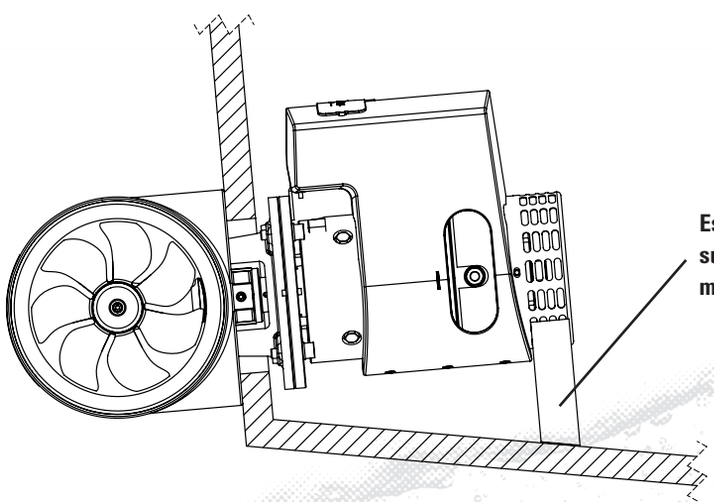
STERN THRUSTER KIT

INSTALLATION MANUAL

Considerations for positioning the stern thruster

- Make sure the stern tunnel does not protrude underneath the hull
- Position the stern thruster as close to the centre line of the boat as possible
- Hull thickness should be less than 35mm
- In case of a sandwich build hull, the sandwich material must be replaced by a solid core where the stern tunnel is positioned
- Check for clearance inside the boat
- Also check thickness of the hull's bottom. It should not interfere with the bolt hole pattern of the stern tunnel
- The electric motor of the stern thruster must be supported
- The inside of the boat where the stern thruster is mounted must be absolutely dry at all times
- Free water flow to the sides of the thruster tunnel is essential for proper operation. Any obstructions will make the stern thruster less efficient.
- To make our stern thruster tube as compact as possible, it is not possible to pre-assemble the tailpiece in the 150 and 185mm tunnels. Only after installation of the tunnel the tailpiece can be mounted.
- For best performance the distance between the top of the thruster and the water surface should be at least the same as the tunnel diameter.



IMPORTANT!
The stern thruster tunnel is not designed to take any external loads or shocks and must always be protected by a rigid frame or swimming platform.
Don't stand on the tunnel and make sure it is protected when manoeuvring with the boat. Failing to do so can result in sinking of the boat.

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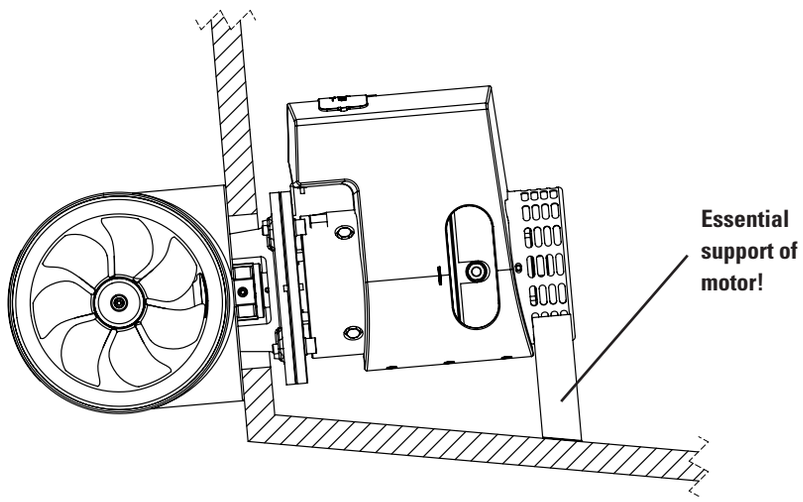

Installation

First check if the tailpiece fits in the pre-drilled holes of the stern tube and correct when necessary (remove after fitting).

When the correct position is established, use the included drilling pattern to drill the holes. Before cutting the large hole, check the position of the bolt holes and correct when necessary. Make the large cutout in the same diameter as the inside of the tunnel flange (according to the drill pattern). With a sandwich built hull, remove the sandwich material 45mm deep and replace with hard wood or epoxy with micro-balloons. Protect the fresh cutout from water ingress by applying epoxy or gelcoat.

When fitting the 250mm stern thruster tube it is recommended to fit the tailpiece and oil feed pipe (for 170kgf version) before the tunnel is bolted to the transom.

Check the bolt length of the mounting bolts to be used. The length of the thread sticking out should be 12-16mm (M8 bolts) or 15-20mm (M10 bolts) . Use large washers on the inside of the boat to distribute the load. Make sure the mounting surface is flat and free of any burrs.

Position the rubber O-ring and apply sealant to the mounting surface and around the bolt holes (Sikaflex 291i/292i or 3M 4400BC/5200FC). Tighten the bolts evenly until the O-ring touches the hull surface. Let the sealant dry 6-12hrs before further tightening the bolts. This makes sure there is sufficient elasticity in the sealant to do its work. Remove any excess sealant before it dries. Make a support underneath the electric motor.

When a hydraulic motor is used, make sure the hoses are supported to prevent any excessive loads on the stern tube.

Assembly of the tailpiece to the tube is described in the manual of the thruster. The flexible coupling is only fastened to the electric motor and simply slides over the tailpiece.

Make sure the stern thruster compartment is always free of any water. Plug drain holes in bulkheads and stringers. Install an automatic bilge pump. Potential water leakages like propeller shafts, rudder shafts, etc. should all be isolated from the thruster. All electrical cables connecting the thruster must be mounted high to avoid any contact with water in the bilge.