

Transom Mount Transducer Installation Manual

Safety Information:

- Read the following safety information carefully before attempting to operate the depth sounder.
- Only qualified personnel should perform repairs or servicing not covered in this manual. There are no user serviceable parts in this transducer.
- Want to save yourself hours of aggravation? If so, then read this manual entirely before attempting the installation.



IMPORTANT:

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

Parts Supplied in Packaging

Before installing the 8000-01, please ensure that the following parts are included in the packaging:

- Transducer with 30' of Cable and Plug
- Transducer Support Bracket with Attached Kick-Up Bracket
- (2) Tapered Plastic Shims
- (2) Cable clamps
- Clam Shell Cable Cover
- (2) #10 x 1.25" self-tapping screws
- (4) #6 x 1/2" self-tapping screws



P/N: 8000-01

If any items are missing or damaged, please contact our Customer Service Department at customerservice@norcrossmarine.com or 888-667-2767.

Tools and Supplies Required for Installation

- Power Drill
- 15/32" (12 mm) drill bit, hole saw or spade bit
- 1/8" (3 mm) drill bit
- 9/64" (4 mm) drill bit
- Marine Sealant/Caulk
- 30 Grit Sandpaper
- "Phillips" Screwdriver
- Pencil
- Tie Wraps
- Water Based Antifouling Paint
- Masking Tape

Does the Installation Vessel Have These Characteristics?

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

If the answer to any of these characteristics is NO, switch to the In-Hull Mounting Instructions within this manual or visit our Customer Service Center at www.norcrossmarine.com. You may also call 888-667-2767 to inquire about exchanging the transducer.

STEP 1

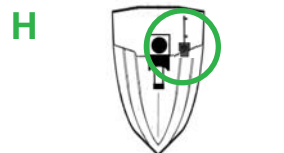
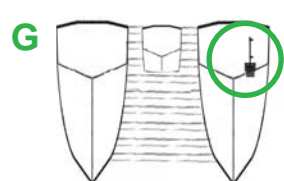
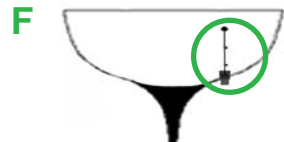
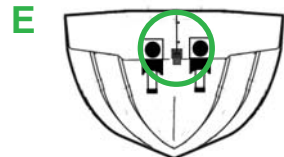
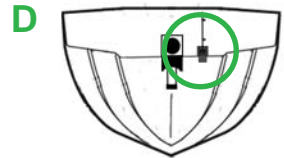
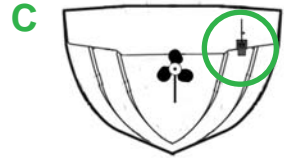
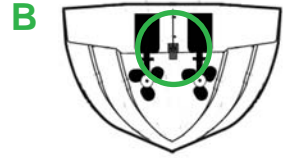
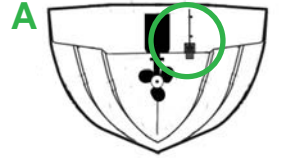
Choosing a Mounting Location

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 in-hull transducer placement. If this information is unavailable, follow the guidelines below .

- A** On a single drive outboard or inboard/outboard boat, mount on the starboard side at least 4" beyond the radius of the propeller.
- 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 an inboard boat, mount as far to the port or starboard as possible so that the propeller turbulence does not effect the performance of the sensor.
- 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 the keel.
- G** On pontoon boats and catamarans, mount on the starboard hull at least 2" outside the hull protector or centerline.
- H** On PWC's, mount on the starboard side, at least 2" outside the intake grate.

NOTICE:

To achieve maximum performance try the following: Have someone run the boat on plane for you in smooth water. CAREFULLY look over the transom at the water flowing from the bottom of the boat. Find the location which produces the least amount of turbulence (air bubbles). This is the location you will want to mount the transducer.



Mounting Location “DONT’s”

IMPORTANT:



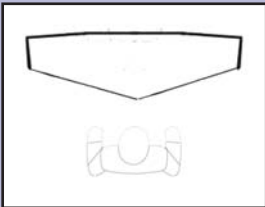
To deliver consistent, accurate readings, the transducer must have a continuous supply of nonturbulent water. Do not mount the transducer in an area of turbulence or bubbles.

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

NEVER MOUNT:

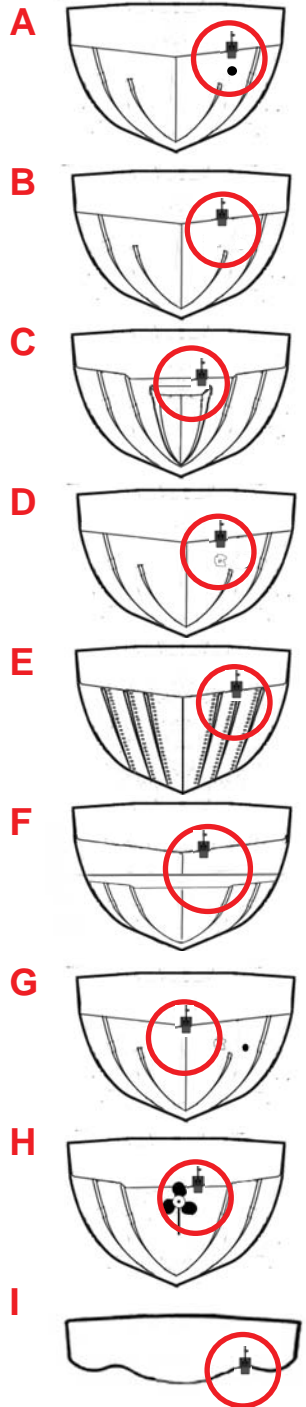
- A** Behind water intakes, discharge openings, or thru-hull fittings.
- B** Behind strakes, struts, or hull irregularities.
- C** Behind transom steps or pockets.
- D** Behind eroding paint, hull deformities, or marine growth.
- E** Behind rivets or strakes on aluminum boats.
- F** Behind the step on 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.

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

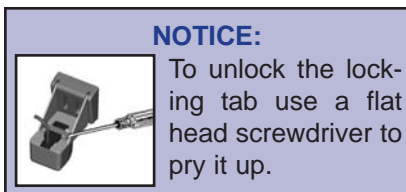
A thru I, note anything that could interrupt the clean flow of water to the transducer mounting location.



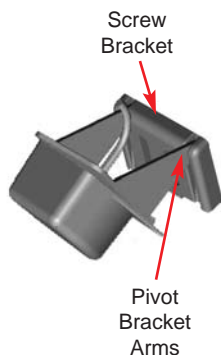
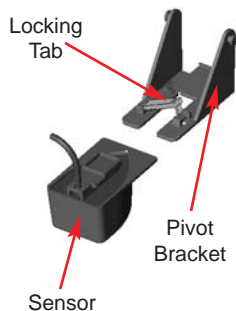
STEP 2

Assembling the Transom Mount Bracket

1. With the Locking Tab in the up position, align the transducer and bracket, then slide the transducer into the Pivot Bracket until it cannot slide any further (minimal force is required).
2. Press the Locking Tab down against the Pivot Bracket until it locks firmly into place.



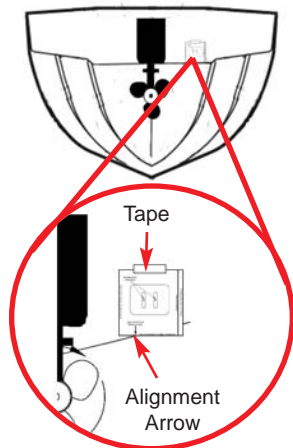
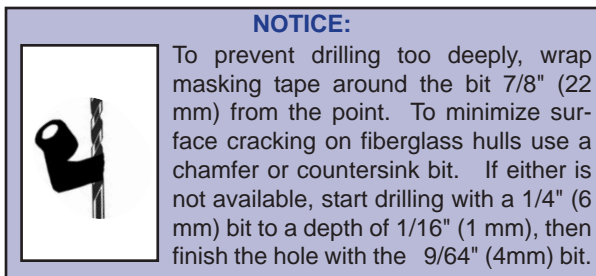
3. Slide the Pivot Bracket arms through the back of Screw Bracket as pictured.
4. Grasp the transducer in your hand as shown in the picture to the right. Rest the screw bracket against a solid object (ground) and press the Pivot Bracket into the Screw Bracket with enough force until it snaps into place



STEP 3

Mounting the Transom Mount Bracket


1. Locate Transom Template inserted in this manual.
2. At the desired mounting location, position the template so the arrow at the bottom is aligned with the bottom edge of the vessel making certain that the template is parallel to the waterline of the vessel.
3. Using a 9/64" (4 mm) drill bit, drill two holes 7/8" (22 mm) deep at the locations indicated on the template marked with an "X".







4. The bracket is designed for a standard 13° transom angle. To determine if the plastic shim is needed, position the transducer at the desired location. Using a straight edge, compare the underside of the transducer relative to the underside of the hull. The stern (trailing edge) of the transducer should be 1/16" - 1/8" (1 - 3 mm) below the bow (leading edge) of the sensor.



IMPORTANT:


 Align the included shims to achieve a slight angle as per the illustration below. To prevent aeration, NEVER position the transducer in a manner that the Leading Edge (bow) is LOWER than the Trailing Edge (stern)

CORRECT	INCORRECT		
 <p>Slight Angle</p>	 <p>Parallel</p>	 <p>Reversed Angle</p>	 <p>Too Steep of An Angle</p>

5. Apply a marine sealant to the threads of the two #10 x 1-1/4" self-tapping screws and screw the bracket to the hull. *DO NOT tighten the screws completely until you position the transducer as per # 4 above.*



IMPORTANT:

 Do not allow the leading edge of the transducer to extend more than 1/8"(3 mm) of an inch below the bottom of the boat as this will create increased aeration and turbulence.

STEP 4

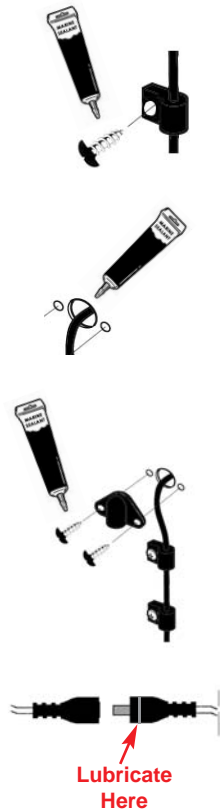
Cable Routing

Route the transducer cable over the transom, through a deck or splash-well drain hole or through a new hole drilled in the transom. **If a new hole is required, it MUST be drilled well above the waterline.**

To drill a cable pass through:

1. Mark the desired location with a pencil.
2. Check for obstructions behind the desired location inside the hull.
3. Drill a 15/32" or 12 mm hole through the transom.
4. Route the cable through the transom.
5. On the outside of the hull, secure the cable against the transom using the included cable clamps. Evenly distribute the clamps between the transducer and the location where the cable passes through or over the hull and mark the location with a pencil.

6. At the marked locations, use a 1/8" (3 mm) bit to drill a hole 3/8" (10 mm) deep.
7. Apply marine sealant to the threads of the 2 #6 x 1/2" self-tapping screws, position the two cable clamps and fasten them in place. *(Skip to #13 if the cable was routed over the transom or a hole that was already in the hull).*
8. If a hole has been drilled in the transom, position the clam shell cover over the cable where it enters the hull and mark the two screw holes.
9. Use a 3 mm or 1/8" bit to drill a hole 10 mm (3/8") deep. To prevent drilling too deeply, wrap masking tape around the bit 10 mm (3/8") from the point of the bit.
10. Fill the remaining space in the hole with marine sealant.
11. Apply marine sealant to the 2 #6 x 1/2" self-tapping screws and fasten the cable clam shell cover into place.
12. 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.
13. Lubricate the plug by applying a generous amount of silicon grease or petroleum jelly to the ridge on the Display plug.
14. Plug the cable into the transducer plug on the depth sounder.



NOTICE:

If you need to increase the length of the transducer cable order part # 8000-90 from our website or toll free at 888-667-2767. Strip back the rubber cable cover 1" (28 mm) exposing the three internal wires (blue, white, and bare) on your transducer. Using a soldering iron, solder the blue, white and bare wires from the 8000-90 extension cable to the corresponding wires on your transducer. Using electrical tape, or heat shrink tubing make certain that the soldered connections are completely sealed and protected against accidental electrical interference and corrosion. **Cutting the plug off the Digital Depth Sounder display will void the warranty.**

STEP 5

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 below the waterline must be painted with WATER BASED antifouling paint.

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

STEP 6

Testing and Troubleshooting

NOTICE:

High Speed performance of the depth sounder may require extensive adjustment and testing to find the best transducer mounting location. This transducer has been tested to perform up to 70 MPH in an In-Hull application. Not all boat hull configurations will allow for this type of performance. If you are not satisfied with the performance of the depth sounder, it is recommended that you seek the advice of a professional marine electronics installer.

To Test Your Transducer Installation:

1. Make sure that the display is functioning properly by following the display testing procedures in the Display Installation and Operation Manual.
2. Place the vessel in the water. Once the display is turned ON, it will display the test sequence and then display the current depth.

IMPORTANT:



If "---" appears on the display, make sure that there is at least 2.5 feet of water between the bottom of the transducer and the bottom of the water body. If the depth sounder has a Keel Offset feature, make sure it is turned OFF.

3. Become familiar with the depth sounder's function and performance at idle speeds.
4. Gradually increase the boat speed and observe the depth readings (*pay attention to minimum and maximum depth capabilities*).
5. If "---" readings appear:
 - Check to make sure that the transducer is not "kicked-up". To prevent damage to the transducer, it will automatically release from the mounting bracket (kick-up) when it is impacted. If this occurs, refer to Page 4 of this manual to reset the transducer for normal operation. If this happens frequently, make sure that the trailer or boat lift bunks do not interfere with the transducer during loading and unloading.
 - Have someone run the boat on plane for you in smooth water. CAREFULLY look over the transom at the water flowing from the bottom of the boat over the base of the transducer. The water should be "Clean" with very little turbulence (air bubbles). If there are any air bubbles or turbulence seen passing underneath the transducer, move the transducer farther down on the transom bracket. If the performance does not improve, move the transducer to "Clean Water" making sure to fill any unused screw holes with marine sealant (*Refer to Page 2 & 3 in this manual*).

IMPORTANT:



Certain environmental conditions may restrict the performance of the depth sounder. Extremely dirty water, very soft bottom, high speeds, deep water, or a combination of the above will result in incomplete or inaccurate readings. Please refer to Page 2 & 3 to minimize the effects of these conditions.

- If you are not happy with the performance of your depth sounder, please visit our website or call 888-667-2767 for technical support. Rest assured that this depth sounder is engineered to the highest standards and is part of the the best selling family of depth sounders in world. It is highly likely that your dissatisfaction is due to improper installation and/or setup and our technical support resources can get your system working properly.

Advanced Troubleshooting Help:

If you have questions about this product please visit our Customer Service Center on our website at www.norcrossmarine.com (*You may also call us toll free at 888-667-2767*) where you can find information relating to:

- **Warranty Details**
- **Warranty Registration**
- **Troubleshooting**
- **Product Knowledgebase**
- **Product Specifications**
- **Parts & Accessories**

Replacement Parts:

Visit our website or call 888-667-2767 to order replacement parts for your transom mount transducer.

- **8000-90** - 30' Transducer Cable Extension w/ Waterproof Plug
- **8000-91** - Transom Mount Bracket Kit
- **8000-95** - 2-Part, Slow Cure, Epoxy Kit for In-Hull Transducer Mounting

NOTICE



To be eligible for the 2 year product warranty, you must register your product within 15 days of purchase. Please visit our Customer Service Center on our website to register. Make a copy of your original purchase receipt and store it in a safe place. You will need to present it in the rare occurrence that you need to send your product in for service.

Warning:



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IMPORTANT:



If printing this manual from a computer, make sure that your printer does not adjust the size of this template by aligning the template with the kickup bracket. If the sizes are different, check your printer settings to make sure the print size is 100% with no scaling.

