



CONVERSION of KEMP DRUM REEFIN R232/126 to FURLIN RB Mk2 OPERATING SYSTEM

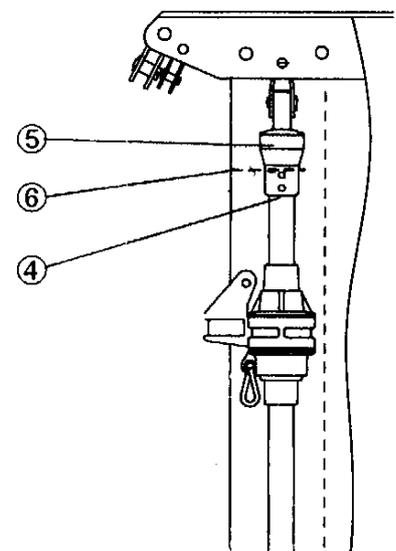
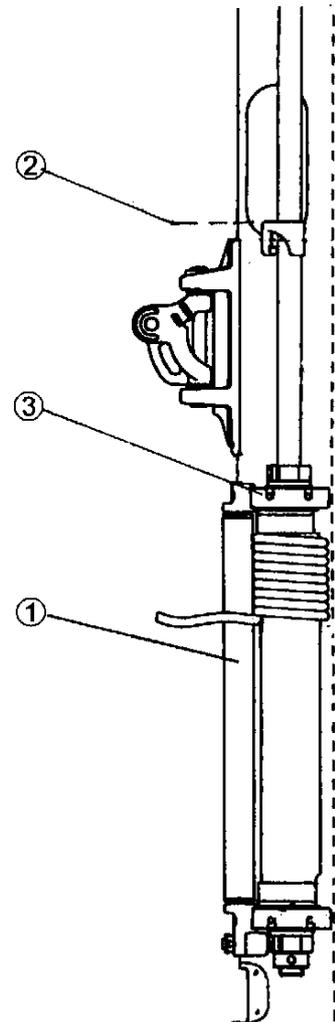
These instructions apply to KEMP Reefin operating systems fitted to mast sections R232/126 & R260/136. They are identified by having a long smooth internal vertical rope drum, and a reefline roller located to port of the centre line. Below the vertical roller is a separate rectangular access panel.

The modification replaces the existing vertical rope drum with the current production drive gearbox set onto a conversion plate. The existing asymmetric luffspar is retained, but joined by a tensioner unit to a new tack hook assembly.

It is theoretically possible for the conversion to be done with the mast up. However, this will take much more time, and be very difficult. We is strongly recommended that the mast is removed from the boat. These instructions assume the mast is ashore on trestles.

Method

1. Remove the sail.
2. Remove the secondary roller ①. Pull the green reefline, rotating the spar, then cut the line close to the drum.
3. Mark the present height of the tack hook on the mast with a pencil for later reference ②.
4. Remove the aluminium access cover located beneath the rope drum. Loosen the lock screw, loosen and remove the spar tension nut. (see Drawing A)
5. Remove the mast heel.
6. Remove the 8 side bearing locating screws ③, and slide the drum carefully down and out of the mast. If necessary, remove the kicker bracket and turning blocks assemblies.
7. Remove the headbox top nuts, disconnect or loosen any electrical cables, and withdraw the headbox far enough to expose the luffspar. Cut the luffspar ④ where it enters the hanging bearing ⑤. Taking care not to disturb the top cross bolt, remove the short cut luffspar end from inside the hanging bearing. Using the headbox & hanging bearing as a guide, mark the "top of luffspar" ⑥ position on the mast with pencil.



8. Cut a second identical oval access ⑦ hole vertically above the existing hole in the port side mast wall. It's lower edge should be 435mm above the lower edge of the existing oval access hole.

9. Referring to Drawing GE 075, enlarge the mast cut-out below the gooseneck bracket as shown in the drawing and cut two access/grease holes on the port side ⑧.

10. Place the conversion plate/gearbox unit in position, to check the cutout size and location. The new plate's top edge should be 75mm below the gooseneck bracket's base. Establish the correct position for a hole on the centre line of the sail compartment forward wall for the gearbox forward arm ⑨. This hole will penetrate the mast section, so take great care not to damage halyards.

11. Temporarily connect the new tackhook assembly to the gearbox drive eye using the tubular toggle & clevis (cotter) pin. Lay them on the mast in the correct vertical position, and check that the tackhook will be at the correct height.

12. Remove the tackhook assembly, and remove the gearbox from the plate.

13. Using the cover plate as a template, drill 26 x Ø6.5mm rivet holes in the mast. Rivet the plate in position.

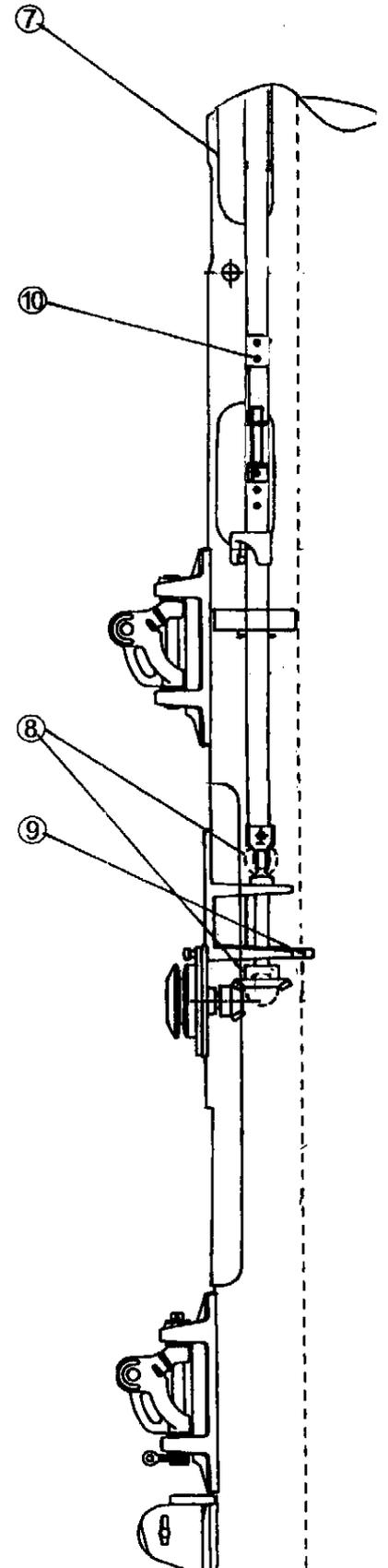
14. Slide the main luffspar down the mast to expose it's lower end. Cut it 50mm below the base of the existing tack hook casting. Drill off the 3 rivet heads, and remove the lower plastic cover and tack hook.

15. Disconnect the adjuster cover from the Tack hook assembly, and slide it onto the main luffspar. Using the 540-133 stainless steel half rigging screw as a guide, drill 4 x Ø4.9mm holes in the luffspar ⑩. Coat the 540-133 with mastic (it already has an anti-corrosive lacquer), then rivet in place.

16. Slide the luffspar up into the mast again, so that it's new lower end is in line with the top of the lower oval access hole. Remove the clevis(cotter) pin from the pressed tubular toggle, then slide in the new Tack hook assembly. Do not connect them together yet.

17. With the gearbox partly in position, connect it's drive eye to the tubular toggle with the clevis pin. Screw the gearbox in position. Grease the screw thread, connect the two luffspar sections at the adjuster, and screw in by 20mm only.

18. Mark the luffspar at the "top of luffspar" mark made earlier. Disconnect the adjuster, slide the main luffspar up to clear the mast top. Cut it at the mark.



19. Prepare the luffspar top. Using the top bearing as a pattern, drill holes and cut away the plastic sheath to match the old offcut. Connect together.

20. Slide upper luffspar down, and connect the adjuster again. At the same time, position the headbox on it's top bolts. This task is awkward. Re-fit the headbox nuts.

21. Slide the halyard swivel down to half mast height.

22. Holding the upper luffspar steady, rotate the linedriver and tension the luffspar. Frequently slide the swivel to the masthead, and check to see when the luffspar mid section just holds itself clear of the sail compartment wall. Slide down and secure the adjuster cover. Slide the swivel down to the upper access hole level.

23. Step the mast. Attach a retrieval line to the swivel, then hoist it to the masthead. Grasp the spar through the upper access hole, and shake. If it is difficult to make it contact the sail compartment sides, the tension is correct. If not, re-adjust the tension as necessary. Return the swivel to upper access hole level.

24. Fit the oval access holes and grease holes plastic covers.

25. Revise the deck layout to allow the endless reefline to run correctly. The linedriver rotates clockwise (viewed from aft) when reefing.

26. Make an endless splice in a new \varnothing 10mm reefline using the enclosed instructions.