Instructions for Use

**Hex Mount Flexible Arm**
*For use with the Window Access SI Retractor*
*Catalog Number 400-001*

**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 at the proximal end for attachment to the ESTECH Window Access SI Retractor. The distal end of the arm has a quick connection for easy mounting of reusable or disposable stabilization or retraction devices such as the ESTECH Atrial Rake 400-441. Once the arm is positioned, a knob at the proximal end is tightened, making the arm rigid.

**Use of Device**
1. Verify Function of device by tightening flexible arm control knob fully and by visual inspection. When flexible arm control knob is turned counterclockwise fully, space should not be visible between the steel beads.

2. Attach accessory device to the Hex Mount Flexible Arm at the distal quick connect by sliding the sleeve of connection toward the arm while inserting accessory device into connection. Detent of accessory connection will line up with the logo on the sleeve. Once the accessory shaft is fully inserted, the sleeve will return to the original position to lock accessory device into connection. See Figure 1.

3. Screw Male Hexagonal Mounting Post into threaded hole in Window Access Retractor (Figure 2). Attach flexible arm to retractor by placing Female Hex Post receptacle on Male Hex Post and fully tightening thumb screw to secure Hex Post. Use the Hex Mount Flexible Arm body as a wrench to tighten hex post securely onto retractor. To loosen and remove arm from retractor, turn thumb screw counter clockwise three turns.

4. Position accessory device as desired. Turn handle clockwise to secure position of arm.

**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 hand rest 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 AND STERILIZATION
Refer to www.estech.com for cleaning and sterilization instructions.

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.

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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—Quick Connect Operation

- Insert attachment shaft with detent facing logo on sleeve
- Turn handle clockwise to tighten arm
- Slide quick connect mechanism toward arm
- Turn thumb screw to tighten/loosen flexible arm on Hex Post

Figure 2 – SI Retractor Mounting

- Screw hex post into any one of five threaded mounting holes and slide Hex Mount USA body onto post