

TracPhone® V30 GPS Replacement Instructions



The following instructions explain how to replace the GPS in a TracPhone V30 antenna.

NOTE: Your antenna might have parts that differ from those pictured in this document. Such differences have no bearing on the instructions unless noted otherwise.

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Tools Required

This procedure requires the following tools:

- #2 Phillips screwdriver
- Cutting pliers
- Adhesive remover that won't scratch metal

Figure 1: GPS



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Remove the Radome

Follow the steps below to disconnect power and remove the radome from the antenna.

1. Power off and unplug the VSAT-Hub to disconnect power from the antenna.



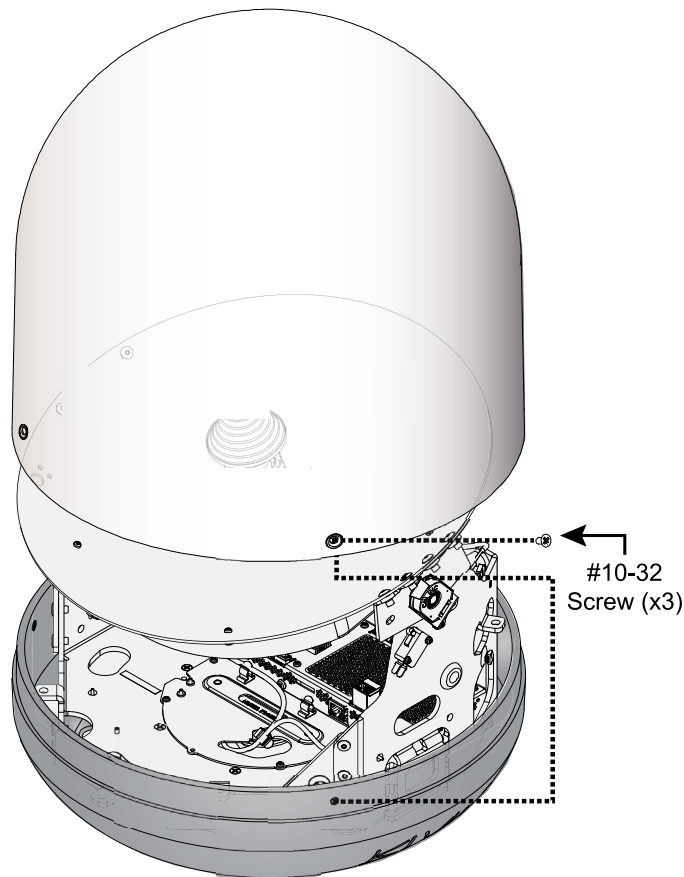
CAUTION

To prevent injury, be sure to disconnect all power from the antenna before proceeding. Power must remain disconnected for the duration of this procedure.

2. Remove and discard the three #10-32 screws securing the radome to the baseplate (see Figure 2). Carefully lift the radome straight up until clear of the antenna assembly and set it aside in a safe place.

NOTE: If you keep the radome topside, secure it with a lanyard to prevent it from falling overboard. Do not place the radome on a hot steel deck – the heat may warp the radome.

Figure 2: Radome Screws

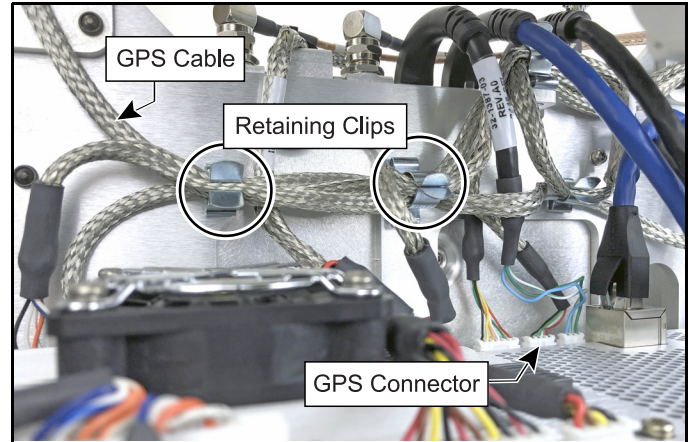


Remove the Old GPS

Follow the steps below to remove the defective GPS.

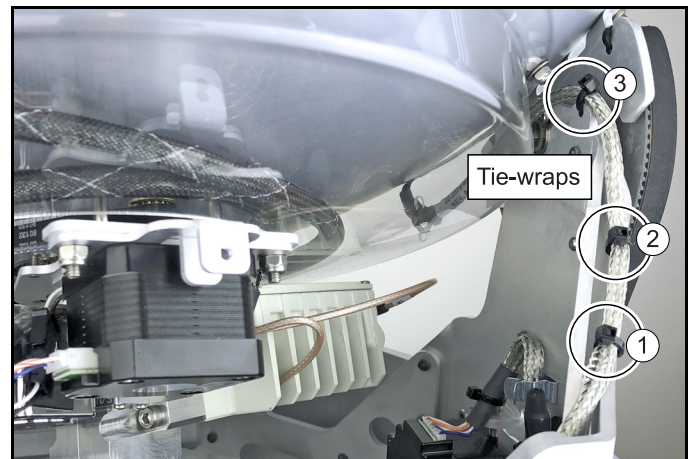
1. Disconnect the GPS cable from the main board (see Figure 3).

Figure 3: GPS Cable Connection at Main Board



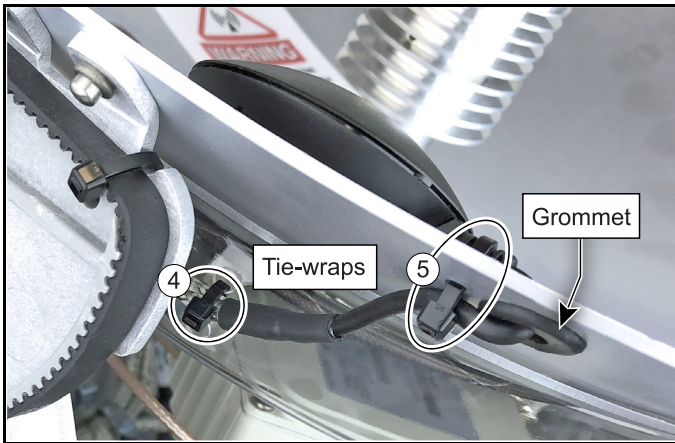
2. Carefully remove the GPS cable from the two metal retaining clips (see Figure 3).
3. Using cutting pliers, remove and discard the three tie-wraps securing the GPS cable to the antenna frame (see Figure 4).

Figure 4: Tie-Wraps 1-3 Securing GPS Cable



- Remove and discard the two tie-wraps securing the GPS cable to the clear plastic skew cable wrap cover and the reflector (see Figure 5).

Figure 5: Tie-Wraps 4 and 5 Securing GPS Cable



- Remove and discard the rubber grommet from the reflector (see Figure 5). Simply push the grommet out through the hole.
- Extract the entire length of GPS cable up through the hole in the reflector.
- Grasp the GPS module and carefully pull it free from the reflector. Discard the defective GPS.
- Remove any remaining adhesive residue from the reflector.

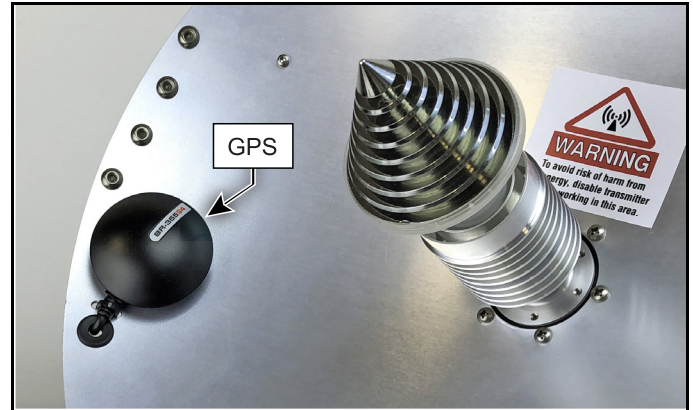
Install the New GPS

Follow the steps below to install the new GPS.

- Feed the cable of the new GPS down through the hole in the reflector.
- Install a new rubber grommet (*supplied in kit*) to prevent abrasion from the metal edges of the hole in the reflector (see Figure 5).

- Peel off the paper backing from the base of the replacement GPS module to expose the adhesive. Then press the GPS module down firmly onto the reflector in the orientation shown in Figure 6. Apply pressure to make sure the adhesive bonds to the reflector.

Figure 6: GPS Orientation on Reflector



IMPORTANT!

Before tightening any tie-wraps securing the GPS cable, move the reflector up and down to ensure the cable does not become taut or restrict movement.

- Using new tie-wraps (*supplied in kit*), secure the GPS cable to the reflector and skew cable wrap cover (see Figure 5).
- Route the GPS cable to the PCB and use new tie-wraps to secure it at the locations shown in [Figure 4 on page 2](#).
- Connect the GPS cable to the PCB (see [Figure 3 on page 2](#)).
- Secure the GPS cable in the two retaining clips (see [Figure 3 on page 2](#)).
- Move the reflector up and down through its full elevation range and make sure the GPS cable does not become taut or restrict movement. Then tighten all five tie-wraps and trim the excess.
- Inspect the inside of the antenna to make sure you have not left any tools or debris inside.
- Reinstall the radome onto the antenna and secure it with three new #10-32 screws (*supplied in kit*). Tighten the screws to 5 in-lbs of torque.
- Reconnect power to the VSAT-Hub.
- Test the system for normal operation. If the problem persists, contact KVH Technical Support.

The replacement procedure is complete!