



TracVision® M7 Azimuth Limit Switch Replacement Instructions

The following instructions explain how to replace the azimuth limit switch in a TracVision M7.

Tools Required

- #1 Phillips screwdriver
- #2 Phillips screwdriver
- 3/8" nut driver or wrench
- Cutting pliers
- Hot melt or RTV



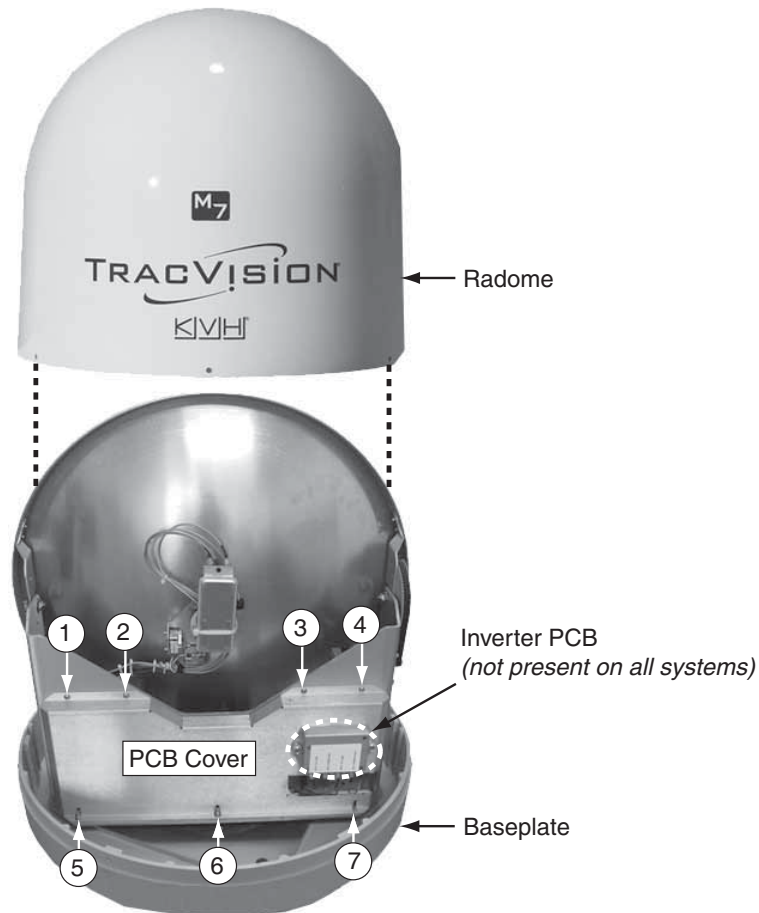
CAUTION

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

Step 1 - Remove the Faulty Azimuth Limit Switch

- a. Using a #2 Phillips screwdriver, remove the six #10-32 screws securing the radome. Then remove the radome and set it aside in a safe place.

Figure 1 Radome Removal/PCB Cover Screws



- b. Using a #1 Phillips screwdriver, remove the four screws securing the PCB cover at locations 1-4 (see [Figure 1](#)). Using a 3/8" nut driver or wrench, remove the three nuts and washers at locations 5-7.
- c. Carefully position the cover to allow access to the PCB.

NOTE: Be sure to handle the cover carefully to avoid damaging or dislodging PCB components.

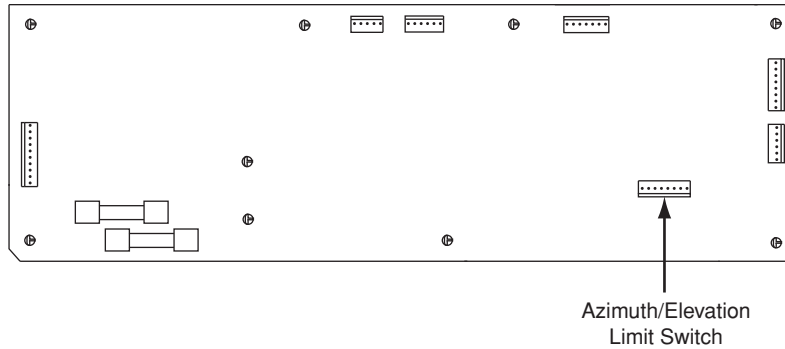
NOTE: The PCB module is static-sensitive. Ensure that you take the necessary grounding precautions before handling.

- d. Using cutting pliers, cut the black and white limit switch wires one inch (2.5 cm) from the azimuth limit switch connector on the main PCB (see [Figure 2](#)).

IMPORTANT!

Do not cut the red and green wires. Be sure to cut only the black and white wires.

Figure 2 Limit Switch on Main PCB



- e. Rotate the antenna frame slowly **clockwise** until the limit switch engages and prevents further rotation.

IMPORTANT!

Be sure to rotate the antenna frame clockwise. Rotating counterclockwise will prevent proper operation.

- f. Remove the hot melt securing the limit switch wires to the limit switch cover (see [Figure 3](#)).

Figure 3 Limit Switch Assembly



- g. Using a #1 Phillips screwdriver, remove the three screws and washers securing the limit switch cover.
- h. Remove the four screws, washers, and cable clamp securing the limit switch to the cover (see [Figure 3](#)).

Step 2 - Install the New Azimuth Limit Switch

- a. Secure the new limit switch to the limit switch cover using the four screws, washers, and cable clamp you removed in [Step 1g](#).

NOTE: Ensure the limit switch is mounted to the limit switch cover as shown in [Figure 4 on page 5](#).

- b. Route the limit switch wires to the PCB and replace the limit switch wires you cut in [Step 1d on page 3](#) with the new limit switch wires.

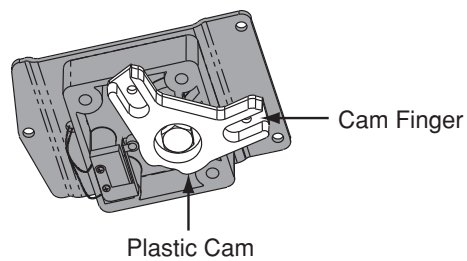
NOTE: Be sure to match the wires by color when securing the new limit switch wires to the PCB connector to ensure proper antenna operation.

- c. Reinstall the PCB cover using the screws and washers you removed in [Step b. on page 2](#).
- d. Orient the limit switch's plastic cam as shown in [Figure 4](#).

IMPORTANT!

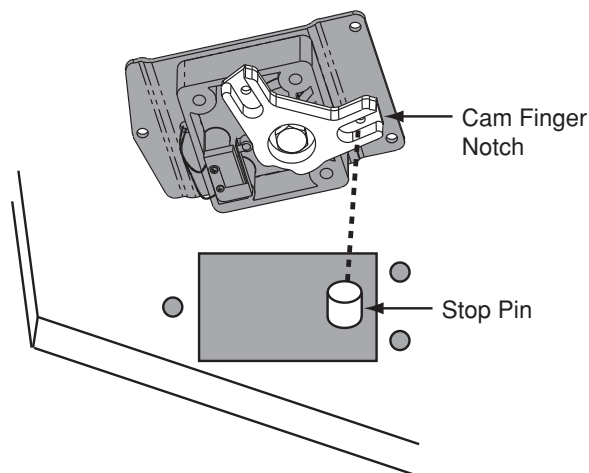
Failure to orient the cam properly might prevent proper operation.

Figure 4 Plastic Cam Position



- e. Install the limit switch assembly, ensuring the stop pin is positioned inside the cam finger notch, as shown in [Figure 5](#). Then secure the limit switch assembly using the three screws and washers you removed in [Step 1f on page 4](#).

Figure 5 Cam/Stop Pin Alignment



- f. Apply hot melt or RTV to secure the limit switch wires to the limit switch cover, as shown in *Figure 3 on page 4*.
- g. Reinstall the radome. Then reconnect power to the TracVision system.

The procedure is complete! Be sure to return the faulty azimuth limit switch to KVH.

NOTE: Before returning the azimuth limit switch, be sure to obtain an RMA number from KVH Technical Support and write the number clearly on the outside of the box. Shipments received without an RMA number will be returned to you at your expense.