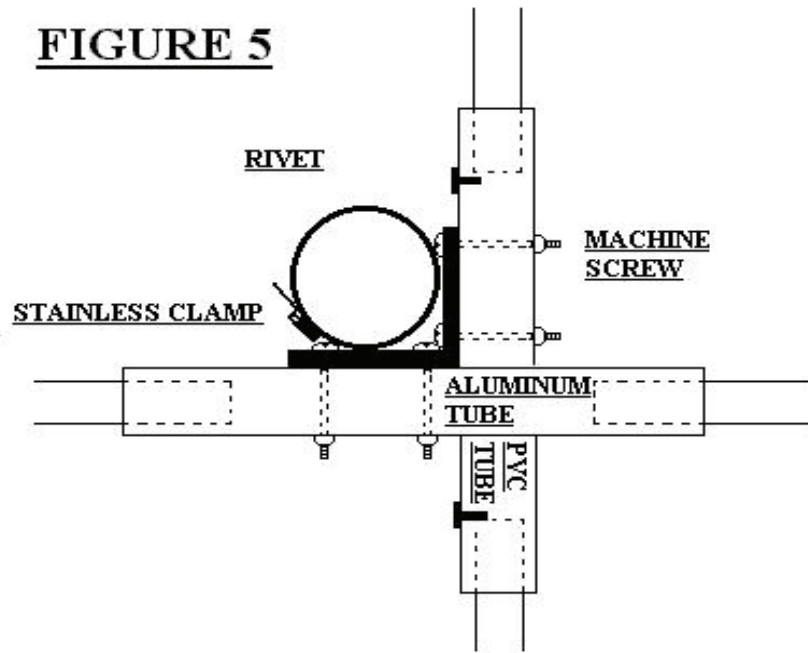


FIGURE 5



5.2 COUNTERPOISE ASSEMBLY see figure 6

- A) Attach the stainless clamp to the assembled Counterpoise bracket. Place the bracket against the Lower Section in between the two sets of screws at the base.
- B) Tighten the clamp securely
- C) It is recommended that the Counterpoise Hoop assembly, be deferred until the TITAN has been installed in it's final position. RAISING the antenna with the hoop installed is cumbersome and can damage the antenna. The following section is easier to complete after the antenna has been mounted. Check section 6.0 before continuing.

5.3 COUNTERPOISE HOOP

- A) Locate the 80" counterpoise rods. There are drill holes on both ends. Slide each rod into the Counterpoise bracket see figure 5 & 6. Make sure the rod with the yellow end cap slides into one side of the aluminum tube, not the PVC.
- B) Align the hole in the 80" rods with the hole in the counterpoise tubes. Insert a screw in both holes and tighten. This step is optional if you plan on frequently raising and lowering your antenna.
- C) Locate the 3 Counterpoise End Caps and the 35 foot copper Counterpoise Hoop with 1 ring terminal. The End Caps have a rivet in them.
- D) Each End Cap also has a thru drilled hole close to one end. Thread the end of the copper wire without the ring terminal thru these holes in the End Caps.

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E) Locate the wire extension with the two ring terminals

F) Take the ring terminal from the Counterpoise Hoop wire and one terminal from the wire extension. Place both terminals over the drill hole at the end of the 80" counterpoise rod that has the yellow end cap and is attached to the aluminum tube on the Counterpoise bracket. see figure 6. Insert a screw attaching these terminals to the Counterpoise rod.

G) Circle the ends of the Counterpoise rods with the Counterpoise Hoop placing an End Cap on each Counterpoise rod as you circle.

H) Find the Dacron cord with the ring terminal. Feed the end of the Counterpoise wire thru the split bolt, the ring terminal on the Dacron cord and back through the split bolt. The distance between the split bolt and the ring terminal on the Dacron should be about 2" or running the wire through the split bolt, the ring terminal on the Dacron and back through the split bolt creates, roughly a 2" loop.

I) Thread the Dacron cord thru the vacant ring terminal of the wire extension. Pull the cord until the Counterpoise Hoop has no slack in it but, do not over tension the hoop. For starters your Dacron should be about 12". If necessary slide some of the hoop wire through the split to either create more length or take up slack. Tie a temporary knot in the Dacron cord to the ring terminal on the wire extension.

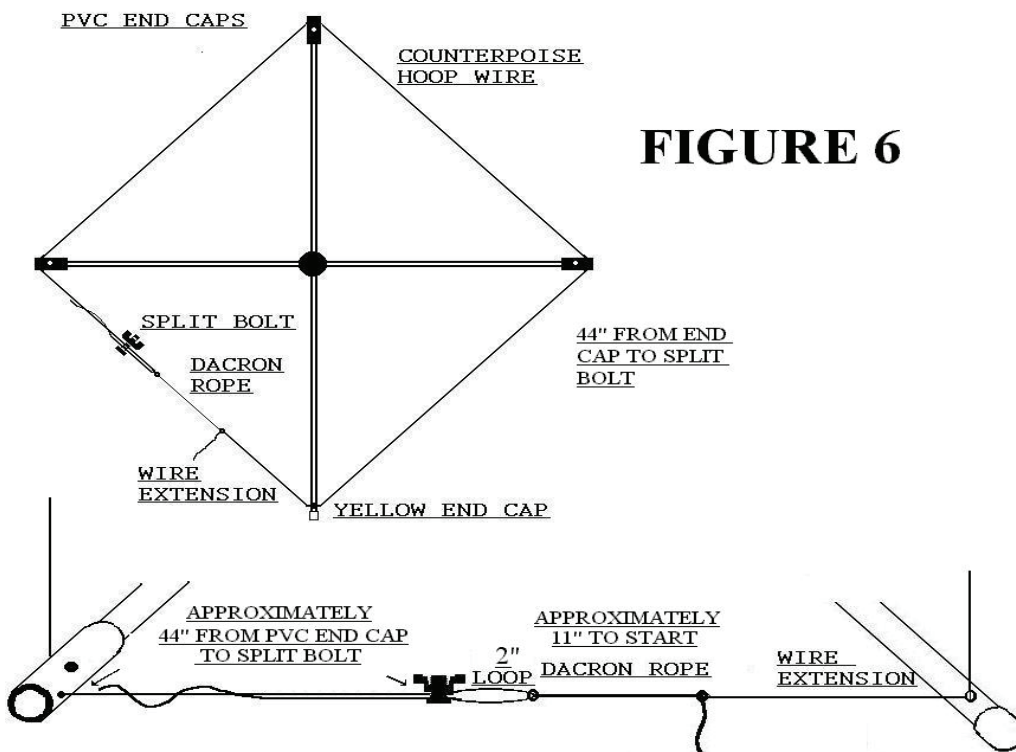


FIGURE 6

PG 11

IMPORTANT The length of the Counterpoise Hoop controls the center frequency on 40m. The longer the Counterpoise wire is, the shorter the Dacron rope is and the lower the resonant frequency will be. Likewise the shorter the length of the Counterpoise Hoop the higher the resonant frequency will be and the longer the Dacron rope will be. Adjust the Counterpoise Hoop and check the frequency with your VSWR meter on 40m. Adjust the length to suit your preference on 40m. Keep in mind that as you adjust the overall length of the Counterpoise hoop wire the loop created between the split bolt and the ring terminal on the Dacron should remain about 2"

5.4 POLE MOUNT ASSEMBLY-REFER TO FIGURE 7

- A) Locate the 3"x12" aluminum plate, the six U-bolts and twelve nuts.
- B) Insert the U-bolts into the plate as shown in figure 7
- C) Locate the six collar insulators. Place each under a U- bolt.
- D) Finger tighten the nuts on the ends of all the U-bolts.
- E) Using a 7/16" wrench tighten the U-bolts until the collars are just held in place.
- F) Take the assembled unit and slide it over the base of the antenna. They should slide freely. If not, they are overtightened and the U-bolts should be loosened.
- G) Continue to slide this unit up the base, until the collar on the first unit butts against the lower portion of the antenna. Tighten the nuts securely on the top unit.
- H) Make sure the nuts that hold the Lower section to the mount plate assembly are tight.
- I) Locate your 1 1/4" mast. Carefully slide your mast thru the 3 vacant insulating collars until your mast pipe is flush with the top of the mount plate assembly. Tighten all U-bolts with a 7/16" wrench.

5.5 COAX TAIL

- A) Bring the coax tail out through the exit hole in the side of the Lower Section. YES, it is important for the coax to exit through the hole in the side. Do not bring it straight out the bottom. Locate the PL259 connector with adapter. Attach the connector to the coax. See the ARRL Handbook if you are unsure of the procedure. In your final installation, make sure the connector does not touch your support mast.
- B) If properly connected, an ohm meter will read "open" when placed from center pin to shell.

NOTE If your pipe is slightly oversized the PVC collars have been slit to allow for expansion. Operating without these insulators can affect performance.