

**IMPORTANT! Please read all instructions before installing.**

Thank you for purchasing a Shakespeare antenna product. Shakespeare works hard to build reliability and durability into all of its products for maximum customer satisfaction.

The 6400-R is a Phase III series 156 MHz VHF Marine antenna with stainless steel ferrules and a female "N" connector. The antenna is 4.5' overall length, including the 1"-14 thread adapter. The design of the Phase III antenna series facilitates mounting to a mast or attachment to a standard marine mount.

**TOOLS REQUIRED:**

- Screwdriver
- Drill
- Drill bits sized according to cable
- Wrench

Other tools or supplies that are appropriate to your specific application may also be needed.

**SUPPLIED PARTS:**

- 1 Antenna assembly
- 1 1"-14 thread adapter
- 1 Rubber O-ring
- 1 Coupling nut

**ADDITIONAL REQUIRED MATERIALS:**

- 1 Length of coaxial cable
- 1 PL-259 connector appropriate to the size coax you are using
- 1 Connector for connection to your VHF radio

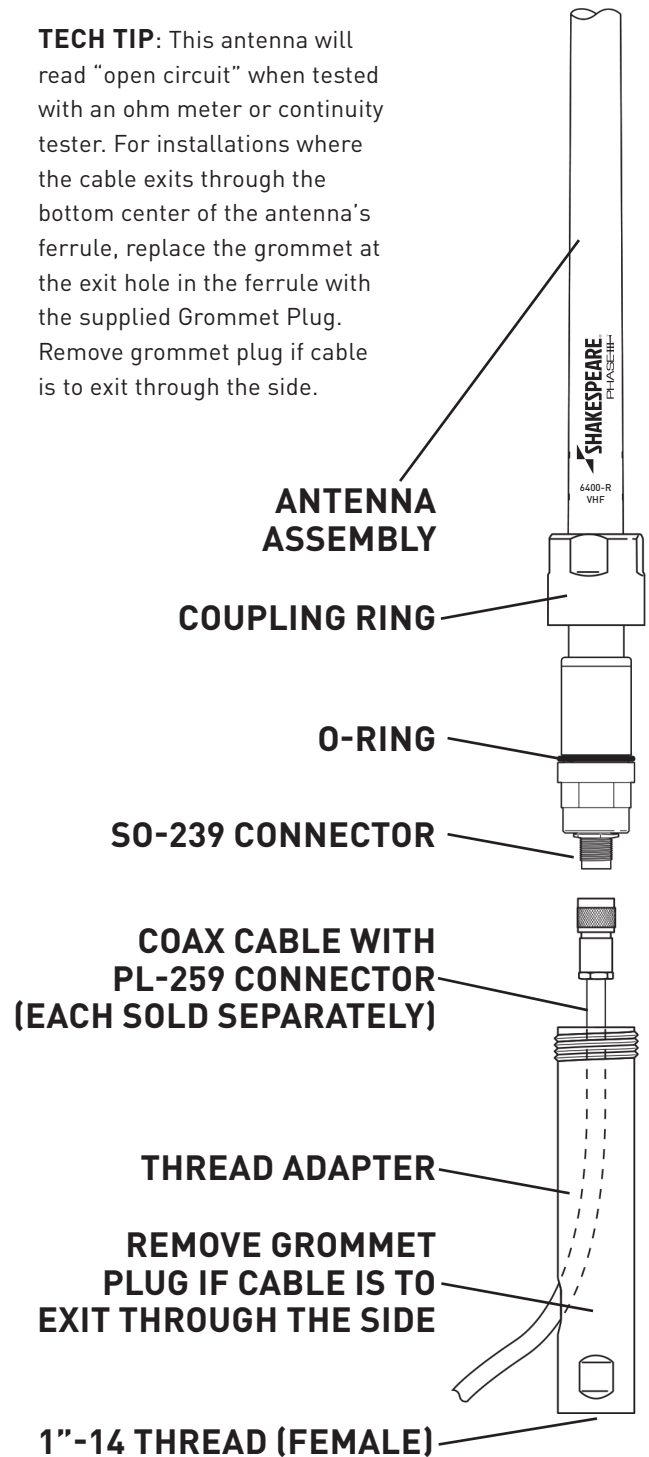
U-bolts, stainless steel strapping and appropriate hardware, if mounting the antenna to a mast

**CLEANING INSTRUCTIONS**

To clean the antenna, use mild dish washing liquid (one that is not harsh to the hands and *without* ammonia) in lukewarm water.

**WARNING:** Do not let paint solvents, cleaning solvents or adhesive caulking come in contact with the antenna. Chemicals in these materials might destroy the finish.

**TECH TIP:** This antenna will read "open circuit" when tested with an ohm meter or continuity tester. For installations where the cable exits through the bottom center of the antenna's ferrule, replace the grommet at the exit hole in the ferrule with the supplied Grommet Plug. Remove grommet plug if cable is to exit through the side.



**SHAKESPEARE® MARINE**  
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## INSTALLATION INSTRUCTIONS

### SELECT A LOCATION FOR THE ANTENNA

Choose a location that is as high as feasible, as free as practical from obstructions, and as far as possible from other antennas and strong sources of RF. Cable runs should be kept as short as possible. If cable length exceeds 25', the use of RG-8X or RG-8 A/U coax (sold separately) is highly recommended, to reduce signal attenuation caused by the cable.

### HOW TO MOUNT THE ANTENNA TO A DECK OR BULK-HEAD, USING A MARINE MOUNT

This antenna can be mounted self supporting only if you are using the recommended Shakespeare 4187-HD stainless steel ratchet mount (sold separately). Use the 1"-14 thread adapter (supplied) to attach the antenna to the mount. The slot in the side of the thread adapter will accommodate up to RG-213 size coax cable.

### ASSEMBLE THE ANTENNA TO THE MOUNT AS FOLLOWS:

1. Bolt the mount to the deck or bulkhead according to the directions included with the mount you choose. Be sure to heed any cautions, included with the antenna mount, regarding drilling fiberglass surfaces.
2. Thread the 1"-14 thread adapter onto the mount and hand tighten.
3. Feed the coax through the slot in the side of the thread adapter or through the bottom and through the hole in your antenna mount, if one is provided.
4. Install a PL-259 connector (sold separately) for the size coax that you have chosen, according to the instructions packed with the connector.
5. Attach the PL-259 connector to the base of the antenna and tighten securely.
6. Place the rubber O-ring in the groove on the antenna ferrule.

7. Seat the antenna ferrule on top of the 1"-14 thread adapter and tighten the coupling ring securely. The adapter has special facets to prevent the antenna from rotating once the coupling ring has been tightened.

### HOW TO MOUNT THE ANTENNA TO A MAST:

1. Feed the coax through the slot in the side of the thread adapter or through its bottom.
2. Install a PL-259 connector (sold separately) for the size coax that you have chosen, according to the instructions packed with the connector.
3. Attach the PL-259 connector to the base of the antenna and tighten securely.
4. Strap the thread adapter to the mast using stainless steel U-bolts, a mast mounting device, or strapping and appropriate hardware (not supplied).
5. Place the rubber O-ring in the groove on the antenna ferrule.
6. Seat the antenna ferrule on top of the thread adapter and tighten the coupling ring securely. The adapter has special facets to prevent the antenna from rotating once the coupling ring has been tightened.

### COMPLETING THE INSTALLATION

1. Route the coaxial cable to your VHF radio, keeping it as far as possible from other electrical equipment and cables.
2. Install a connector (sold separately) that is appropriate for your size coax and your radio's antenna connection.

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