

Refurbishing a Model 6813 Antenna

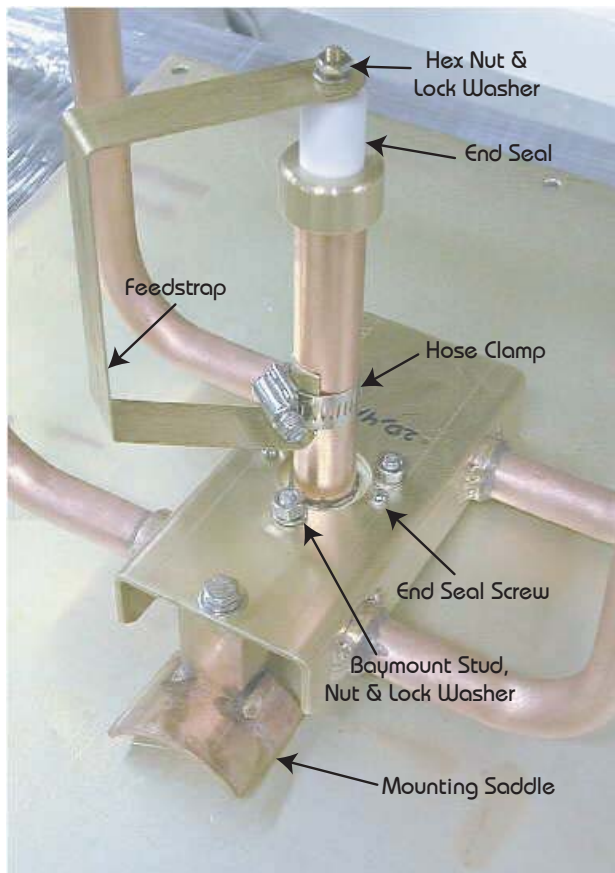
Description

This procedure describes the field overhaul of a Model 6813 antenna, without radomes or de-icers.

Step 1: Remove antenna bay from feedline (figure 1)

Remove the hose clamp from the mounting saddle. Remove the three baymount nuts and lock washers from the baymount studs and remove the bay from the feedline. Take note of the position numbers stenciled on each bay - bays are not interchangeable!

Step 2: Replace end seal (figure 1)



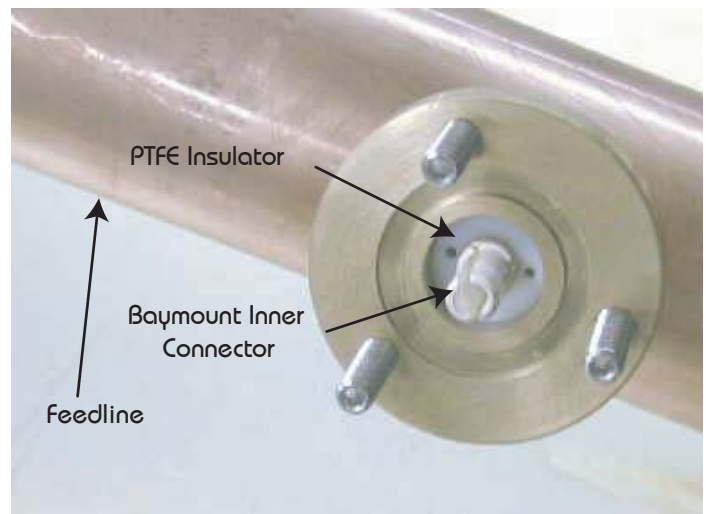
- a. On each bay, remove the hex nut, lock washer, and hose clamp securing the feedstrap to the end seal, and remove the feedstrap.

- b. Remove the end seal screws and remove the end seal through the back of the baseplate.
- c. Install the new end seal (part no. 51275) in the reverse order of removal. When reinstalling the feedstrap, be sure to place it at the angle indicated on the test report.

Step 3: Replace baymount inner connector (figure 2)

- a. Using a 5/32" Allen wrench through the hole in the center of the baymount inner connector and unscrew the 10-32 screw securing the baymount inner conductor to the feedline inner. Withdraw the baymount inner conductor.
- b. Spread the split PTFE insulator and remove it from the baymount inner. Carefully spread a new insulator (part no. 51837) and install it in the groove in the inner conductor.
- c. Reinstall the baymount inner into the feedline inner and tighten the 10-32 screw.
- d. After the 10-32 screw has been retightened, pull the baymount inner ("bullet") connector out of the baymount inner and replace it with the new one (part no. 55566) from the spare parts kit (part no. 56261).

- continued on reverse -



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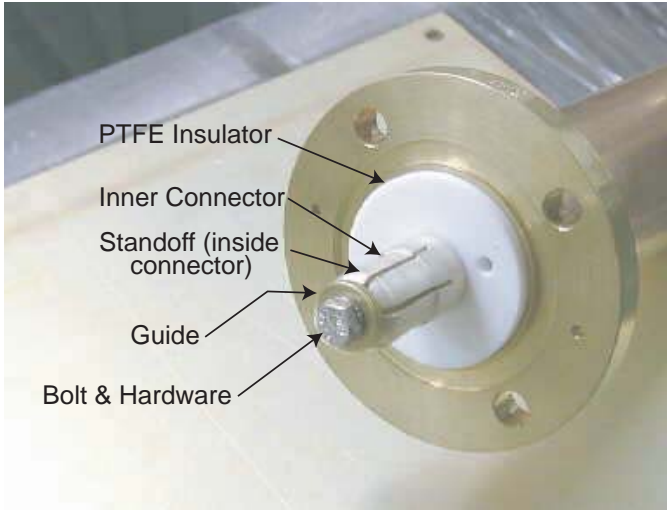
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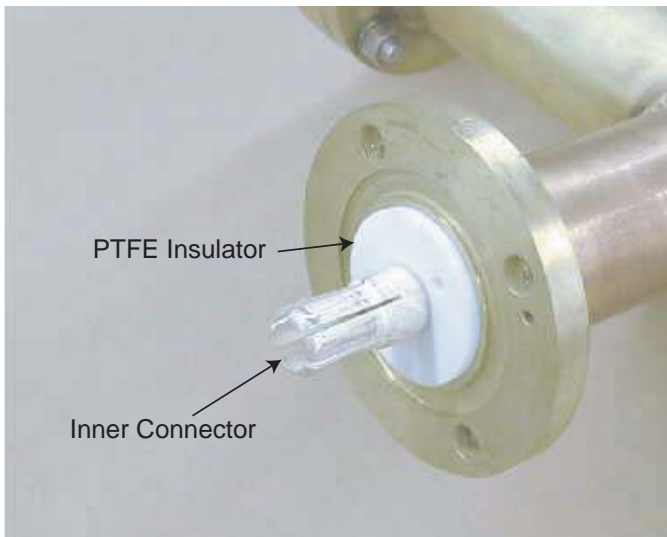
Step 4: Replace feedline inner connector and insulator (figure 3)

CAUTION

Lay the feedline horizontal during this operation. If it is held vertical or at an angle, the baymount may have to support the weight of the feedline inner conductor, and may be damaged.



- Lay the feedline horizontal. Unscrew the feedline connector bolt from the end of the connector. Remove the bolt, its hardware, the connector, the guide, the standoff, and the feedline insulator.
- Install the new insulator (part no. 53186) over the boss on the end of the feedline inner conductor.
- Install, in turn, the new connector kit (part no. 82918-G502), including the connector, standoff, guide, flat washer, lock washer, and bolt. Tighten the bolt.



Step 5: Replace transformer inner connector

NOTE

If your transformer output flange resembles figure 4, follow A. If it resembles figure 5, follow B.

A. Without locking flange (figure 4)

- The inner connector is constructed similar to the feedline connector, except for the lack of a guide with its bolt and hardware. Insert a 5/32" Allen wrench through the hole in the end of the inner conductor connector (as with the baymount assembly) and unscrew the bolt securing the inner connector to the transmission inner conductor. Remove the bolt and the connector.
- Install the new connector (part no. 82918-G501) and the screw and its hardware. Tighten the screw.

B. With locking flange (figure 5)

- Insert a 5/32" Allen wrench through the hole in the end of the inner conductor connector (as with the baymount assembly) and unscrew the screw securing the inner connector to the transmission inner conductor. Remove the screw, the lock washer, and the connector.
- Install the new connector (part no. 51870-02).

