

TracPhone® V7 BUC Cable Replacement Instructions

The following instructions explain how to replace the BUC cable in a TracPhone V7 system.

Replacement Steps

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2. Remove the Faulty BUC Cable, 2
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Tools Required

This procedure requires the following tools:

- #2 Phillips screwdriver
- Cutting pliers
- Torque nut driver with a 7/64" hex bit, set at 11 in-lbs
- 5/16" open-end torque wrench set at 8 in-lbs
- Torque nut driver with a 5/16" socket, set at 11 in-lbs

Technical Support

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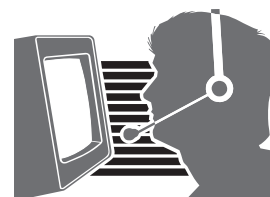
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Step 1 - Remove the Radome

Follow the steps below to remove the radome.



CAUTION

For your own safety, be sure to disconnect power from all wired components before performing this procedure.

- Disconnect power from the TracPhone V7 system and any connected receivers and/or multiswitch.
- Using a #2 Phillips screwdriver, remove the six screws securing the radome to the baseplate (see Figure 1). Set the screws and radome aside in a safe place.

Figure 1 Radome Screws

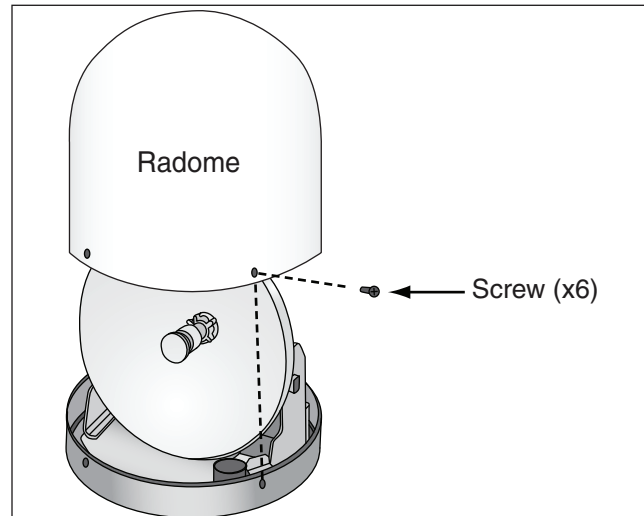
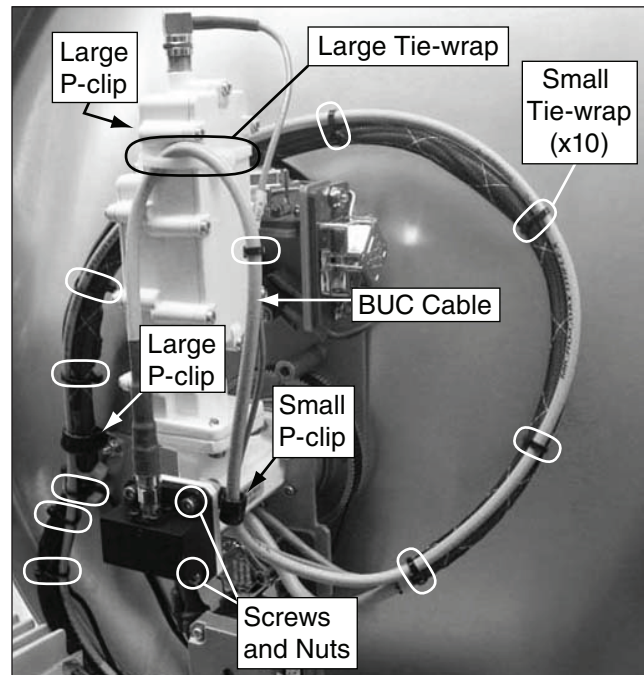


Figure 2 BUC Cable/P-clips/Tie-wraps



Step 2 - Remove the Faulty BUC Cable

Follow the steps below to remove the faulty BUC cable.

- Using a nut driver with a 7/64" hex bit, remove the two screws and nuts shown in Figure 2. Then remove the small p-clip and set it aside in a safe place (see Figure 2).
- Using cutting pliers, carefully cut and remove the large tie-wrap, and the 10 small tie-wraps securing the BUC cable (see Figure 2).
- Using a nut driver with a 5/16" socket, remove the screws and nuts securing the two large p-clips to the reflector (see Figure 2). Then remove the p-clips from the cables and set them aside in a safe place.

- d. Using a 5/16" open-end wrench, disconnect the BUC cable's straight connector from the feed (see Figure 3). Then disconnect the other end from the BUC (see Figure 4).
- e. Extract the BUC cable, ensuring no other cables or components are stressed or damaged.

Figure 3 BUC Cable Straight Connector

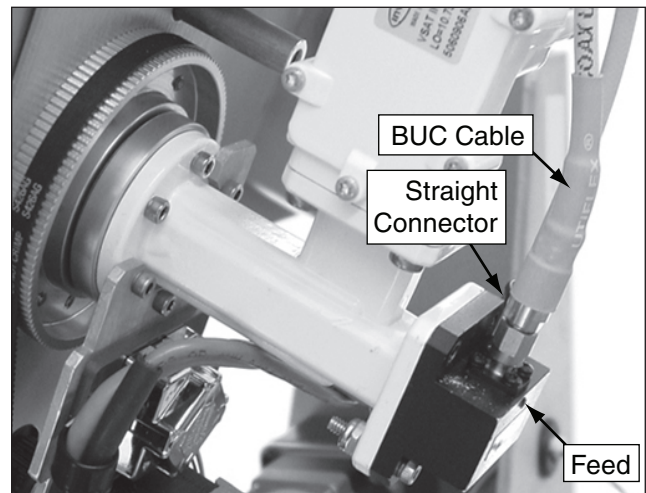
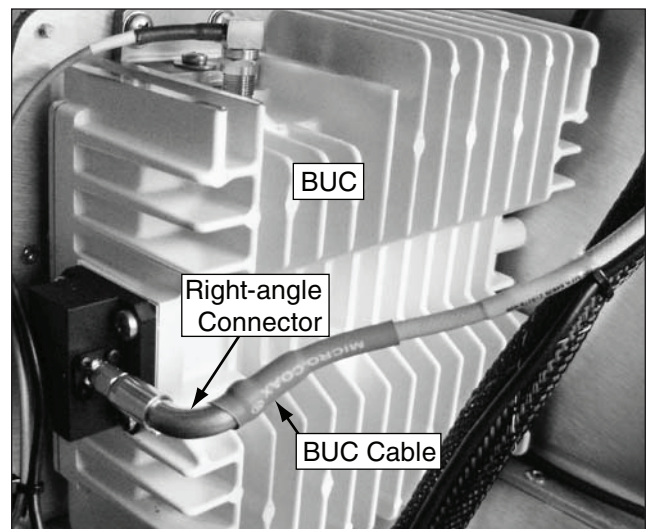


Figure 4 BUC Cable on BUC

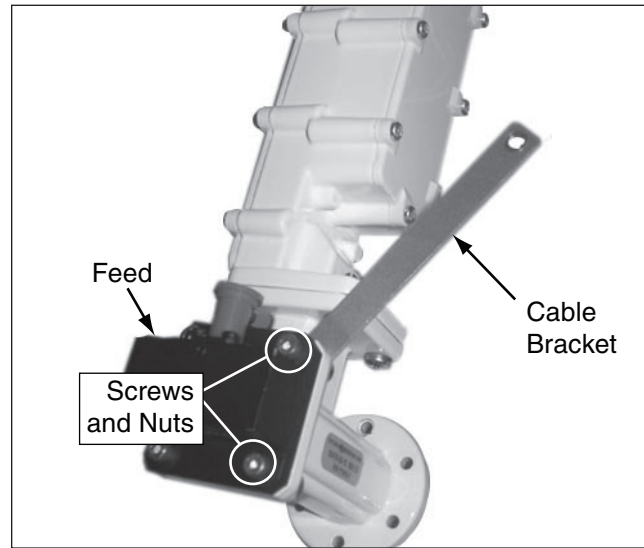


Step 3 - Install the Cable Bracket

A new cable bracket will secure the new BUC cable to the feed. Follow the instructions below to install the new bracket onto the feed; you will secure the BUC cable to this bracket later.

- a. Align the supplied cable bracket and feed mounting holes.
- b. Secure the bracket to the feed using two supplied #6-32 x 3/4" screws and nuts (see Figure 5). Tighten both screws using a torque nut driver with a 7/64" hex bit, set at 11 in-lbs.

Figure 5 Cable Bracket Mounting



Step 4 - Route and Connect the BUC Cable

IMPORTANT!

Never create sharp bends or kinks in the BUC cable. To prevent cable stress or damage, allow the BUC cable to untwist as needed during cable dressing.

Cable Installation

Follow the instructions below to begin installing the BUC cable. Be sure to allow the cable to naturally twist or bend at each point.

TIP: The BUC cable markings are used to align tie-wraps and p-clips later in this procedure (see Figure 6).

- a. Loosely connect the new BUC cable's right angle connector by hand to the BUC (see Figure 7).
- b. Using a small supplied tie-wrap, loosely secure the BUC cable to the cable bundle, as shown in Figure 7. Ensure the tie-wrap does not prevent the cable from twisting as necessary.
- c. Insert the BUC cable and the cable bundle into one of the large p-clips that you removed in Step 2c. on page 2.

Figure 6 BUC Cable Markings

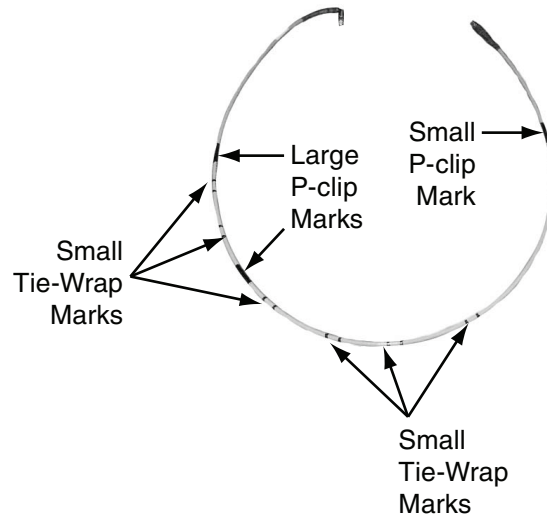
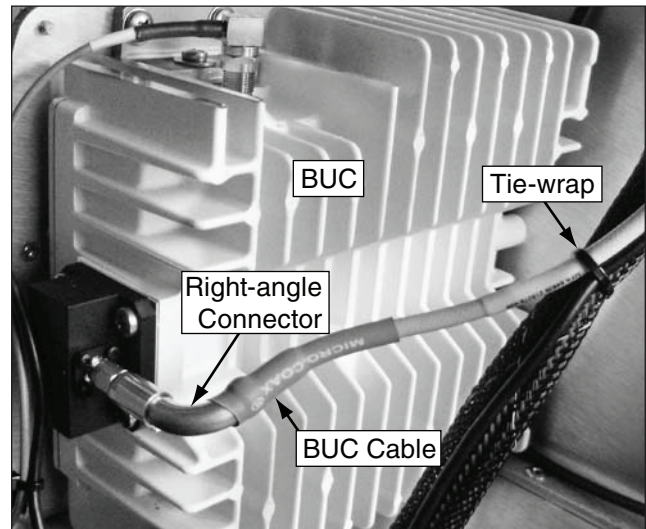


Figure 7 BUC Cable Right-angle Connector and Tie-wrap



- d. Mount the large p-clip 1/2" [12.7 mm] above the end of the cable bundle's braid (see Figure 8), with the p-clip's flat side facing the reflector (see Figure 9). Then loosely secure the large p-clip onto the rear of the reflector.
- e. Insert the BUC cable and the cable bundle into the second large p-clip (that you removed in Step 2c. on page 2). Then mount the p-clip loosely onto the rear of the reflector, ensuring the curved side of the p-clip faces the reflector (see Figure 9).

Figure 8 P-clip Location Close-up

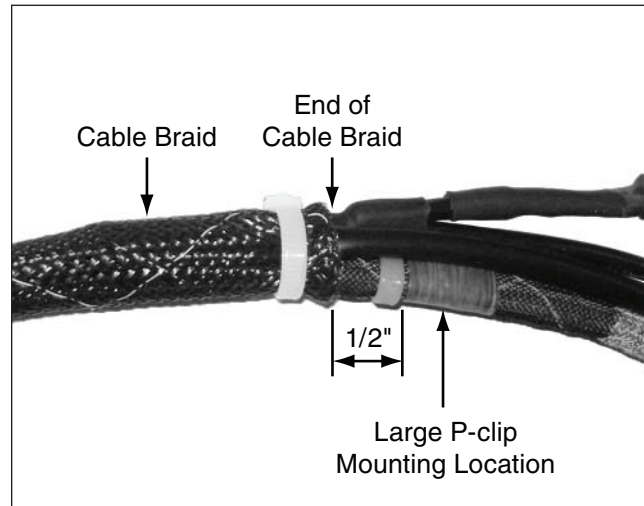
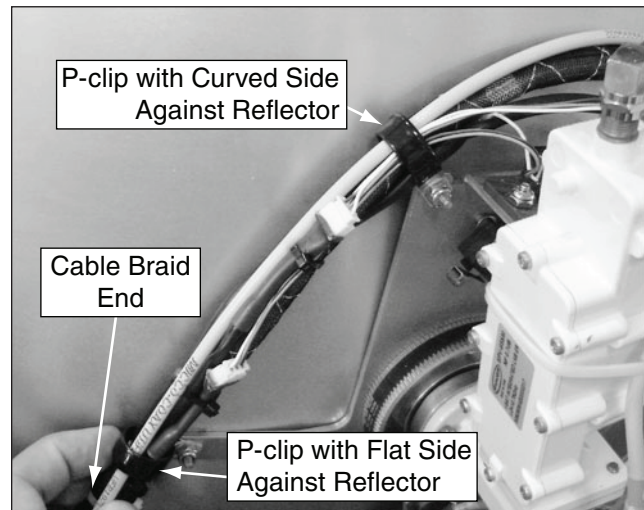


Figure 9 Large P-clips



- f. Wrap a 1" [25.4 mm] length of the supplied rubber tape around the BUC cable over the 3/4" black mark closest to the straight connector (see Figure 10).
- g. Insert the BUC cable into a small p-clip. Then insert the RF cable into another small p-clip (see Figure 10).
- h. Secure both p-clips to the cable bracket using a supplied hex screw, washer, and nut (see Figure 10 and Figure 11). The p-clips should align approximately with the center of the rubber tape. Ensure the BUC cable can twist freely as needed.

Figure 10 Bracket P-clips/Rubber Tape

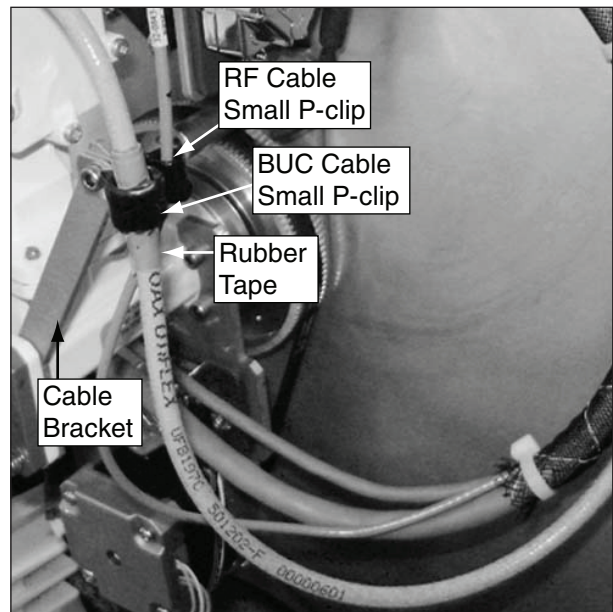
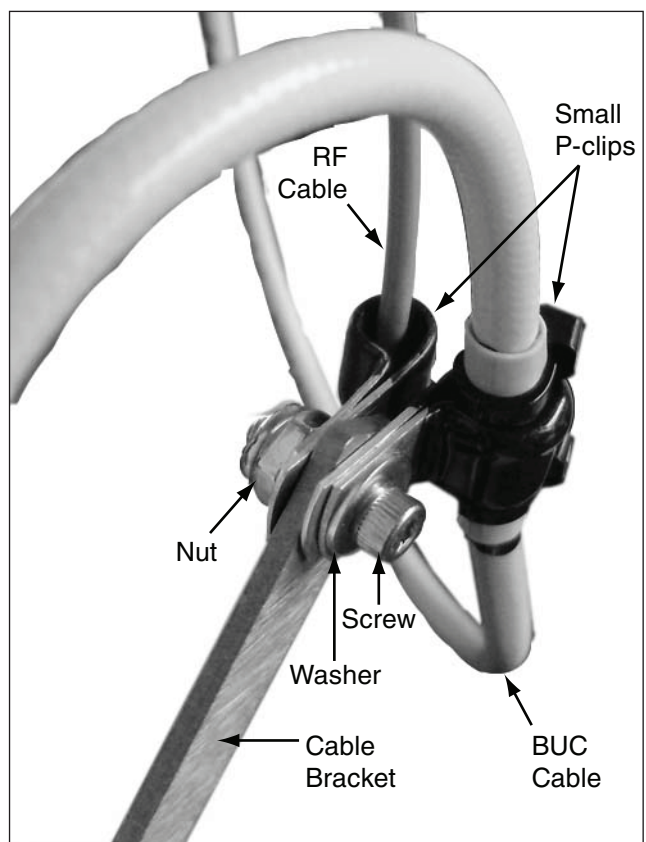
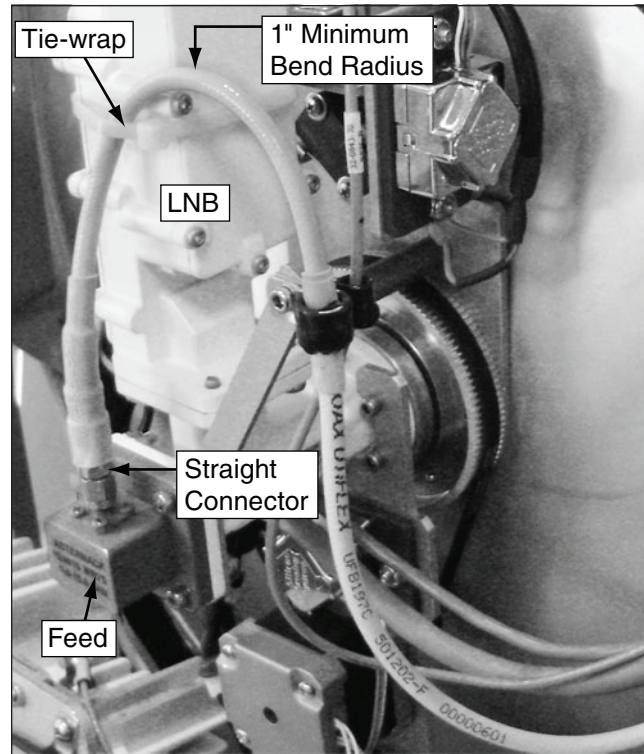


Figure 11 Cable Bracket Small P-clips/screw



- i. While maintaining a 1" minimum cable bend radius, loosely secure the BUC cable to the LNB using a large tie-wrap, as shown in Figure 12.
- j. Loosely connect the new BUC cable's straight connector to the feed (see Figure 12).
- k. Gently reposition the BUC cable as necessary to align the BUC cable's markings with both large p-clips on the rear of the reflector.

Figure 12 Tie-wrap on LNB



Step 5 - Secure the BUC Cable

Follow the instructions below to fully secure the new BUC cable. Be sure to trim and remove any excess tie-wrap lengths.

- a. Using a torque nut driver with a 5/16" socket set at 11 in-lbs, tighten the two large p-clips on the rear of the reflector (see Figure 13).
- b. Tilt the reflector forward, as shown in Figure 14.
- c. Using a 5/16" open-end torque wrench set at 8 in-lbs, fully tighten the BUC cable's right-angle connector to the BUC (see Figure 15).
- d. Align the tie-wrap closest to the right angle connector with the BUC cable's tie-wrap marking. Then fully tighten the tie-wrap (see Figure 15).

Figure 13 Reflector P-clips

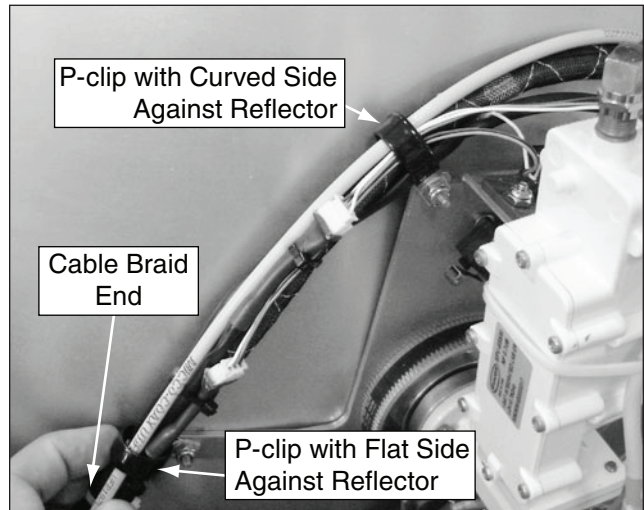


Figure 14 Reflector Tilted Forward

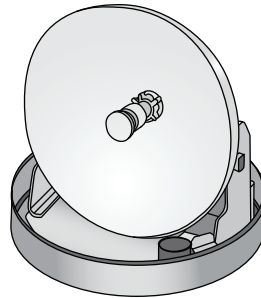
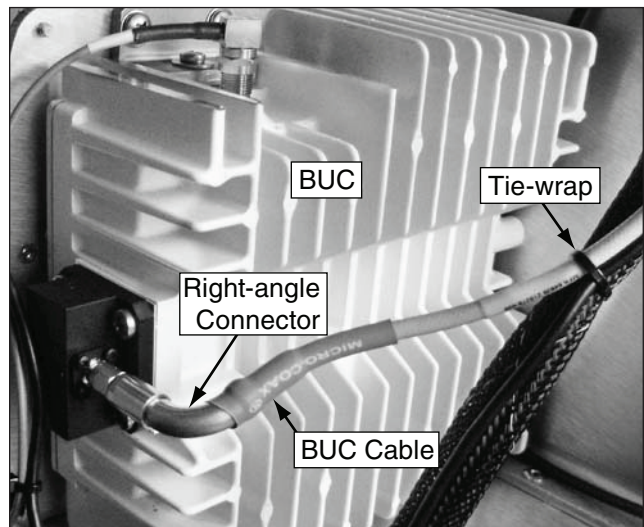


Figure 15 Right-angle Connector and Tie-wrap



- e. Install, but do not fully tighten, five small tie-wraps to secure the BUC cable to the cable bundle, as shown in Figure 16.
- f. Install one small tie-wrap around the BUC cable's rubber tape above the p-clip; install another tie-wrap below the p-clip (see Figure 17).
- g. Using a torque nut driver with a 5/16" socket, set at 11 in-lbs, tighten the screw securing the two p-clips to the cable bracket (see Figure 17).

Figure 16 Tie-wrap Locations

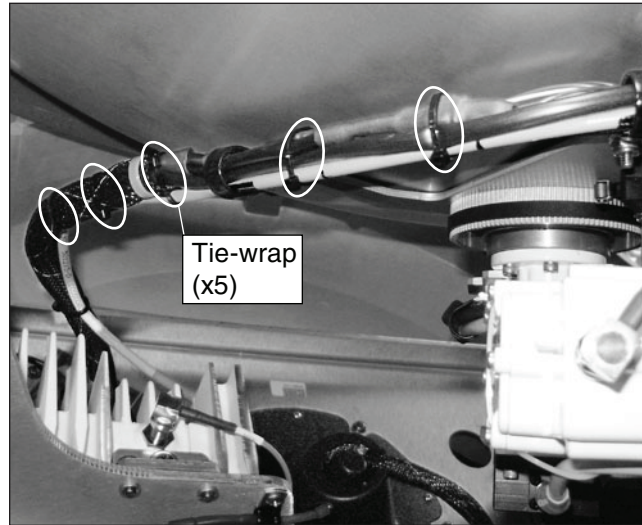
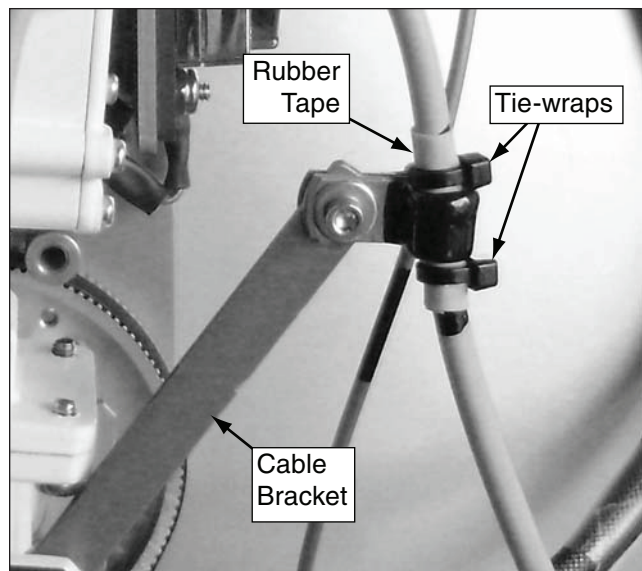


Figure 17 Tie-wraps



- h. Fully tighten the large tie-wrap securing the BUC cable to the LNB (see Figure 18).
- i. Using a 5/16" open-end torque wrench set at 8 in-lbs, tighten the BUC cable's straight connector (see Figure 18).
- j. Fully tighten the five small tie-wraps securing the BUC cable to the cable bundle, as shown in Figure 19. Be sure to align the tie-wraps with the BUC cable's markings.

Figure 18 Large Tie-wrap/BUC Straight Connector

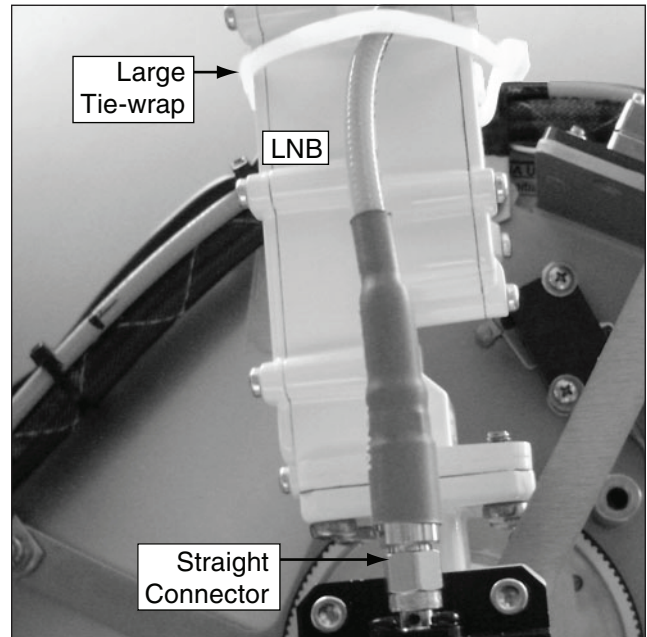
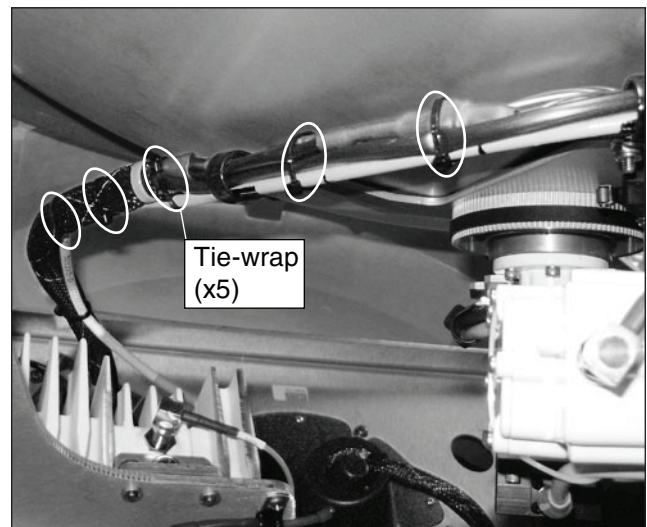


Figure 19 Tie-wrap Locations



- k. Install, and fully tighten, four small tie-wraps to secure the BUC cable to the cable bundle, as shown in Figure 20. Be sure to align the tie-wraps with the markings on the BUC cable.
- l. Reinstall the radome. Then re-apply power to the TracPhone V7 system.

The procedure is complete!

Figure 20 Tie-wrap Locations

