

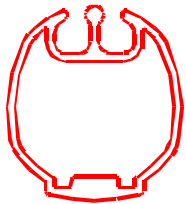
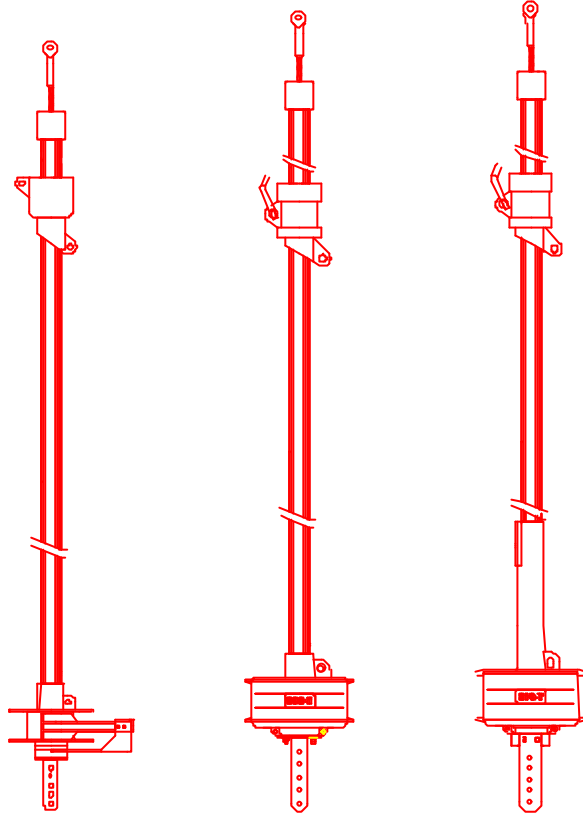
**PLASTIMO JIB REEFING SYSTEMS  
T-SERIES**

**406-T**

**608-T**

**810-T**

**GB**



# **ASSEMBLY INSTRUCTIONS FOR T-SERIES**

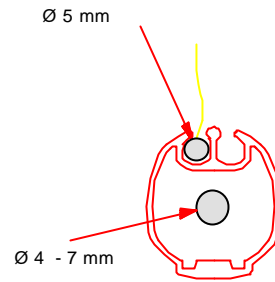
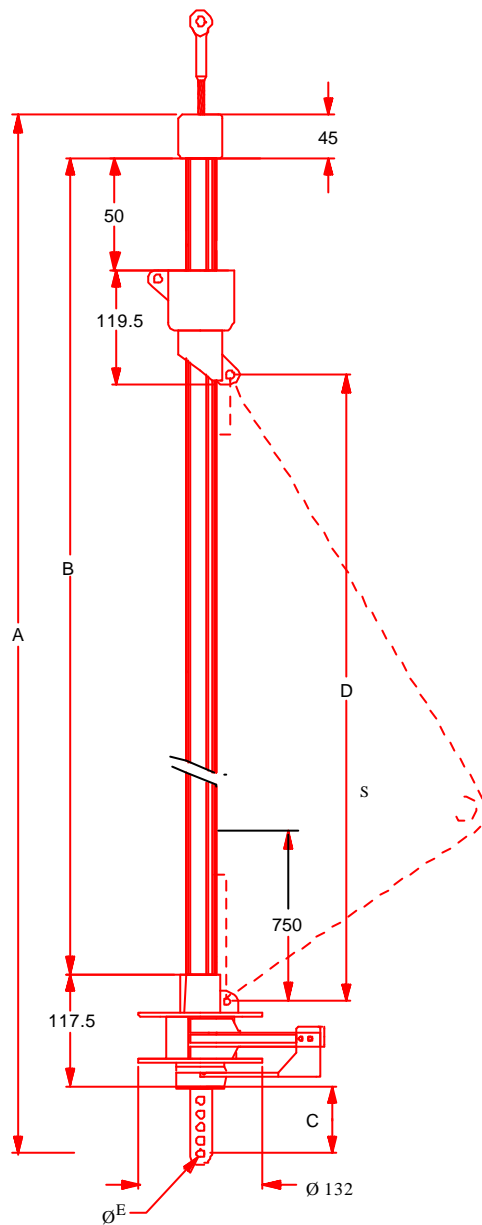
## **406-T 608-T 810-T**

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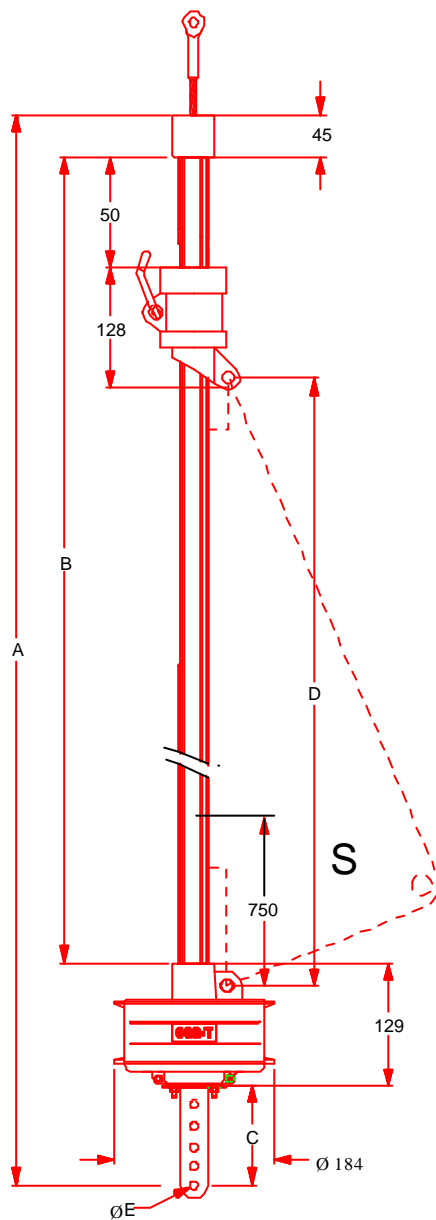
# TECHNICAL SPECIFICATIONS

## 406-T MODEL



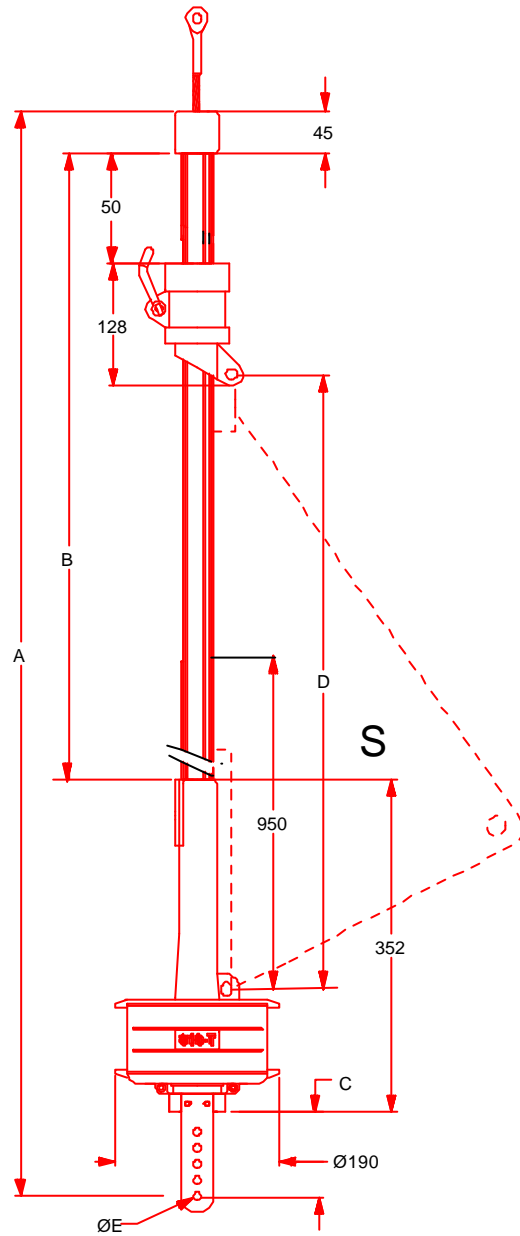
Model	406-T
Ref. N° chainplate version	25200
Ref. N° turnbuckle version	25286
Forestay diameter (mm)	4 - 7
Luffrope diameter (mm)	5
Length A chainplate (m)	6.60
Length A turnbuckle (m)	6.68
Length B (m)	6.35
Length C chainplate (mm)	85
Length C turnbuckle (mm)	170
Length D (m)	6.22
S (m <sup>2</sup> )	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

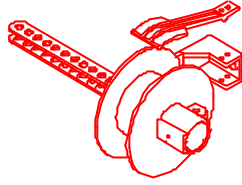


Model	810-T
Ref. N°	25202
Forestay diameter (mm)	4 - 7
Luffrope diameter (mm)	5
Length A (m)	11.26
Length B (m)	10.64
Length C (mm)	220
Length D (m)	10.70
S (m <sup>2</sup> )	35
Ø E (mm)	14.3
Bearings	Delrin® & Torlon®
Coupling units (sleeve&0stop)	Delrin® + vis
Number of grooves	2

## DESCRIPTION OF SPECIFIC PARTS FOR EACH MODEL

### 406-T model

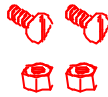
- 1 drum unit



- 1 halyard swivel

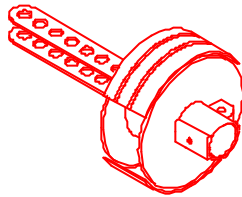


- 2 TCL screws M4 x 12 (to secure reefing line feeder 406-T)



### 608-T model

- 1 drum unit

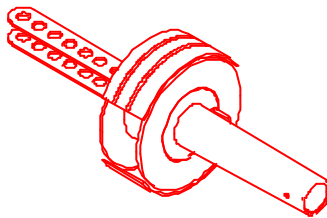


- 1 halyard swivel



### 810-T model

- 1 drum unit



- 1 halyard swivel



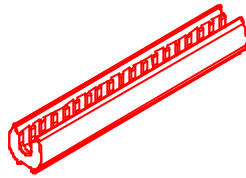
**Standard parts for all models**

- 1 top end stop



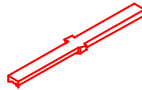
- Coupling sleeves

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

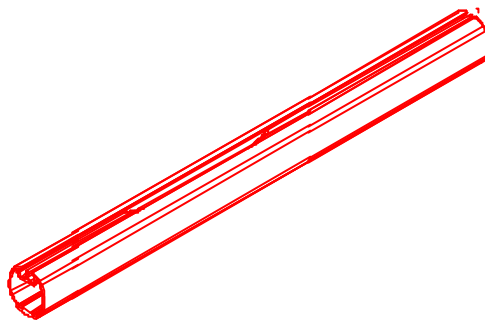


- Connecting stops

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

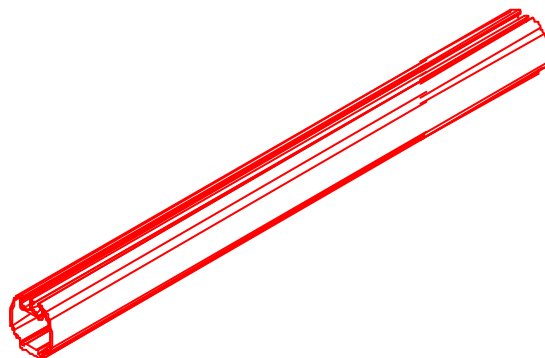


- 1 base spar



- Intermediate spars

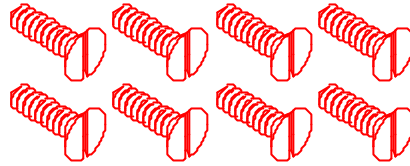
- 406-T ⇒ 2 spars
- 608-T ⇒ 3 spars
- 810-T ⇒ 4 spars



## Screws

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

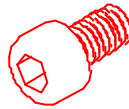
- 406-T ⇒ 4 screws + 2
- 608-T ⇒ 6 screws + 2
- 810-T ⇒ 8 screws + 2



- 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:

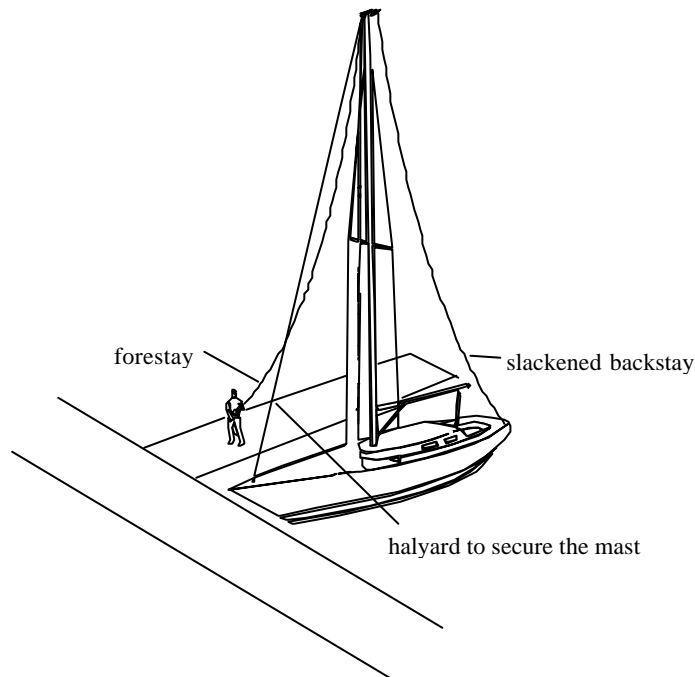
#### DISMANTLING THE FORESTAY

##### 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)

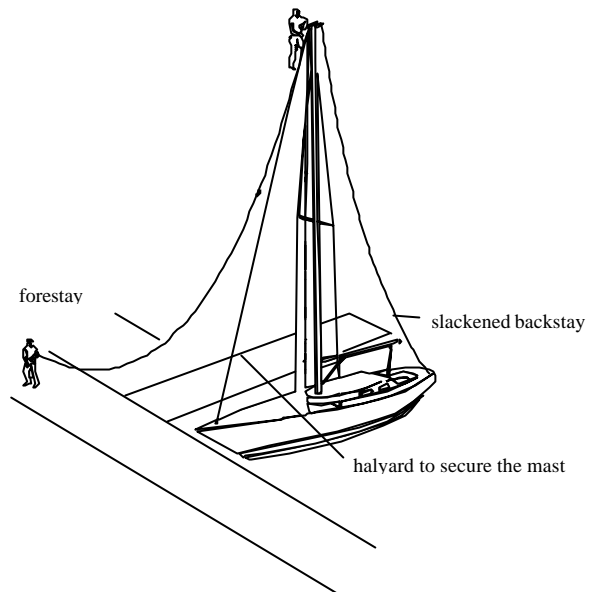
Note: it is important to measure the distance between the forestay eye and the hole of the forward mounting plate in order to find the correct adjustments again.

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

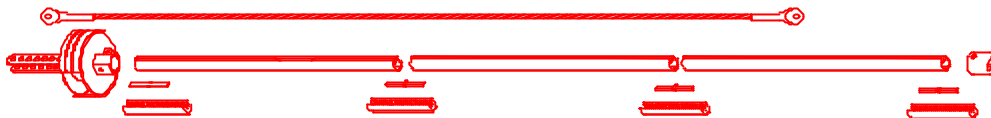


## ASSEMBLING THE JIB REEFING SYSTEM

- Lay the forestay flat



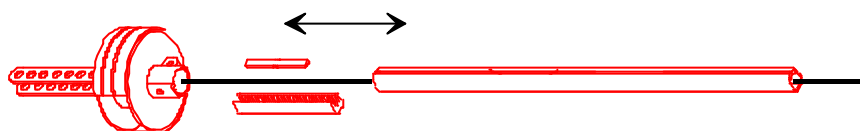
- Place the parts to be assembled alongside the forestay



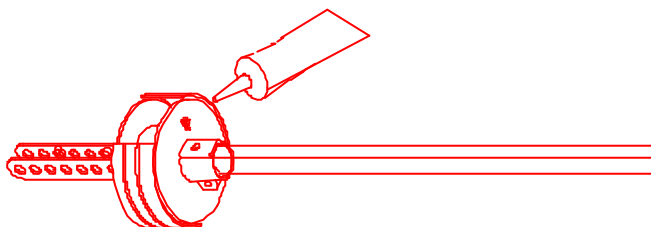
- Assemble the drum unit on the forestay and put the rigging screw pin or screw and nut in place (select the chainplate hole that corresponds to the initial forestay adjustment)



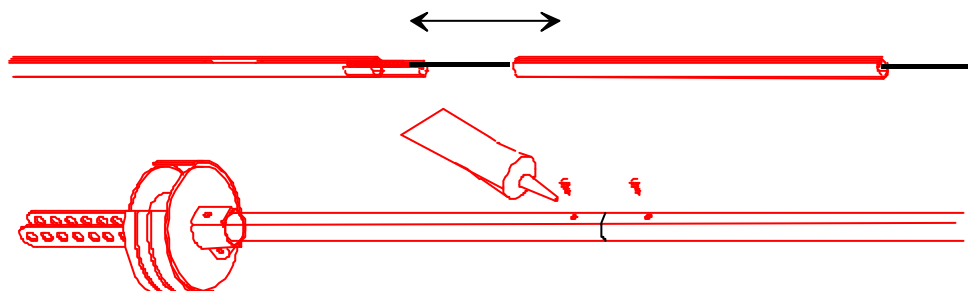
- Slide the base spar onto the forestay
- Slide a coupling sleeve and connecting stop onto the forestay  
(ensure that the hole in the coupling sleeve is in line with the pre-drilled hole of the base spar)



- 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.

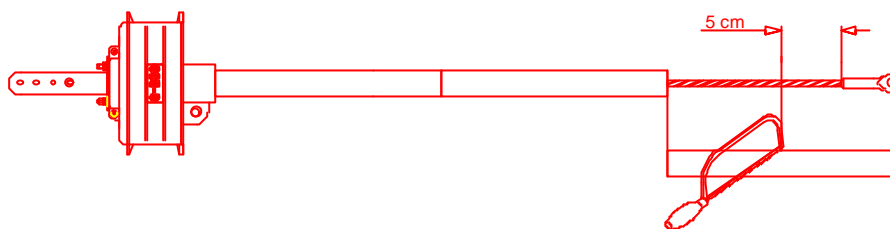


- Put another coupling unit (sleeve and stop) into position
- Insert a N°7 screw ( 3.9 x 12.7); do not forget to put some silicone filler into the hole beforehand
- Put another aluminium spar into position
- Repeat the process until only one spar is left



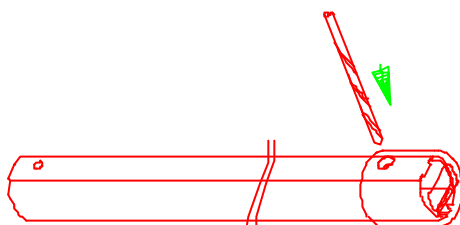
## Positioning the last spar

- 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

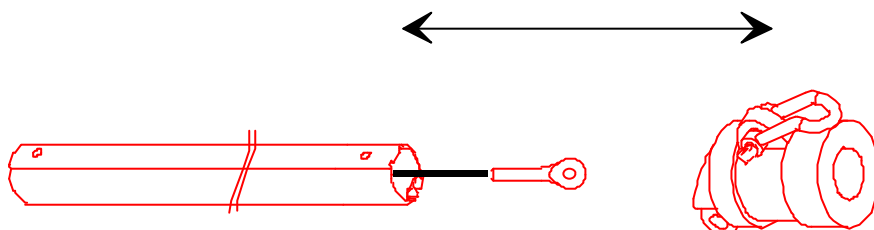


## Installing the top end stop

- 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



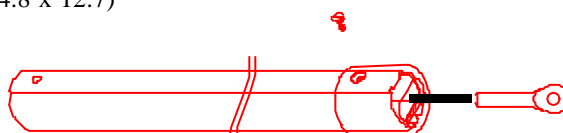
- Before putting the screw into position, do not forget to slide the halyard swivel into place (ensure that the conical end of the halyard swivel faces downwards)



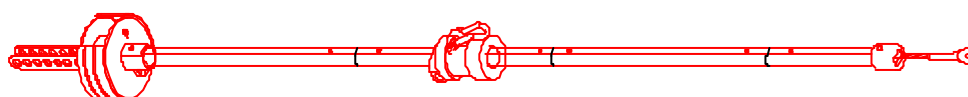
- Insert a coupling unit (sleeve and stop)
- Ensure that the hole in the coupling unit is in line with the hole you have just drilled



- 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

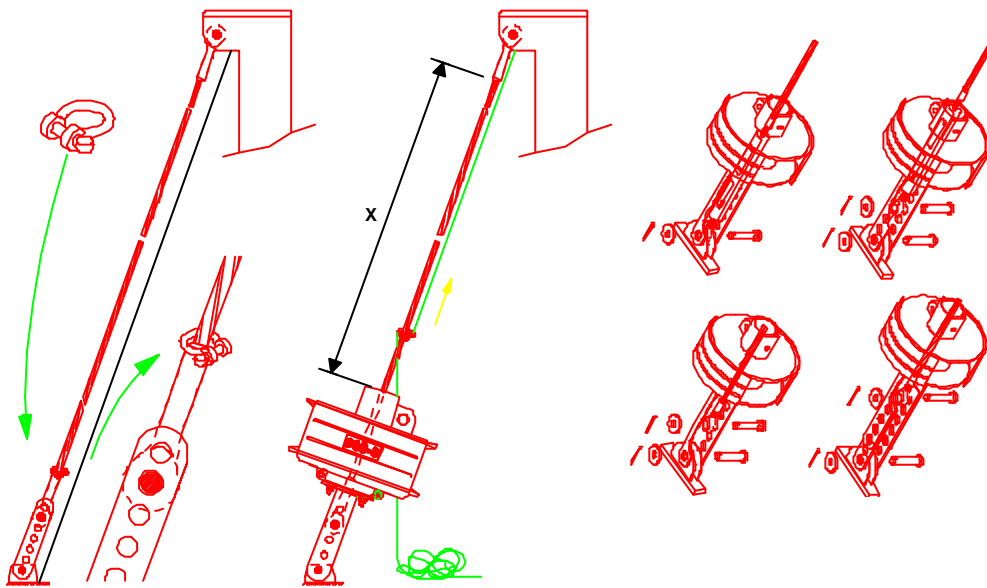
### Steps to be followed:

#### MEASURING THE LENGTH OF THE FORESTAY

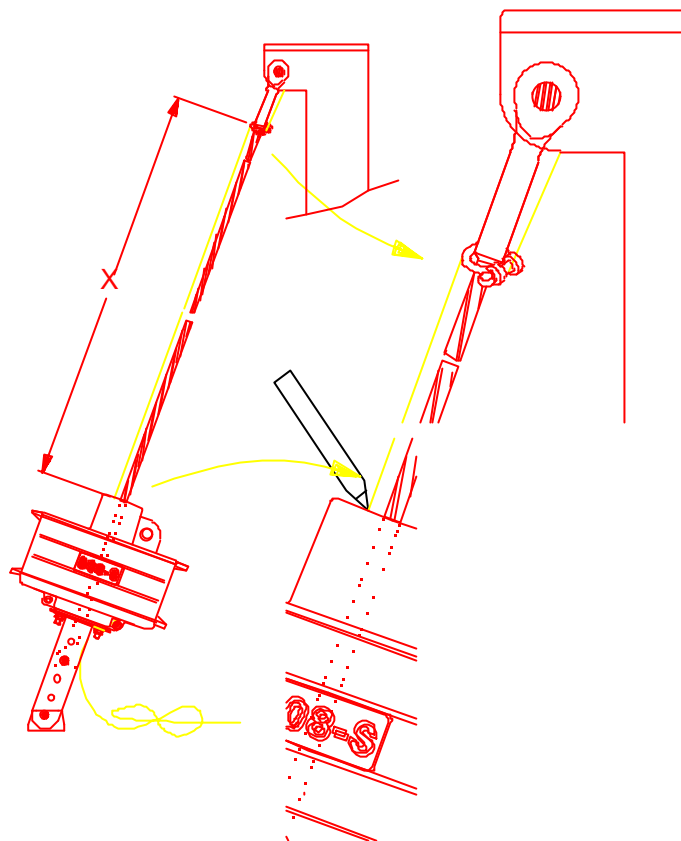
- In order for this jib reefing system to be perfectly adapted to your boat the length « X » needs to be known.

#### 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



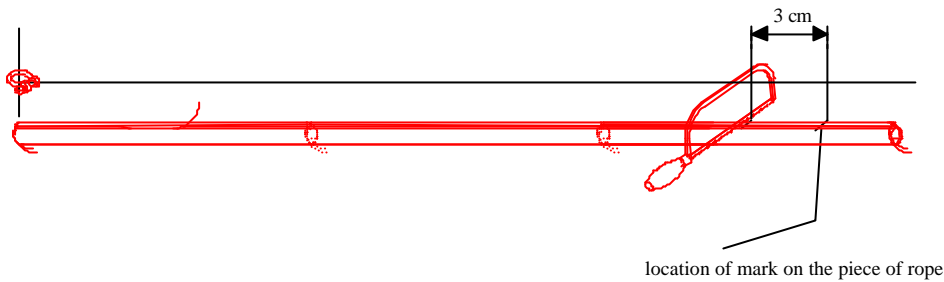
- Attach a halyard to the shackle
- Attach a length of rope (or a tape measure) to the shackle
- Hoist the shackle until it touches the top sleeve of the forestay
- Mark the piece of rope level with the top of the drum unit
- Lower the shackle



## **CUTTING THE LAST SPAR**

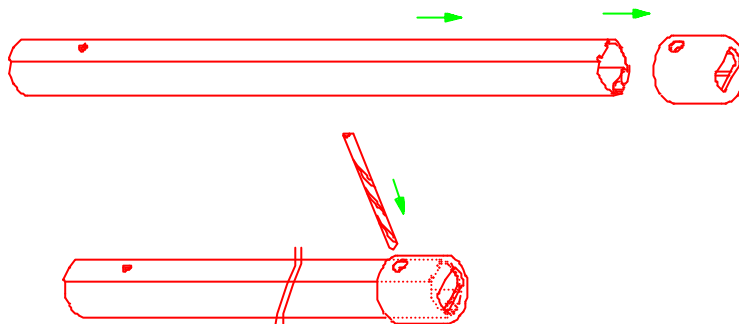
Stretch out flat the piece of rope used to measure the length of the forestay

- 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



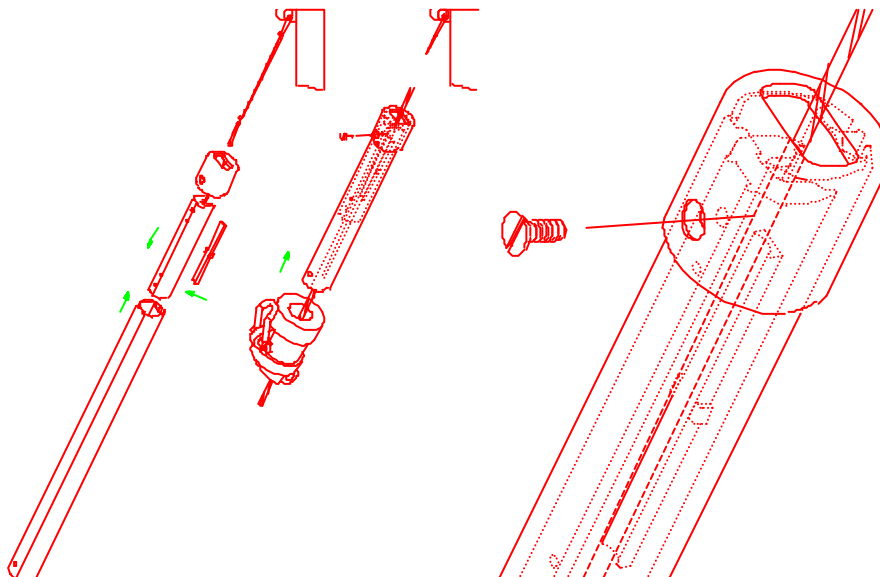
## **ASSEMBLING THE TOP END STOP**

- 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

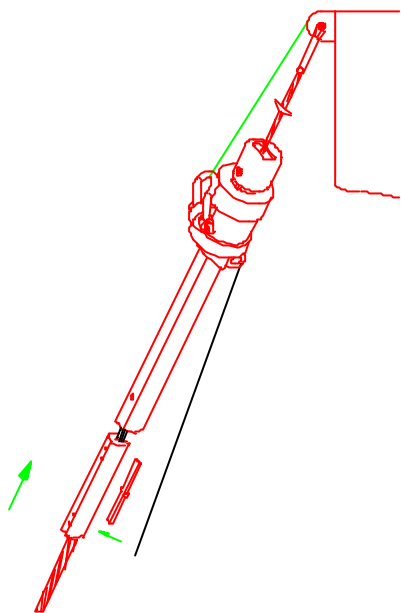


## **ASSEMBLING THE SPARS**

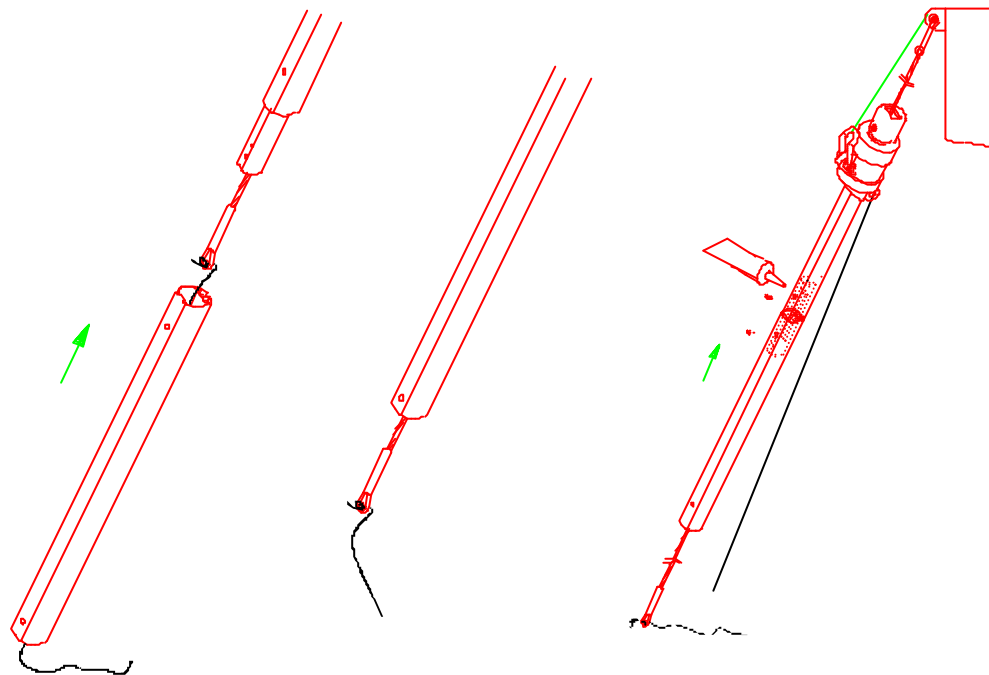
- Dismount the forestay from the stemhead fitting
- Install the following on the forestay:
  - Top end stop
  - The spar that you have cut and drilled
  - Coupling unit (sleeve and stop); ensure that the hole in the coupling unit is in line with the hole in the spar
  - N°10 screw
  - Halyard swivel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

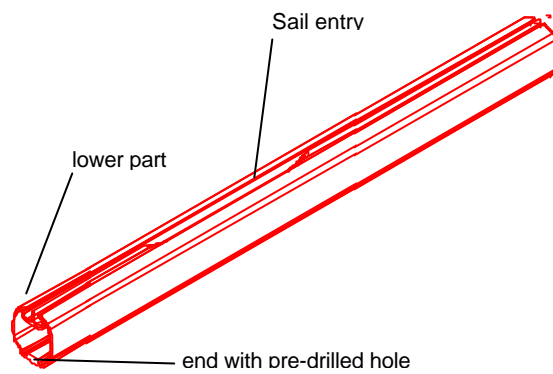


- Insert a coupling unit (sleeve and stop)
  - Put some silicone filler into the holes before tightening the screws (in order to reduce the electrolytic couple between the stainless steel screw and the aluminium)
  - Insert a N°7 screw (3.9 x 12.7)
  - Wipe away any excess silicone with a cloth
  - Slide 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.

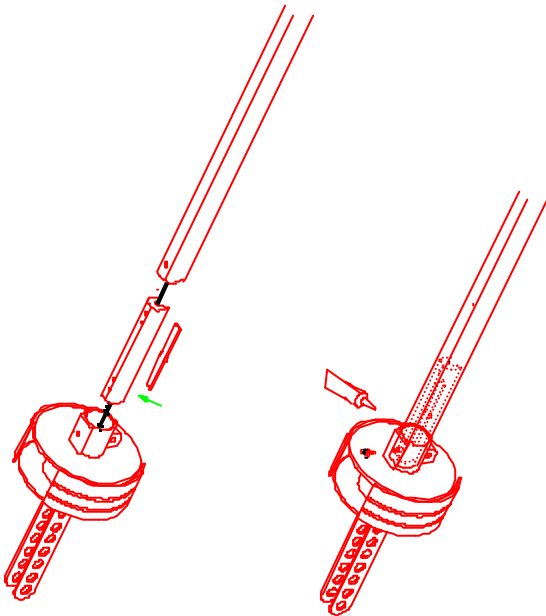


## **ASSEMBLING THE BASE SPAR**

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



## **ASSEMBLING THE DRUM UNIT**

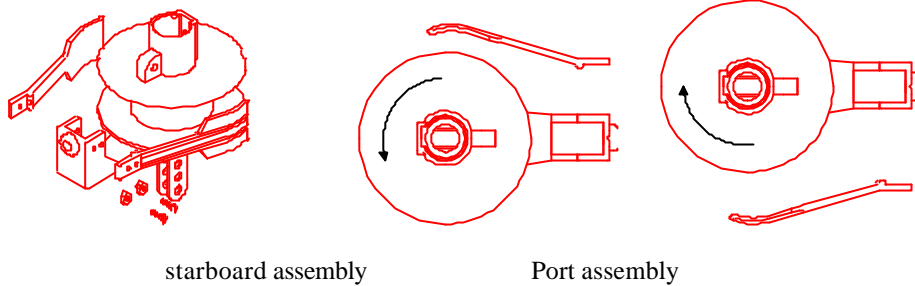


- Position the sleeve or turnbuckle\* on the drum (\*depending on model)
- Insert coupling unit from the bottom end of the spar (ensure the hole in the coupling unit is in line with the pre-drilled hole on the end of the base spar)
- Insert the base spar into the drum unit
- Put some silicone filler 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

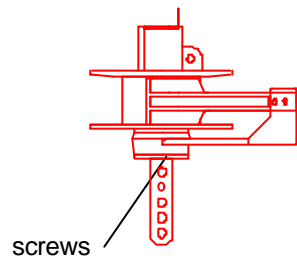
## ADJUSTING THE REEFING LINE FEEDERS

### 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)

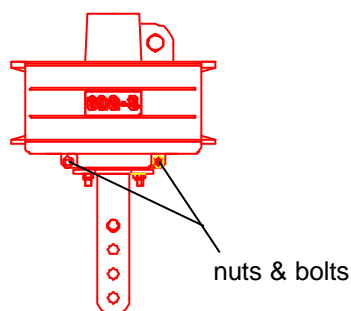


- The angle is adjusted by loosening the two screws that hold the chainplate.



### 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)

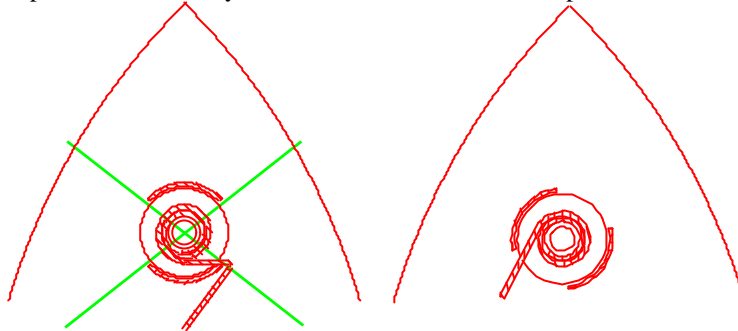


## RECOMMENDATIONS

### 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

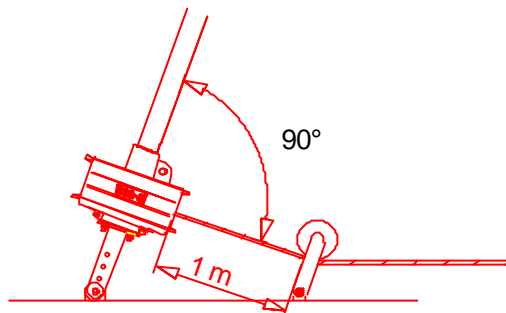


### Reefing line

➔ 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.

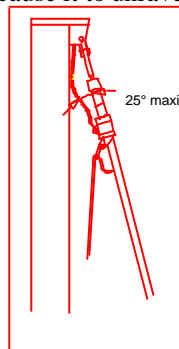
### Hollow forestay

➔ 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.

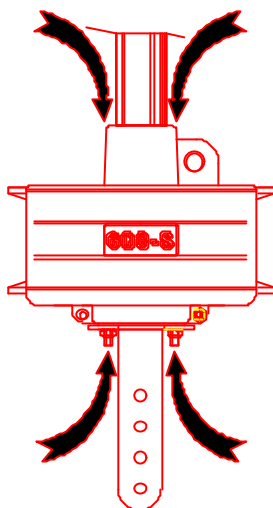
### Unfurling the genoa

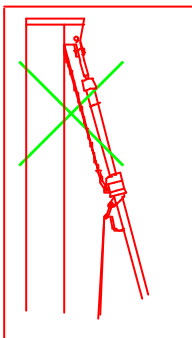
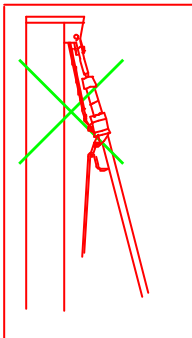
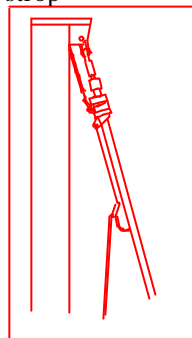
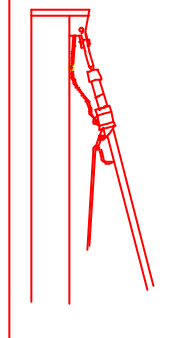
➔ When unfurling the genoa, ensure that it does not unfurl too quickly by winding the reefing line once round a winch and feeding it out slowly in one hand and the genoa sheet in the other.

## 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>

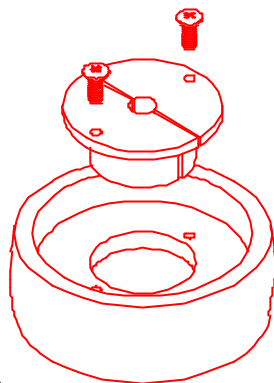
## OPTIONAL EXTRAS

### 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



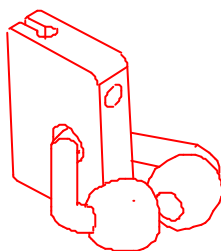
**Ref: 25677**



**Ref: 26140**

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

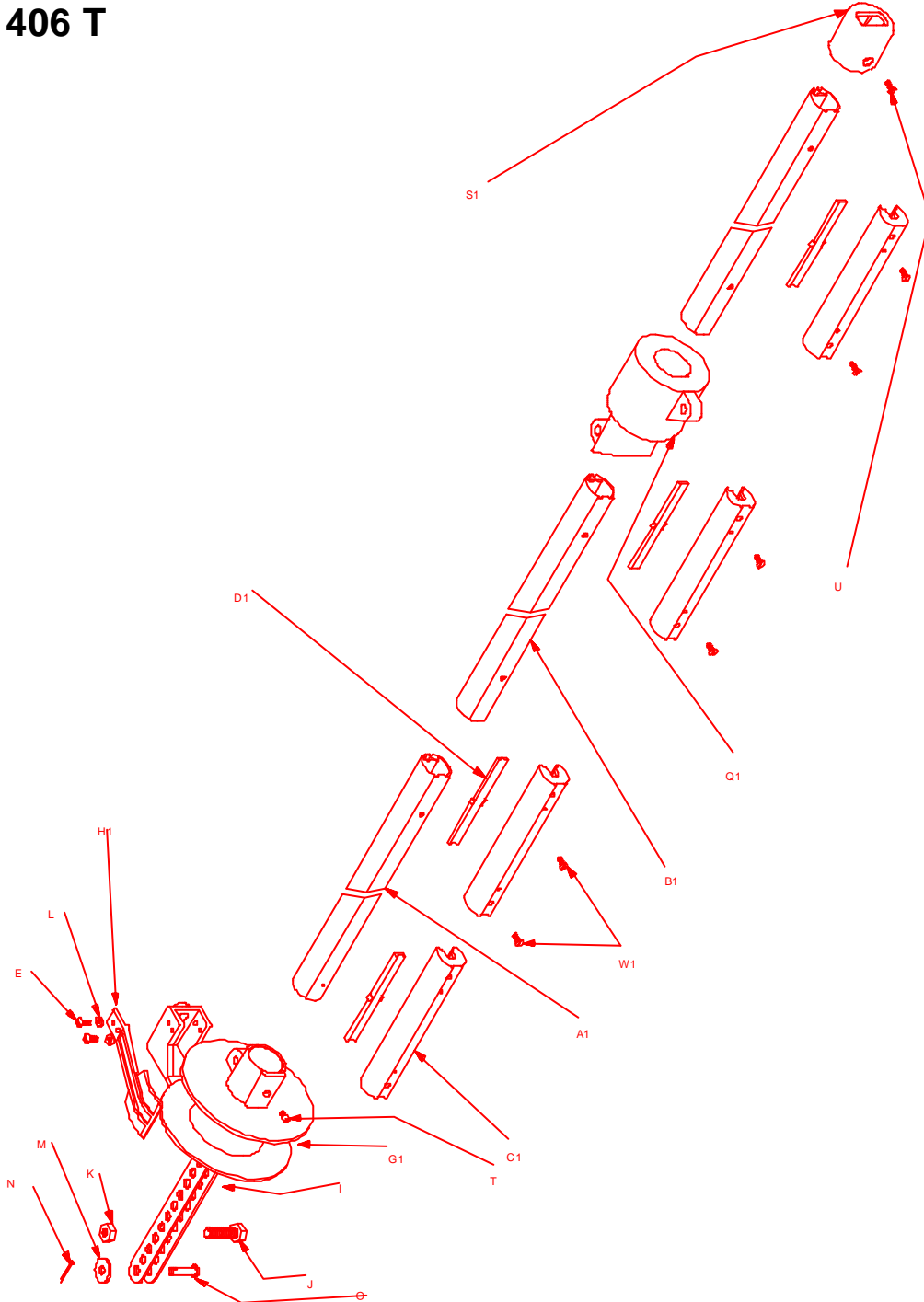
- We recommend the installation of a rope prefeeder for use with a hollow forestay
- The height of the prefeeder may be adjusted (the screw should be at the top of the prefeeder)



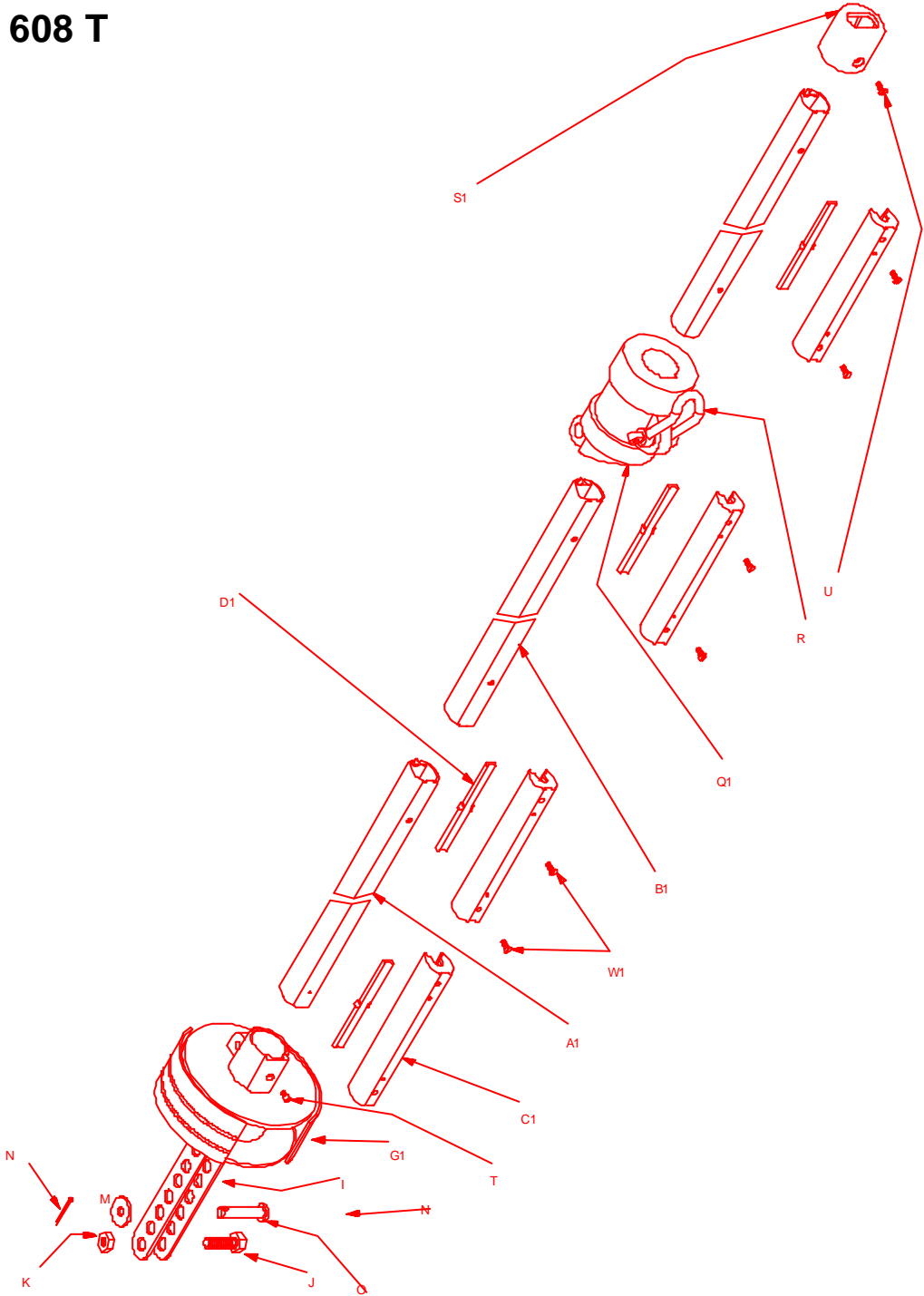
**Ref: 25884**

			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	25673	Screw TF N°7 (3.9x12.7)	4+2	4+2	6+2	6+2	8+2

# 406 T



608 T



# 810 T

