



Installation Instructions for TH-FLWBL Through-Hull Transducer

The TH-FLWBL is an 11", 200 kHz transducer designed for use with Lowrance blue-connector sonar units. This instruction sheet will help you install your TH-FLWBL through-hull transducer.

Read these instructions carefully *before* attempting the installation. Determine which mounting location is right for your transducer and boat. **Remember, the transducer installation is the most critical part of a sonar installation.**

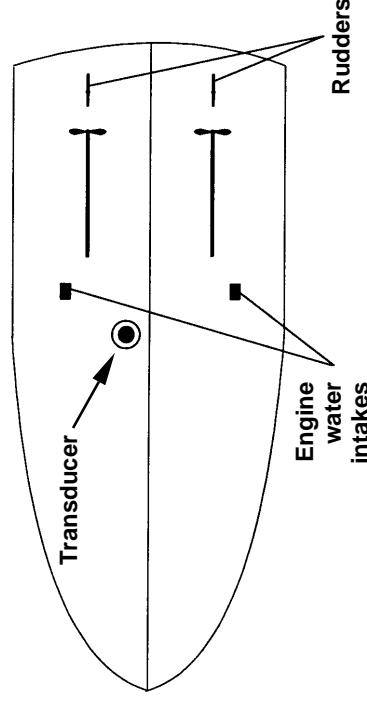
Recommended Tools and supplies

Recommended tools for this job include: drill, 1/8" (3.17 mm) drill bit for pilot hole, hole saw with a blade appropriate to your hull type. Required supplies for this job include: *high quality, marine grade* above- or below-waterline sealant/adhesive compound (3M® Polyurethane Marine Adhesive Sealant 5200 or equivalent). For saltwater use, you will also need a water-based anti-fouling paint to prevent sea growth. (Supplies not included.)

Selecting a Transducer Location

The transducer's mounting location is an important factor in its performance. Consider the following issues carefully before beginning installation.

- 1. Water flow:** The transducer should be located in an area that has a smooth water flow. This is typically close to the centerline of the hull.
- 2. Inboard powered hulls:** On inboard powered hull boats, you should install the transducer ahead of the propeller shafts and rudders. This is typically an amidships location ahead of the engine's water intakes.



Mount the transducer amidships, forward of any fittings on the hull that will cause excessive water noise.

6. Route the transducer cable to the sonar unit. If the cable is too long, do not cut it! Coil and store the excess cable.

7. **Check for leaks!** After the boat is placed in the water, check for leaks immediately. Check the boat for leaks again several times during the next 24 hours. If you notice any leakage at all, the transducer should be re-installed with a new coat of adhesive.

Maintenance

Sea growth can accumulate rapidly on the transducer's surface. This growth will reduce the transducer's performance. To prevent this, any portions of the transducer surface exposed to saltwater must be coated with antifouling paint. Use only water-based paint.

Caution:

Never use ketone-based antifouling paint. Ketones can attack many plastics, and could cause damage to the transducer.

Apply paint every 8 months or at the beginning of each boating season.

Clean the transducer periodically with a soft cloth and mild household detergent. If fouling does occur, use a stiff brush or putty knife to remove the growth. Wet sanding of the fouled surface is permissible with #220 or finer-grade sandpaper.



3. Planing hulls: On planing hull boats with outboard motors or stern drives, you should install the transducer close to the transom to ensure it will be in the water at all times.

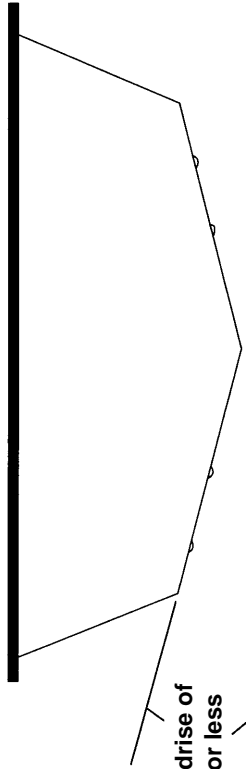
4. Noise: When choosing a transducer location, keep in mind that ambient noise is always present, from the mechanical noise made by the engine(s), the movement of the hull through the water, and other sources. These sound waves can interfere with the operation of the transducer. While ambient noise can't be eliminated, careful selection of a mounting location can minimize the effect of vessel-generated noise. The lower the noise level, the greater the sonar's unit's usable sensitivity.

5. Surface obstructions: don't mount the transducer behind other through-hull fittings. Such obstructions will interfere with the smooth flow of water necessary for a clean sonar reading.

6. Clearance: Make sure there is enough room on the inside of the hull to install the transducer and there is clearance to attach the nut.

NOTE:

This transducer is designed to perform best in boats with a hull deadrise of 10° or less. The transducer will work at greater angles, but it will be sending signals off at an angle instead of straight to the bottom, so it won't return true depth readings. The higher angle will also prevent the transducer from performing to its full depth potential.



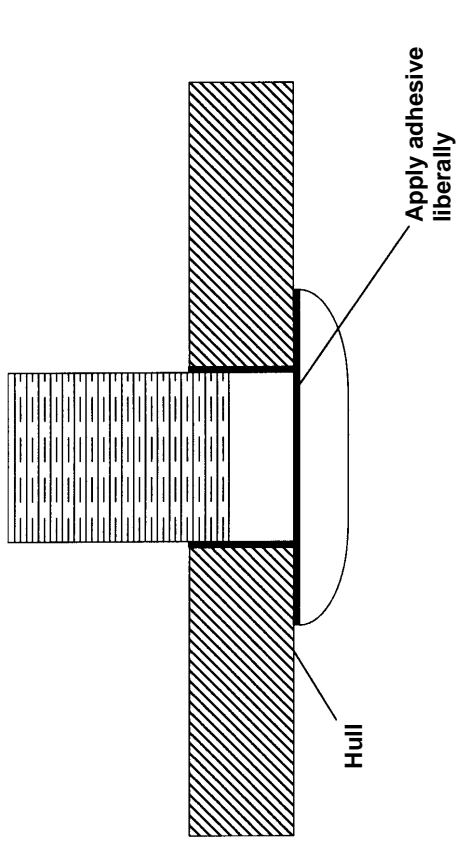
Deadrise of 10° or less

This transducer is designed for hulls with a deadrise of 10° or less.

Installing the Transducer in Your Boat's Hull

1. After you've determined the proper location for the transducer, drill a 1/8" (3.17 mm) pilot hole from inside the hull. Check the outside of the hull to make sure there is no obstruction in the way, such as a strake. If you find a problem with the chosen location, fill the pilot hole with the sealant-adhesive compound and choose another mounting location.

2. The TH-FLWBL transducer requires a 2" (50.8 mm) hole. Using a hole saw, drill from the outside of the hull to prevent the gel coat from cracking on fiberglass hulls. Use eye and face protection when drilling the hole. Afterwards, clean the area around the hole with detergent or alcohol. This will establish a good surface for the adhesive.

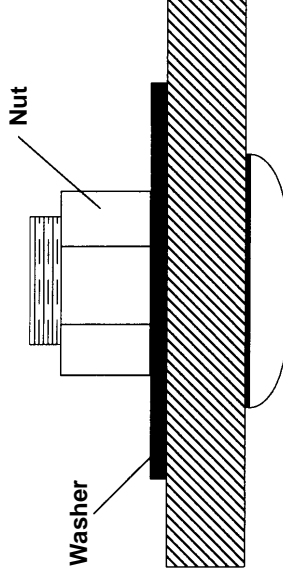


Spread adhesive around the lip of the transducer housing and up around the lower part of the sensor as shown.

3. Using the marine-grade sealant/adhesive, apply a 1/8" (3.17 mm) bead of sealant around the lip of the transducer housing. Also spread the sealant up around the lower part of the sensor housing, spreading it higher on the housing than the hull is thick.

4. From the outside of the hull, pass the transducer cable up through the hole, then push the transducer with sealant into it. Use a twisting motion to squeeze out excess sealant. Remove excess sealant from the outside of the hull before it dries, to ensure a smooth flow of water around the transducer.

5. On the inside of the hull, slide the provided rubber washer over the housing and install the nut. Hand-tighten the nut, being careful not to over-tighten. **Do not use a wrench to tighten the nut!**



After positioning the provided washer, use the provided nut to secure the transducer in place.