FERROPILOT

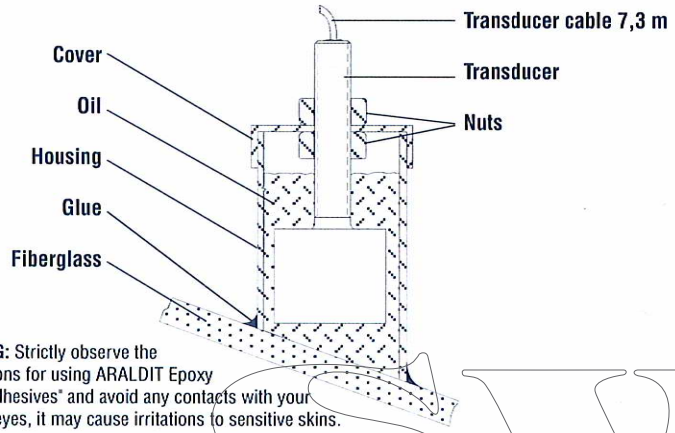
MOUNTING OF TRANSDUCERS INBOARD OF FIBERGLASS HULLS

The high performance of the echosounders makes it possible to mount their transducers inboard of fiberglass hulls without any losses of the depth ranges. However this feature is depending only on absolutely clean and bubble-free fiberglass as well as on the exact oberservation of the mounting instructions. The benefits of this inboard installation are:

1. No drilling of the hull
2. No damage to the transducer by floating objects or ground contacts
3. Easy installation, even when the ship is afloat
4. When the tests are showing that a proposed location of the transducer would be at a wrong place, the selection of the optimum mounting site is easily performed.

On planing hulls the siting of the transducer should be chosen in about one third of the boatslength from the bow and at two thirds from the waterline to the keel athwart ship; however the keel must be out of 45° of the transducer sounding beam.

On planing hulls the transducer must be mounted in that part of the hull which is keeping always in the bubble-free water.



WARNING: Strictly observe the "Instructions for using ARALDIT Epoxy Resign Adhesives" and avoid any contacts with your skin and eyes, it may cause irritations to sensitive skins.

No echosounder will work satisfactorily in an air/water mixture; therefore the greatest care should be exercised to locate the very best mounting position and sometimes several tests may become necessary to obtain the optimum result.

These tests should be executed in the following manner: Put the transducer in a small plastic bag, fill the bag with water and wet it and the selected position inboard of the hull thoroughly with water as well. Run the boat at normal speed and put the bag on tl wetted spot while observing the depth indications on the indicator. Select that locatior with the very best indications.

Having found that spot, cut the supplied transducer-housing according to the hull ang in such a way that the transducer finally will stay vertically.

Now clean the lower surface of the housing and the corresponding area with cleaning benzine and scrape it thoroughly with sandpaper to make the surface rough and absolutely free from grease. This is absolutely necessary to eliminate any performanc losses.

Put a sufficient amount of glue (Araldit Adhesive/Hardener mixture 1:1) on the underside of the housing to the hull so that it will stand vertically. To open the Tube tur the tip 90 ° counterclockwise. Assign the rest of the Araldit mixture (see sketch) around the outer edge of the housing with the special oil supplied with the package.

Insert the transducer into the cover of the housing and tighten its spindle with both nuts hand tight against both sides of the cover. Put the cover with the transducer on t of the oilfilled housing. (A special oil is being used to allow the transducer the optimu transmission and reception of the ultrasonic signal pulses.)

Avoid a thick layer of paint on the outside of the monting area and keep it free from barnacles and growth which will reduce the performance of the echosounder. This location should be controlled in regular intervals.

On boats with double bottoms or airlayer-, resp. sandwichhulls this method is practicable only, when the innerlayer is cut-off and the foam removed, so that the housing with the transducer inside is standing directly on the outer hull.

ATTENTION:
During the setting time of the adhesive mixture the temperature should not be under a least +18°C. The higher the temperature, the faster the setting and hardening.

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