

The MK-114 Mast Kits are designed to support the BWD/BWDS series of folded dipole antennas as well as the AC/ACS series of End-Fed Vee antennas. The roof mount series includes the MK114-RM mast anchor which is designed to secure the bottom of the mast to a variety of roof tops. The supports on each side are hinged so that it can be used on flat, sloped, or peaked roofs. The mast sleeve is able to be tilted to the side. This allows assembly of the mast while it is laying down, and then lifting with the guys into the upright position.

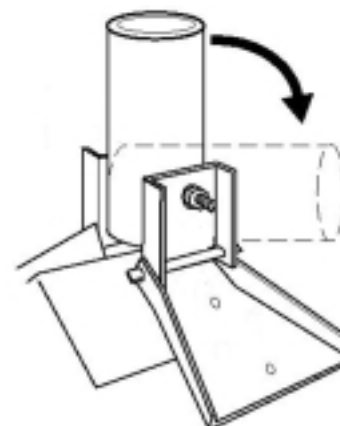
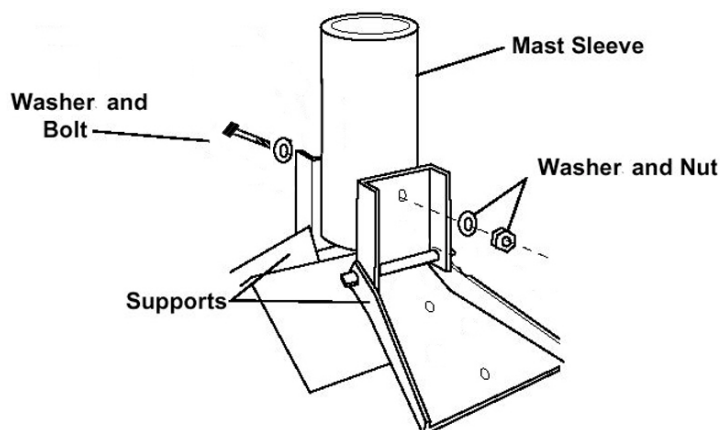
Antenna Preparation

If you are using a folded dipole antenna (BWD/BWDS), assemble the MK114-CM center mount to the antenna. Refer to the separate instruction sheet that comes with the mount. Attach the clamps to the back of the mount and to the top mast pole. Attach the end lines to the antenna (Figure 3). Tie the line through the holes in the end spreader. The line to the top of the antenna should be tied approx 3 inches shorter than the bottom line. This will pull harder on the top antenna wire and prevent windmilling. Once the antenna is up on the masts, if it does not hang vertically, you may need to further shorten that top line.

The End-Fed antennas (AC/ACS) do not need any preparation.

Mast Assembly

- (1) Take the bottom section of the antenna mast and insert it into the mast sleeve. Turn it to align the hole in the mast pole with the hole in the sleeve. Place a flat washer under the head of the bolt, and insert it through the supports, sleeve and mast. Put the other flat washer and lock nut on the bolt, and tighten until the mast sleeve is just able to be rotated.
- (2) Place the assembly where it is to be mounted, and attach it with lags or bolts as appropriate. There will be little force on this mount as the guy lines support the mast, but ensure that you are attaching to something that is structurally sound.
- (3) Pivot the mast down to the roof.



(4) Assemble the mast sections together (Figure 5). The white joiner pieces go into the mast pole ends. Line up the holes, and insert the 1/4-20 hardware. Tighten until just snug - do not crush the fiberglass. If you are assembling a 24 foot mast, the middle guy ring must be placed onto the mast end before joining the next piece (Figure 6). The mast with the halyard pulley goes on top.

(5) Place the guy ring on top of the mast, near the pulley (Figure 7). Clip the guy lines onto the guy ring(s). Straighten out all lines along the mast, including halyard lines, in preparation for standing the mast up. Now is the time to get rid of any tangles.

(6) When all is ready, raise the mast. You should have people pulling on the guy lines to keep the top of the mast from whipping. When it is stood up straight tie off the mast guy lines, and then tighten the nut on the base.

If you are raising a folded dipole (BWD/BWDS) you must attach the antenna to the mount, and partially unroll the ends before raising the mast. You will need an additional person for each antenna end to keep the antenna from tangling. If you have the ability, you may find it easier to erect the mast and then attach the antenna/mount to the top after guying.

Raising the end-fed antenna (AC/ACS) is quite simple. After unrolling, tie the halyard line to the insulator that is preassembled onto the antenna wire. Hoist the antenna to the top.

These pictures show tactical masts using pins on lanyards. You will be substituting 1/4-20 bolts and lock nuts. They should only be snugged to alleviate play.

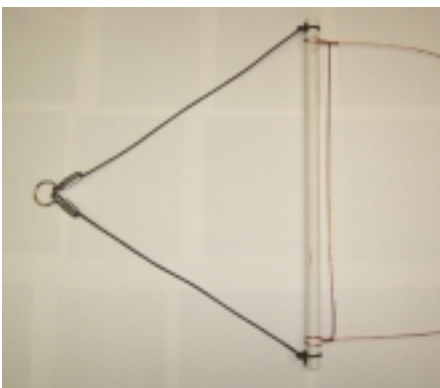


FIG 3 (Folded Dipole Only)



FIG 5



FIG 6



FIG 7