



## INSTRUCTIONS FOR THE CARE OF REUSABLE INSTRUMENTS: A FOUR STEP PROCESS

### 1. Rinsing Process

- a. Following a surgical procedure all reusable instruments should be rinsed under warm running water.
  - i. Removes most surface level contaminants such as blood, tissue, and other fluids.

### 2. Disinfection Process

- a. Steps:
  - i. All Instruments should be soaked in an enzymatic cleaner bath for 10 minutes and then rinsed under running water.
  - ii. Instruments should then be submerged in a PA approved disinfectant for a minimum of 10 minutes, after which they should be rinsed under running water.
- b. Minimizes the risk of contaminating personnel during cleaning.
- c. **NOTE: DO NOT USE BLEACH OR OTHER NON-PA CHEMICALS TO DISINFECT INSTRUMENTS.**
  - i. Bleach and other chemicals may corrode instruments and shorten their lifespan.
  - ii. The use of bleach or other non-PA approved chemicals voids the Norralco Lifetime Warranty on the instrument.

### 3. Cleaning Process

- a. A solution of water and neutral pH (7) detergent should be used.
- b. Choose from among the following cleaning procedures:
  - i. **Ultrasonic Cleaning (Preferred)**
    1. Place instruments in an open position into the ultrasonic cleaner.

- a. **DO NOT ALLOW SHARP INSTRUMENTS TO TOUCH OTHER INSTRUMENTS.**
- b. **DO NOT MIX INSTRUMENTS MANUFACTURED FROM DIFFERENT METALS IN ONE CYCLE.**

2. Completely submerge instruments in solution.
3. Fasten the lid onto the cleaner.
4. Run cleaner for its full cycle as stated by the manufacturer.
5. Replace solution as recommended by the manufacturer of the cleaner.

**ii. Automatic Washing Sterilization**

1. Lubricate instruments before sterilization cycle with non-silicone, water soluble surgical lubricants (such as spray lube).
2. Follow the instructions of the device manufacturer.
3. Relubricate instruments following sterilization cycle with non-silicone, water soluble surgical lubricants (such as spray lube).

**iii. Manual Cleaning (If the Previous Two Options are Unavailable)**

1. Use a stiff nylon brush to clean the instrument.
  - a. **DO NOT USE OTHER TYPES OF BRUSHES (STEEL, WOOL, WIRE, ETC.), UNLESS CLEANING SERRATED AREAS, BONE FILES, OR STAINED AREAS IN KNURLED HANDLES.**
2. Use neutral detergents (pH 7) while cleaning
  - a. **NOTE: ACIDIC DETERGENTS WILL CORRODE STEEL AND BASIC DETERGENTS WILL DEPOSIT PHOSPHATE ON SURFACE OF INSTRUMENT AND INTERFERE WITH OPERATION.**
3. Use caution when brushing delicate instruments, handle them separately from other instruments.
4. Inspect all instruments to ensure there are no stains or foreign material present and that they are functioning properly.
  - a. Stains can be removed with an approved stain remover.

b. Inspection Tips:

- i. Ensure forceps' tips are aligned.
- ii. Ensure teeth are not catching.
- iii. Ensure hemostats and needle holders' teeth do not have a gap through which light can be seen when closed in the first position.
  1. Hemostats can show a small open space halfway in from the closed tips.
- iv. Ensure instruments' joints are not loose and lock and unlock properly.
- v. Check jaws for wear.
- vi. Ensure suction tubes are clean from the inside.
- vii. Test biopsy punches by punching a hole into tissue paper.
- viii. Check functions of all retractors
- ix. Ensure cutting instruments and knives have sharp, undamaged blades.

5. Rinse instruments under running water to ensure all detergent is rinsed out.

- a. Open and close any hinged instruments during this procedure to ensure there is no detergent remaining in the hinges.

6. If storing instruments, air dry them and then store them in a clean and dry space.

#### 4. Autoclaving

- a. Lubricate all instruments where metal parts meet and interact with non-silicone, water soluble surgical lubricants (such as spray lube).
- b. If wrapping instruments, ensure there is no detergent residue on towel.
  - i. Residue from detergent can stain instruments.

- c. Sterilize instruments either individually or in sets, ensuring that they are in open and unlocked positions. **(Locking instruments results in damage to hinges and joints).**
  - i. **Individual Instruments:**
    - 1. Use disposable paper or plastic pouches.
      - a. Use a pouch that is 4 in. or wider for instruments with ratchet locks.
  - ii. **Instrument Sets:**
    - 1. Place heavier instruments at the bottom, if using two layers.
    - 2. Do not overload instruments.
    - 3. Place towel at the bottom of the pan to absorb excess moisture.
- d. Cautions:
  - i. **DO NOT LOCK OR CLOSE INSTRUMENTS THAT ARE BEING PUT IN THE MACHINE**
  - ii. If using a tabletop autoclave, before drying, open the door no more than ¼ of an inch. If the door is opened more, condensation can build and leave water marks on instruments and result in wet packs.
  - iii. Make sure autoclave filters and chambers are cleaned periodically.

## **5. Cold Sterilization\***

- a. Only suitable if a ten-hour window for sterilization is available.
- b. Can be more demanding on instruments.
- c. A cold sterilization soak can be used for disinfection.
- d. Read manufacturer's specifications for sterilization.
- e. **DO NOT USE BLEACH**
- f. **NOT RECOMMENDED FOR TC (TUNGSTEN CARBIDE INSERTS) INSTRUMENTS**
  - i. **IF COLD STERILIZATION IS CONDUCTED ON TC INSTRUMENTS, SOLUTIONS CONTAINING BENZYL AMMONIUM CHLORIDE ARE NOT RECOMMENDED**

**CAUTION: VIOLATING ANY WARNINGS LISTED VOIDS THE LIFETIME WARRANTY**