



SITCO ANTENNAS

PORTLAND, OREGON USA

**ASSEMBLY INSTRUCTION
FOR
MOUNTED SINGLE BAY VHF ANTENNAS
MODELS: EM5, EM8 & EC12**

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1.1. GENERAL:

Your antenna should arrive packed in two boxes. The long box contains the antenna and the smallest box contains the mounting hardware. All elements, including the signal dipole, have smooth rounded ends to improve the signal to noise ratio. Only the highest quality aluminum alloy rod and seamless tubing is used in the manufacture of SITCO antennas. To insure a long lasting installation all steel mast, clamps, U-bolts and fasteners are zinc plated with chromate dip to withstand adverse weather conditions.

1.2. END MOUNT TUBE INSTALLATION:

Slide the end mount extension tube over the antenna boom. Align its element hole, which is painted black, with the corresponding element hole (also marked black) at the tail end of the antenna boom. See Figure 1.

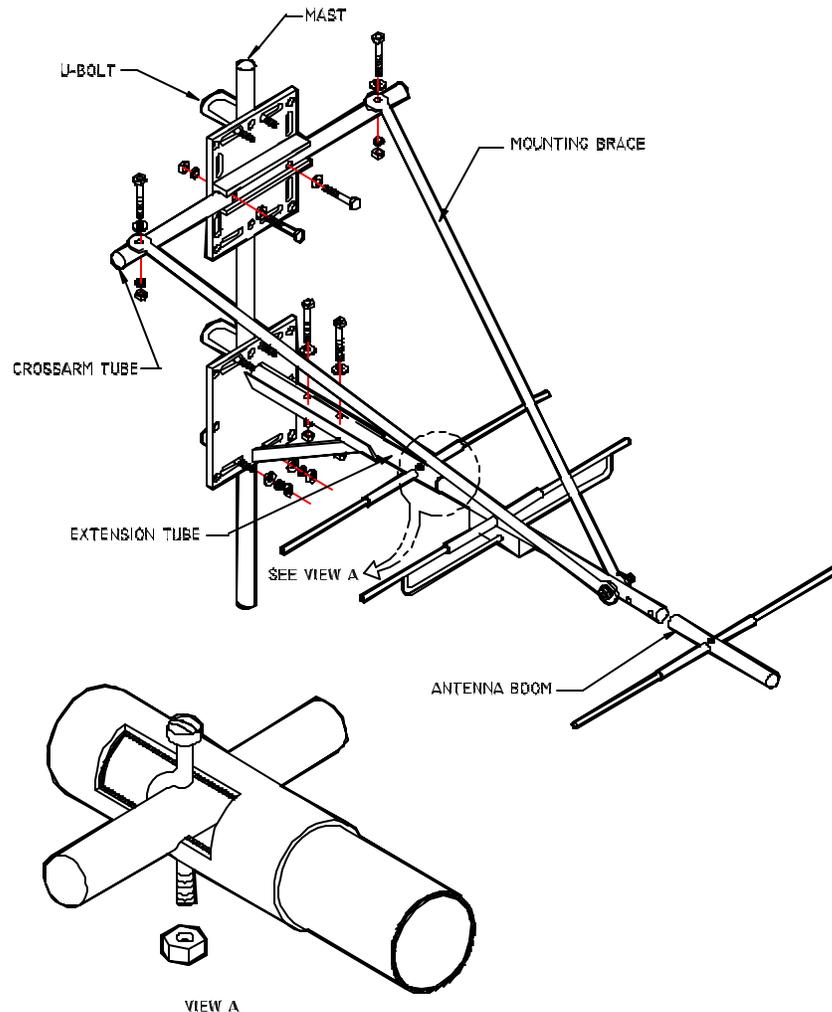


Figure 1



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1.3. REFLECTOR AND DIRECTOR INSTALLATION:

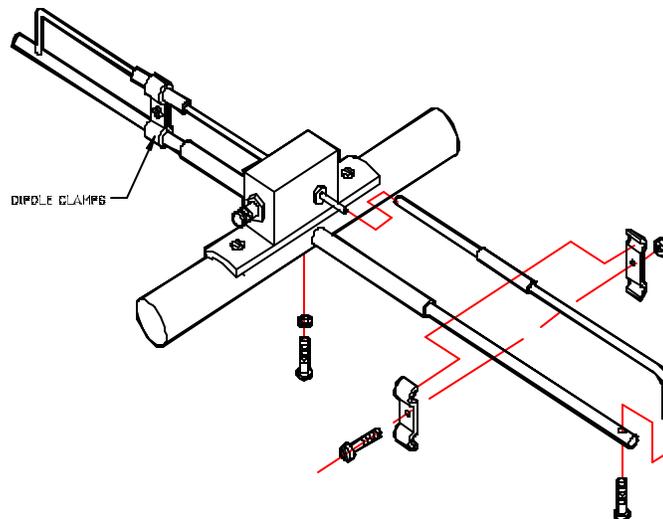
Insert a color coded element into it's corresponding color coded position on the antenna boom (if the color code is not visible start from the end of the antenna boom, which is the end closer to the balun box, with the longest element and insert them in a decreasing length order as you approach the front of the boom). For the antenna to work properly the element must be centered. The SITCO Wedge Screw Fasteners must be in place but loose when inserting elements. After making sure the element is in position and centered, secure it by tightening the hex nut on the SITCO Wedge Screw Fastener.

1.4. SIGNAL DIPOLE INSTALLATION:

The three piece signal dipole assembly is the last section to be installed in the boom. Prepare the dipole for insertion by removing the curved return element which is opposite from the rivet, which is located just off-center of the element. See Figure 2.

NOTE: On the high band antennas there is no rivet. Either curved return element may be removed.

Also remove the dipole screw from the center of the element. Slide the end of the 3/8" rod into the hole below the balun box, until the curved return element, which is still attached has slipped securely onto the banana jack on the opposite side of the balun box, and re-attach it to the 3/8" rod. Insert the dipole screw into the boom directly below the balun and thread it carefully into the driven element to secure it firmly. See Figure 2.



NOTE: High band VHF models do not have dipole clamps or 1/2" sleeve.

Figure 2



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1.5. ANTENNA MOUNTING:

- a. Secure the crossarm tube to the antenna support brace mounting bracket. See Figure 3. Attach an antenna brace to the crossarm tube with the end bend down. Connect the other antenna brace in the same way. Attach both antenna braces to the same hole in the antenna boom.

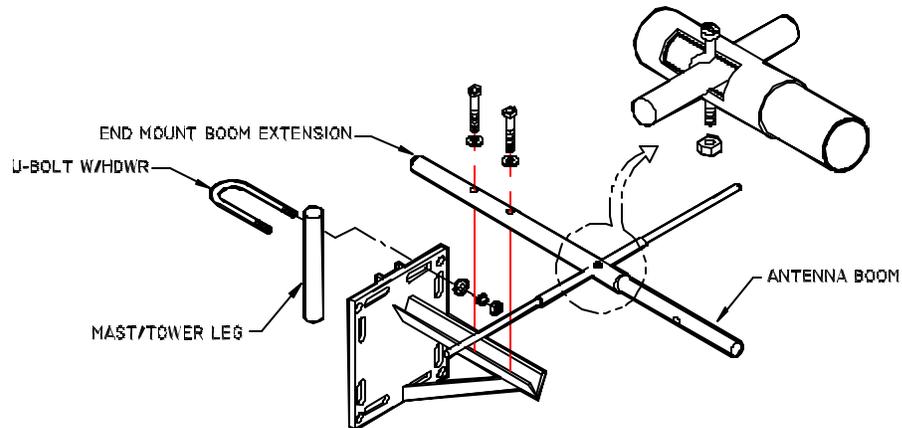


Figure 3

- b. Connect the antenna at the end mount boom extension to the antenna support bracket using the provided bolts. See Figure 4.

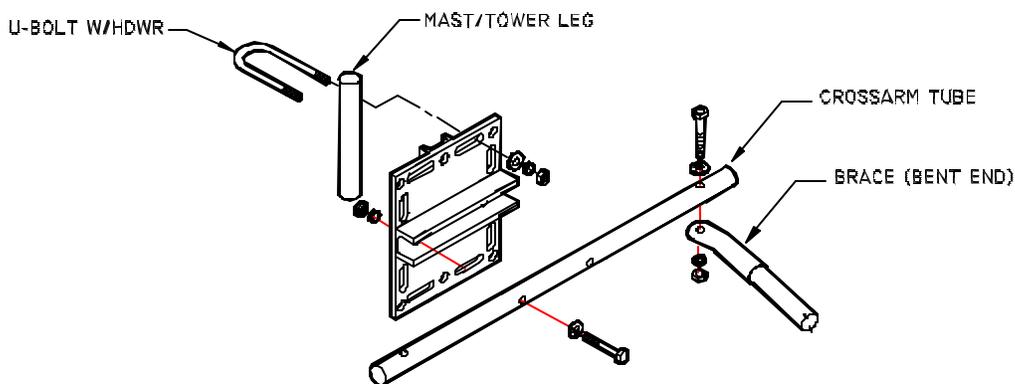


Figure 4

- c. Attach the antenna crossarm tube bracket to the mast / tower leg using the supplied U-bolts. Also, connect the antenna boom support bracket to the antenna mast / tower leg using the supplied U-bolts.