

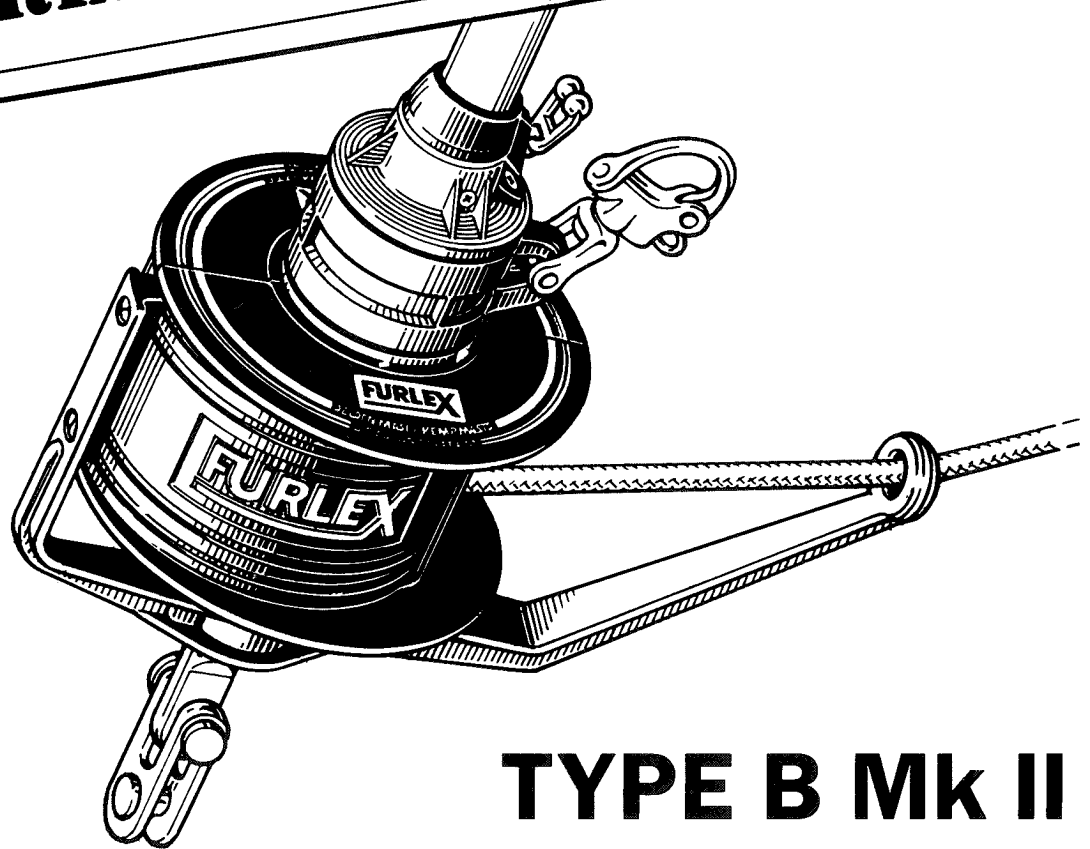
# FURLEX

JIB FURLING & REEFING SYSTEM



**SELDÉN**

## IMPORTANT INFORMATION



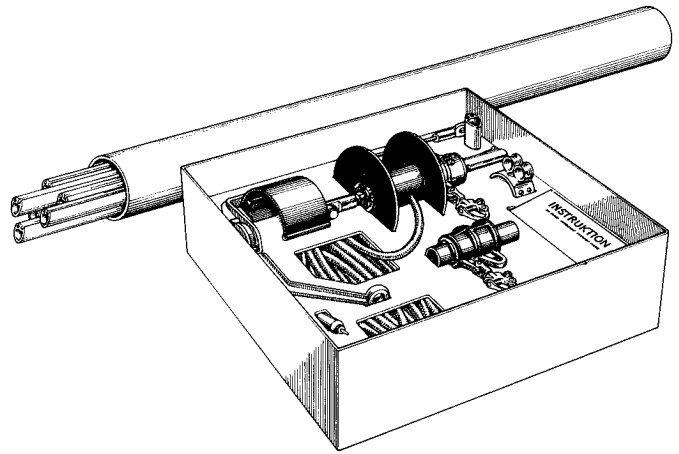
### TYPE B Mk II

# MANUAL FOR ASSEMBLY AND OPERATION

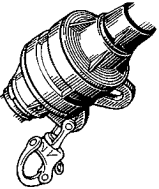
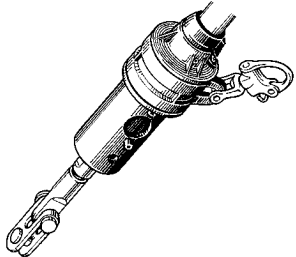
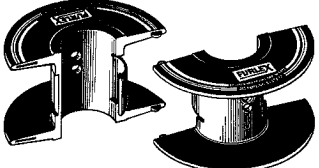
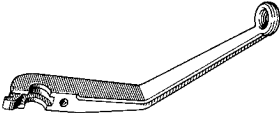

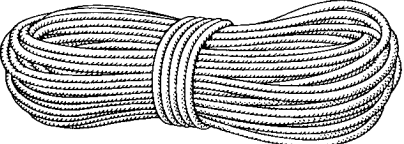
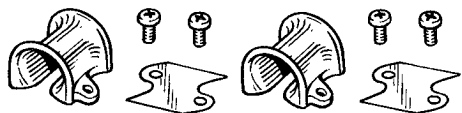
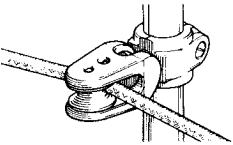
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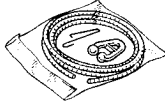

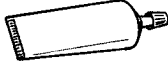
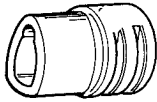
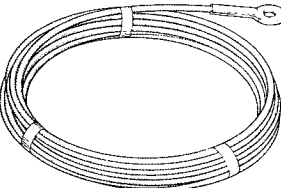
# CHECKLIST

Check that the kit is complete.







## Packing box

<input type="checkbox"/> 1 halyard swivel (with snap shackle)	
<input type="checkbox"/> 1 lower bearing part (with snap shackle)	
<input type="checkbox"/> 2 line drum halves	
<input type="checkbox"/> 1 line guide arm	
<input type="checkbox"/> 1 line guard with screw	
<input type="checkbox"/> 1 furling line	
<input type="checkbox"/> 2 halyard leads 508-135, incl 4 screws and insulator sheets	
<input type="checkbox"/> 4 stanchion blocks	

<input type="checkbox"/> 1 drillbit $\varnothing 5,3$ mm	
<input type="checkbox"/> 1 luff extrusion sample (for the sailmaker)	
<input type="checkbox"/> 1 prefeeder incl. rubber cord and hook	
<input type="checkbox"/> 1 locking adhesive	
<input type="checkbox"/> 1 tube lubricating grease	
<input type="checkbox"/> 1 top guard incl. 2 screws	
<input type="checkbox"/> 1 forestay wire	
<input type="checkbox"/> Certificate of guarantee	To be able to keep you informed about new developments, maintenance and handling of your FURLEX, your dealer should fill out the enclosed register coupon and return it to us.

### Packing tube

<input type="checkbox"/> 1 1000 mm luff extrusion with distance tube + joining sleeve	
<input type="checkbox"/> 1 2000 mm luff extrusion with distance tube + joining sleeve	
<input type="checkbox"/> 3—6 2400 mm luff extrusions with distance tube + joining sleeves	
<input type="checkbox"/> 1 sail feeder <input type="checkbox"/> 1 long connecting spring for each 2400 and 2000 mm luff extrusion <input type="checkbox"/> 1 short connecting spring for the 1000 mm luff extrusion	

### TOOLS NEEDED FOR ASSEMBLY

Screw driver  
Hacksaw  
2 adjustable spanners (size 16)  
Pair of pliers (type "poly-grip")  
Adhesive tape  
File  
Steel measuring tape (20 m)

Knife

For halyards leads:  
Heavy duty screwdriver for phillips-head  
Drill  
(Drillbit dia. 5,3 mm enclosed in the package)

## PRODUCT INFORMATION

- FURLEX is supplied as a complete kit containing every required part.
- FURLEX is the ultimate jib furling gear for cruising and racing. The line drum and guide arm are easy to remove if you want to race.
- Twin luff grooves allow fast sail changes (a great feature for the racing man). When cruising they also make goosewinging two jibs possible when running downwind.
- FURLEX is designed for reefing under severe conditions. However make sure that the sail has sufficient strength
- The automatically retracted prefeeder is always handy when required.
- The ballbearing system is based on a unique system which distributes the loads along the entire ball race. This system gives smoother furling with less friction.

**Follow the instruction carefully when assembling FURLEX.**

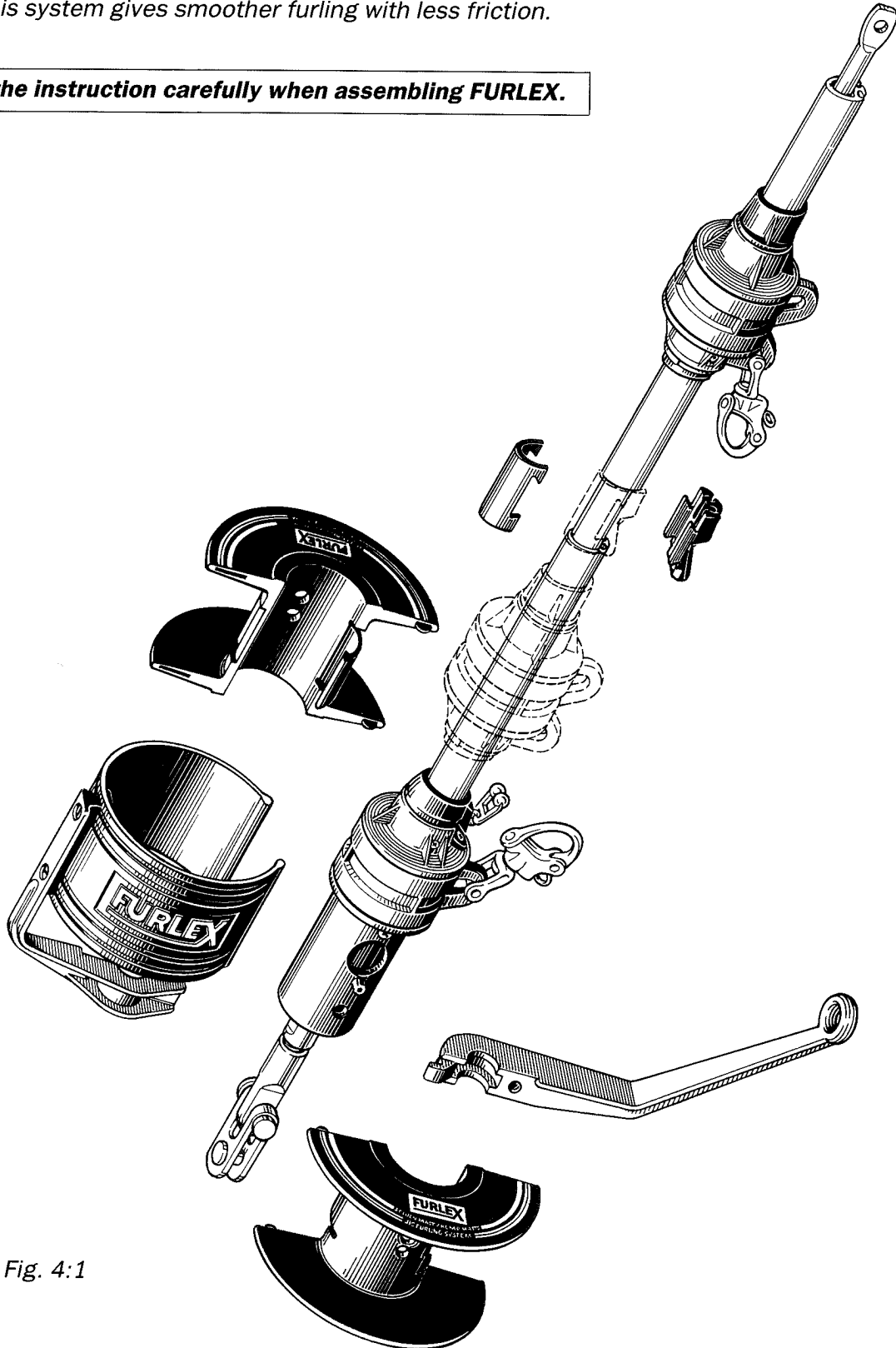
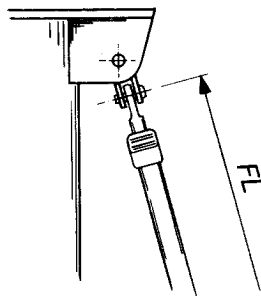


Fig. 4:1

## HULL AND MAST ATTACHMENTS

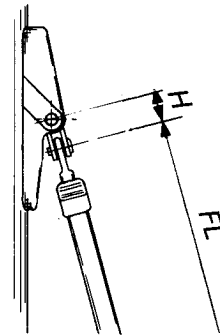
There are many different hull and mast attachment designs. Generally the fittings should be designed so that the connections allow enough flexibility to cope with forestay sag. Check that the spinnaker halyard, if any, cannot catch the halyard swivel or the top end of the luff extrusion when furling. If this can happen, let the halyard run through a halyard lead (508-135) that keeps the halyard clear.

Fig. 5:1



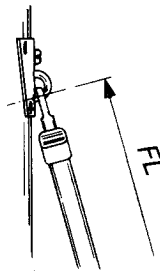
**Forestay attachment on masthead boxes:**  
Always connect the stay with a toggle to give maximum articulation.

Fig. 5:2



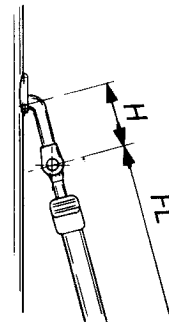
**Forestay attachment on fractional rigs, type Seldén triple combi box (or similar):**  
6 mm or 7 mm wire: connect with a toggle fork/eye. See table below.  
8 mm wire: connect to existing toggle.

Fig. 5:3



**Forestay attachment Seldén's fitting "0 — 35 / 0 — 50":**  
Connect directly to the fitting which provides sufficient articulation.

Fig. 5:4



**Forestay attachment type "T-terminal":**  
Fit a T/fork toggle according to the table below.

The lower end of FURLEX is supplied with a fork toggle as a standard item. This toggle can be attached directly to the forestay deckfitting. Check that the line drum does not interfere with pulpit, bow anchor or other deck fittings.

The line drum can be raised by adding toggles (fork/eye) (see table) or with links. Links should at their lower ends be connected with a toggle.

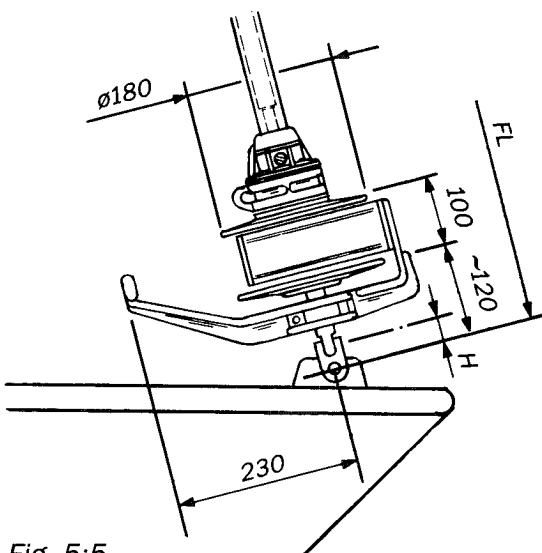


Fig. 5:5

Toggle \ Wire dim.	ø6 mm	ø7 mm	ø8 mm
Toggle (eye/fork)	174-104	174-105	174-106
(Hasselfors no)	H = 40 (80254)	H = 45 (80255)	H = 50 (80256)
Toggle (fork/fork)	517-046-02	517-047-02	517-048-02
	H = 40	H = 40	H = 50
Toggle (T/fork)	174-122	174-123	174-124
	H = 80	H = 90	H = 100

**TO CALCULATE THE LENGTH OF THE FORESTAY WIRE (See fig. 7:1)**

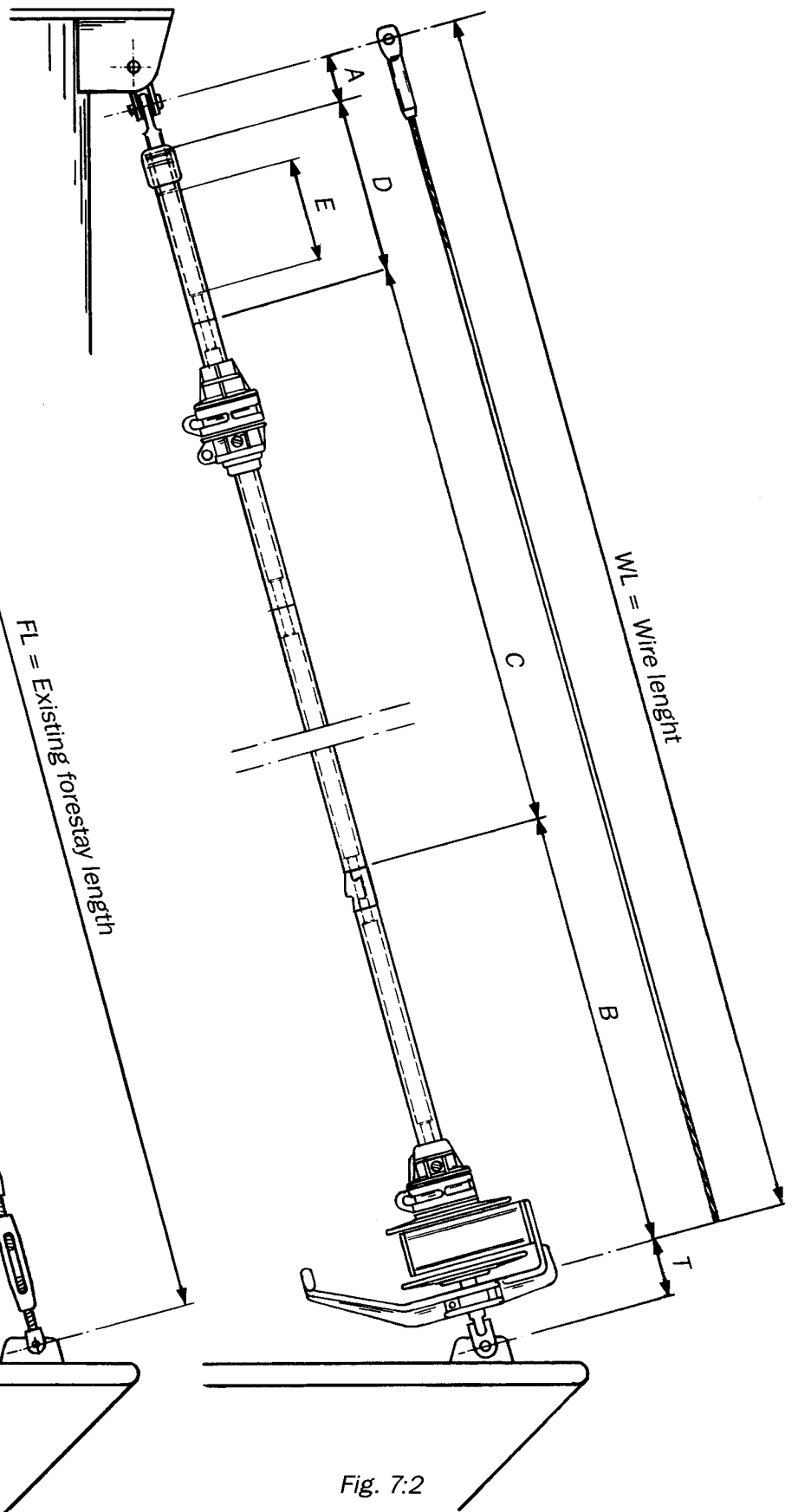
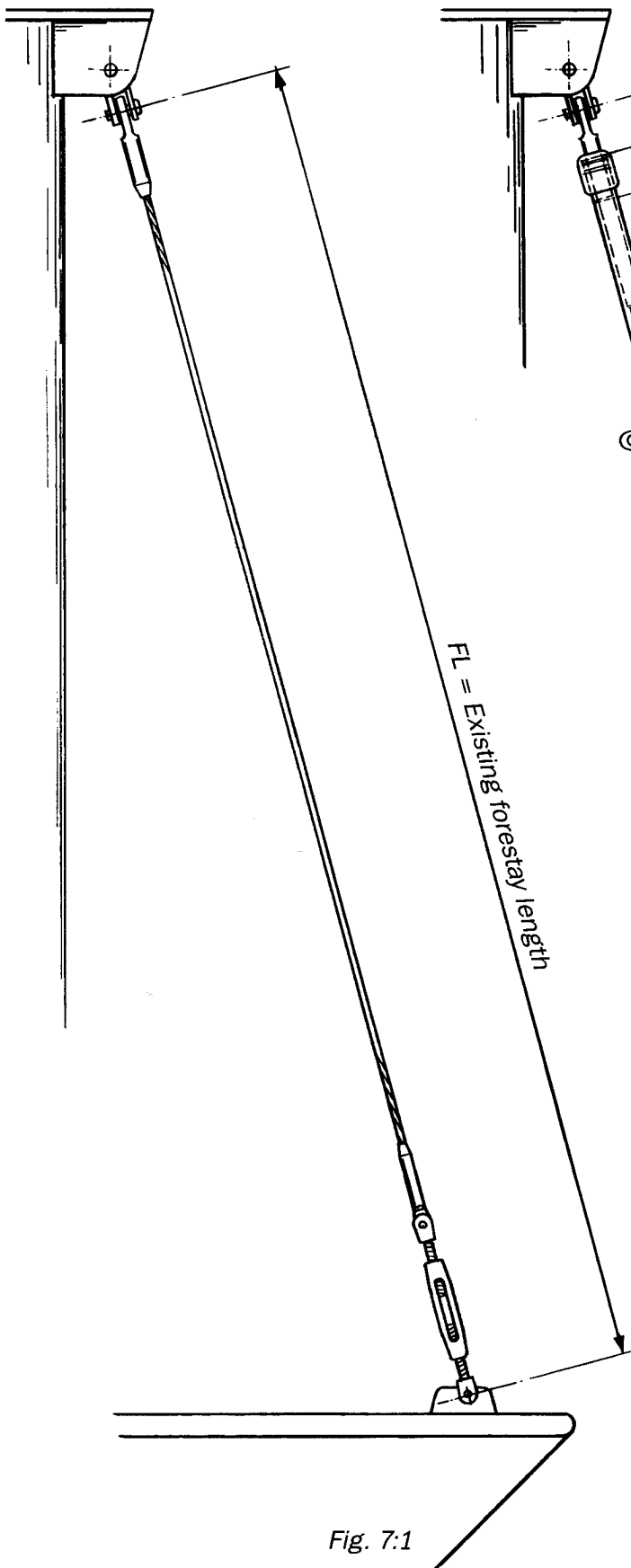
- 1 Decide the rake of the mast with the fore/backstay tensioned.
- 2 Slacken the backstay. Measure the length of the forestay (FL) with just enough tension to keep it straight using a steel measuring tape.
- 3 Write the measured length on the form below and calculate the correct wire length (WL).
- 4 Measure the length from the center of the hole in the wire terminal. Mark the measurement WL on the wire using, for example a hacksaw, so that the mark can not move. Do not cut the forestay yet. **BE CAREFUL WHEN YOU OPEN THE WIRE COIL AS IT CAN UNCOIL QUICKLY!!!**

CALCULATION OF FORESTAY WIRE LENGTH		YOUR FORESTAY	EXAMPLE ø7
<b>FL</b>	Existing forestay length (FL), inclusive of rigging screw. (See fig. 7:1)		<b>11.670</b>
<b>T</b>	Deduction for lower wire terminal: ø6 mm wire: — 70 mm ø7 mm wire: — 70 mm ø8 mm wire: — 80 mm	—	— <b>70</b>
	If a link or extra toggle is to be used deduct its length as well.	—	—
<b>WL</b>	The new forestay wire is to be <u>marked</u> at the measurement (WL, acc. to fig. 7:2)	=	= <b>11.600</b>

**TO CALCULATE THE LENGTH OF THE LUFF EXTRUSION (See fig. 7:2)**

The length of the luff extrusion is calculated according to the form below. Insert the length of the new forestay wire (WL) taken from the preceding form and calculate starting from the top of the form.

CALCULATION OF LUFF EXTRUSION LENGTH		YOUR EXTR.	EXAMPLE ø7
<b>WL</b>	Length of new forestay wire (see form above)		<b>11.600</b>
<b>A + B</b>	Fixed deduction (A + B) ø6 mm wire: — 1330 mm ø7 mm wire: — 1335 mm ø8 mm wire: — 1345 mm	—	— <b>1.335</b>
<b>C + D</b>	C + D =	=	= <b>10.265</b>
<b>C</b>	Max. number of extrusions × 2400 mm that, together are shorter than C + D: . . . . . extr. × 2400 mm = C C =	—	(4 extrusions) — <b>9.600</b>
<b>D</b>	Normally use the 2000 mm extrusion Smooth the edges of the cut end with a file. Length of the top extrusion D = <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">                         If the top part comes out shorter than 400 mm the joint will be located too close to the top terminal. In that case replace the top full length 2400 mm extrusion with the 2000 mm extrusion. In this way the joint is moved 400 mm down the stay. Adjust the C and D measurements thus:                          Deduct 400 mm from the C-measurement.                          Add 400 mm to the D-measurement.                     </div>	=	= <b>665</b>
<b>E</b>	Cut the distance tube for the top extrusion: ø6 mm wire: E = D—200 ø7 mm wire: E = D—210 ø8 mm wire: E = D—210 Length of distance tube E =	— =	— <b>210</b> = <b>455</b>



## ASSEMBLY OF FURLEX

### Assembly of the luff section

The assembly should be carried out on a horizontal surface. Connect the luff extrusions one by one starting at the lower bearing part.

1

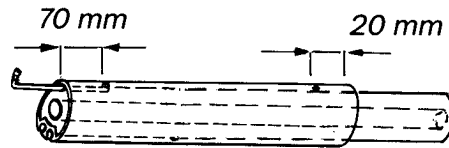


Fig. 8:1

Fit the short connecting spring,  $L=103$  mm, to the 1000 mm extrusion as shown in fig. 8:1. The large hook must be on the outside.

2

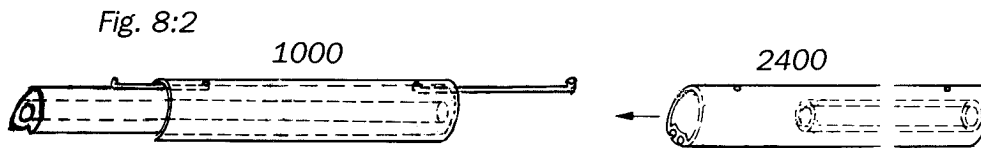


Fig. 8:2

Push the joining sleeve down to secure the short connecting spring. Attach a 144 mm spring in the upper hole of the 1000 mm extrusion. Remove the 200 mm joining sleeve from a 2400 mm extrusion (this joining sleeve will be used later in the 2000 mm extrusion). Connect the 2400 mm extrusion and the 1000 mm extrusion as shown in fig. 8:2. Push the joining sleeve up into the 2400 mm extrusion to secure the connecting spring. A 50 mm gap is formed at this joint where the sail feeder is later to be fitted.

3

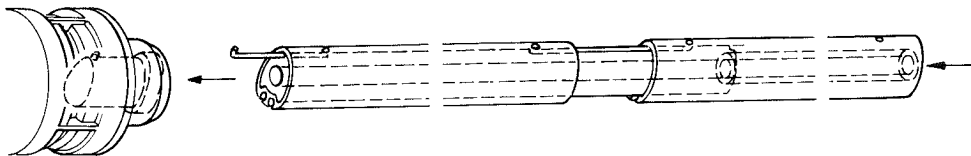


Fig. 8:3

These two connected extrusions are then fitted to the adapter of the lower bearing part. Hook the connecting spring to the internal hole in the adapter. Then push down the joining sleeve and the distance tube until they bottom. The distance tube of the 2400 mm extrusion should be buried approximately 100 mm, about equal to half the length of a joining sleeve.

4

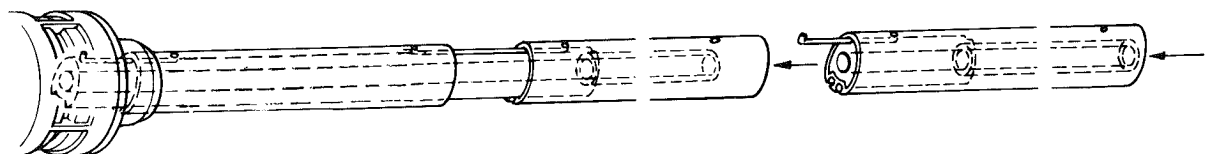


Fig. 8:4

Connect the remaining extrusions according to the table, page 6.

5

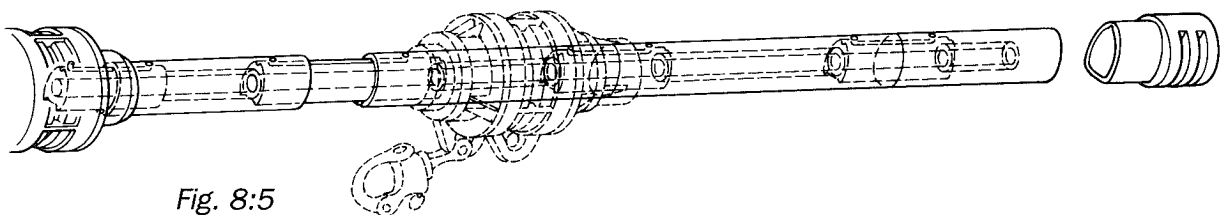


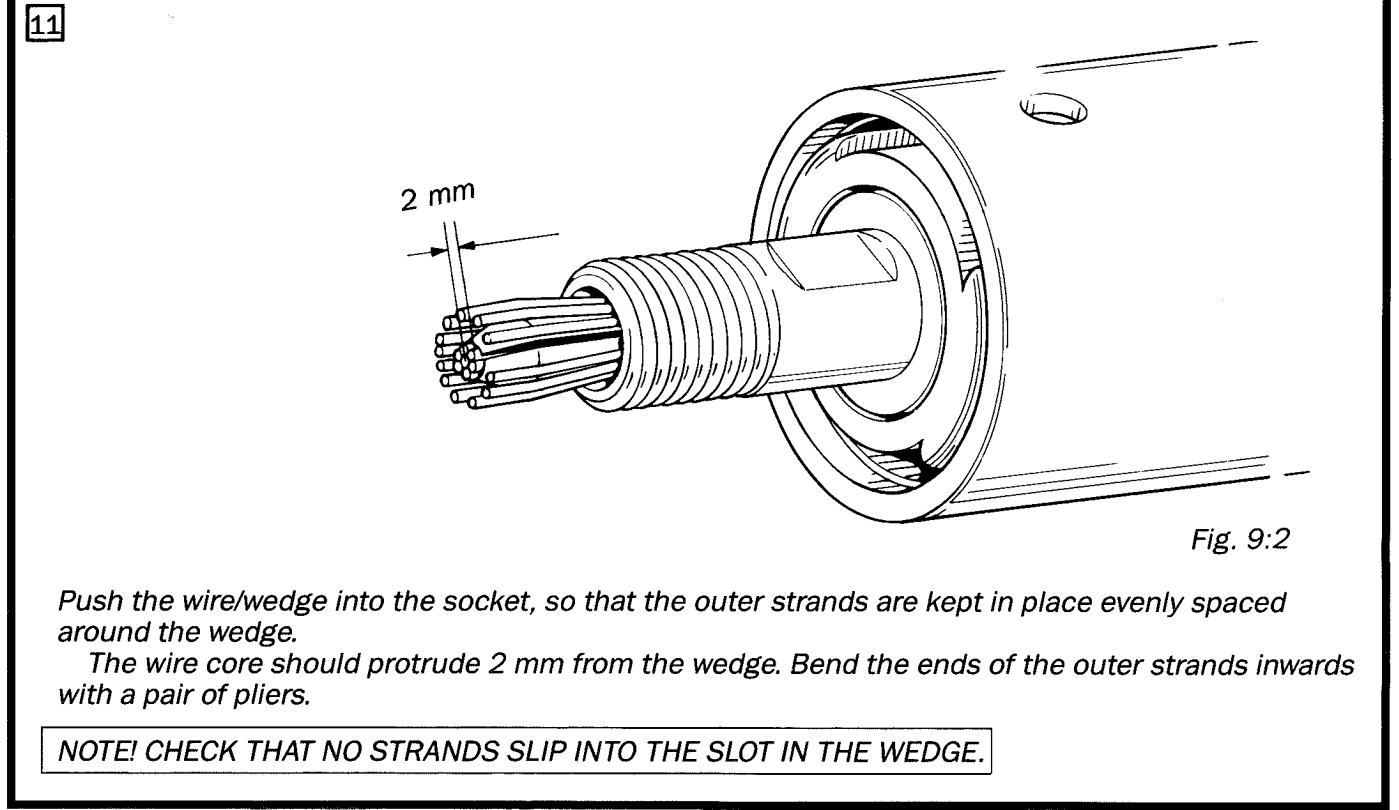
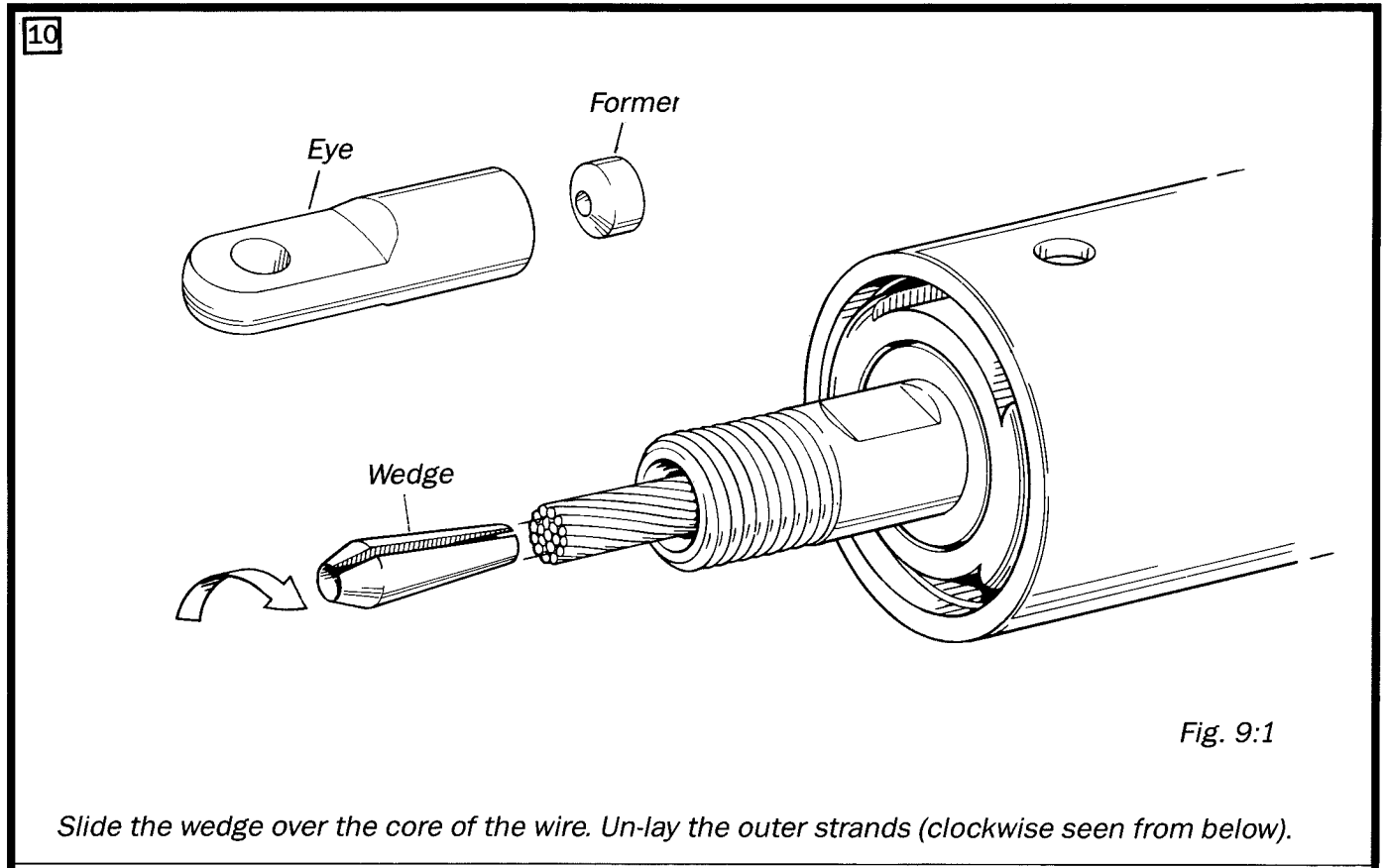
Fig. 8:5

Slide the halyard swivel down to the sail feeder gap. Secure it in position with some turns of adhesive tape. Slide the top guard over the top extrusion and secure it with the two pre-fitted screws. Tighten the screws until they bottom. Do not over-tighten.



### Fit the wire terminal

- 6 Dismantle the removable parts of the wire terminal: eye + wedge + former/washer.
- 7 Remove the tape fitted to the end of the wire. Round the end of the wire using a file.
- 8 Feed the forestay wire from the top. If the wire catches inside the extrusion, turn it counter-clockwise until it passes the obstruction.
- 9 Put adhesive tape around the wire on both sides of the cut mark and cut the wire with a hacksaw. The cut wire should protrude from the wire terminal approx. 30-40 mm.



12

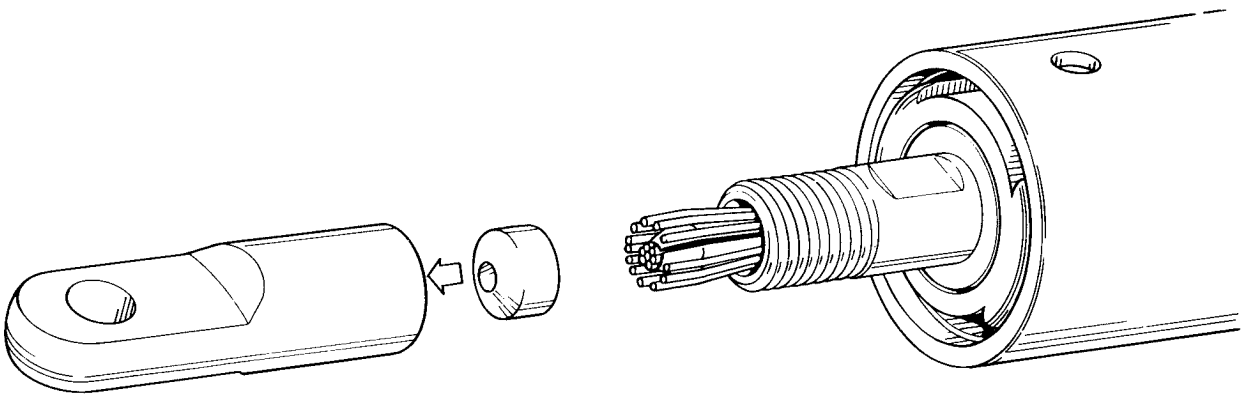


Fig. 10:1

Put the former into the eye part of the terminal. Fit the eye part of the terminal and screw it on so that the wire is formed inside the terminal.

13

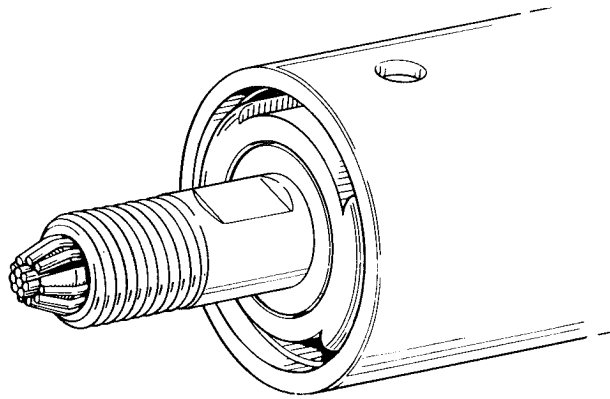


Fig. 10:2

Dismantle again and check the strands. If some strands are crossed, correct their positions. CHECK THAT NO STRAND HAS SLIPPED INTO THE SLOT OF THE WEDGE. (If the assembly is unsuccessful see page 19 "To dismantle FURLEX" for applicable instructions.)

14

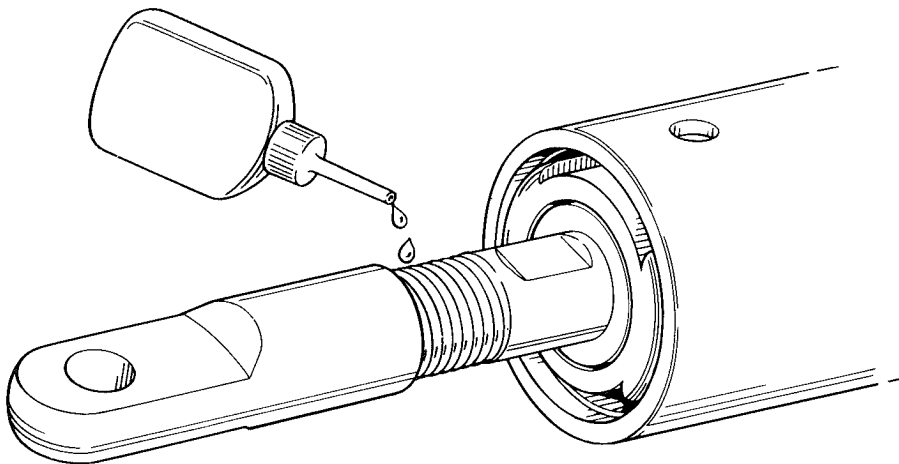


Fig. 10:3

Apply 2 or 3 drops of the locking adhesive on to the male threads and tighten quite hard. The terminal is now permanently locked. When using the adhesive, avoid skin and eye contact.

**Fit the prefeeder**

15

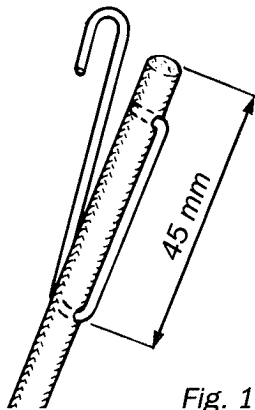


Fig. 11:1

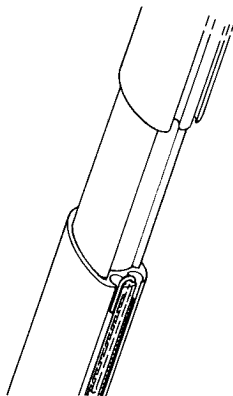


Fig. 11:2

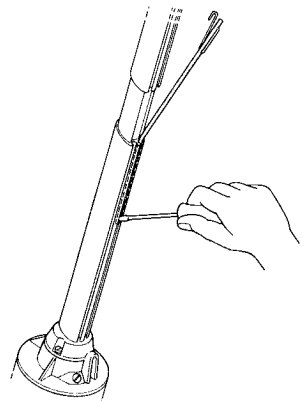


Fig. 11:3

The hook is connected to the rubber cord acc. to fig. 11:1. Feed the cord through the starboard sail groove acc. to fig. 11:2 and then through the slot in the lower bearing part. Fix the hook in position.

If the rubbercord is difficult to feed through the sailgroove, use a small screwdriver acc. to fig 11:3.

16

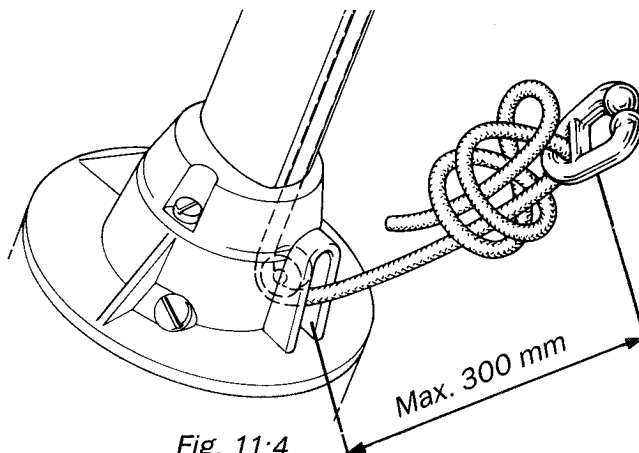


Fig. 11:4

It is of utmost importance that the prefeeder is correctly fitted or it will not work properly.

Tension the cord as hard as possible and tie the prefeeder to the cord 300 mm from the slot according to fig. 11:4.

Tighten the knot and cut off excessive cord.

**CAUTION:** If the cord is too loose, the prefeeder could be moved from its static position by the action of centrifugal force (caused by the lower bearing part, revolving quickly).

If the sail has a tendency to come out of the feeder reduce the gap width by squeezing the two arms together with a pair of pliers.

17

To fit the sail feeder:

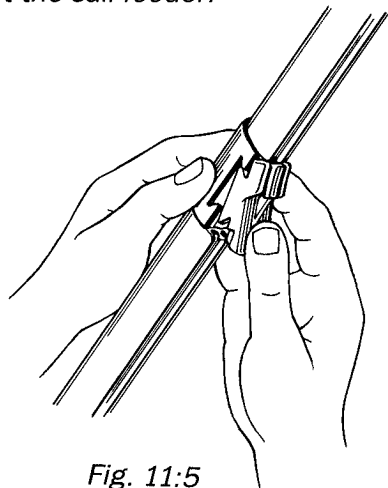


Fig. 11:5

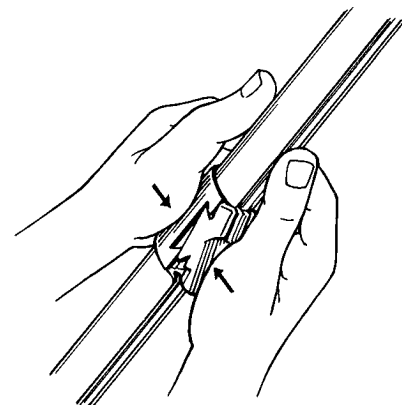


Fig. 11:6

Put the "connector" in its correct location. Slip on the feeder from underneath so that the upper clips engage.

Apply pressure on the "connector" while pushing the "feeder" forwards. Check that all 4 clips have engaged.

## FITTING OF LINE DRUM/GUIDING ARM

The line drum consists of two halves and these are easiest to fit when the stay is fitted to the mast.

- 1 Feed the furling line through the eye of the line guide and then through the upper hole in one of the line drum halves. Make an overhand knot at this end of the line.
- 2 Press the two halves together around the bearing house with the text facing upwards. Check that the clips engage.
- 3 Fit the line guard and the guiding arm.

4

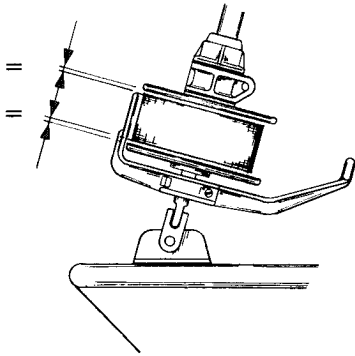


Fig. 12:1

Adjust the position of these so that the line guard does not touch the line drum and prevent it from rotating.

5

**THE FURLING LINE SHALL EXIT ON THE PORT SIDE OF THE DRUM**

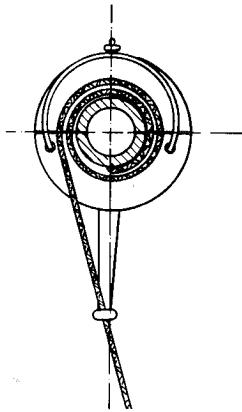


Fig. 12:2

Furl the line on the drum so that it exits on the port side of the drum, in order to use the effect of the rotating tack attachment properly, when reefing. This also makes sure that the torsion forces are correctly distributed.

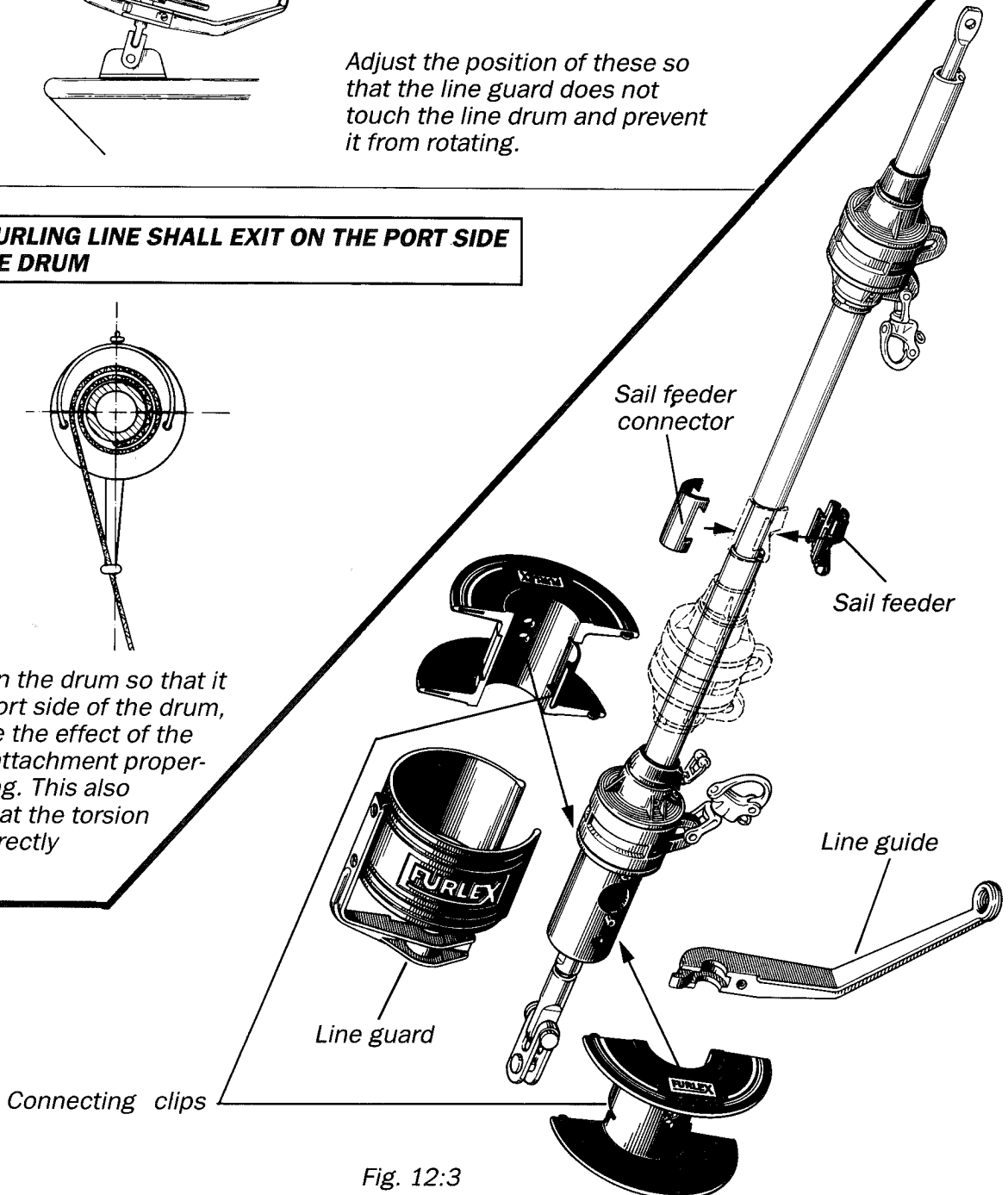


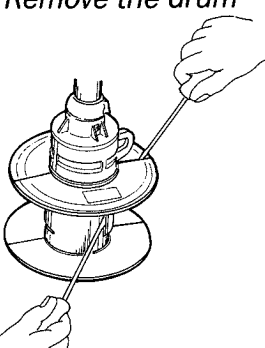
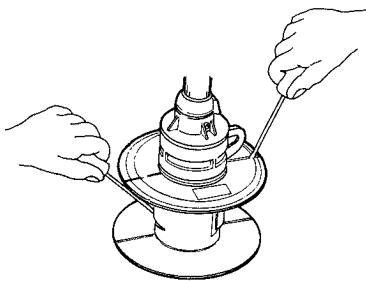
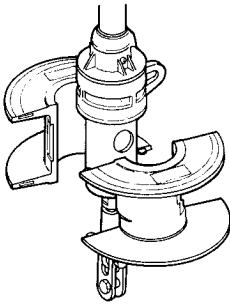
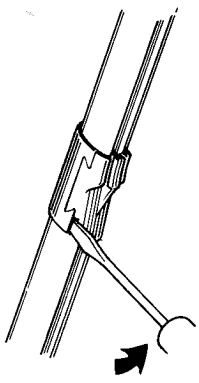
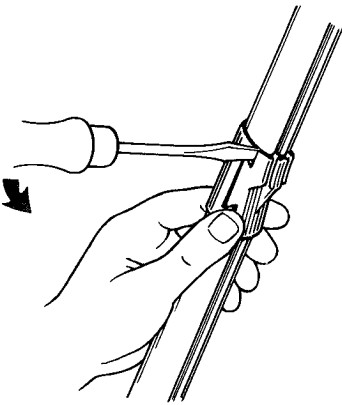
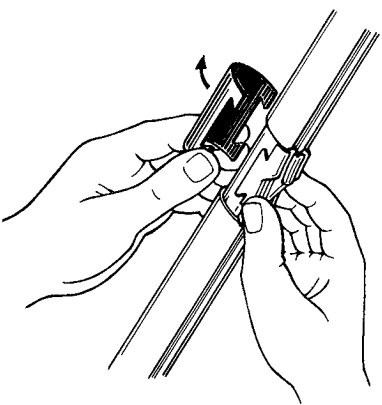
Fig. 12:3

Avoid too many turns of furling line on the drum. When the largest sail is furled, there should be max. 5 — 8 turns on the drum.

## FURLEX FOR RACING

FURLEX can easily be modified for racing. The line drum can be dismantled, without removing the forestay from its deck fitting and the halyard swivel can be lowered below the sail feeder. The sail can then be tacked at deck level and the full hoist of the foretriangle can be utilized. The twin luff grooves provide the possibility of quicker sail changes.

- 1 Unroll the entire furling line from the drum. Make a note of the number of turns to be able to restore it correctly.
- 2 Dismantle line guard and guiding arm.

<p>3 Remove the drum</p>  <p>Fig. 13:1</p> <p>Press one screwdriver under one of the connecting clips. Press, simultaneously, the other screwdriver into the slot between the halves, on the same side of the drum, so the halves are forced apart 3—4 mm.</p>	 <p>Fig. 13:2</p> <p>Turn the stay half a revolution. Lift the clip on the opposite side and the two halves are separated.</p>	 <p>Fig. 13:3</p> <p>With one turn of furling line around the drum, the free drum half is prevented from dropping over board.</p>
<p>Remove the sailfeeder. The sail feeder consists of two parts: The "feeder" made of aluminium alloy and the "connector" made of composite material. The composite material is flexible so the side flaps can be forced apart.</p>		
<p>4</p>  <p>Fig. 13:4</p> <p>Prise open the clips on one side of the connector. First push a small screwdriver into the slot of the lower part of the feeder and prise.</p>	 <p>Fig. 13:5</p> <p>Then force open the clip at the top part of the feeder.</p>	 <p>Fig. 13:6</p> <p>The connector can then be swung forward. Keep your hand around these parts so that they do not fall overboard.</p>

- 5 Lower the halyard swivel to the lower end of the luff extrusion. In this position it will not disrupt any sailchanges and it will not add any weight to the top of the mast. Re-install the sail feeder (see page 11, item 17) and your FURLEX is ready for racing.

## **HALYARD LEADS**

**When the sail is furled on a forestay with a halyard swivel, the genoa halyard could twist due to friction in the swivel. If this happens, furling would stop after only a few turns and both halyard and stay might be damaged.**

To prevent this, the halyard should run from an angle with the forestay of at least  $10^\circ$  (see fig. 14:2).

However this requirement is usually not fulfilled. The halyard should then be run through the enclosed halyard lead 508-135 (see fig. 14:3 — 14:4).

The kit contains two leads. If the mast is equipped with two genoa halyards they should each run through a halyard lead, as the second halyard unintentionally could be used for the halyard swivel. The leads should be fitted side by side.

If fitted to a Seldén mast the leads should be located according to fig. 14:3 — 14:4. These measurements could also be used with other masts, but the angle must be checked carefully. If the angle is too large the halyard will be chafed.

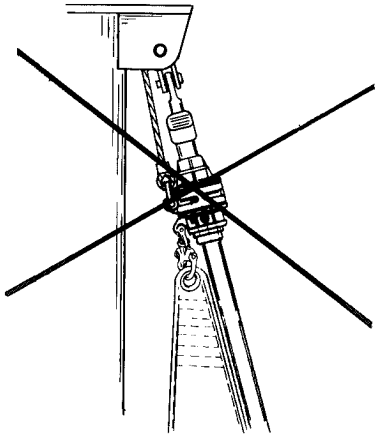


Fig. 14:1

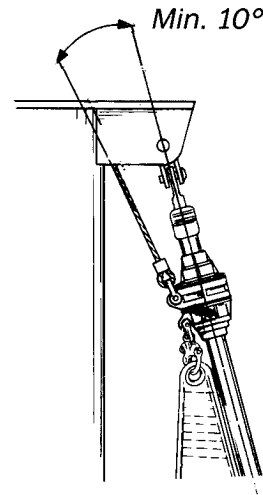


Fig. 14:2

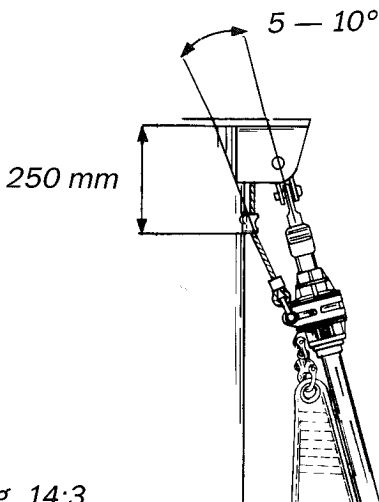


Fig. 14:3

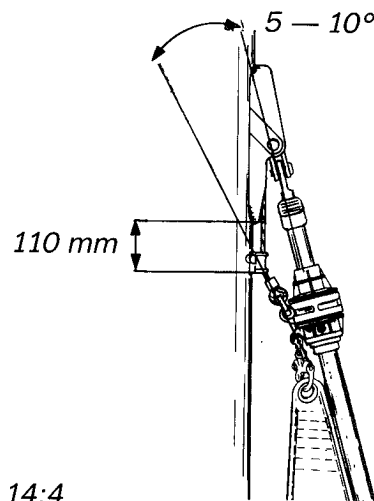


Fig. 14:4

When producing a new mast on which FURLEX is to be fitted, a sheave box is preferably fitted just below the head box. In this way genoa halyard chafe, caused by the halyard lead is eliminated.

Such a box could also be added to an "old" mast but the work needed hardly justifies the advantages gained.

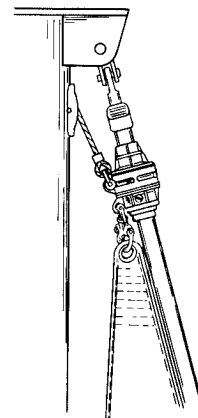


Fig. 14:5

**1** Measure the position of the leads.

**2** Use the fitting as a jig, and drill the holes with the  $\varnothing 5,3$  drillbit.

The screws are selftapping M6-screw which can be screwed directly into the  $\varnothing 5,3$  mm hole.

Use the enclosed insulator sheet between mast and fitting. Lubricate the screws with grease. Fit one lead on top of each halyard as the halyard (snap) shackles are too big to be fed through the lead eye.

If two halyard leads are fitted to a stepped mast, they should be fitted before the FURLEX which otherwise will be in the way when drilling on the front side of the mast.

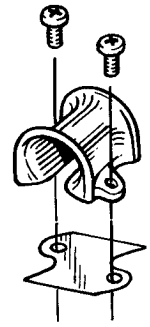


Fig. 15:1

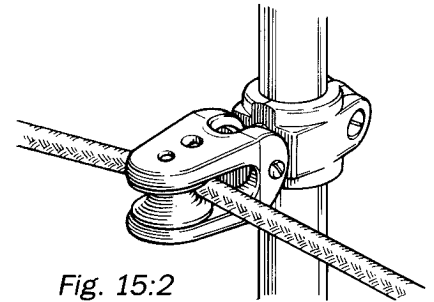


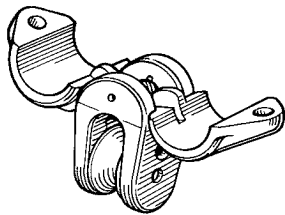
Fig. 15:2

### STANCHION FAIR LEAD BLOCK

The kit contains 4 stanchion blocks to be fitted to  $\varnothing 25$  mm stanchion or pulpit. The block has a ball-and-socket joint so that it can be angled in any direction.

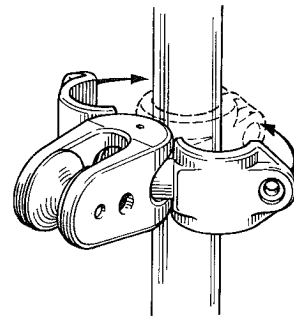
The block is designed to serve as a lead block. For heavy loads and big turning angles a stronger block should be used.

**1**



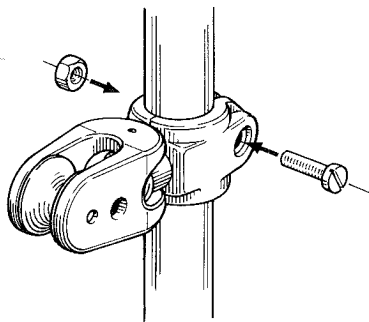
Fit the clamp halves into the sheave house, as shown.

**2**



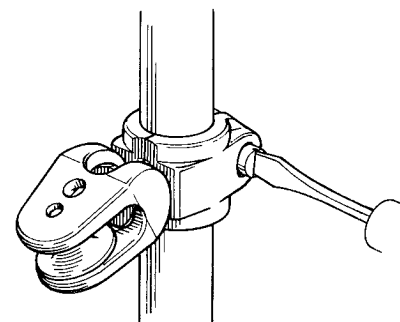
Squeeze the clamps together around the stanchion.

**3**



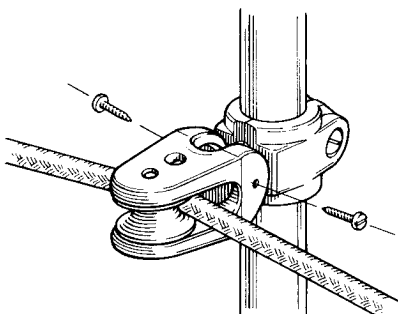
Lightly screw the clamp halves together using the enclosed M6-screw and nut.

**4**



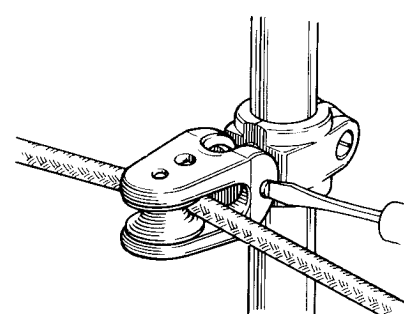
Angle the sheavehouse in the desired direction and tighten the M6-screw.

**5**



Fit the rope and check the position. Finally lock the block...

**6**



...with the enclosed selftapping screws.

## THE SAIL

- If the boat is equipped with several genoas, each one should be given equal luff lengths so that the halyard swivel will be located at the same level, when the sail is hoisted. (That is, the "5 – 10°-requirement" should be fulfilled, see "HALYARD LEADS" page 14.) The best way to perform the length adjustment is to add a wire pennant of suitable length. The length is decided by testing on board.
- Use the starboard groove when hoisting the sail. Initial furling resistance is minimized (the sail is less sharply bent along the luff than if it is hoisted in the port groove).
- Turn the tacking anti-clockwise before the sail is fitted to the tack snap shackle.

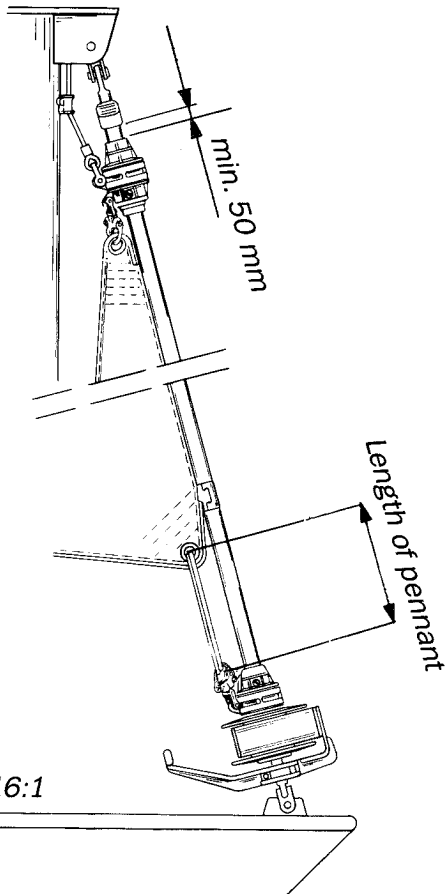


Fig. 16:1

- 1 Attach the head of the sail directly to the halyard swivel.
- 2 Tack the sail at deck level with a piece of rope. Adjust the rope so that the swivel is in the correct position at the top of the stay with normal halyard tension (correct position = 5–10°-requirement).  
Pennant length = length of rope pennant.

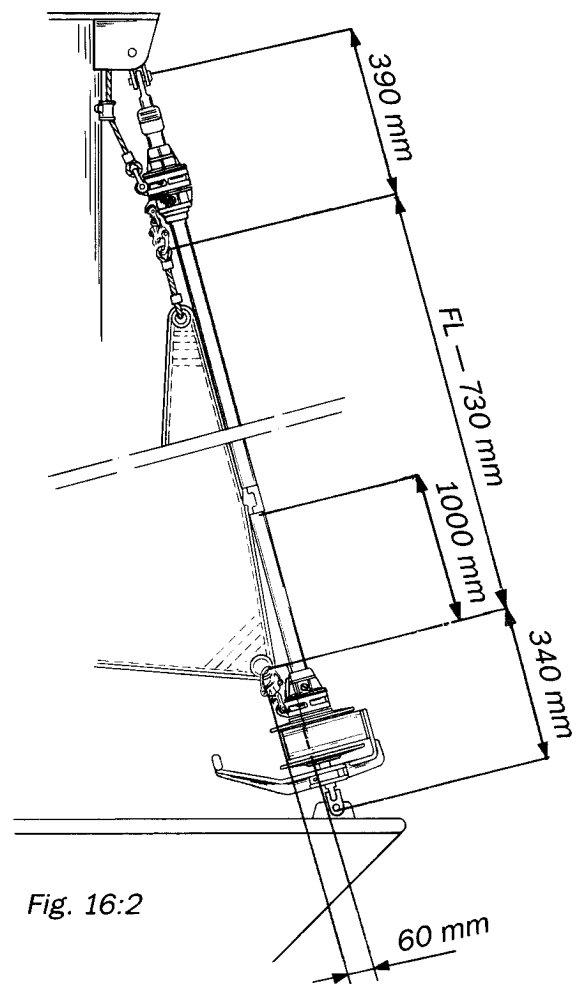


Fig. 16:2

- 3 Attach, by a talurit splice, the pennant directly to head of the sail. Then it will not be removed unintentionally, lost or exchanged.

THERE SHOULD BE AT LEAST 50 MM CLEARANCE BETWEEN THE TOP OF THE HALYARD SWIVEL AND THE TOP GUARD WHEN THE SAIL IS FULLY TENSIONED.

### Dimensions for sail adjustments:

- Max. length of luff = FL (length of existing forestay) minus head and tack deduction (see fig. 16:2).
- "Cutback" for tack (see fig. 16:2).
- The kit contains a sample of the extrusion intended for sail adjustment. The sail should be made to run very easily through this sample as friction increases many times, when the luff runs through the entire length of the luff section. We recommend max.  $\varnothing 5$  mm luffrope/lufftape (max.  $\varnothing 4$  mm "hard" line). The dimensions of the luff grooves are in fig. 16:3.
- Any ultraviolet protection should be on the starboard side of the sail.
- A high clewed headsail could give an unchanged position of the sheeting point, even if the headsail is reefed.

Extrusion overall dimensions:

31 x 20 mm

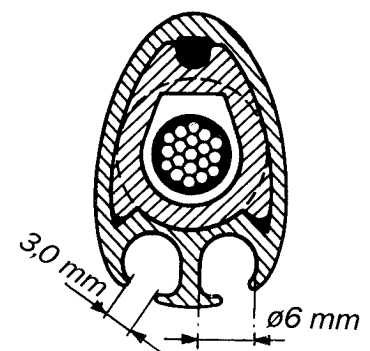


Fig. 16:3



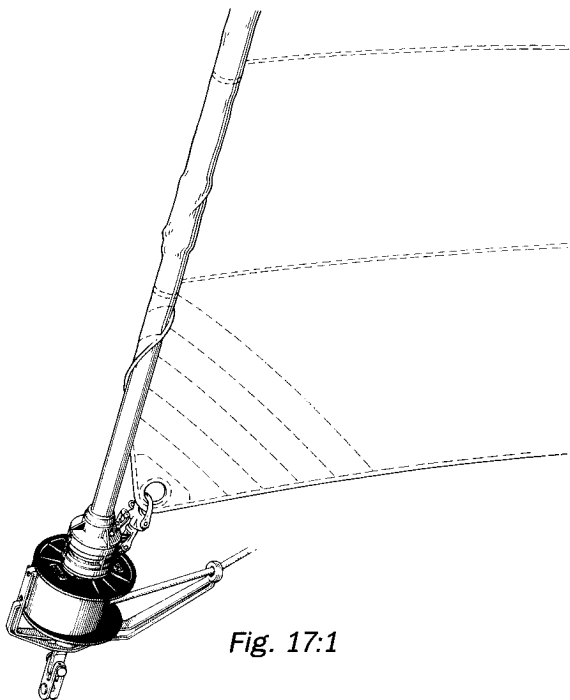


Fig. 17:1

## REEFING

FURLEX is provided with a tack attachment which rotates in relation to the luff extrusion. When furling and simultaneously applying a limited counter-tension in the sheet, the luff extrusion makes approx. one revolution before the tack fitting starts rotating as well. The part of the sail with the biggest draft will in this way be flattened. This makes the sail flat as the furling is continued.

This rotating tack feature is not incorporated in units intended for the U.S and U.K markets due to risk of patent infringement.

### Remember!!

- Furl at least 5 — 6 turns.
- When reefing, counteract the furling gently with the sheet by slipping it from the winch.
- Try out the best way for your sail.
- Do not expose your light weather sails (=low cloth weight) to too much wind. Consult your sail-maker if you are not sure.

Avoid using a winch when furling the sail. The power of the winch makes it difficult to control the tension of furling line.

### The shape of a reefed sail can be improved.

Several methods to improve the shape of the reefed sail have been developed. Many sail-makers fit "plastic foam" along the luff. The foam is matched with the draft of the sail. It will compensate for the draft of the sail so that the sail, when reefed becomes flatter.

Another way is to add a sleeve along the luff approx. 30 mm wide.

Ropes of varying length diameter can be fed into this sleeve to compensate for excessive sail draft. The advantage with this system is that it can be adjusted step by step to suit the individual sail. This is therefore a suitable method when "old" foresails are adjusted for FURLEX.

Discuss with your sailmaker to find the best solution for your and your sails.

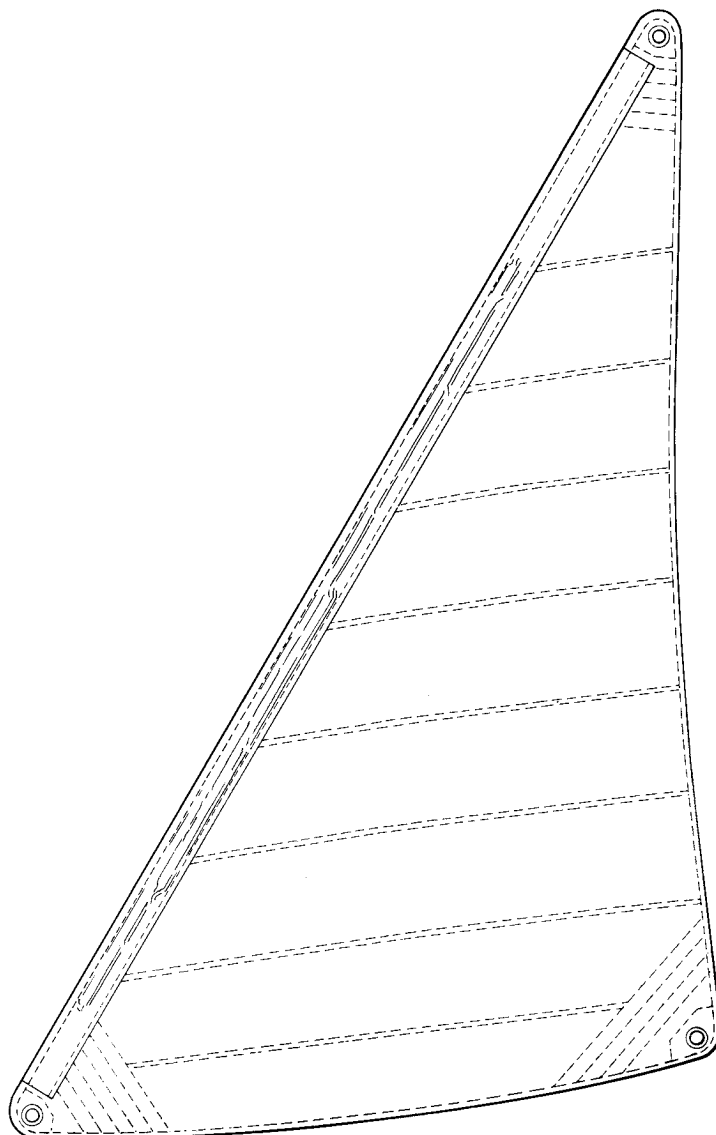


Fig. 17:2

## MAINTENANCE

To make FURLEX rotate easily and smoothly through the years the following maintenance points should be carried out at regular intervals. (For example at the autumn overhaul.)

### Wash away salt

Wash and rinse the complete FURLEX with fresh water to clear away all salt crystals. This is particularly important at the lower bearing part, where it is especially exposed to corrosion.

N.B. Most washing powders etc. contain substances which can cause corrosion so take special care to thoroughly swill away all washing agents.

When the parts have dried, all anodized surfaces can be treated with a silicone-free boat polish or wax. This provides good protection and prevents dirt adhering to the surfaces which could then soil the sail.

### Lubricate the bearings.

Lubricate all roller bearings with the grease enclosed with this FURLEX kit.

- Inject the grease directly into the slots ① – ④. (See fig. 18:1).
- There is also an internal roller bearing in the lower bearing part. Lubrication is carried out by removing the screw ⑤ and pressing grease into the hole while turning the wire terminal ⑥.
- Press grease into the slot ⑦ at the bearing for the wire terminal.

AN UNWASHED OR DAMP FURLEX SHOULD, UNDER NO CIRCUMSTANCES, BE WRAPPED IN PLASTIC SHEETING OR OTHER IMPERVIOUS MATERIAL.

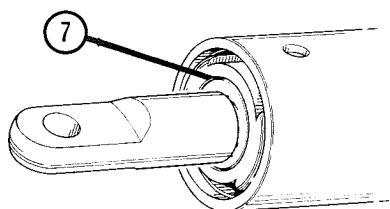


Fig. 18:2

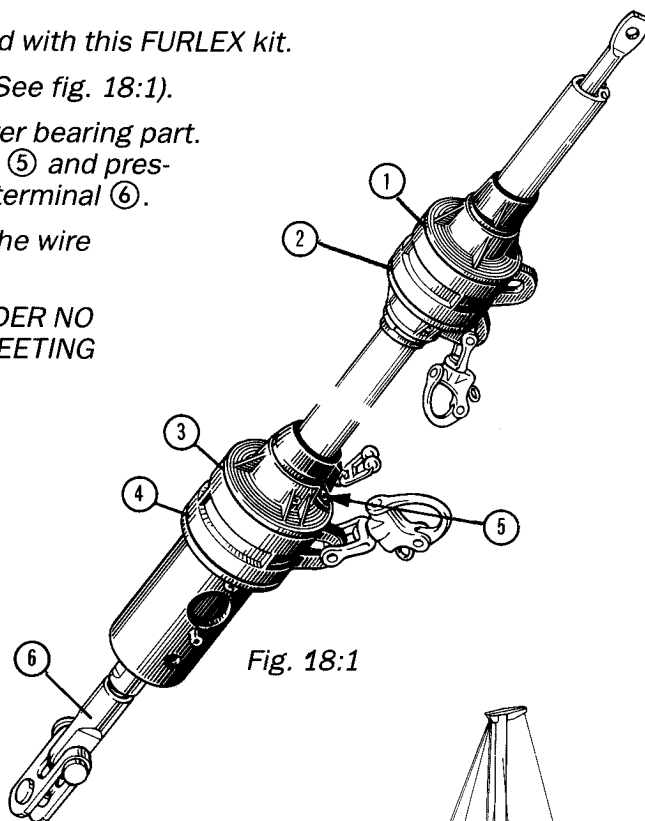


Fig. 18:1

## RIGGING

The FURLEX stay should be handled with the mast for protection.

### Stepping the mast with the FURLEX stay fitted:

Lift the mast with the sail groove facing downwards.

Secure the stay on the front of the mast. Have one person hold the stay during the entire operation, so that the stay does not catch anything. Keep the end of the stay "outside the deck" to avoid stepping the mast on the stay.

### Fitting the stay on a stepped mast:

Slack off the backstay as much as possible. Pull the masthead forward using the genoa halyard. Do not use the snap shackle but lash the halyard to a fitting on deck or hull. Make sure that the fitting is strongly attached.

Hoist the top end of the stay. Use the spinnaker (or spare genoa) halyard and tie the halyard to the luff extrusion with a couple of clove hitches and prevent the knot from sliding by securing it with some turns of adhesive tape.

Go aloft and fit the stay to the headbox. Use a proper bosun's chair. If there are no free headsail halyards use the main halyard. (For further information see Seldén Mast AB's "Hints and advice"..)

After the stay is fitted to the headbox attach it to its deck fitting.

Tension the forestay to max. 25% of its ultimate load which corresponds to 20% of the ultimate backstay load. (See Seldén Mast AB's "Hints and advice"..) A tensioned stay means less forestay sag and less friction for furling.

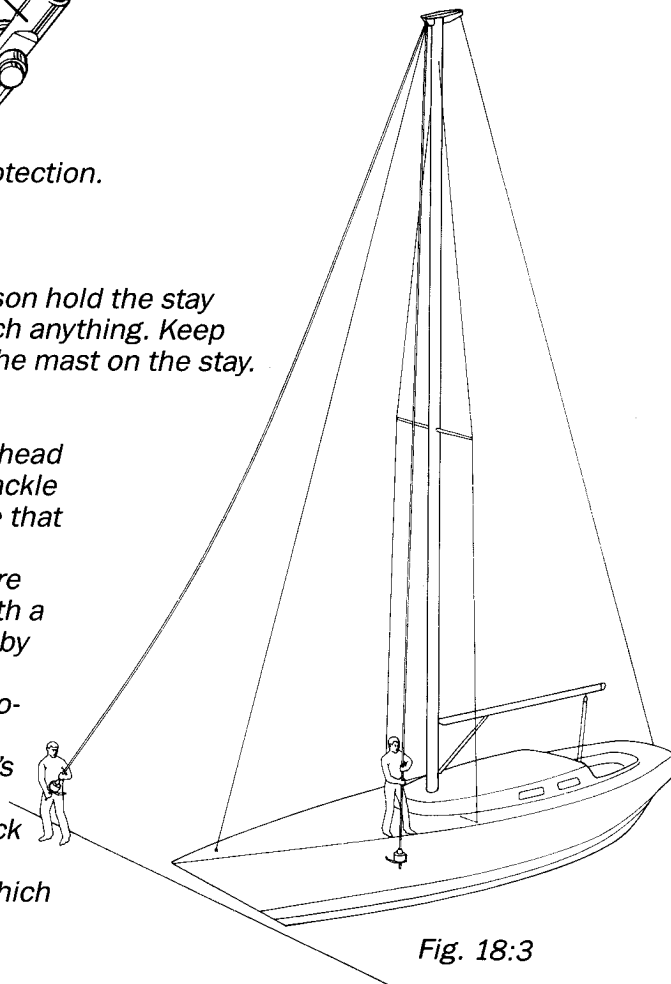


Fig. 18:3

## TO DISMANTLE FURLEX (for repair or length adjustment).

To remove the lower bearing part or the luff extrusion the wire must be removed.

To remove the lower bearing part from the luff extrusions, see items 1 — 11. To take apart the luff extrusions, see items 1 — 16.

**1** Remove the toggles from the wire terminal.

**2** Remove the eye part of the terminal.  
The thread is locked by a locking adhesive. If it can not be turned, heat the eye to approx. 100°C (212°F) and unscrew the eye when warm.

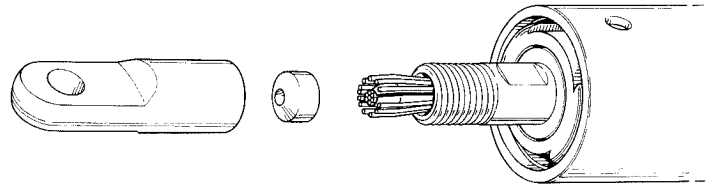


Fig. 19:1

**3** Remove the former from the bottom of the eye part.

**4** Replace the eye, 3 turns only.

**5** Hit the top of the eye, hard, a couple of times, along the line of the forestay. Use a heavy hammer. The wire will then leave its coned seat. Remove the eye.

*Note: The stay must not be fixed anywhere during this operation.*

**6** Cut all wire strands protruding outside the wedge at the bend (approx. 5 mm of the strands).

**7** Widen the wedge slightly by putting the end of a screwdriver into the slot and twist. Remove the wedge and turn the wire strands in correct positions (counter — clockwise seen from below).

**8** Pull out the wire from the luff extrusion, from the top.

**9** Remove the sail feeder. (See page 13, item 4.)

**10** Remove the hook which holds the prefeeder shock cord to the sailfeeder. Pull out the prefeeder.

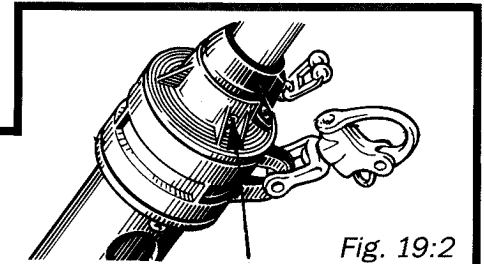


Fig. 19:2

**11** Separate the luff extrusion from the lower bearing part, by removing the two screws, which connect the adapter to the lower bearing part.

**12** Push the joining sleeve 50 — 60 mm into the luff extrusion so that the adapter and lowest part of the luff section can be removed. Use a pin or tube,  $\varnothing 13$  mm as a mandrel. Do not use a pointed object as it could damage the joining sleeve.

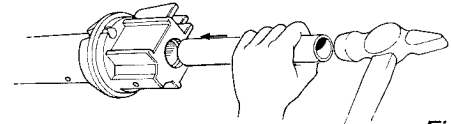


Fig. 19:3

**13** Refit the adapter to the lower bearing part.

**14** Push the joining sleeve at the sail feeder flush with the luff extrusion.

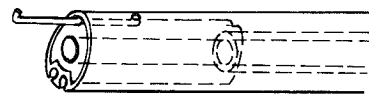


Fig. 19:4

**15** All luff extrusion parts can now be separated. Check, though, that the joining sleeves are flush with the luff extrusion ends at each joint.



Fig. 19:5

**16** Twist one of the extrusions a little and detach the section.

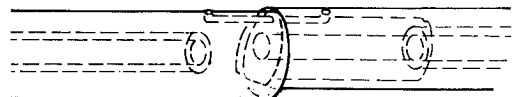


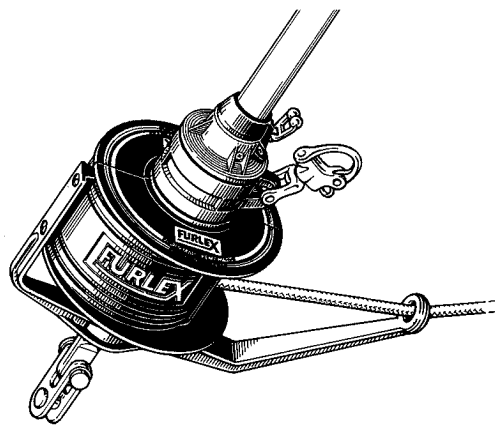
Fig. 19:6

Reassembly is carried out according to the assembly instruction (page 8). Before reassembly, cut the core strands flush with outer strands. The decrease of forestay length is compensated by an increase of stay tension by 5% of the ultimate wire load (but permanent tension must not exceed 25% of the ultimate load of the wire). If this wire length reduction is unacceptable, the decrease can be made equal to the length of a toggle. This toggle should be of the eye/fork type and is preferably connected to the top of the stay.

**NOTE:** Do not dismantle the halyard swivel or lower bearing part. You will find it difficult to re-assemble them correctly, (for example the many ballbearings are loose and are awkward to refit.) IF SERVICE IS REQUIRED, CONTACT YOUR FURLEX DEALER

## TO CHECK BEFORE SAILING

Check your FURLEX system according to the list below to make sure that all important items of the instructions have been carried out. This is to make sure that your FURLEX will work in all conditions, without any problems.



- 1. Is the furling line wound in the correct direction? It should exit on the port side of the drum.
- 2. Check that the line guard does not touch the drum rims.
- 3. Check that the halyard forms an angle of 5 — 10° with the stay, when the sail is hoisted.
- 4. Check that every sail, used with the FURLEX, is provided with a pennant so that the angle-requirement of item 3 is fulfilled.
- 5. Check that no halyard could be caught by the halyard swivel or the luff extrusion.
- 6. Check that there is a clearance between the halyard swivel and the top guard. (Min. clearance = 50 mm).
- 7. The extension of the prefeeder cord should not exceed 300 mm.
- 8. Check that the furling line runs through the guide eye, in a straight line. This minimises friction and chafe.
- 9. Check that the tackring is in correct position (page 16).

### **Avoid using winch when furling the sail.**

The power of the winch makes it difficult to control the tension of furling line.

We are sure that your FURLEX will give you many years of enjoyment.



# SELDÉN