TOYOTA MARINE Sports

Technical Service Bulletin #33

S22 Depth Sounder with Water & Air Temperature Installation

April 4, 2000

Note: When installing **only** a Depth Sounder skip Step 3 & Step 6

Parts Needed

Depth, Water/Air Temp Kit – MGA0010545	7 #8 Screws –Dealer supply
3 #8 Washers -Dealer supply	

Kit Includes

Amplifier modules	2 Temperature sensors	Depth transducer
Epoxy		

Tools Needed

Drill	Screwdriver	Mixing cup and stick
1/8th Drill bit	Tie wrap	Marine sealant

⚠WARNING

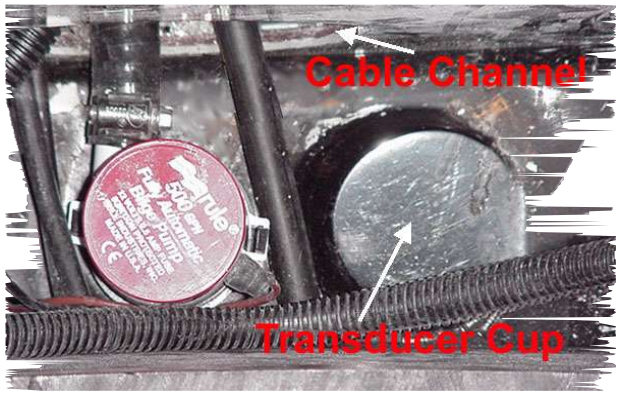
Always be sure to wear OSHA approved eye protection when using a drill or other rotary tools as these have the potential to throw debris into the air. Always be sure to follow manufacturer-specified procedures when using adhesives. Some adhesives may be flammable.

Procedure

Step 1 – Remove Motorbox and Bulkheads

First, remove the driver's kick panel to allow access to the cable channel leading from behind the kick panel to the bilge for steering and control wires. Next, remove all the floor panels to reveal the bilge pump and the fuel tank.

Step 2 – Install Transducer

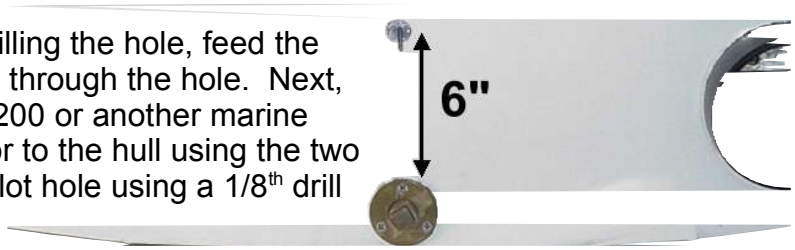


First, feed the transducer end of the wire through the cable channel from the deck downward to the bilge. Next, carefully clean the transducer cup to remove any dust or dampness. Finally, thoroughly mix the included epoxy and apply a small amount to the face (flat side) of the transducer, then pour the remaining epoxy into the transducer cup. Place the transducer into the epoxy, twisting and

turning it to force any air bubbles out from under the transducer face. The face of the transducer should be parallel with the hull, with a minimum amount of epoxy between the hull and transducer. Hold the transducer down with a weight until the epoxy dries.

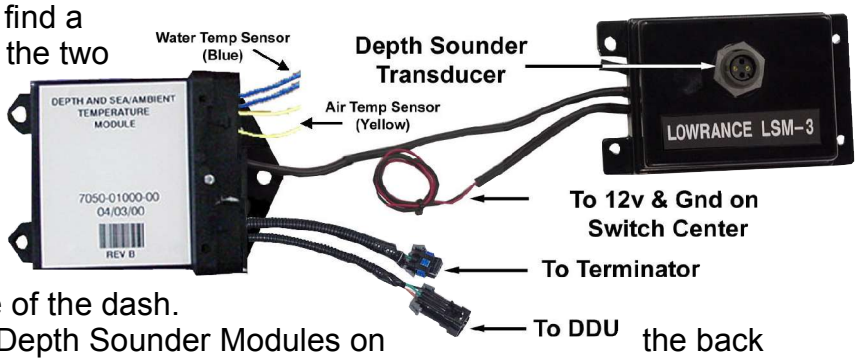
Step 3 – Installing Water Temperature Sensor

First, remove the center floor panel from the trunk. Next, measure upward 6” from the drain plug and drill a through hole using a 3/8” drill bit. After drilling the hole, feed the Water Temperature Sensor wires through the hole. Next, seal the through hole using 3M 5200 or another marine sealant. Finally, attach the sensor to the hull using the two included screws, after drilling a pilot hole using a 1/8th drill bit.



Step 4 – Installing Depth Sounder Modules

Under the dash, behind the radio, find a clear area of fiberglass and install the two components of the Depth Sounder Module, after drilling pilot holes, using the #8 screws. Use the three washers along with #8 screws to secure the component labeled Depth Sounder Module to the under side of the dash. It may be necessary to install the Depth Sounder Modules on the back of the drivers kick panel if enough space for installation cannot be found under the dash.



Terminator Plug

Step 5 – Wiring the Depth Sounder Module

First, remove the Terminator Plug from the nine pin male connector wired to the Digital Display Unit (DDU) and attach it to the nine pin male connector on the Depth Sounder Module. **Note: The Terminator Plug must be connected or the DDU and Depth Sounder will not work.**

Next, attach the nine pin male connector from the DDU to the nine pin female connector on the Depth Sounder Module. Finally, connect the plug end of the Transducer to the receiving port on the Depth Sounder Module labeled “Lowrance LSM-3”.

Finally, wire the red and black wires on the “Lowrance” module to the Switch Center, connecting the red with to the 12v terminal and the black wire to the Ground input.

Step 6 – Wiring Water & Air Temperature Sensor

First, run the Water Temperature Sensor wires from the trunk bilge to the engine compartment, and then down the fuel tank to the depth sounder transducer. The wires need to be run through the same cable channel the transducer wires were run through.
NOTE: Water and Air Temperature Sensors are identical, care should be taken to insure proper wiring.
Soldier or crimp connect the Water Temperature Sensor wires to the Blue wires. Next, connect the Air Temperature Sensor to the Yellow wires. Finally, tie wrap the Air Temperature Sensor to the wiring bundle underneath the dash.