

Gyro PCB Installation/Replacement Instructions for TracVision® M5/M7

These instructions explain how to install or replace a gyro PCB in a TracVision M5/M7 antenna.

Installation/Replacement Steps

1. Remove the Radome, 2
2. Remove the Main PCB Cover, 2
3. Install/Replace the Gyro PCB, 3
4. Reinstall the Main PCB Cover and Radome, 7
5. Calibrate the Gyros, 7

Tools Required

This procedure requires the following tools:

- #1 Phillips screwdriver
- #2 Phillips screwdriver
- Cutting pliers
- PC with the latest version of the Flash Update Wizard installed

TIP: The Flash Update Wizard is available to KVH-authorized dealers through the KVH Partner Portal at www.kvh.com/partners.

Technical Support

If you need technical assistance, please contact KVH Technical Support:

N. America, S. America, Australia:

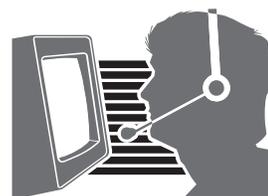
Phone: +1 401 847-3327

E-mail: techs@kvh.com

Europe, Middle East, Asia:

Phone: +45 45 160 180

E-mail: support@kvh.dk



Step 1 - Remove the Radome

Follow the steps below to remove the radome.

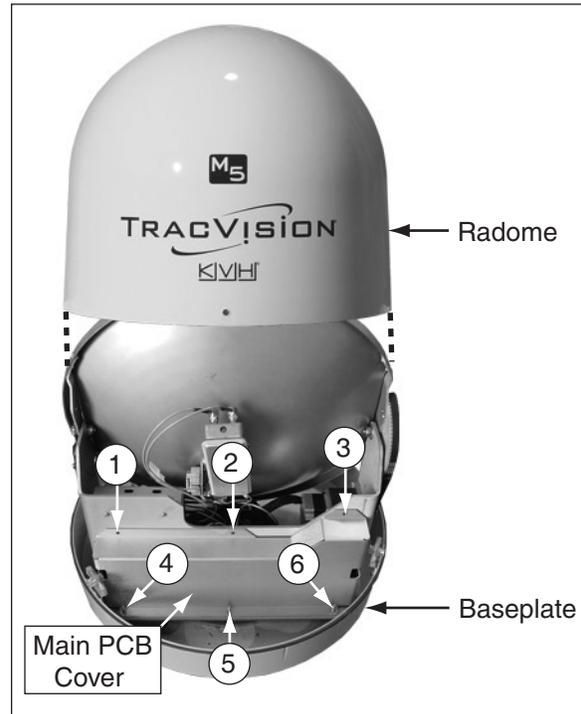


CAUTION

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

- a. Disconnect power from the TracVision system and any connected receivers and/or multiswitch.
- b. **TracVision M5** – Remove the four Phillips screws securing the radome. Then carefully remove the radome and set it aside in a safe place (see Figure 1).
- c. **TracVision M7** – Remove the six Phillips screws securing the radome. Then carefully remove the radome and set it aside in a safe place (see Figure 2).

Figure 1 TracVision M5 Radome/Main PCB Cover Screws



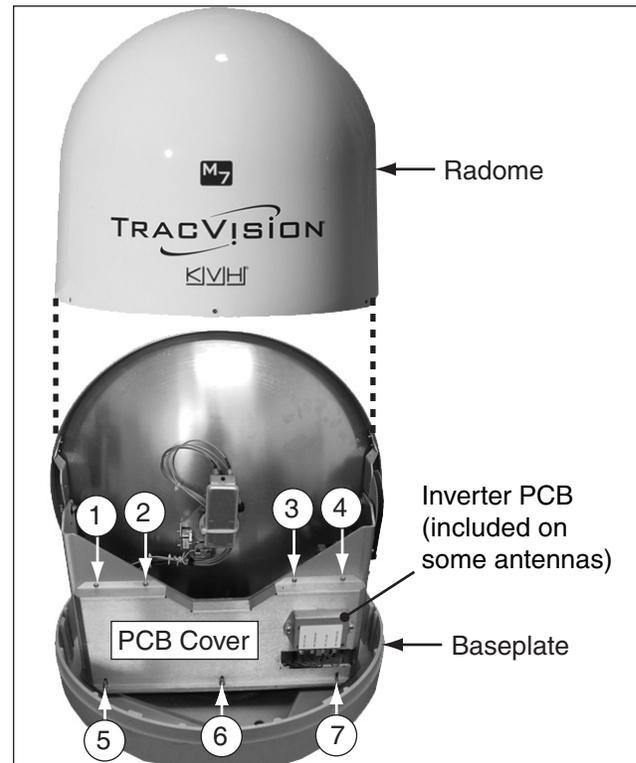
Step 2 - Remove the Main PCB Cover

Follow the instructions below to remove the main PCB cover. Be sure to remove the cover carefully to avoid damage to the PCBs or cables.

- a. **TracVision M5** – Remove the six Phillips screws securing the main PCB (see Figure 1). Then remove the cover and set it aside in a safe place.
- b. **TracVision M7** – Remove the seven Phillips screws securing the main PCB (see Figure 2). Then remove the cover and set it aside in a safe place.

NOTE: If the TracVision M7 includes an inverter PCB, do not disconnect any of its cables. Simply lay the main PCB cover down to allow the required access.

Figure 2 TracVision M7 Radome/Main PCB Cover Screws



Step 3 - Install/Replace the Gyro PCB

Refer to Figure 3 to determine if your TracVision system includes a gyro PCB. If a gyro PCB is currently installed, proceed to Option A. If a gyro PCB is not currently installed, proceed to Option B.

Option A - Replace an Installed Gyro PCB

Follow the instructions below to replace the gyro PCB.

- a. Place labels on the elevation and azimuth gyro cables as needed to ensure proper connection to the new PCB later (see Figure 3).

IMPORTANT!

If the gyro connections are reversed, the TracVision system will not operate properly.

- b. Using cutting pliers, cut and remove the tie-wrap securing the jumper cable connector to the gyro PCB (see Figure 3).
- c. Disconnect the jumper cable and gyro cables from the gyro PCB (see Figure 3).
- d. Remove the four Phillips screws securing the gyro PCB (see Figure 4).

Figure 3 Gyro PCB Location/Connections

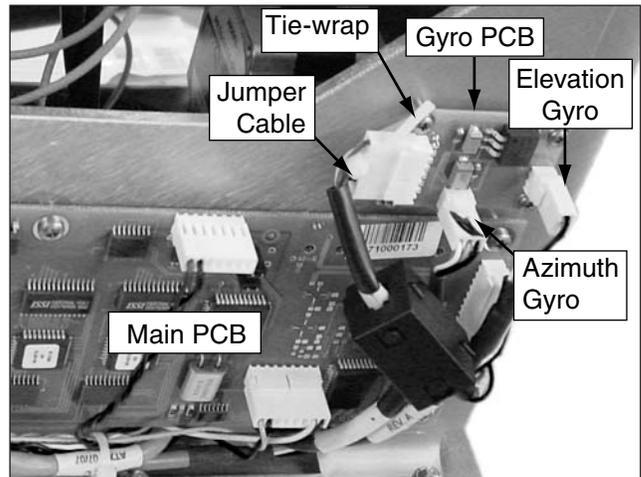
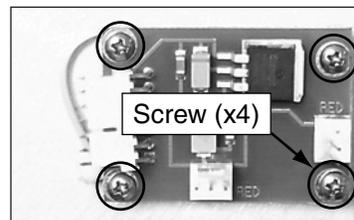


Figure 4 Gyro PCB Screws



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- e. Reverse these instructions to install the new gyro PCB.

NOTE: Be sure to install the jumper cable supplied in the kit with its ferrite coil installed (see Figure 5), and secure the jumper cable's connector to the gyro PCB, using a supplied tie-wrap (see Figure 6).

Figure 5 Ferrite Coil Installed

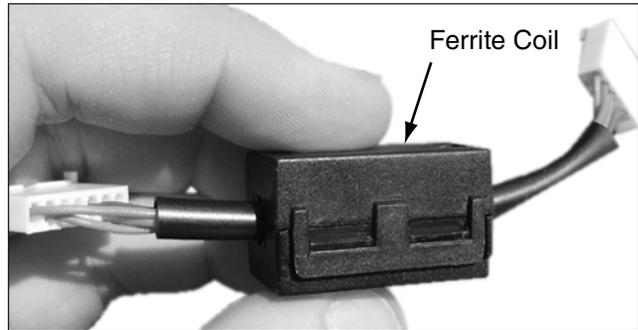
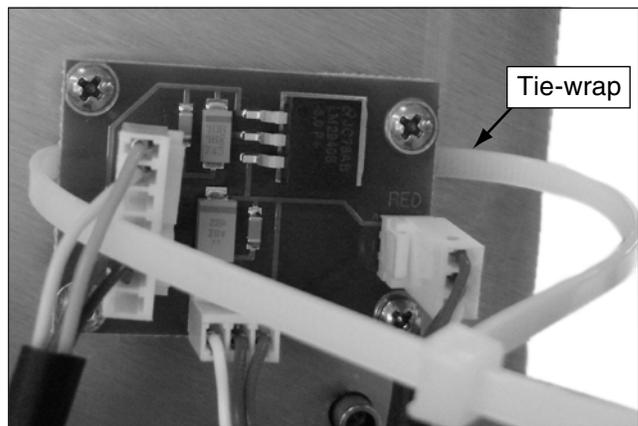


Figure 6 Tie-wrap Installation



Option B - Install a Gyro PCB

Depending on the serial number, some TracVision M5/M7 systems require installing a gyro PCB and modifying connections. The following instructions apply only to the serial numbers specified below.

Model	Serial Numbers
M5	081100140 - 090500206
M7	081100749 - 090500117

- a. Using four supplied Phillips screws, secure the gyro PCB to the standoffs (Figure 7).
- b. Place labels on the elevation and azimuth gyro cables as needed to ensure proper connection to the gyro PCB (see Figure 8).

Figure 7 Gyro PCB Standoffs

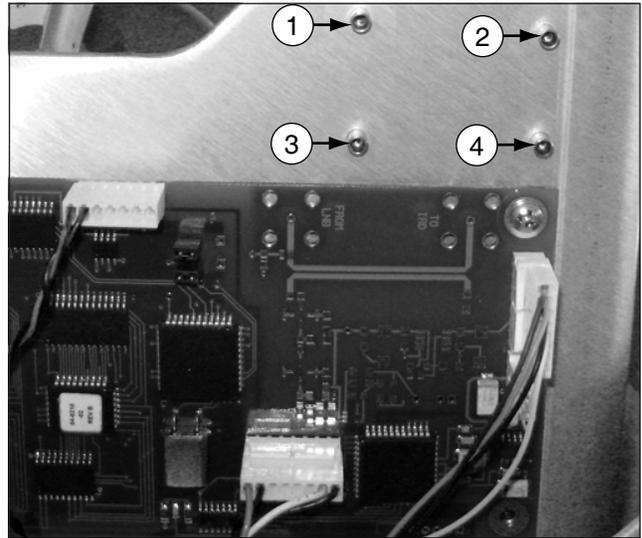
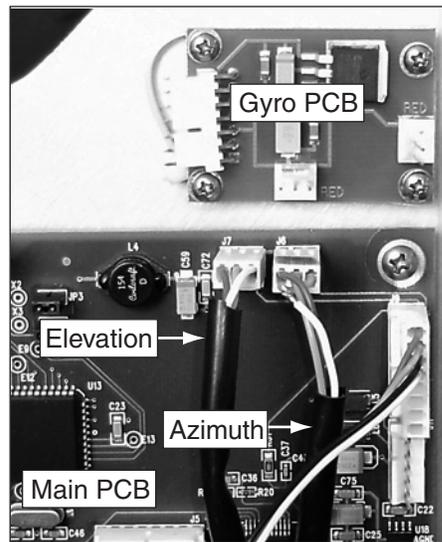


Figure 8 Gyro PCB Screws/Labels



- c. Disconnect the gyros from the main PCB. Then connect them to the gyro PCB connectors, as shown in Figure 9.
- d. Install the ferrite coil onto the supplied jumper cable, as shown in Figure 10.
- e. Connect one end of the supplied jumper cable to the gyro PCB. Then connect the other end to the main PCB (see Figure 11).

Figure 9 Gyro Connections

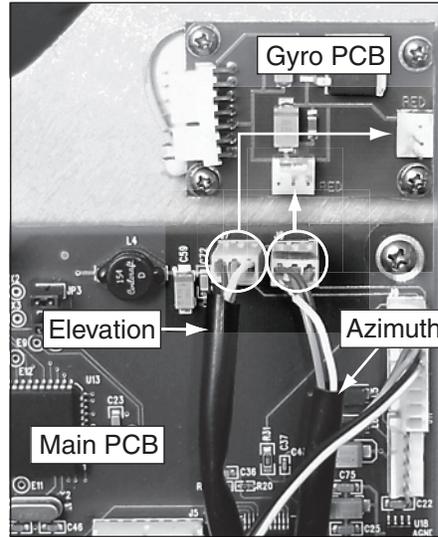


Figure 10 Ferrite Coil Installed

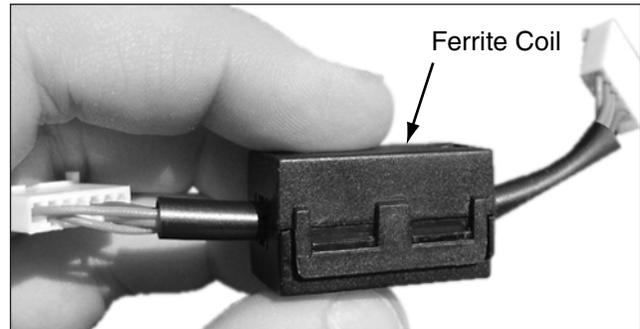
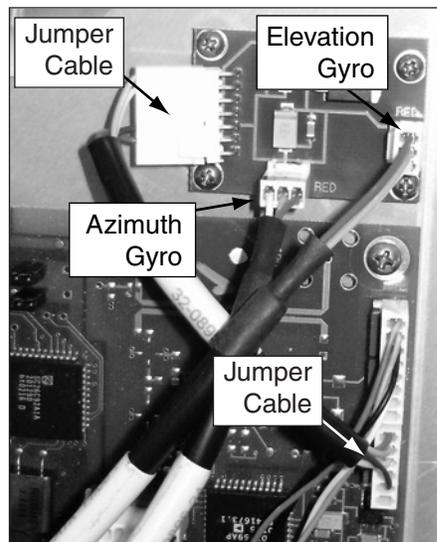


Figure 11 Jumper Cable Connections



Step 4 - Reinstall the Main PCB Cover and Radome

Follow the instructions below to reinstall the main PCB cover and radome. Be sure to position the cover carefully to avoid damage to the PCBs or cables.

- a. **TracVision M5** – Secure the main PCB cover using the six Phillips screws you removed in “Step 2 - Remove the Main PCB Cover” on page 2 (see Figure 1 on page 2).
- b. **TracVision M7** – Secure the main PCB cover using the seven Phillips screws you removed in “Step 2 - Remove the Main PCB Cover” on page 2 (see Figure 2 on page 2).
- c. Reinstall the radome. Then restore power to the TracVision system and any connected receivers and/or multiswitch.

Step 5 - Calibrate the Gyros

Follow the steps below to calibrate the gyros for use with the new gyro PCB.

- a. Follow the instructions in the TracVision M5/M7 User’s Guide to connect a PC to the TracVision system.
- b. Double-click the KVH Flash Update Wizard shortcut on your PC’s desktop to start the Flash Update Wizard.

NOTE: You do not need to flash the antenna; you will simply type commands in the Flash Update Wizard’s “TracVision Antenna Comms” window. Be sure to click the “TracVision Antenna Comms” window to select it before typing.

- c. Type **HALT** then press Enter.
- d. Type **DEBUGON** then press Enter.
- e. Type **=CALGYRO** then press Enter.
- f. Type **ZAP** then press Enter.

The procedure is complete!