

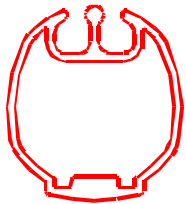
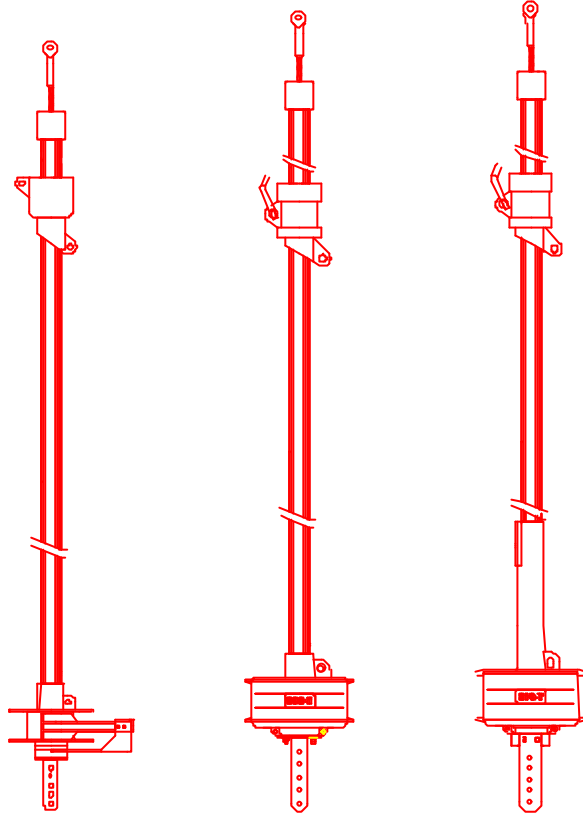
**PLASTIMO JIB REEFING SYSTEMS  
T-SERIES**

**406-T**

**608-T**

**810-T**

**GB**



# **ASSEMBLY INSTRUCTIONS FOR T-SERIES**

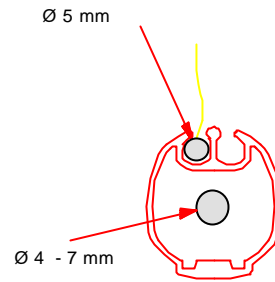
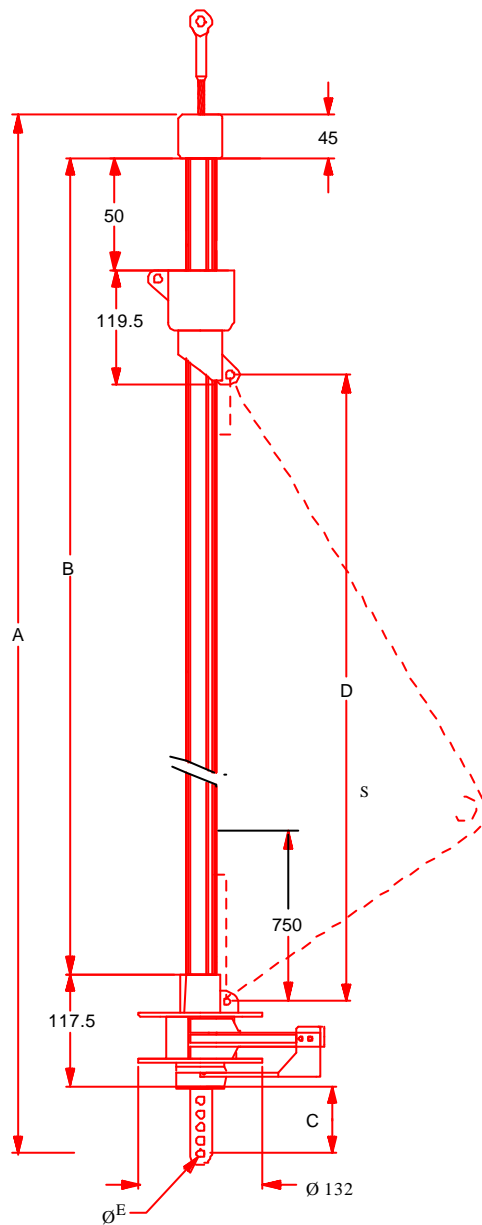
## **406-T 608-T 810-T**

### **INDEX**

Technical specifications of 406-T, 608-T, 810-T	3
Description of specific parts for each model	6
Tools needed	8
<b>FLAT ASSEMBLY (forestay dismantled)</b>	
Dismantling the forestay	9
Assembly of the jib reefing system	11
<b>IN SITU ASSEMBLY (directly onto the boat)</b>	
Measuring the length of the forestay	13
Cutting the last spar	15
Assembling the top end stop	15
Assembling the spars	15
Assembling the base spar	17
Assembly of the drum unit	17
Adjusting the reefing line feeders	18
<b>RECOMMENDATIONS</b>	
Recommendations	19
Maintenance	20
Troubleshooting	20
<b>OPTIONS</b>	
Optional extras	21
Spare parts	22

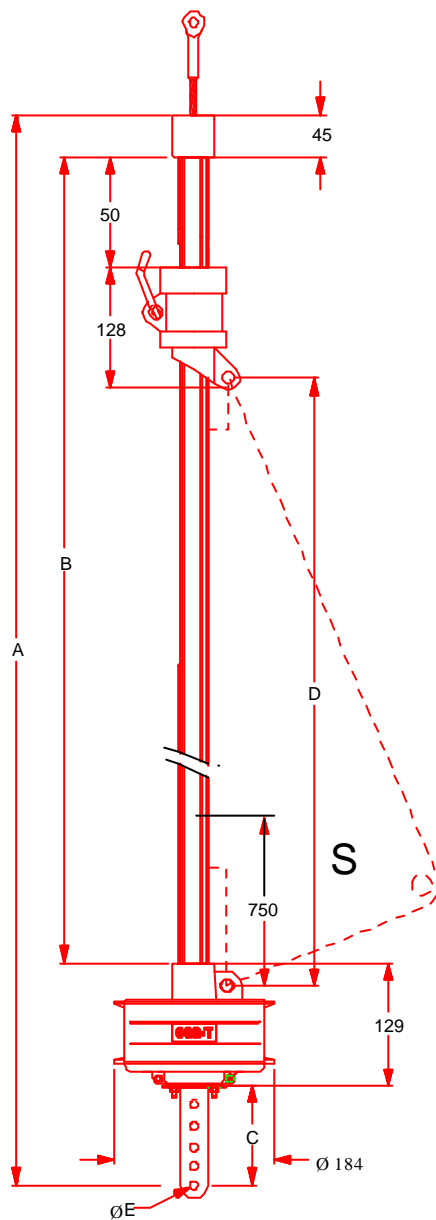
# TECHNICAL SPECIFICATIONS

## 406-T MODEL



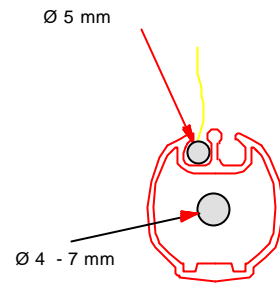
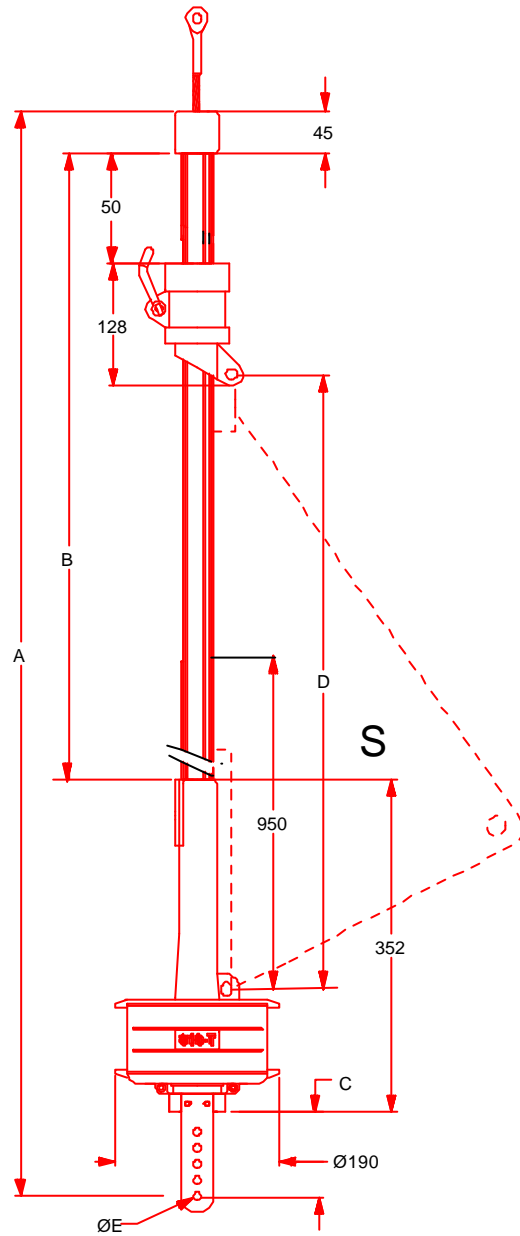
Model	406-T
Ref. N° chainplate version	25200
Ref. N° turnbuckle version	25286
Forestay diameter (mm)	4 - 7
Luffrope diameter (mm)	5
Length A chainplate (m)	6.60
Length A turnbuckle (m)	6.68
Length B (m)	6.35
Length C chainplate (mm)	85
Length C turnbuckle (mm)	170
Length D (m)	6.22
S (m <sup>2</sup> )	12
ØE (mm)	8.5
Bearings	Delrin®
Coupling units	Delrin®+ screws
Number of grooves	2

### 608-T MODEL



Model	608-T
Ref. N° chainplate version	25201
Ref. N° turnbuckle version	25287
Forestay diameter (mm)	4 - 7
Luffrope diameter (mm)	5
Length A chainplate (m)	8.79
Length A turnbuckle (m)	8.96
Length B (m)	8.50
Length C chainplate (mm)	115
Length C turnbuckle (mm)	285
Length D (m)	8.36
S (m <sup>2</sup> )	25
Ø E (mm)	12.5
Bearings	Delrin® & stainless steel
Coupling units	Delrin® + screws
Number of grooves	2

# 810-T MODEL

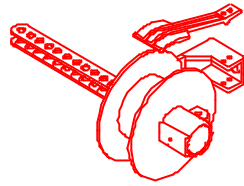


Model	810-T
Ref. N°	25202
Forestay diameter (mm)	4 - 7
Luffrope diameter (mm)	5
Length A (m)	11.26
Length B (m)	10.64
Length C (mm)	220
Length D (m)	10.70
S (m <sup>2</sup> )	35
Ø E (mm)	14.3
Bearings	Delrin® & Torlon®
Coupling units (sleeve&0stop)	Delrin® + vis
Number of grooves	2

## DESCRIPTION OF SPECIFIC PARTS FOR EACH MODEL

### 406-T model

- 1 drum unit



- 1 halyard swivel

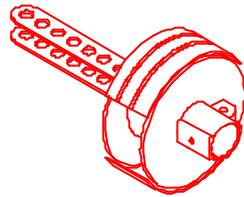


- 2 TCL screws M4 x 12 (to secure reefing line feeder 406-T)



### 608-T model

- 1 drum unit

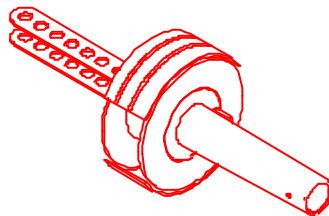


- 1 halyard swivel



### 810-T model

- 1 drum unit



- 1 halyard swivel



**Standard parts for all models**

- 1 top end stop



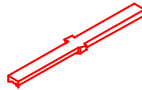
- Coupling sleeves

- 406-T ⇒ 4 Qty
- 608-T ⇒ 5 Qty
- 810-T ⇒ 6 Qty

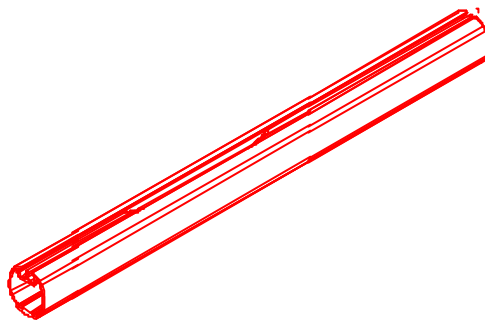


- Connecting stops

- 406-T ⇒ 4 Qty
- 608-T ⇒ 5 Qty
- 810-T ⇒ 6 Qty

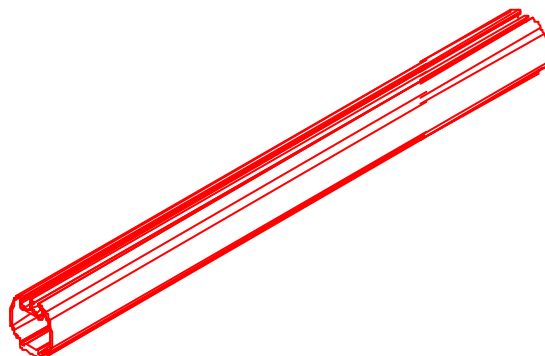


- 1 base spar



- Intermediate spars

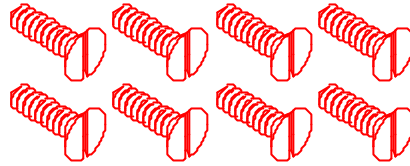
- 406-T ⇒ 2 spars
- 608-T ⇒ 3 spars
- 810-T ⇒ 4 spars



## Screws

- N°7 screws (3.9 x 12.7) for spar connections

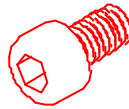
- 406-T ⇒ 4 screws + 2
- 608-T ⇒ 6 screws + 2
- 810-T ⇒ 8 screws + 2



- 1 N°10 TF screw (4.8 x 12.7)



- 1 Chc M5 x 12 screw to secure base spar to drum



## TOOLS NEEDED

- Hammer
- Pliers
- Comfortable bosun's chair (Plastimo)
- Allen key (Ø4)
- Electric or hand drill
- 1 Ø 4.2 mm drill
- Hacksaw
- Tape measure
- Screwdriver
- Silicone filler

## ASSEMBLY

- This method consists of fully dismantling the forestay and assembling the jib reefing system while the forestay is lying flat.
- We recommend this method as it is faster.
- In certain cases the top part of the forestay cannot be dismantled; in this case:
  - ➔ do an in situ assembly (see page 14)
  - ➔ contact a professional who can install a universal joint on the upper part of the forestay

### Steps to be followed:

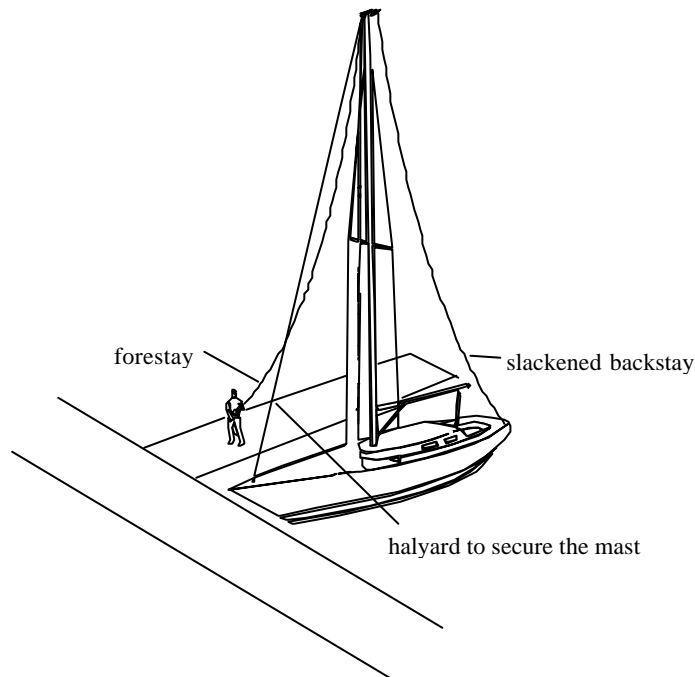
#### DISMANTLING THE FORESTAY

##### Lower part

- Slacken the backstay
- Secure the mast forward with 1 or 2 halyards
- Tighten the halyards to relieve the strain on the forestay
- Dismantle the lower part of the forestay (this usually consists of removing a rigging screw pin, or a screw and a nut)

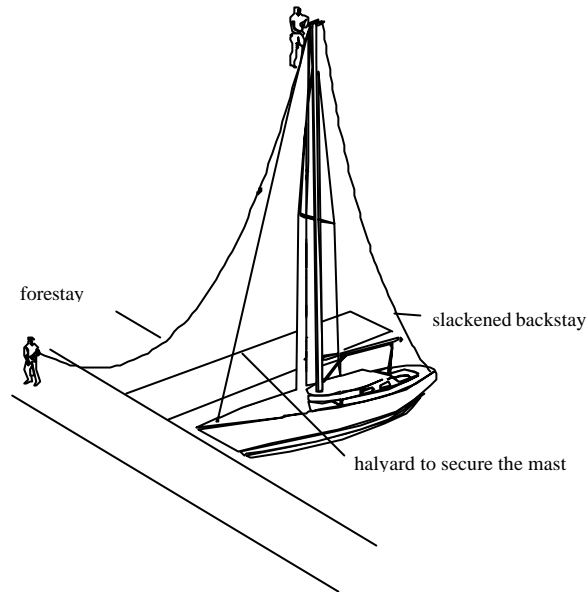
Note: it is important to measure the distance between the forestay eye and the hole of the forward mounting plate in order to find the correct adjustments again.

For a turnbuckle assembly, measure the distance between the mounting plate and the blocking nut of the turnbuckle.



Upper part

- Send a person to the masthead (equipped with hammer and pliers)
- Dismount the upper part of the forestay
- Bring the person and the forestay down from the masthead

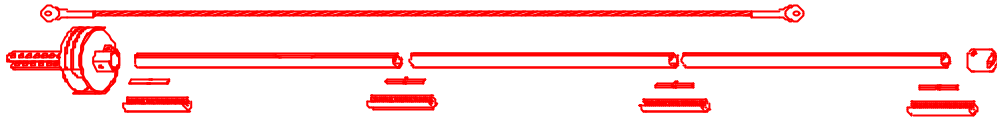


## ASSEMBLING THE JIB REEFING SYSTEM

- Lay the forestay flat



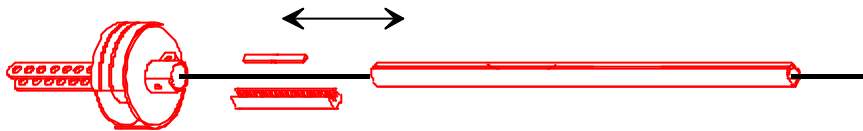
- Place the parts to be assembled alongside the forestay



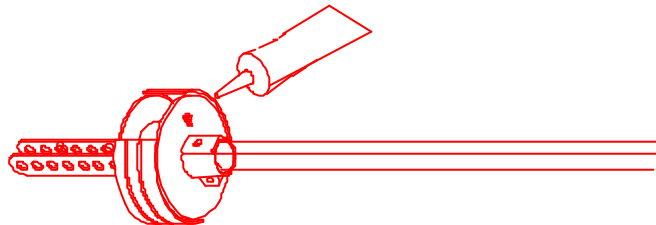
- Assemble the drum unit on the forestay and put the rigging screw pin or screw and nut in place (select the chainplate hole that corresponds to the initial forestay adjustment)



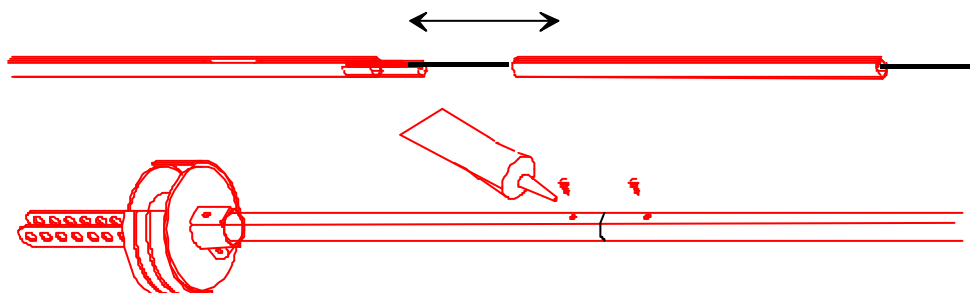
- Slide the base spar onto the forestay
- Slide a coupling sleeve and connecting stop onto the forestay (ensure that the hole in the coupling sleeve is in line with the pre-drilled hole of the base spar)



- Slide the base spar into the drum unit until the two holes are in line, insert the Chc M5 x 12 screw (after putting some silicone filler in the hole in order to reduce the stainless steel / aluminium electrolytic couple) and tighten.

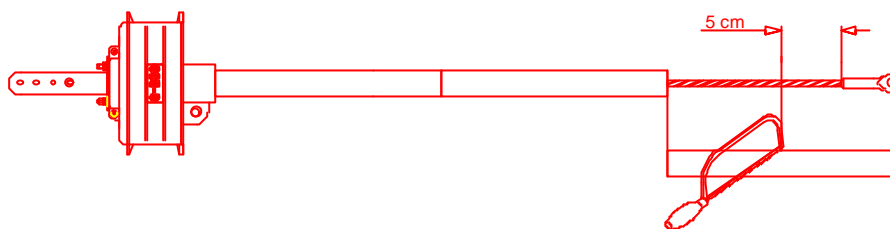


- Put another coupling unit (sleeve and stop) into position
- Insert a N°7 screw ( 3.9 x 12.7); do not forget to put some silicone filler into the hole beforehand
- Put another aluminium spar into position
- Repeat the process until only one spar is left



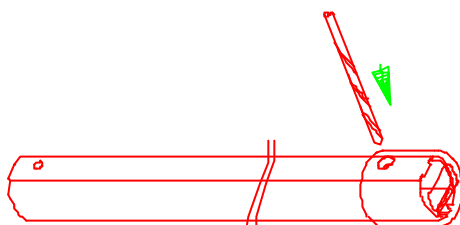
## Positioning the last spar

- Position the last spar so that it lies flush against the previous spar but do not install it
- Measure a distance of 5 cm back from the sleeve of the forestay
- Mark and cut the spar with a hacksaw
- Put a coupling unit into position (sleeve and stop)
- Insert the spar, then insert and tighten the screw

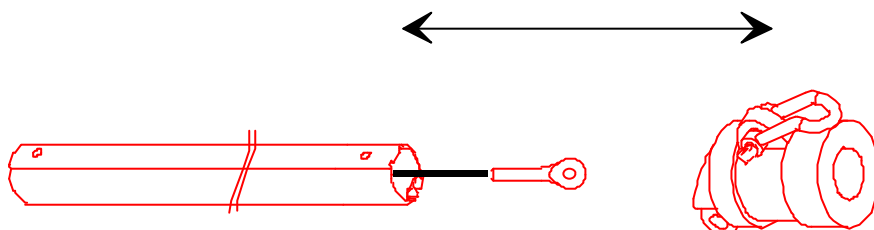


## Installing the top end stop

- Slot the top end stop over the aluminium spar
- Drill a hole (with a 4.2 mm drill)
- IMPORTANT: refer to diagram for the positioning of the top end stop



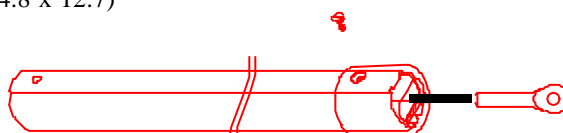
- Before putting the screw into position, do not forget to slide the halyard swivel into place (ensure that the conical end of the halyard swivel faces downwards)



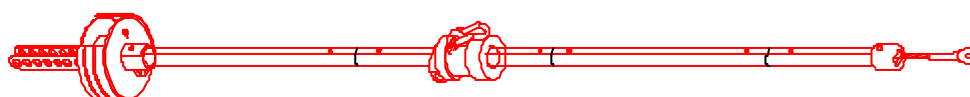
- Insert a coupling unit (sleeve and stop)
- Ensure that the hole in the coupling unit is in line with the hole you have just drilled



- Put the top end stop back into position
- Put some silicone filler into the hole
- Insert and tighten N°10 TF screw (4.8 x 12.7)



- Your jib reefing system is now assembled and can be put into position (hoist it up to the masthead with a halyard)



## IN SITU ASSEMBLY

- ➔ this method of assembly may be carried out by one person
- ➔ it is not necessary to dismantle anything at the masthead

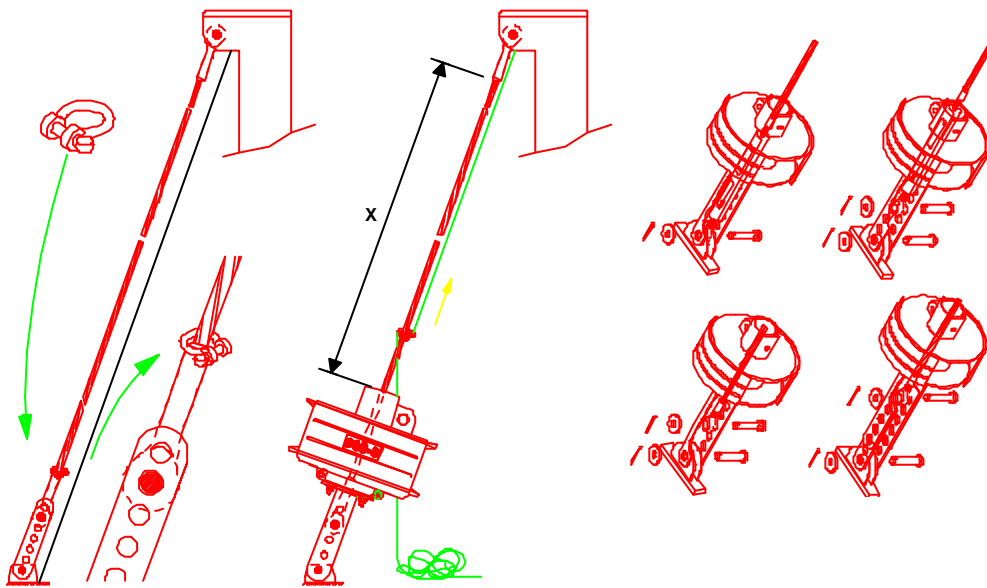
### Steps to be followed:

#### MEASURING THE LENGTH OF THE FORESTAY

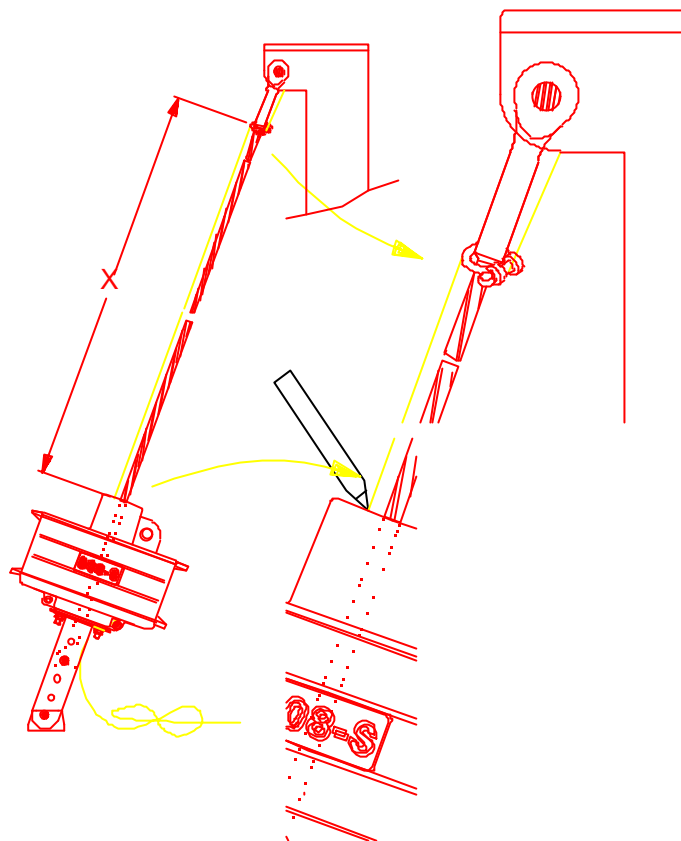
- In order for this jib reefing system to be perfectly adapted to your boat the length « X » needs to be known.

#### Helpful hint:

- Slide a small shackle around the forestay
- Ensure that it lies flush against the sleeve
- Slacken the backstay
- Secure the mast with a halyard
- Dismount the lower part of the forestay
- Assemble the drum unit
- Reassemble the lower part of the forestay
- Undo the halyard and tighten the backstay



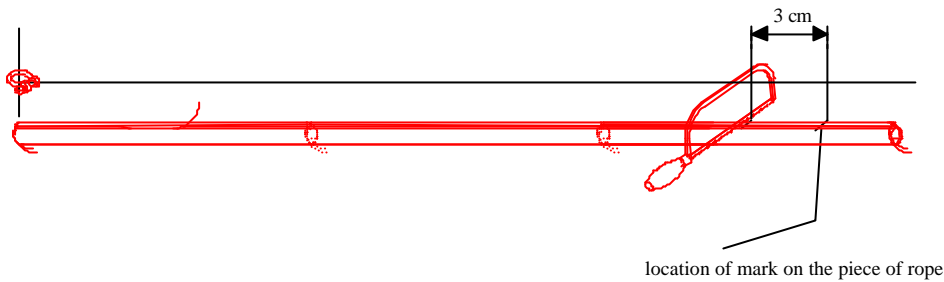
- Attach a halyard to the shackle
- Attach a length of rope (or a tape measure) to the shackle
- Hoist the shackle until it touches the top sleeve of the forestay
- Mark the piece of rope level with the top of the drum unit
- Lower the shackle



## **CUTTING THE LAST SPAR**

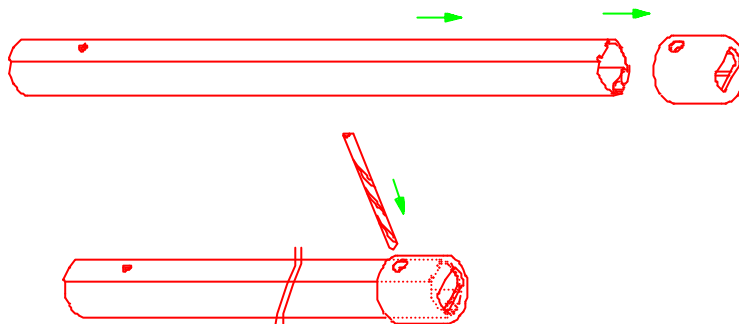
Stretch out flat the piece of rope used to measure the length of the forestay

- Lay the aluminium spars parallel to the piece of rope (take note of base spar, see page 7)
- Mark the spar level with the mark on the piece of rope
- Cut the spar 3 cm (safety margin) below the mark



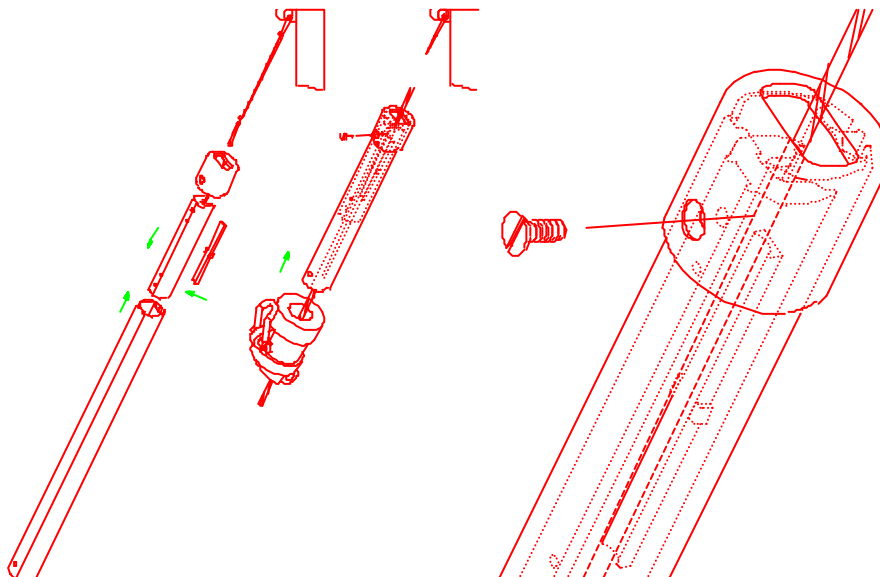
## **ASSEMBLING THE TOP END STOP**

- The top end stop should be assembled on the aluminium spar that has just been cut.
  - Slide the top end stop fully over the end of the spar  
(IMPORTANT: refer to diagram below for positioning of the hole in the top end stop)
  - Drill a hole using a 4.2 mm drill

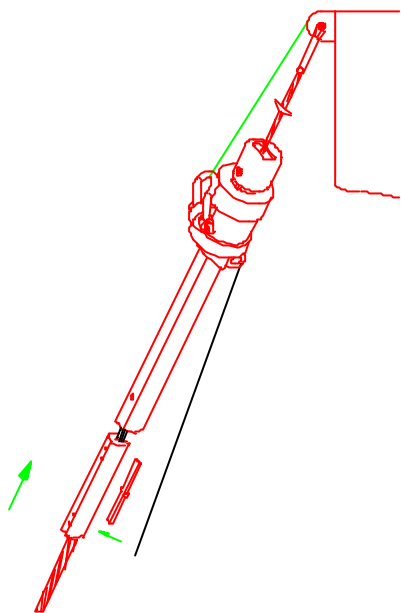


## **ASSEMBLING THE SPARS**

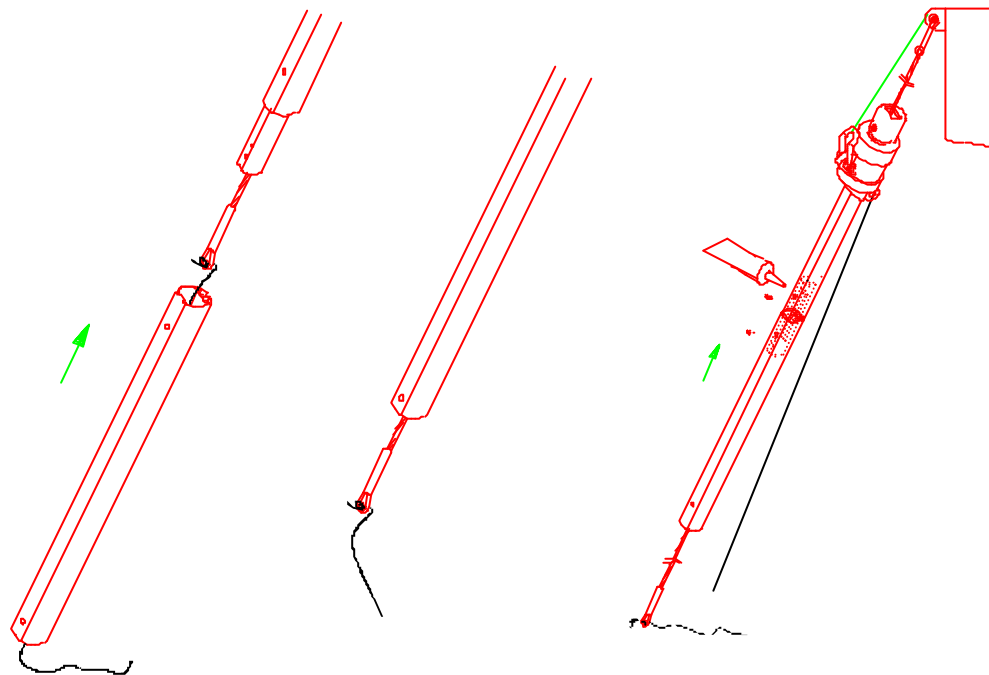
- Dismount the forestay from the stemhead fitting
- Install the following on the forestay:
  - Top end stop
  - The spar that you have cut and drilled
  - Coupling unit (sleeve and stop); ensure that the hole in the coupling unit is in line with the hole in the spar
  - N°10 screw
  - Halyard swivel (IMPORTANT: see drawing below for position of halyard swivel)



- Attach a halyard to the halyard swivel in order to support the spars as they are assembled

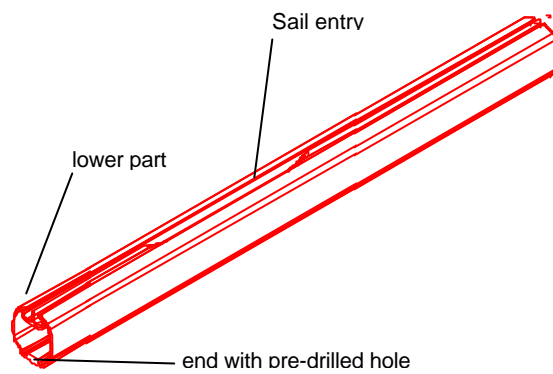


- Insert a coupling unit (sleeve and stop)
  - Put some silicone filler into the holes before tightening the screws (in order to reduce the electrolytic couple between the stainless steel screw and the aluminium)
  - Insert a N°7 screw (3.9 x 12.7)
  - Wipe away any excess silicone with a cloth
  - Slide another aluminium spar into position
- IMPORTANT:** keep the base spar to one side; you will be assembling it last)
- Repeat the process as many times as necessary
  - To put the base spar into position, it is first advisable to loop a piece of rope through the eye of the forestay in order for the spar to be able to slide easily around it and for the forestay then to be retrieved.

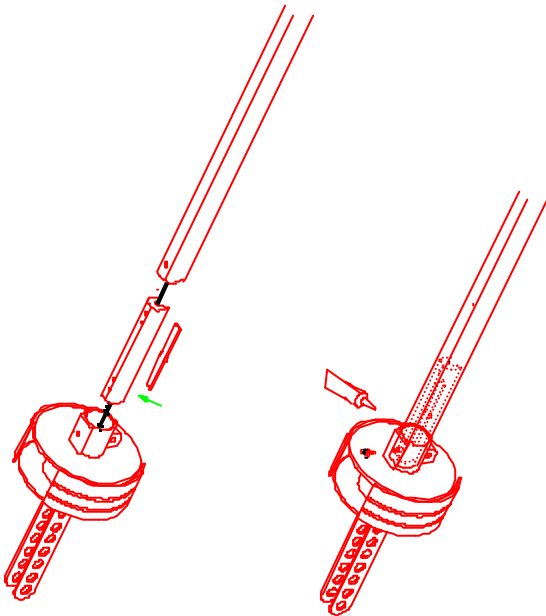


## **ASSEMBLING THE BASE SPAR**

- IMPORTANT: ensure the base spar is facing the right way (see diagram below)



## **ASSEMBLING THE DRUM UNIT**

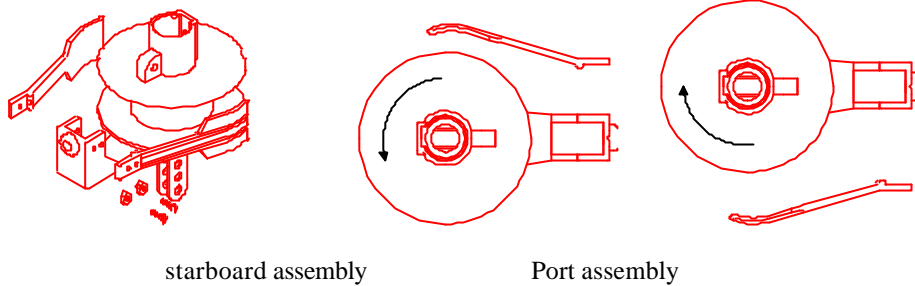


- Position the sleeve or turnbuckle\* on the drum (\*depending on model)
- Insert coupling unit from the bottom end of the spar (ensure the hole in the coupling unit is in line with the pre-drilled hole on the end of the base spar)
- Insert the base spar into the drum unit
- Put some silicone filler in the pre-drilled hole
- Insert the Chc M5 x 12 screw
- Attach the jib reefing system to the forward mounting plate
- Lower the halyard swivel
- Tighten the backstay

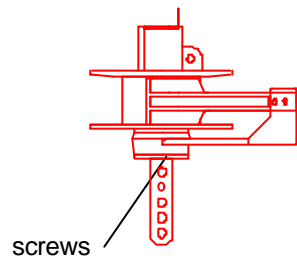
## ADJUSTING THE REEFING LINE FEEDERS

### 406-T model

- The reefing line feeder on the 406-T model is assembled either on the right or left hand side of the drum unit, depending on which direction you prefer to reef.
- To fasten the reefing line feeder, use the two M4 x 12 nuts and bolts (see page 6)

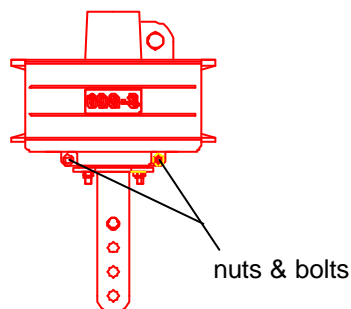


- The angle is adjusted by loosening the two screws that hold the chainplate.



### 608-T & 810-T models

- The angle of reefing line feeders on 608-T & 810-T models is adjusted by loosening the two nuts and bolts (see diagram below)

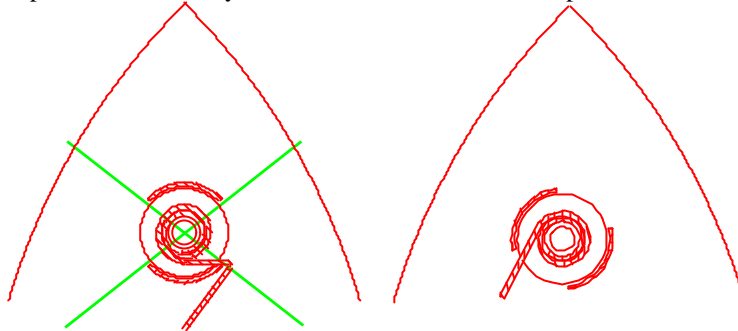


## RECOMMENDATIONS

### Reefing line feeders

➔ The angle of all the reefing line feeders may be adjusted.

IMPORTANT: they should be positioned in a way that best suits the direction of pull on the line

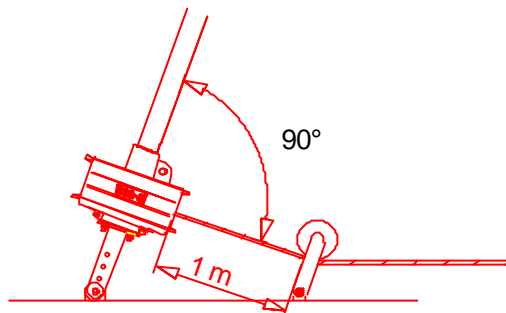


### Reefing line

➔ The reefing line is wound around the drum.

Only use pre-stretched rope in order to eliminate any elasticity

Refer to diagram below for the position of the reefing line as it comes out of the drum



### Reefing direction of the genoa

➔ The genoa should be reefed in the same direction as the strands turn on the forestay.

### When you are not sailing

➔ Slacken the backstay in order to reduce undue strain on mechanical parts

### About the drum

➔ When your genoa is fully reefed and in order to avoid direct strain on mechanical parts and on the knot of the reefing line, there should be a minimum length of one halyard turn on the drum.

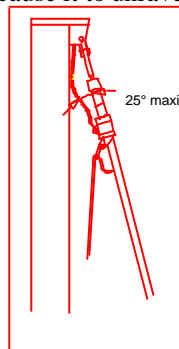
### Hollow forestay

➔ If you have a hollow forestay we recommend that you add the optional ball prefeeder (reference 25884).

### Halyard/forestay angle

➔ This angle should never be more than 20-25° as this makes it impossible to tauten and reef the sail.

What is more, this undue strain on the forestay could cause it to unravel and even dismast the boat...



### When sailing

➔ Ensure that the forestay is always taut. Not only will this make reefing easier but will avoid any danger of the forestay unravelling.

(We recommend putting a universal joint at the masthead)

### Trimming the genoa

➔ The reefing line should never be used to trim the sail.

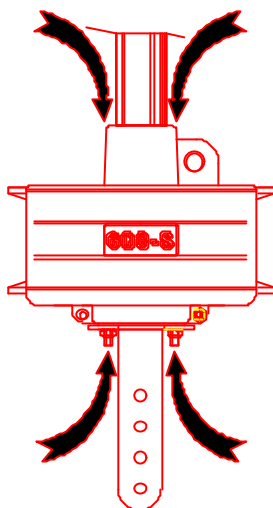
### Unfurling the genoa

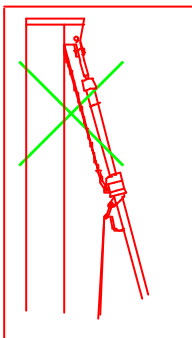
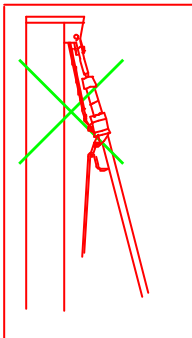
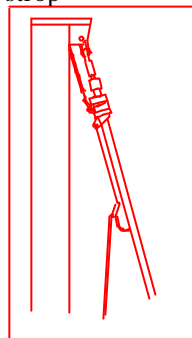
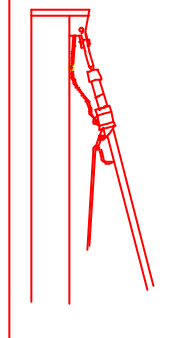
➔ When unfurling the genoa, ensure that it does not unfurl too quickly by winding the reefing line once round a winch and feeding it out slowly in one hand and the genoa sheet in the other.

## MAINTENANCE

Rinse the drum unit once a year with fresh water (no dismantling required).  
 - No other special maintenance is needed.

fresh water



PROBLEM ENCOUNTERED	CAUSE	SOLUTION
Halyard turns with the halyard swivel	<ul style="list-style-type: none"> <li>- Forestay not taut enough ➡➡</li> <li>- Genoa halyard too slack ➡➡</li> <li>- Genoa too short, halyard swivel too low ➡➡</li> </ul>  <ul style="list-style-type: none"> <li>- Genoa halyard too close to the forestay ➡➡</li> </ul> 	<ul style="list-style-type: none"> <li>- tighten the backstay</li> <li>- tauten the genoa halyard</li> <li>- Use a strop</li> <li>- Fasten a halyard feeder to the mast or a diverter to the forestay</li> </ul>  
The halyard tends to wrap itself around the spar when the genoa is hoisted	<ul style="list-style-type: none"> <li>- Halyard is worn and thus twists in the direction of the rope strands ➡➡</li> </ul>	<ul style="list-style-type: none"> <li>- Change the halyard</li> </ul>
Reefing line fouls	<ul style="list-style-type: none"> <li>- Wrong angle on reefing line ➡➡</li> <li>- First sheave too far from drum unit ➡➡</li> <li>- Genoa unfurled too quickly ➡➡</li> </ul>	<ul style="list-style-type: none"> <li>- Change position of first sheave</li> <li>- Slow down the unfurling of the genoa by winding the reefing line once round a winch.</li> </ul>
Genoa difficult to hoist	<ul style="list-style-type: none"> <li>- Poor output from a sheave ➡➡</li> <li>- Halyard jammed ➡➡</li> <li>- Luffrope too large ➡➡</li> </ul>	<ul style="list-style-type: none"> <li>- Try with a different halyard</li> <li>- Change luffrope</li> </ul>

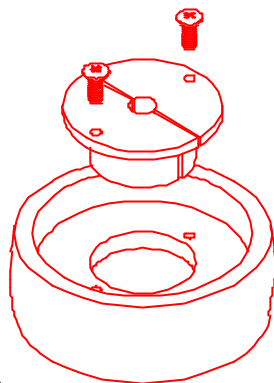
## OPTIONAL EXTRAS

### HALYARD DIVERTERS

- When the genoa is furled or unfurled, if the angle between the halyard and the forestay is too tight, the halyard risks being twisted round as the halyard swivel turns.
- 3 options are available to solve this problem:

#### **Option 1:** Halyard diverter wheel

- To install the diverter wheel, it is necessary to dismantle the forestay



**Ref: 25720**

#### **Option 2:** Halyard feeder

- To install the halyard feeder, it is not necessary to dismantle the forestay
- 2 sizes are available; we recommend:

Ref 25677 ➔ 608 & 810 models

Ref 26140 ➔ 406 model



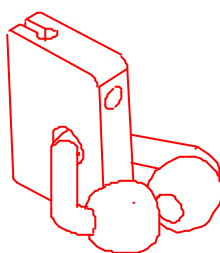
**Ref: 25677**



**Ref: 26140**

#### **Option 3:** Rope prefeeder

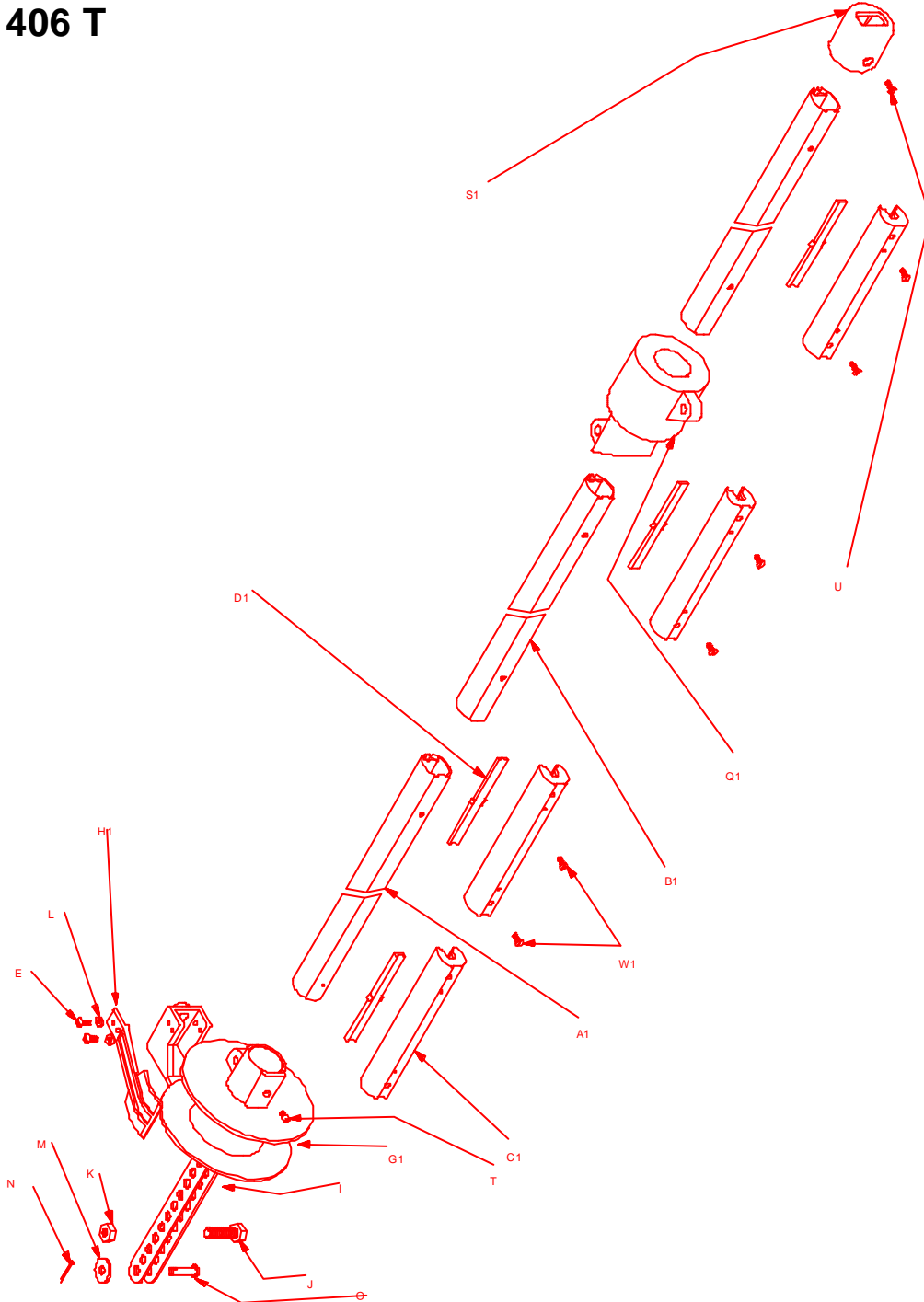
- We recommend the installation of a rope prefeeder for use with a hollow forestay
- The height of the prefeeder may be adjusted (the screw should be at the top of the prefeeder)



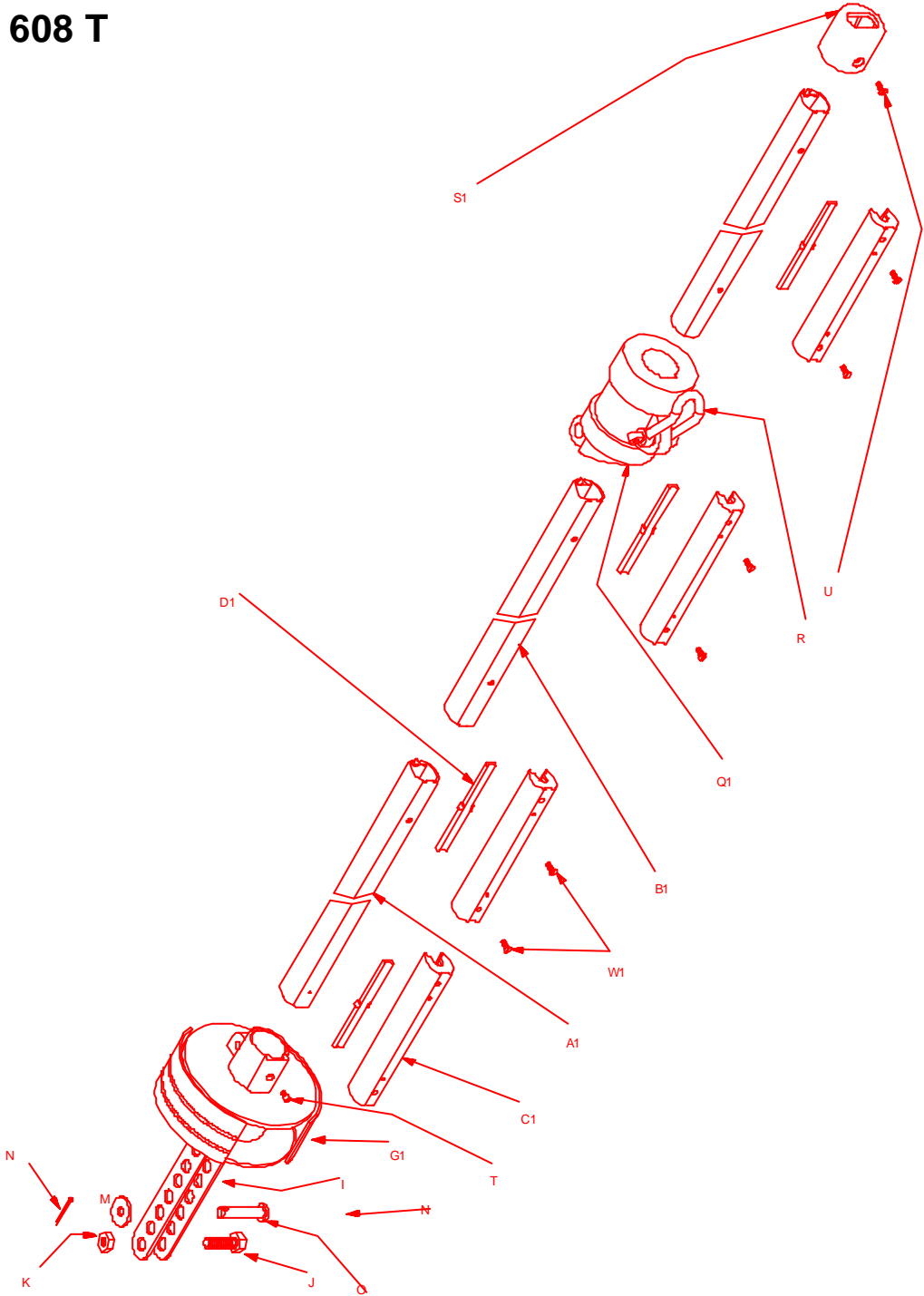
**Ref: 25884**

			406-T	406-T	608-T	608-T	810-T
			25200	25286	25201	25287	25202
A1	25184	Base	1	1	1	1	1
B1	25183	Alloy spar	2	2	3	3	4
C1	25375	Coupling sleeve	4	4	6	6	7
D1	25149		4	4	6	6	7
E	25675	Screw TCL M4 x 12	2	2			
G1	26326	Drum	1	1			
	26327	"			1	1	
	26328	"					1
H1	22828	Reefing line adjuster	1	1			
I	26325	Coupling plates 5 holes	1				
	21308			1			
	21291				1		
	21295					1	
	22850						2
J	18109	Screw TH 8 x 30	1				
	22831	Screw TH 12 x 35			1		
	22855	Screw TH 14 x 40					1
K	18048	Nut M8	1				
	22832	Nut M12			1		
	22857	Nut M14					1
L	18045	Nut M4	2	2			
M	18076	Washer L8		1			
	18078	Washer L12				1	
N	18090	Split pin 20x20		1			
	18092	Split pin 2.5x30				1	
O	22836	Shouldered clevis pin dia 8		1			
	22837	Shouldered clevis pin dia 12				1	
Q1	26323	Halyard swivel	1	1			
	26322	"			1	1	1
R	19451	Crank shackle			1	1	1
S1	22840	top end stop	1	1	1	1	1
T	25674	Screw Chc M5 x 12	1	1	1	1	1
U	25672	Screw N°10 (4.8x12.7)	1	1	1	1	1
W1	27126	Screw TF N°7 (3.9x12.7)	4+2	4+2	6+2	6+2	8+2

# 406 T



608 T



# 810 T

