

OWNER'S GUIDE &

INSTALLATION INSTRUCTIONS

Survey: *Installed in Lloyd's Type-approved Tank, CS235*

Record the information found on the cable tag for future reference.

Part No. _____ Date _____ Frequency _____ kHz

Sealcast™ Depth Transducer

Model: M192

Patent <http://www.airmar.com/patent.html>



11/16/20

17-174-01-rev.3

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Follow the precautions below for optimal product performance and to reduce the risk of property damage, personal injury, and/or death.

WARNING: Always wear safety glasses, a dust mask, and ear protection when installing.

CAUTION: Never pull, carry, or hold the transducer by the cable as this may sever internal connections.

CAUTION: Never use solvents. Cleaner, fuel, sealant, paint, and other products may contain solvents that can damage plastic parts, especially the transducer's face.

CAUTION: Never power sand or pressure wash the transducer. It may weaken the structure or damage the internal components.

IMPORTANT: Please read the instructions completely before proceeding with the installation. These directions supersede instructions in your instrument manual if they differ.

Tools & Materials

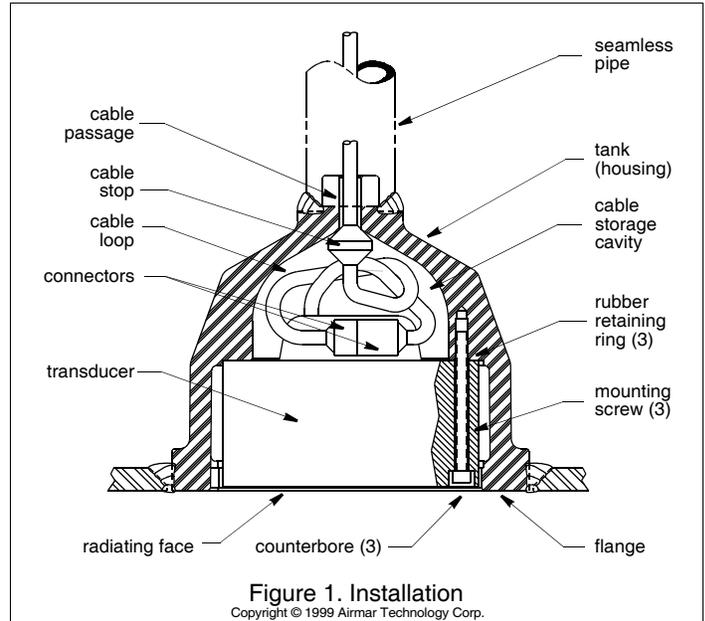
- Safety glasses
 - Dust mask
 - Ear protection
 - Water-based antifouling coating (**mandatory in salt water**)
 - Cable gland
 - Junction box
 - Underwater lubricant such as Aqualube®
 - Hex wrench: 8M
 - Marine sealant
- NOTE:** *The terms tank and housing are used interchangeably.*

Antifouling Coating

Surfaces exposed to salt water must be covered with anti-fouling coating. Use a *water-based* anti-fouling coating made for transducers only. Never use ketone based paint, since ketones can attack many plastics possibly damaging the transducer. It is easier to brush on antifouling coating before installation, but allow sufficient drying time.

Installation

CAUTION: Do not remove the rubber retaining rings. The transducer's mounting screws utilize rubber retaining rings to hold the screws in place during installation.



CAUTION: Lubricate the screw threads. Lubrication is necessary for removing the screws, if the transducer needs to be replaced.

1. Inspect the transducer, cable, and connectors carefully before installing. All parts must be clean and free of oil, grease, paint, solvents, and other foreign material that may hinder performance.
2. Pull the tagged end of the transducer cable (P/N 22-136-01) through the housing cable passage and the seamless pipe until the cable stop is seated *firmly* against the cable passage opening (Figure 1). Approximately 305mm (12") of cable will remain in the housing with the male connector attached.
3. Use a suitable cable gland at the top of the pipe to support and clamp the cable.
4. Secure the free end of the cable in a junction box located in a dry, gas free environment within the ship.
5. *Carefully* push the socket head end of each mounting screw into the counterbore of the transducer to fully expose the threaded end of the screw. Sparingly apply a uniform coat of Aqualube® or other similar underwater lubricant to the screw threads.
6. Push the threaded end of each screw back into the transducer until approximately 7mm (0.25") of the lubricated threads are exposed and held in place by the retaining ring.
7. While supporting the weight of the transducer, plug the mating connectors together until they are fully engaged. The connector faces *must* touch.
8. Slowly rotate the transducer approximately 1 to 2 turns as it is raised into the housing to properly dress the cable and joined connectors in the cable storage cavity. The transducer face will

be almost flush with the flange of the housing when the cable is properly stowed and the mounting screws are seated in the threaded holes of the housing.

NOTE: For diver installations, we suggest attaching the hex wrench to a lanyard.

9. Tighten each of the mounting screws using the hex wrench until the transducer is secured in the housing and does not move. The recommended tightening torque is 20N-m (15ft-lb).
10. Fill the screw heads and counterbores with marine sealant until they are flush with the transducer's radiating face (Figure 2). Remove any excess sealant to ensure smooth water flow over the transducer.

Maintenance

Aquatic growth can accumulate rapidly on the transducer's surface reducing the performance in weeks. Clean the surface with a soft cloth and mild household detergent.

Reapply antifouling coating every 6 months.

The information needed to order a replacement Airmar transducer is printed on the cable tag. Do not remove this tag. When ordering, specify the part number, date, and frequency in kHz. For convenient reference, record this information at the top of page one.

Obtain parts from your instrument manufacturer or marine dealer.

Gemeco

USA

Tel: 803-693-0777

Email: sales@gemeco.com

Airmar EMEA

Europe, Middle East, Africa

Tel: +33.(0)2.23.52.06.48

Email: sales@airmar-emea.com

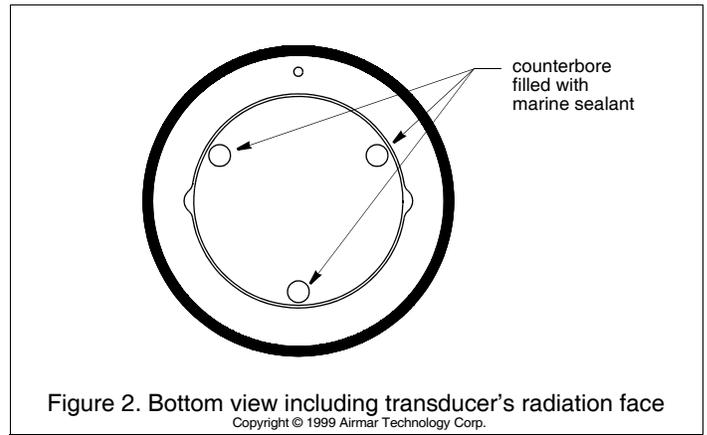


Figure 2. Bottom view including transducer's radiation face

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