

TracNet H60

1 m (41.5") Dome Installation Addendum



The following instructions explain how to install the TracNet™ H60 antenna inside the 1 m (41.5") dome, which matches the TracVision® HD11.

IMPORTANT!

These instructions supplement but do not replace the Installation Guide. Be sure to follow all instructions provided therein that are not superseded by this addendum.

Tools Required

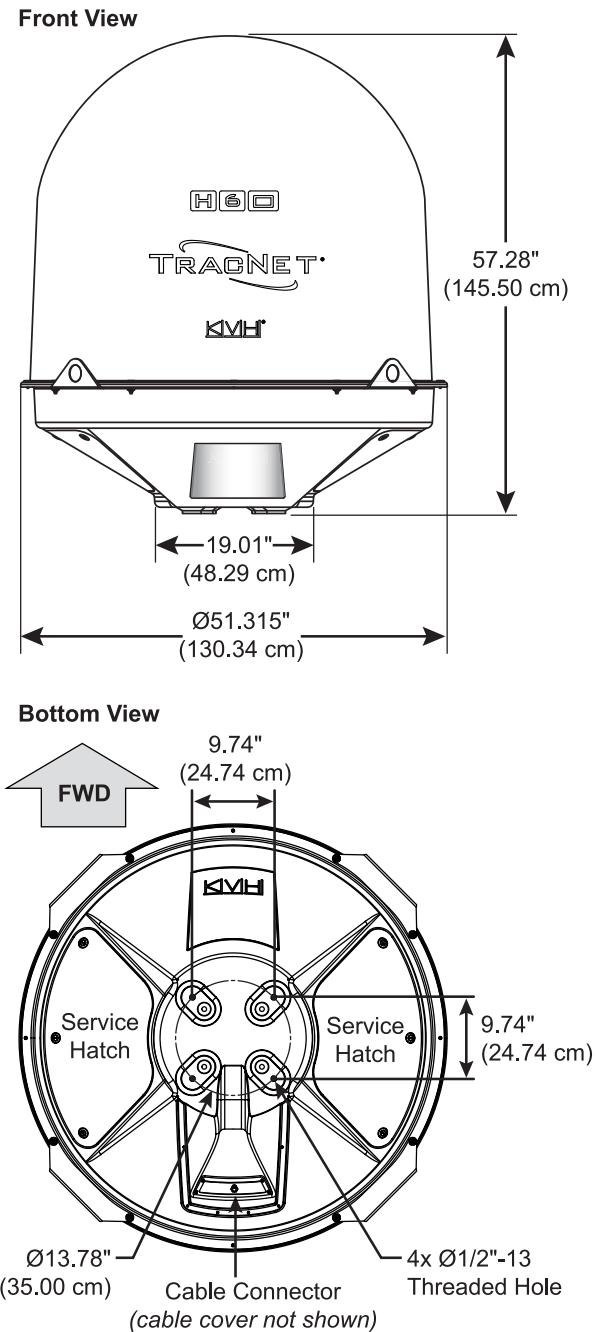
In addition to items provided in the kitpack and the items listed in the Installation Guide, this procedure requires the following tools and materials:

- Flat-head and Phillips screwdrivers
- 7/16" socket/ratchet or nut driver
- 3/4" socket; recommended torque: 35-40 ft-lbs (47-54 N-m)
- 1/2" open-end wrench
- 5/32" hex key
- Electric drill and 5/8" (16 mm) drill bit
- 3.75" (95 mm) hole saw

Steps

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- Rig/Hoist the Antenna 3
- Connect the Cable..... 4
- Mount the Antenna..... 5
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Figure 1: Antenna Dimensions



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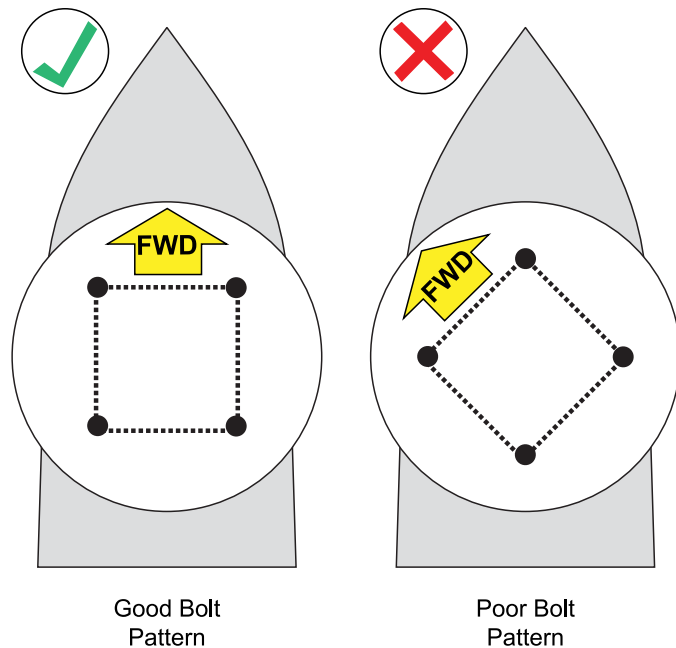
Prepare the Mounting Site

Follow the same guidelines in the TracNet H60 Installation Guide to choose a suitable mounting location on the vessel. Then perform the steps below to prepare the mounting site.

1. Unfold the antenna mounting template (supplied in the Welcome Kit) and place it onto the mounting surface. Make sure the “FWD” (forward) arrow points toward the bow and is parallel to the vessel’s centerline.

Note: You don’t need to mount the antenna exactly on the vessel’s centerline, but the antenna’s forward arrow must be parallel to it.

Figure 2: Mounting Bolt Hole Pattern Examples

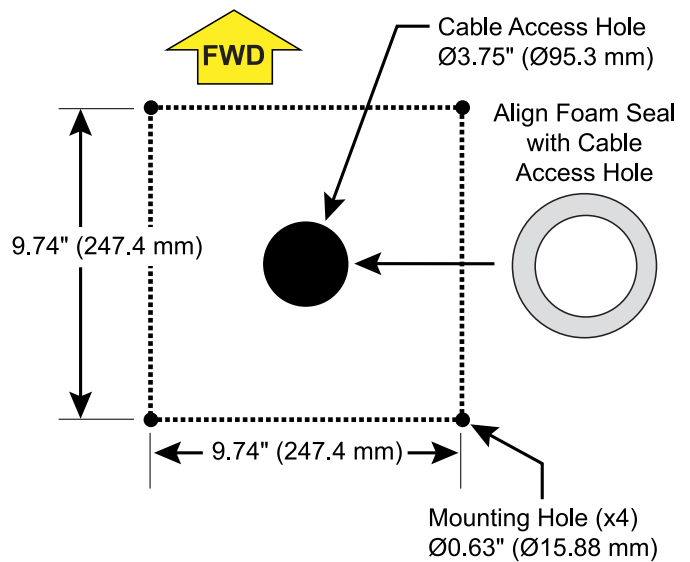


2. Using a light hammer and center punch, mark the locations for the four mounting holes and cable access hole on the mounting surface in the locations indicated on the template.
3. Drill a 5/8" (16 mm) hole at the four mounting hole locations you marked in step 2. Later, you will insert four 1/2"-13 bolts through these holes **from below** to secure the antenna to the mounting surface.

IMPORTANT!

The 1/2"-13 bolts supplied in the kit are 3" (76 mm) long. Since the bolts must extend between 1.25" (32 mm) and 1.5" (38 mm) into the baseplate for proper thread engagement, you will need bolts of a different length if the mounting surface is thinner than 1.5" (38 mm) or thicker than 1.75" (44 mm).

Figure 3: Antenna Mounting Holes Layout



4. Cut out the 3.75" (95.3 mm) cable access hole in the location you marked in step 2. Smooth the edges of the hole to protect the antenna cable. (You may also apply anti-chafe material around the antenna cable to prevent abrasion.) Later, you will route the antenna cable through this hole and into the vessel.
5. Clean and dry the antenna mounting surface.
6. Peel off the paper backing from a supplied foam seal to expose the adhesive. Then press the foam seal down firmly onto the mounting surface, ensuring the hole in the foam seal aligns with the cable access hole in the mounting surface.

Rig/Hoist the Antenna

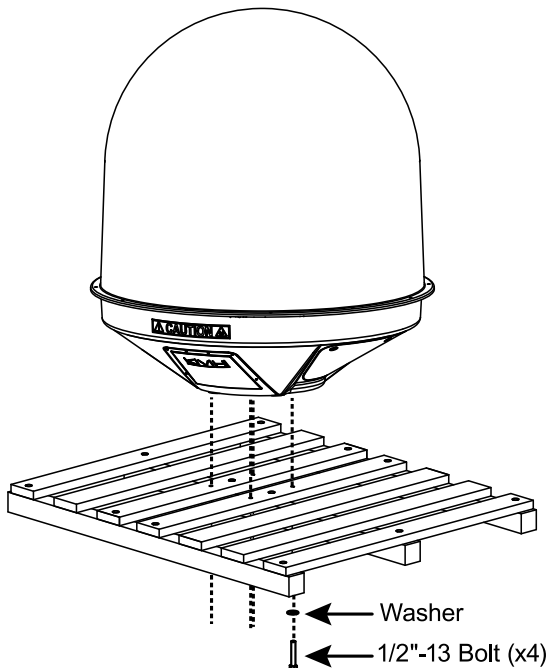
Follow these steps to detach the antenna from the shipping pallet and safely rig the antenna for crane hoisting.

IMPORTANT!

Take protective measures to avoid gouging or scratching the radome during the rigging operation.

1. Using a 3/4" socket/ratchet or wrench, remove the four 1/2"-13 bolts securing the antenna to the pallet.

Figure 4: Shipping Pallet and Bolts



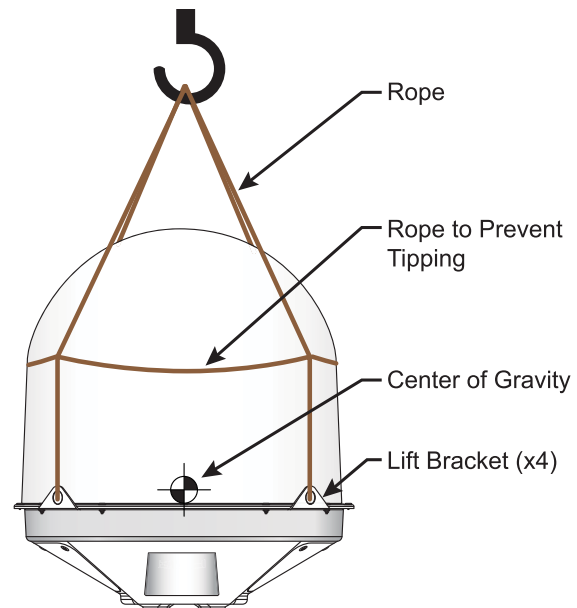
2. Secure the crane rigging to the antenna's lift brackets. Be sure the rigging and crane are suitably rated to lift the weight of the antenna.



WARNING

Be sure no personnel stand underneath the antenna at any time while it is suspended in the air.

Figure 5: Antenna Crane Rigging (Example)

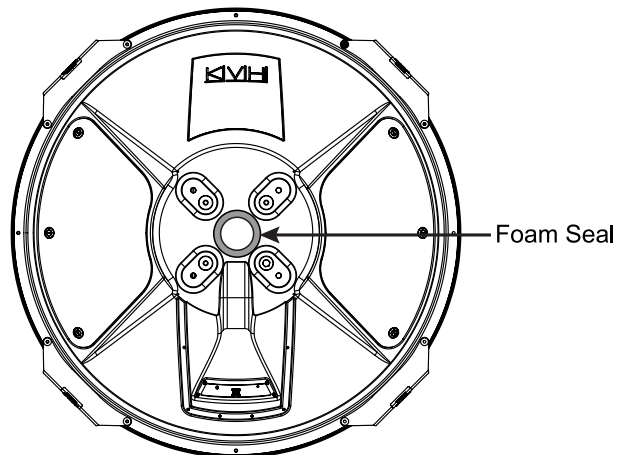


3. Carefully hoist the antenna to its mounting location.

Attach Second Foam Seal

Attach a second foam seal to the base of the antenna. First, clean and dry the bottom of the antenna. Then peel the paper backing from the foam seal and press the foam seal firmly onto the underside of the antenna.

Figure 6: Foam Seal on Antenna Base



Connect the Cable

Follow these steps to connect the antenna cable to the antenna's N-type baseplate connector.

IMPORTANT!

Refer to the Installation Guide for details on selecting and preparing the antenna cable.

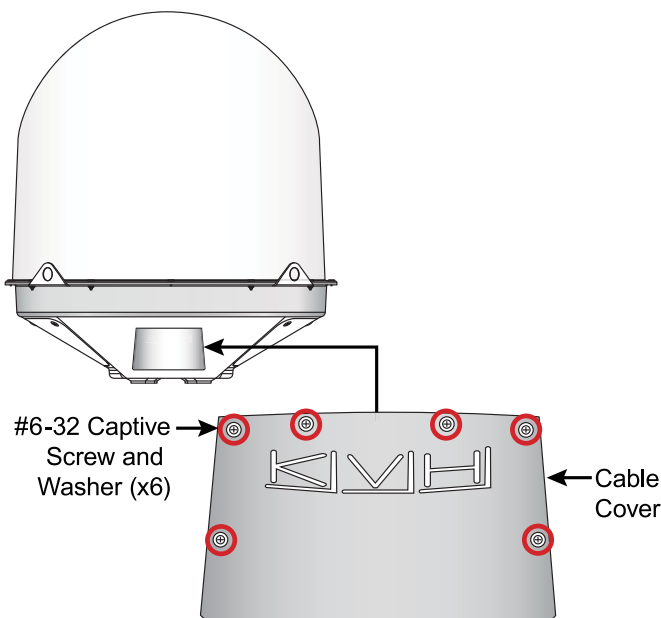
Route the Cable Belowdecks

1. Route the TNC-connector end of the antenna cable belowdecks through the cable access hole. Leave an adequate service loop, 14" (36 cm) in diameter, at the antenna location for serviceability.
2. Route the TNC end of the cable to the BDU location. Maintain the minimum bend radius in the cable.

Remove the Cable Cover

To access the antenna's connector, you first need to detach the cable cover. Loosen the six #6-32 captive screws securing the cable cover to the base. Set the cover aside in a safe place.

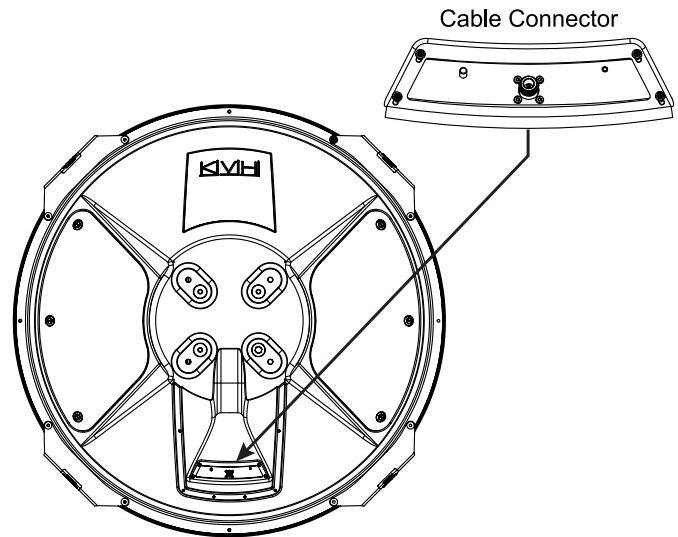
Figure 7: Cable Cover



Connect the Cable to the Antenna

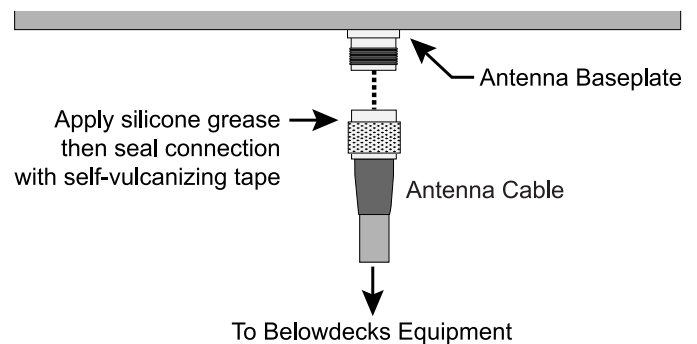
1. Clean and dry the antenna cable's N-type connector and the connector at the side of the baseplate.

Figure 8: Antenna Baseplate Connector



2. Fill half of the inner body of the cable's N-type male connector with the supplied silicone grease.
3. Connect and **SLOWLY** hand-tighten the cable to the antenna's connector, allowing the grease to diffuse and settle into the entire space within the connector.
4. Make sure the cable connector is hand-tightened all the way into the antenna's connector.
5. Seal the cable connection with self-vulcanizing tape or equivalent.

Figure 9: Connecting the Cable to the Antenna



6. Secure the antenna cable near the antenna to relieve stress. The cable cover is designed for aesthetics only – it does not provide any support for the cable.
7. Weatherproof and seal the cable access hole, as required.

Reattach the Cable Cover

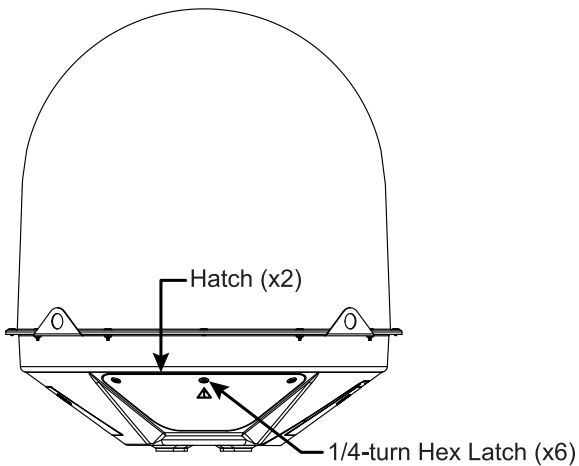
Position the cable cover over the antenna's cable connector and secure in place with the six #6-32 captive screws and washers (see [Figure 7 on page 4](#)).

Mount the Antenna

Follow these steps to mount the antenna to the mounting surface.

1. Using a 7/16" socket/ratchet or nut driver, unlock the three hex latches securing the antenna's service hatches. Then gently lower the hatches.

Figure 10: Service Hatch

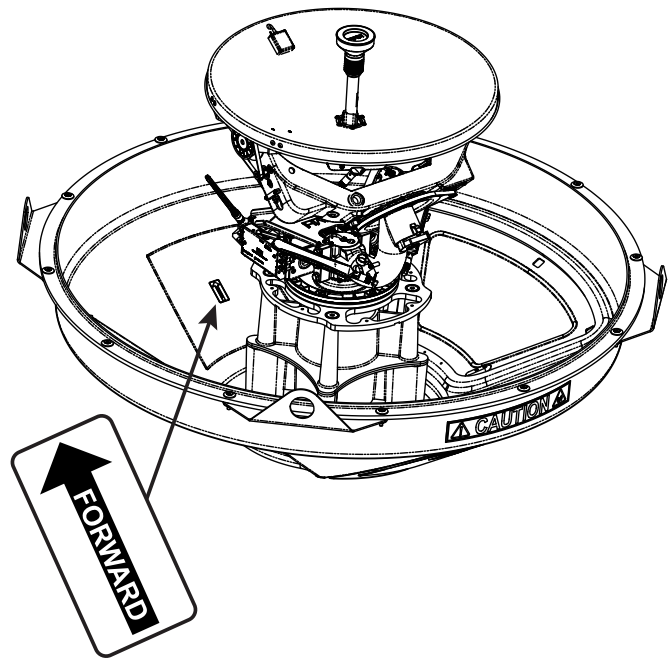


2. Place the antenna baseplate over the holes drilled in the mounting surface and make sure the forward arrow inside the baseplate points toward the bow and is **parallel** to the vessel's centerline.

IMPORTANT!

Do not reposition the antenna laterally once the antenna's foam seal has made contact with the foam seal on the mounting surface. If you need to reposition the antenna, lift the antenna first to avoid damage to the foam seals.

Figure 11: Forward Arrow in Baseplate (Radome Not Shown)



3. Carefully lower the antenna onto the mounting surface and ensure the mounting holes and foam seals are aligned.



CAUTION

Be sure to observe the safe handling instructions in the Material Safety Data Sheet (MSDS) provided with the anti-seize lubricant.

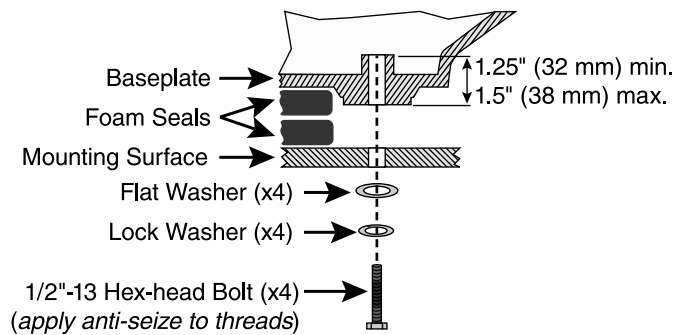
4. Apply a thin layer of the supplied anti-seize lubricant to the threads of the four supplied 1/2"-13 bolts to prevent galling.

IMPORTANT!

Be sure your 1/2"-13 mounting bolts extend between 1.25" (32 mm) and 1.5" (38 mm) into the baseplate to ensure sufficient thread engagement.

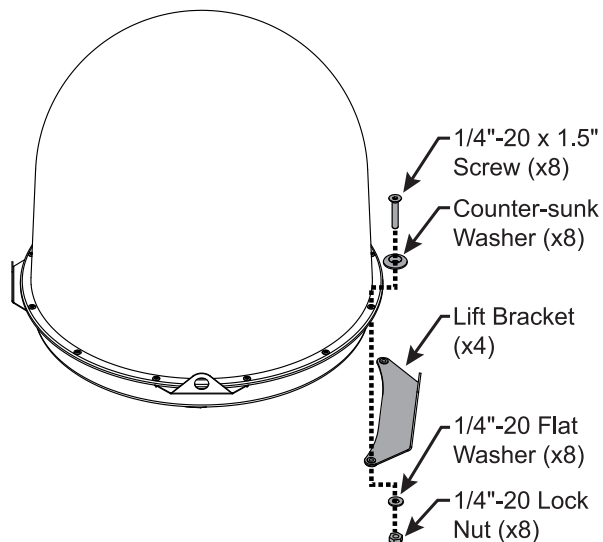
- Using a 3/4" socket or wrench, secure the antenna to the mounting surface using four 1/2"-13 x 3" (7.6 cm) bolts, lock washers, and flat washers from below.

Figure 12: Mounting the Antenna to the Vessel (Side View)



- Tighten the bolts in a cross pattern until the four rubber feet on the baseplate are bottomed against the mounting surface. KVH recommends that you tighten the nuts to between 35 and 40 ft-lbs (47 and 54 N-m) of torque.
- Disconnect the crane rigging.
- Remove the eight screws, flat washers, and lock nuts securing the four lift brackets to the antenna. Use a 5/32" hex key to keep the screws from turning, and use a 1/2" open-end wrench to loosen and remove the nuts. Remove the lift brackets and hardware and set them aside.

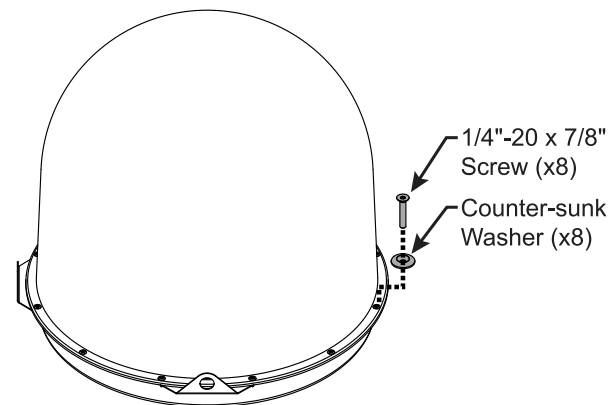
Figure 13: Removing the Lift Brackets



Note: Save the brackets and bracket hardware in case the antenna needs to be moved in the future.

- Install eight 1/4"-20 screws and washers (supplied in the kitpack) in place of the longer mounting bracket screws you removed in the previous step.

Figure 14: Reinstalling Radome Hardware

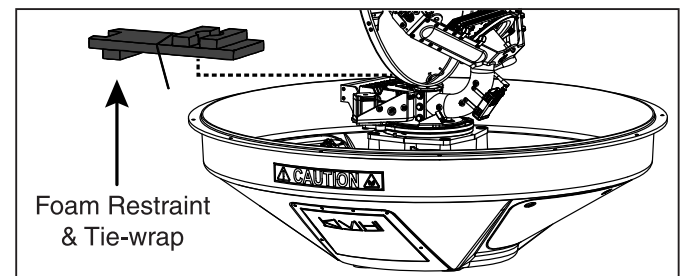


Remove the Shipping Restraint

Follow these steps to remove the restraint.

- Carefully cut the tie-wrap around the foam shipping restraint that is wedged underneath the reflector. Remove the foam restraint and save it for future use.

Figure 15: Foam Restraint and Tie-Wrap (Radome Not Shown)



- Close both antenna service hatches. Secure each hatch using the three hex latches (see [Figure 10 on page 5](#)).

Follow all remaining steps in the TracNet H60 Installation Guide to complete the installation.