

# GARMIN®

## TRANSOM-MOUNT TRANSDUCER INSTALLATION INSTRUCTIONS

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### Important Safety Information

#### WARNING

See the *Important Safety and Product Information* guide in the chartplotter 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.

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

Read all installation instructions before proceeding with the installation. If you experience difficulty during the installation, go to [support.garmin.com](https://support.garmin.com) for more information.

### Tools Needed

- Drill and drill bits
- 9.5 mm ( $\frac{3}{8}$  in.) wrench
- Masking tape
- #2 Phillips screwdriver
- Marine sealant

### Cable Considerations

#### NOTICE

Zip ties and cable clamps can over-tighten and damage or break the cable, or cause cable fatigue due to repeated rotation of the motor.

You should use black electrical tape to secure the cable above and below the rotating joint. If you secure the cable with zip ties, do not over-tighten the zip ties.

You should secure the cable above and below the pivot joint of your trolling motor.

You should create a service loop at least 25 cm (10 in.) long in the cable, with the rotating joint centered on the loop.

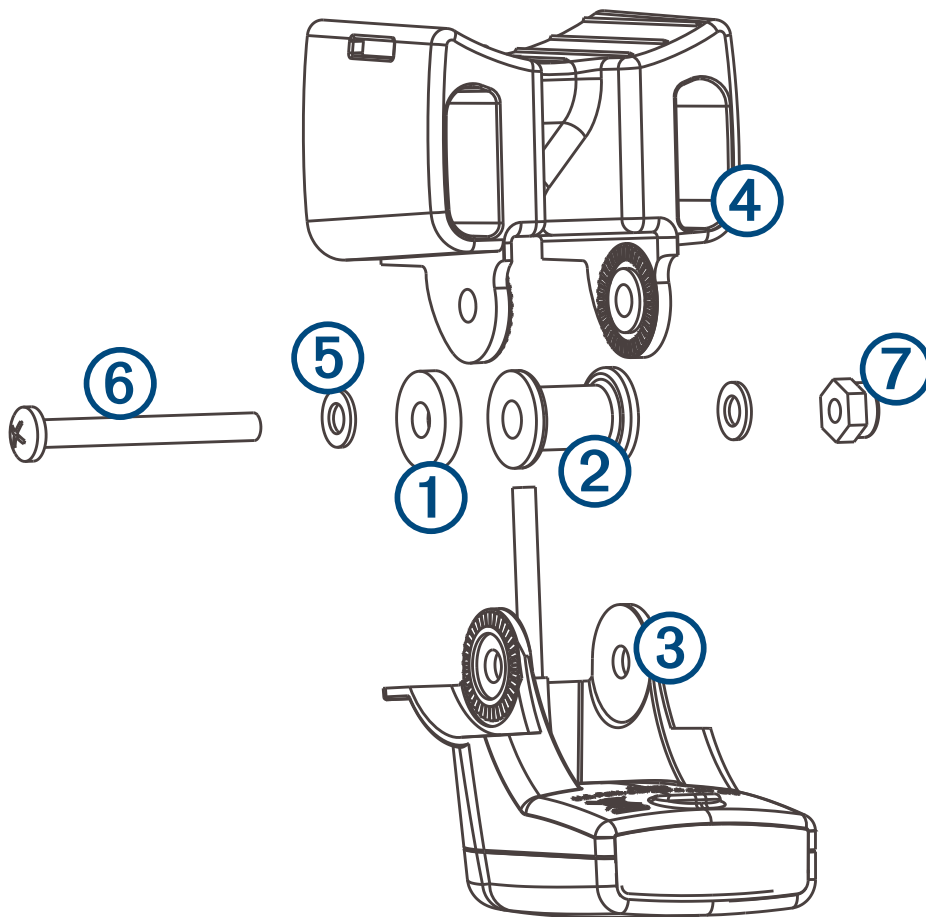
## Transom-Mount Location Considerations

- You should mount the transducer as close to the center of the boat as possible.
- You should not mount the transducer behind strakes, struts, fittings, water intake or discharge ports, in-hull transducers, or anything that creates air bubbles or causes the water to become turbulent. Turbulent water may interfere with the sonar beam.
- On single-drive vessels, you must not mount the transducer 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 vessels, you should mount the transducer between the drives, if possible.
- You should not mount the transducer in a location where it might be jarred when launching, hauling, or storing.

## Assembling the Transducer

- 1 Insert the rubber washer ① and the plastic spacer ② into the transducer.

**NOTE:** Do not add lubricant to the rubber washer.



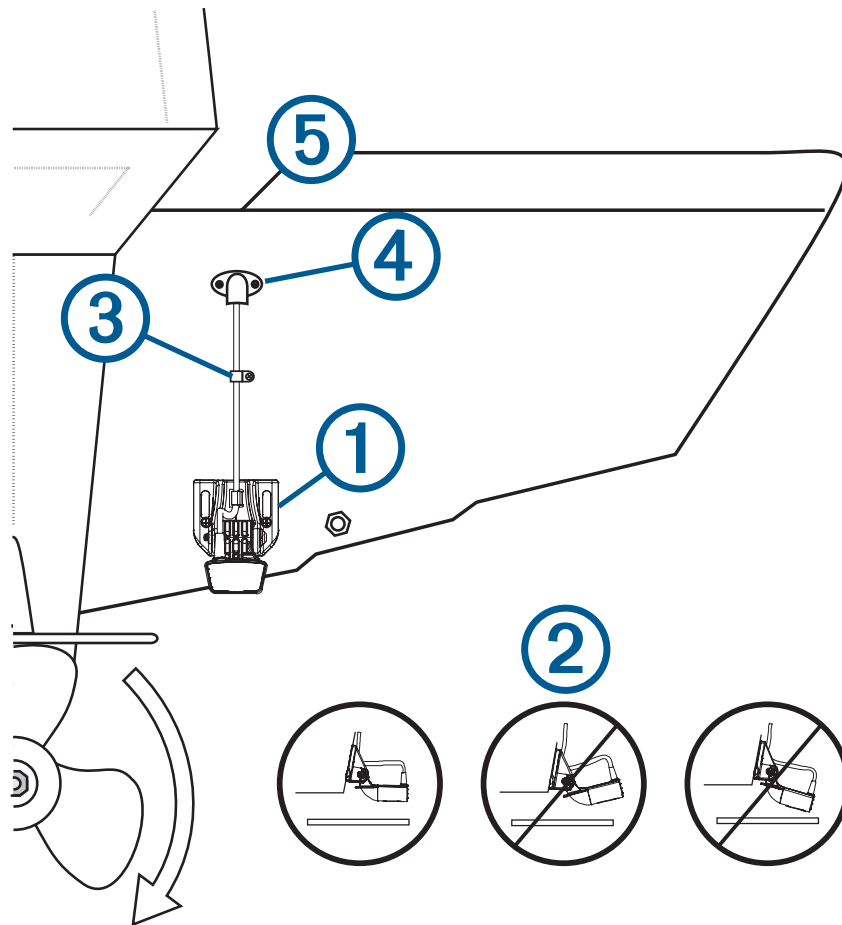
- 2 Pull the cable back, and slide the transducer ③ into the mounting bracket ④.
  - 3 Place a flat washer ⑤ on the screw ⑥, and insert the screw through the mounting bracket, transducer, spacer, and rubber washer.
  - 4 Secure the screw to the bracket with a flat washer and the lock nut ⑦.
- NOTE:** Do not tighten the lock nut. You will adjust the transducer and tighten the nut after you install the transducer on the boat.

## 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 cracking in the gel-coat layer when the screws are tightened.

- 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 of the transducer mount.
- 3 Wrap a piece of tape around a 4 mm ( $5/32$  in.) bit at 25 mm (1 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 25 mm (1 in.) deep at the marked locations.
- 6 Apply marine sealant to the included 30 mm screws, and attach the transducer assembly to the transom.
- 7 If you must route the cable through the transom, choose a pilot-hole location well above the waterline **③** and mark it.
- 8 Place a cable clamp on the transducer cable **④**, approximately halfway 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** If you marked a pilot hole in step 7, choose the appropriate drill bit and drill a pass-through hole completely through the transom:

- If you have the 4-pin cable, use a 16 mm ( $\frac{5}{8}$  in.) drill bit.
- If you have the 8-pin cable or the 12-pin cable, use a 25 mm (1 in.) drill bit.

**12** Route the transducer cable to the chartplotter:

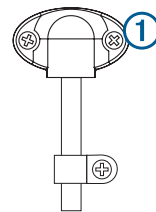
- If you are routing the cable using a pass-through hole, push it through the hole you drilled in step 11, and install the cable-entry cover (*Installing the Cable-Entry Cover, page 4*).
- If you are not routing the cable using a pass-through hole, route the cable up and over the top of the transom ⑤.

You should 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 ( $\frac{1}{8}$  in.) bit, drill the pilot holes approximately 10 mm ( $\frac{3}{8}$  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.



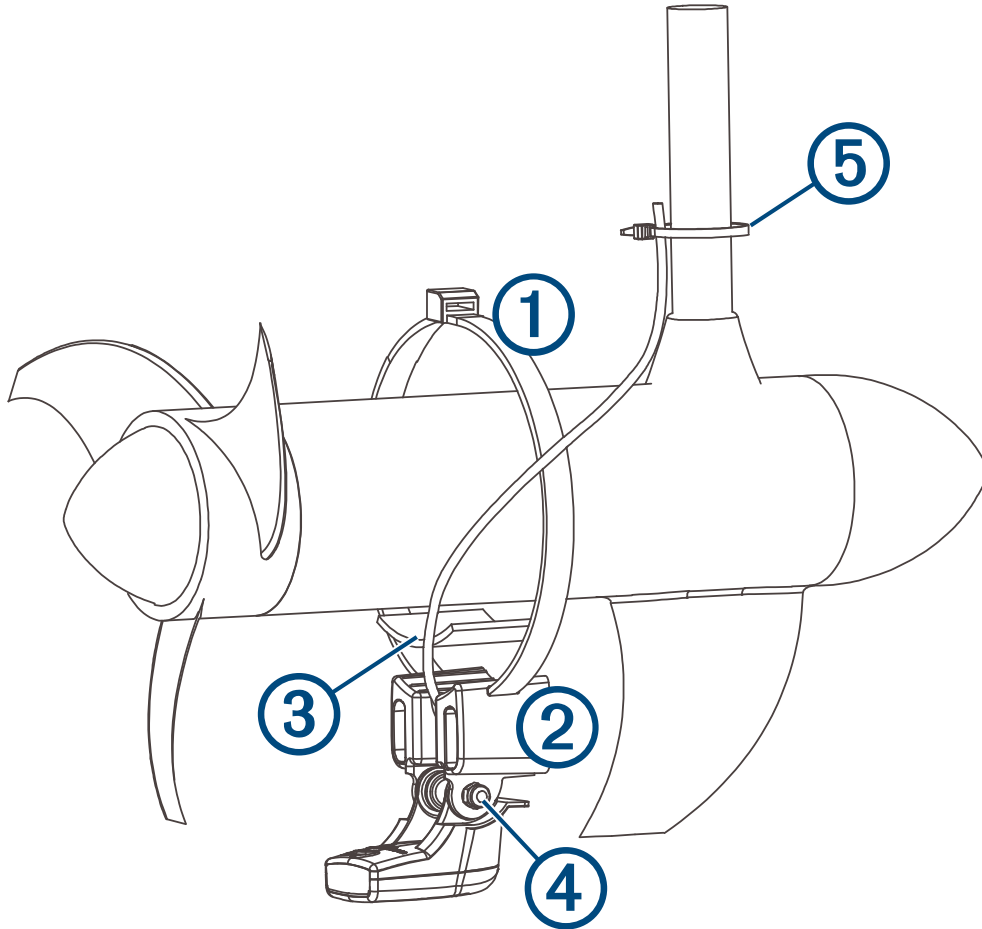
## Installing the Transducer on a Trolling Motor

### NOTICE

Do not cut the transducer cable. Cutting the transducer cable will void your warranty.

- 1 Insert the larger cable tie ① through the slot on the mount ②, with the ridges of the cable facing up, until equal lengths extend on both sides of the mount.

**NOTE:** In cold water or in areas with heavy timber or debris, use a metal 10 to 13 cm (4 to 5 in.) worm gear clamp (not included) instead of the cable tie.



- 2 Place the gasket ③ on the curved top of the transducer mount.
- 3 Place the transducer mount against the body of the trolling motor with the front of the transducer pointed away from the propeller.
- 4 Secure the 50 cm (20 in.) cable tie around the body of the trolling motor.  
**NOTE:** Do not tighten the cable tie.
- 5 Align the gasket between the transducer mount and the body of the trolling motor, and tighten the cable tie, trimming the excess cable tie if necessary.
- 6 Align the transducer parallel with the bottom of the motor when in use, and tighten the locking nut ④ until it touches the mounting bracket, and tighten  $\frac{1}{4}$  turn more.  
Do not overtighten.
- 7 Secure the transducer cable to the motor shaft using the smaller cable ties ⑤.

- 8 If necessary, fill the forward-facing portion (except the cable tie pocket) of the transducer mount with sealant to avoid accumulation of debris.
- 9 Route the transducer cable to chartplotter while taking these precautions:
  - The cable should not be routed close to electrical wires or other sources of electrical interference.
  - The cable must not be pinched when the trolling motor is deployed or stowed.

## 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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