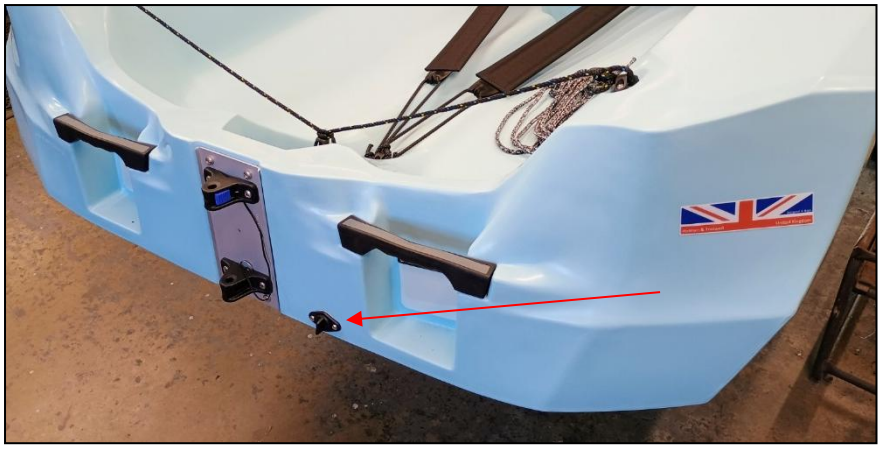
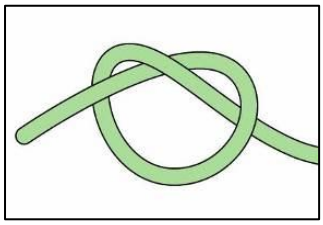

## RIGGING MANUAL



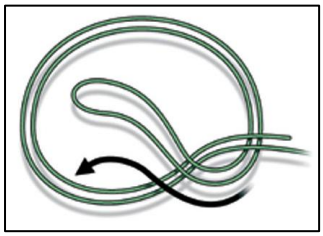
**WARNING:** Please check the transom drain bung is closed securely by turning it in a clockwise direction until tight.

# 1. Glossary/Useful Boat Terminology

## Knots



**Half Hitch Stopper**



**Half Hitch loop**

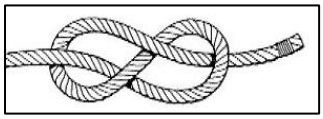
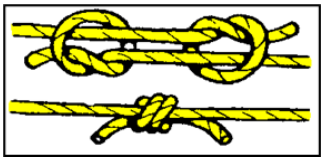
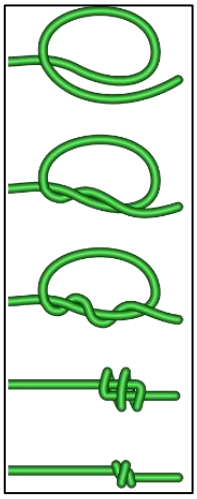


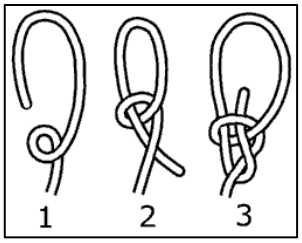
**Figure of Eight**



**Fisherman's**



**Double Overhand**




**Bowline**

## HULL

**Bow:** Front of the boat
**Painter:** Rope exiting through the bow of the boat used for towing or tying the boat to a jetty, buoy, or trolley
**Stern/Transom:** Back of the boat
**Fore:** Forward
**Aft:** Rearward
**Mast Step:** Bracket in the forward lower most part of the cockpit where the masts heel/foot locates
**Gunwale:** Upper/outermost edge of a boat's side
**Port**: Left side of the boat when looking forward
**Starboard**: Right side of the boat when looking forward
**Leeward**: Direction away from the wind
**Windward**: Direction towards the wind
**Gudgeons:** Female brackets on the transom used for hanging the rudder

## SAILS

**Mainsail:** Sail aft of the mast
**Jib:** Sail forward of the mast
**Gennaker:** Sail projected forward of the bow used only for sailing downwind
**Tack:** Forward lower corner of a sail
**Clew:** Rear lower corner of a sail

**Head:** Upper corner of a sail
**Leach:** Rear edge of a sail
**Luff:** Forward edge of a sail
**Foot:** Bottom edge of a sail
**Battens:** Fibreglass stiffening strips used in a mainsail to support the leach

## SPARS

**Mast:** Main vertical spar supporting the sails
**Heel/Foot:** Lower edge of the mast
**Boom:** Main horizontal spar at the foot of the mainsail
**Outhaul:** Purchase system in the boom for tightening the foot of the mainsail
**GNAV:** Strut tube/purchase system used for tightening the leech of the mainsail
**Cunningham:** Purchase system for tightening the luff of the mainsail
**Sheets:** Ropes for controlling the inward/outward position of the sails
**Gennaker Pole:** Retractable spar at the bow (Deployed when using the Gennaker)

## FOILS

**Daggerboard:** Blade found in the middle of a dinghy used to counteract leeward slippage & create forward motion
**Rudder:** Blade found at the back of a dinghy used for steering
**Pintles:** Male brackets on the rudder head used for hanging the rudder

# 2. Parts of Fusion 2

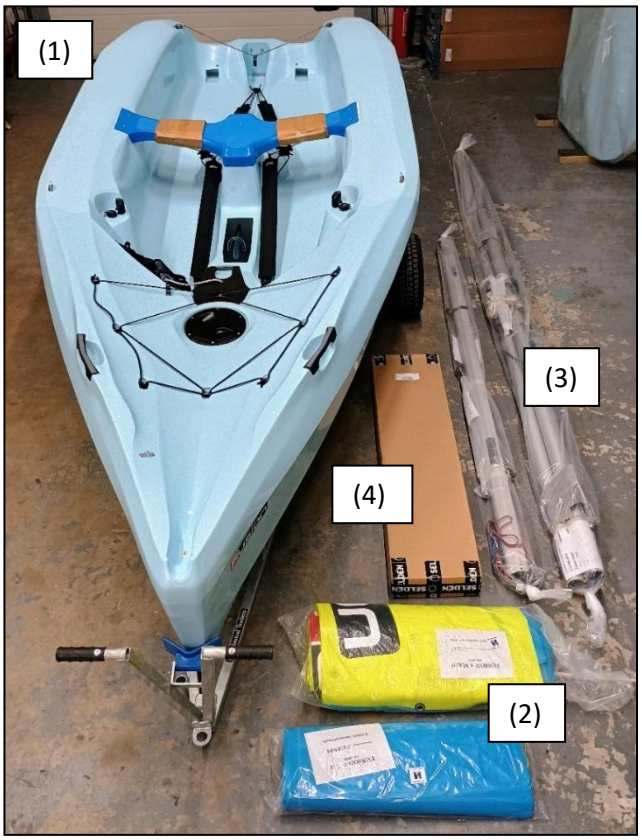
### Unpack your Fusion 2 and check you have all the required components:

1. HULL COMPLETE – The jib furling drum is supplied in the halyard bag on the aft face of the foredeck
2. SAIL KIT – Mainsail, Jib
3. SPAR KIT – Mast, Boom, GNAV strut, spreaders, rigging
4. FOIL KIT - Daggerboard, Rudder assembly, sheet kit

THE DAGGERBOARD IS 100MM LONGER THAN FUSION 1 AND THE TILLER ARM IS CRANK/BENT 11 DEGREES VERTICALLY.

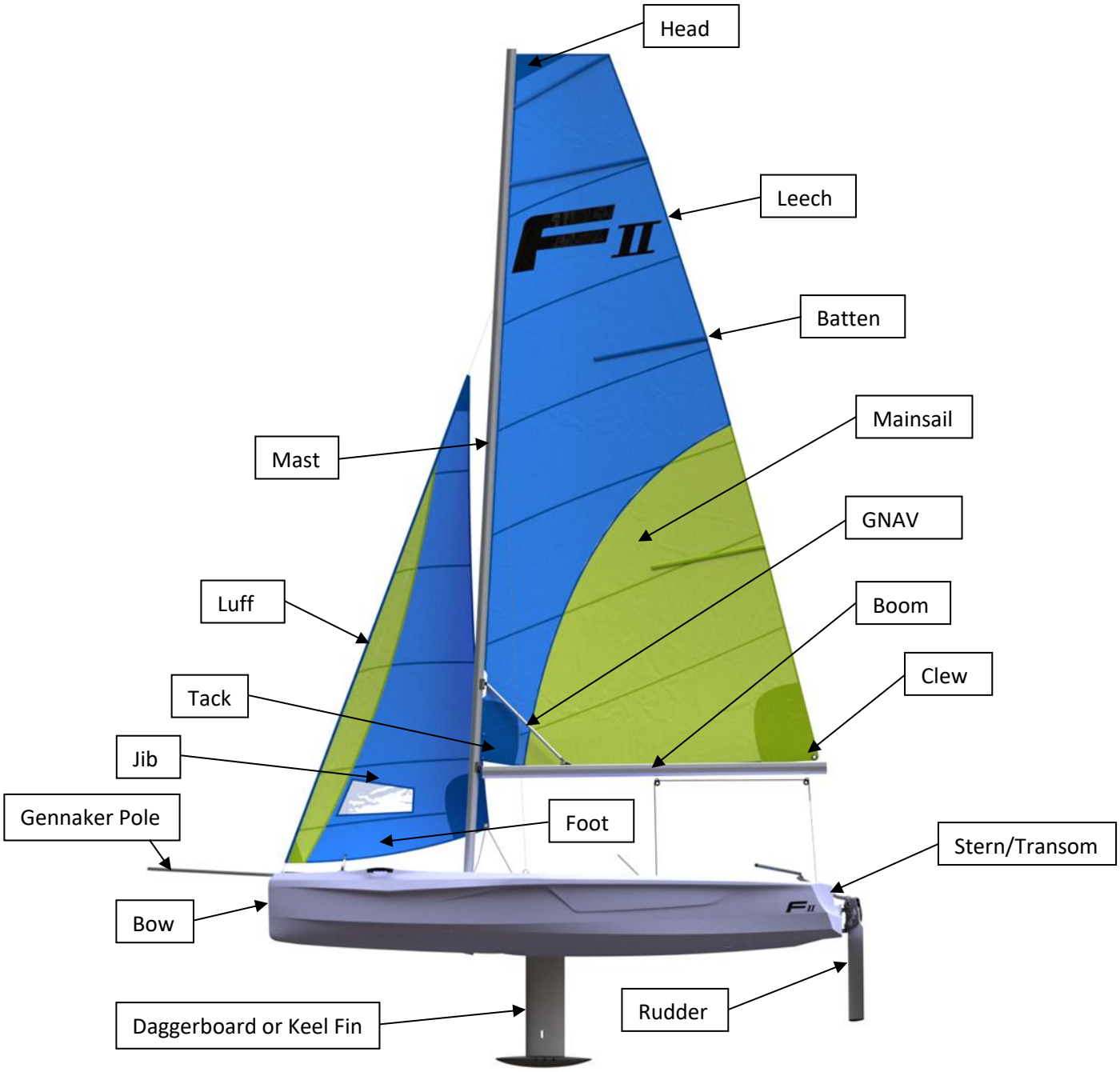
**THE FOIL KIT (4) -** Includes:

- ✓ RUDDER ASSEMBLY
- ✓ DAGGERBOARD ASSEMBLY
- ✓ MAINSHEET - 7mm Navy/White (10m)
- ✓ JIBSHEET - 6mm Grey/White (7m)
- ✓ DAGGERBOARD SHOCK CORD - 5mm Black (1.2m)
- ✓ SISTER CLIPS (X2) - Allen A.75
- ✓ GYBING STROP - 5mm Grey/Black (0.7m)
- ✓ GYBING STROP RING - Allen A.156
- ✓ M/S BRIDLE - 5mm Grey/Black (1.35m)
- ✓ M/S BRIDLE BLOCK 40mm - Selden 404-101-02




### Specification Dependent Items (Optional Extras):

5. GENNAKER KIT – Gennaker sail, pole, chute mouth, sock, sheet, hardware, fasteners
6. TRAPEZE KIT - Trapeze wires, rings, ropes, elastic, hardware, fasteners
7. MAINSHEET SWIVEL CLEAT KIT - Swivel cleat assembly, hardware, fasteners
8. KEEL KIT - Fin, bulb, purchase system, ropes, hardware, fasteners




# 3. Fitting the Gennaker Kit

**Please allow 1 hr to fit!**

**You will also require the following tools:**

- Posi drive screwdrivers (size PZ2 & PZ3)
- Flat blade screwdriver (medium)
- Adjustable spanner, mole grips or pliers
- Stanley knife
- Tape Measure

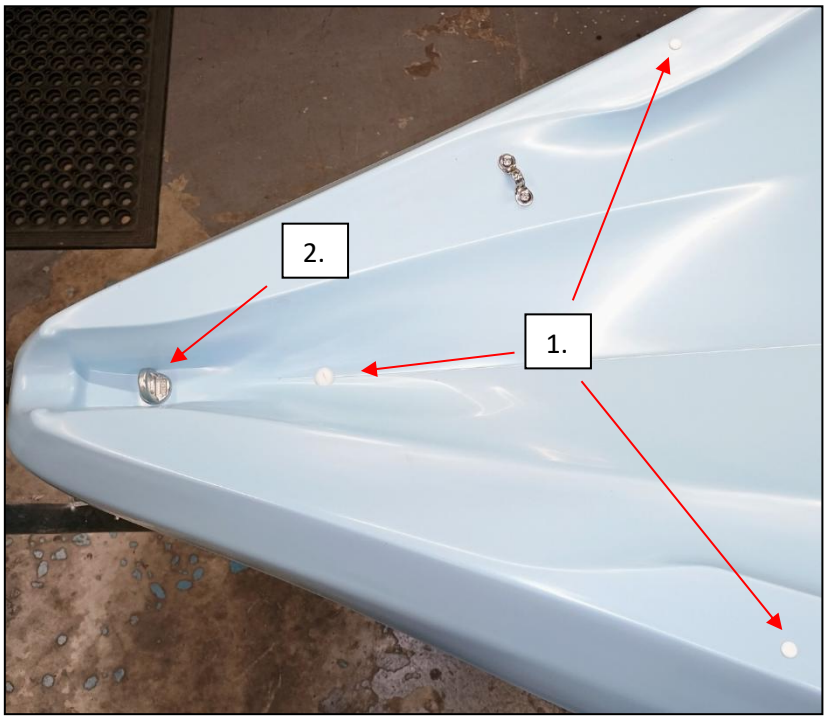
**THE GENNAKER KIT (5) -** Includes

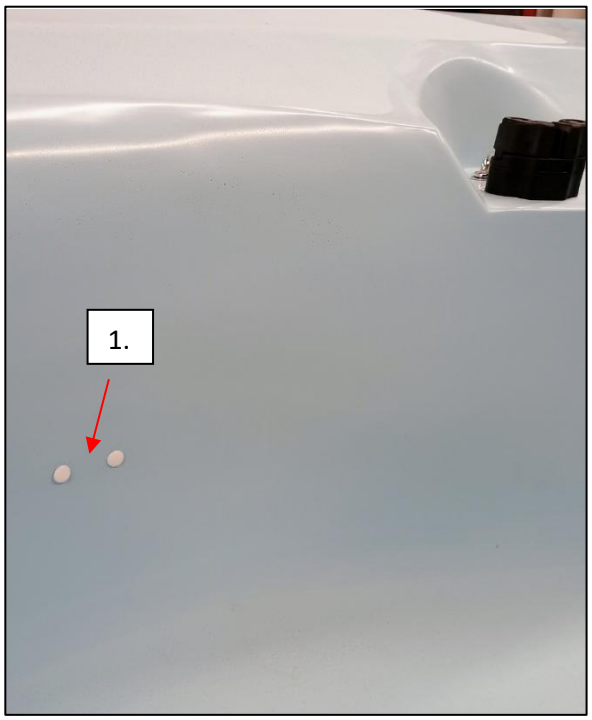
**A.** POLE
**B.** HARDWARE PACK
**C.** CHUTE SOCK
**D.** GENNAKER SAIL

**THE GENNAKER HARDWARE PACK (B) -** Includes

| | |
|---|---|
| ✓ POLE LAUNCH TUBE ASSEMBLY | |
| ✓ POLE LAUNCH TUBE SCREW (X1) | - Posi Csk Stainless Machine Screw M8 x 35mm |
| ✓ POLE LAUNCH TUBE SCREW (X1) | - Posi Csk Stainless Machine Screw M6 x 30mm |
| ✓ DOWNHAUL BLOCK 30mm (X1) | - Selden 403-101-02 |
| ✓ DOWNHAUL BLOCK FAIRLEAD (X1) | - RWO R2835 |
| ✓ DOWNHAUL BLOCK MACHINE SCREW (X2) | - Posi Pan Stainless 5mm x 12mm |
| ✓ POLE LAUNCH BLOCK 20mm (X1) | - Selden 402-101-01 |
| ✓ SHEET AUTO BLOCKS 45mm (X2) | - Selden 404-401-01 |
| ✓ UPHAUL CLEAT (X1) | - Selden 432-013 |
| ✓ CLEAT KEEPER (X1) | - Selden 511-268 |
| ✓ CLEATCAGE (X1) | - Selden 511-269 |
| ✓ CLEAT WEDGE (X1) | - Selden 432-029 |
| ✓ UPHAUL CLEAT SCREWS (X2) | - Posi Csk Stainless Self Tapping 8 X 1 ½ |
| ✓ DOWNHAUL & JIB FURLER BOBBLE (X2) | - Selden 319-521 |
| ✓ GENNAKER CHUTE MOUTH | |
| ✓ GENNAKER SOCK TIES (X3) | - 2.5mm Black (0.3m) |
| ✓ CHUTE/SOCK NYLON WASHERS (X2) | - M5 x 12.55 x 1.1 Nylon |
| ✓ CHUTE/SOCK CUP WASHERS (X8) | - M5 Stainless |
| ✓ CHUTE/SOCK SCREWS (X13) | - Posi Csk Stainless chipboard 5mm x 20mm |
| ✓ CHUTE/SOCK SCREWS (X2) | - Posi Pan Stainless 5mm x 16mm |
| ✓ GENNAKER SHEET | - 6mm Neo Yellow (10m) |

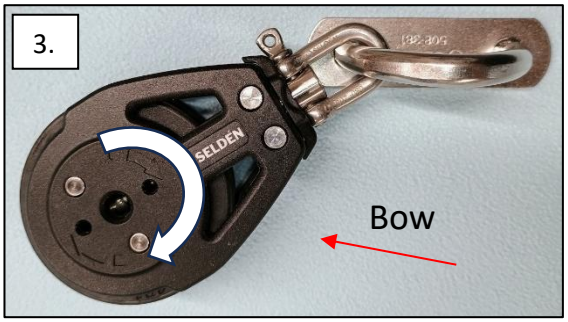
**1. Remove The Following Cosmetic Blanking Caps:**
(X1) **Launch Tube Rear** – Rear of the bow eye bolt. (Use a flat blade screwdriver turned anticlockwise)
(X2) **Chute Bar** – Forward of the bow handles. (Stab with a Stanley knife blade and turn anticlockwise)
(X2) **Downhaul Block** – On the port forward inner side deck. (Stab with a Stanley knife blade and turn anticlockwise)



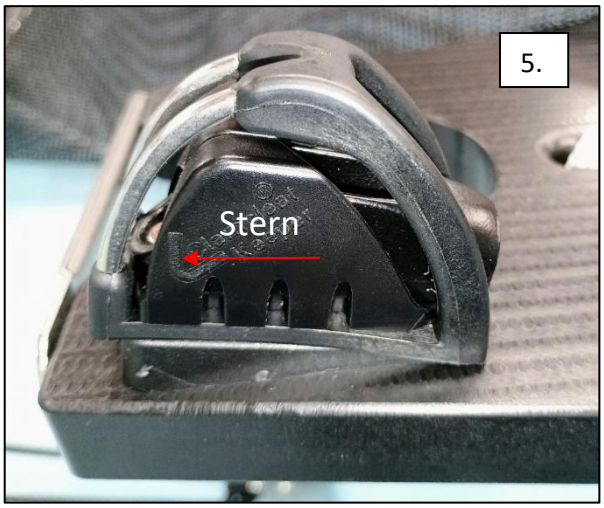




**2. Remove The Bow Eye Bolt** – Using an adjustable spanner, mole grips or pliers turned anti-clockwise.
The bow eyebolt and the long, forged shackle supplied as part of the jib furling drum are now obsolete and are NOT reused.

**3. Fit The Sheet Auto Blocks 45mm (X2)** - To the shroud anchor U bolts.
a. Ensure the block orientation limiter plates are refitted as shown.
b. Angle the block forwards and inboard at 45 degress as though in use.
c. Ensure the sheet travel arrows on the blocks depict sheet travel from the bow, around the block and inboard towards the centre of the cockpit.



**4. Fit The Downhaul Block Fairlead (X1) & Downhaul Block 30mm (X1)** - To the "moulded in" brass inserts on the port forward inner side deck using a PZ2 screwdriver and the Posi Pan machine screws 5mm x 12mm. (X2)


**5. Fit The Gennaker Up-Haul Cleat Assembly** – To the pilot holes on the starboard saide of the mast deck plate using a PZ2 screwdriver and Posi Csk self-taping screws 8 X 1 ½. (X2)

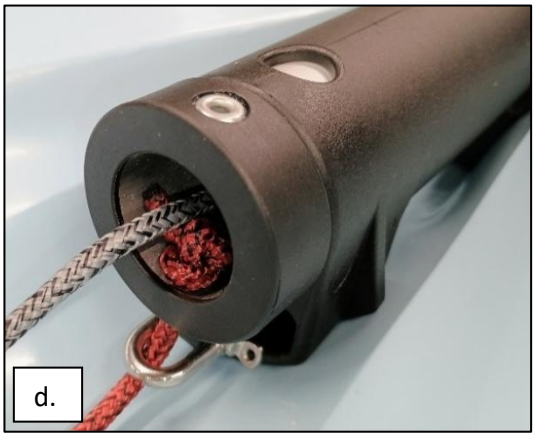
The gennaker up-haul cleat assembly consists of:

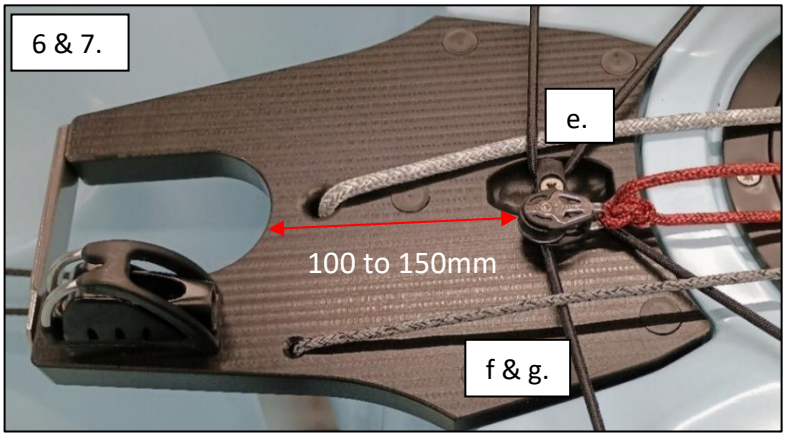
a. Cleat with jaws orientated rear most
b. Keeper with jaws orientated rear most
c. Cage orientated with stainless rope guide rear most
d. Wedge orientated with thick end rear most

**6. Fit The Gennaker Pole Launch Tube** – To the "moulded in" brass inserts on the bow using Posi Drive screwdrivers (PZ2 & PZ3) and the following machine screws: X1 – Posi Csk M8 x 35mm X1 – Posi Csk M6 x 30mm


**7. Fit The Gennaker Pole** -

a. Remove the screw from the forward end of the pole (temporarily) using a PZ2 screwdriver.
b. Pass the forward end of the pole through the rear end of the pole launch tube until fully extended forwards.
c. Replace the screw at the forward end of the pole using a PZ2 screwdriver.
d. Pass the pole launch line (4mm diameter red/black rope) around the forged shackle at the aft end of the launch tube travelling in a downward before aft/rearward direction.
e. Using a bowline loop, tie the 20mm pole launch block near the end of the launch line ensuring the block is between 100mm and 150mm forward of the gennaker uphaul cleat assembly when the pole is fully extended.
f. Pass the end of the tack line (4mm grey/black rope) aft/rearwards (above all foredeck storage elastics) and down the 6mm hole in the mast deck plate. (just ahead of the gennaker uphaul cleat assembly)
g. Tie a figure of eight knot near the end of the tack line ensuring the bobble is tight up against the forward end of the pole when fully extended.



**8. Fit The Trapeze Shock Cord Blocks to The Gennaker Chute Mouth** – (Specification Dependent)

NOW IS BY FAR THE MOST CONVENIENT TIME.

a. Tie a double overhand stopper knot in one end of the trapeze shock cord and pass the other end:
b. Through the first shock cord bobble.
c. Through the pulley end of both 20mm shock cord blocks.
d. Through the second shock cord bobble before tying a double overhand stopper knot in the cords end.
e. Tie both 20mm shock cord blocks to the gennaker chute mouth bar using the block ties passed twice around the bar and block fairlead before tying an overhand knot to join the two loose ends together.



**9. The Gennaker Chute Mouth and Sock MUST Be Fitted EXACTLY As Follows** –

GREAT CARE MUST BE TAKEN NOT TO OVER-TIGHTEN & STRIP THE THREADS CREATED WHEN USING SELF-TAPING SCREWS.

a. On the starboard/right side, a 5mm x 20mm Posi Pan machine screw should pass through a nylon washer and the slotted hole in the rear/outermost edge of the chute mouth footplate before being screwed loosely in to the "moulded in" brass insert in the boats deck. (Using a PZ2 screwdriver)

THE GENNAKER SOCK MUST BE FITTED CAREFULLY ABOVE THE TRAPEZE SHOCK CORD BLOCKS.

b. On the port side, a 5mm x 20mm Posi Pan machine screw should pass through a stainless cup washer, the preformed hole in the gennaker socks seam and the slotted hole in the rear/outermost edge of the chute mouth footplate before being screwed loosely in to the "moulded in" brass insert in the boats deck. (Using a PZ2 screwdriver)

Centralise the chute mouth (left to right) before tightening the machine screws completely PRIOR TO THE FITMENT OF ANY OF THE OTHER FASTENERS.

c. Both the remaining outer/forward-most footplate fasteners should be fitted next using a PZ2 screwdriver. (Both sides of the boat - 5mm x 20mm Counter Sunk, chipboard self-taping screws)

d. The port/left, inner/rear footplate fastener should be fitted next using a PZ2 screwdriver. (5mm x 20mm Counter Sunk, chipboard self-taping screw)

e. The starboard/right, inner/rear foot plate fastener should be fitted next using a PZ2 screwdriver.

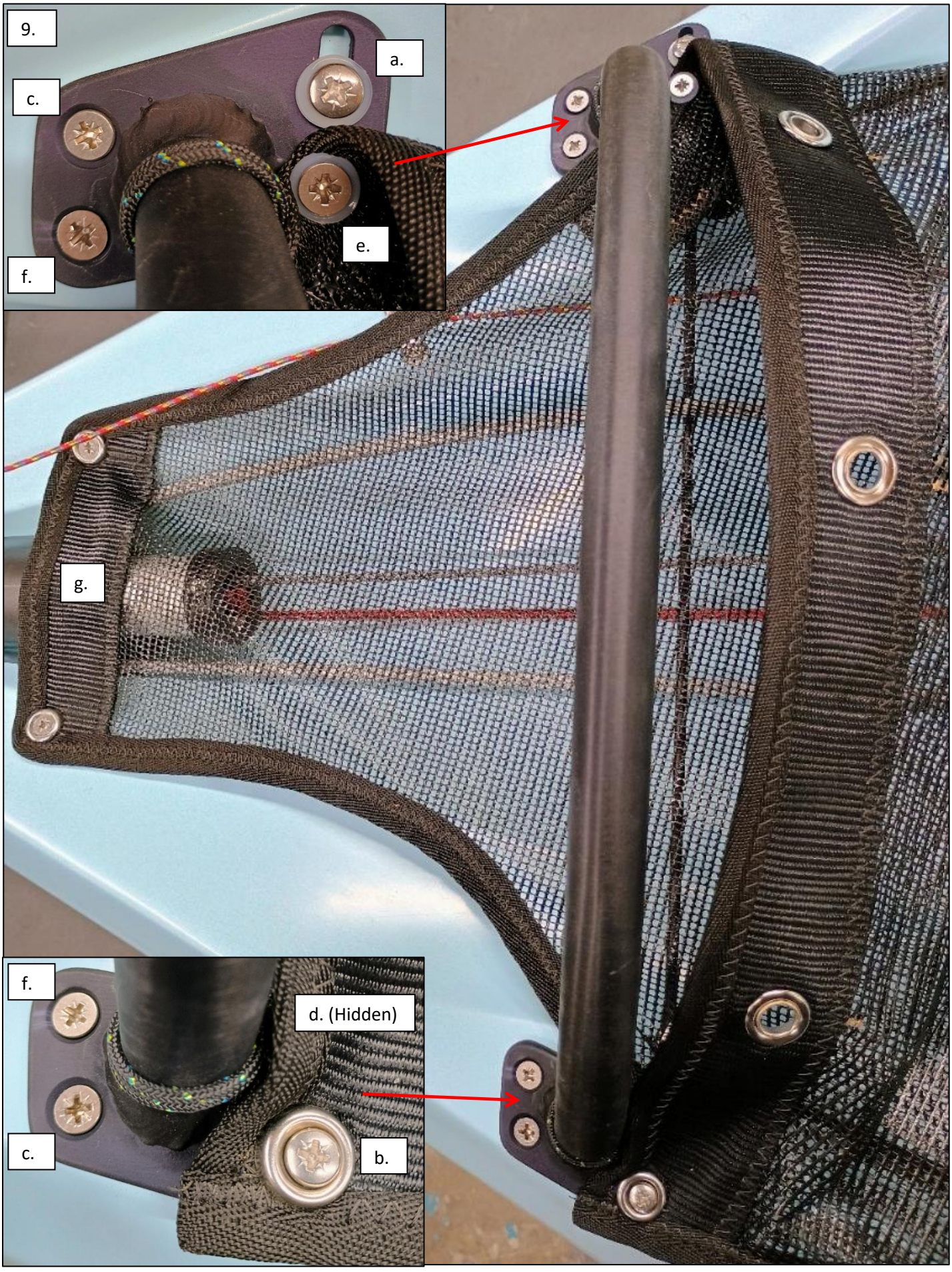
THIS MUST ALSO FIRST PASS THROUGH A NYLON WASHER AND THE GENNAKER SOCK AS SHOWN.

Ensure the lower surface of the sock passes between the footplates smoothly, just taught with the socks tongue positioned on centreline OVERLAPPING THE AFT END OF THE POLE LAUNCH TUBE.

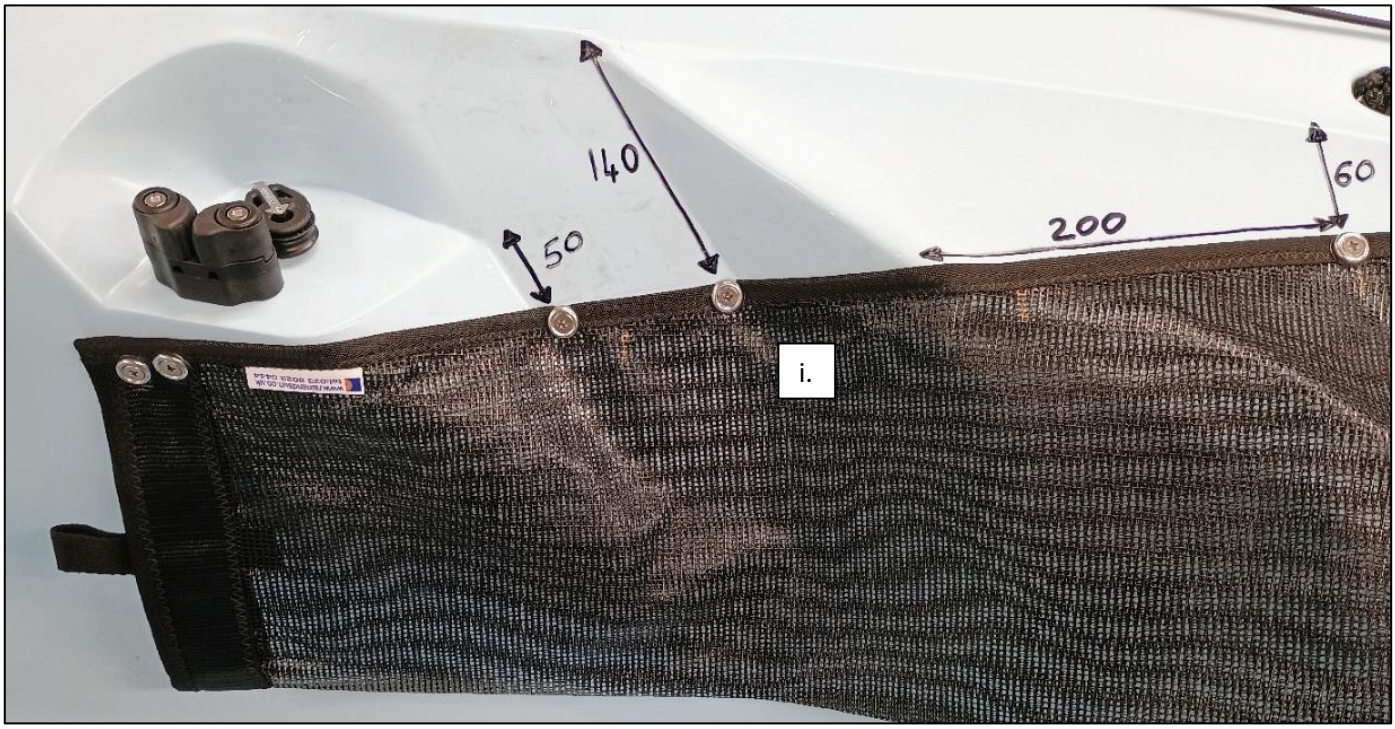
f. Both the remaining inner/forward footplate fasteners should be fitted next using a PZ2 screwdriver. (Both sides of the boat - 5mm x 20mm Counter Sunk, chipboard self-taping screws)

g. The gennaker sock "tongue" fasteners can now be fitted (X2) using a PZ2 screwdriver. (Both sides of the boat - 5mm x 20mm Counter Sunk, chipboard self-taping screws and stainless cup washers)

Ensure the sock tongue overlaps the aft end of the pole launch tube smoothly and just taught.




h. The gennaker sock ties can then be passed through the sock eyes and around the gennaker bar before tying overhand knots to join the two loose ends together.




i. Pull the gennaker sock taught aft/rearwards before fitting the final retaining fasteners through its seam using a PZ2 screwdriver in the positions shown. (5 OFF - 5mm x 20mm Counter Sunk, chipboard self-taping screws with cup washers)

Start with the forward most fastener working aft/rearwards.


# 4. Fitting the Trapeze Kit

PREVIOUSLY DOCUMENTED IN CHAPTER 3 "FITTING THE GENNAKER KIT" SUB SECTION 8 WAS **"Fit The Trapeze Shock Cord Blocks to The Gennaker Chute Mouth"**

**Please allow 15 minutes to fit!**

**You will also require the following tools:**

- Posi drive screwdriver (size PZ2)

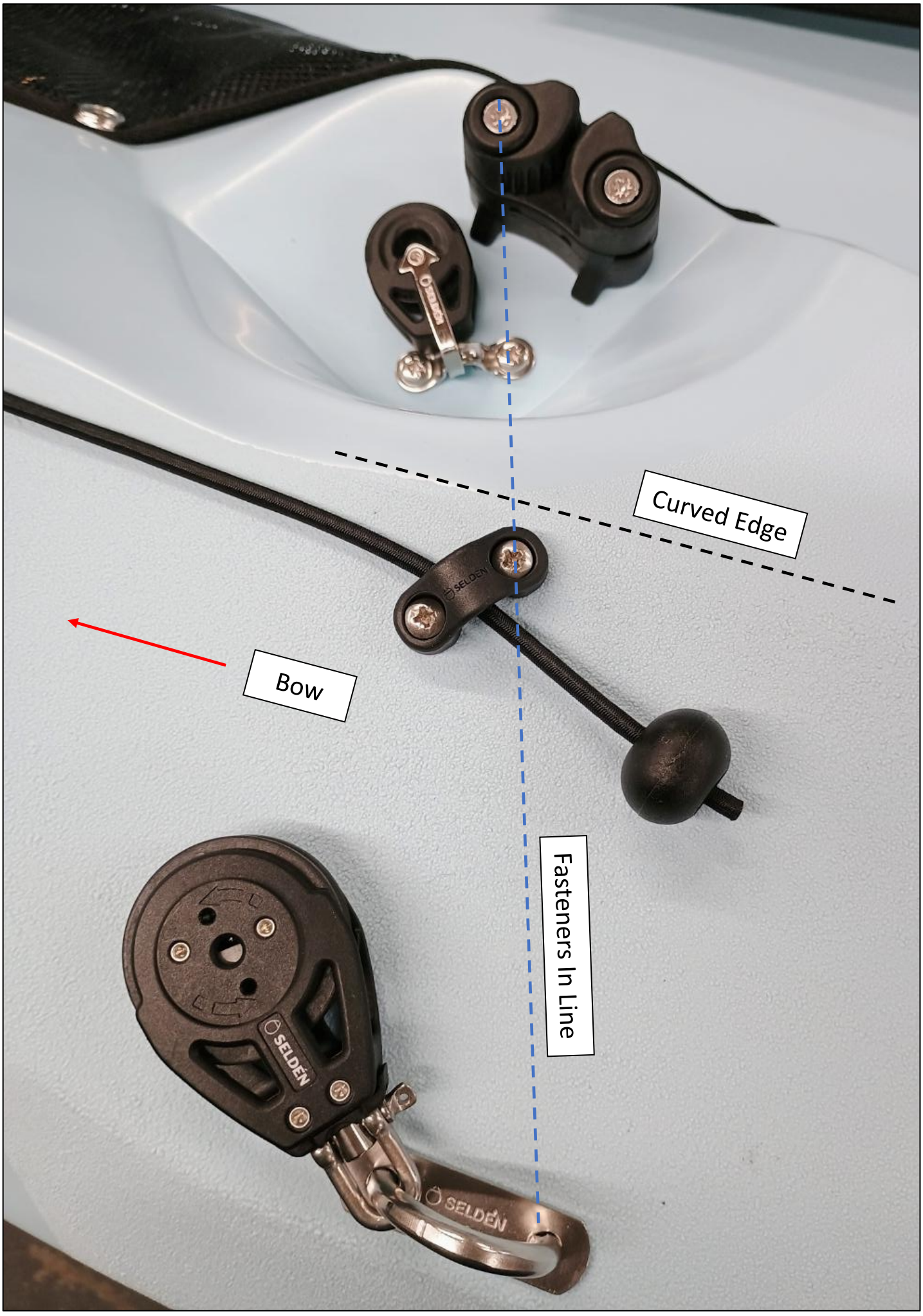
**THE TRAPEZE KIT (6) -** Includes

| | | |
|---|---|---|
| ✓ | TRAPEZE WIRES (X2) | - Wire, Cleat, Rope & Ring |
| ✓ | SHOCKCORD BLOCKS 20mm (X2) | - Selden 402-101-01 |
| ✓ | SHOCKCORD BLOCK TIES (X2) | - 2.5mm Black (0.3m) |
| ✓ | SHOCK CORD (X1) | - 5mm Black (2.8m) |
| ✓ | SHOCKCORD BOBBLES (X2) | - Selden 319-521 |
| ✓ | SHOCKCORD FAIRLEAD (X2) | - Selden 508-601 |
| ✓ | SHOCKCORD FAIRLEAD SCREWS (X4) | - Posi Pan Stainless Self Tapping 10 X 1 |

**1. Fit The Shock Cord Fairleads -**

a. Thread the shock cord fairlead bobbles aft/rearward.
b. Above all foredeck storage elastics.
c. Underneath the gennaker sock.
d. Position just inboard and forward of the shroud anchor points.
e. Using a PZ2 screwdriver and 4 OFF - 10 X 1 Posi Pan self-taping screws, fit the shock cord fairleads as shown.

THE REMAINING STEPS REQUIRED TO FIT THE TRAPEZE KIT ARE COVERED IN CHAPTER 8 "MAST".


Curved Edge
Bow
Fasteners In Line
SELDEN
SELDEN
SELDEN

# 5. Fitting the Mainsheet Swivel Cleat Kit


**Please allow 10 minutes to fit!**

**You will also require the following tools:**

- Posi drive screwdriver (size PZ2)
- Adjustable spanner, mole grips or pliers

**THE MAINSHEET SWIVEL CLEAT KIT (7) -** Includes

- ✓ SWIVEL CLEAT ASSEMBLY
- ✓ SPRING
- ✓ SPRING REACTOR PLATE
- ✓ 50mm x 5mm POSI COUNTERSUNK SELF TAPPING SCREWS (X4)

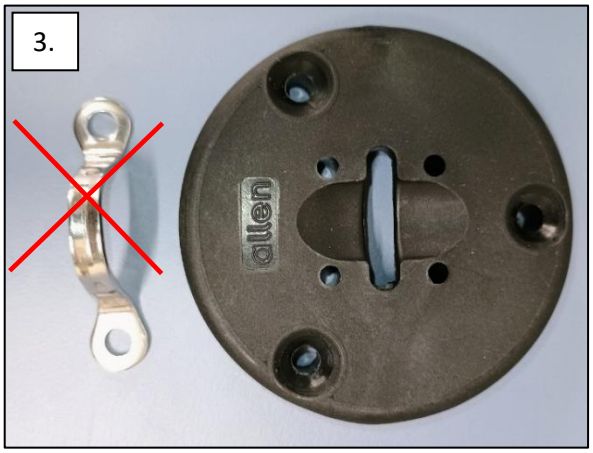
THIS IS THE SAME SWIVEL CLEAT AS FUSION 1 BUT WITH AN ALLEN A.893 MEDIUM CAM CLEAT RISER WEDGE FITTED USING 4 OFF - 10 X 1 POSI PAN SELF-TAPING SCREWS.


1. Remove the mainsheet ratchet block – Using an adjustable spanner, mole grips or pliers to undo the shackle pin.

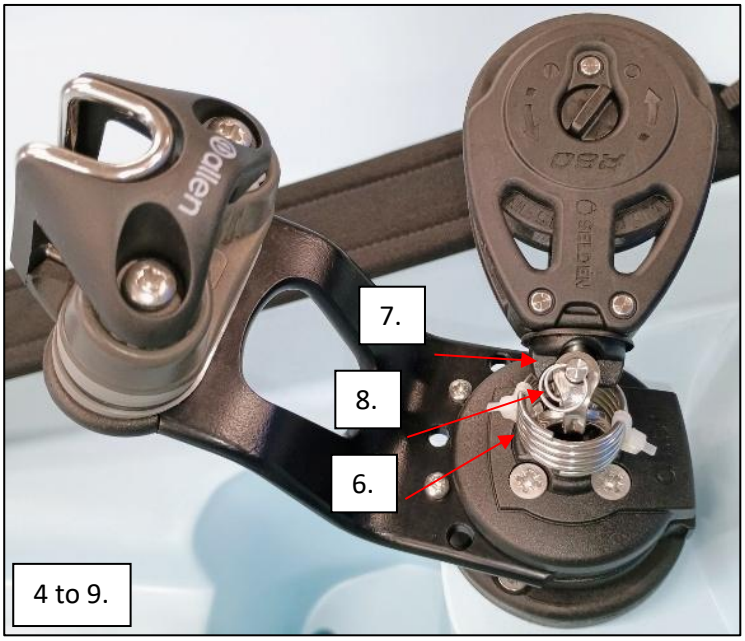
This mainsheet ratchet block shackle is now obsolete and is NOT reused.

2. Remove the swivel base – Using a PZ2 screwdriver.
3. Remove the stainless fairlead from the swivel base.

The stainless fairlead is now obsolete and is NOT reused.




4. Refit the swivel base ensuring that the area with Allen written on it is rearmost – Using a PZ2 screwdriver.
5. Screw the swivel cleat assembly onto the swivel base ensuring that the anti-rotation block with Allen written on it is forwardmost – Using a PZ2 screwdriver and 4 OFF - 50mm Posi Counter Sunk self-tapping screws.
6. Place the spring over the rigging link - On the swivel cleat assembly.
7. Place the spring reactor plate over the mainsheet ratchet blocks attachment lug.
8. Attach the mainsheet ratchet block to the rigging link - On the swivel cleat assembly.
9. Cut the cable ties compressing the spring - To release compression form the spring.



# 6. Fitting the Keel Kit

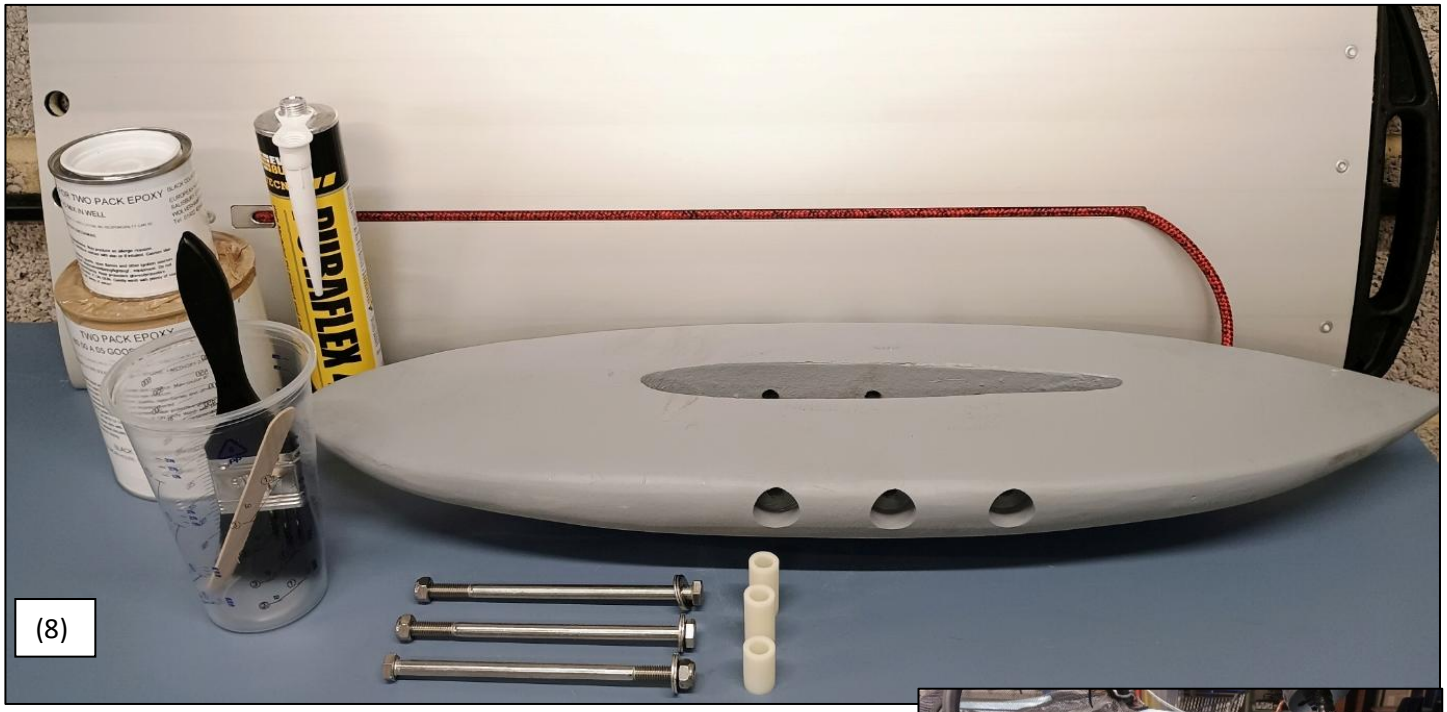
**Please allow 1.5 hours to fit & 72 hours to cure before sailing!**

**You will also require the following tools:**

- 13mm socket wrenches or box spanners (2 off)
- Hammer
- Sturdy piece of timber 400mm long
- Padding material (such as carpet, foam or an old towel)
- Heavy duty cable ties or rope
- Sealant gun
- Clean lint free cloths
- Filler knife or old credit card
- White spirit or turpentine substitute

**THE KEEL KIT (8) -** Includes (In addition to the boat being factory fitted with Fusion 2 keel deck hardware)

- ✓ KEEL FIN (X1)
- ✓ KEEL BULB (X1)
- ✓ KEEL FIN BUSH LONG (x2) - Nylon ABS M10 x 16mm Dia. x 35mm Long
- ✓ KEEL FIN BUSH SHORT (x1) - Nylon ABS M10 x 16mm Dia. x 35mm Long
- ✓ KEEL BOLTS (X3) - Hex Bolt Part Thread M8 x 160mm
- ✓ KEEL BOLT NUTS (X3) - Nylock Nut Type T (Thin) M8
- ✓ KEEL BOLT WASHERS (X3) - Penny Washer 20mm OD M8
- ✓ KEEL BONDING/SEALING AGENT (X1) - Everbuild Puraflex 4



(8)

1. Cable or rope tie a sturdy piece of timber (with padding material on top of it) between the trolley bow handles.

2. Lift the boat forwards by approximately 0.5 metre until the bow sits securely on the timber/padding.

This is a multi-person operation and will need several people around the boat.

3. Check the aft end of the under-hull keel bulb recess is clear ahead of the trolleys black keel bulb support rubber before placing some padding on the ground immediately below the keel fin case.

1 & 2.

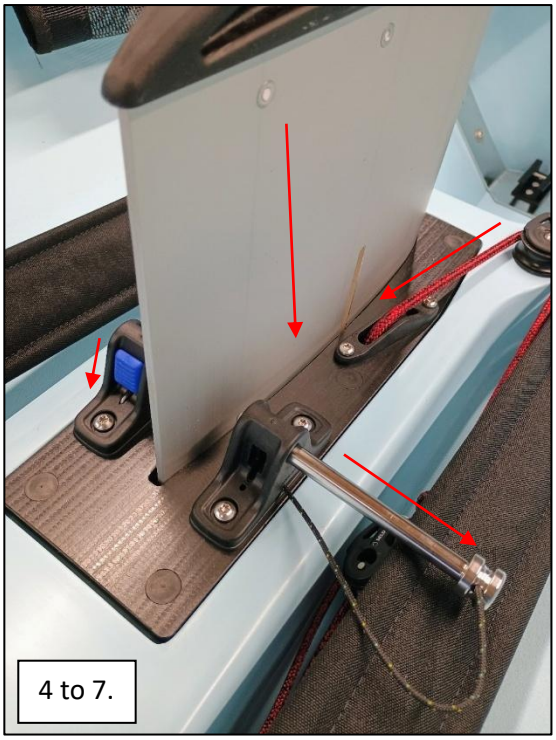
**4.** Thread the primary keel hoist line (6mm diameter, 1.4m Long red/black rope) around the keel deck plate "cheek block" passing in a port/left direction.

**5.** Press the blue button downwards and withdraw the keel lock down pin.

**6.** Put the tip of the keel fin just through the boats keel fin top plate.

**7.** Slowly lower the keel fin to the ground while gently feeding the primary keel hoist line through the keel deck plate "through block" in a downward direction.

You should feel the keel fin recess "pick up" the primary keel hoist line, carrying it neatly to the under-hull side of the boat.



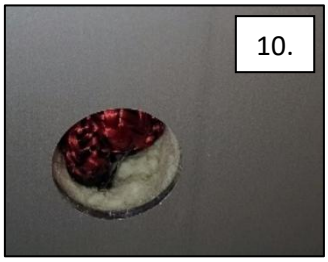

**8.** Pass the end of the primary keel hoist line through the stainless-steel keel lift dead end fitting in a port/left direction.

**9.** Tie a half hitch stopper knot 15mm from the end of the primary keel hoist line before hauling it hard backwards in a starboard/right direction until it sits completely flush within the keel fin cavity. Ensure that:

a. A 15mm tail continues to exist between the end of the line and the half hitch stopper knot.

b. The end of the 15mm tail sits flush below the port/left side of the keel fin.

A small flat blade screwdriver can be used to push the tail further into the recess if required.

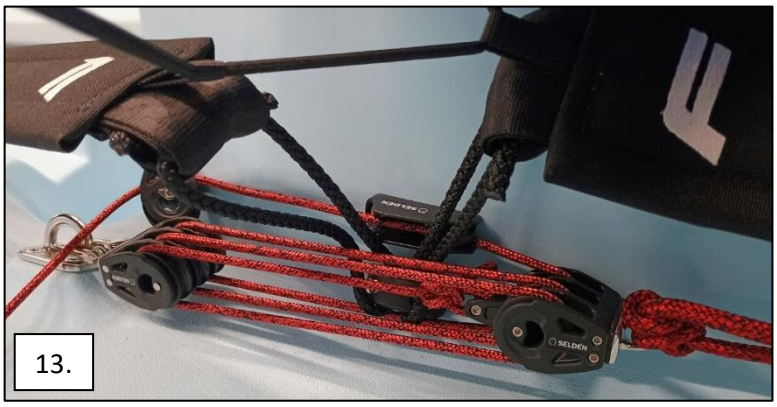



**11.** Fit the long keel fin bushes (2 Off) to the forward most holes in the lower end of the keel fin. (Push/interference fit)

**12.** Fit the short keel fin bush (1 Off) to the rearmost hole in the lower end of the keel fin. (Push interference fit)

**13.** Adjust the length of the primary keel hoist line until the keel fin bushes are about to disappear into the keel fin case at the same time as the keel hoist purchase system is in the following position:

Adjust the primary keel hoist line using a half hitch on to the triple block with additional half hitch stopper knot.





**14.** Place the keel bulb on the padding immediately below the boats keel fin case.

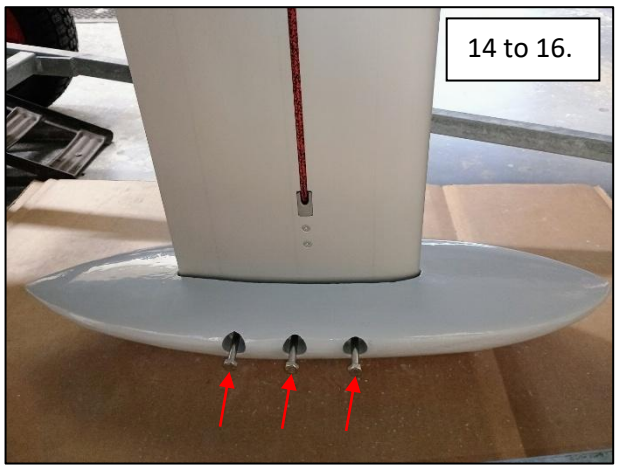
**15.** Carefully lower the keel fin into the keel bulbs fin recess.

**16.** Test/dry fit the M8 x 160mm keel bolts (3 Off) through the keel bulb & fin to ensure optimised positioning and alignment of all componentry. It is greatly advantageous to:

a. "Sight" the holes to visually to check alignment before the keel bolts are fitted.

b. "Rock" the keel bulb slightly while inserting the keel bolts.

c. Use a hammer to gently tap the keel bolts through the keel bulb and fin.



**17.** Once a successful dry fit has been achieved, remove the keel bolts and lift the keel fin completely clear of the keel bulb.

**18.** Fill the keel bulb's keel fin recess 50% full of keel bonding/sealing agent.

**19.** Carefully re-lower the keel fin into the keel bulbs fin recess.
A firm push downwards will be required to overcome the hydraulic effect caused by the keel bonding/sealing agent.

**20.** Re-fit the M8 x 160mm keel bolts (3 Off) through the keel bulb & fin ensuring that a keel bolt washer is used under the head of each bolt.

**21.** Use the keel hoist purchase system to prove keel bulb to fin engagement by lifting the keel bulb just clear of the ground.

**22.** Lower the keel bulb and fit it the keel bolt nuts (3 Off) ensuring that a keel bolt washer is used under each nut.

**23.** Tighten the keel bolts/nuts using 13mm socket wrenches/box spanners.

**24.** Fill the following cavities flush/planar to the surface using keel bonding/sealing agent:
a. Keel fin recess.
b. Keel bolt/nut recesses. (6 Off)
c. Primary keel hoist line dead end recess.

**25.** Smooth & clean off any overfill using a filler knife or old credit card.

**26.** Clean off any visual contamination of the surrounding surfaces using white spirit and a clean lint free cloth.

**27.** Leave the bonding/sealing agent to cure for at least 72 hours. (Any overnight moisture will not adversely affect the cure)

**28.** Pull the secondary keel hoist line to lift the keel bulb completely into the recess on the underside of the hull.

**29.** If necessary, adjust the length of the primary keel hoist line to achieve the keel hoist purchase system position depicted in picture 29 when the keel bulb is completely in the recess on the underside of the hull.
Failure to do this may result in the inability to either:

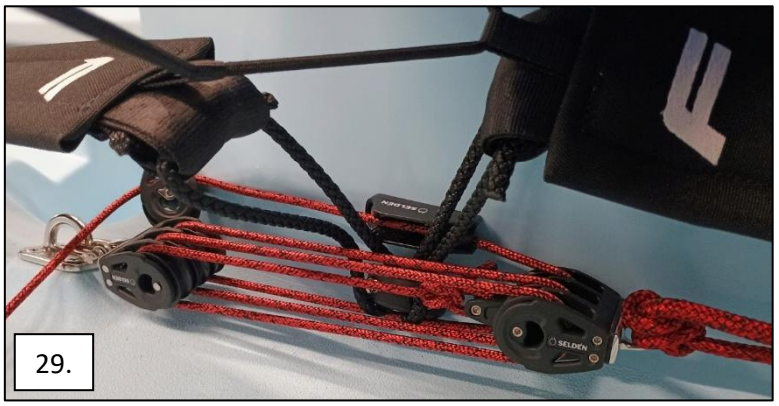
a. Lift the keel fin/bulb sufficiently to clear the trolley bunk upon launching and recovering.

b. Lower the keel fin/bulb sufficiently to fit the keel lock pin when sailing.

**30.** Lift the boat aft into its usual position and remove the timber from between the trolleys handles.
This is a multi-person operation and will need several people around the boat.

**31.** Lower the keel bulb on to the trolleys black keel bulb support rubber. (This unloads the hull of the keel bulbs weight when not sailing)




***** IMPORTANT KEEL USAGE NOTES: *****

**1.** **THE KEEL LOCK PIN IS PARAMOUNT TO SAFETY AND MUST BE FITTED AT ALL TIMES WHEN SAILING!!**

**2.** Press the blue button downwards and withdraw the keel lock down pin.

**3.** Lightly tension & cleat the secondary keel hoist line after the keel lock pin is fitted. (Un-cleat prior to lock pin removal)
This ensures the primary keel hoist line sits neatly in its recess on the side of the keel fin avoiding any unwanted noise or vibration while sailing.

**4.** The length of the keel primary hoist line (Dead end adjustable where it attaches to the keel hoist purchase system) should be set to ensure:

a. The keel bulb retracts completely into the recess on the underside of the hull.
Failure to do this will make launching and recovery difficult as the keel bulb will unnecessarily strike the trolley bunk.

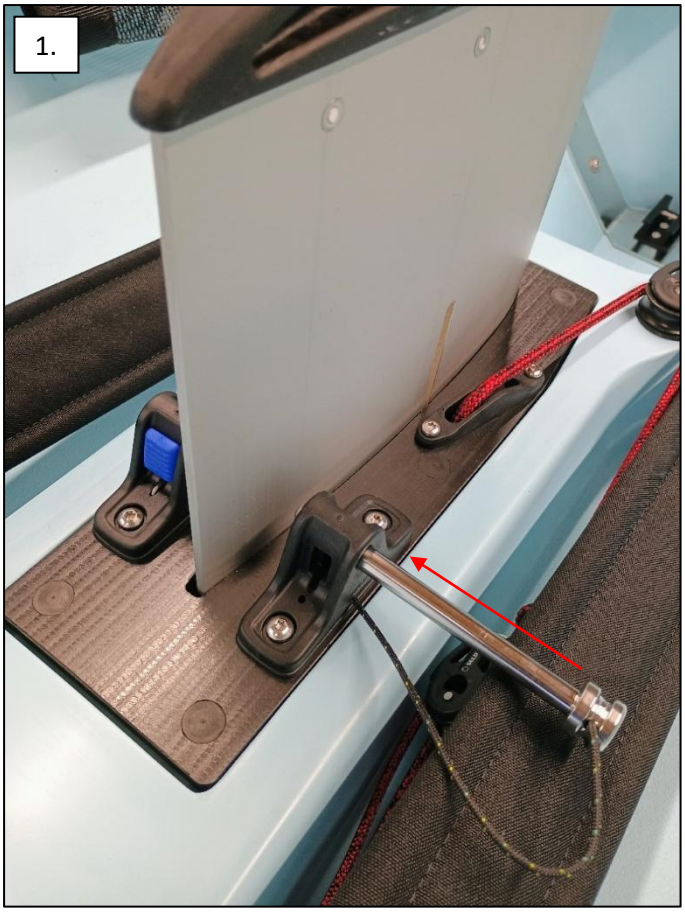
b. The handle at the head of the keel fin touches the boats keel deck plate when fully lowered.
Failure to do this will result in poor sailing performance and prevent fitment of the keel lock pin when sailing.

**4.** The keel bulb should always be lowered on to the trolleys black keel bulb support rubber to unload the hull when not sailing.

**5.** Fusion 2 should never be stored on the water as cyclical fatigue not covered under warranty may occur.

**6.** Fusion 2's hull, keel fin or keel bulb should never be antifouled.

**7.** Fusions 2's keel bulb is supplied pre-finished with a **TOUGH EPOXY 2-PART FORMULA.**
This is a durable long-lasting finish that withstands harsh marine environments both above and below the water line.
For ongoing touch up and/or refinishing purposes it is strongly advised that a similar 2-part epoxy finish be used.

# 7. Sail Numbers & Rating Yardstick for Racing

1.

**Suggested Portsmouth/Great Lakes yardstick number for racing -**

- Any sail/foil configuration – 1155 (2 crew)

If you intend to race your Fusion 2, you will need to attach 300mm tall sail numbers. These can be supplied by a local chandlery although their positioning is important!

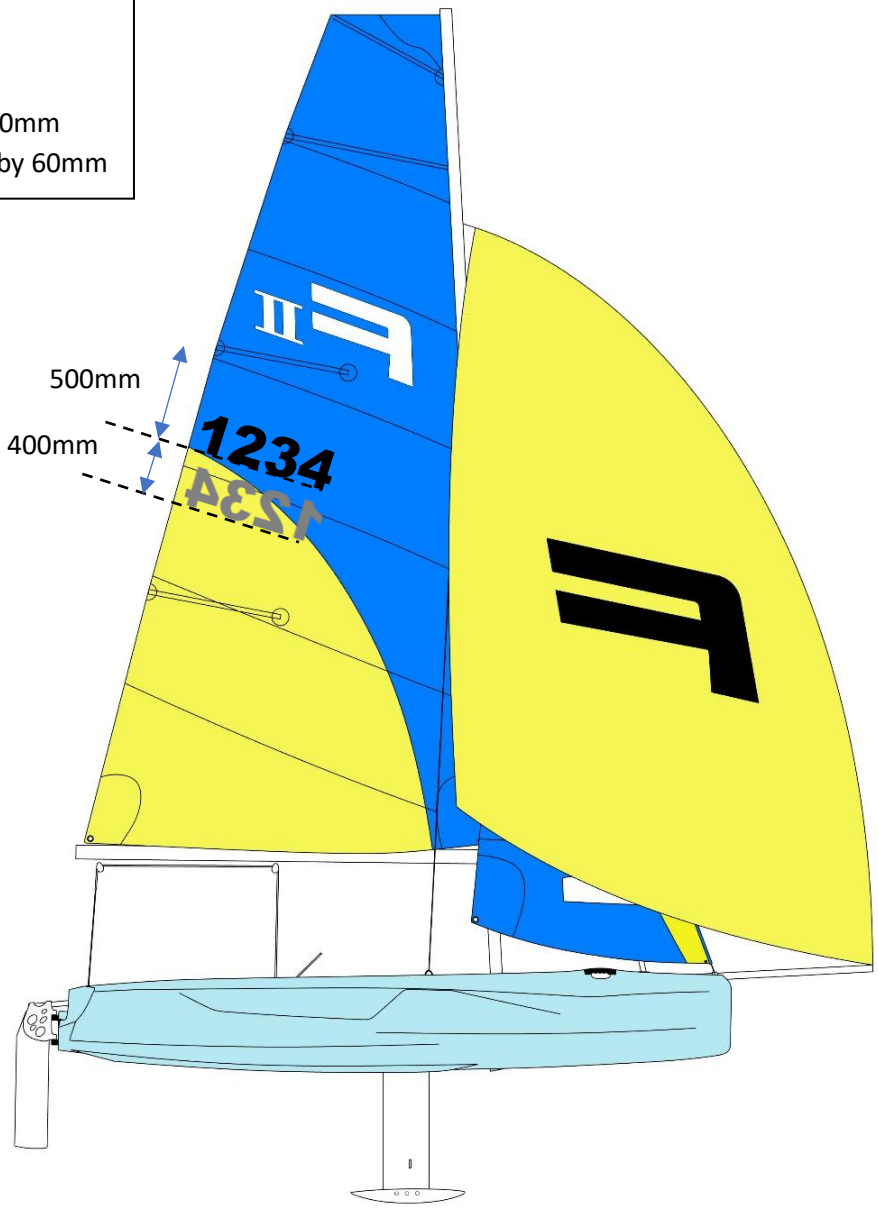
1. Identify the sail number of your Fusion by referring to the sail number plate positioned on the starboard (right hand) side of the forward cockpit. (Just below the jib sheet block/cleat)

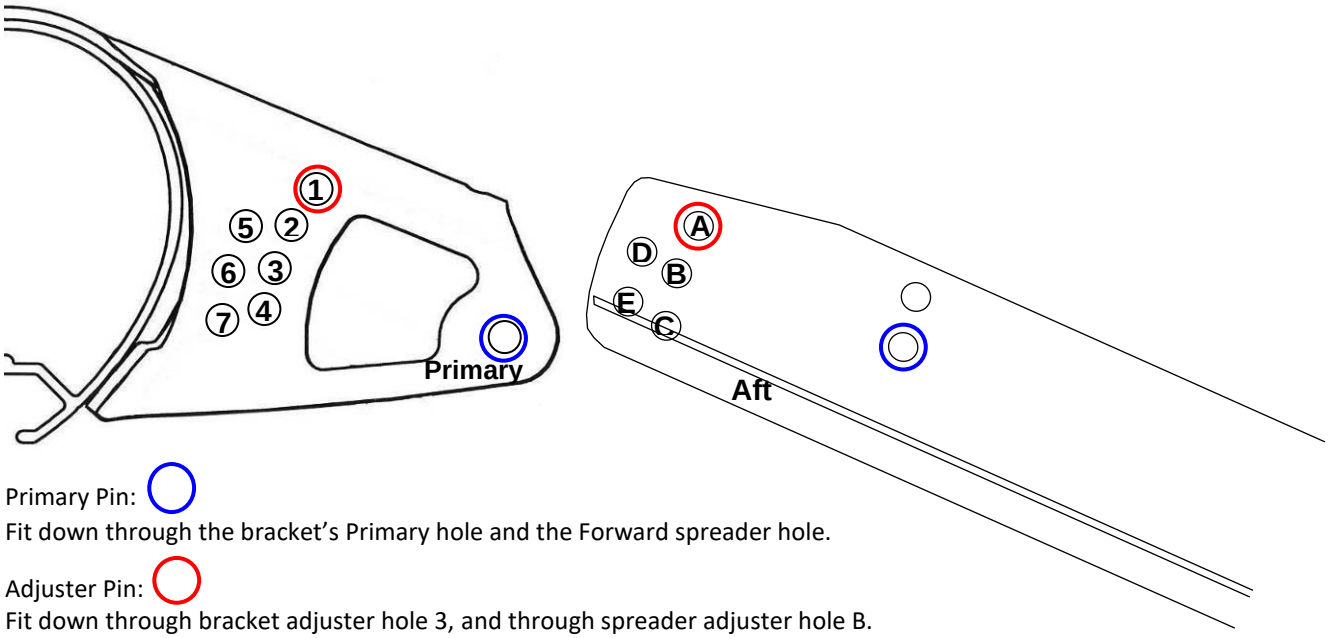
## Sail Number Positioning –

2. Lay the sail on a flat surface starboard side up.
3. The numbers on the starboard side are always higher than those on the port.
4. Draw a faint base line 90 degrees to the leech 500mm below the second batten from the foot of the sail.
5. Working ABOVE this base line, start 100mm in from the leech, positioning the starboard sail numbers 60mm apart.
6. Turn the sail over and draw a second faint base line 400mm below the one on the starboard side of the sail.
7. Starting with the last digit of your sail number - Working ABOVE the second base line, start 100mm in from the leech, positioning the port sail numbers 60mm apart.

**Sail Numbers:**

- 300mm tall
- 90 degrees to the leach
- Inboard of the leach by 100mm
- Spaced apart horizontally by 60mm






Primary Pin:
Fit down through the bracket's Primary hole and the Forward spreader hole.

Adjuster Pin:
Fit down through bracket adjuster hole 3, and through spreader adjuster hole B.

| Class | Bracket Connection Pin | |
|---|---|---|
| | Primary | Adjuster |
| Fusion 2 | Aft | 1A |



# 8. Mast

**Please allow 1 hour to assemble.**

**You will also require the following tools:**

- Flat blade screwdriver (Medium)
- M8 Spanner or socket wrench
- Tape meaure
- Elecrical or amalgamating tape

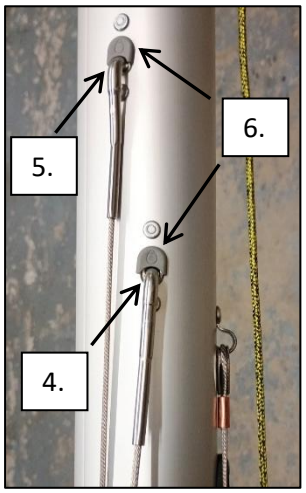
1. Using a torch to look inside each mast half, join the mast ensuring the internal halyards (jib and spinnaker) are not twisted.
2. Tie the forestay to the "P" clip on the masts forward face just above the gennaker halyard exit block.
3. Temporarily tie both ends of the jib, main & gennaker halyard off near the base of the mast.
4. Fit the shroud wires in the **lower** "T" terminals.
5. Fit the trapeze wires (If specified) in the **upper** "T" terminals.
6. Fit the grey rubber "T" terminal plugs to prevent the wires disengaging accidentally.
7. Fit the spreaders bars:

THE SPREADERS BARS MUST BE FITTED TO ENSURE 165MM OF DEFLECTION EXISTS BETWEEN THE AFT FACE OF THE MAST AND A STRAIGHT EDGE BRIDGING THE SHROUDS.

**165mm of deflection is achieved when:**

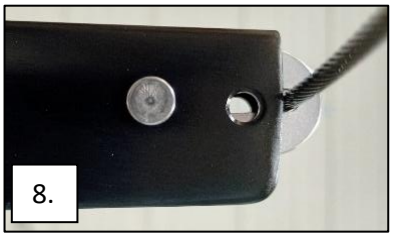
a. The primary bolts are positioned through the aft/rear-most holes in the spreader bars.
b. The adjuster pins are positioned through the forward-most holes in BOTH the spreader bars and the spreader bracket.

All pins and bolts should be fitted with their heads on top of the spreader bracket.




8. Fit the spreaders ends:

a. Slide the hook over the shroud and slide back into the spreader.
b. Fit the clevis pin and split ring.

**9.** Tape all split rings, pins, and the outboard end of the spreader extrusion to reduce mainsail abrasion. (Self-amalgamating tape is best, but PVC electrical tape is an adequate alternative.)

Orientate the boat directly bow into the wind - known as “head to wind”.

Check there are no overhead lines, obstructions or trees in your immediate vicinity.

**10.** Open the mast gate bar by lifting the bars starboard (hook end) off the flange head screw before orientating it downwards towards the cockpit floor.

**11.** Raise the mast vertically outside of the boat and lift the mast heel/foot carefully over the gunwale before positioning it directly on top of the mast step.

This is a two-person operation, someone will need to help hold the mast upright while the mast gate bar is closed.

**12.** Close the mast gate bar.

Tighten both mast gate bar screws to prevent accidental future disengagement.

**13.** Attach the shrouds before the jib or forestay.

**14.** Ensure the shrouds are set on the lowest positions achievable on the vernier adjusters to achieve optimal mast rake. (The mast will temporarily bear up against the mast gate bar at this point)

**15.** Ensure the trapeze wires/rings are aft and inboard of the shrouds and spreader bar ends.

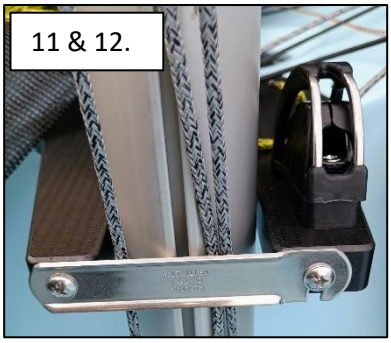
**16.** Attach the trapeze rings to the port and starboard hull mounted shock cords:

a. Pass the shock cord through the fairlead at the bottom of the trapeze ring pulley to create a small loop.

b. Pass the bobble through the loop created.

c. Pull the shock cord tight to secure it.

d. Tie two double over hand stopper knots a hand width apart in the end of each trapeze adjuster line.


11 & 12.


13 & 14.


15 & 16.

# 9. Jib

The jib Furling drum is supplied in the jib halyard bag on the aft face of the foredeck.

**1.** Fit the jib furling drum to the jib tack fitting.

**2.** Tape up all split rings, pins and shackles to avoid gennaker abrasion.

**3.** Pass the furling drum line in an aft/rearward direction:

a. Through the stainless furling fairlead.

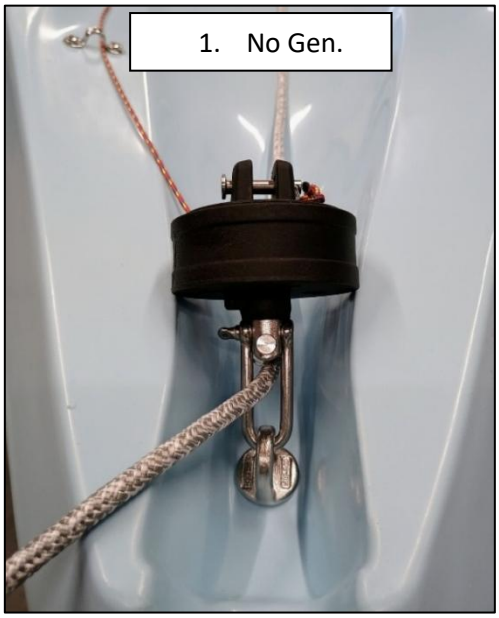
b. Underneath the gennaker sock.

c. Underneath all foredeck storage elastics.

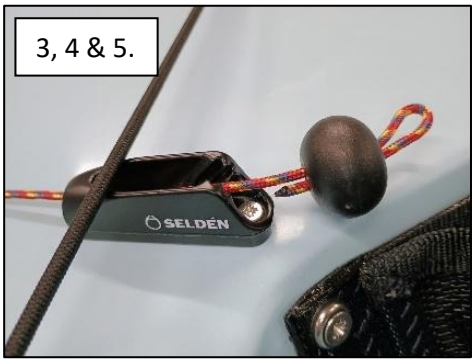
d. Through the furling drum cleat positioned on the starboard/aft/upper face of the foredeck.

**4.** Put the plastic bobble on the furling drum line before tying a short half hitch loop in the ropes end.

**5.** Ensure the furling drum line is wound completely onto furling drum before you attach the jib.


1. No Gen.


1. With Gen.



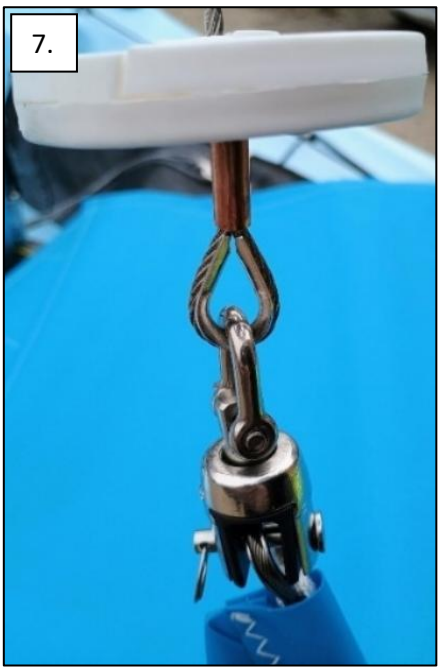
3, 4 & 5.

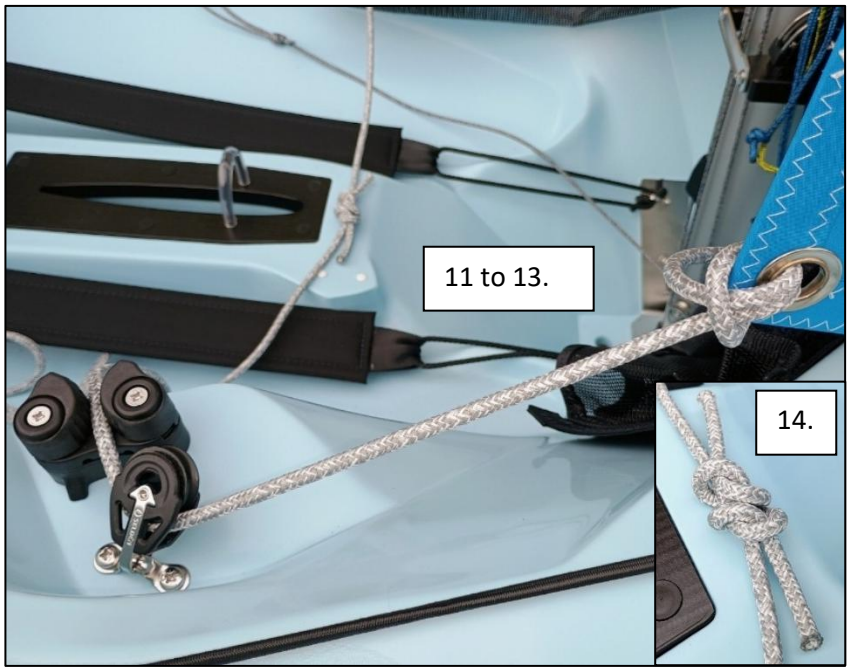
6. Attach the jib tack to the furling drum and carefully tape up the pin and ring.
7. Attach the head of the jib to the jib halyard swivel and carefully tape up the pin and ring.
8. Hoist the jib by pulling the jib halyard (black 4mm rope) from the aft face of the mast before hooking the jib halyard purchase system on to the jib halyard wire. (3:1 - 4mm diameter grey/black rope purchase system just above the mast heel/foot)
9. Tension the jib halyard purchase system until the jib luff wire is taught.
10. Coil the jib halyard and place it in the jib halyard bag on the aft face of the foredeck.

If a loose gauge is used to measure rig tension do NOT exceed 15 units or 70Kg's - measured on the shrouds.

11. Find the middle of the jib sheet before passing it through the clew of the jib to create a small loop.
12. Pass both rope ends through the loop before pulling them tight to secure it.
13. Thread a loose end of the jib sheet each side of the mast before passing them through the port and starboard jib sheet blocks in an inboard direction towards the cockpit.
14. Tie the two loose ends of the jib sheet together using a fisherman's knot.
15. Ensure the forestay is tied to the "P" clip (immediately above the mast gate) on the front face of the mast to avoid interference with the jib furling system when sailing.
16. Furl the jib by pulling and cleating the furling line.
17. When the jib is lowered the forestay should be tied to the stainless furling fairlead to support the mast during storage.



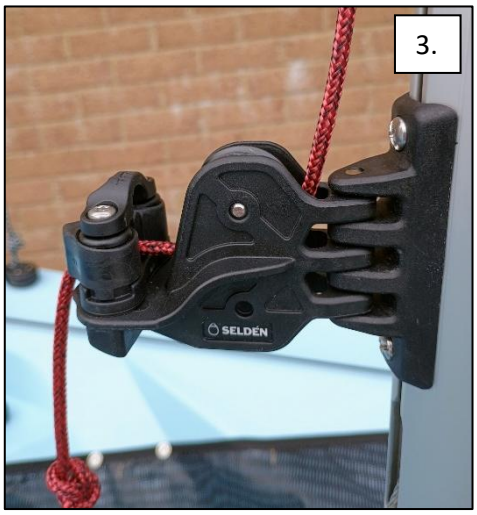

# 10. Boom & GNAV

**1.** Attach the boom to the gooseneck bracket using the drop nose pin. (Lower of the 2 brackets on the aft face of the mast)
Articulate the toggle at the bottom of the drop nose pin to 90 degrees to prevent loss.

**2.** Attach the GNAV strut to the GNAV bracket using the drop nose pin. (Upper of the 2 brackets on the aft face of the mast)
Articulate the toggle at the bottom of the drop nose pin to 90 degrees to prevent loss.

**3.** Pass the GNAV control line down the aft face of the mast and around the flip/flop block/cleat before tying a bowline loop in the ropes end. (4mm diameter red/black rope)






**4.** Retrieve the following components from the foil kit:

- ✓ GYBING STROP - 5mm Grey/Black (0.7m)
- ✓ GYBING STROP RING - Allen A.156
- ✓ MAINSHEET BRIDLE - 5mm Grey/Black (1.35m)
- ✓ MAINSHEET BRIDLE BLOCK 40mm - Selden 404-101-02

**5.** Tie a half hitch in one end of the gybing strop before passing the untied end through the centre of the forward mainsheet block on the boom.

**6.** Tie a half hitch in the rope end before passing it through the centre of the gybing strop ring before tying a final half hitch to hold the ring in place at the ropes end.

**7.** Find the middle of the mainsheet bridle rope before passing it through the fairlead at end of the mainsheet bridle block to create a small loop.

**8.** Pass both rope ends through the loop before pulling them tight to secure the block in the middle.

**9.** Using a bowline loop, tie one end of the mainsheet bridle to the port transom fairlead and the other to the starboard transom fairlead.



**10.** Pass one end of the mainsheet through the stainless bushed fairlead at the forward end the helms starboard toe strap before tying a half hitch stopper knot to dead-end it there.

**11.** Pass the untied end through:

a. The mainsheet swivel cleat. (If fitted)

b. The mainsheet ratchet block

Take care to ensure the mainsheet passes through the ratchet block so it free wheels when sheeting in and locks when sheeting out. There is also a ratchet on/off switch, on the side of the block.

c. The gybing strop ring.

d. The forward mainsheet block on the boom in an aft/rearward direction.

e. The mainsheet sling webbing on the boom in an aft/rearward direction.

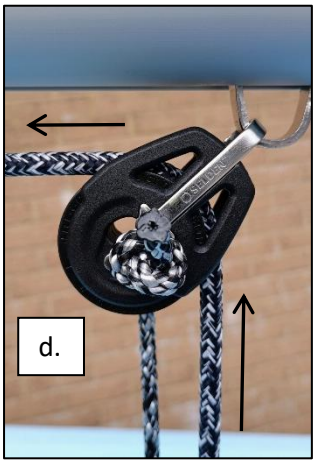
f. The rear mainsheet block on the boom in an aft/rearward direction.

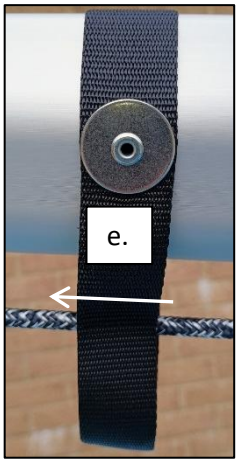
g. The mainsheet bridle block at the transom in an aft/rearward direction. (When the block is held upright as though in use)

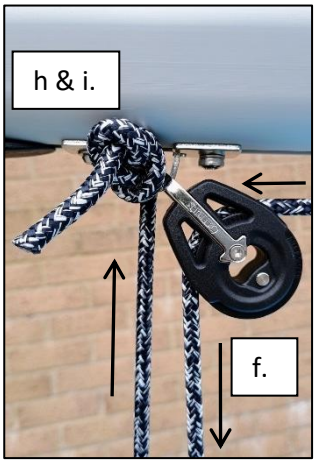
h. Through the stainless fairlead that attaches the aft/rear mainsheet block to the boom in a side-to-side direction.

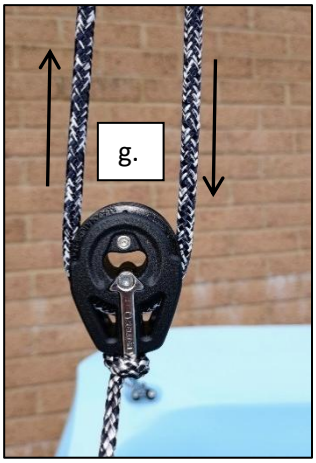
i. Finally tie a figure of eight stopper knot in the mainsheets end.






# 11. Gennaker

**1.** Retrieve the end of the Gennaker pole launch line from underneath the gennaker sock at the bow. (4mm diameter red/black rope with a 20mm block on the end of it)

**2.** Pull the gennaker pole out line aft/rearwards (above all foredeck storage elastics) to extend the gennaker pole to its full extension.

**3.** Retrieve the gennaker halyard from where it exits the masts forward face just above the boats mast deck gate. (4mm diameter yellow/black rope)

**4.** Pass this end of the gennaker halyard:

a. Forward around the 20mm block at the end of the gennaker pole launch line. (4mm diameter red/black rope)

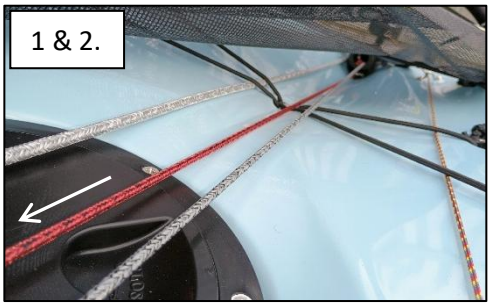
b. Aft/rearwards directly through the gennaker cleat assembly on the starboard side of the boats mast deck gate.

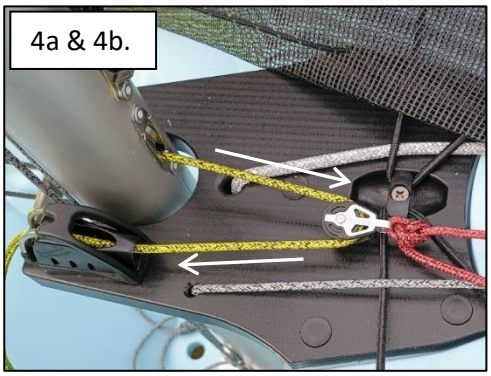
c. Below jib sheets.

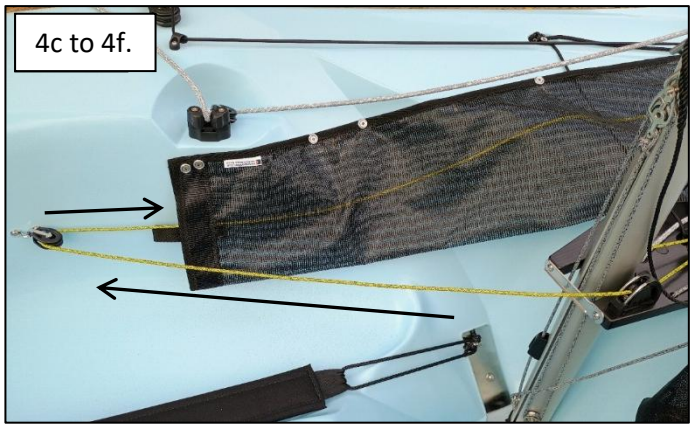
d. Above the toes traps.

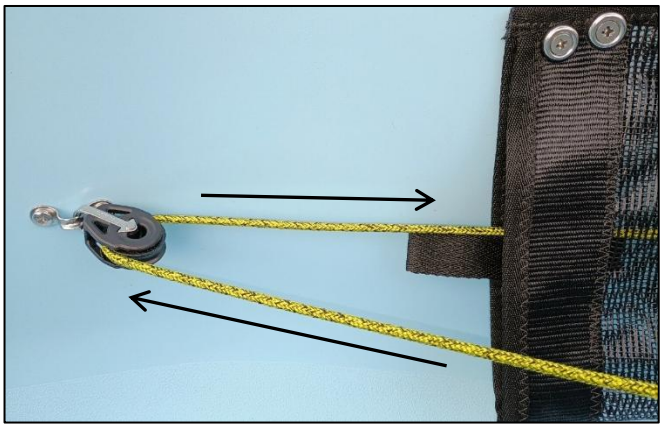
e. Through the 30mm gennaker retrieval block at the aft/rear end of the gennaker sock in a forward direction.

f. Through the gennaker sock in a forward direction towards the bow.



5. Temporarily tie this end of the gennaker halyard to the gennaker chute bar using a bowline to prevent accidental unthreading.
6. Unfold the gennaker:
7. Identify the gennaker tack. (written on the sail)
8. Tie to the gennaker pole tack line to the gennaker tack using a bowline. (4mm diameter grey/black rope that exits the front of the gennaker pole)

The plastic bobble should act as a bush between the sail and the pole end.

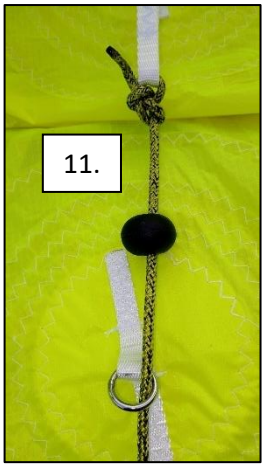
9. Identify the head of the gennaker. (written on the sail)
10. Take the other end of the gennaker halyard that exits the mast at ¾ mast height and secure it to the head of the gennaker using a bowline. (4mm diameter yellow/black rope)

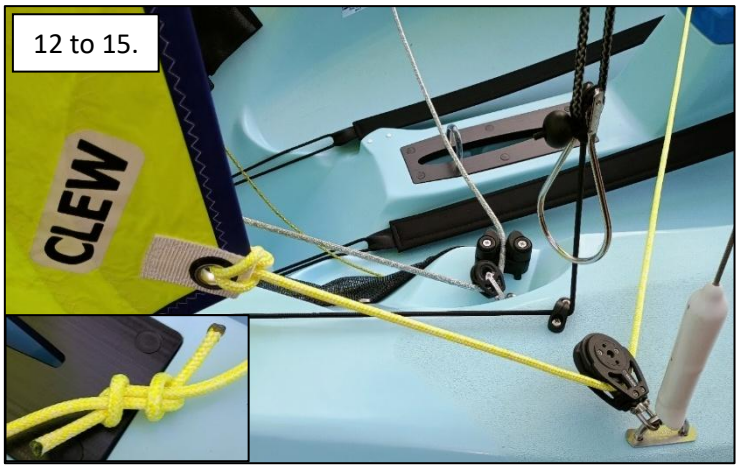
The plastic bobble should act as a bush between the sail and the mast.

11. Take the end of the gennaker halyard (That you previously tied to the gennaker chute bar) and pass it through the lower downhaul patch ring on the port side of the gennaker in a foot to head direction before securing it to the upper downhaul patch extension using a bowline.

The plastic bobble should act as a bush between the bowline and the lower downhaul patch ring.






12. Find the middle of the gennaker sheet before passing it through the clew of the gennaker to create a small loop.
13. Pass both rope ends through the loop before pulling them tight to secure it.
14. Pass a loose end of the gennaker sheet each side of the jib luff and through the gennaker sheet ratchet blocks attached to the shroud anchor points.

The gennaker sheet must pass between the shrouds and trapeze lines if fitted - There are arrows on the ratchet blocks to indicate which way the gennaker sheet should pass - When under load, the ratchet will free wheel when sheeting in and lock when sheeting out.


15. Finally tie the two loose ends of the jib sheet together using a fisherman's knot.
16. Many people consider it best practise to hoist the gennaker to check it is rigged correctly before going afloat although this is only practical in light to medium winds:

a. Ensure the boat is pointing directly into the wind.
b. Hoist the gennaker slowly taking great care to ensure it does not get snagged around the trolley in any way.

A second person should help to ensure the gennaker does not snag anywhere OR on the trolley ahead of the bow!

c. On port and starboard gybe - Check the gennaker is not twisted and the sheets are not tangled with the halyard.
d. To lower the gennaker, un-cleat the halyard on the starboard side of the boats mast deck gate and gently pull it through the block at the aft end of the gennaker sock.

A second person should help to ensure the gennaker does not snag anywhere OR on the trolley ahead of the bow!

# 12. Mainsail


1. Ensure the boat is still pointing directly into the wind.

a. Place the mainsail in the boat's cockpit with the luff closest to the mast and the leach closest the stern/transom.
b. Slide the sail battens into the batten pockets.
c. Tighten the velcro batten pocket straps ensuring any wrinkles along the length of the batten pocket are removed.
d. Engage the velcro closure flaps to prevent batten loss.

**2.** Take the end of the main halyard that exits the mast at its tip: (5mm diameter blue/black rope)

a. Ensure the halyard is clear and aft of the spreaders.

b. Pass the halyard through the eye in the head of the sail to create a small loop. (Pass the loop from the port/left side to the starboard/right side)

c. Pass the bobble through the loop created.

d. Pull the halyard tight to secure it.

Ensure the bobble is positioned on the starboard right side as shown – This ensures the bobble will not get caught in the "V" between the GNAV bar and the mast during hoisting.

**3.** Place the head of the mainsail into the mast track.

The GNAV bar must be on the port side of the sail with sail and halyard to the Starboard side of the GNAV bar.

**4.** Hoisting the mainsail by pulling the other end of the main halyard from where it exits the mast on the starboard side just above the gooseneck. (5mm diameter blue/black rope)

Continue to feed the mainsail into the track while hoisting to avoid luff rope damage.

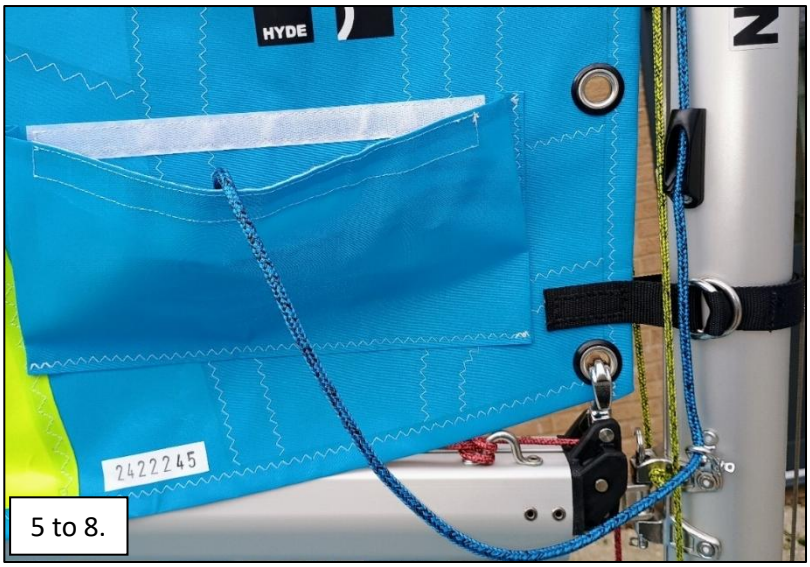
**5.** Hook the sails tack eye on to the booms tack hook when the mainsail is approximately 90% hoisted.

**6.** Hoist the mainsail firmly to the very tip of the mast ensuring the luff of the sail is tight before cleating.

**7.** Coil the mains halyard and store it the pocket on the starboard side of the mainsail tack.

**8.** Secure the velcro tack strap around the mast.

2, 3 & 4.



5 to 8.


9.

**Outhaul**

**9.** Feed the plastic slug slide on the mainsails clew into and aft of the cut out on the booms upper surface.

**10.** Pass the outhaul line through the eye in the sail (From port/left to starboard/right side) before locating/securing the figure of eight knot in the slot which comprises part of the boom end casting. (4mm diameter blue/black rope that exits the aft/rear end of the boom)

**11.** Outhaul tension is controlled using the cleat and turning block on the forward underside of the boom where the other end of the outhaul line exits. (4mm diameter blue/black rope)


10.

**Forward Reefing Line**

(4mm diameter grey/black rope threaded from side-to-side through the hole in the masts gooseneck)

**12.** Thread the forward reefing line:

a. Upwards through the second available eye in the sails luff passing in a starboard/right direction.

b. Upwards through the third available eye in the sails luff passing in a port/left direction.

c. Upwards through the fourth available eye in the sails luff passing in a starboard/right direction.

d. Down the starboard/right hand side of the mast and through the forward reefing line cleat (just below the gooseneck) before tying a bowline loop in the ropes end.

The first available eye in the sails luff is a cunningham eye. The cunningham eye is identifiable by the black plastic ring around it and should only be used to tension the luff (using the forward reefing line) in a scenario when reefing functionality is NOT required. In this scenario simply pass the forward reefing line through the cunningham eye passing in a starboard/right direction before threading it back down the starboard/right hand side of the mast and through the forward reefing line cleat just below the gooseneck.

**Aft/Rear Reefing Line**

(4mm diameter grey/black rope)

**13.** Un-cleat the end of the reefing line that exits at the forward underside of the boom.

**14.** Thread the end of the reefing line that exits at the aft/rear end of the boom:

a. Upwards through the third available eye in the sails leach passing in a port/left direction.

b. Downwards through the second available eye in the sails leach passing in a starboard/right direction.

c. Downwards through the first available eye in the sails leach passing in a port/left direction.

d. Down the port/left hand side of the sail before sliding the figure of eight stopper knot in the ropes end into and aft of the cut out on the booms upper surface.



# 13. Reefing

**1.** Un-cleat the GNAV control line on the masts rear face below the gooseneck. (4mm diameter red/black rope)

**2.** Un-cleat the main halyard on the starboard side of the mast just above the gooseneck. (5mm diameter blue/black rope)

**3.** Pull the aft/rear reefing line from the turning block on the forward underside of the boom until the rear end of the mainsail is completely slab reefed tight down to the boom. (4mm diameter grey/black rope)

**4.** Pull the forward reefing line from the cleat on the starboard/right hand side of the mast until the forward end of the mainsail is completely slab reefed tight down to the boom. (4mm diameter grey/black rope)

Ensure the forward and aft/rear reefing lines are cleated.

**5.** Pull the main halyard firmly until the luff of the mainsail is completely tight before cleating.

**6.** Tension and re-cleat the GNAV control line accordingly.

# 14. Rudder

1. Lower the rudder heads pintle pins onto the rudder gudgeons situated on the stern/transom of the boat.
2. Ensure the integral rudder gudgeon clip (blue) is successfully engaged resulting in the rudder head automatically “clicking” in to place securely.
3. Fit the secondary rudder retaining split ring through the upper pintle pin.
4. Insert the aft/rear end of the tiller arm tube into the rudder head travelling in an aft/rearward direction while passing underneath the mainsheet bridle line.
5. Line up the tiller arm retaining screw hole with its corresponding hole on the uppermost aft/rear surface of the rudder head.
6. Locate the tiller arm retaining screw, driving it carefully through both the rudder head and the tiller arm.
7. Clip the tiller extension to its mounting bracket on the uppermost forward surface of the tiller arm.
8. To remove the rudder assembly from the transom gudgeons, the rudder retaining split ring must be removed and the integral rudder gudgeon clip (blue) pressed forwards.

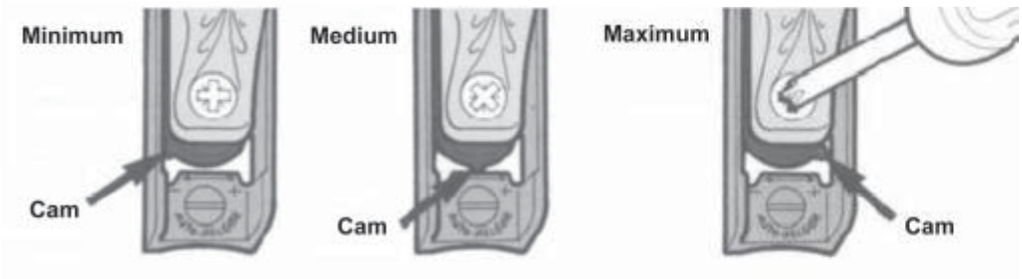


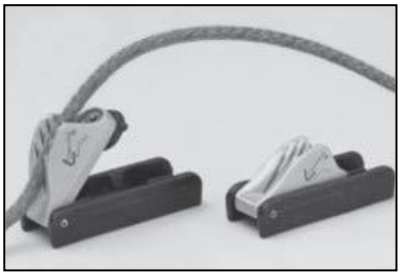


**Background:** The auto-release cleat on the Fusion tiller arm provides the best solution to the problem of how to lock-down a rudder blade yet allow it to flip up if it hits the bottom or a solid obstacle in the water.

**TOP TIP:** Once tripped the Fusion tiller arm cleat can be reset in seconds simply by pushing the cleat back down into its base until you hear it “click”. The cleat is also fitted with an adjustable cam to enable the release tension to be set to suit your local conditions.

**Setting the Release Load:**
**1**. Test release load with the “cam” at minimum setting.
**2**. To increase the release load use a screwdriver to rotate the “cam” incrementally towards maximum.



# 15. Daggerboard

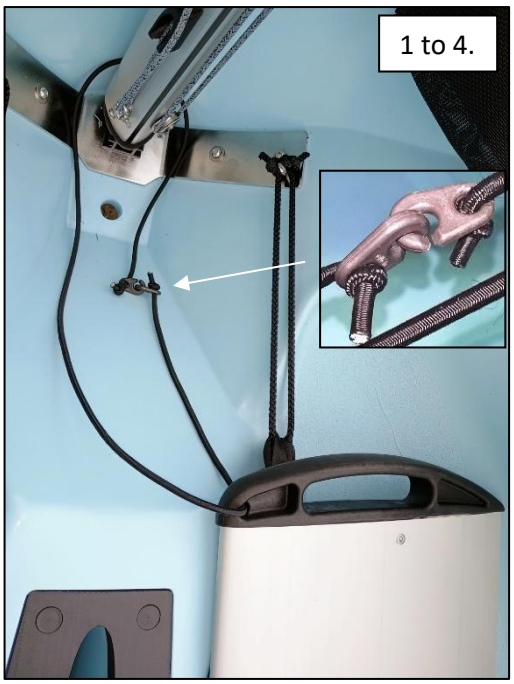
1. Put a sister clip on **one** end of the daggerboard shock cord before tying an overhand knot at the end of the shock cord to prevent loss.

2. Pass the other end of the shock cord:
a. Through the hole in the upper forward edge of the daggerboard
b. Around the mast. (Below the boats mast deck plate)

3. Put a sister clip on the loose end of the daggerboard shock cord before tying an overhand knot at the end of the shock cord to prevent loss.
4. Finally fasten the sister clips together to close the daggerboard elastic loop as shown.

5. When putting the daggerboard in the case, (upon launching) make sure the elasticated clear plastic loop (Integral to the daggerboard case) is positioned **BEHIND** the daggerboard. In this event, when the daggerboard is pushed fully down the elasticated plastic loop can easily be flicked over the top of the daggerboard to prevent it riding or floating up.

**WARNING:** If the daggerboard is not secured correctly and fully re-tracts during capsize, the boat will invert resulting in a risk of entrapment.





# 16. Launching and Basic Safety on the Water

**Before You Go Sailing:**

1. Check you are wearing suitable clothing and safety equipment for the conditions and time of year
2. If possible, take a phone, GPS, or VHF with you.
3. Always wear a buoyancy aid or life jacket
4. Make sure a third party knows where you are sailing and how many of you are sailing.
5. Check the weather forecast
6. Check the time of high and low tides if applicable.
7. Seek advice on local conditions if sailing in a new area.
8. Always check the condition of your craft before setting off.
9. **Check for overhead cables when rigging, launching, and recovering.**
10. **The use of a 40 Litre mast head float is highly advisable.**

(To assist in the prevention of complete inversion in the event of capsize)

**Launching**

**1**. Raise the rig with the boat facing into the wind.
**2**. Take the boat into the water with the bow facing into the wind.
**3**. When there is enough water below you, lower the daggerboard and rudder fully.
**4**. Cleat the rudder downhaul in the cleat on the tiller.
**5**. The rudder and the daggerboard should be raised before coming ashore.

**On The Water**

**1**. Conform to the sailing rules of the road.
**2**. Look out for changing weather conditions.
**3**. Never sail beyond your ability or that of your crew.
**4**. Understand and be competent in sailing skills and righting techniques.

# 17. Care, Maintenance and Service

Before rigging your boat, read and familiarize yourself with the rigging manual. Failure to adhere to the following guidelines could invalidate your warranty.

**Maintenance**

• Keep all equipment clean by frequently flushing with fresh water. In corrosive atmospheres, stainless parts may show discoloration/brown staining around screw holes and rivets. This is nothing serious, staining can be removed with a fine abrasive or oxalic acid/gel.
• Excess water should be removed from the hull.
• Ropes, rigging and fittings should be checked at regular intervals for wear and tear.
• All moving parts should be lightly lubricated to avoid jamming, i.e., McLube, Teflon or a similar Silicone-based spray. Do not use oil.
• Inspect shackles, pins, and clevis rings, use electrical tape to stop snagging and to prevent them from coming undone.
• When refastening screws do not over tighten as this may strip the thread, do not reuse nylock nuts more than three times.
• Damaged or worn parts should be replaced.
• Sails should be thoroughly washed down with fresh water, dried and stored in a dry place.

**Trailers and Trolleys**

• Trailers and trolleys supplied by Fusion Sailboats are designed to store and transport the hull in the best possible manner to avoid damage. Please do not transport or store your Fusion Sailboats product on a trailer or trolley that has not been specifically designed for the product. Hulls damaged via the use of an incorrectly designed or wrongly set up trolleys or trailers are not covered under warranty.
• It is highly recommended that a trolley is used to launch and recover your boat. Dragging your hull up onto a beach or slip way will wear away the polyethylene and damage the boat.
• The hull should not be stored directly on a pebble beach, wooden battens or in any other locally point loaded scenario (such as on scaffold or wood batten boat racks) as the hull may become permanently dented or warped.
• Trailers should be rinsed with fresh water and checked at regular intervals. It is recommended that trailers be serviced annually. Trailer road base should never be immersed in water.
• When securing your boat to a trailer for transport be very careful that ratchet straps and ropes are not over tightened and that there is sufficient padding under the strap or rope to prevent the hull/deck from being damaged through abrasion or pressure.
• Top covers must not be allowed to “flap” when driving at speed. This can abrade the surface of the hull and damage it. It is recommended if you are towing and plan to use your top cover that an undercover is fitted to prevent cover flap damage to the top sides of the hull.

**Storage**

• Your boat should never be stored afloat as cyclical fatigue not covered under warranty may occur.
• Your boat should always be tied down securely to the ground when not in use.
• UV light will cause fading to hull and components over time. A storage cover is recommended to reduce UV degradation.
• Do not leave the rig under tension when not sailing or during storage.
• Hulls, hardware, ropes, rudders, daggerboards, spars, sails or any other equipment must not be stored wet in bags from whomever they are supplied. (To include Fusion Sailboats) Failure to do this will cause corrosion, mould, blistering, print through, warping and other damage.

**On Water Towing**

• Towing your Fusion Sailboats product at high speed (10 – 20 knots) behind a rib or power boat can seriously damage the hull. Boats damaged in this manner are not covered by the warranty. Fusion Sailboats recommends a maximum towing speed of 6 knots.

**Repairs**

• Repairs to the polyethylene hull should only be undertaken by persons with the relevant equipment and skills.
Please contact Fusion Sailboats for advice.

# 18. Certification

# Examination Report - Stability

This is to certify that the product listed below conforms to the requirements of the

## Recreational Craft & Personal Watercraft Directive

2013/53/EU: Module A1 - Annex 1, Essential Requirements 3.2 & 3.3

**Certificate Number** HPiVS-iR1176-003-I-01-00
**Date of Issue** 13-Oct-2023

**Manufacturer**

Fusion Boats Ltd
Egerton House, 55 Hoole Road
Chester
CH2 3NJ
United Kingdom

**Watercraft Model** Fusion 2

**Description** Rigid Hull, Cruising boat - Planing - Sail - None

**Design Category** C — No of hulls: 1

**Length** (m) — Max. ($L_{MAX}$): 4.00 — Hull ($L_H$): 4.00

**Beam** (m) — Max. ($B_{MAX}$): 1.55 — Hull ($B_H$): 1.55

**Maximum Load ($m_L$)** (kg) 360 (including fluids)

**Builder's Plate**

| Category | People | Mass (kg) |
|---|---|---|
| C | 4 | 320 |

**Displacement** (kg)

Light Craft Condition ($m_{LC}$): 154 (excl. engine)
Maximum Load Condition ($m_{LDC}$) 514

Check this certificate is genuine

Quality Director

Technical Director

An INAB accredited Inspection Body no. 9033.

This Examination Report is supported by an assessment report bearing the same number.
This report is the property of HPi Verification Services (Ireland) Ltd. & shall not be amended or issued to others.
The manufacturer must inform HPi Verification Services (Ireland) Ltd. of any changes that affect any of the assessed Essential Requirements.
Failure to do this will invalidate the report.

The applied conformity assessment module requires the client to affix HPi Vertification Service's *Notified Body* identification number (2810) next to the CE mark.

EU Notified Body No. 2810
Company registered in Ireland #577786

Tel +353 (0)1 8017008
Email enquiries@eucertification.com
Web www.eucertification.com

HPi Verification Services (Ireland) Ltd.
Clonross
Dunshaughlin, Co. Meath
A85 XN59, Ireland