

TracPhone® V7 Elevation Motor Belt Adjustment/Replacement Instructions

The following instructions explain how to adjust or replace the elevation motor belt in a TracPhone V7 system.

Replacement Steps

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Tools Required

This procedure requires the following tools:

- #2 Phillips screwdriver
- Tension meter
- Scribe or pencil
- Ruler or tape measure
- Torque nut driver with a 3/8" socket, set at 21 in-lbs

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

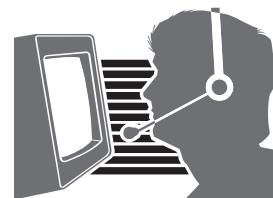
(Monday-Friday, 9:00 am - 6:00 pm
Eastern Time, -5 GMT)

Europe, Middle East, Asia:

Phone: +45 45 160 180

E-mail: support@kvh.dk

(Monday-Friday, 8:00 am - 4:30 pm,
+1 GMT)



Step 1 - Remove the Radome

Follow the steps below to remove the radome.

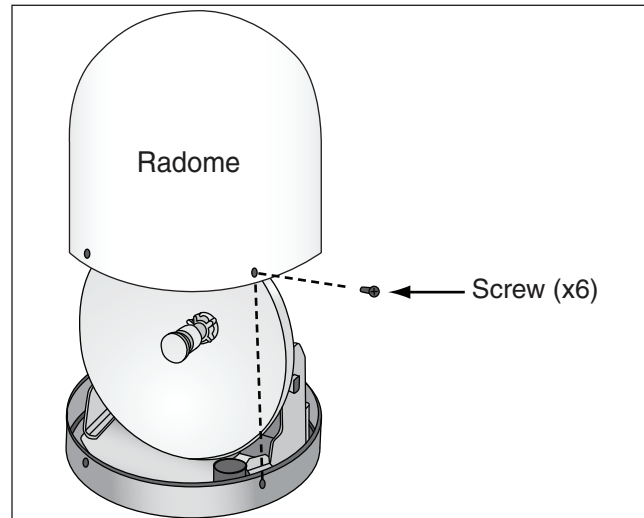


CAUTION

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

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

Figure 1 Radome Screws



Step 2 - Remove the Faulty Belt

Follow the instructions below to remove a faulty elevation motor belt.

TIP: If you only need to adjust belt tension, proceed to “Step 4 - Set the Belt Tension” on page 4.

- Using a nut driver with a 3/8" socket, loosen the four #8-32 nuts securing the motor to the frame until the motor is free to move upward (see Figure 2).
- Move the motor upward as necessary to relieve belt tension, then roll the belt over the motor hub while slowly moving the antenna reflector through its vertical range (see Figure 3).
- Remove the belt.

Step 3 - Install the New Belt

Follow the instructions below to install the new belt.

- Carefully work the belt in between the antenna pulley and reflector (see Figure 2). Ensure that the belt teeth are positioned inside the belt loop.
- Route the belt behind the roller and onto the motor hub.
- Once the belt is in place, slowly move the reflector through its vertical range to ensure the belt is aligned and the teeth engage the pulley and motor hub.

Figure 2 Elevation Belt Assembly

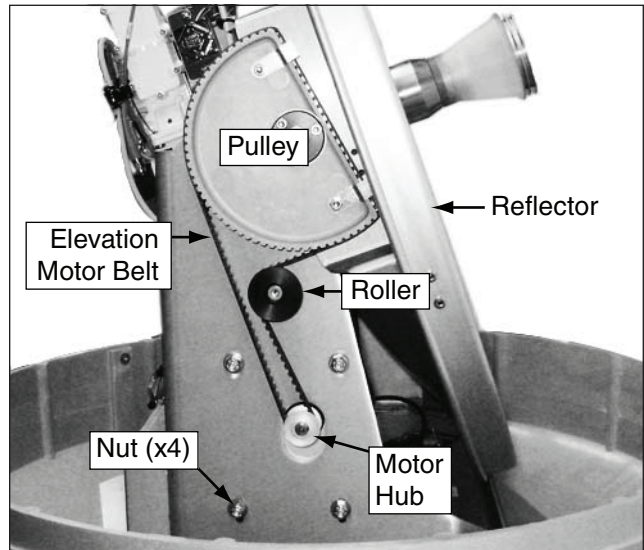
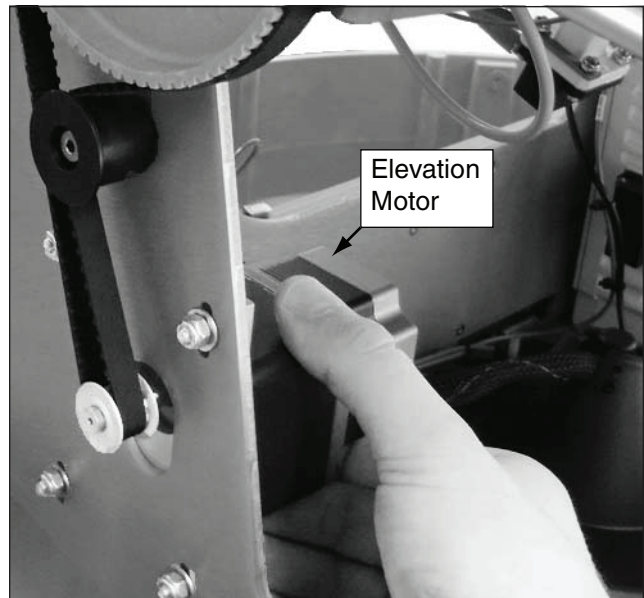


Figure 3 Motor Adjustment



Step 4 - Set the Belt Tension

Follow the instructions below to set the belt to the correct belt tension.

- a. Reposition the motor as necessary to remove any visible slack from the belt.
- b. Tilt the reflector forward, as shown in Figure 4. Then, using a scribe or pencil, mark the belt's alignment on the antenna frame, as shown in Figure 4.
- c. Using a ruler, create another mark on the antenna frame 0.1" [2.5 mm] closer to the rear of the antenna (see Figure 4).
- d. Secure a tension meter to the belt, as shown in Figure 5.
- e. While using a tension meter to pull the belt at 2 lbs, adjust the elevation motor position as necessary to achieve a 0.1" [2.5 mm] belt deflection (to the mark you just created).
- f. Using a torque nut driver with a 3/8" socket, set at 21 in-lbs, tighten the four nuts securing the elevation motor to the frame.

Step 5 - Verify Proper Belt Tension

Follow the instructions below to verify the belt tension.

- a. Re-measure and adjust the belt tension. Verify proper belt tension.
- b. Reinstall the radome. Then re-apply power to the TracPhone V7 system

The procedure is complete!

Figure 4 Scribe Markings

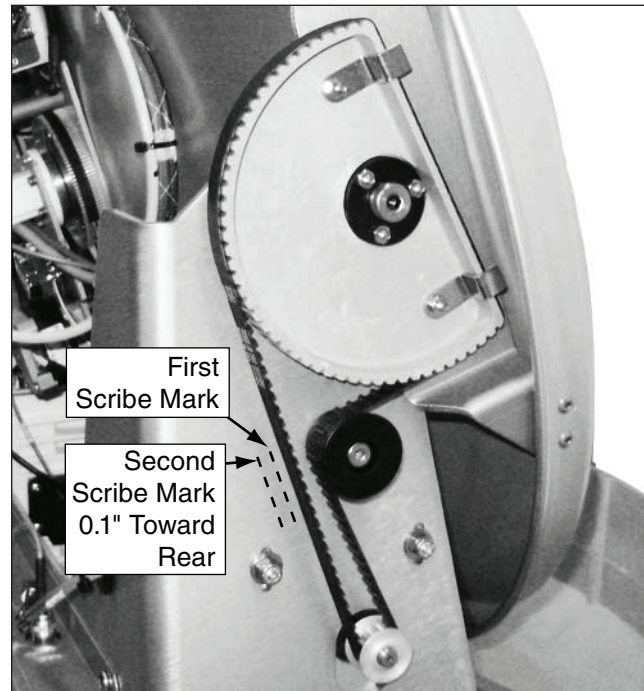


Figure 5 Tension Measurement

