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Pryme RD-78 VHF/UHF Dual Band Antenna: Short Circuit Problem Warning

Users of this antenna should be aware that a potential short circuit exists within the connector and loading coil of the unit. Figure 1 illustrates the problem: The manufacturer has included a bare copper loading coil in the base of the antenna. When the antenna is in use, there is enough play in the assembly for it to touch the sides of the connector. This will result in an intermittent short being presented to the transceiver.

Figure 1: The loading coil is uninsulated and can short against the BNC connector body, resulting in possible damage to a radio in transmit.

To correct the problem, unscrew the plastic boot (at left in the figure above). You may need to gently grasp the BNC connector inner shield with needle nose to unthread the boot. There may be a small amount of glue on the threads. Remove the loading coil assembly, as shown in Figure 2.

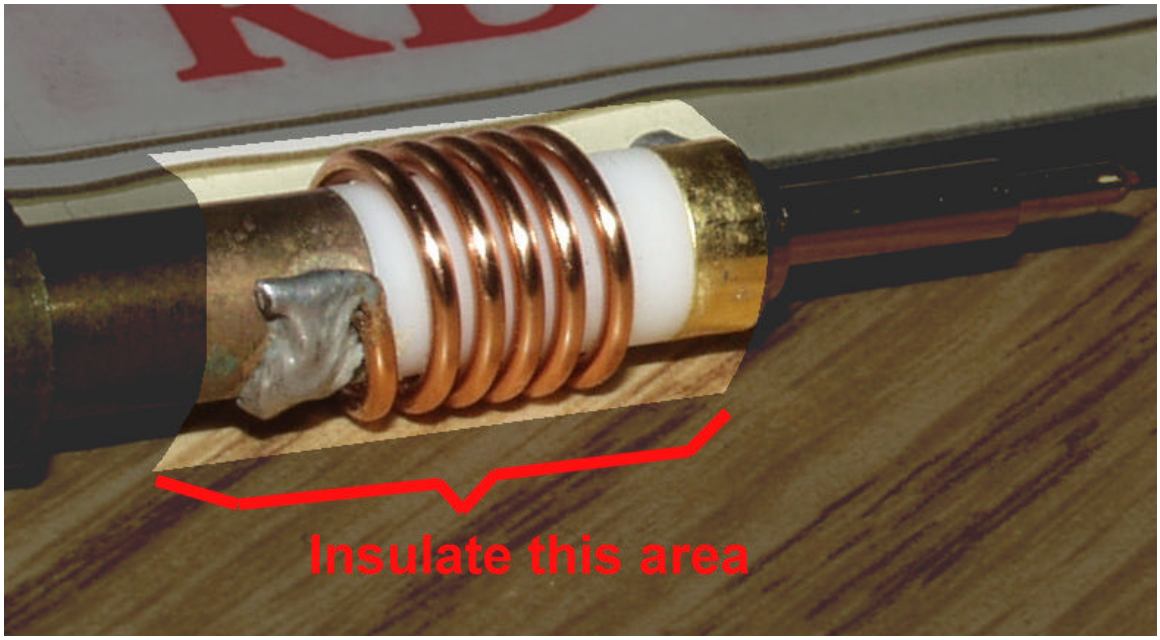

Figure 2: Add insulating material over the loading coil to prevent future shorts.

Apply heatshrink tubing (or any other suitable insulating material) over the loading coil, being careful to not bend the coil itself (or short its turns together). Inspect the two solder joints to make sure they're OK; the unit above had two cold solder joints. Finally, reassemble the antenna, and verify correct performance of the unit.