

TracPhone® V30 VSAT Modem Replacement Instructions



The following instructions explain how to replace the VSAT modem 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.

Table of Contents

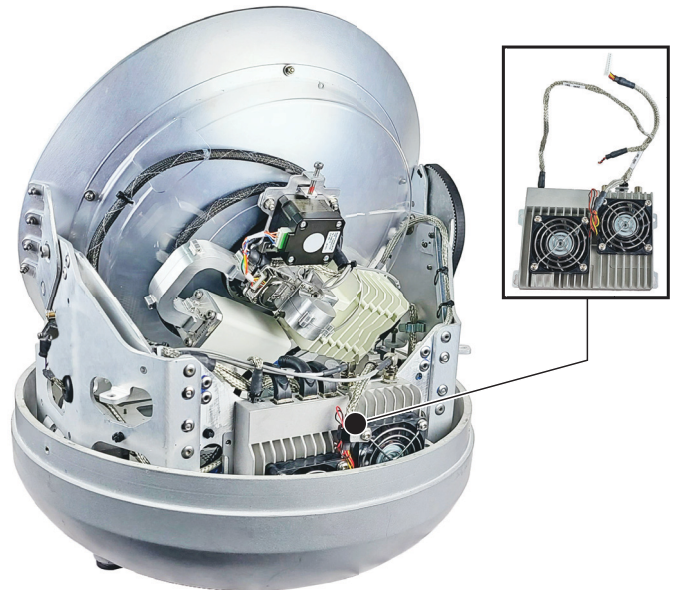
Remove the Radome.....	2
Replace the Modem	2

Tools Required

This procedure requires the following tools:

- #2 Phillips screwdriver
- Driver with T10 Torx bit
- Torque driver set to 9 in-lbs
- Needle-nose pliers
- 7/16" open-end wrench
- 7/16" torque wrench set to 15 in-lbs

Figure 1: VSAT Modem



Technical Support

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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.



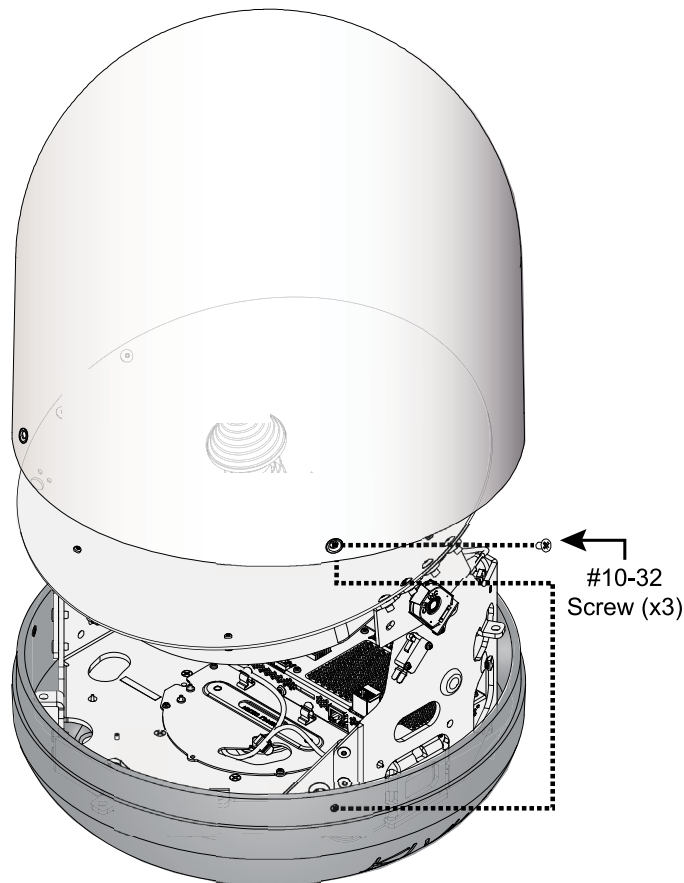
CAUTION

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. Also, do not place the radome on a hot steel deck – the heat may warp the radome.

Figure 2: Radome Screws

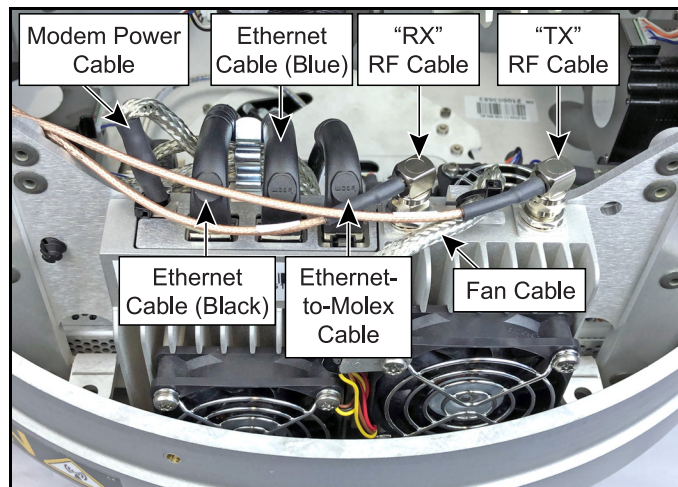


Replace the Modem

Follow the steps below to replace the defective modem.

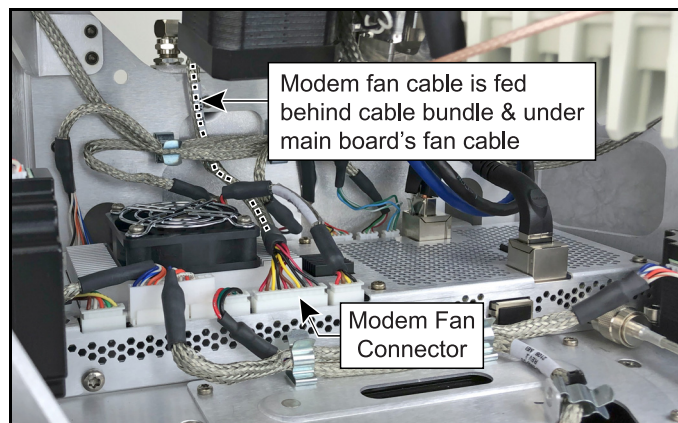
1. Using a 7/16" wrench, disconnect the two RF cables from the modem. To avoid stressing the cables, hold the tops of the connectors while loosening (see Figure 3).

Figure 3: Modem Cable Connections



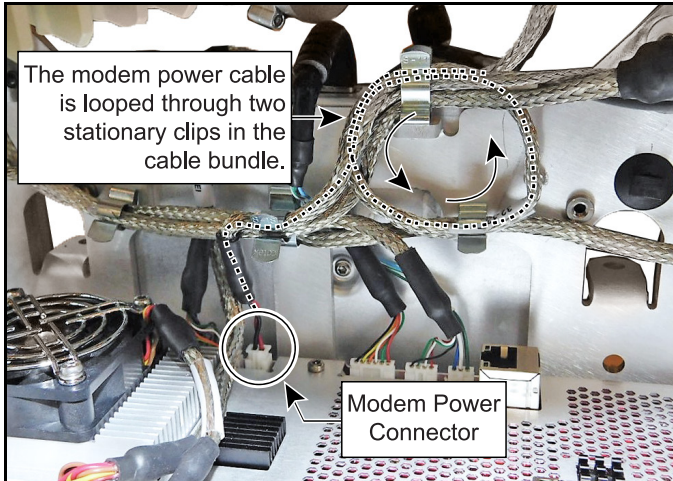
2. Disconnect the three Ethernet cables from the modem (see Figure 3).
3. Disconnect the modem fan cable from the main board (see Figure 4). **Be sure to disconnect by grasping the connector body; do not pull on the wires.** Then carefully extract the modem fan cable by pushing the connector up behind the cable bundle.

Figure 4: Modem Fan Cable Routing and Connection



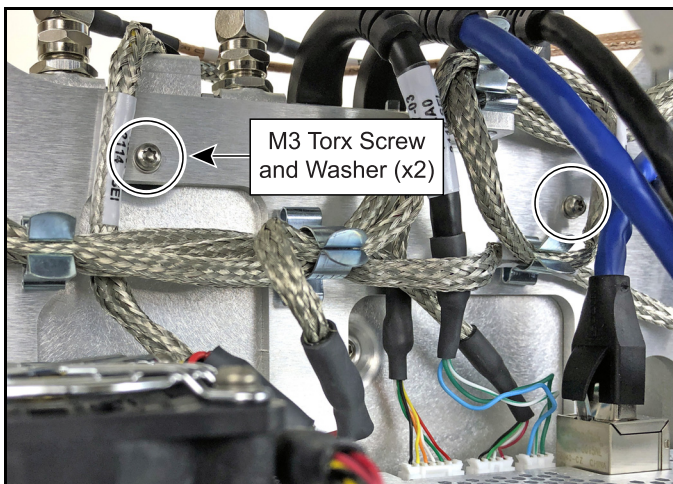
- Disconnect the modem power cable from the main board (see Figure 5). **Be sure to disconnect by grasping the connector body; do not pull on the wires.** Then carefully extract the modem power cable from the clamps and the cable bundle loop.

Figure 5: Modem Power Cable Routing and Connection



- Using a T10 Torx screwdriver, remove and discard the two M3 Torx screws and washers securing the modem to the antenna frame (see Figure 6).

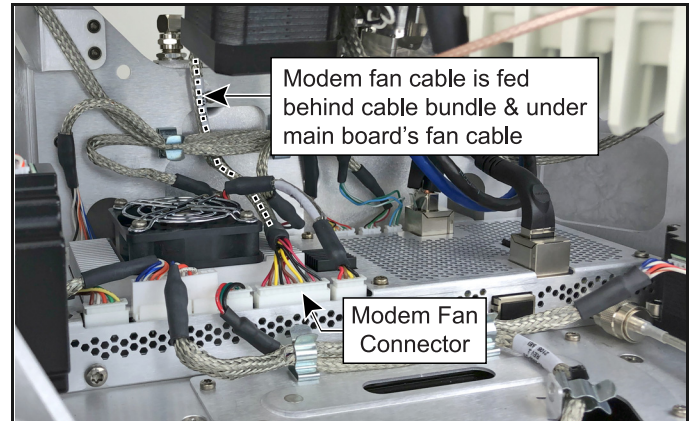
Figure 6: Modem Mounting Screws



- Slide the modem straight up to detach it from the two mounting posts on the frame. Remove the old modem.
- Position the modem upright against the frame and engage the two slotted holes at the base of the modem with the mounting posts on the frame.
- Secure the modem to the frame using two new M3 Torx (T10) screws and washers (*supplied in kit*) (see Figure 6). Tighten the screws to 9 in-lbs of torque.
- Route the modem power cable through the cable bundle loop and secure it to both stationary clips (see Figure 5).

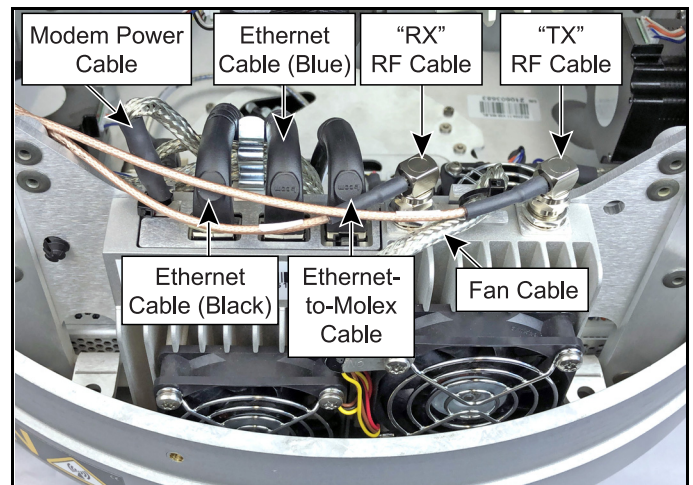
- Connect the modem power cable to the main board and secure the cable in the third stationary clip above.
- Route the modem fan cable behind the cable bundle and under the main board's fan cable and connect it to the main board (see Figure 7).

Figure 7: Modem Fan Cable Routing and Connection



- Reconnect the Ethernet cables to the modem as shown in Figure 8.

Figure 8: Modem Cable Connections



- Apply some silicone grease inside the connectors of the RF cables and reconnect them to the modem, orienting the connectors as shown in Figure 8. Be sure to connect the RF cable labeled "TX" to the connector on the right. Then tighten the connectors with a 7/16" torque wrench set to 15 in-lbs.
- Slowly rotate the RF feed assembly in all directions to ensure nothing restricts movement. Adjust the cable routing, if necessary.
- Inspect the inside of the antenna to make sure you have not left any tools or debris inside.

16. 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.
17. Reconnect power to the VSAT-Hub.
18. Test the system for normal operation. If the problem persists, contact KVH Technical Support.

The replacement procedure is complete!