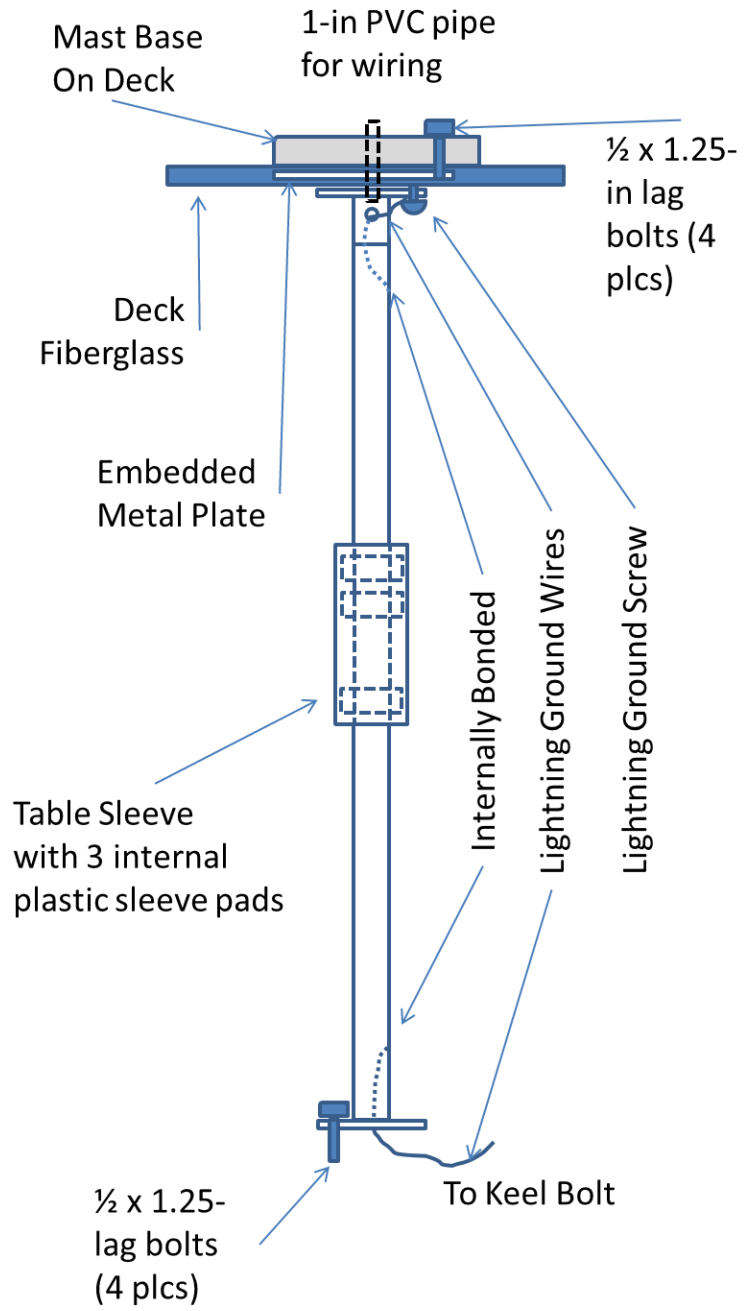
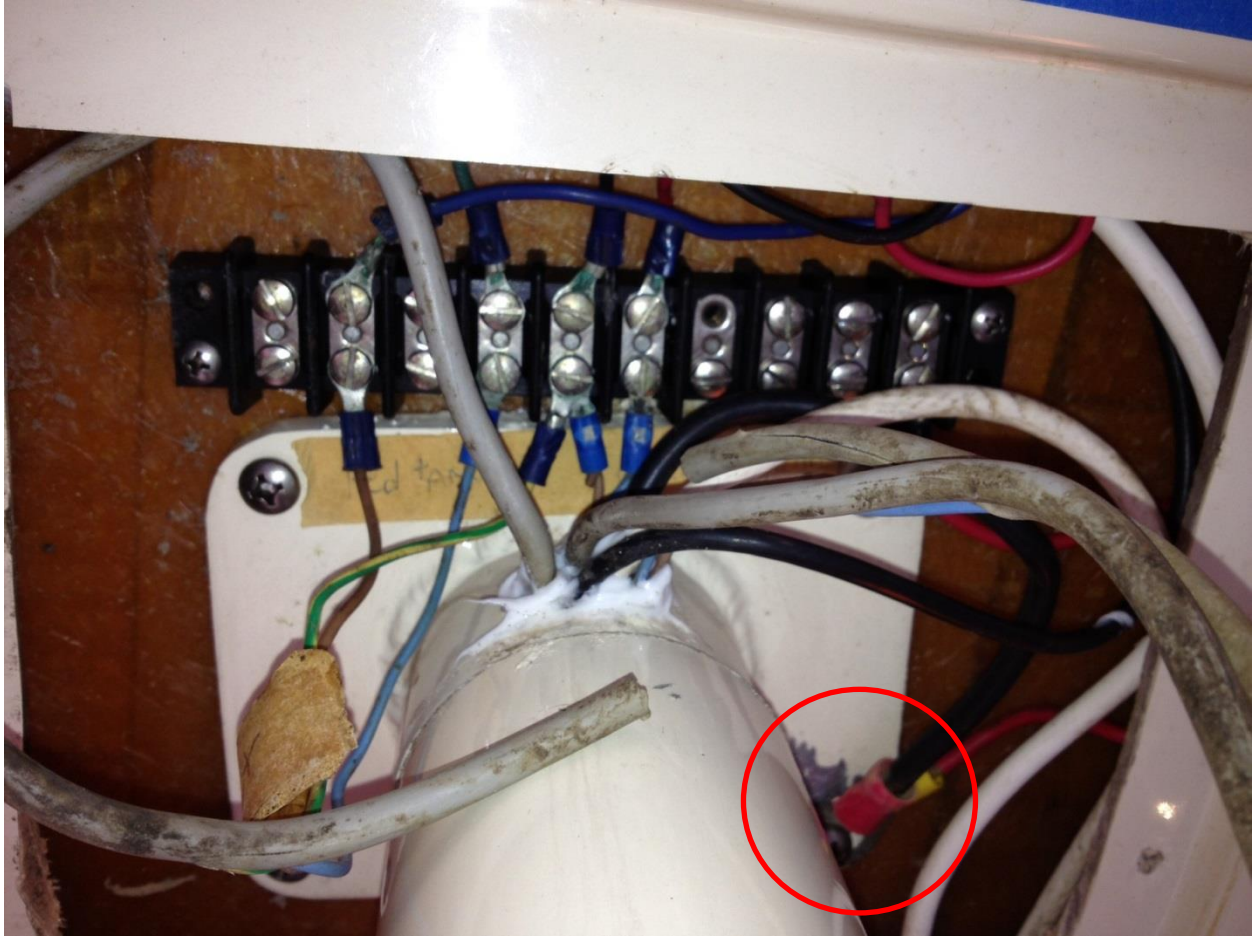


H30T Compression post cartoon...





Salon roof post cover removed to get at mast wiring terminal strip. Note standard single crimp ring terminals, open to corrosion. #8 AWG black lightning ground wire came down from the mast base inside the post and out through the hole (filled with caulk) and was fastened to the upper post flange. Note Hunter at least ground off the paint where the wire is screwed into the post flange...(red circle). And at some point, the red wire was added as if the post was a DC ground point. That was removed!



The coax connector that was cut from the coax (foreground) needed some work...(left). Well no wonder the VHF didn't work so well...It could receive within a mile or so but couldn't transmit across the marina...

Compression Post Disassembly of a 1991 Hunter 30T.



Foot of aluminum compression post. Note bonding tab for lightning ground wire to keel bolt.



Base (foot attached)

Top

30-inch x 2.5-in diameter cast iron counter weight was rusted tight in the post. Water was coming in through the electrical wire conduit in the mast base since 1991.



Detail of counter weight rope attachment point. The counter weight was sold for scrap. The table was easy to adjust without the counterweight.



Top of post



Top of compression post upper foot. Mast wiring enters through opening in top of flange and exits via the side opening. Post OD is 2 7/8-in and ID is 2.5-inch AL.



Salon table support sleeve with table removed.



Upper nylon insert removed (left). It the inner nylon/plastic surface was actually flaking off. Bottom view of sleeve (right) showing lower two internal nylon slides. The rust on the inside of the sleeve actually compressed the nylon inserts to become an interference fit with the compression post.



Most rust is at bottom of sleeve bands that tighten the sleeve to the post. One cause of rust is that it is unpainted steel (inner diameter surface).



Access panel for upper post flange. Can't forget to put it over the post before putting the upper flange on.

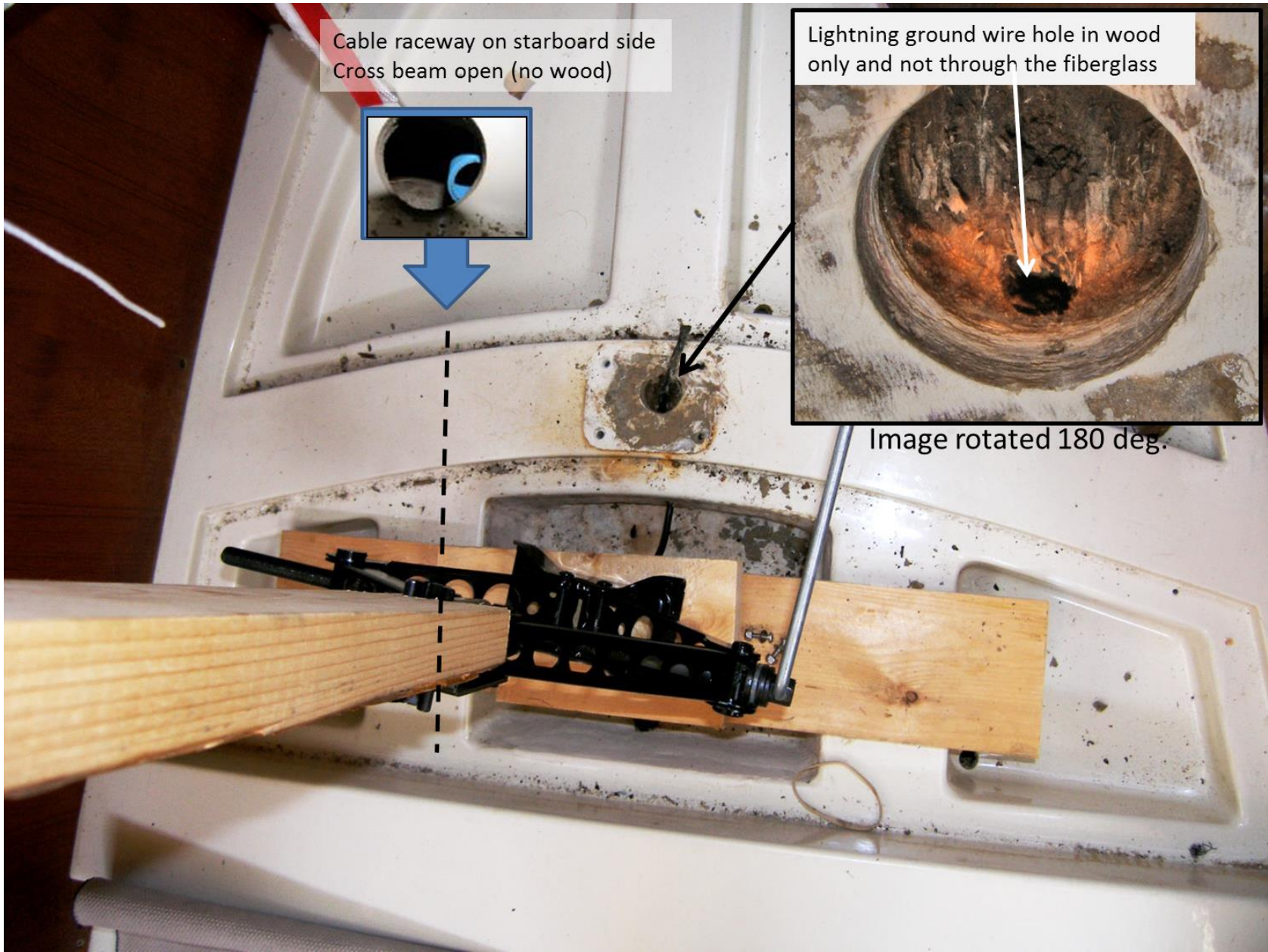
Cable raceway on starboard side
Cross beam open (no wood)



Lightning ground wire hole in wood
only and not through the fiberglass



Image rotated 180 deg.



Above - View of cabin floor where compression post foot sets. Water ran down through compression post and sat in the hole and rotted the wood. This wood is not structural, but only to help form the cross member and to anchor the post foot with the four, 2-in, lag bolts. The black wire exiting the cross member is the lightning wire that came up through the hole in the cross member and into the lower post foot. It fastened to the tab in the foot. The hole through the cross member was opened up to either $\frac{3}{4}$ or 1 inch to accommodate the #4 lightning ground wire. The four lag bolt holes were drilled slightly over size and filled with west thickened epoxy and re-drilled to the correct size. The rot in the large hole under the mast foot was cleaned out as much as possible, then soaked in thinned epoxy. Note the tire jack was needed to get enough clearance to remove and replace the post. Don't overjack!



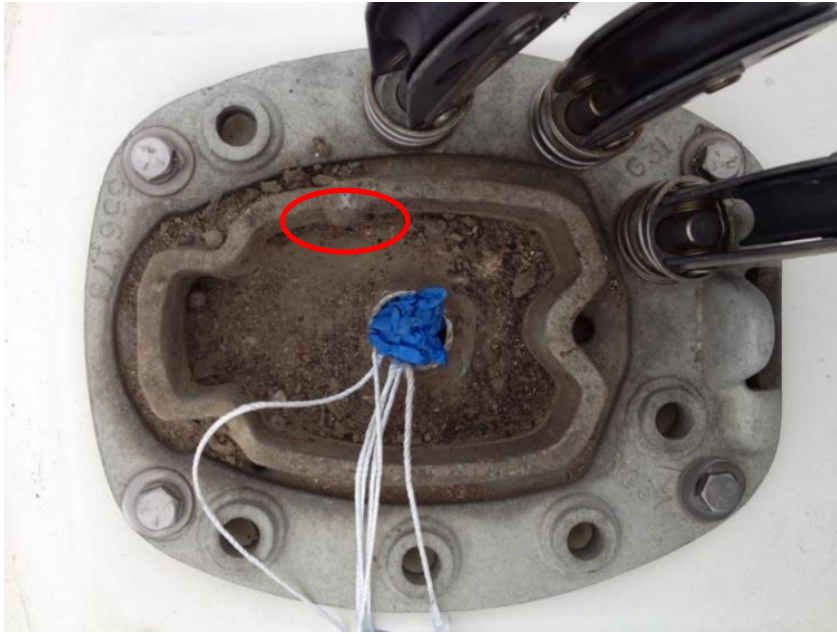
Post replaced with #4 Wire running from mast based down through the post and to a keel bolt. Had to splice the #4 (don't recall why now), but used a heavy-duty connector used in home grounding systems. Splicing is probably not good practice for lightning, but it's better than what was there before.



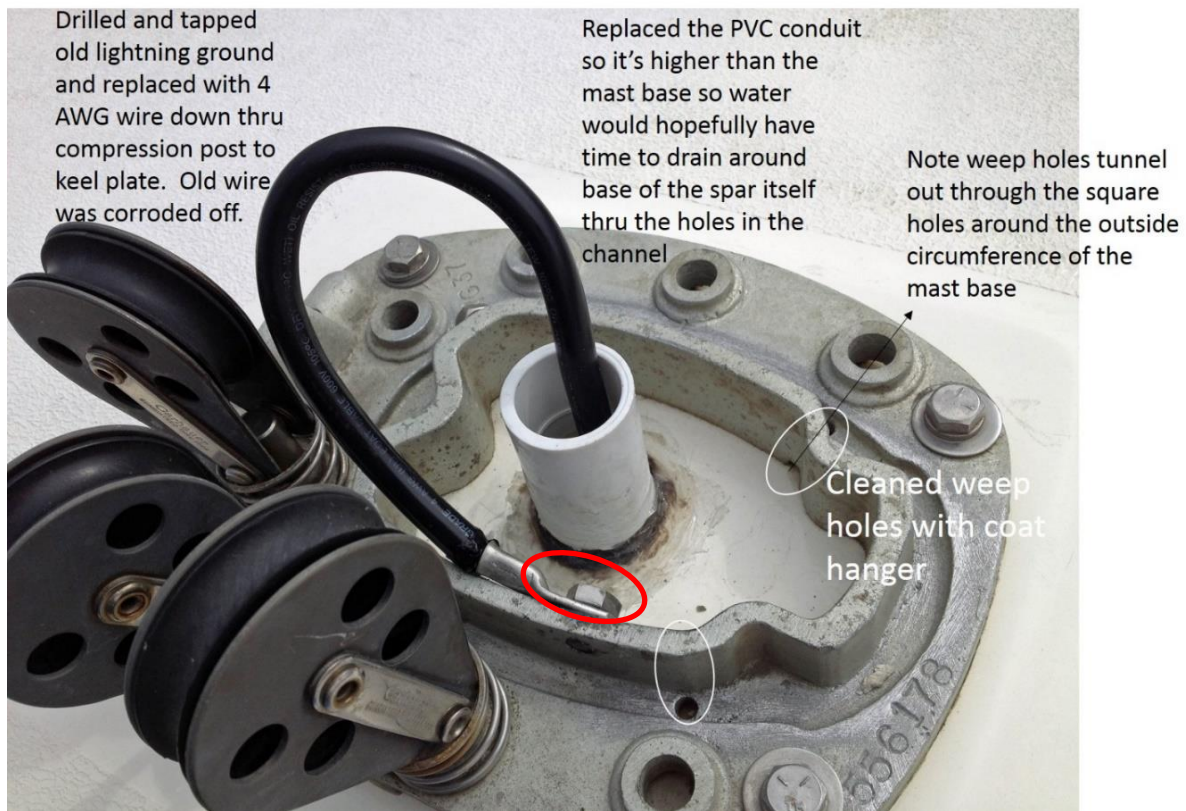
Upper post flange with wiring and mast removed. Post was removed and painted with two-part paint. Perfection I think it was. Color match was perfect.



New mast wiring and VHF coax. Lightning ground runs through post down to keel bolt. Mast wires terminated in adhesive-lined shrink ring terminals. New coax connector wrapped in electrical tape. Should have used self-fusing tape.



Mast foot on deck. Circle is around where the lightning ground wire used to attach to the mast base. Ground it off, re-drilled and tapped (next photo).



Base prior to stepping mast. We stepped the mast and set the end on block about a foot above the base so we could run wires down through conduit, make drip loops, followed by a generous blob of caulk to

seal the wires and tube, then lowered the mast onto the base. NOTE: KEEP YOUR MAST BASE WEEP HOLES CLEAR if you haven't lengthened the PVC tube to be above the "waterline" (top of mast base). In the "before" photo above, the top of the PVC was < 1/2 inch above the deck surface and water would flow in because the weep holes were plugged. The conduit did not come sealed from Hunter. This entire issue could have been avoided had the conduit been sealed.