



## Cardiac Surgery Specialists

### **Instructions for Use Hex Mount Flexible Arm with Atrial Depressor Catalog Number 400-003**

#### **Non-Sterile**

#### **Product Description**

The Hex Mount Flexible Arm 400-001 is a reusable device with a 7" (18cm) flexible stainless steel arm (comprised of 13 beads) with a mounting anchorage clamp at the proximal end for attachment to the ESTECH MV Retractor Body or Window Access Retractor Handle. The distal end of the arm has a paddle, which is used to hold down the atrial incision opening.

#### **Use of Device**

1. Verify Function of device by tightening flexible arm control knob (Figure 1) fully clockwise and by visual inspection. When flexible arm control knob is turned counterclockwise fully, space should not be visible between the steel beads.
2. Attach Male Hex Mounting Post into threaded hole in MV Retractor Body or Window Access Retractor (figure 2). Attach flexible arm to retractor by placing female Hex Post receptacle on male hex post (figure 3) use arm to tighten hex post securely into threads and remove arm for use after retractor is employed in surgical incision.
3. After retractor is employed in surgical incision, attach arm to retractor with as in step 2. Position atrial depressor paddle as required. Turn flexible arm control knob clockwise to secure position of arm. See figure 1.

**WARNING – Use care to avoid tissue damage when positioning depressor paddle**

#### **Maintenance and Trouble Shooting**

Should the surgeon experience inadequate stiffness of the Flexible arm or control knob feels tight, then do the following for both:

**Step 1.** Turn the Flexible arm knob control maximally to the left (counterclockwise) making the Flexible arm as loose as possible.

**Step 2.** Then spin the entire assembly (Flexible arm control and mounting anchorage) to the right (clockwise) by holding the chain of Flexible arms (ball joints) in the left hand.

#### **FLEXIBLE ARM Adjustments**

The FLEXIBLE ARM, which provides a wide range of positions for the accessory devices, must be used correctly to maximize its life. Follow these simple rules:

1. When making major adjustments in the positioning of the FLEXIBLE ARM, loosen the knob until the FLEXIBLE ARM becomes limp, reposition, and then tighten.

2. When making minor adjustments in the positioning of the FLEXIBLE ARM, loosen the adjustment knob slightly. Retighten knob after the adjustment has been made.

**CAUTION:** Forcing the FLEXIBLE ARM to move against its present tension will cause the cable in the FLEXIBLE ARM to wear and possibly break. The ball joints will also become scored and the FLEXIBLE ARM will tend to drift.

After a period of time, there may be drifting in the handrest even though the FLEXIBLE ARM knob is made tight. This is usually due to the drawbar threads becoming worn and this part (draw bar) may have to be replaced.

## **CLEANING**

Disassemble and scrub the instruments and parts thoroughly using a soft brush and mild detergent. Remove all traces of blood and debris. Make sure all movement parts are cleaned thoroughly to prevent debris from interfering with movement. It is recommended that the instruments and parts be ultrasonically cleaned.

## **LUBRICATION**

It is extremely important that moveable parts be properly lubricated to keep these parts functional. It is recommended that all components be immersed in a water-soluble lubricant.

## **STERILIZATION**

The instruments may be steam or gas sterilized. Refer to the sterilizer manufacturer's instructions for correct time, temperature and pressure settings.

## **WARRANTY**

ESTECH warrants that the instruments are free from defects in both materials and workmanship. Suitability for use of the instruments for any surgical procedure shall be determined by the user. ESTECH shall not be liable for incidental or consequential damages of any kind. The above warranties are in lieu of all other warranties either expressed or implied including any warranty of any merchantability or fitness for use.

## **SERVICE OR REPAIR /TECHNICAL INFORMATION**

Contact information for service or repair or to request technical information:

**ESTECH, Inc.**  
2603 Camino Ramon  
Suite 100  
San Ramon, CA 94583  
USA  
(925) 866-7111 Phone  
(925) 866-7117 Fax  
[info@estechlics.com](mailto:info@estechlics.com)

### **Authorized Representative:**

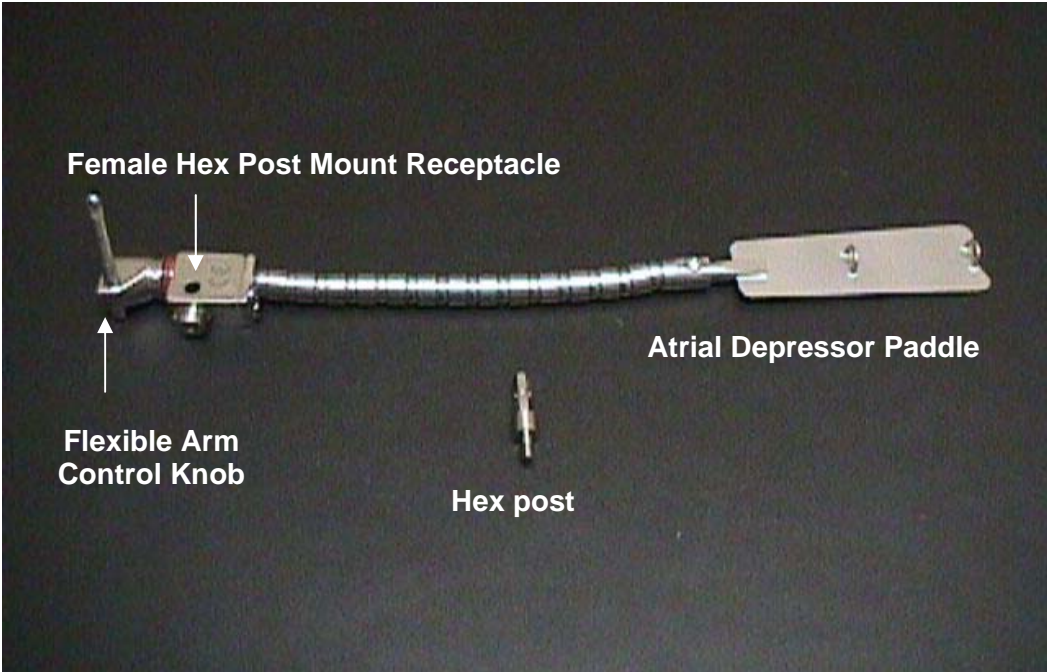
Medical Partners BV  
Groenendijk 39, Lage Zwaluwe  
4926 RE Netherlands  
+31.168.48 37 32 Phone  
+31.168.48 47 90 Fax  
Email: [europa@estechlics.com](mailto:europa@estechlics.com)

## **RECOMMENDED RECONDITIONING**

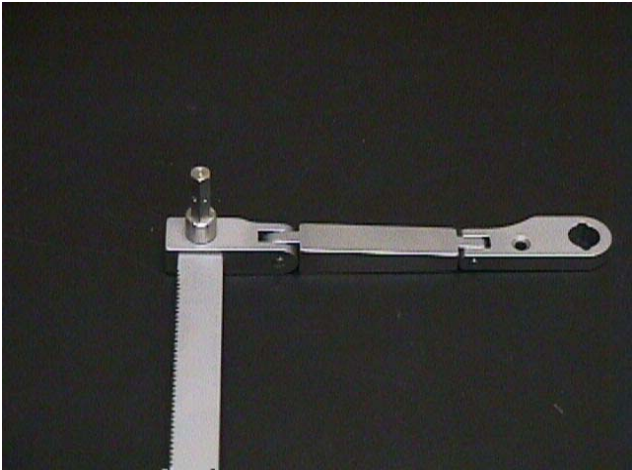
To allow for optimum performance of this product, it is recommended that this device be returned to the manufacturer at least 1 time yearly for reconditioning.

Heavy use of devices may require more frequent reconditioning.

**Figure 1**  
**Hex Mount Flexible Arm with**  
**Atrial Depressor and Hex Post for mounting**



**Figure 2**  
**Hex Post Mounted in**  
**Retractor Receptacle**



**Figure 3**  
**Hex Mount Flexible Arm**  
**Mounted on Hex Post**

