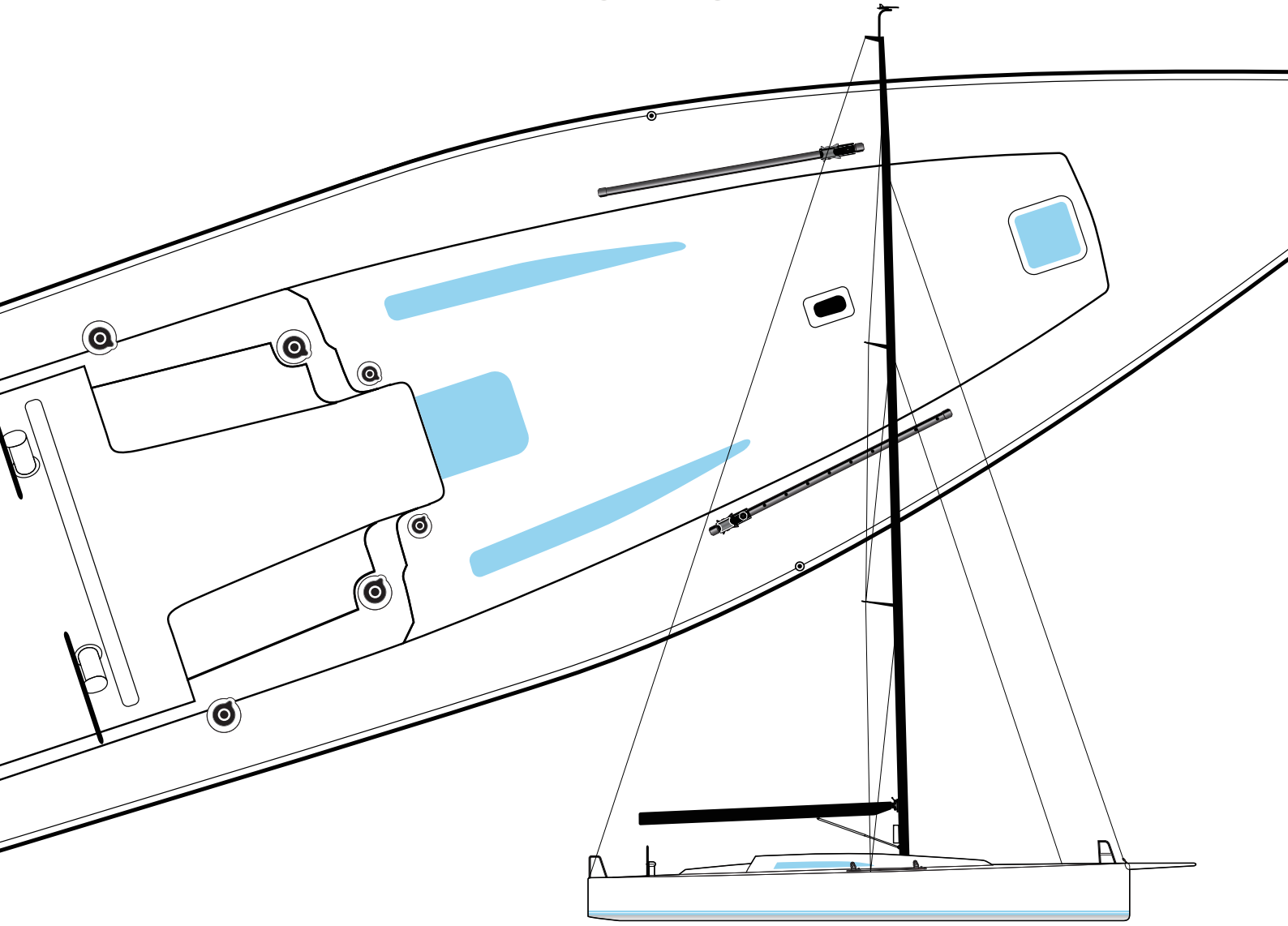
SAIL EXCHANGE



BOAT MEASURING GUIDE

Making sails isn't hard. But making sails that are well designed and constructed in accordance with strict ISO quality control parameters, requires real dedication. Even more so when those sails are backed up by a global 30-day money-back guarantee and a full 12-month warranty. At Sail Exchange, our sails are made with passion, integrity and transparency, delivered on time and at the right price. It's our promise to clients:

We deliver premium quality sails that fit your boat at unmatchable value, guaranteed.

Click above to go to specific sections:

Preparation required before measuring

Before you begin, fill out your details in the boxes and select each sail type you are measuring for below. Please keep all measurements in centimetres and remember the old saying: *'measure twice, cut once!'*

Name	
Phone	
E-mail	
Brand/Model/Year	

Sail types you are measuring for:	
Mainsail	☐
Spinnaker	☐
Headsail	☐

Tools required

Tape measure

- At least the length of the mast plus 10%
- The tape measure zero point is preferably large enough to accept a halyard snap shackle.
- If using a metal tape measure you can whip on a stainless steel ring and then deduct the bearing point from the zero point.
- If using a flexible or fibreglass tape measure a good tip is to take the tape measure to a sail maker and have a stainless steel 25mm x 5m ring sewn into the zero point to accept a snap shackle.

SMALL METAL RULER

CLIPBOARD

DIGITAL CALLIPERS

SMALL LINE OF VB CORD
(3 mm x 300 mm)

PENCIL

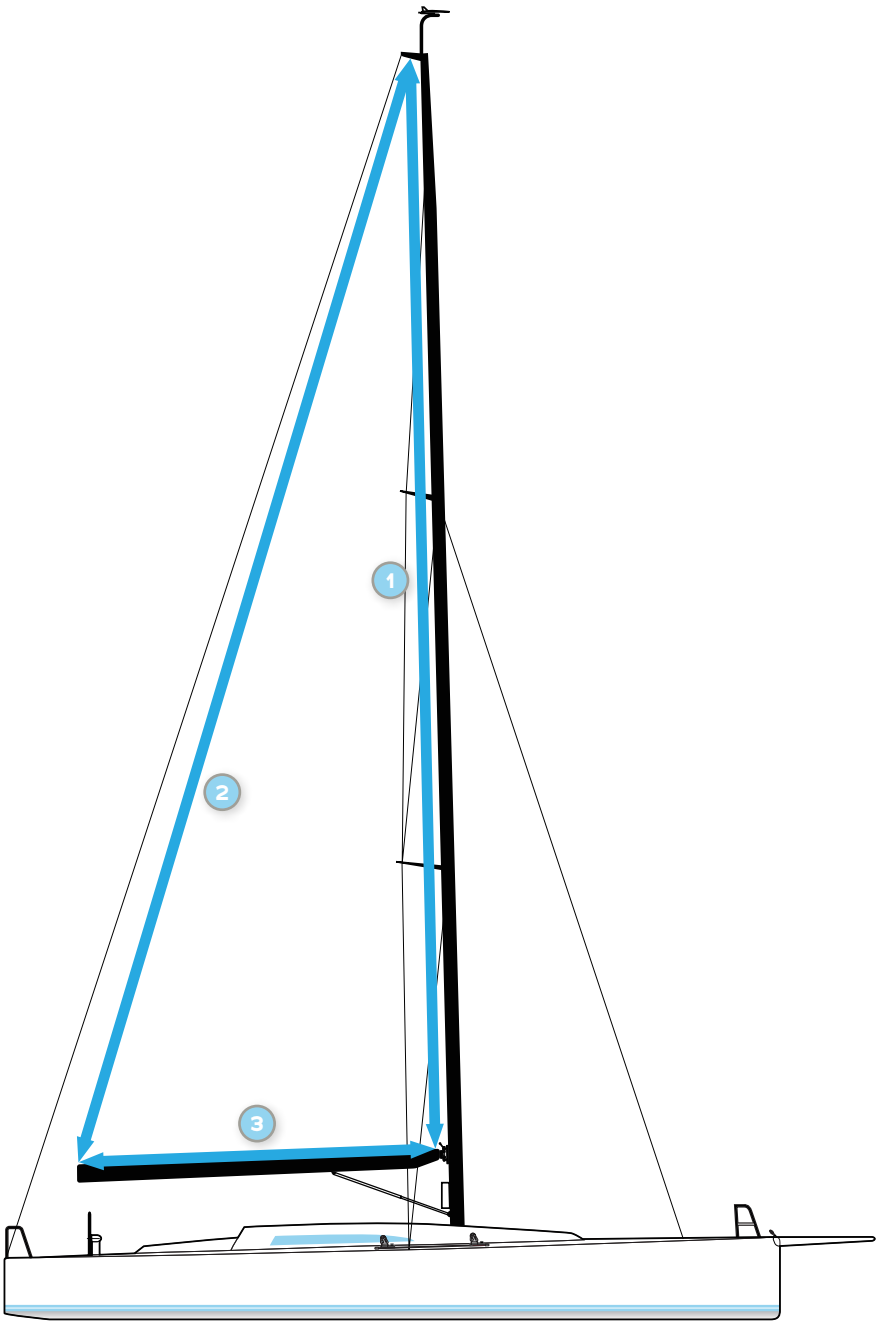
PHONE OR CAMERA

Measuring your boat for a mainsail

Tie the light line to the zero point ring on your tape measure and then shackle the ring to the main halyard. Pull to the top of the mast until the tape measure zero point ring is hard against the halyard sheave box for the main halyard. Then secure the halyard so you can pull down against the tape measure.

We will allow for the distance from max hoist and max outhaul or you can supply the P & E measurements.

P = Luff and **E** = Foot



- These measurements need to be exact for boats sailing under one design or racing rules.
- Also important is knowing the maximum measurements to allow for stretch and range.

1 MAX HOIST
Measure to tack pin at gooseneck

Max Hoist	

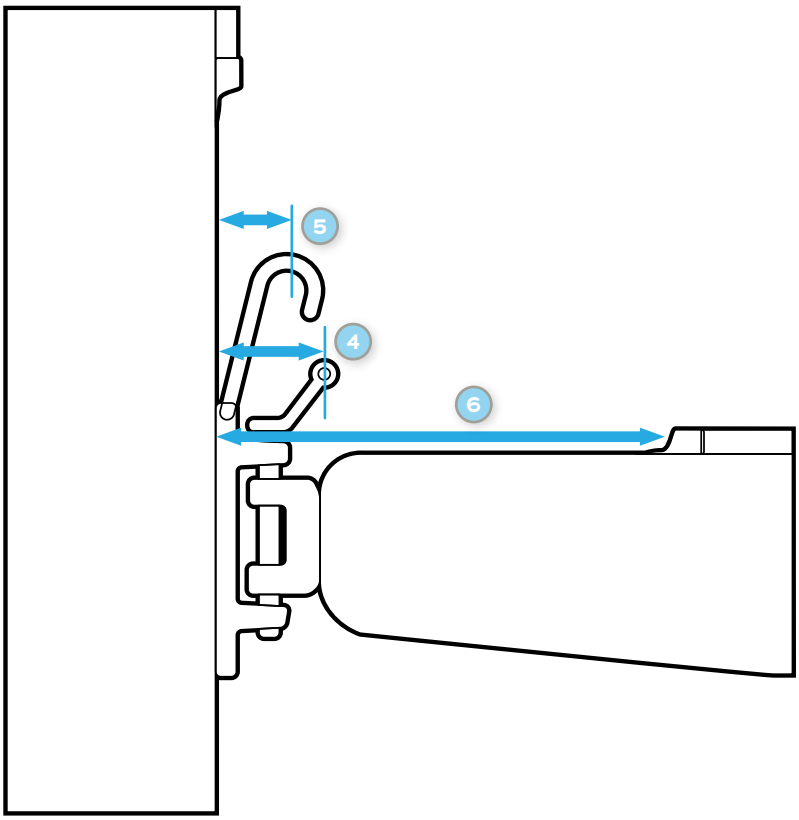
2 MAX LEECH
Generally all leech measurements are with the boom at 90 degrees. However, if you have a Dodger or Bimini then measure to the outhaul car pin with the boom in its normal position while sailing. *(Drop tape measure and halyard to deck. Secure halyard).*

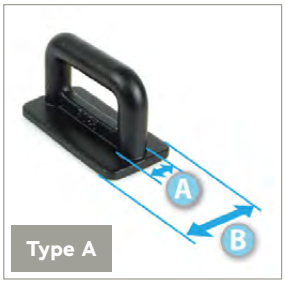
Max Leech	

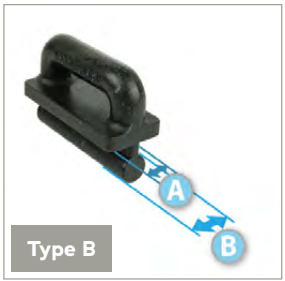
3 MAX FOOT
Measure from back of mast to outhaul pin with outhaul max aft.

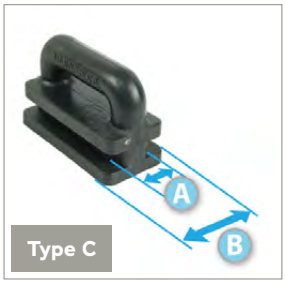
Max Foot	

Mainsails measurements continues ▶









Luff Hardware

Type A ■	Type B ■	Type C ■	Rope ■
Other (Specify)			
Bolt Rope Diameter			
A Width			
B Throat			

Full Foot Hardware

Type A ■	Type B ■	Type C ■	Rope ■
Other (Specify)			
Bolt Rope Diameter			
A Width			
B Throat			

Measured from back of mast

4 TACK SET BACK
Holding the shackle at the goose neck at 45 degrees, measure how far aft the bearing point of the shackle is relative to the aft face of the mast or external track. We call this the **Tack Set Back**.

Tack Set Back	

5 REEF HOOK AFT
Holding the shackle or hook at the goose neck at 45 degrees, measure how far aft the bearing point of the shackle or hook is relative to the aft face of the mast.

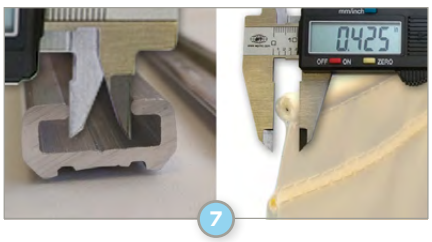
Reef Hook Aft	

6 FOOT GROOVE AFT
Measure from the mast to where the sail goes into the foot groove of the boom (if your boat has foot groove).

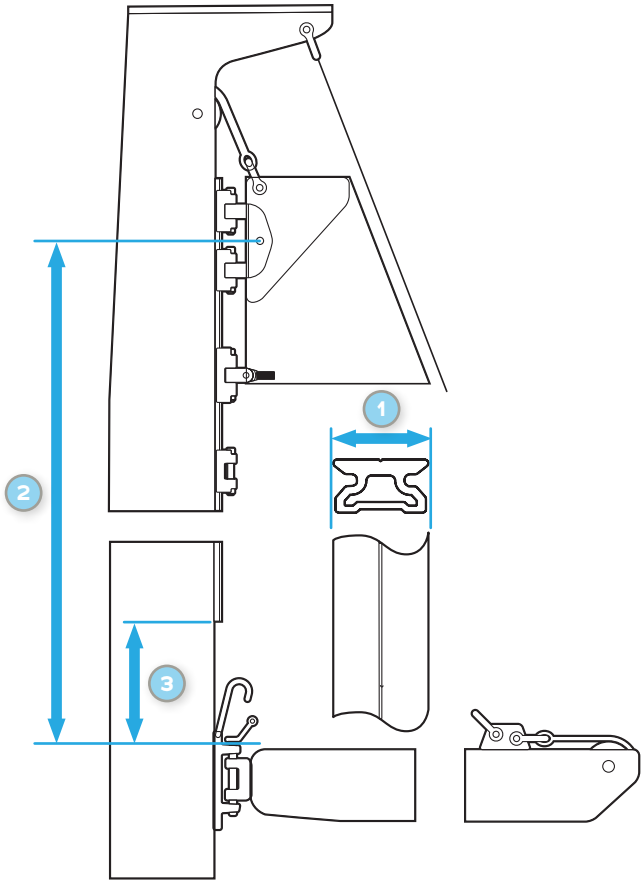
Distance Aft	

7 LUFF TAPE OR SLIDE MEASUREMENT
For sail attachment to mast and boom. With your digital callipers or ruler, measure the diameter of the bolt rope on the luff tape of your existing mainsail. Alternatively, measure the external track of both the mast and boom.

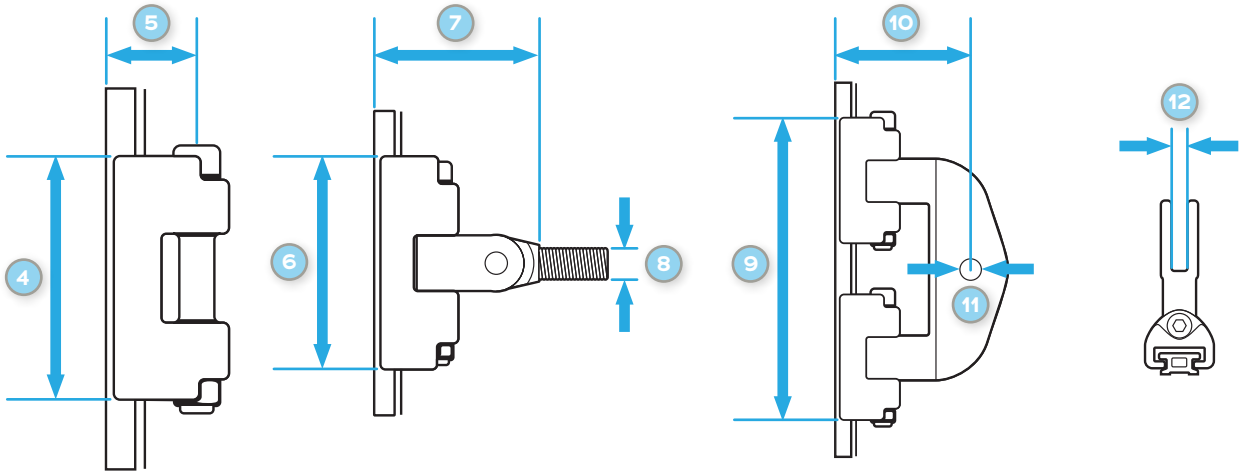
Luff Tape/Slide	



External Track System (if present)

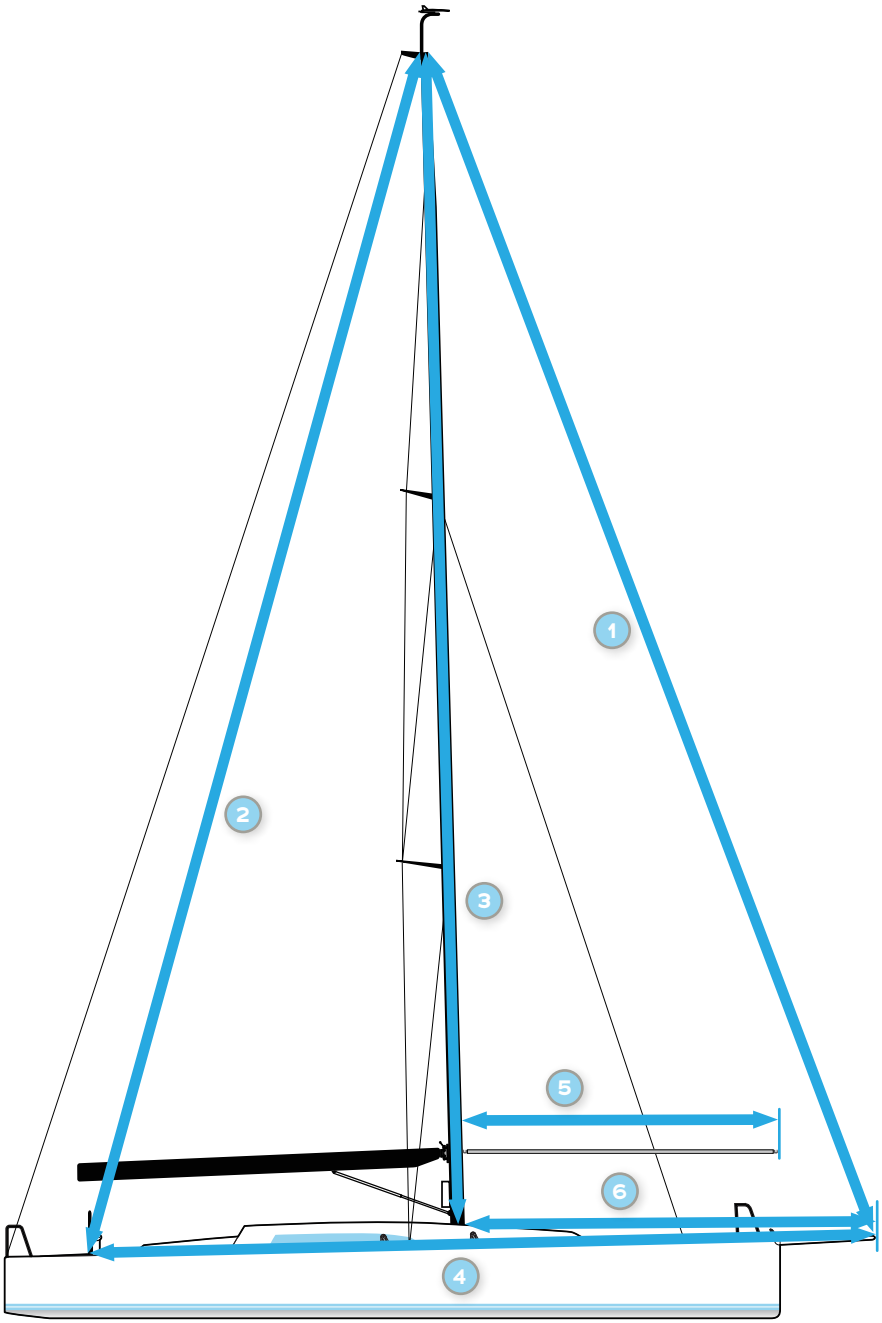


1	Track Width	
2	Max height of head board car	
3	Bottom of track	
4	Height if intermediate car	
5	Back of mast to centre pin	
6	Height of batten car	
7	Back of mast to thread stop	
8	Thread diameter	
9	Height of headboard car	
10	Back of mast to headboard carriage pin	
11	Headboard carriage pin diameter	
12	Width of headboard carriage	
	Number of intermediate cars	
	Luff attachment intermediate cars	
	Number of full batten cars	
	Luff attachment at full batten cars	



Measuring your boat for an Asymmetrical, Symmetrical or Code Zero Spinnaker

Tie the light line 6–8 mm to the zero point ring and clip the spinnaker halyard clip to the ring. Pull to the halyard until the tape measure zero point ring is hard against the halyard sheave box. Then secure the halyard so you can pull down against the tape measure. Measure in the numerical sequence of the measurement forms that Sail Exchange has supplied. Write the measurements in the boxes below:



1 MAX HOIST

Measure to tack point or tack line with tack clip max down in position on pole or bow. If measuring to clip out on pole and hard-to-reach place tape measure in tack clip and pull tack line taut until it stops and then measure by pulling tape taut back to yourself on bow.

Max Hoist	

2 MAX LEECH

Swing the tape measure aft around spreaders and measure to spin sheet block aft near quarter.

Max Leech	

3 SPINNAKER MAST VERTICAL MEASUREMENT

While tape measure is in the same position as for point 3, measure to front face of mast at deck level. Please measure to deck shear where deck meets hull. *(Drop tape measure and halyard to deck. Secure halyard).*

Mast Meas.	

4 MAX FOOT

Attach tape measure zero point to tack line and pull out taught and measure back to spin sheet block near aft quarter.

Max Foot	

5 SPINNAKER POLE LENGTH

Measure from front face of mast to the end of the spinnaker pole.

Spinnaker pole length	

6 SPINNAKER TACK LENGTH

Measure from tack point of stem or bow pole to front of mast.

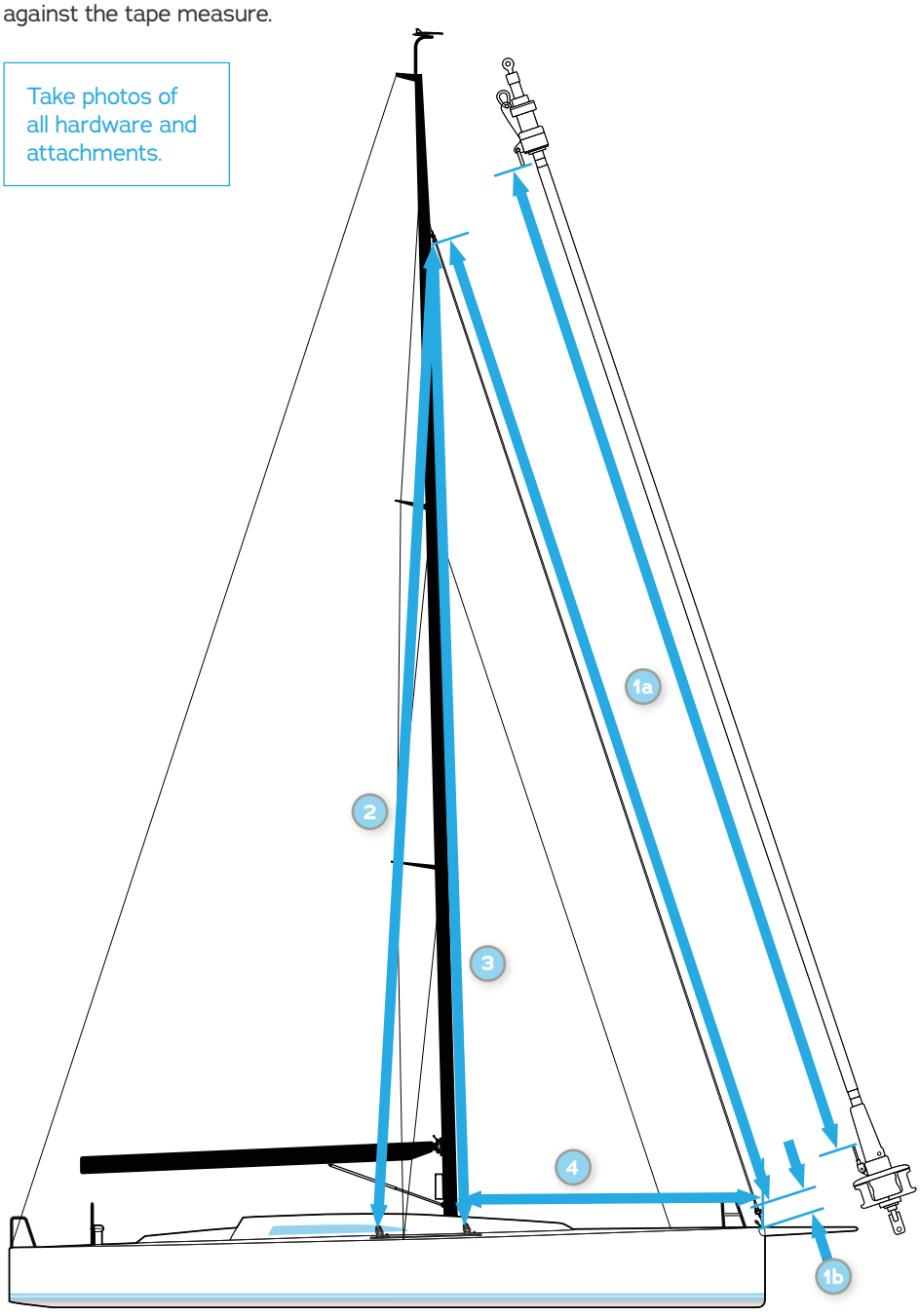
Spinnaker tack length	

Measuring your boat for a headsail

Try to measure your boat in the morning on a still day. You may wish to have someone assist you. Tie a light line of 6-8mm the height of the mast to the tape measure zero point ring prior to hoisting the tape measure so you can then pull the tape measure down without damaging or breaking it.

If there is a furling headsail on the furler drop the headsail and leave on the deck for this exercise and re-hoist when measuring is complete. Leave the genoa halyard attached to the upper furling swivel. Then attach the light line to the zero point of the ring on your tape measure and clip the ring to the shackle on the lower side of the furling head swivel. This is the same shackle the head of the sail was attached to. Now pull to the top of the foretriangle until the head swivel and halyard is hard against the halyard sheave box. Then secure the halyard so you can pull down against the tape measure.

Take photos of all hardware and attachments.



1a MAX HOIST
Measure down to tack pin.

Max Hoist	

1b TACK TO DECK
Measure down from tack pin on furling drum to forestay / deck intersection.

Tack to Deck	

2 MAX HOIST TO BACK END OF GENOA TRACK
Swing tape measure outside cap shrouds and measure to genoa car sheave at the maximum aft of the genoa track. *(Drop tape measure and halyard to deck. Secure halyard).*

Genoa Back	

3 MAX HOIST TO FRONT END OF GENOA TRACK
Swing tape measure outside cap shrouds and measure to genoa car sheave at the maximum forward point of the genoa track. *(Drop tape measure and halyard to deck. Secure halyard).*

Genoa Front	

4 J MEASUREMENT
Attach tape measure to tack pin (using the small piece of string) and measure horizontally aft to the front face of the mast at deck level. This will provide the datum point for the LP (luff perpendicular) for the percentage of overlap of the headsail.

J Meas.	

5 GENOA TRACK TO FORESTAY DECK

(with the tape measure zero point still secured to the tack pin as per measurement 4). Measure to the front end of the genoa track with the genoa car sheave in the max forward position.

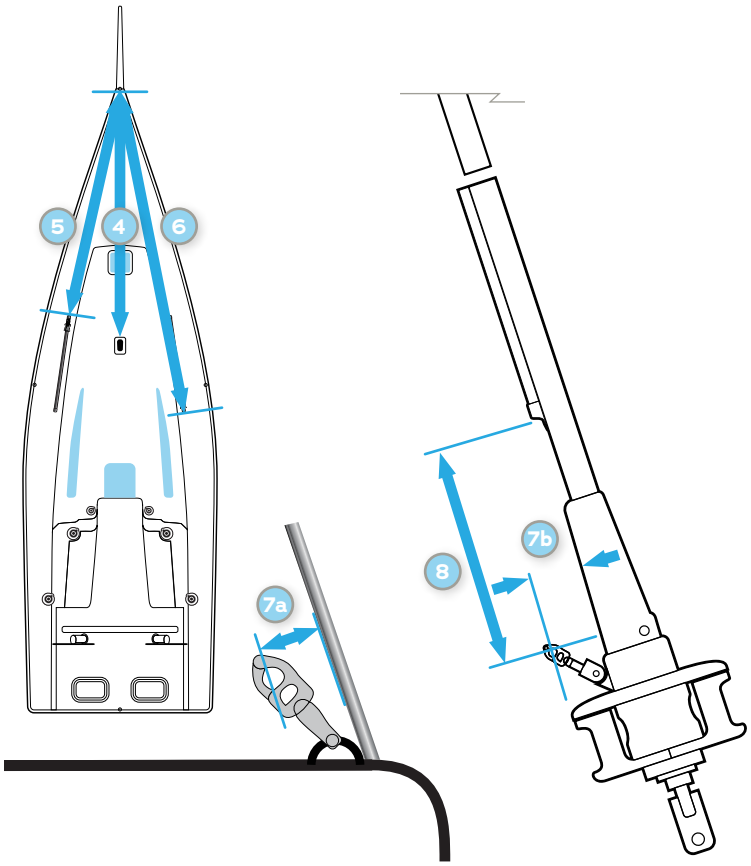
Forward genoa track	

6 MEASURE TO THE AFT END OF GENOA TRACK

with the genoa car sheave in the max aft position.

Aft genoa track	

You have now completed the max and minimum triangles for all headsails to sheet correctly with the rig and deck interface.



7a TACK SET BACK

All yachts have various ways of attaching headsails to the deck. The bearing point of where the genoa shackle is in relation to the forestay is required for the sail to set correctly. Therefore, we need to measure the distance aft of the bearing point of the tack shackle holding the shackle at 45 degrees relative to the forestay. We call this the **Tack Set Back**.

Tack Set Back	

7b TACK SET BACK FOR FURLING HEADSAILS

Holding the shackle on the furling drum at 45 degrees, measure how far aft the bearing point of the shackle is relative to the aft face of the foil track. We call this the **Tack Set Back**.

Tack Set Back	

8 TACK PIN TO FEEDER

(if you have hanks, this is not required) – For yachts with foils this measurement allows the correct length of the luff tape.

Tack pin to feeder	

9 WIRE DIAMETER MEASUREMENT

Wire Diameter measurement is required for hanks

Wire #	

10 LUFF TAPE MEASUREMENT

With your digital callipers or ruler measure the diameter of the bolt rope on the luff tape of your existing headsail then measure the X/Y of the foil and then record the brand and model of the headfoil.

Bolt rope diameter	
X/Y of the foil	
Brand	
Model	

When you have finished, save this PDF and attach it to an email after clicking below.

Click here when you are ready to submit your measurements

Alternatively, you can submit your documents manually to info@sailexchange.com.au

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