

Devices

All reusable surgical instruments supplied by NSI, Inc. comprising fixed assemblies (no moving parts), simple hinged surgical instruments, and simple assemblies.

Warnings

Any variation between what is suggested here and your facility's policies and procedures or those indicated by your sterilizer manufacturer should be brought to the attention of the appropriate responsible persons for direction before cleaning and sterilizing your instruments.

Prior to use, all instruments should be inspected to insure proper function and condition. Do not use instruments if they do not perform satisfactorily in an operational test.

Limitations on reprocessing

Repeated processing has minimal effect on these instruments. End of life is normally determined by wear and damage due to use.

Instructions

Point of use

 It is recommended that instruments are reprocessed as soon as is reasonably practical following use.

Preparation for Cleaning and Sterilization

- · Disassembly of simple assemblies is necessary to allow more complete cleaning and sterilization.
- · Follow cleaning instructions below before sterilization.

Cleaning: Manual

Equipment: Neutral pH (pH 6.0 - 8.0) detergent, soft but firm brush, deionized or distilled water.

- Soak soiled instruments for a minimum of 30 minutes in fresh neutral pH (pH 6.0 - 8.0) detergent. DO NOT ALLOW INSTRUMENTS TO DRY AFTER USE.
- · Soak the instruments in an open or relaxed position.
- · After initial immersion, open and the instrument several times to allow the detergent to penetrate all crevices.
- A soft firm but firm brush should be used to scrub all surfaces to remove any visible particulate. Additional attention may be necessary in each crevice of the distal tip
- Rinse all surfaces with distilled water to remove any residual debris or cleaning agent.

Cleaning: Ultrasonic

Equipment: ultrasonic cleaner, neutral pH (pH 6.0 - 8.0) detergent, instrument trays or baskets.

- · Load instruments in the wide-open position.
- · Do not overload
- · Sonicate for twenty (20) minutes.
- When unloading, check cannula, holes, openings, etc. for complete removal of visible soil. If necessary, repeat cleaning cycle.
- · Rinse with distilled or deionized water to remove residual solution.



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Cleaning: Automatic

Equipment: washer/disinfector, low foam, neutral pH (pH6.0 - 8.0) detergent, instrument trays or baskets.

- · Load instruments in the wide-open position.
- Do not overload.
- · Follow detergent instructions provided by detergent provider.
- · Follow wash instructions provided by washer / disinfector provider.
- When unloading, check cannula, holes, openings, etc. for complete removal of visible soil. If necessary, repeat cleaning cycle. • Rinse with distilled or deionized water to remove residual solution.

Inspection and function testing

- · Check for smooth movement of hinge without excessive "play." Locking mechanisms should be free of nicks and present a continuous edge
- Instruments with broken, cracked, chipped or worn parts, or tarnished surfaces should not be use, but should be repaired or replaced immediately
- Stained or discolored instruments should be cold soaked in a cold soak and stain remover, following the detergent manufacturer's directions
- · Lubricate the instrument before autoclaving with a steam permeable instrument lubricant.

Packaging

· Instruments can be wrapped in sterilization wrap, according to manufacturer's instructions.

Sterilization

Sterilization of instruments may be accomplished by Autoclave or Ethylene Oxide. Time and Temperature parameters required for sterilization vary according to type of sterilizer, cycle design, and packaging material.

- Do not sterilize instruments at temperatures over 141°C (285°F).
- All ring-handled instruments must be autoclaved in the fully open position to prevent cracking of the box lock.
- Always verify parameters with sterilizer manufacturer's written instructions.

Parameters for Wrapped Instruments in Steam Sterilization

| | Temperature | Exposure | Drying |
|-------------------------|--------------|------------|------------|
| Gravity Displacement | 121°C(250°F) | 30 Minutes | 45 Minutes |
| | 132°C(270F) | 15 Minutes | 45 Minutes |
| Prevacuum Sterilization | 132°C(270°F) | 4 Minutes | 30 Minutes |
| | 135°C(275°F) | 3 Minutes | 16 Minutes |

Parameters for wrapped Instruments in Ethylene Oxide (EtO) Sterilization

| Concentration | Temperature | Exposure Time | Humidity |
|---------------|---------------|------------------|----------|
| 600 mg/l | 55°C(131°F) ± | 145 Minutes | 55%±5% |
| (100%) | 2°C(3.6°F) | | |

Storage

· After sterilization, instruments should remain in sterilization wrap and be stored in a clean, dry cabinet or storage case.

• Care must be taken to protect the jaws from damage.

Guarantee

We guarantee every surgical instrument bearing the NSI, Inc. brand name to be free of functional defects in workmanship and materials when used normally for its intended surgical purpose. Any NSI Instrument proving to be so defective will be replaced or repaired at no charge.

Repair service

Regardless of age, if any NSI instrument needs service, return it to your authorized service center. All instruments must be cleaned and sterilized prior to sending. For repairs outside the U.S, please Contact your local distributor.