

Retrofitting a Model 6810 with a Standard Radome

The radome retrofit may be done on the tower. However, you may find it easier to bring the radiators down and do some of the work on the ground. Both methods are described below.

On the Tower

Remove the Partial Radome (figure 1)

WARNING

Whenever a rigger is on the tower in the area of the antenna, shut off the power and lock it off so that it cannot be turned on accidentally.

- a. Shut off all power to the antenna.

CAUTION

Do not disturb the feedstrap (1, figure 2) at any time during this process. If you do, the antenna will not perform well.

- b. For each antenna radiator: remove the screws (1) securing the closure plates (2), and remove the closure plates.

NOTE

These screws are usually 1/4" hex, but may be round-head. If they are round-head and the feed strap is in their way, take great care not to disturb the feed strap.

- c. Inside the partial radome, remove the two bolts (1/2" hex) securing the antenna mounting saddle to the antenna radiator.
- d. Remove the hose clamp securing the mounting saddle to the vertical feedline and remove the saddle. Remove the plastic spacer between the back of the radiator and the partial radome.
- e. Remove the two small screws (3) at the sides of the partial radome and spread the radome so that the front clears the antenna arms.
- f. Using tinsnips, cut up both sides (4) of the back of the partial radome to allow it to clear the input flange.
- g. Spread and lift the partial radome off over the top of the antenna radiator.

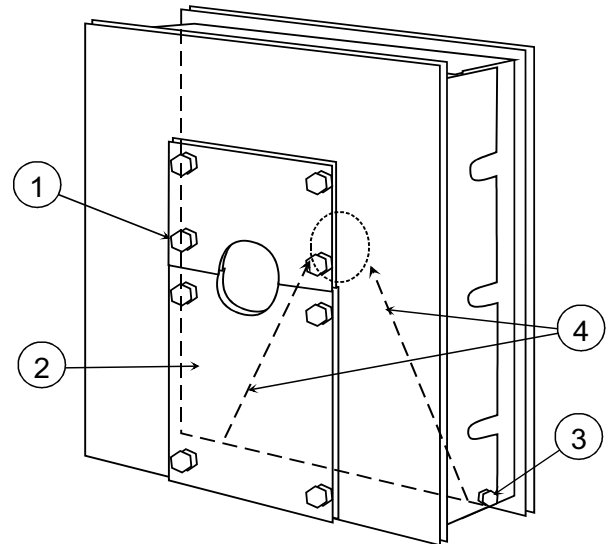


Figure 1. Partial Radome Removal

Install the Full Radome (figure 2)

CAUTION

When handling the radome, be careful not to lose the black foam pieces on the radome that will help seal the radome to the feedline.

- h. Identify the bottom half of the full radome (2) by its drain holes, and its narrow mating flange. Carefully place it in position under the radiator so that the cutout of the radome fits snugly behind the antenna input flange (3). Secure it lightly in position with a hose clamp around the bottom radome mount (4) and the feedline (5). Align it with the radiator, then tighten the hose clamp.
- i. Identify the correct top radome half (7). Separate the two-piece top radome mount (8) and remove the piece that will be attached to the feedline flange, keeping the hardware for reinstallation.
- j. Using two of the existing feedline flange bolts (9), fasten the removed piece of the top radome mount loosely to the feedline flange (10) as shown.
- k. Carefully place the top radome half over the radiator so that its cutout fits behind the antenna input flange, and its mating flange fits over the bottom radome half's mating flange. Loosely bolt the radome halves together, using the 1/4" bolts and nuts, and a flat washer and a lockwasher on each bolt.

Document No.: ts-6810_radome (0411)

NOTE

It may be necessary to squeeze the radome flanges together slightly to start the nuts.

- l. Re-mate the two-piece top radome mount and bolt it together with the hardware provided.
- m. Tighten all hardware securely.
- n. Seal the joint where the radome encircles the antenna input flange with the silicone caulk supplied with the antenna.

On the Ground

- a. After removing the mounting saddle and plastic spacer in step d above, remove the four bolts securing the antenna input flange. Carefully lower the antenna bay to the ground.
- b. On the ground, complete the removal of the partial radome per steps e, f, and g above.

CAUTION

Do not use silicone grease on the O-ring, as this will soften the silicone O-ring. We use petroleum jelly.

- c. Reinstall the radiator on the feedline, using a lightly lubricated new O-ring in the input flange.
- d. Install the new full radome per steps h through n above.

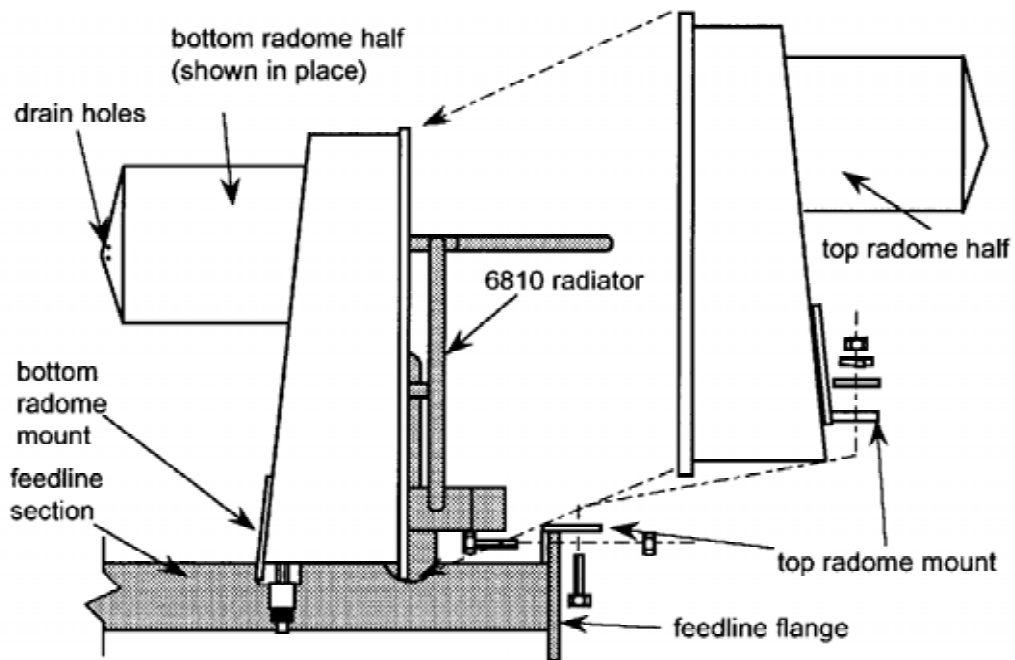


Figure 2. Full Radome Installation