**PRODUCT DESCRIPTION**

Nathanson Hooks have been designed specifically to retract the liver in various laparoscopic procedures which require the liver to be held away from the operative field for the entire procedure. They are sold individually, as a set of assorted sizes or with one of the Mediflex Holders and Positioners. The various sizes and assortments are shown on the reverse side of this document. While designed specifically to be used with the Mediflex Holders and Positioners, it is possible that other devices may be used for that purpose. They may also be hand-held by one of the scrubbed OR Staff. It is the responsibility of the hospital and/or surgeon to determine the suitability of any non-Mediflex device used to hold a Nathanson Nathanson Hook.

**CLEANING**

These devices should be cleaned and sterilized upon receipt. After use, they should be cleaned according to hospital protocol for reusable surgical instruments. Follow instructions and warnings as issued by the manufacturer of any decontaminants, disinfectants and cleaning agents used. Suggested steps in the cleaning process include but are not limited to:

- Wherever possible, do not allow blood, debris or bodily fluids to dry on devices. For best results and to prolong the life of the device, reprocess immediately after use. If they cannot be reprocessed immediately, use enzymatic foam spray cleaner or deionized (distilled) water to help prevent soil from drying.
- The individual Nathanson Hooks do not come apart in any way. Do not attempt to disassemble them.
- Prepare enzymatic detergent [such as Kenzyme™ according to manufacturers’ recommendations at 40°C and soak device(s) for fifteen (15) minutes.
- Scrub the submerged device(s) with a soft bristled, non-metallic brush. Agitate the device(s) by hand while scrubbing. Move any movable parts to loosen soil for one minute total, for each Device.
- Rinse device(s) with warm tap water for thirty (30) seconds.
- Place device(s) into bath containing warm (38-49°C) water. Agitate the device(s) by hand for one (1) minute. Repeat two additional times.
- Sonicate device(s) for fifteen (15) minutes in 40°C water and a neutral pH detergent [such as NeutraZ™].
- Prepare detergent according to manufacturers’ recommendations.
- Rinse the device(s) with clean tap water for one (1) minute.
- Dry the device(s) with a clean, lint-free cloth.
- Re-inspect for cracks and sharp edges. Inspect for visible soil or debris. Repeat cleaning procedure if the device(s) appear to be soiled.

**STERILIZATION**

Minimum parameters for Pre-Vac cycles are 4 minutes of 132 Degrees C (270 degrees F). Validated hospital protocol for reusable surgical instruments including Gravity, Flash, Ethylene Oxide, Peracetic Acid (Steris) and Hydrogen Peroxide Gas Plasma (Sterrad) may also be used. Always follow the manufacturer’s recommendation for surgical instruments in the use of any sterilizing equipment or method.

**SET-UP AND USE**

If used with a Mediflex StrongArm™, StrongArm Plus™ or Flex Arm™ Holder, refer to the Instructions for Use for the applicable device. If used with another Manufacturer’s device, please check with that manufacturer for instructions.

After the hook is inserted and positioned under the liver, attach the hex post at the proximal end of the Hook into the Quick Disconnect Fitting:

- Be sure that the Locking Sleeve (Fig. 1) is in the unlocked position.
- Insert the hook’s hex end into the opening. A slight rotation may be necessary to align the fit. When completely inserted, slide the locking sleeve into the locked position (Fig. 1).
- Always check to assure that the hook is locked in place by pulling on the shaft gently. If the hook comes out of the fitting, slide the locking sleeve back to the unlocked position and repeat the steps above.
- When the hook is securely installed on the arm, use the hook to retract the liver to the desired position.
- Tighten the Tensioning Knob of the arm by turning it clockwise until the desired rigidity is obtained.
- During the procedure, if the hook needs to be repositioned, turn the Tensioning Knob counter clockwise until the arm can be moved; adjust the hook position and re-tighten the Tensioning Knob.

**ROUTINE MAINTENANCE**

If inspection, cleaning and lubrication are done on a regular basis, no other routine maintenance should be required on these devices.

**LIMITED PRODUCT WARRANTY**

Mediflex Nathanson Hooks are warranted to the original purchaser to be free from defects in material and workmanship for a period of one (1) year from the date of purchase. If this product proves to be defective, purchaser should obtain a Return Goods Authorization from Mediflex and return it to the address below. Mediflex will repair or replace defective product at our option. Mediflex’s liability under this limited warranty does not extend to abuse or misuse of the product.

**FOR SERVICE OR REPAIR**

For any necessary service or repair, please contact your Mediflex Distributor or Mediflex Customer Service at the address shown below.

**MEDIFLEX Surgical Products**

Div. of Flexbar Machine Corporation
250 Gibbs Road ● Islandia, NY 11749 ● USA
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1-631-582-4520 (Faxedime) ● email: sales@mediflex.com

Please visit our web site at: www.mediflex.com

© Baty International Victoria Road, Burgess Hill West Sussex RH15 8UY England +44(0)1444 239621
# Nathanson Hooks

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## Nathanson Hook Liver Retractors

### Instructions For Use for:
- **Individual Hooks:**
  - 69703
  - 69735
  - 69737
  - 69704
  - 69736
  - 69737-XL
  - 69705
  - 69736-XL
  - 73010

- **Hook Sets:**
  - 69709
  - 69710
  - 69710-XL

- **Hook Sets shipped with a Mediflex Arm:**
  - 73000-NLR
  - 73020-NLR
  - 73020-XL
  - 73005-NLR
  - 73025-NLR
  - 73025-XL

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**IMPORTANT PRODUCT INFORMATION**

**PLEASE REVIEW BEFORE USING**

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**Mediflex Surgical Products**

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[IFU-22 Rev1.1]