand; connect mixing handle to the base of the mixer.
5. Mix cement, remove vacuum pressure, and install chosen application nozzle.
6. Place cartridge into the cradle of the cement gun and secure. Squeeze trigger to fill nozzle until bone cement reaches the tip of the nozzle.
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4. Applying excessive pressure or force to the cement gun may cause the cartridge to break when handling.
   Circle the correct answer.
   True False