

# INSTALLATION INSTRUCTIONS

## ASTRO-BRAC CLAMP ASSY

### 3/16" Cable

Tools Required: 1/2" & 11/16" Sockets & Ratchets or Box End Wrenches (approx. 7" length)  
3/8" Open End Wrench or Equivalent (approx. 7" length)  
Torque Wrench or equivalent  
Hack Saw

#### Attaching Clamp Kit to Mast Arm

1. Place Female Clamp Half on mast arm as shown in Figure 1. Leave two to three (2-3) threads exposed above the nut on the Cable Screw Assembly as shown.
2. Place Cable Screw Assembly in casting pawl of the Female Clamp as shown in Figure 2. Loosen four (4) 5/16" Bolts on Cable Plate. Pull cable loop to tighten cable on the mast arm. To secure cable with cable plate, tighten four (4) 5/16" bolts to 15-18 ft. lbs. of torque. **DO NOT OVERTIGHTEN.**
3. Repeat Step 2 for second Cable Plate.
4. Back off nut on both Cable Screw Assemblies to loosen cable. Rotate Clamp Kit on mast arm to desired signal position (Figure 3). Snug nut on both Cable Screw Assemblies just enough to hold Clamp Kit 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. DO NOT TIGHTEN TO FINAL TORQUE UNTIL STEPS 5-7 BELOW ARE COMPLETED.**

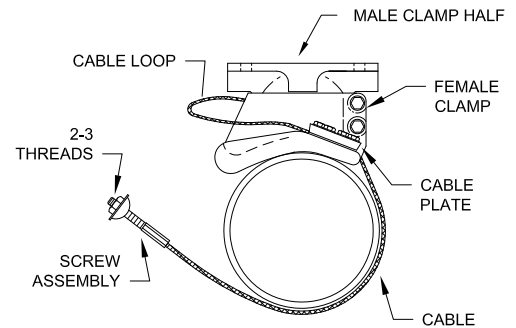


Figure 1

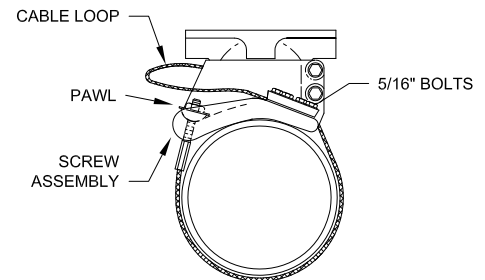


Figure 2

#### Attaching Signal and Tube Assembly to Clamp Kit

5. Position tube into Male Half of Clamp Kit (Figure 4). Insert V-Bolts as shown and attach with lockwashers and nuts.
6. With signal properly positioned to the desired height and direction, tighten nuts on two (2) V-bolts to 12-15 ft. lbs. of torque. **DO NOT OVERTIGHTEN.**
7. Plumb or level signal and tighten two (2) 5/16" hex bolts on Female Half of Clamp Kit to 20-22 ft.lbs. of torque. **DO NOT OVERTIGHTEN.**
8. Use 3/8" Open End Wrench to hold Cable Screw and tighten both Cable Screw Assembly Nuts to 20-22 ft.lbs. of torque, using a 11/16" Box End Wrench or Ratchet (Figure 4). Note: Tightening the Cable Screw Assembly Nuts firmly with a 7" Wrench will produce approximately 20 ft. lbs. of torque. **DO NOT OVERTIGHTEN.**
9. Install cable Ty-Back/Restraining Clamp (AB-0506) per separate Instruction Bulletin No. 2037. Clamp will provide neater cable appearance and a positive cable restraint.

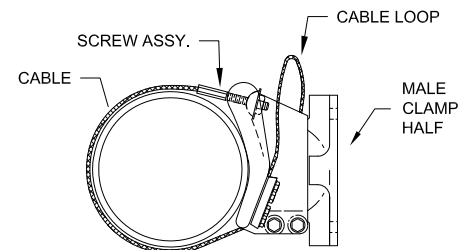


Figure 3

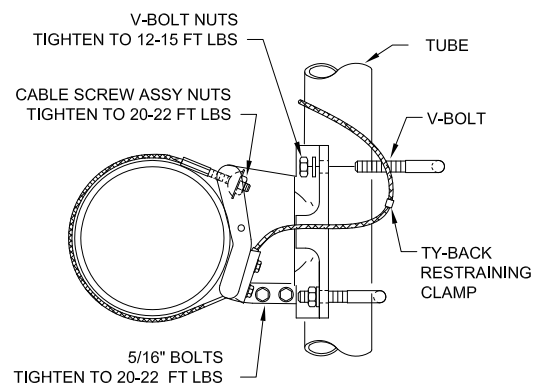


Figure 4



# INSTALLATION INSTRUCTIONS

## ASTRO-BRAC CLAMP ASSY 3/16" Cable

### For All Arm and Tube Kits:

Gusseted  and Solid 

1. Mount lower arm to bottom of signal. Position arm so that tube boss will be centered in back of signal. (Figure 1). Using the hardware kit without rubber gasket, secure arm to signal.
2. Screw tube into lower arm, being sure to stop at a point where the channel (if using a gusseted tube) is at the back, facing directly away from the signal. Slide upper arm down over top of tube and secure to signal, using hardware kit with rubber gasket. Hardware kit should be installed against the inside top of signal. (Figure 2).
3. After upper and lower arms are secure, and tube channel (if gusseted tube) is centered at back of tube, tighten setscrews in upper and lower arms. This will prevent rotation of tube after installation. (Figure 3).
4. Using hack saw, cut off any excess tube which may protrude above the upper arm. (Figure 4).
5. Finished assembly is now ready for installation on Clamp Kit. (Figure 5).

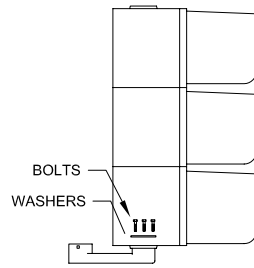


Figure 1

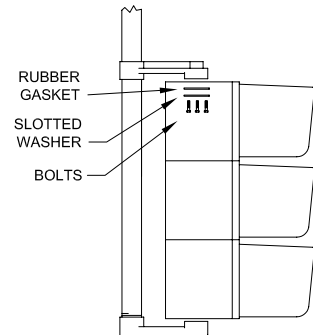


Figure 2

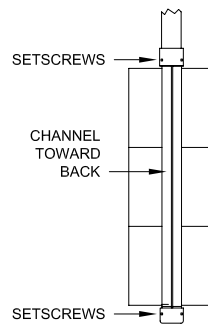


Figure 3

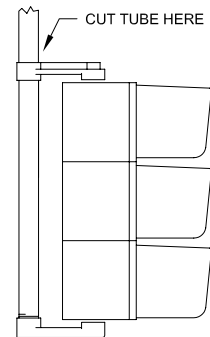


Figure 4

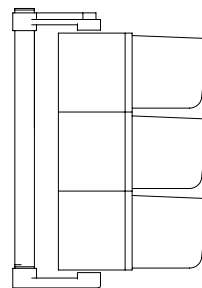
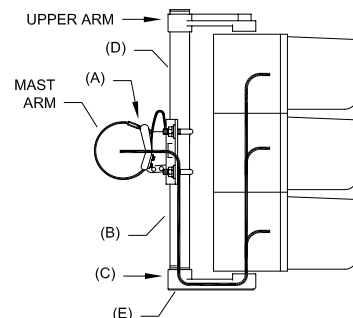


Figure 5

COVERED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS:  
3586280, 3764099, 3854685, 4659046. OTHERS PENDING.

### How To Wire When Using The Astro-Brac

1. Wiring from inside the MastArm should be fed through field drilled hole in the arm and brought through Clamp Kit (A) to extruded Aluminum Support Tube (B) to Lower Arm (C) and to signal connections.
2. After running wire, cut Vinyl Insert to size and insert in Support Tube (D).
3. Slide in Bottom Cover (E) and snap into place.



No Other Adjustable Bracket Gives You...  
**COMPLETELY CONCEALED WIRING!**

*The Astro-Brac provides the most  
versatile mounting system available!*

