Keel Lifter Installation – fitting to 2.3 or 303

Hansa part 2.3 # 5221

303 #5241

Also requires fitting components to fit to deck, either
#5203 Onboard keel lifter hull components – Kit
#5204 Onboard keel lifter hull components - Fitted

Keel lifters are used to raise and lower keels to facilitate sailing on and off a beach. There are volunteer keel lifters, used by someone standing in the water, and onboard lifters used by the crew. Both 2.3 and 303 onboard keel lifters are similar, the difference being the 2.3 uses a 4 part purchase and the 303 a 6 part purchase.

Onboard keel lifters are telescopic so when not in use can lay on the cockpit floor alongside the keel case. When extended they are tall enough to fully lift the keel, but will obstruct the boom. When reduced can lift the keel half way, while short enough for the boom to clear the top of the keel with the mainsail reefed. This is a valuable asset as with the keel raised its sensible to have first reefed the mainsail, while there is still enough depth of keel to give stability and lateral resistance meaning the boat is under control while you sail into knee deep water. That's the purpose of onboard keel lifters.

An onboard keel lifter requires some fittings to be installed, so these are available in a kit which includes; 1 cheek block with M5 bolt, washer and nut. 1 clam cleat with 2 self tappers. 1 fibreglass "donut" which locates the keel lifter's foot. A template is provided which locates these fittings. 1 saddle with 2 self tappers to fit to the keel.

Installing the Onboard Keel Lifter fittings - Part #5203

1. First read the text on the A3 attached PDF sheet. Then with scissors cut out the upper and aft shape of the template.

2. Place the template on the starboard side of the keel console, roughly aligning its edges and the seat tube cutout. Hold in place with adhesive tape. Refer Fig.1

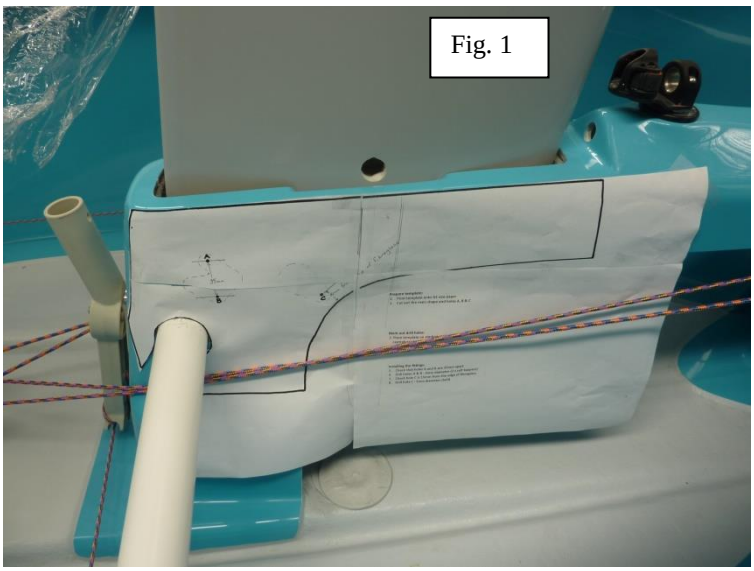
Fig. 1

3. Drill 3mm holes for the cleat self tappers and the cheek block bolt.

4. With a ruler project down onto the floor the near vertical line which represents the centreline of the keel lifter tube. This locates the position of the donut so mark the floor with a pencil line.

5. After removing the template, drill out the cheek block hole to 5mm and attach the block with nut and large washer on the inside.

6. Attach the cleat with its 2 self tappers direct into the predrilled 3 mm holes.

7. Put the board in the keel case so you can see in practice why and how the lifter will line up.

8. Stand the keel lifter vertically positioned just in front of the cheek block. Lean the lifter forward to the angle representing the forward rake of the keel (yes its not vertical but leans forward). With the tube passing in front of the cheek block, and the lifter lined up down the centreline of the keel, note the foot of the lifter should be sitting on or very near the line you drew earlier on the floor. Refer Fig.2


Fig. 2

9. Place the donut under the lifters foot, check it's alignment then pencil around the donut. Use course sand paper to scratch the surface and remove the gloss of the gel coat where the donut will sit. Also sand the under side of the donut. Refer Fig.3

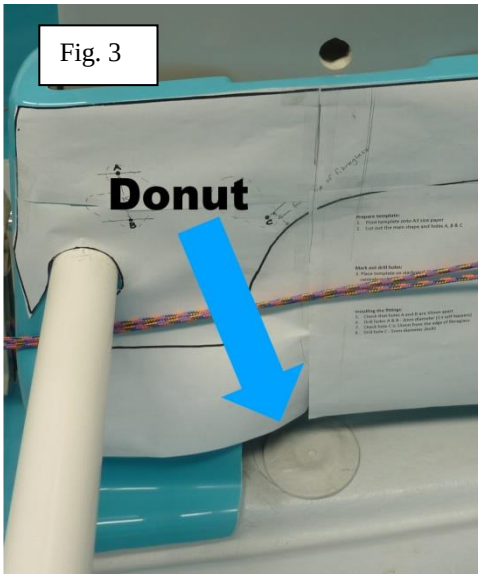

Fig. 3

10. Glue the donut in place with a few dabs of epoxy or use a bonding sealant like Sika. (Not silicon it doesn't stick to anything). That completes the hull fittings.

10. Position the saddle in the trough of the keel, on an angle so the self tappers pass through raw fibreglass, not into the join down the keel centreline. The saddle has been bent to suit this complex shape, so check it sits down flush. If not bend it a little to suit. Refer Fig.4

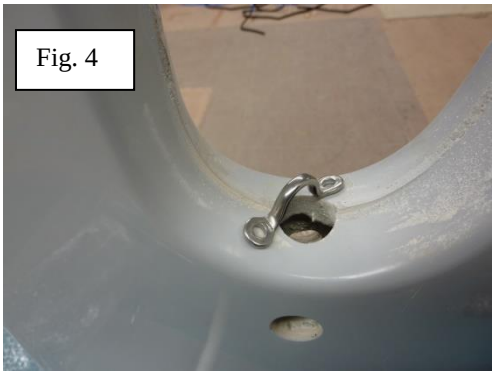
Fig. 4

11. Drill the holes for the self tappers. Use a 3mm bit. These want to be a tight fit, but too tight and it will cause the gelcoat to chip. Note that the 2 self tappers used here are going to go in on an angle opposing each other. Make sure you drill the holes for these at the correct angle. Refer Fig.5


Fig.5

That completes the installation.


Fig.6