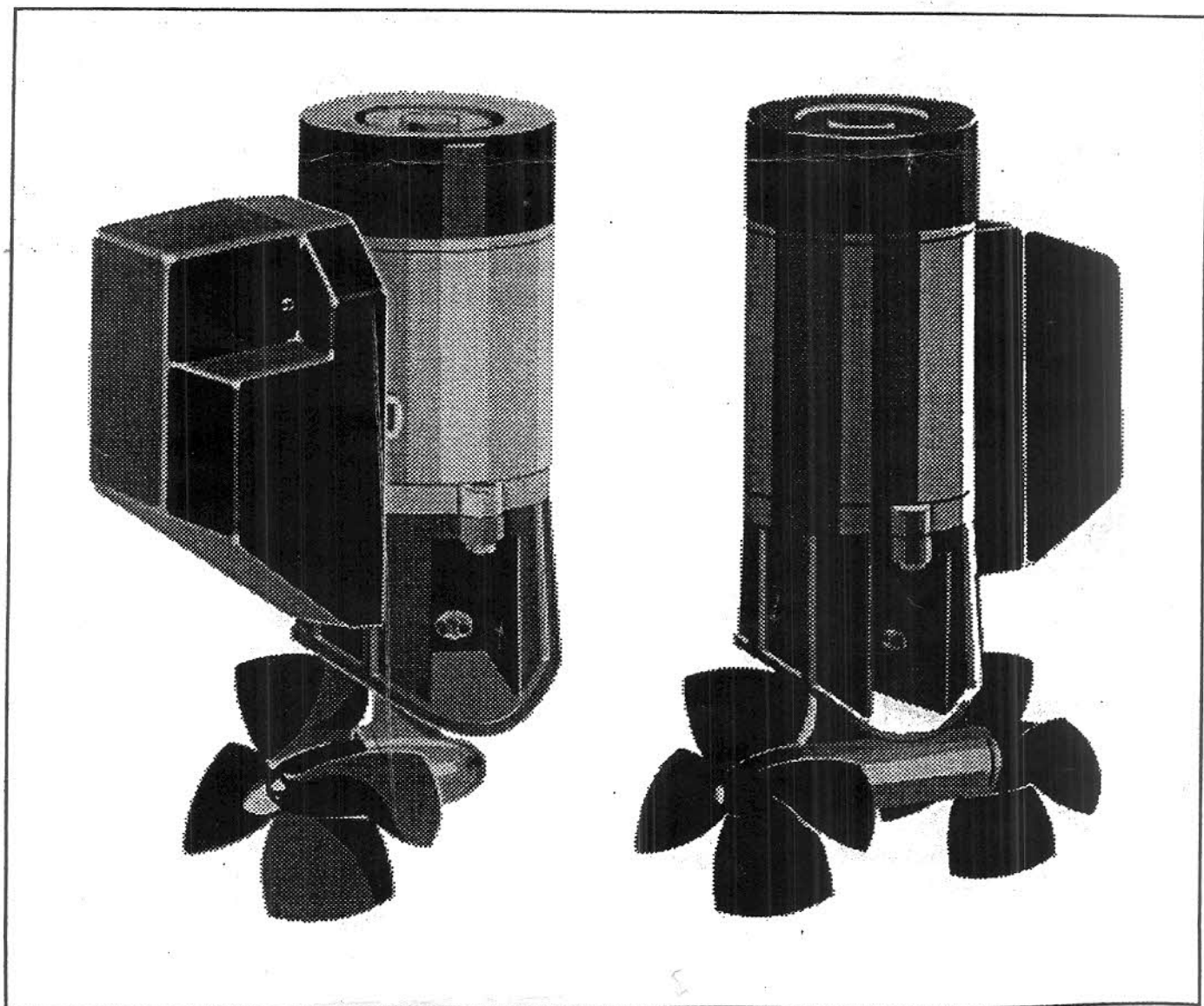


Bow thruster BP 300 and BP 450  
Bugstrahlruder  
Propulseur d'étrave  
Elica di prua  
Propulsor de proa  
Bogpropeller

QUALITY LINE  
MARINE ACCESSORIES  
DISTRIBUTED BY  
VOLVO PENTA



**NB.**  
Read this instruction carefully  
before starting to install  
your bow thruster

**Advice for installation**

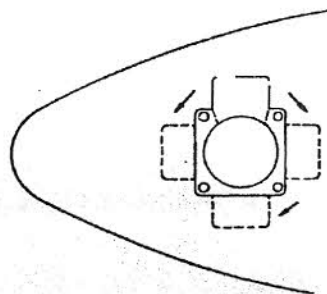
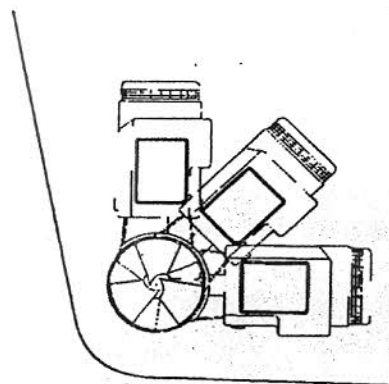
1. Decide the position for the bow thruster, see the dimensional drawings fig.1 and 2.

**NB.** Recommended minimum distance from the centre of the tunnel to the water line is approx. 200 mm.

For maximum performance, install the bow thruster as far forward and as deep in the hull as possible.

Please make sure that no part of the propeller is jutting out of the hull.

Where space is limited the bow thruster can be mounted in any angle, from 0° to 90°. Installation from 45° to horizontal requires a support for the motor.



It is also possible to install the motor with the jack panel towards your preferred direction.

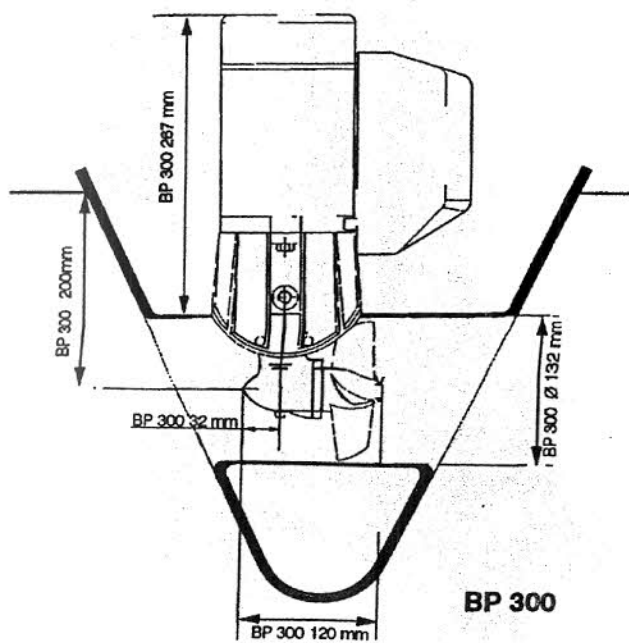


fig. 1

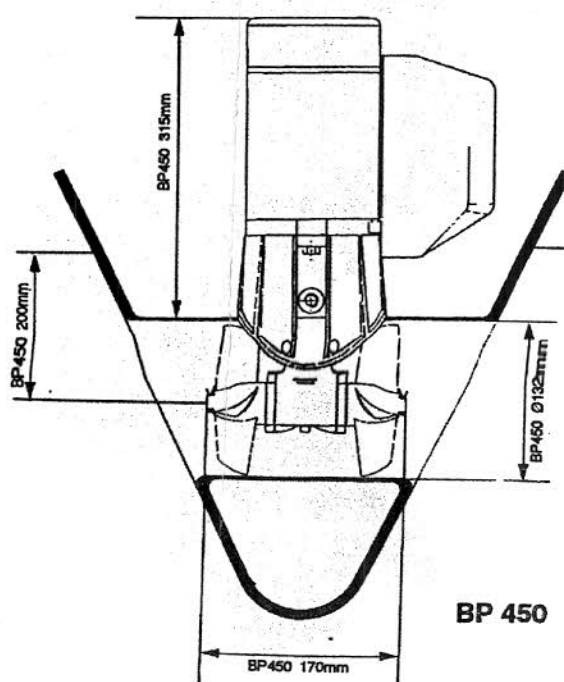


fig. 2

## Installing the propeller tunnel

**NB!** Read the entire instruction thoroughly before starting to install the Bow thruster.

1. Decide the best place where to install the bow thruster.
2. Use the compass to mark the centre of the hole for the propeller tunnel.
3. Draw the outlines of the tunnel hole on the inside of the hull (fig. 3) to ensure the hole will be positioned correctly. This is very important for clearance beneath the tunnel.
 

**NB!** Check that the tunnel is positioned 90° crosswise the boat.
4. When the tunnel position is decided the installation can start. Drill one hole, dia. 25 mm on each side of the hull, where the compass tips show. See fig. 3
5. Guide the tool gauge from the outside through the hull sides and cut the holes using the installation cutter. See fig. 3.
 

**NB!** When cutting the holes, do not cut all the way around but leave small support lugs on each side to support the gauge during the operation. When the holes are cut the small remaining parts are cut away with a hack saw or similar.

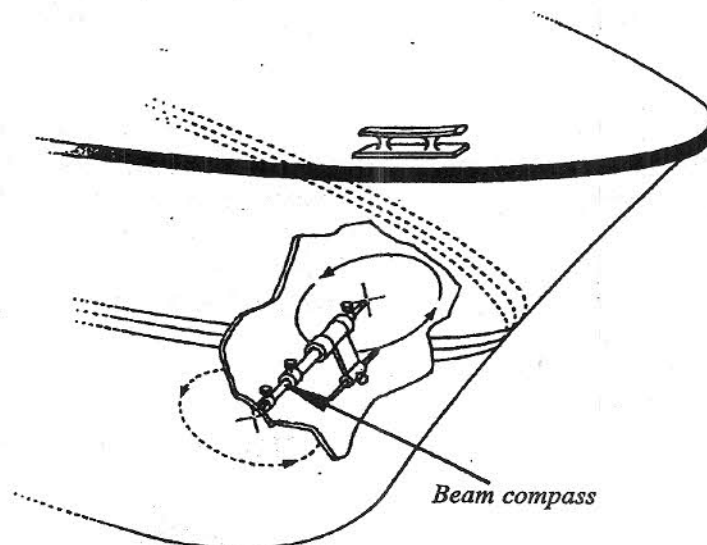
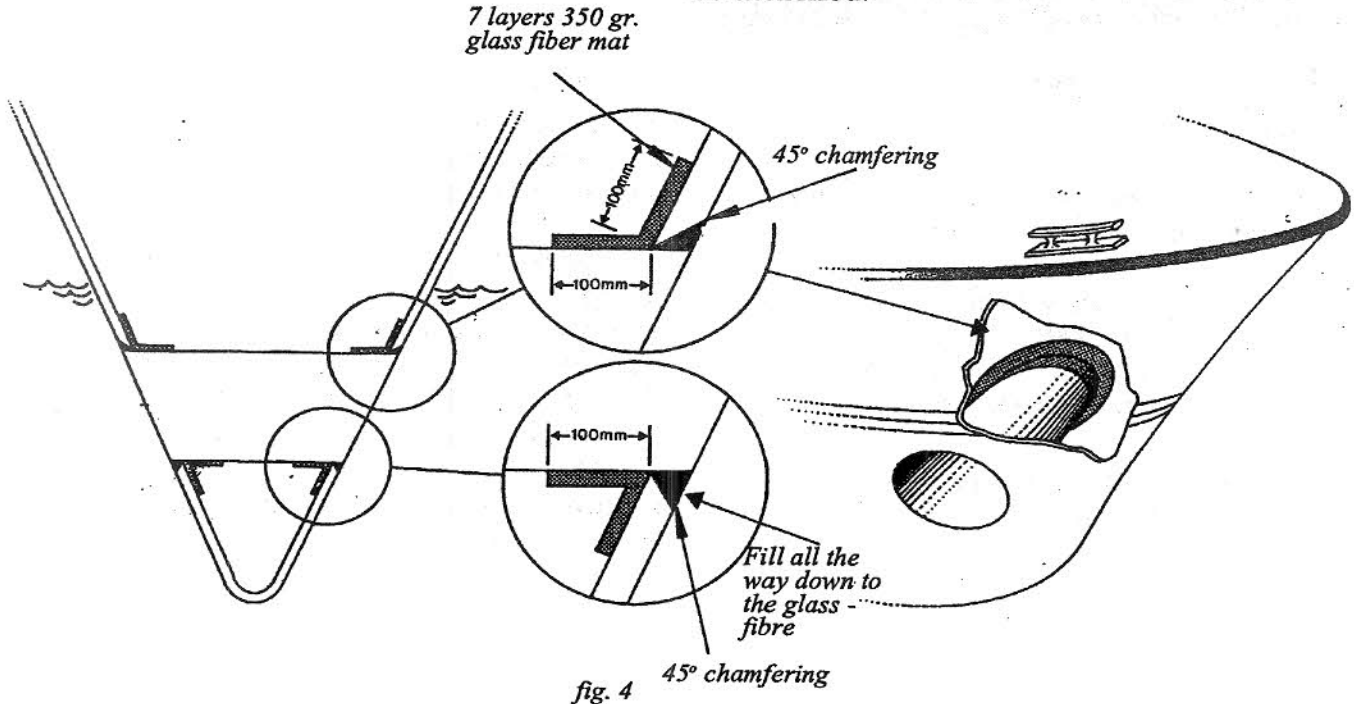


fig. 3

6. The outer edges of the tunnel holes should be chamfered 45° down to the innermost edge of the hole. See fig. 4.

**NB!** If the boat is of "Sandwich" construction, the core around the tunnel must be ground off so that the glass fiber mats can be attached.



7. Put the polyester tunnel in place and mark off the hull all around on both sides. Use a pencil for marking.

8. Cut the tunnel to required length. (**NB!** before doing so, please read the instructions for Special installations.)

9. Buff the tunnel surface inside and outside. The tunnel must be absolutely clean from all wax. **Clean with acetone.**

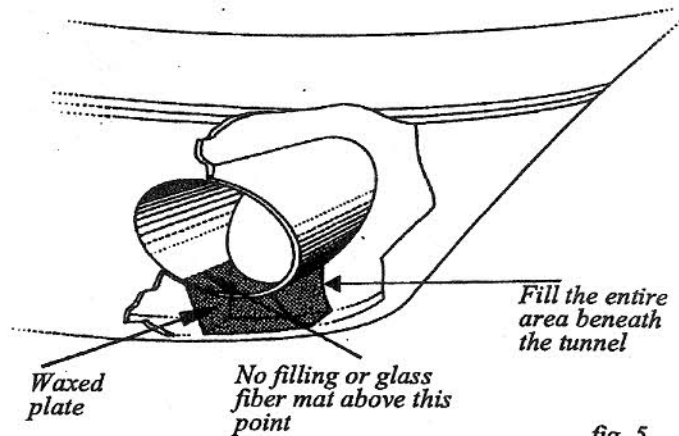
10. On the inside of the hull, on an area of 100 mm around the cut holes, all Topcoat should be ground off (use an adjustable grinder) to get a clean surface on which the 7 layers of 350 gr. glass fibre mats can be attached. See fig. 4.

**Remove all dust with a vacuum cleaner and clean with acetone.**

11. Should it be impossible to fasten the tunnel with glass fibre all the way around the tunnel, the entire space beneath the tunnel must be filled. See fig. 5.

The filling must be uniform and might be made from Talcum Powder and Polyester, or equivalent.

12. To prevent the filling from running aft, a waxed plate, formed after the bilge and tunnel shapes, must be put into place. See fig. 5. Sometimes also the outer edge of the holes must be taped to prevent the filling from coming out there.



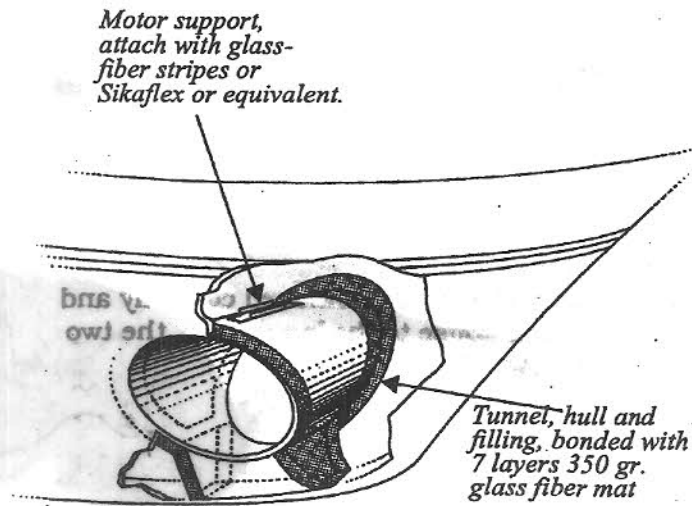


fig. 6

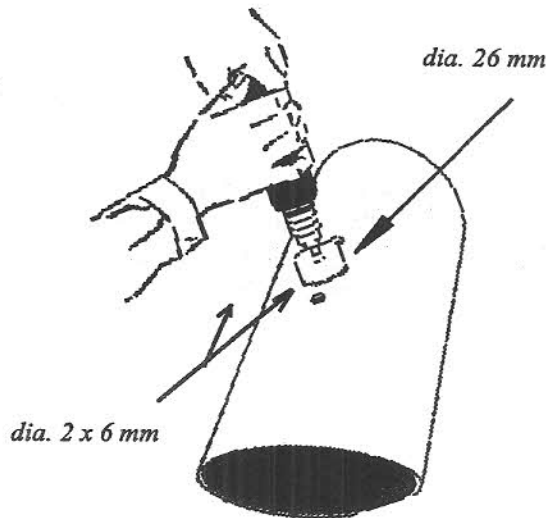


fig. 7

13. When the filling is baked remove the plate.

14. Fill the gap between hull and tunnel all the way down to the bottom tip and alongside the hull. See fig. 4.

Grind the surface and round off the inner edge of the tunnel holes.

15. Mark the fitting holes on the tunnel using the bracket as template.

Make sure the bracket is standing vertically and is centered fore and aft.

Drill two holes, dia. 8 mm and one hole dia. 33 mm . The holes must be drilled in the center of the tunnel. (See fig. 7)

16. Paint the hull interior with Topcoat.

17. The hull exterior and inside the tunnel must be primed twice with two-pack coating and then painted with bottom coat.

**The following instructions are only for Special installations.**

**A.** Certain boats might need a bulb, of the same type as a foil, on the fore edge of the tunnel. This to prevent accidental starts of the Bow Thruster when water is pushed through the tunnel. The arrangement also reduces the propeller stress significantly. In these cases the tunnel's fore edge can be cut like in fig. A.

**B.** Buff the surface and clean with acetone. Fix 2-3 layers of fibre glass mat and fill with glazing. See fig. B.

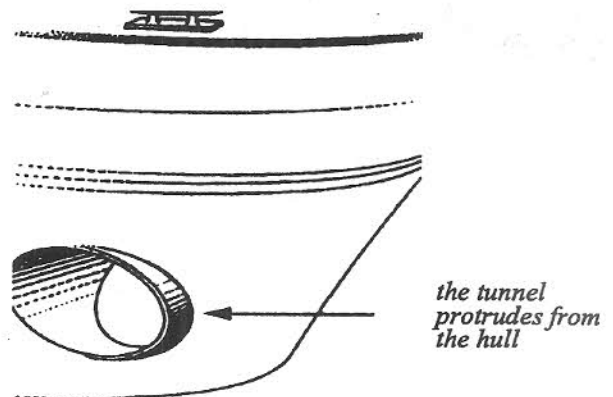


fig. A

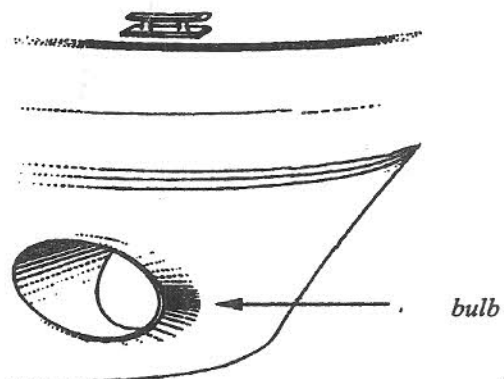


fig. B

