

# INSTALLATION INSTRUCTIONS

## ASTRO-MINI-BRAC 5/8" Stainless Steel Band

**Tools Required:** 11/16" Box End Wrench or Ratchet (7" length approx.)  
5/32" Allen Wrench, Pliers and Band Cutter (WISS No. M5 recommended)

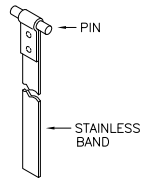


Figure A

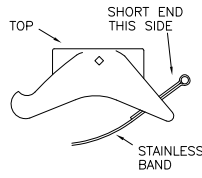


Figure B

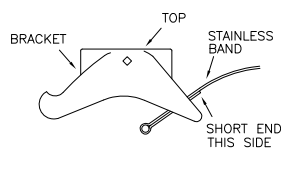


Figure C

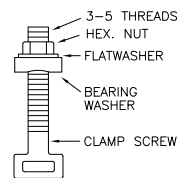


Figure D

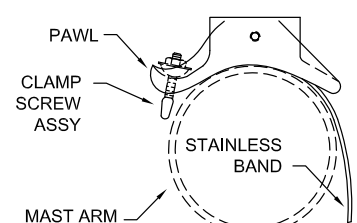


Figure 1

The Astro-Mini-Brac is designed to fit small diameter tubes (4" O.D.) as well as large diameter tubes. The band is attached to the Bracket Body from the bottom, depending upon the arm or pole size.

For **Small Diameter Tubes:** Thread Band (Fig. A) from the top down (Fig. B) making certain the pin seats into the groove provided.

For **Large Diameter Tubes:** Thread Band (Fig. A) into the Bracket Body from the bottom up (Fig. C) making certain the pin seats into the groove provided.

### Attaching Clamp Kit to Mast Arm

1. Place Astro-Mini-Brac with bands on mast arm as shown in Figure 1. Place screw assembly in pawl of Bracket Body, as shown in Figure 1, allowing three to five (3-5) threads to show above nut (Figure D).
2. Bend stainless band around arm and mark on band at the point where band makes contact with the slotted end of the screw assembly. (Figure 2).
3. Slide Band Buckle on band with setscrew to the outside. (Figure 3). Bend band to the inside at point where mark was made in Figure 2 and slide Screw Assembly on band. (Figure 3).
4. If free end of band is too long to wrap inside of band, cut off extra length. **NOTE: MAKE CERTAIN FREE END IS TURNED TO THE INSIDE AND IS A MINIMUM OF 4" IN LENGTH.** (Figure 3).
5. With a pair of pliers, crimp the bend in the band around the clamp screw and slide Band Buckle on the free end of the band as close to the screw assembly as possible. (Figure 4). Tighten the setscrew in the band buckle snugly with Allen Wrench.

**CAUTION: Make certain measurements are correct BEFORE bending band. Once band is bent and crimped, DO NOT straighten and rebend. Replace with new band. The bending process stresses the band and repeated bendings may cause fatigue resulting in loss of strength.**

6. Screw nut off screw assembly until it is flush with clamp screw end. Insert screw assembly on clamp pawl. Rotate clamp assembly so it is on the side of the mast arm with clamp screw on the tip side (Figure 5). Tighten nut on screw assembly until it is just snug.
7. Tighten setscrew on band buckle with Allen Wrench.
8. Tighten clamp screw nut securely, using a 7" Box End Wrench or Ratchet. **NOTE: Tightening the clamp screw nut firmly with a 7" wrench will produce approximately 20 ft./lbs. of torque. This is all that is necessary to hold the bracket in place. DO NOT OVERTIGHTEN.**

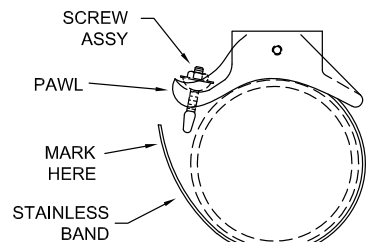


Figure 2

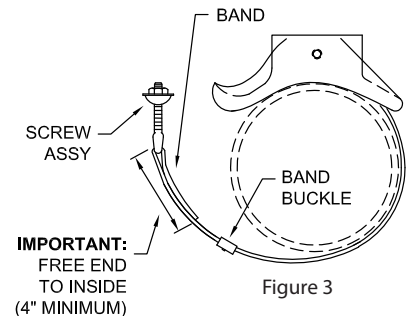


Figure 3

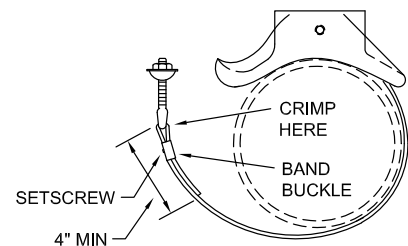


Figure 4

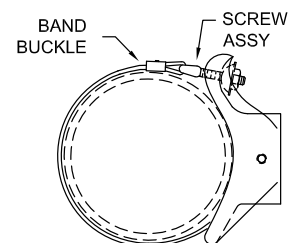


Figure 5

# INSTALLATION INSTRUCTIONS

## ASTRO-MINI-BRAC 3/16" Cable

**Tools Required:** 1/2" & 11/16" Sockets w/ Ratchets or Box End Wrenches, approx. 7" long  
Open End Wrench, 3/8" x 7" long  
Torque Wrench or Equivalent

**NOTE:** Do not pull the free end of the cable out of the Astro-Mini-Brac, either before or during the installation.

### INSTALLATION:

- 1). Place Astro-Mini-Brac on mast arm and insert Cable Screw Assembly into pawl area of clamp as shown in Figure 1. Leave 2 to 3 threads exposed at the end of the Clamp Screw as shown in Figure 2.
- 2). If tight, loosen the two 5/16" bolts on Cable Plate. With the Cable Screw Assembly in the pawl, pull the other end of cable until it is tight around the mast arm. **DO NOT PULL THE FREE END OF THE CABLE OUT OF THE ASTRO-MINI-BRAC.** Secure the cable by evenly tightening the two 5/16" bolts on the Cable Plate to 20-22 ft. lbs. of torque.
- 3). Back off Cable Screw Nut to loosen cable and adjust Astro-Mini-Brac Assembly to desired position on mast arm. Snug the Clamp Screw Nut just enough to hold the Mini-Brac in position. When tightening Cable Screw Assembly, hold hex portion with 3/8" Open End Wrench, or equivalent. **DO NOT ALLOW CABLE TO TWIST OR TURN WHEN TIGHTENING.**
- 4). With the 3/8" Open End Wench holding the Cable Screw, use the 11/16" socket and ratchet, or Box End Wrench, to tighten the Cable Screw Assembly Nut to 20-22 ft. lbs. of torque. **DO NOT OVER TIGHTEN.**

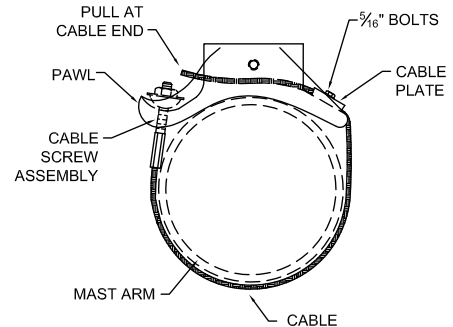


Figure 1

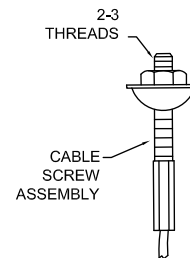


Figure 2