

sailcube



Owners/Rigging Manual



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Congratulations on the purchase of your SailCube!

Please take the time to read through this manual in order to familiarize yourself with your SailCube.
If you have any further questions, please contact your dealer.

This manual is not a guide to sailing your SailCube and it should not be considered suitable for the task of learning to sail a boat.

1. SailCube Component Parts

2. Glossary

3. Useful Knots

4. SailCube Assembly Tools Required

5. Safety

6. Assembling & Rigging Your SailQube

1. **Sprit Halyard Fitment**
2. **School Sail Fitment** (SailCube School – SCS)
3. **Race Sail Fitment** (SailCube Race – SCR)
4. **Boom Vang Fitment**
5. **Outhaul Fitment**
6. **Mainsheet Bridle Fitment**
7. **Stepping the Mast**
8. **Sprit Fitment**
9. **Rigging The 3:1 Mainsheet** (Sailcube School – SCS)
10. **4:1 Mainsheet Ratchet Block Fitment** (SailCube Race – SCR)
11. **Rigging The 4:1 Mainsheet** (SailCube Race – SCR)
12. **Rigging The Painter**
13. **Rudder Assembly**
14. **Rudder Fitment**
15. **Dagger-board Fitment**
16. **Other Hints and Tips**

7. Cleaning

8. Service

9. Storage & Transport

10. On The Water Towing

1. SailCube Component Parts

Before proceeding any further, please check your SailCube includes the following component parts:

SailCube School Complete (Part Code – SCS)

1. SailCube Hull Complete (Part Code – SCH)
2. School Spars – Mast, Boom & Sprit
3. Varnished Wooden Foils – Dagger-board, Rudder, Tiller & Extension
4. School Sail
5. Line/Block Pack

SailCube Race Complete (Part Code – SCR)

1. SailCube Hull Complete (Part Code – SCH)
2. Race Silver Spars – Mast, Boom & Sprit
3. Varnished Wooden Foils – Dagger-board, Rudder, Tiller & Extension
4. Race Sail with Battens, Corner and Sail Ties
5. 4:1 Mainsheet Ratchet Block, Stainless Deck Fairlead, X2 Stainless Steel Fasteners (m/screw, pozi pan, M5x10mm)
6. Line/Block Pack

The contents of the Line/Block Pack (common to SailCube School – SCS and SailCube Race - SCR) are as follows:

- a. Painter - (8mm x 7000mm Blue/Purple)
- b. Mainsheet - (8mm x 7000mm Blue/Purple)
- c. Sprit Halyard - (5mm x 1600mm Blue/Yellow)
- d. Boom Vang - (6mm x 900mm Blue/Yellow)
- e. Outhaul - (4mm x 1200mm Blue/Yellow)
- f. Boom Bridle (3mm x 500mm Blue/Yellow) with 25mm/1" Stainless Steel Ring
- g. Mainsheet Fiddle/Becket Block With Trigger Shackle
- h. Mainsheet Fiddle/Becket Block With Screw Shackle

2. Glossary

Bow: Front of the boat

Stern: Back of the boat

Transom: Back of the boat

Fore: Forward

Aft: Rearward

Clew: Back lower corner of a sail

Tack: Forward lower corner of sail

Head: Top corner of sail

Luff: Forward edge of the sail

Foot: Bottom edge of the sail

Leech: Rear edge of the sail

Burgee: Wind direction indicator (usually a small flag)

Batten: A thin stiffening strip in the sail to support the leech

Mast: Main vertical spar supporting the rig/sails

Boom: Spar at the Bottom of the mainsail

Sheet: Rope for controlling the inward/outward position of the sail

Gunwale: The outermost edge of the boat

Gudgeon: Female fitting on the transom used to hang & locate the rudder

Pintle: Corresponding male fitting on the rudder used to hang & locate the rudder

Cunningham: Purchase system for tightening the forward edge/luff of the sail

Vang: Purchase system for tightening the rear edge/leech of the sail

Outhaul: Purchase system for tightening the bottom edge/foot of the sail

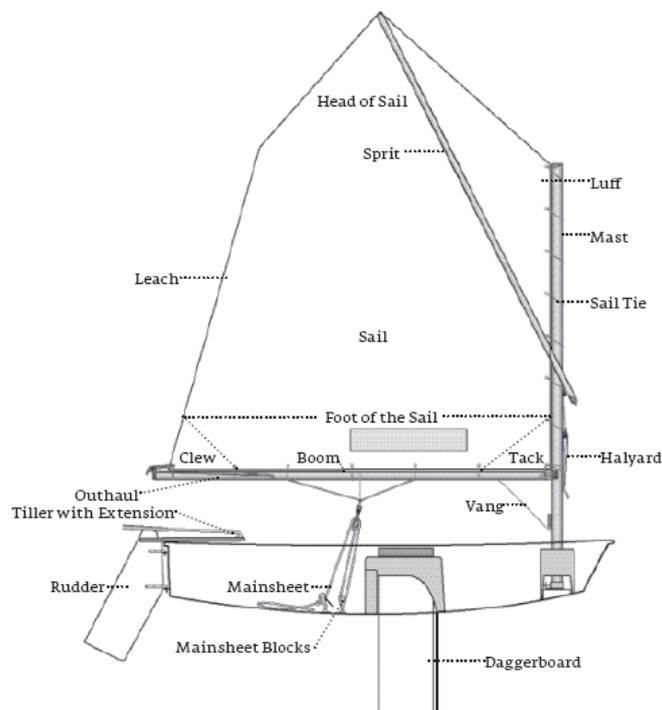
Mast Heel: Bottom edge/foot of the mast

Mast Step: Adjustable/integral cup in the boat where the mast heel/foot is located

Rudder: Blade and attachments used for steering the boat

Dagger-Board: Blade used to inhibit sideways slippage (leeway) and improve stability.

Painter: Rope exiting through the bow/front of the boat used for leading/towing or tying the boat to a jetty or buoy.



3. Useful Knots

Bowline Loop:

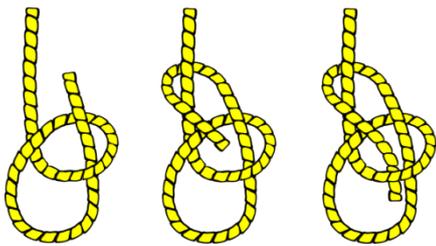
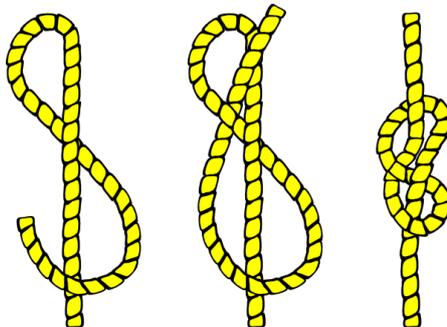
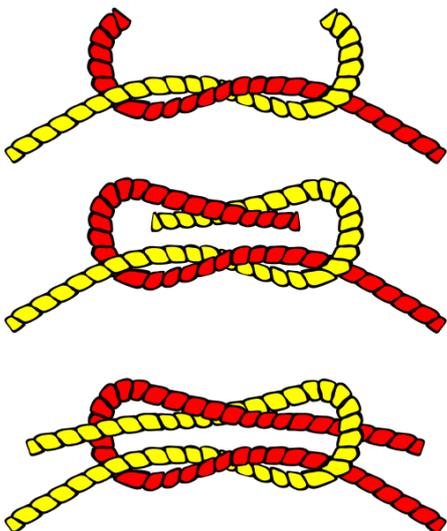


Figure of 8 Stopper Knot:



Square Knot:



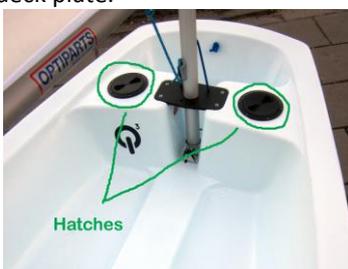
4. SailCube Assembly Tools Required

- 1 x medium size flat blade screwdriver
- 1 x medium size Pozi blade screwdriver (PZ2 ideally)
- 1 x 7mm or 9/32" spanner or adjustable spanner

5. Safety

Your SailCube has two hatches and one drain bung, these **MUST** all be checked to ensure tightness and correct fit prior to sailing.

The hatches are located either side of the mast deck plate.



The drain bung is located on the lower starboard/right side of the transom.



Check all are closed securely by turning it in a clockwise direction until hand tight.

Before You Go Sailing:

- ✓ Check you are wearing suitable clothing and safety equipment for the conditions and time of year.
- ✓ Always wear a buoyancy aid or life jacket
- ✓ Make sure a third party knows where you are sailing and how many there are of you.
- ✓ Check the weather forecast
- ✓ Check the time of high and low tides if applicable.
- ✓ Seek advice of local conditions if sailing in a new area.
- ✓ Always check the condition of your craft before setting off.
- ✓ Check for overhead cables when rigging, launching and recovering.

Launching:

- ✓ Raise the rig with the boat facing into the wind.
- ✓ Launch the boat using the appropriate launching dolly.
- ✓ Take the boat into the water with the bow facing into the wind.
- ✓ Ensure that there is enough water to float the boat off the dolly.
- ✓ When there is enough water below you, lower the centreboard and rudder fully.
- ✓ The rudder and the centreboard should always be raised before coming ashore.

On The Water:

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

6. Assembling & Rigging Your SailCube

1. Sprit Halyard Fitment

Take the sprit halyard rope and tie a 25mm/1" diameter bowline loop in one end.

Thread the other end of the sprit halyard rope:

- a. Through the block (pulley) on the forward face of the mast. (Traveling in a downward direction)
- b. Through the cleat on the lower forward face of the mast. (Traveling in a downward direction)
- c. Tie a 100mm/4" diameter bowline loop in the tail end to use as a handle.

2. School Sail Fitment (SailCube School – SCS)

- a. Slide the mast in to the luff sleeve on the leading/forward edge of the sail. (Bare unfitted end first travelling in an upward direction)
- b. Slide the boom through the **two** webbing straps on the foot/lower edge of the sail. (Boom outboard end cap first traveling in an aft/rearward direction)
- c. Clip the boom gooseneck/claw clamp fitting to the mast. (Ensure the boom fitted hardware faces upwards towards the foot of the sail)

3. Race Sail Fitment (SailCube Race – SCR)

- a. Ensuring it is free of sharp objects that could damage the sail, spread the sail out on a large, clean, dry surface.
- b. Align the mast with the luff of the sail and the boom with the foot of the sail.
- c. Clip the boom gooseneck/claw clamp fitting to the mast immediately above/opposite the sprit halyard cleat.
- d. Making sure there is sufficient space for one finger to fit between the sail and the mast, secure the luff sail ties in place using a square knot in each.

- e. Starting at the top of the mast, pass a corner tie through the upper eye-strap and through the top grommet in the luff of the sail.
- f. Pass the corner tie a second time around the eye strap and the grommet before securing it in place with a square knot.
- g. Repeat this procedure for the lower eye-strap.
- h. Using two more corner ties and the same methodology, secure the tack of the sail around both the boom and the mast.
- i. Be sure to adjust the corner ties in order to get the red mark on the luff of the sail to fit between the two blue stripes on the mast.
- j. Making sure there is sufficient space for two fingers to fit between the sail and the boom, secure the foot sail ties in place using a square knot in each.
- k. Pass the last remaining corner tie through the clew of the sail and around the boom.
- l. Pass the corner tie a second time around the clew and the boom before securing it in place with a square knot.

4. Boom Vang Fitment

Take the boom vang rope and tie a tight bowline loop around the boom immediately behind the boom vang peg. (Positioned on the upper surface of the boom approximately 300mm/1ft behind the gooseneck/claw clamp)

Thread the other end of the boom vang rope:

- a. Through the cleat on the lower aft face of the mast. (Travelling in an upward direction)
- b. Before tying a figure of eight stopper knot in the rope end.

5. Outhaul Fitment

Take the outhaul rope and tie a figure of eight stopper knot in one end.

Thread the other end of the outhaul rope:

- a. Through the boom outboard end cap fitting. (Travelling in a forward direction)
- b. Through the eye in the clew of the sail. (travelling in a side to side direction)
- c. Through the boom outboard end cap fitting. (Travelling in an aft/rearward direction)
- d. Through the cleat on the starboard/right side of the boom. (Travelling in a forward direction)
- e. Tie a 100mm/4" diameter bowline loop in the rope end to use as a handle.

6. Mainsheet Bridle Fitment

Take one end of the boom bridle rope:

- a. Pass it twice around the boom ensuring that it is threaded through **both** the tiny bridle fairlead on the mid-upper surface of the boom **and** the 25mm/1" stainless steel ring on each pass.
- b. Tighten and tie the tail ends together using a square knot.

7. Stepping the Mast

- a. Point the bow of the boat directly in to the wind.
- b. Ensure the hull mounted adjustable mast step is adjusted to mid-range point.
- c. The adjustable mast step position should be tuned when your SailQube is fully rigged in order to facilitate the "ideal" being a horizontally aligned boom when sheeted in fully whilst going up-wind.
- d. Lift the mast with sail and boom attached.
- e. Align the mast heel over the hole in the SailQube deck plate.
- f. Gently slide the mast through the deck plate and carefully into the adjustable mast step.
- g. Ensure the sprit halyard cleat is facing towards the bow and the vang cleat is facing towards the stern.
- h. If necessary twist the mast retainer elastic until taught when placed over the mast retainer peg.
- i. **Place the mast retainer elastic over the mast retainer peg on the lower forward face of the mast.** (In order to prevent the mast from sliding out of the mast cup in the event of capsizing.)

8. Sprit Fitment

- a. Place one sprit end through the sprit loop at the head/top of the sail.
- b. Place the other sprit end through the small bowline loop in the upper end of the sprit halyard.
- c. Pull on the lower end of the sprit halyard to raise the top of the sail.
- d. Cleat the sprit halyard at the point when the diagonal sail wrinkles disappear.

9. Rigging The 3:1 Mainsheet (SailCube School – SCS)

- a. Shackle the mainsheet fiddle/becket block with screw shackle on to the boom mounted stainless steel mainsheet bridle ring.
- b. Clip the mainsheet fiddle/becket block with trigger shackle on to the hull mounted stainless steel mainsheet fairlead.
- c. Tie one end of the mainsheet on to the fiddle/becket of the boom mounted block using a bowline loop.

Thread the other end of the mainsheet:

- d. Downwards and around the fiddle/becket of the hull mounted block. (Travelling in an aft/rearward direction)
- e. Upwards and around the main sheave/pulley of the boom mounted block. (Travelling in a forward direction)
- f. Downwards and around the main sheave/pulley of the hull mounted block. (Travelling in an aft/rearward direction)
- g. Finally tie a figure of eight stopper knot in the end of the mainsheet to prevent accidental unthreading.

10. 4:1 Mainsheet Ratchet Block Fitment (SailCube Race – SCR)

- a. Remove the white nylon counter sunk machine screws positioned immediately behind the stainless steel mainsheet fairlead on the hull.
- b. Where the nylon counter sunk machine screws were previously located - Attach the race specification stainless steel deck fairlead (2 hole) using the stainless steel M5x10mm pozi pan machine screws supplied.
- c. Remove the shackle pin and ring from the mainsheet ratchet block. Loop the shackle beneath the aft deck fairlead (Just fitted) and place the compression spring over it.
- d. While compressing the spring, place the mainsheet ratchet block at the top of the spring and align the hole in the bottom of the block with the holes in the shackle.
- e. Secure the ratchet block to the shackle using the pin and ring.

11. Rigging The 4:1 Mainsheet (SailCube Race – SCR)

- a. Shackle the mainsheet fiddle/becket block with screw shackle on to the hull mounted stainless steel mainsheet fairlead.
- b. Clip the mainsheet fiddle/becket block with trigger shackle on to the boom mounted stainless steel mainsheet bridle ring.
- c. Tie one end of the mainsheet on to the fiddle/becket of the hull mounted block using a bowline loop.

Thread the other end of the mainsheet:

- d. Upwards and around the fiddle/becket of the boom mounted block. (Travelling in an aft/rearward direction)
- e. Downwards and around the main sheave/pulley of the **forward** hull mounted block. (Travelling in a forward direction)
- f. Upwards and around the main sheave/pulley of the boom mounted block. (Travelling in an aft/rearward direction)
- g. Downwards and around the sheave/pulley of the hull mounted **ratchet** block. (Travelling in an aft/rearward direction)
- h. Ensure the ratchet block makes a ratchet like noise when pulling the tail on the mainsheet.
- i. If the block does not make a ratchet like noise, either the mainsheet is travelling through the ratchet block in the wrong direction **or** the ratchet switch is turned off.
- j. Finally tie a figure of eight stopper knot in the end of the mainsheet to prevent accidental unthreading.

12. Rigging The Painter

Take the painter rope and tie a tight bowline loop directly on to the rope loop in the centre of the mast deck plate bridle.

Thread the other end of the painter rope:

- a. Through the integral hull bow bush. (Travelling in a forward direction)
- b. Tie a figure of eight stopper knot in the rope end.
- c. Neatly coil up the painter rope until the figure of eight stopper knot touches the outer hull/bow surface.
- d. Place the neatly coiled up painter in the bow area of your SailQube ready for convenient deployment.

13. Rudder Assembly

- a. The tiller arm machine screws and washers should already be attached to the tiller arm.
- b. Remove these machine screws before aligning the two holes in the tiller arm with the two holes in the top of the rudder blade. (Ensure the tiller extension mounting bracket faces upwards.)
- c. Screw the machine screws through the aligned holes before placing washers over each of the protruding threads.
- d. Wind the nylon lock nuts on to the protruding threads carefully.
- e. The lock nuts should be tightened until the tiller arm is secure but do not over tighten!
- f. Clip the tiller extension in to its mounting bracket on the uppermost forward surface of the tiller arm.

14. Rudder Fitment

- a. Align the pintle pins on the rudder above the gudgeon holes on your SailCubes transom.
- b. Push the rudder downward making sure the pintle/gudgeon sets and the rudder retaining clip engage correctly.
- c. To remove the rudder, press in the rudder retaining clip while lifting the rudder upwards.
- d. Once the upper pintle clears the retaining clip the rudder will be released.

15. Dagger-board Fitment

- a. Locate the hole in the handle of the dagger-board. This identifies the dagger-boards forward/leading edge.
- b. The forward/leading edge of the dagger-board should always be positioned closest to the bow when sailing.
- c. Only place the dagger-board into the dagger-board case when the boat is in the water.
- d. The dagger-board should be lowered gradually as you sail into deeper water.

- e. The dagger-board deck plate elastics can be positioned to run around the dagger-board edges to add the friction required for accurate height adjustment whilst sailing.
- f. Alternatively they can simply be positioned to go over the dagger-board handle to hold it completely down.
- g. **Always remember to raise the dagger-board when you sail in to shallower water or head back to the shore.**

16. Other Hints and Tips

- **In order to prevent boom disengagement from the mast** (caused by gybing when the vang is too loose): Tie a taught 4mm/1/8" x 300mm/12" rope around the mast and through the holes on either side of the gooseneck.
- **In order to cushion any potential boom-to-head contact:** Fasten a length of pipe insulation just aft of the boom bridle using electrical tape or cable ties.
- **In order to slow down the rate of complete inversion in the event of capsizing:** Fasten a length of pipe insulation over the upper end of the sprit using electrical tape or cable ties.
- **In order to prevent the dagger-board from floating away in the event of disengagement from the dagger-board case when either sailing or capsized:** Tie a piece of 4mm/1/8" x 1300mm/52" line between the hole in the handle of the dagger-board and the hull of your SailCube.
- **In order to prevent the rudder from floating away in the event of disengagement from the gudgeon retaining clip when either sailing or capsized:** Tie a piece of 4mm/1/8" x 750mm/30" line between the base of the tiller arm and the hull of your SailCube.

10. Cleaning

- After sailing in salt water always rinse all SailCube parts using fresh water.
- Sails should be thoroughly washed down with fresh water, dried and stored in a dry place.
- For best results your SailCube **hull** should be cleaned using fresh water, washing up liquid, a sponge/cloth and a high pressure hose or power washer.
- Do not use abrasive cleaners or scouring pads on any hull or component surfaces.
- In corrosive atmospheres stainless parts may show discoloration/brown staining around screw holes and rivets over time, this is not serious and can be removed with a fine abrasive polish.
- Trailers and launching trollies should also be rinsed with fresh water.

11. Service

- Repairs to the polyethylene hull should only be undertaken by those with relevant skills and equipment. Contact your SailCube dealer for advice.
- 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, Dry Teflon or a dry silicone based spray. Do not use oil.
- Inspect all shackles to ensure they are tight. (Pliers should be used for this operation).
- Damaged or worn parts should be replaced.
- It is recommended that trailers be serviced annually.
- Do not leave the rig under tension when not sailing or during storage.

12. Storage & Transport

- It is highly recommended that a trolley is used to launch and recover your SailCube.
- Dragging your SailCube up a beach or slip way will wear away the polyethylene and damage the boat.
- UV light will cause fading to some components and fittings, a waterproof/breathable cover is therefore highly recommended to reduce UV degradation.

- 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 under-cover is fitted first to prevent cover flap damage to the top sides of the hull.
- 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.
- Your SailCube hull should NOT be left on a pebble beach, as the polyethylene could dent.
- Care must be taken to support the hull adequately if storing on racking or in a similar manner.
- Any sustained point loading could permanently dent or distort the hull.
- Your boat should always be tied down securely to the ground when not in use.

13. On Water Towing

- Always use painter and transom bridle lines of 8mm/5/16” minimum diameter in order to prevent point load related damage to the integral SailCube bow and stern bushes.
- The inboard end of the painter should always be tied directly to the rope loop in the centre of the mast deck plate bridle when towing.
- Towing your SailCube at high speed (10 – 20 knots) behind a rib or power boat can seriously damage your SailCube and its component parts.
- The maximum recommended towing speed for your SailCube is 6 knots.

Enjoy Your SailCube Sailing!

