FARR® ONE DESIGN 280

Assembly Guide

Contents

FARR 280 ONE DESIGN

About this guide

The intention of this guide is to provide helpful hints and tips regarding the rigging of the Farr 280. It is not intended to supersede any recommendations made by hardware suppliers or manufacturers. If there is conflict between a manufacturer's suggestions and a suggestion made by this guide, the manufacturer suggestion shall take precedence.

Use this guide in conjunction with other manufacturer's assembly guides. In particular:

- The Southern Spars Owner's Information Pack
- Lombardini Owner's Manual

This guide is not intended to be an owner's manual per CE requirements. If you have any questions please contact your Farr 280 broker or dealer.

Symbols

→ Supplementary information/directions

⚠ Important note

Keel

Supplied hardware:

- ***Fin and bulb***
- ***Carbon backing plate*** →
- ***Custom keel nuts (x2)***

Additional hardware:

- ***Tube of 3M 4000 UV or similar sealant with application gun***
- ***Torque wrench***
- ***Optional lifting eye***
- ***Super Lube synthetic grease or similar***
- ***Foam padding***

STEPS

1. Lift the Farr 280 hull with travel lift or similar. The hull must be level, both fore and aft as well as side to side.

2. Pick the fin and bulb (keel) up so that it is vertical.

→ If the keel is still on the trailer or in its cradle, pick the keel up by lifting the bulb with forklift or similar while supporting the head (where the keel bolts are).

(Figure K-1)

3. Place the bulb on the ground and manually lift the head of the fin up so the keel is vertical.

→ Place padding or foam under the bulb when it is lowered onto the ground and as the keel is rotated to vertical.

(Figure K-2)

→ Alternatively you may use a lifting eye that is fully thread onto the forward keel bolt to slowly lift the keel so that it is vertical.

4. Place a bead of 3M 4000 UV or similar around base of the keel bolts.

⚠ Do not use a structural adhesive as this will make removing the keel extremely difficult.

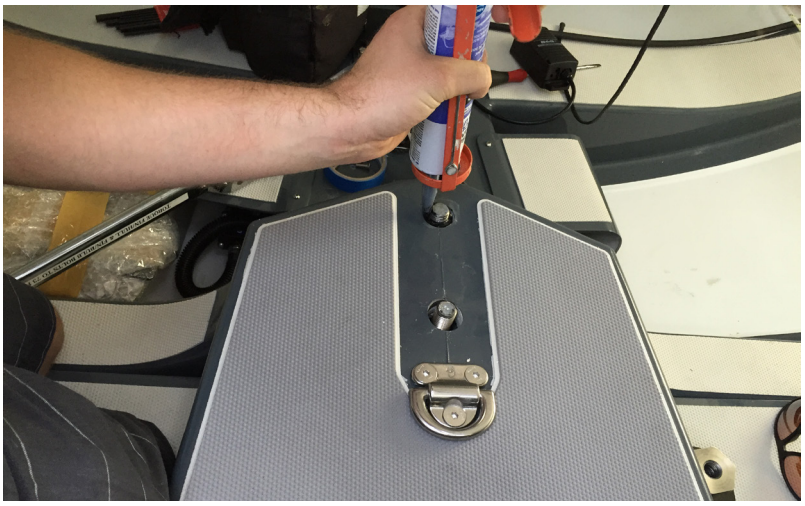
⚠ Only apply sealant around keel bolts. DO NOT coat the keel head.

5. Grease the head of the keel (application area shown in red).

(Figure K-3)

6. Lower the boat onto the keel head while watching for alignment of the keel relative to the boat. It is good to have someone inside the boat at this point to check the alignment of the keel bolts as they come through the hull liner.

7. Once the keel bolts have been aligned and are just starting to come through the matching holes in the hull liner, add another bead of 3M 4000 UV into the area around the keel bolts. See Fig. K-4.



(Figure K-4)

8. Place carbon backing plate on liner and tighten nuts as boat is lowered onto the keel.

9. Tighten the keel nuts to the specified torque of 99 N-m (73 ft-lbs)

(Figure K-5)

10. Run a bead of 3M 4000 UV or similar around the keel-to-hull joint to fair the transition.

⟶ This bead is not structural and only serves to close the ~6mm (~1/4”) gap between the keel and hull.

(Figure K-6)

11. If trailering your Farr 280 with the keel installed, be sure to check the keel nut torque before relaunching, as vibrations during travel can loosen the keel nuts.

Rudder

Supplied hardwear
- ***Rudder and top cover plate***
- ***Tiller***

Additional hardwear
- ***Pliers***
- ***Allen key set***

STEPS

1. Remove the top plate from the rudder.

(Figure R-1)

→ Before inserting rudder, ensure that the upper and lower bearings are in place in the rudder stock tube

→ No need to lubricate bearings

2. Slide stock into place from underneath the boat

⚠ When inserting the rudder stock, take care to not impact the bearings as the outer casing on the bearings can crack.

3. With the rudder being supported from below, fasten the top plate over the stock and into the top bearing sleeve.

4. Attach the tiller by bolting through the horizontal hole in the top of the rudder stock.

(Figure R-3)

Stepping the rig

Supplied hardware

- ***Cunningham line assembly***
- ***Wrench springs***
- ***Mast collar***
- ***Mast shim***
- ***Mast chock***

Additional hardware

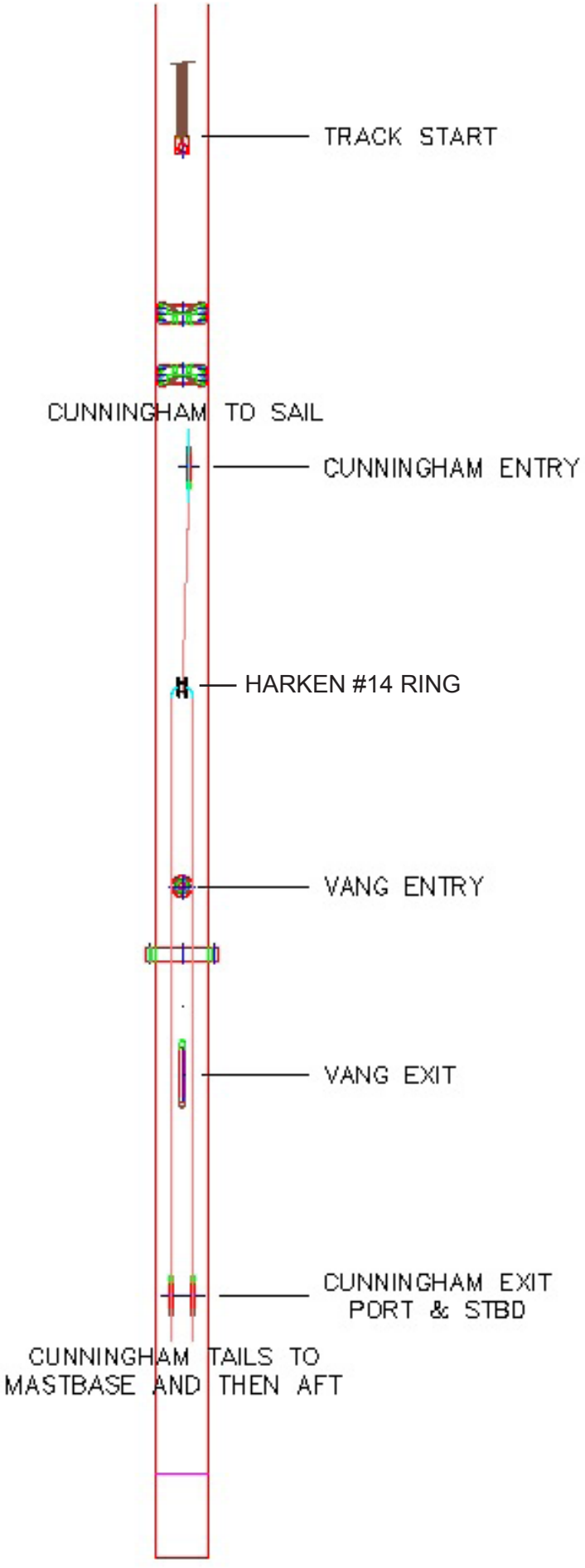
- ***Pliers***
- ***Adjustable wrench***

STEPS

1. Put rig together per Southern Spars manual.

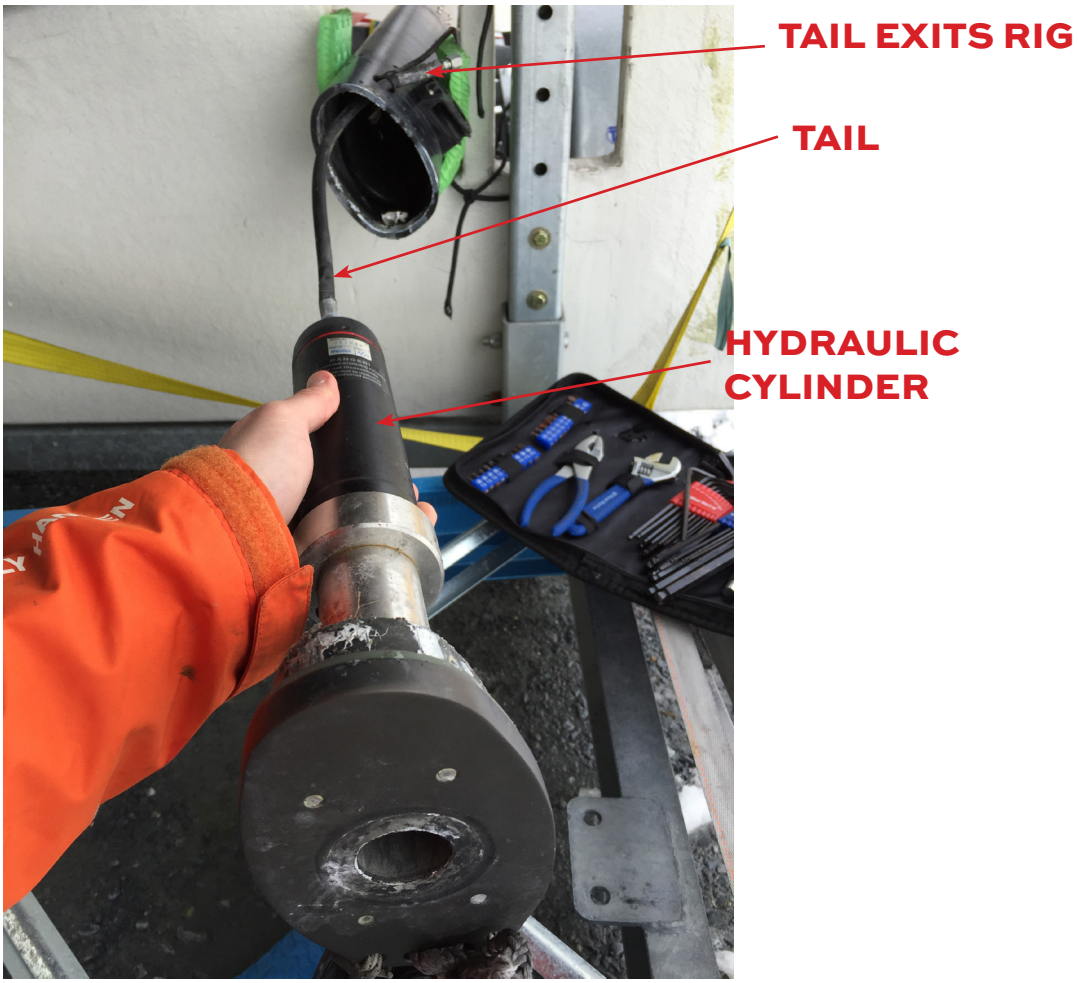
⚠ It is important that you do not over tighten the D2s. Only put the turnbuckle on so that all threads are engaged. A overly tight D2 turnbuckle will prevent attaching the cap shroud when stepping the rig.

2. Install Cunningham using the mouse lines already in the rig, before connecting the bottom base plate. There will be 1 Harken #14 ring that rides in the rig.



Aft face of mast(Figure RI-1)

3. Remove the mast step hydraulic line tail from the boat. Install this tail on the mast base hydraulic cylinder and run tail through the opening on the starboard side of the rig. Insert the mastbase and secure to the rig.



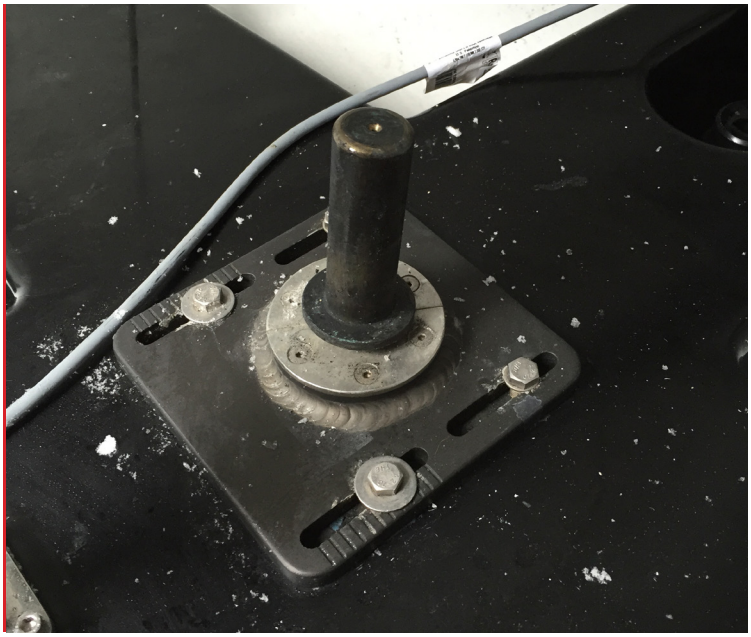
(Figure RI-2)

4. Add bellows to the Cap shrouds, D1s and rope portion of the forestay.

(Figure RI-3)

5. Lower rig into boat while keeping lines clear.

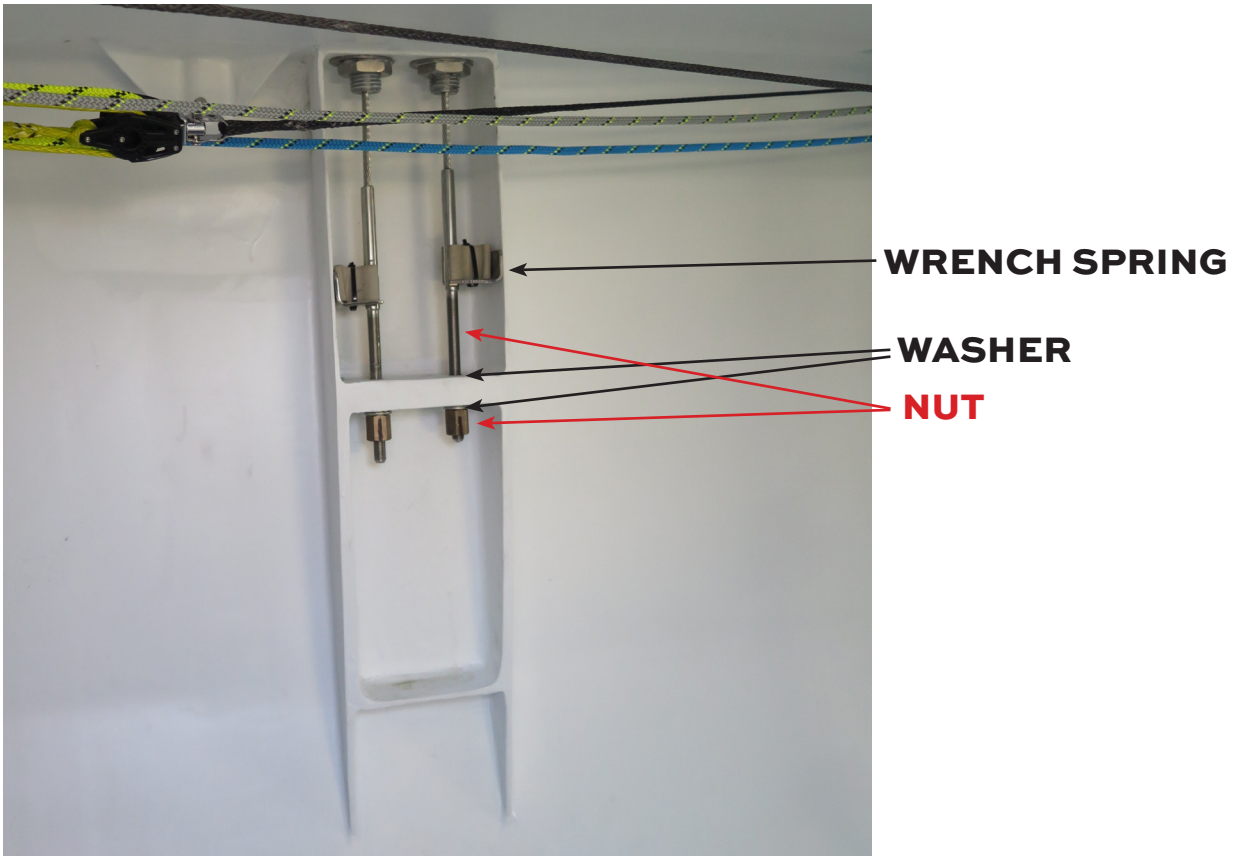
6. Seat on mast base male receiver with no shims installed.



(Figure RI-4)

7. Connect the cap shrouds (forward hole) and the D1s (aft hole). Insert the threaded portion of the stay through the deck. Put the small bronze nut on the thread turnbuckle. Before inserting threaded turnbuckle through the hole in the composite chainplate, install one of the washers. Once the chainplate has passed through the composite chainplate, add the second washer and the larger bronze nut.

8. While there is still little tension on the rig, install the wrench springs.



(Figure RI-5)

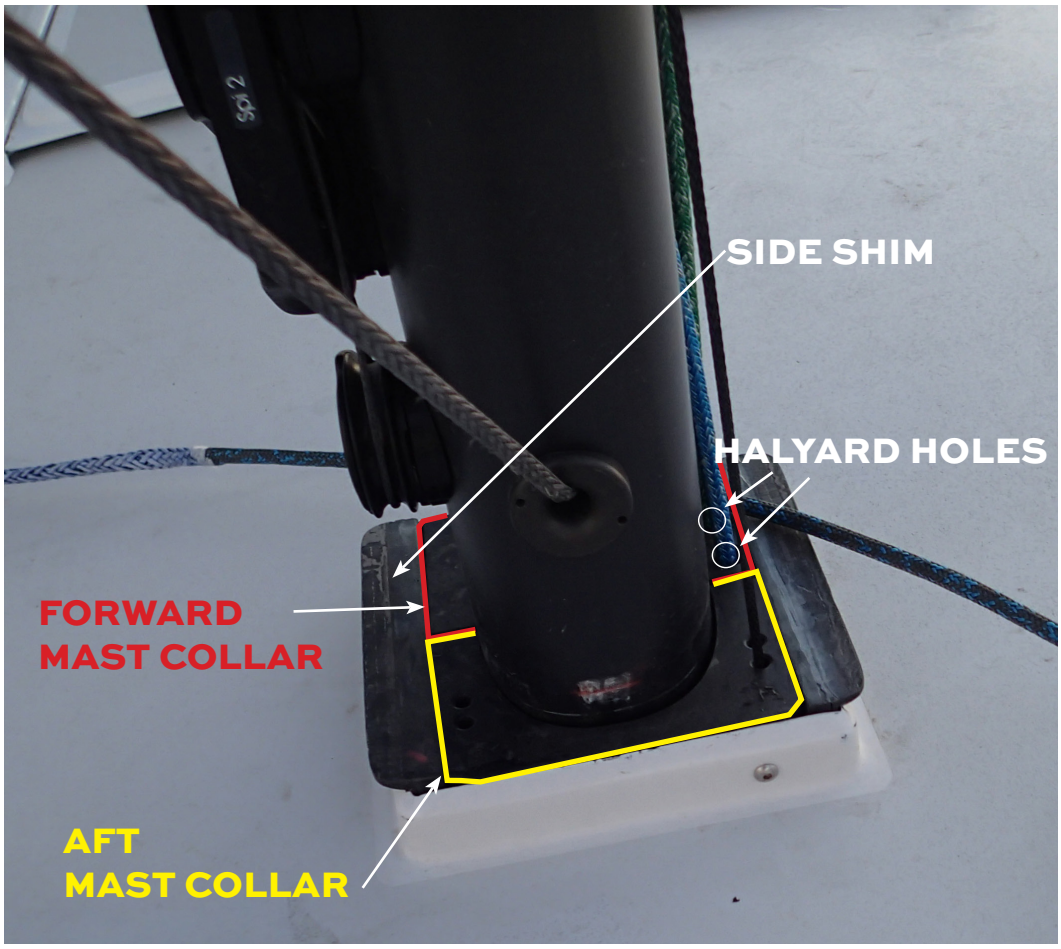
9. Connect the forestay.

→ You may have to open the release for the forestay ram on the hydraulic panel to get enough slack in the prespliced rope portion of the forestay.

10. Connect mast cylinder and test hydraulics in the boat – it can take ~15 pumps to fully pressurize the lines.

11. Install mast collar and side shims – screw into place.

→ The collar with two large holes to pass halyards through should be to starboard and forward of the mast.



(Figure RI-6)

12. Go to base tune and install base(safety) shim under the mast butt.

(Figure RI-7)

⚠ The safety shim is required to prevent the rig from going too loose during sailing, while still allowing easy rig changes and derigging.

Bowsprit

Supplied hardware

- ***Composite bowsprit***
- ***Metal end fitting***
- ***Bobstay (wire, spectra loop, stem ball washer and nuts)***
- ***Tackline***
- ***Primary winch and winch handle***

Additional hardware

- ***Vicegrip and rag***
- ***Adjustable wrench***
- ***PT-2 Loos Gague***

STEPS

1. Run tackline through boat as if sprit were installed. To do this:

1.1 Insert the covered end of the tackline through the ferrules in the bowsprit stub on the hull itself.

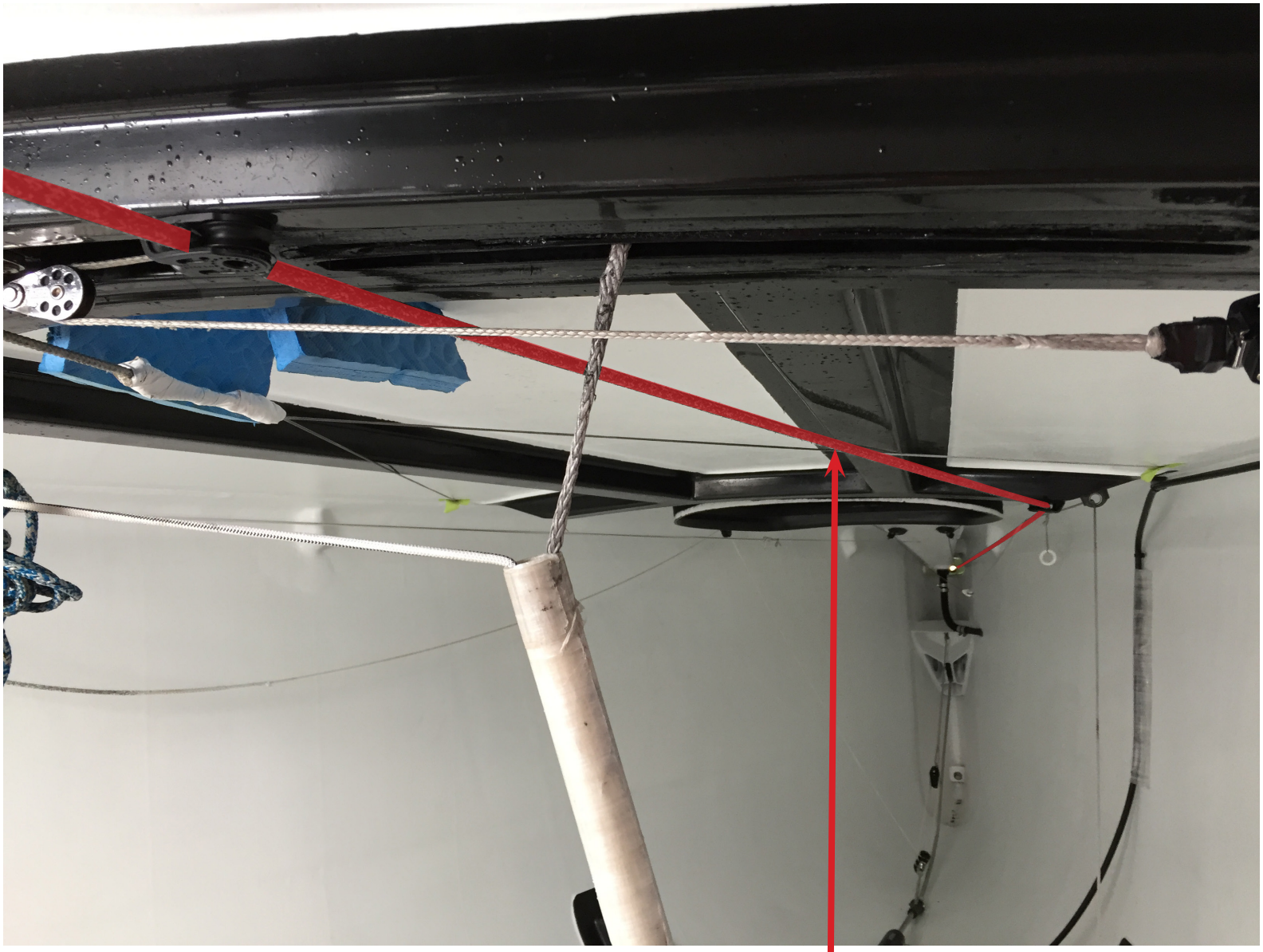
1.2 Inside the boat, the tackline runs from the bowsprit stub, to a cheek block on the deck liner, starboard and aft of the forward hatch.

1.3 Continuing aft, the tackline goes through another cheek block on the deck liner, to starboard and aft of the mast.

1.4 The tackline then exits the deck and goes through the clutch and organizer.

1.5 Once the tackline is run, feed the core portion of the tackline through the sprit from the base to the tip.

→ You may have to run a mouse line from the tip of the sprit internally through to the base. This will make it easier to run the actual tackline.



(Figure B-1)

TACKLINE

2. Tie a stopper knot in the end of the tackline.

(Figure B-1)

⟶ As a point of reference, the tackline comes with a spliced loop on the end. Owners are free to customize this attachment as they see fit (shackle, dogbone, etc.)

3. Place the sprit onto the bowsprit stub (on the boat).

4. Take slack out of the tackline and slowly take tension, while wiggling the end of the sprit.

⟶ If necessary, take the covered end of the tackline to the primary winch and slowly grind the sprit onto the stub while wiggling the end.

5. The sprit should seat nicely against the hull

(Figure B-2)

6. Once the sprit is seated, place the bobstay spectra loop through the eye on the bobstay and then around the metal end fitting on the tip of the sprit (as shown in Fig. B-1)

7. Inside the boat, place the stemball washer and nuts on the threaded stud.

8. Tighten the bobstay so the tension is ~300kg. This is an equivalent to a reading of 13 on a PT-2 Loos Gauge

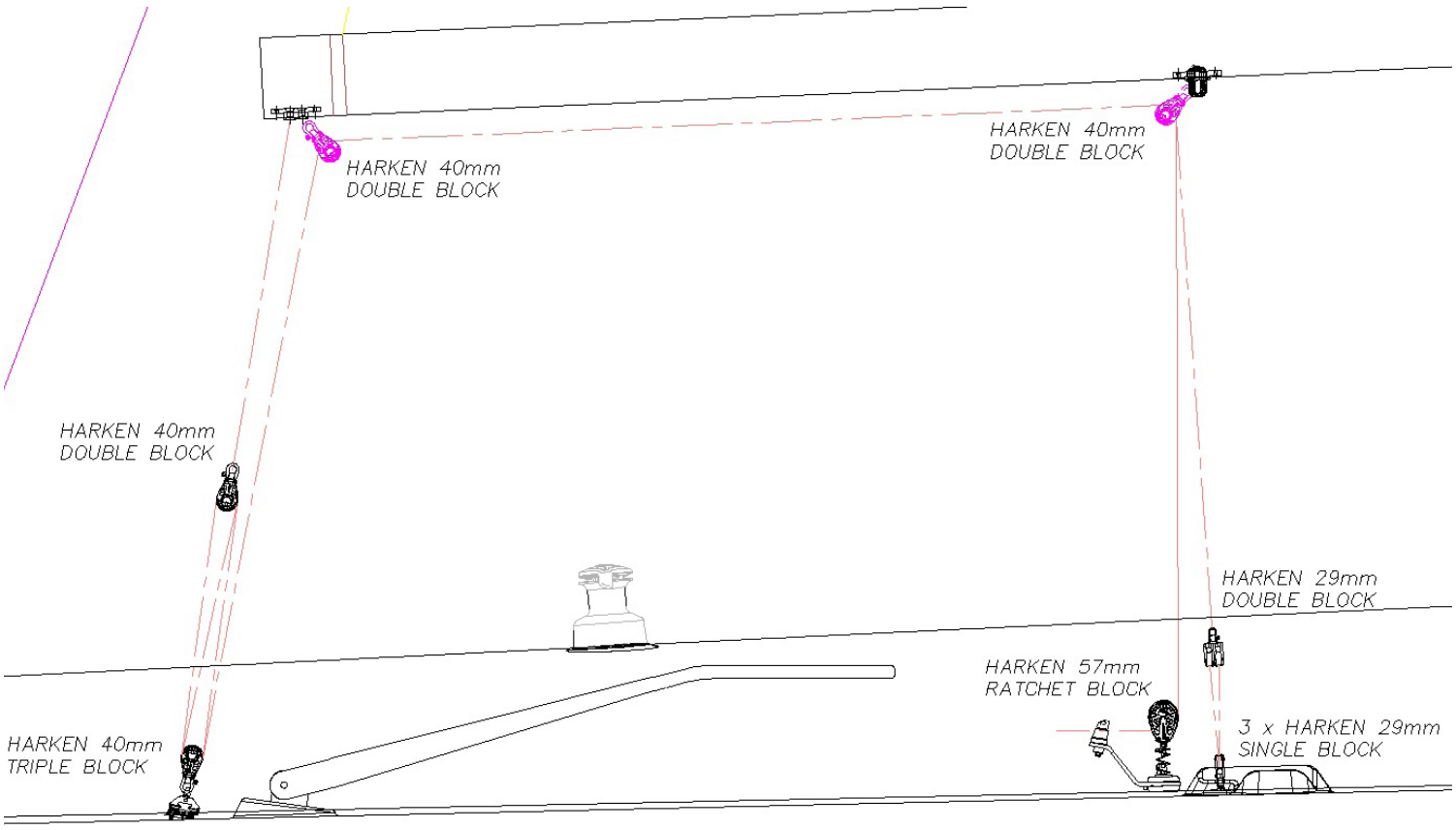
⟶ Someone outside the boat will have to prevent the bobstay wire from spinning while the nuts are tightened.

(Figure B-3)

Final rigging, hints & tips

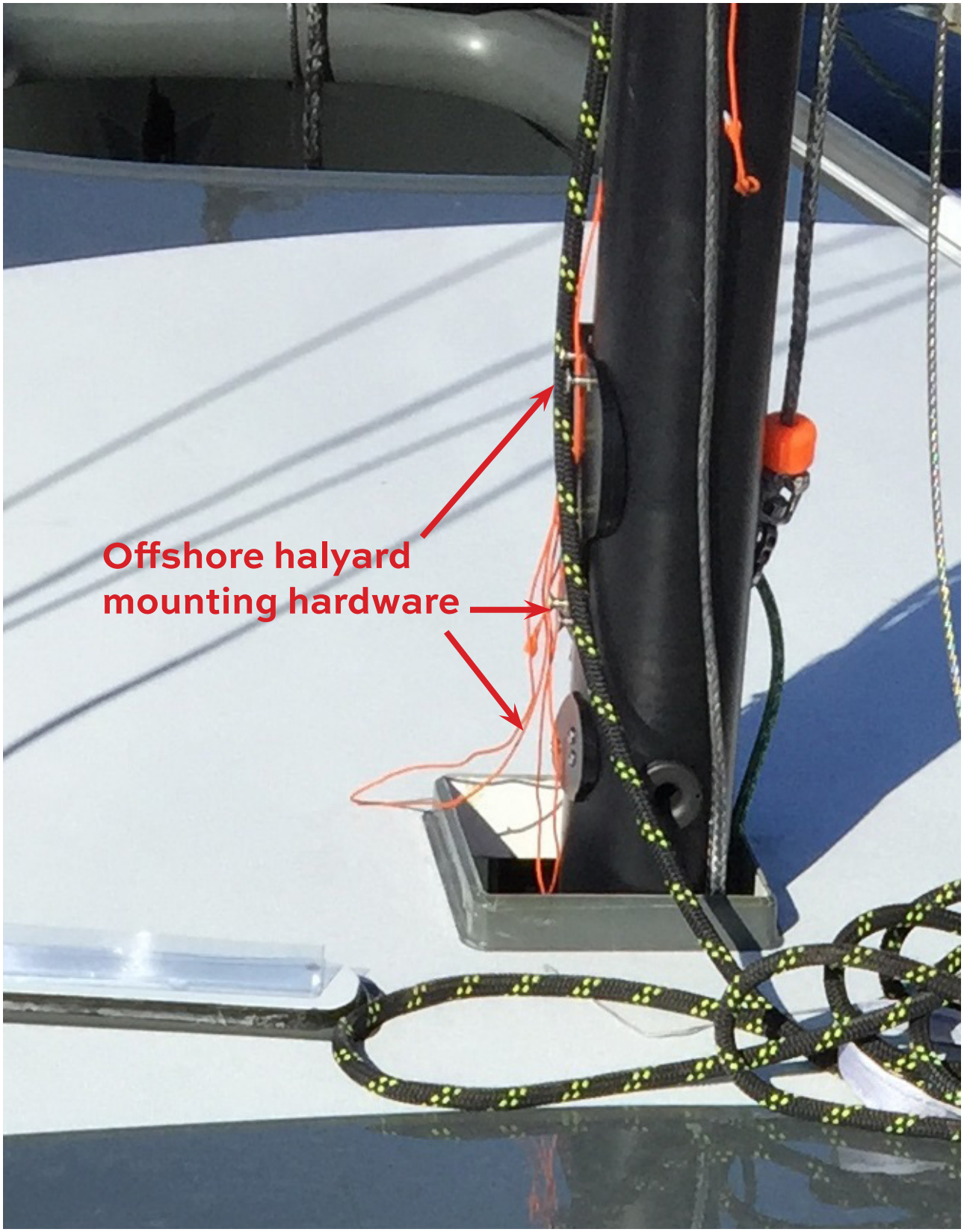
STEPS

1. Install boom and run mainsheet purchase system.



(Figure F-1)

2. Remove the offshore halyard hardware from the mast and store in a safe place.



(Figure F-2)

3. Install lifelines as shown.

→ The lifeline pads should be as tight as possible to the front stanchion and the pushpit. Lash the lifeline pads together through the middle stanchion so that the lashing can slide through the thimble of the stanchion. This will prevent overloading any single stanchion.

(Figure F-3)

⚠ Regularly inspect Spectra® lifelines where they pass through stanchions for chafe or other wear. Replace as necessary.

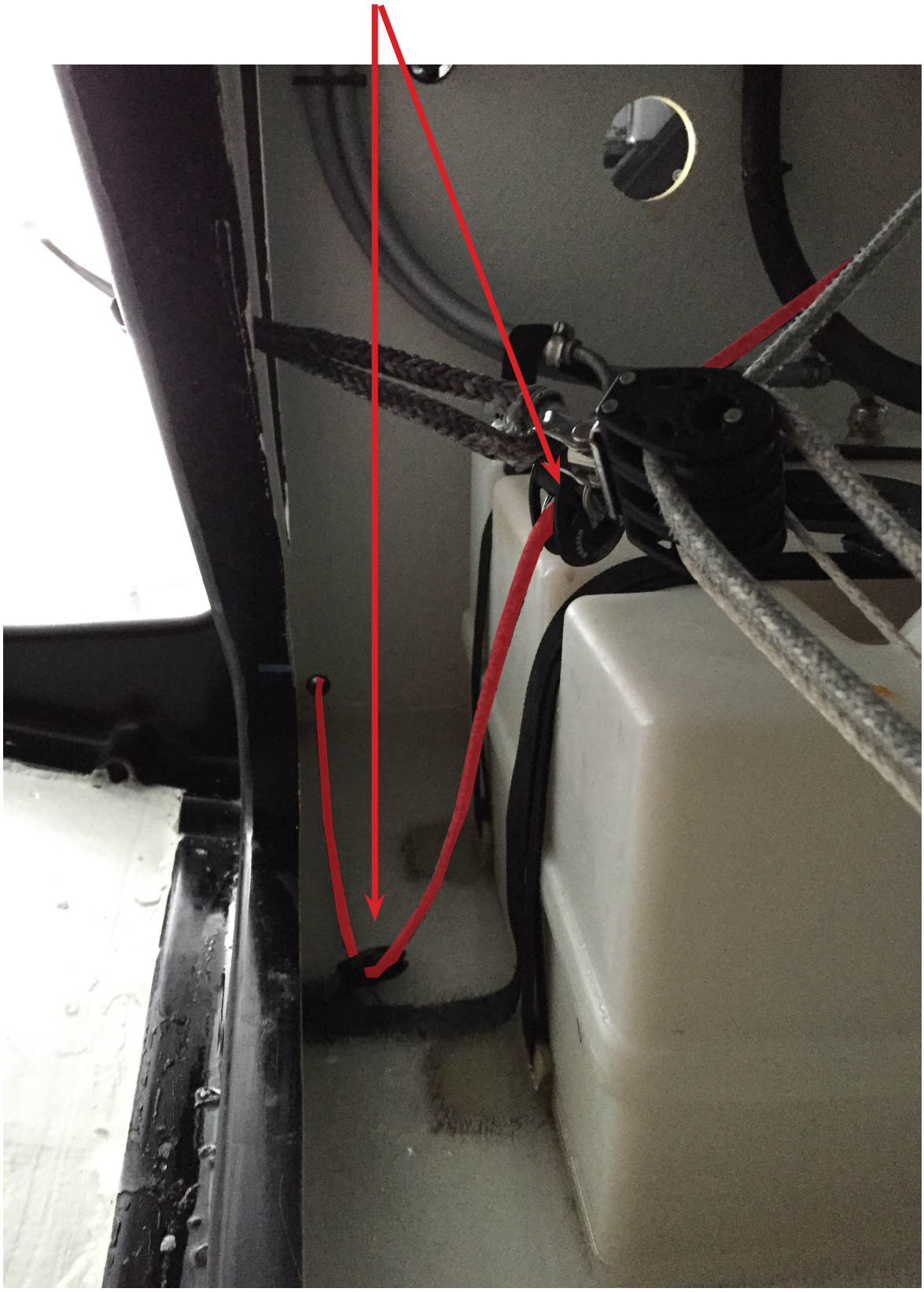
4. Splice vang so that when the vang is max eased the distance from mast exit to the boom attachment is 1.675m.

5. Finish running the cunningham purchase by:

5.1 Feeding each tail through a 29mm Harken block on the mastbase.

5.2 Sending the tail aft through the liner to a ferrule in the bulkhead aft of the engine.

5.3 The tail runs through two blocks and out onto the deck as shown.



(Figure F-4)

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