

INSTALLATION AND OPERATION MANUAL

8000.06T – Plastic Thru-Hull Transducer with Integrated Temperature Sensor
8000.06 - Plastic Thru-Hull Transducer

To ensure safety and many years of trouble-free operation of your product, please read this manual carefully before using this product.

SAFETY INFORMATION:

- Periodically wipe the face with a dry cloth. Do not use abrasives or solvents on this device.
- Only qualified personnel should perform repairs or servicing not covered in this manual.
- The LCD used in the product is made of glass. Therefore, it can break when the product is dropped or impacted.
- Keep this product away from heat sources such as radiators, heaters, stoves and other heat generating sources. Do not store in extreme temperatures above 150° F (65° C).
- Shade the LCD during storage. Do not expose LCD to direct sunlight for extended periods of time. Use the supplied cover at all times during storage.

NOTES, NOTICES, AND CAUTIONS



WARNING: Indicates a potential for property damage, personal injury or death.



IMPORTANT: Indicates potential damage to the device and tells you how to avoid it.



NOTICE: Indicates important information that helps you make better use of the device and tells you how to correct a performance problem.



INFORMATION: Indicates resources to obtain the proper information to help you make the most of your device.

INFORMATION:



Read this manual completely before attempting to use or install your device. Visit our Customer Service Center on our website for advanced troubleshooting and technical support.

WARNING:



This depth sounder should not be used as a navigational aid to prevent grounding, boat damage, or personal injury. Always operate the boat at slow speeds in unfamiliar water, or if you suspect shallow water or submerged objects.

PARTS SUPPLIED IN PACKAGING

The following parts should be included with the transducer:

- Thru-Hull Transducer with Integrated Temperature Sensor, 30 ft Cable and Connectors
- Rubber Gasket
- Plastic Nut
- Integrated Temperature Sensor

If any items are missing or damaged, please contact our customer service department.

SELECTING THE PROPER TRANSDUCER INSTALLATION

The Thru Hull Transducer (8000.06(T)) is suitable for the following vessels:

- Outboard, inboard/outboard, single or dual inboard, or jet-drive propulsion.
- Hull dead rise angle below 20°.
- Fiberglass or Metal Hull Material. CANNOT be constructed of wood.
- Hull thickness LESS than 1.25" (32 mm)

The Transom Mount transducer (8000.01(T)) is suitable for the following vessels:

- Outboard, inboard/outboard, single inboard, or jet-drive propulsion.
- Hull dead rise angle below 30°.
- Transom angle from 3-20°.

If you think that the thru-hull transducer is not suitable for your installation, return to the place of purchase and exchange for the transom mount (8000.01(T)). You can also visit our Customer Service Center at www.hawkeyelectronics.com to contact us or to complete a transducer exchange request to exchange the transducer for one that is specialized for your vessel. You may also call 888-766-7276 to inquire about exchanging the transducer.

NOTICE:



The included transducer needs to be installed in a thru-hull configuration. It CANNOT be glued in-hull. We also offer the option to trade-in the included transducer for a customized transducer. Please visit our website for details.

Does the Installation Vessel Have These Characteristics?

- Outboard, inboard/outboard, single or dual inboard, or jet-drive propulsion.
- Hull deadrise angle below 20°.
- Fiberglass or Metal Hull Material. CANNOT be constructed of wood.
- Hull thickness LESS than 1.25" (32 mm)

If the answer to any of these characteristics is NO, visit our Customer Service Center at www.hawkeyelectronics.com to learn about our Transducer Exchange Program. You may also call 888-766-7276 during normal business hours.

Tools and Supplies Required for Installation

- Safety goggles
- Dust mask
- Electric drill with minimum 3/8th Inch (10 mm) chuck capacity
- Drill Bit: 1/8" (3 mm)
- Hole Saw: 2" (51mm)
- Sandpaper
- Marine sealant
- Zip-ties
- Water-based antifouling paint (*mandatory in salt water*)

WARNING:



Never install a plastic thru-hull sensor in a wood hull as swelling of the wood could cause damage to the sensor that could cause the vessel to sink.

STEP 1

Test Before Installation

1. Connect the sensor to the instrument as per the instructions supplied with the instrument.
2. Place the sensor in the water with the transducer face in the horizontal position and aimed towards the sea bottom.
3. Check for a depth reading (and temperature reading if applicable).
4. If there is no reading, check all the connections and repeat the test.
5. Visit our Customer Service Center at www.hawkeyelectronics.com or call 888-766-7276 for further troubleshooting information



NOTICE:



Mount the transducer as far as possible away from sources of internal noise as outlined above.

How Acoustic Noise Effects Performance

External sound waves can interfere with the operation of the depth sounder. Background noise from sources such as vegetation, fish, sea surface waves, and other vessels cannot be controlled.

You can limit the amount of noise generated by your vessel by carefully selecting the transducer's mounting location. This will allow the automatic sensitivity settings on your depth sounder display to give you the best possible performance.

Common Sources of Internal Noise Are:

- Propeller(s), shaft(s), fins, rudders and other running gear.
- Engines, Generators, Pumps, etc
- Other echo sounders, fish finders or depth sounders.

NOTICE:



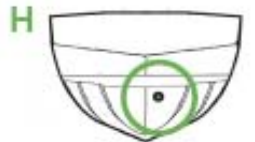
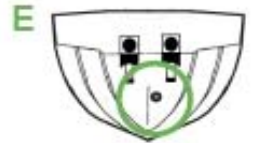
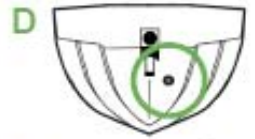
Install and test the display in the desired mounting location before attempting the transducer installation.

STEP 2

Choosing a Mounting Location

To obtain the best performance, the transducer should be mounted in a location where the water flow beneath the hull is aeration and turbulence-free. Try to mount the transducer as close to the centerline of the boat as possible. Consult the boat manufacturer for the best transducer placement. If this information is unavailable, follow the guidelines below.

- A. On a single drive outboard or inboard/outboard boat, mount towards the back of the boat, on or near the centerline, and well inboard of the first lifting strakes. Mount on the side of the hull where the propeller is moving downward.
- B. On a twin outboard or inboard/outboard boat, mount between the drives, making certain that the transducer is not directly in front of either drive or propeller (avoid aligning directly in line with the bottom of the boat if the hull comes to a point).
- C. On a single or twin inboard boat, mount ahead of the propeller(s) and shaft(s) near the centerline.
- D. On a single jet drive boat, mount on the starboard side at least 4" outside the intake grate.
- E. On twin jet drive boats, mount on the center line, between the intake grates (avoid aligning directly in line with the bottom of the boat if the hull comes to a point).
- F. On sailboats, mount on the starboard side at least 6" outside and forward of the keel.
- G. On PWC's, mount on the starboard side, at least 2" outside and forward of the intake grate.
- H. On a stepped hull mount just ahead of the first step.



Mounting Location "DON'T's"

NOTICE:



To deliver consistent, accurate readings, the transducer must have a continuous supply of non-turbulent water.

DO NOT MOUNT THE TRANSDUCER IN AN AREA OF TURBULENCE OR BUBBLES.

Never install the transducer where the boat may be supported during trailering, launching, hauling, or storage.

NOTICE:



To Get a Good "View" of the Mounting Location: While the vessel is out of the water, position yourself at the transom and look at the bottom of the hull towards the bow. Using illustrations A thru I, note anything that could interrupt the clean flow of water to the transducer mounting location.

NEVER MOUNT:

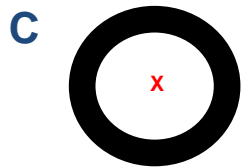
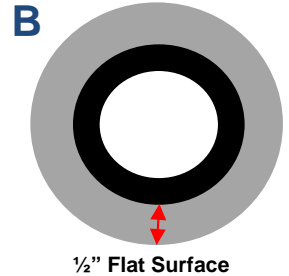
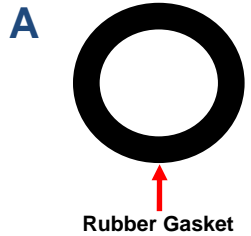
- A. Behind water intakes, discharge openings, or thru-hull fittings.
- B. Behind strakes, struts, or hull irregularities.
- C. Behind transom steps or pockets.
- D. Behind eroding paint, hull deformities, or marine growth.
- E. Behind rivets or strakes on aluminum boats.
- F. Behind the step on stepped hulls.
- G. Directly on the "V" in the hull.
- H. Behind propellers or anywhere propeller turbulence will interrupt the flow of "clean" water to the transducer.
- I. In areas where the hull has a reverse angle.



STEP 3

Drilling the Hole

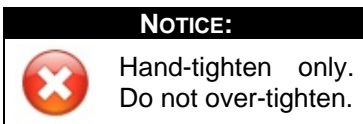
1. After selecting the mounting location based on STEP 2, place the rubber gasket inside the hull against the mounting location. (*illustration A*)
2. Ensure that there is at least 1/2" (12 mm) of flat surface area around the rubber gasket. (*illustration B*)
3. Place a mark in the center of mounting location. (*illustration C*)
4. Drill a 1/8" (3 mm) pilot hole on the mark. If there is a rib, strut, or other hull irregularity on the hull bottom near the selected mounting location, drill from the outside.
5. Using a 2" (51 mm) hole saw, cut a hole from outside the hull. (Illustration A)
6. Using sandpaper and mild house hold detergent, sand and clean the area around the hole (inside and outside). Make sure to remove all rough spots and petroleum residue.



STEP 4

Sealing and Installing

1. Remove the nut and rubber gasket from the sensor.
2. Apply a bead of marine sealant around the lip of the sensor housing. (*illustration D*)
3. From outside the hull, feed the cable through the hole (plug first) into the mounting hole until all the cable is inside the hull.
4. Insert the sensor into the hole using a twisting motion to squeeze out excess sealant.
5. From inside the hull, align the arrow on the housing towards the bow of the vessel. (*illustration E*)
6. Slide the rubber gasket onto the housing.
7. Screw the hull nut into place, being sure the arrow on the housing is still positioned forward toward the bow.



8. Remove the excess sealant on the outside of the hull.

STEP 5

Cable Routing & Connection to the Depth Sounder Display

Route the cable to the mounting location of the depth sounder transducer plug.

- To reduce electrical interference, separate the transducer cable from other electrical wiring.
- Coil any excess cable and secure it in place using tie-wraps.
- Connect the transducer plug to the depth sounder display plug and secure to prevent accidental disconnection.

STEP 6

Antifouling Paint

Marine growth can accumulate rapidly on the transducer's surface. If the vessel is left in saltwater for extended periods of time, all components of the transducer exposed to sea water must be painted with WATER BASED antifouling paint.

- Clear, spray-on antifouling paints are very easy to apply and can be purchased from your local boating supply store.
- Reapply paint as needed to prevent marine growth

NOTICE:



Never use ketone-based paint, as this type of paint can damage the transducer's plastic shell.

STEP 7

Checking for Leaks

Immediately after placing the vessel in the water check around the transducer for leaks.

- If no leaks are evident, recheck the area after 2, 12, 24, and 48 hours.
- If there is a leak, remove the vessel from the water and repeat STEP 4 above immediately.

WARNING:



Never install this transducer and leave the vessel in the water unchecked. Refer to STEP 7 above.