

TACO RUGGEDIZED YAGI ANTENNA

FOR MODELS:

Y81-A, -2, -3.

Y-101-65, -4, -B, -5, -6, -C, -FM, -D, -H, -E.

Y-102B-F, -G, -120, -130, -150.



The Yagi dipoles and parasitic elements are all identified with a letter i.e. A, B, C, D and E. These markings will be found on the crossarm indicating the location these elements are to be assembled on the crossarm (See Figure 6). The antenna main mounting clamp holes are located in the crossarm perpendicular to the element holes. The dipole insulators and parasitic elements mount to the same side of the crossarm.

Note: All Y-101 and Y-81 series Yagi have a two-piece crossarm. The antenna main mounting clamp is used to assemble the two halves together and for this purpose four (4) 3/8" Dia. Bolts are supplied.

Start with the director element and the dipole elements and assemble them to their marked locations on the crossarm as shown in Figure 1. Shims are supplied with Y-101-65, -4, -B, -5, -6, -C, -FM, -D, -H, and -E, to be assembled with the dipole elements as shown in Figure 1. The dipoles are attached with 2 1/4 or 2 1/2 (for models with shims) inch long 1/4 inch bolts.

Next assemble the feedlines connecting the dipole elements as shown using feedline clamps and 5/8 inch long 10-32 screws (See Figure 2). Attach feedlines at dipoles to top of clamps with a centre-to-centre spacing of 3/4 inch (See Figure 2).

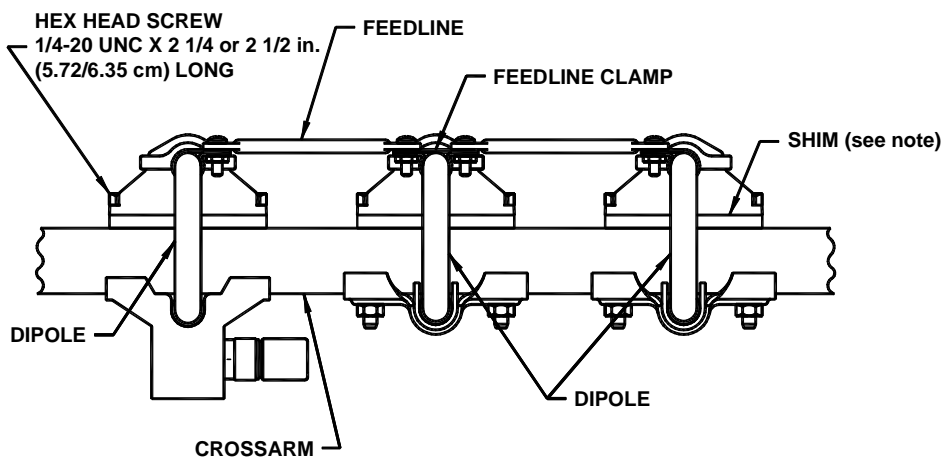


FIGURE 1

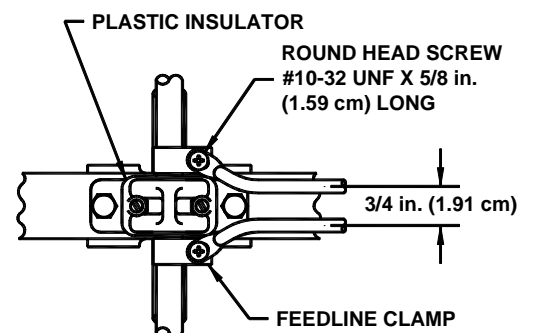


FIGURE 2

NOTE:
Shims are supplied with Y-101-65, -4, -B, -5, -6, -C, -FM, -D, -H, and -E only.

The Parasitic Elements "A", "B", and "E" are mounted onto the crossarm at their match marked locations, with 2 ¼" long, 1/4" Bolts, Reinforcing Clips, Lockwashers and Nuts as shown in Figure 3.

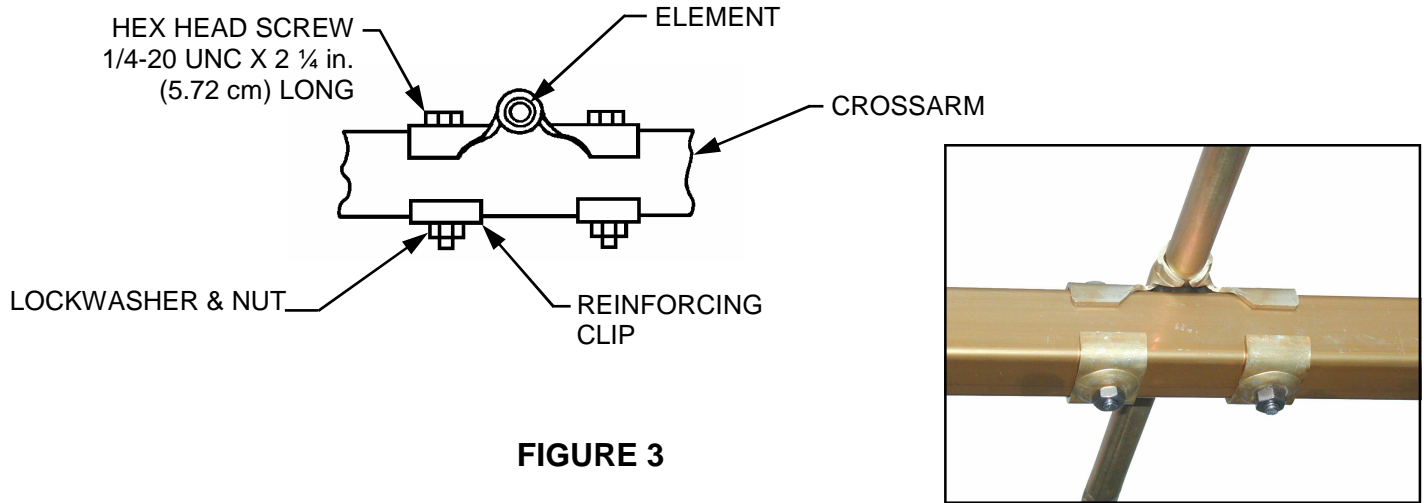


FIGURE 3

The antenna main Mounting Clamp is assembled to the crossarm at the unmarked holes (perpendicular to the element holes) with 2 ¼" long, 3/8" diameter Hex Head Bolt as shown in Figure 4.

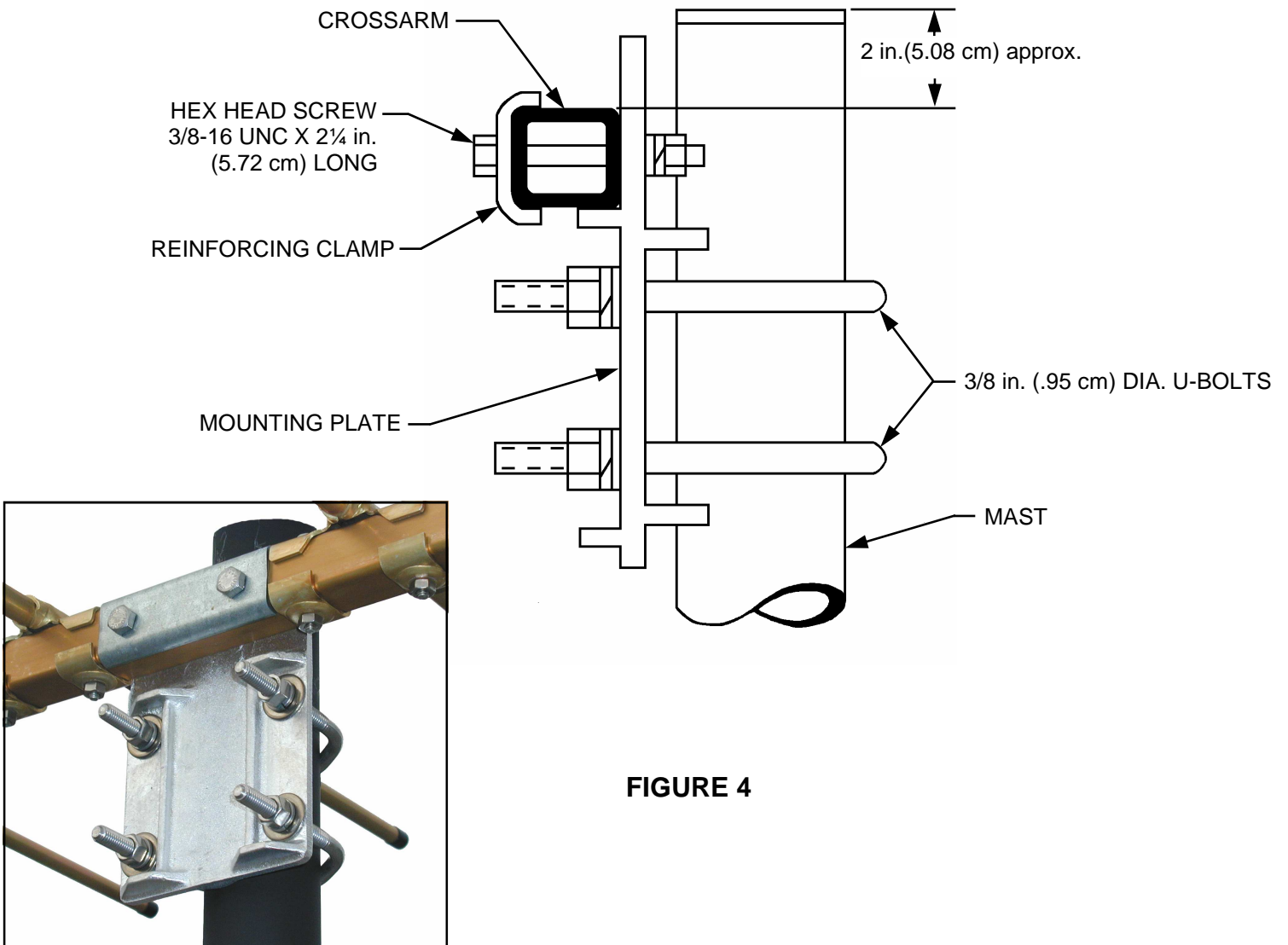


FIGURE 4

The antenna Braces are assembled to the crossarm at the unmarked holes (perpendicular to the element holes) with 1/4" x 2 1/2" Hex Head Bolts, Reinforcing Clip, Washer, Lockwasher and Hex Nut. The opposite ends of the braces are assembled to the mast (mounting pipe) using the channel and 3/8" U-Bolt, Washer, Lockwasher and Hex Nut assembly as shown in Figure 5.

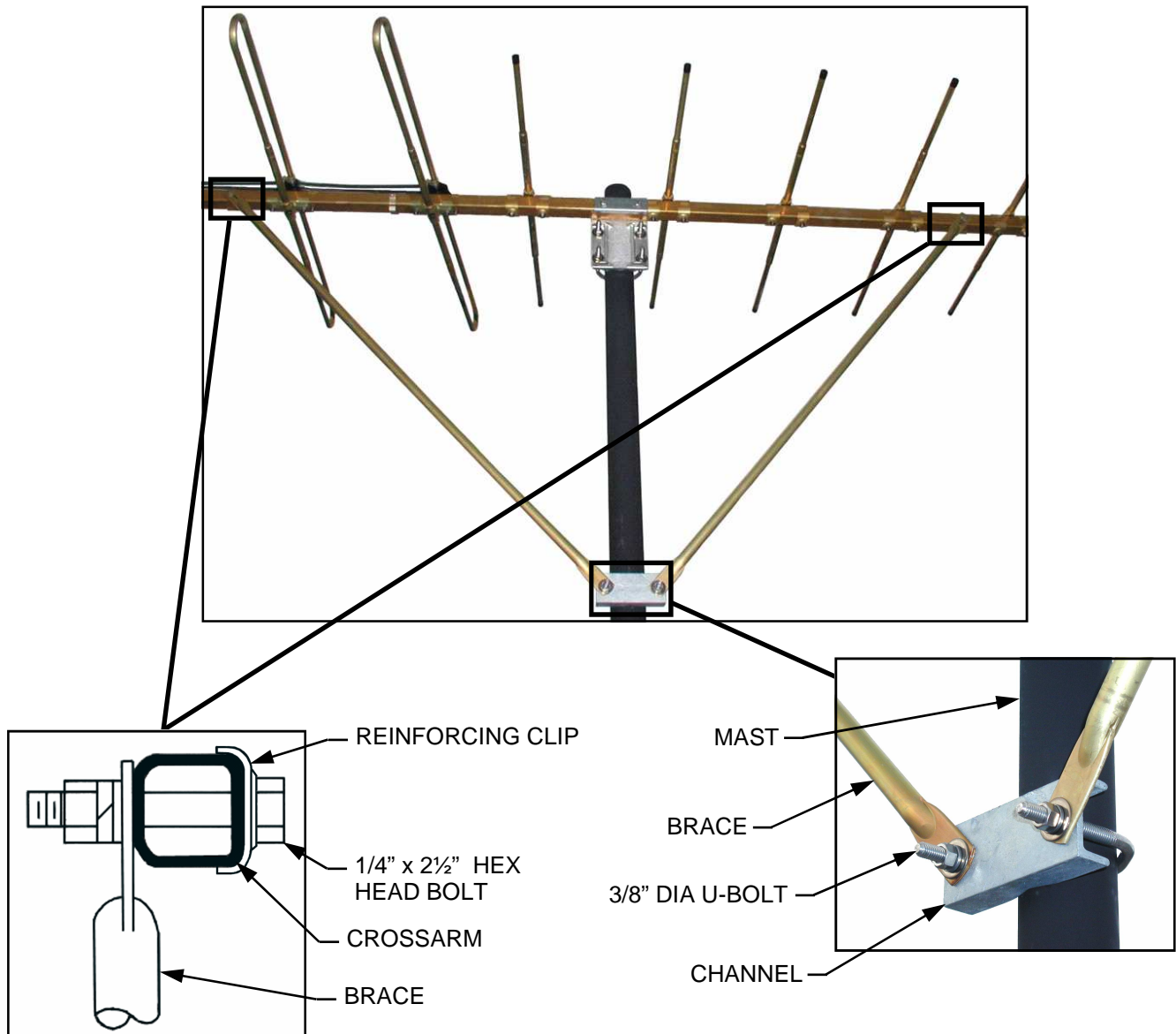


FIGURE 5

SAFETY PRECAUTIONS

1. To protect your antenna and equipment from lightning damage, you should use a lightning arrestor. Attach the lightning arrestor to the downlead at the point where it enters the building. Drive a ground rod at least 4 feet into the ground. Use ground wire to connect the antenna mast and the lightning arrestor to the ground rod.
2. Keep antenna and downlead a safe distance from any power lines.

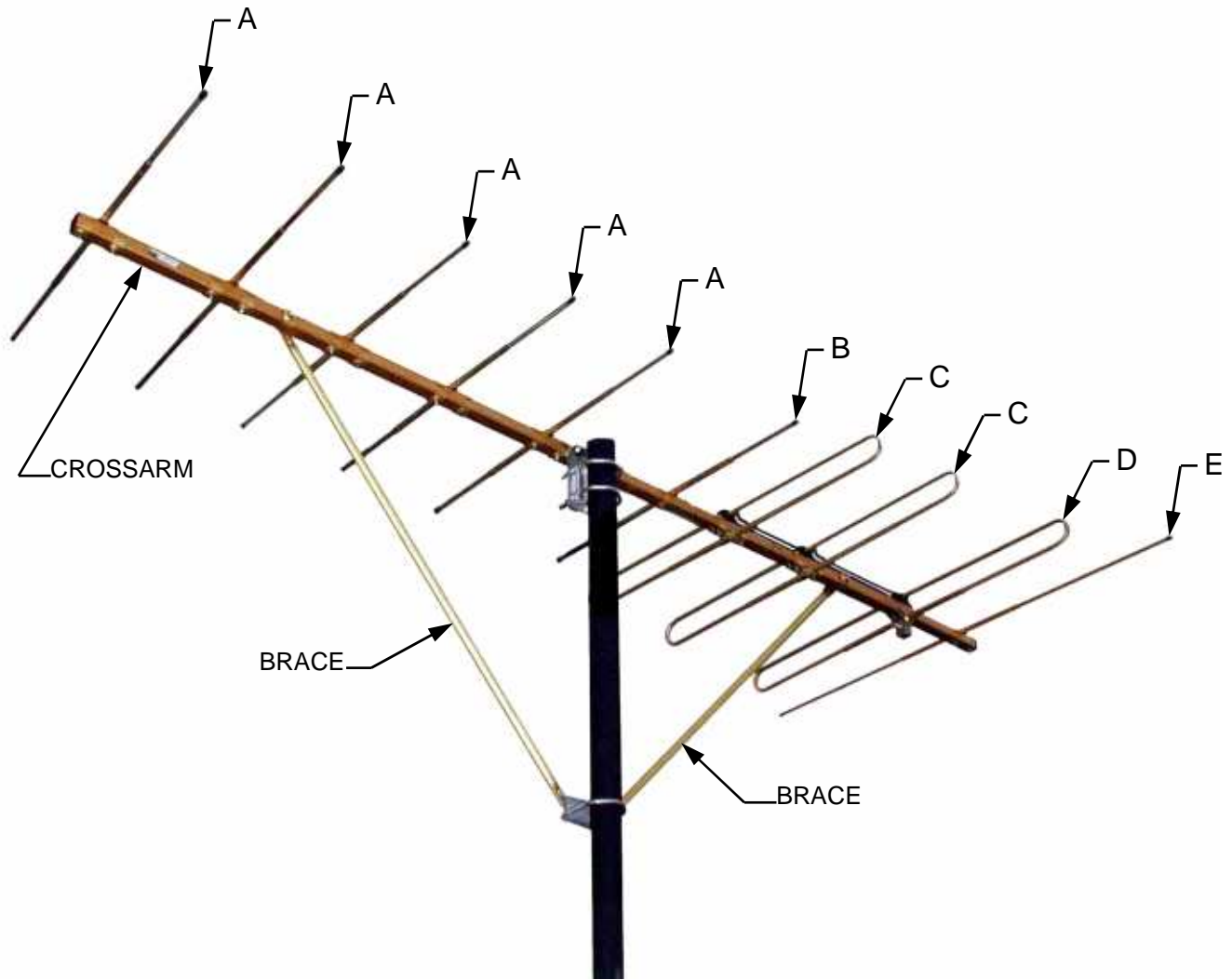


FIGURE 6

For stacking antennas in an array on a limited frame, the antenna support braces can be inverted or installed going up at an angle instead of going down at an angle. **CAUTION** must be used to insure that the antenna radiators be oriented in spaces identical (in phase condition), therefore to eliminate any interference between brace and antenna, a 2 in. spacer (not supplied) must be installed between antenna crossarm and brace bars as shown in Figure 7.

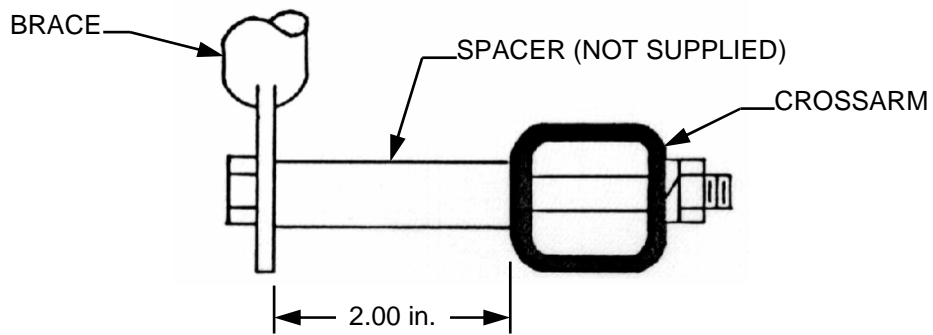


FIGURE 7

(See Figure 5 for normal installation)