

INSTALLATION INSTRUCTIONS

STELLAR TENON CLAMP ASSY

Designed to fit 1.9" to 4.5" OD

Tools Required: 1/2", 5/8" and 9/16" Sockets & Ratchets or Box End Wrenches, (approx. 7" length)
Torque Wrench (0-50ft. lbs.), or equivalent, Hack Saw

Attaching Clamp Kit to Tenon:

1. Place Male Clamp into the two Female Halves of the Stellar Clamp Kit. Using supplied 7/16" bolts and washers, hand tighten the bolts into the assembly so that the male bracket can still rotate. Check Tenon diameter. Smaller tenon diameters may cause the four 3/8" x 5" Clamp Bolts to interfere with rotation of the Male Clamp Half. If there appears to be a conflict with the length of these bolts, simply reverse the installation direction, in the sequence below, of the hex head of the bolts through the Female Clamp Halves. Install the four flat washers and four spring lock washers between the head of the bolt and the aluminum casting. The spring lock washers should be under the head of the bolts and the flat washers against the casting. (Figure 1)
2. Place Female Tenon Mount Clamp Kit on mast arm tenon without two Back Clamps and all-thread hardware. Install one 3/8" x 5" hex bolt through one end of the Back Clamp and insert through one of the casting holes in the Female Clamp Half. Install one 3/8" flat washer, lock washer and hex nut on the end of the hex head bolt above the Female Clamp Half. Install the other bolt through the other end of the Back Clamp Half. Tighten the two nuts to only "finger tight" ("snug" tight) to hold the Clamp Assembly on top of the tenon. Install the second Back Clamp and hardware by following the same procedure as the first Back Clamp. **DO NOT OVER TIGHTEN.** Rotate the Tenon Mount Clamp Kit to its final position on the tenon and tighten ("snug tight") the two all-thread bolts on ONE Back Clamp to hold the Tenon Mount Clamp Kit in place. **DO NOT TIGHTEN THE TWO BOLTS ON THE OTHER BACK CLAMP.** (Figure 2)
3. Rotate the Male Clamp Half in the Female Clamp Half to its desired position, and "snug tighten" one of the two 7/16" bolts in the Female Clamp Half to hold the assembly in place. **DO NOT OVER TIGHTEN HARDWARE UNTIL LATER WHEN THE CLAMP KIT IS ADJUSTED TO ITS FINAL POSITION.** (Figure 2)

Attaching the Signal and Tube Assembly to Tenon Clamp Kit:

4. Position the Signal Mounting Tube in the Male Clamp Half of the Tenon Clamp Kit. Insert the two 5/16" v-bolts around the signal tube and into the Male Clamp Half. Install the four 5/16" lock washer and hex nuts on the two v-bolts. Aim and position the signal assembly to its final height and direction, and tighten the 5/16" nuts on the v-bolts to 12–15 ft. lbs. of torque. **DO NOT OVER TIGHTEN.** (Figure 3)
5. Plumb, or level, the Signal Mounting Tube and tighten the two 7/16" bolts in the Female Clamp Half to 20–22 ft. lbs. of torque. **DO NOT OVER TIGHTEN.** (Figure 2)
6. Equally tighten the (4) 3/8" nuts on the (2) hex head bolts that hold the two Back Clamps to 22–25 ft. lbs. of torque. **DO NOT OVER TIGHTEN.** (Figure 2)
7. Check assembly for proper installation. If vertical rotation of the Signal Tube is required, first loosen the (2) bolts on one of the Back Clamps before loosening the two 7/16" bolts in the Female Clamp Half. Then adjust the Signal Tube to the desired position and re-tighten the two 7/16" bolts in the Female Clamp Half to 18–20 ft. lbs. of torque. Lastly equally re-tighten the 3/8" nuts on the (2) hex head bolts that hold the two Back Clamps to 22–25 ft. lbs. of torque. **DO NOT OVER TIGHTEN.**

Note: If re-adjustment, or re-installation, of the Clamp Assembly is required, NEVER just loosen and then re-tighten the two 7/16" bolts in the Female Clamp Half without first loosening the (2) 3/8" hex nuts on ONE of the Tenon Mount Back Clamps. Re-position the signal assembly and re-tighten the two 7/16" bolts in the Female Clamp Half to 20-22 ft. lbs. of torque. Then re-tighten the 3/8" hex nuts on both Tenon Mount Back Clamps to 22–25 ft. lbs. of torque. DO NOT OVER TIGHTEN.

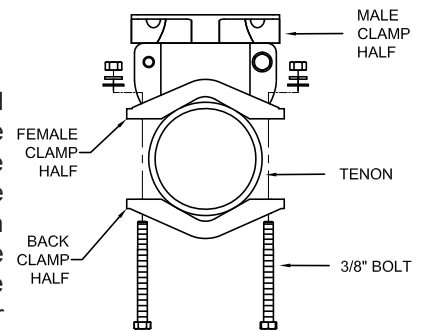


Figure 1

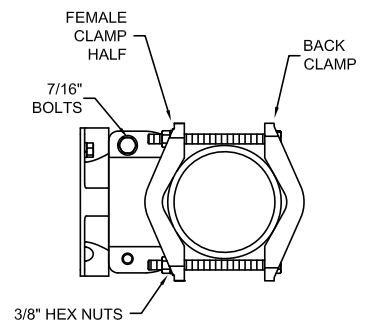
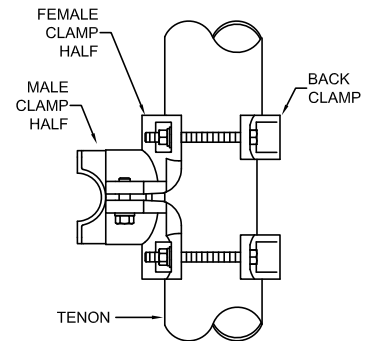


Figure 2

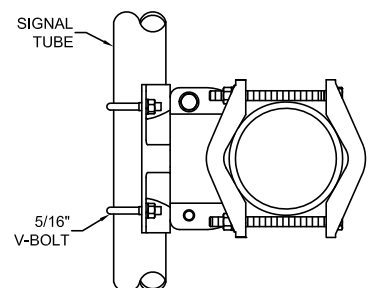


Figure 3

INSTALLATION INSTRUCTIONS

STELLAR TENON CLAMP ASSY Designed to fit 1.9" to 4.5" OD

For All Arm and Tube Kits:



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 set-screws 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).

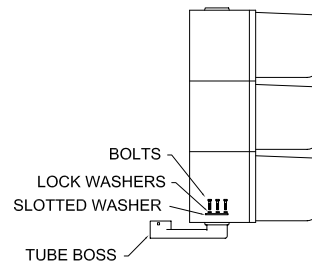


Figure 1

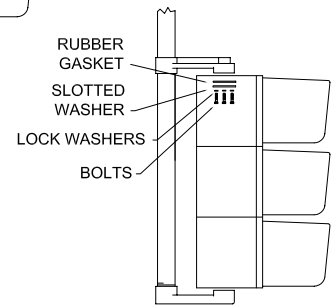


Figure 2

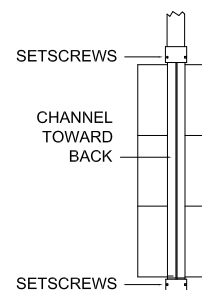


Figure 3

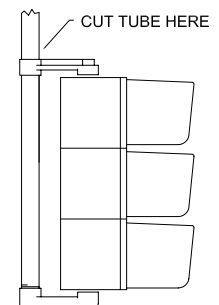


Figure 4

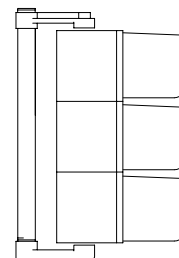
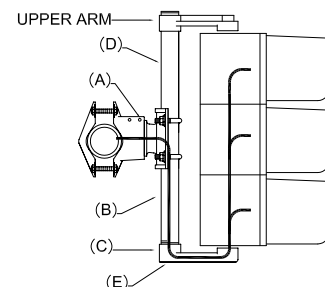


Figure 5

How To Wire When Using The Astro-Brac:

1. Wiring from inside the mast arm should be fed through field drilled hole in the mast 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 length and insert in Gusseted 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!