



Transom-Mount Transducer Installation Instructions

To obtain the best performance and to avoid damage to your boat, you must install the Garmin® transducer according to these instructions.

Read all installation instructions before proceeding with the installation. If you experience difficulty during the installation, contact Garmin Product Support.

Registering Your Device

Help us better support you by completing our online registration today.

- Go to <http://my.garmin.com>.
- Keep the original sales receipt, or a photocopy, in a safe place.

Contacting Garmin Product Support

- Go to www.garmin.com/support and click **Contact Support** for in-country support information.
- In the USA, call (913) 397.8200 or (800) 800.1020.
- In the UK, call 0808 2380000.
- In Europe, call +44 (0) 870.8501241.

Important Safety Information

⚠ WARNING

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

You are responsible for the safe and prudent operation of your vessel. Sonar is a tool that enhances your awareness of the water beneath your boat. It does not relieve you of the responsibility of observing the water around your boat as you navigate.

⚠ CAUTION

Failure to install and maintain this equipment in accordance with these instructions could result in damage or injury.

Always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.

NOTICE

When drilling or cutting, always check what is on the opposite side of the surface.

Loading the New Software on a Memory Card

You must copy the software update to a memory card.

- 1 Insert a memory card into the card slot on the computer.
- 2 Go to www.garmin.com/support/software/marine.html.
- 3 Select **Download** next to “Garmin Marine Network with SD card”.
- 4 Read and agree to the terms.
- 5 Select **Download**.
- 6 If necessary, select **Run** or save and open the file.
- 7 If necessary, select the drive associated with the memory card, and select **Next > Finish**.

Updating the Device Software

Before you can update the software, you must obtain a software-update memory card or load the latest software onto a memory card.

- 1 Turn on the chartplotter.
- 2 After the home screen appears, insert the memory card into the card slot.

NOTE: In order for the software update instructions to appear, the device must be fully booted before the card is inserted.

- 3 Follow the on-screen instructions.
 - 4 Wait several minutes while the software update process completes.
- The device returns to normal operation after the software update process is complete.

- 5 Remove the memory card.

NOTE: If the memory card is removed before the device restarts fully, the software update is not complete.

Tools Needed

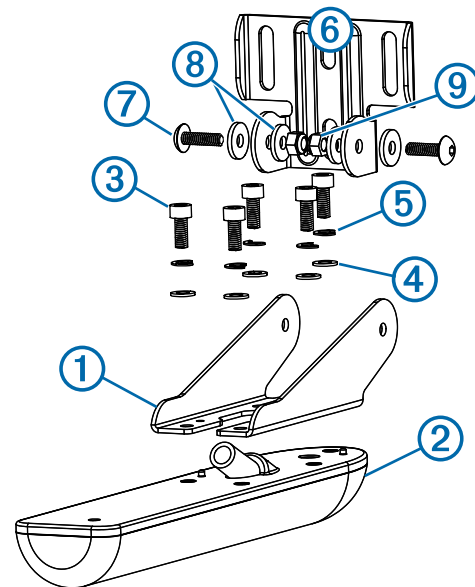
- Drill and drill bits
- 7 mm wrench
- 3 mm hex wrench
- Number 2 Phillips screwdriver
- Masking tape
- Marine sealant

About the Transducer

The transducer transmits and receives sound waves through the water, and relays sound-wave information to your Garmin sonar device.

Assembling the Transducer

- 1 Secure the mount ① to the transducer ② with the included 8 mm M4 screws ③, 4 mm flat washers ④, and M4 split washers ⑤.



- 2 Secure the mount to the bracket ⑥ with the included 12 mm M4 screws ⑦, M4 flat washers ⑧, and M4 lock nuts ⑨.

NOTE: You can use the 7 mm wrench to hold the lock nut in place while you tighten each 12 mm M4 screw.

Installing the Transducer on a Transom

Mounting Location Considerations

- The transducer should be mounted as close to the center of the boat as possible.
- The transducer should not be mounted behind strakes, struts, fittings, water intake or discharge ports, or anything that creates air bubbles or causes the water to become turbulent.

The transducer must be in clean (non-turbulent) water for optimal performance.

- The transducer should not be mounted in a location where it might be jarred when launching, hauling, or storing.
- On single-drive boats, the transducer must not be mounted in the path of the propeller.

The transducer can cause cavitation that can degrade the performance of the boat and damage the propeller.

- On twin-drive boats, the transducer should be mounted between the drives, if possible.

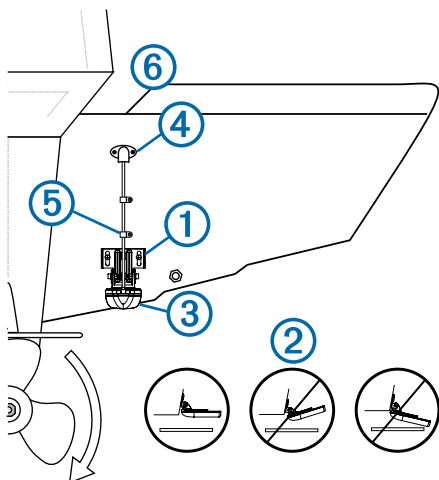
Installing the Transom-Mount Hardware

NOTICE

If you are mounting the bracket on fiberglass with screws, it is recommended to use a countersink bit to drill a clearance counterbore through only the top gel-coat layer. This will help to avoid any cracking in the gel-coat layer when the screws are tightened.

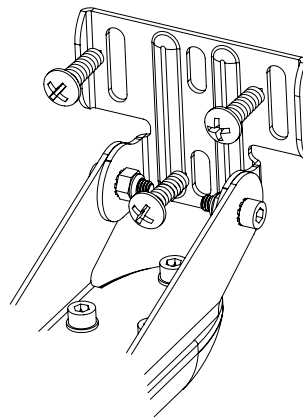
The cables connected to the transducer should not be cut, because cutting the transducer cables voids your warranty.

- 1 Position the transducer mount ① so the center of the bottom of the transducer is level with the bottom edge of the transom and is parallel to the water line.



- 2 Align the transducer parallel to the water line ②, and mark the center location of the two outer holes and the center hole of the transducer mount.
- 3 Wrap a piece of tape around a 4 mm ($5/32$ in.) bit at 15 mm ($19/32$ in.) from the point of the bit, to avoid drilling the pilot holes too deep.
- 4 If you are installing the bracket on fiberglass, place a piece of tape over the pilot-hole location to reduce cracking of the gel coat.
- 5 Using the 4 mm ($5/32$ in.) bit, drill the pilot holes approximately 15 mm ($19/32$ in.) deep at the marked locations.
- 6 Apply marine sealant to the included 20 mm screws, and attach the transducer assembly to the transom.

NOTE: A third screw in the lower center screw hole stabilizes the mount.

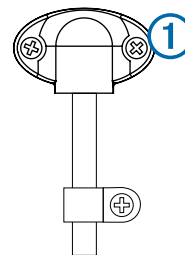


- 7 If you must route the cable through the transom, choose a pilot-hole location well above the waterline ④ and mark it.
 - 8 Place a cable clamp on the transducer cable ⑤, approximately one third of the distance between the transducer and the top of the transom or the pilot hole.
 - 9 Mark the pilot-hole location for the cable clamp, and using a 3.2 mm ($1/8$ in.) bit, drill a pilot hole approximately 10 mm ($3/8$ in.) deep.
 - 10 Apply marine sealant to the included 12 mm screw, and attach the cable clamp to the transom.
 - 11 Repeat steps 10–12 to install the other cable clamp approximately two thirds of the distance between the transducer and the top of the transom or the pilot hole.
 - 12 If you marked a pilot hole in step 9, use a 25 mm (1 in.) drill bit to drill a pass-through hole completely through the transom.
 - 13 Route the transducer cable to the sounder:
 - If you are routing the cable using a pass-through hole, feed it through the hole you drilled in step 14, and install the cable-entry cover ④.
 - If you are not routing the cable using a pass-through hole, route the cable up and over the top of the transom ⑥.
- Avoid routing the cable close to electrical wires or other sources of electrical interference.

Installing the Cable-Entry Cover

If you routed the cable through the transom after you installed the transducer, you should install the cable-entry cover to keep water from entering your boat.

- 1 Place the cable-entry cover ① over the hole and the cable, with the opening pointing downward, and mark the location of the two pilot holes.



- 2 Remove the cable-entry cover, and, using a 3.2 mm ($1/8$ in.) bit, drill the pilot holes approximately 10 mm ($3/8$ in.) deep.
- 3 Fill the pass-through hole with marine sealant so it covers the cable completely and there is excess sealant around the hole and the cable.
- 4 Place the cable-entry cover over the hole and the cable, with the opening pointing downward.

- 5 Apply marine sealant to the included 12 mm M4 screws, and attach the cable-entry cover to the transom.
- 6 Wipe away all excess marine sealant.

Testing the Installation

NOTICE

You should check your boat for leaks before you leave it in the water for an extended period of time.

Because water is necessary to carry the sonar signal, the transducer must be in the water to work properly. You cannot get a depth or distance reading when out of the water. When you place your boat in the water, check for leaks around any screw holes that were added below the water line.

Testing the Transom-Mount Transducer Installation

NOTICE

When adjusting the depth of the transducer, make the adjustments in small increments. Placing the transducer too deep can adversely affect the performance of the boat and put the transducer at risk of striking underwater objects.

Test the transom-mount transducer installation in open water free of obstacles. Pay attention to your surroundings as you test the transducer.

- 1 With the boat in the water, turn on the chartplotter.
- 2 Drive the boat at a slow speed. If the chartplotter appears to be working properly, gradually increase speed while observing the chartplotter.
- 3 If the sonar signal is suddenly lost or the bottom return is severely degraded, note the speed at which this occurs.
- 4 Return the boat to the speed at which the signal was lost, and make moderate turns in both directions while observing the chartplotter.
- 5 If the signal strength improves while turning, adjust the transducer so that it extends another $\frac{1}{8}$ in. (3 mm) below the transom of the boat.
- 6 Repeat steps 2–4 until the degradation is eliminated.
- 7 If the signal does not improve, move the transducer to a different location on the transom, and repeat the test.

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