

Reassembly of spliced in-mast furling mast

Tools:

Screwdriver (phillips head)
Half round file
Hammer
2.5 mm mandrel
Sailmakers needle.

Furthermore needed for mast sections 214x122, 232x126 and 260x136: Poprivet gun, drill, 6.5 mm drillbit.

A. Mast section reassembly

1. **Alt. 1: Mast parts packed separately.**

Put the mast parts with fronts facing upwards. Tie the halyard messenger lines together, checking carefully that the lines are correctly connected and not twisted. Feed fitted cables through the lower mast part. Clean the surfaces of the joint. Keep messenger lines and cables tight to prevent them from being damaged when the mast parts are pushed together. Push the parts together, while feeding cable conduit covers into their proper positions. Keep the mast straight at the joint by supporting both mast parts rigidly. Align mast parts carefully so the predrilled holes in mast section front and butt strap match perfectly.

1. **Alt. 2: Mast parts “folded” and packed together.**

Halyards, cables and messenger lines are fitted to the mast, and only need tightening up when mast parts have been aligned prior to pushing together. In other respects follow instructions 1.Alt. 1.

2. **Alt. 1: Mast sections 214 x 122, 232 x 126 and 260 x 136**

Fasteners:

3 front rivet line:	Poprivets LK850 (countersunk)
Remaining rivets in forward butt strap:	Poprivets LD850 (dome headed)
Aft butt straps, 214x122 and 232x126 :	Screws MFX 6x10
Aft butt straps, 260x136:	Screws MFX 6x12

Screws for aft butt strap are also used as temporary assembly screws in the forward butt strap.

- 2.1 Press mast half and forward butt strap together along the front line using some of the screws. Threaded holes in the butt strap decide their positions. Pull the adjoining rivets. Remove the screws on the front line, drill the holes 6.5 mm and rivet.
- 2.2 Put the mast with one side upwards. Recheck mast straightness at the joint. Press the joint tight using screws in the remaining threaded holes in the forward butt strap. Rivet the adjoining holes, remove the screws, drill and complete riveting in the forward butt strap. Then fit the screws in the aft butt strap using the enclosed locking adhesive. Turn the mast and repeat this operation on the other side.
- 2.3 Remove rivet mandrels. Check the sail groove and slot. Some filing may be necessary to make them smooth at the joint. Check sail compartment at joint for excess locking adhesive, and clean if necessary. Fit the spinnaker pole track if any. Fit all the rivets into their holes provisionally before they are permanently riveted (the track might have been put up side down).



2. **Alt. 2: Mast section 290x150**

Fasteners:

3 front screw lines: MFX 6x16

Remaining screws: MFX 6x12

2.1-3 The same procedure as in Alt. 1 is followed, except that, all fasteners being screws, no temporary assembly screws are used, and there should be no riveting. Start fitting the screws at the front line and proceed aft, finishing one side before starting on the other. Do not forget the locking adhesive.

B. Luff extrusion assembly

- 1 Put the mast with the port side up. Slacken the messenger lines at the head box 200 mm. Remove the four nuts on top of the mast head box, lift the head box off the mast extrusion and leave it hanging in the messenger lines with the sail compartment free. Be careful not to get messenger lines twisted.
- 2 Remove the top luff extrusion from the sail compartment
- 3 Pull out the lower luff extrusion (the one with the tack hook at the lower end) at the masthead until the top end with the joining sleeve just protrudes out of the mast. Do not remove the halyard swivel. Align the top luff extrusion with the lower one by supporting it in the top end. Push the two parts together (the luff extrusions are stored the right way in the sail compartment during transportation, and should not be turned around. However the extrusions, being unsymmetrical, cannot be spliced the wrong way). Check that the sailgrooves of the two luff extrusions match perfectly. Fit and pull the enclosed rivets. Remove rivet mandrels.
- 4 Push, or carefully tap the plastic cover of the top sail extrusion downwards until it meets the lower one. Push the assembled luff extrusion into the sail compartment until the end is just protruding. Lift the head box and fit the top swivel to the luff extrusion using the two screws and nuts fitted to the top swivel.
- 5 Refit the masthead box, feeding the hook bolts into their appropriate holes in the head box. Check that the messenger lines do not get stuck between mast extrusion and head box. Adjust headbox position until chiselled markings agree with the lines in the mast extrusion. Refit and tighten the nuts on top of the head box.
- 6 Fit the lower end of the luff extrusion assembly to the shaft of the furling gear with the clevis pin/ split pin of the lower end toggle. To avoid injuries later, split pin is preferably fitted on the side opposite to the tack hook.
- 7 Tension the luff extrusion following instructions in the In-mast furling mast manual, page 4.

C. Halyard fitting

Fit the halyards one by one. Do not untie more than one messenger line at a time, as they easily get tangled. Using a sailmakers needle, feed the top end of the messenger line through the lower end of the appropriate halyard and knot. Carefully pull the halyards down inside the mast.

