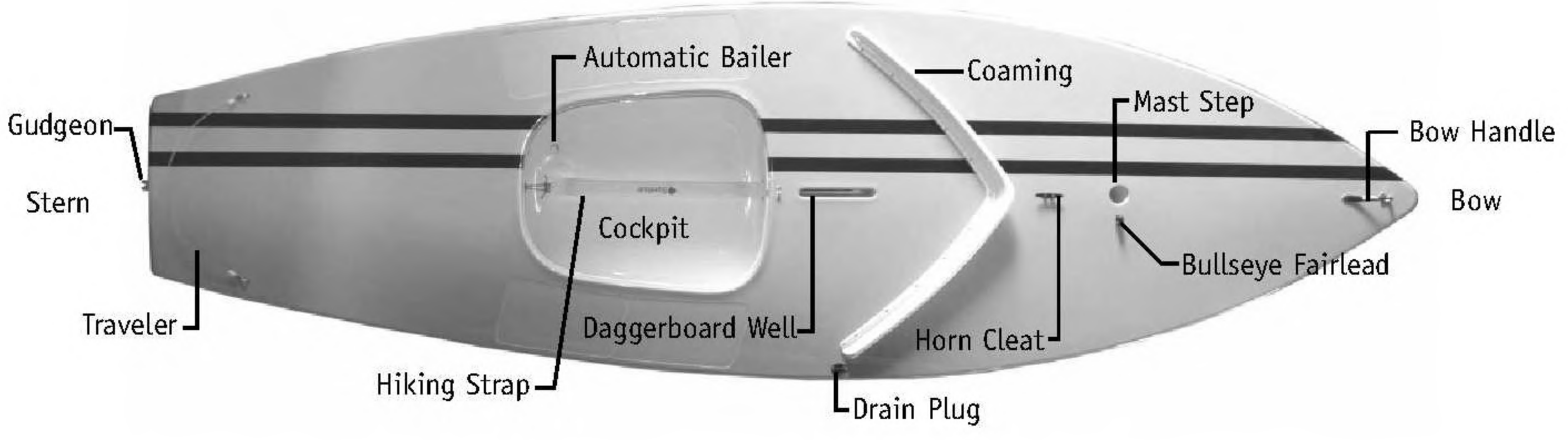




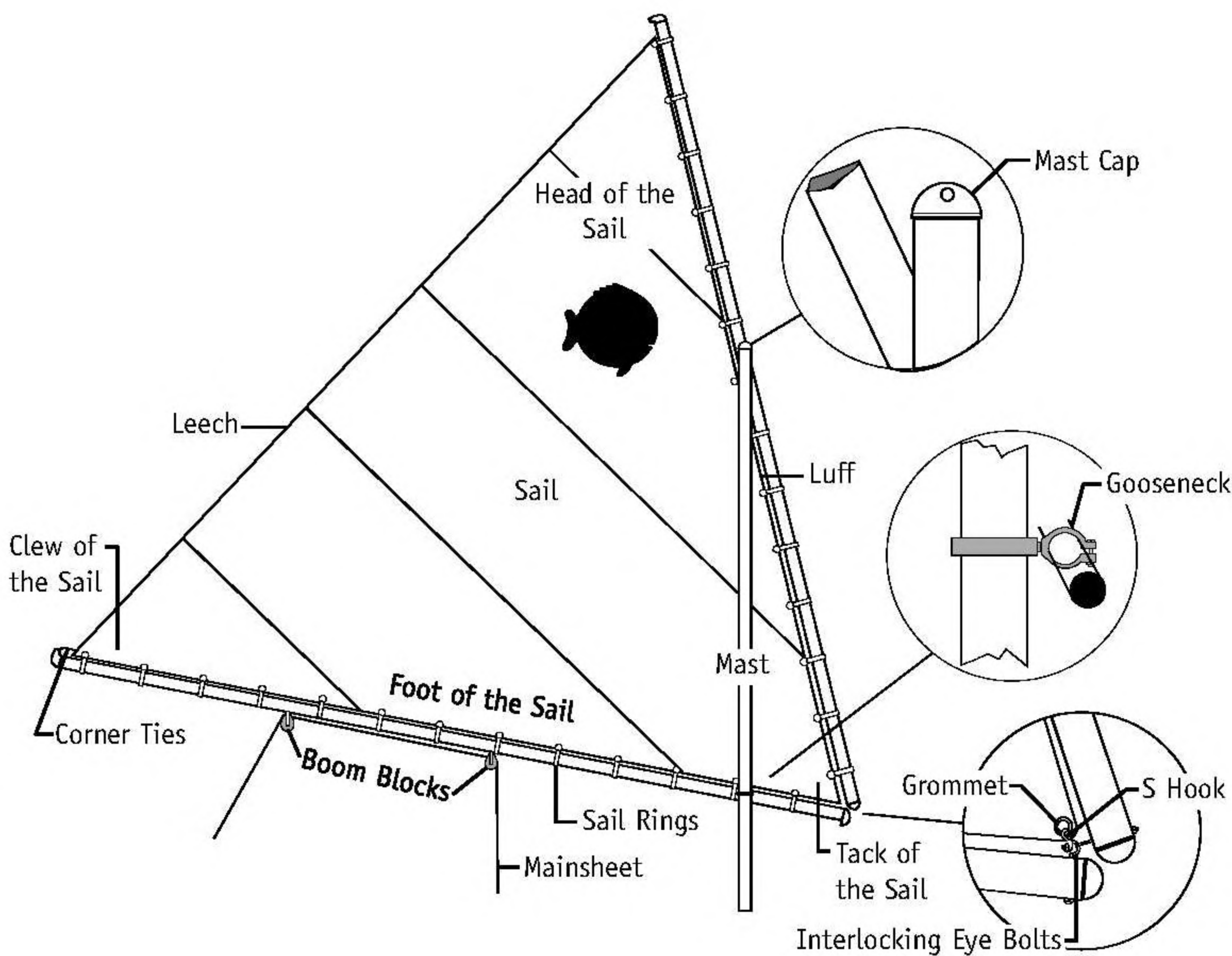
A RIGGING GUIDE



Parts of the Hull:



Parts of the Sail:



Useful knots to know:

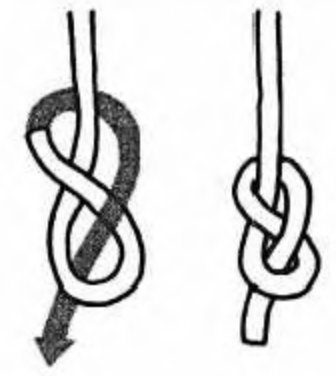
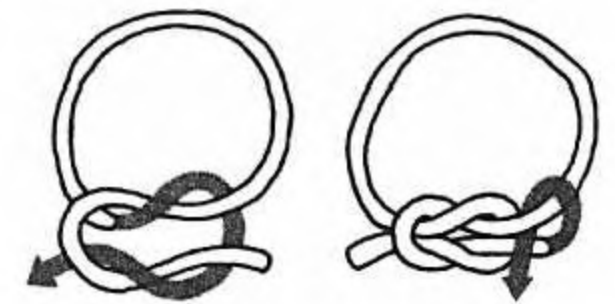
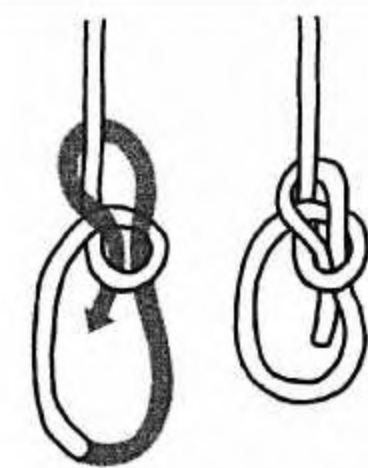


Figure 8 Knot or Stopper Knot



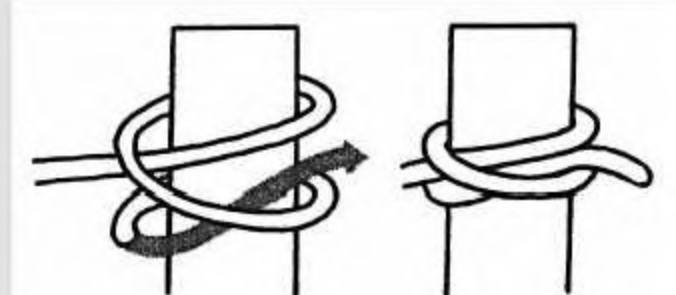
Square Knot



Bowline



Cleat



Clove Hitch

Nautical Terminology:

Port: Left side of the boat when looking forward

Starboard: Right side of the boat when looking forward

Gunwale: Upper edge of a boat's side

Leeward: Direction away from the wind

Windward: Direction from which the wind is coming

Rigging

Figure 2 depicts the goal. Steps follow.

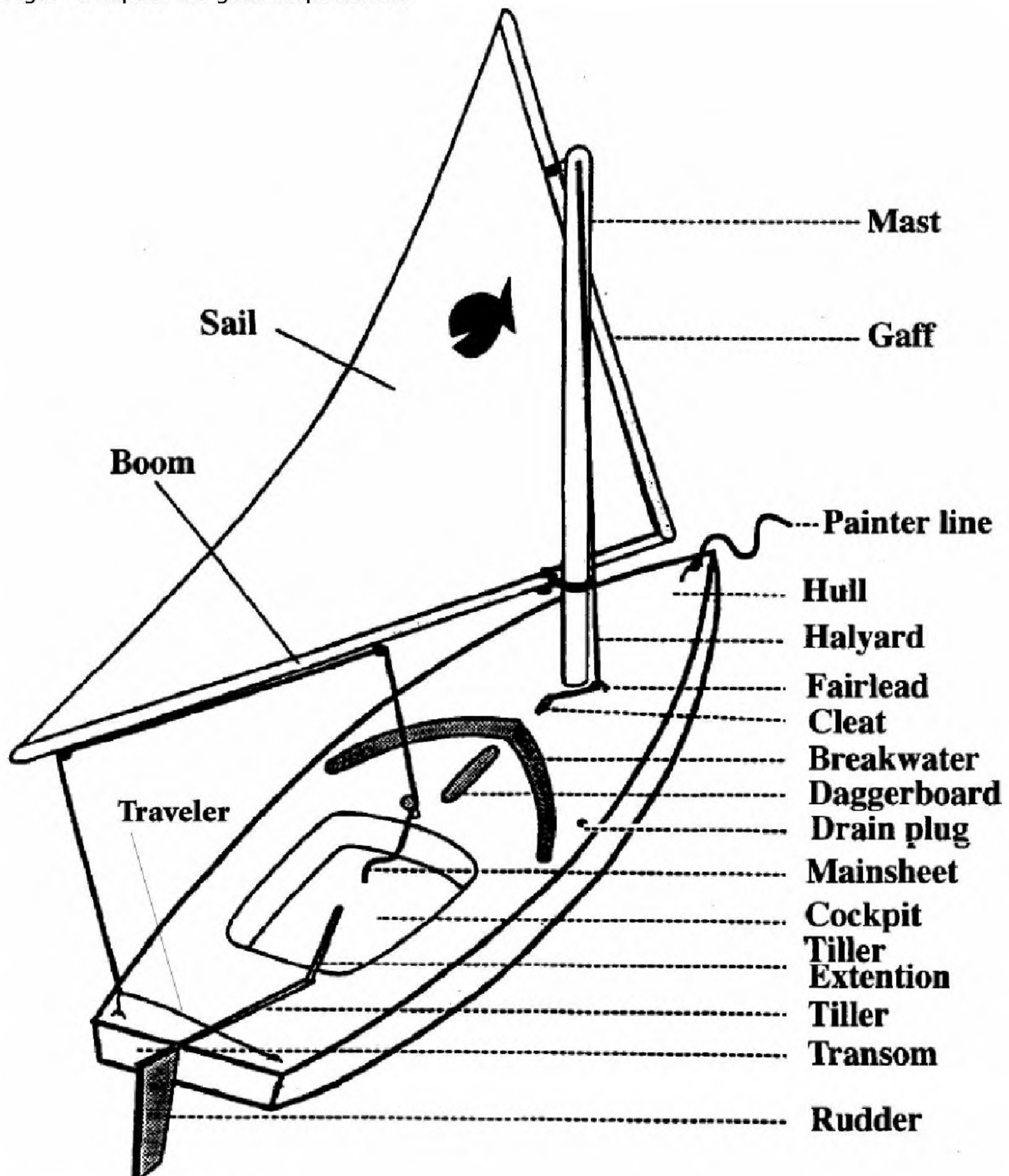


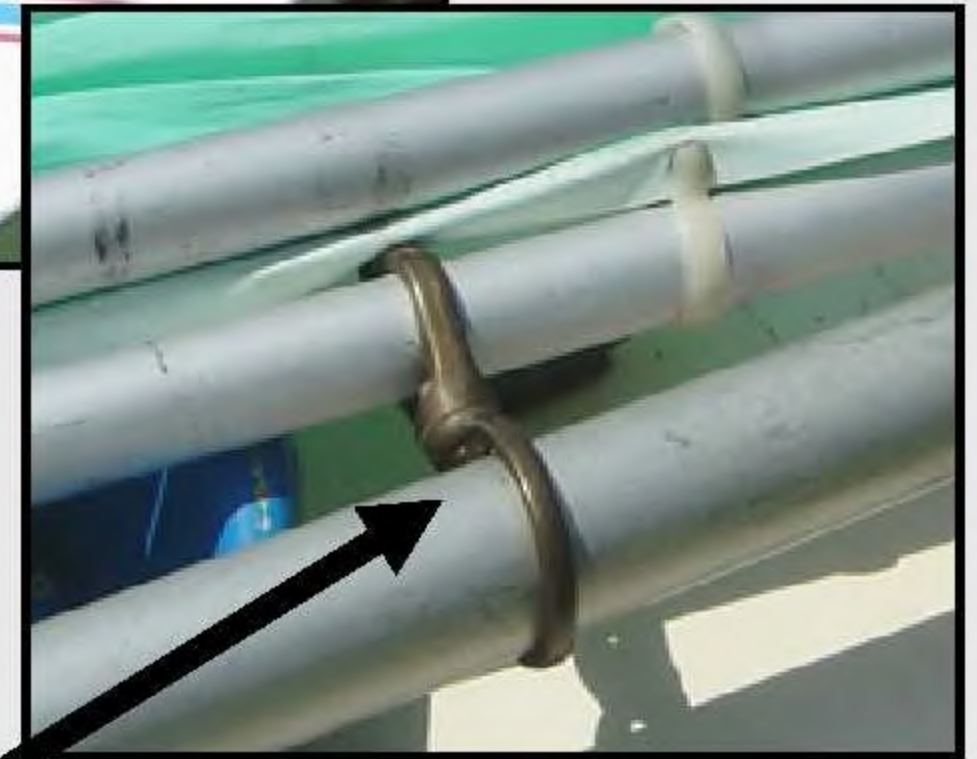
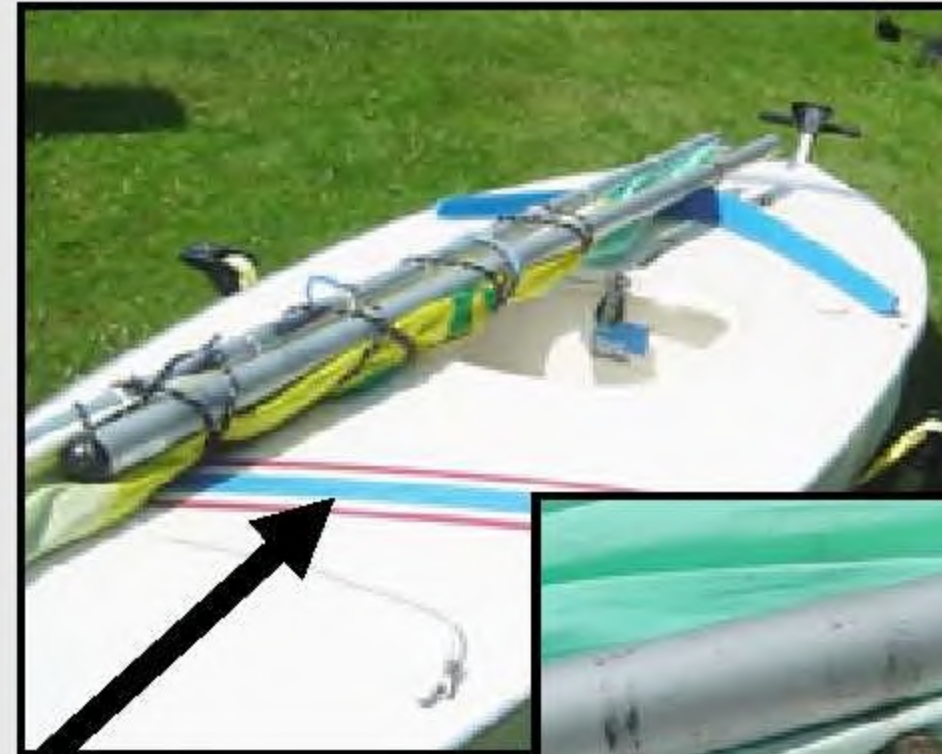
Figure 2. Rigged Sunfish

Rigging a Sunfish

Note: With practice, a Sunfish can be rigged and launched within 5 to ten minutes. Let's go sailing!!!

Step 1 - Point the bow of the boat into the wind. This helps keep the sail over the boat when it is raised. Keeping the sail over the boat avoids hitting other boats or people with the booms and makes it easier to attach the mainsheet.

Step 2 - Lay the spars and sail on the boat with the mast ring toward the front of the boat.



Mast Ring

Holds the lower boom to the mast

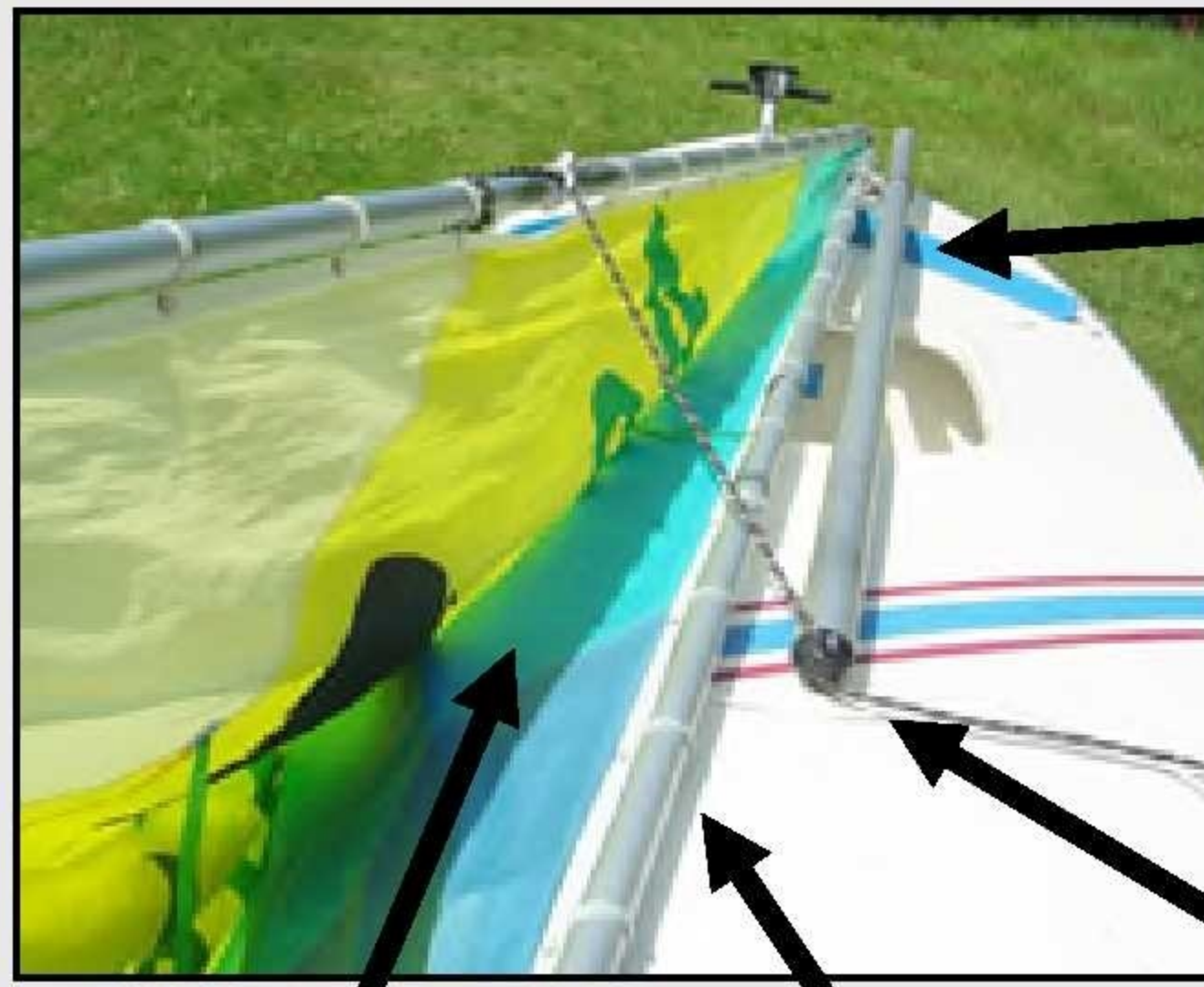
Rigging a Sunfish (continued)

Step 5 – Correctly align the mast and booms. The booms should be on the Port side of the mast.

Step 6 – Make sure the halyard runs directly from the upper boom to the top of the mast and through the eye at the top of the mast.

Step 7 – The sail needs to lay off to the port side of the boat.

Step 8 – Be sure that the mainsheet is not wrapped around anything, but lying below the lower boom.



Booms on Port

The booms are on the port side of the mast.

Halyard Direct to masthead

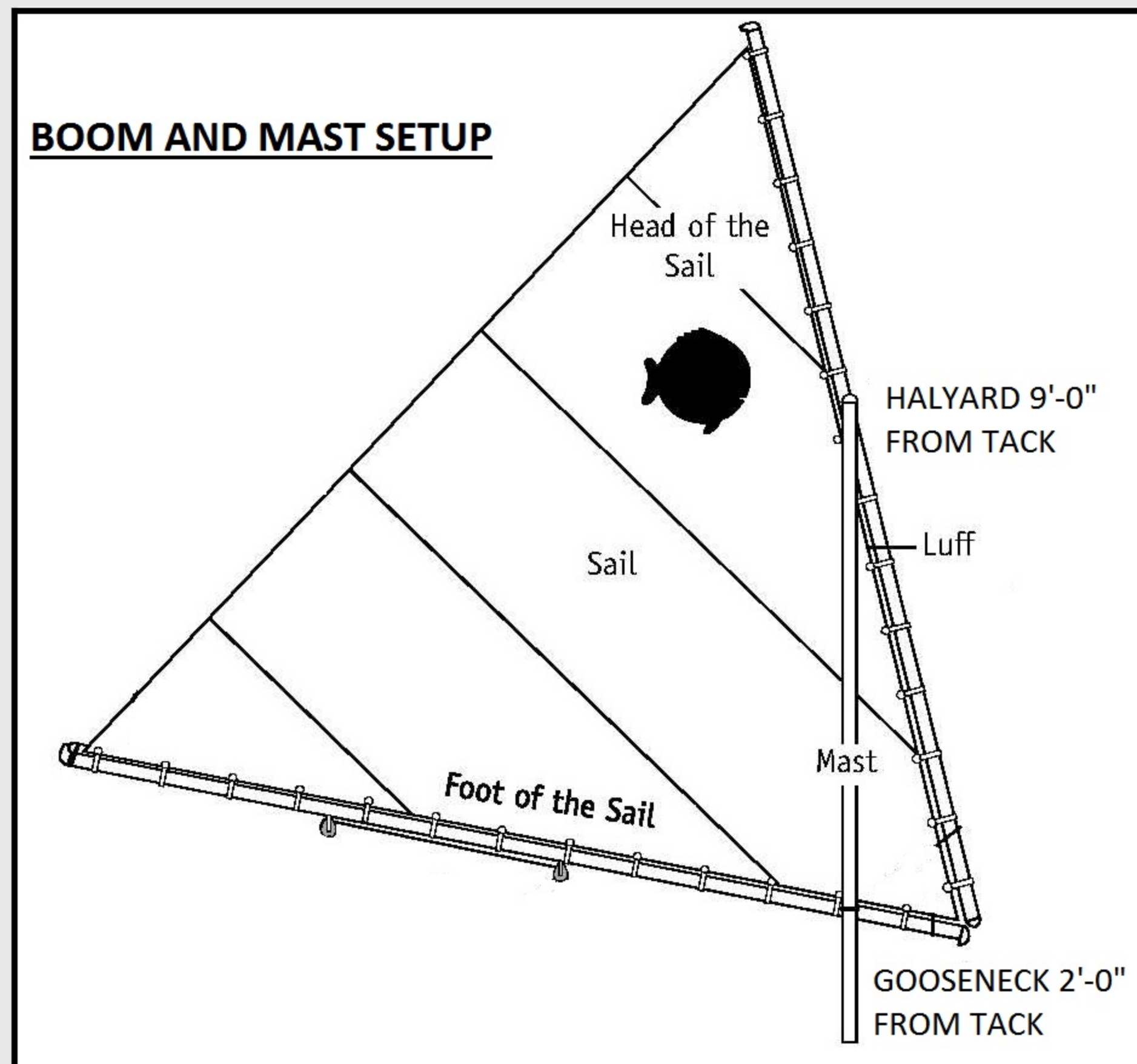
The halyard goes directly from the boom to the top of the mast and through the eye at the top of the mast.

Sail lays to port

The sail is laying to the port side of the boat.

Mainsheet is clear

The mainsheet is not wrapped around anything, but is lying under the sail.

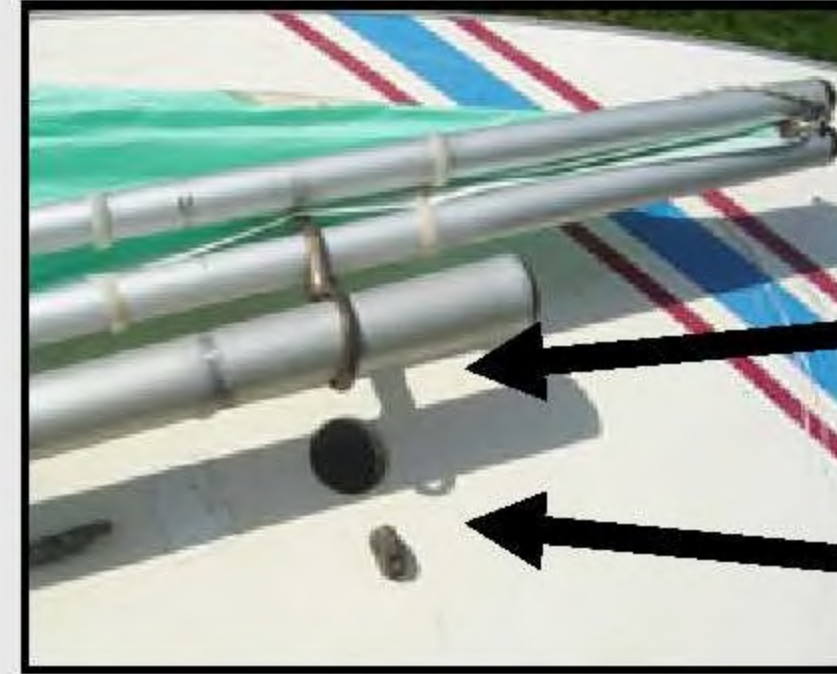


Rigging a Sunfish (continued)

Step 9 – Align the mast and booms so that the mast ring is directly over the mast step.

Step 10 – Raise the mast and put it gently in the mast step.

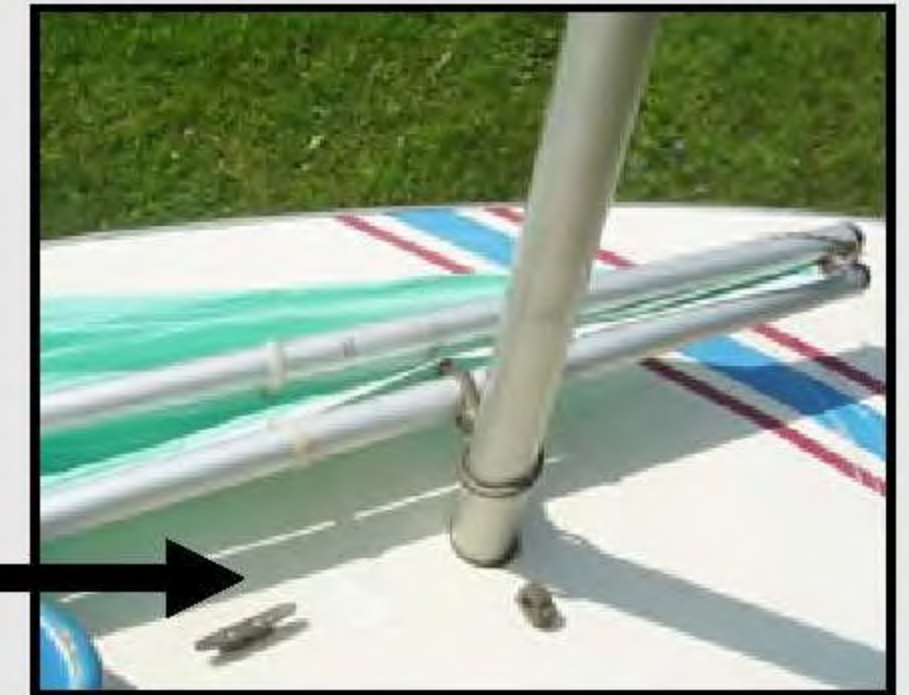
Step 11 – Make sure the halyard is running cleanly through the masthead fairlead from the back to the front.



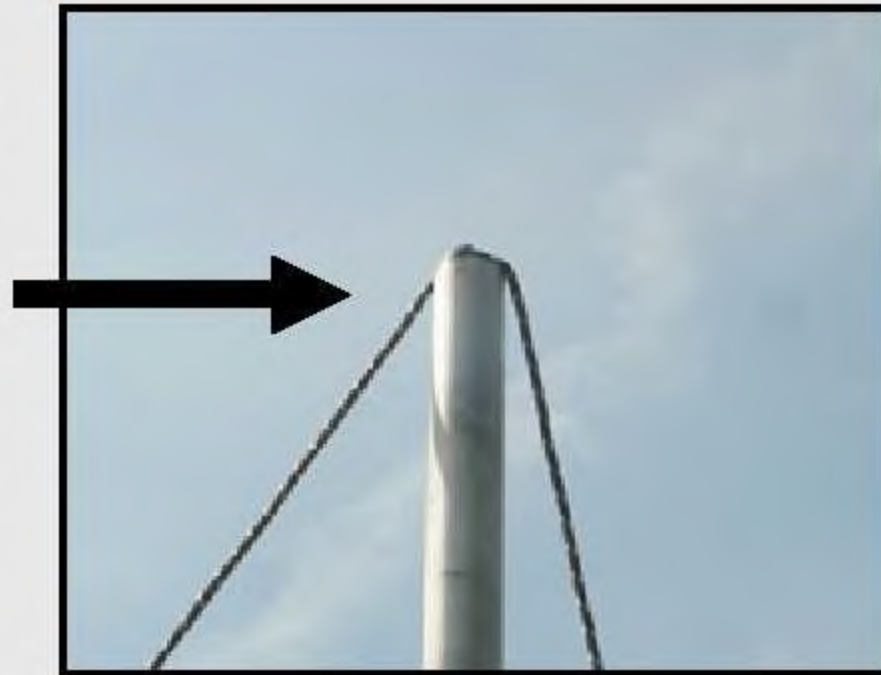
Mast Ring
Located directly over the mast step.

Mast Step
The mast step is the hole in the deck where the mast goes.

Be Gentle
When putting the mast into the mast step, be sure to ease it in slowly. Rough treatment will wear out the mast step, cause leaking in the hull and necessitate expensive repairs.



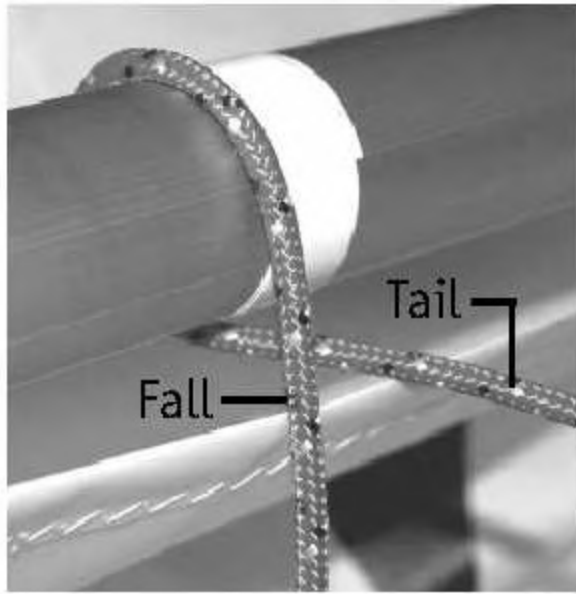
Halyard
If the halyard doesn't run smoothly through the masthead fairlead, usually rotating the mast will clear the problem.



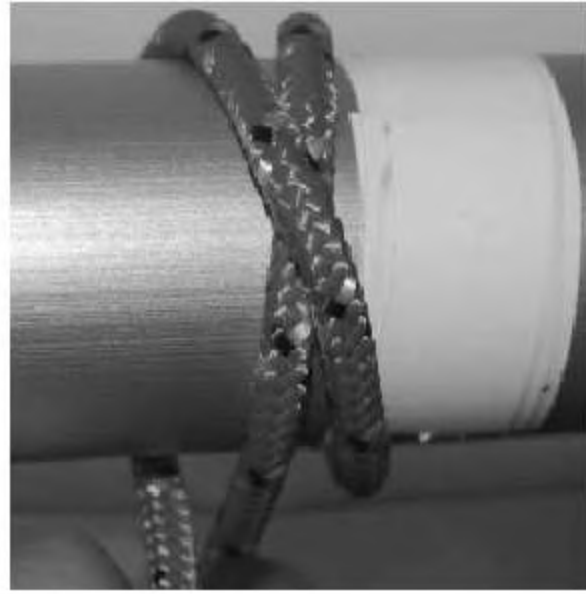
Attaching the Main Halyard

The main halyard is secured to the upper boom with a clove hitch. It is suggested that you place three wraps of electrical tape around the upper booms between the ninth and tenth sail ring (counting from the tack of the sail upward). The tape helps keep the halyard from slipping up to the next sail ring or sail tie.

Note: Tying the halyard between the 9th and 10th sail ring is only a suggestion for the halyard location. You can play with the location of the halyard to raise or lower the boom depending on your comfort or wind strength. It is highly suggested not to tie the halyard up much farther; raising the boom too far off the deck may cause the mast to bend. For further information on tuning your Sunfish visit the class association at www.sunfishclass.org.



1. Find one end of the halyard (tail) and wrap it around the upper boom just below the electrical tape; leaving about a foot long tail to complete the clove hitch.



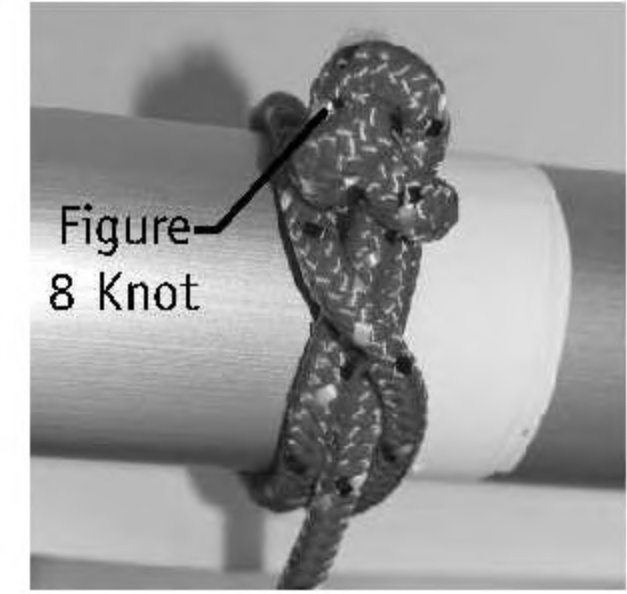
2. Lead the tail of the halyard over the fall (The fall is the remainder of the halyard) and around the upper boom again.



3. Where the tail crosses over the fall it forms an X. Pull up on the line that creates the top of the X.



4. Lead the tail under the line you are pulling up on. Pull on the tail and fall in order to tighten around the boom.



5. Tie a figure eight knot in the end of the tail.

Rigging a Sunfish (continued)

Step 12 – Lead the end of the halyard through the fairlead just to starboard of the mast.

Step 13 – Raise the sail all the way to the top of the mast.

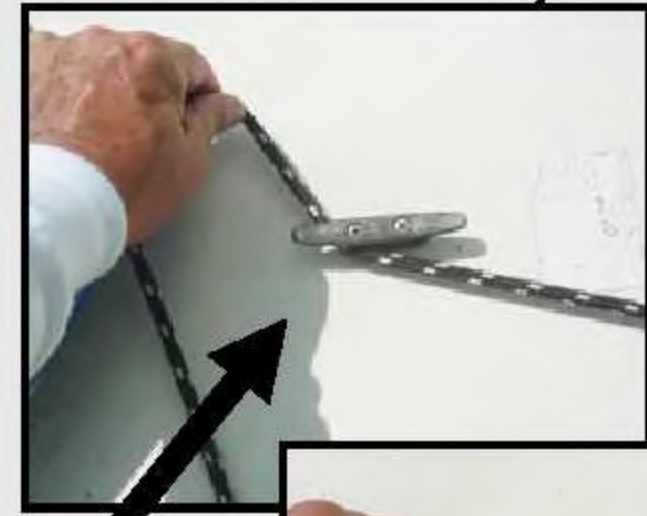
Step 14 – Secure the sail using a cleat hitch, coil the halyard and secure the coil under the halyard.



Coil the excess halyard and stuff it under the halyard between the cleat and the fairlead.



Pull halyard thru fairlead, then raise sail.



Run halyard to cleat.



Do a complete turn around the cleat.



Go over the top of the cleat.

Create a loop with the end of the halyard underneath.

Put the loop on the cleat and pull tight.



Attaching the Rudder:



1. Slide the tiller and extension underneath the wire bridle. The pintle pin will have two indentations that align with the two notches in the gudgeon (located on the stern of the boat). Align the pintle pin with the gudgeon notches.



2. Press down on the top of the pintle pin (compressing the pintle spring) in order to and slide the pins indentations into the gudgeon.



3. Release the pin and the rudder should securely be attached to the boat. The rudder should be able to pivot from side to side easily. Leave the rudder in the kicked up position prior to launching.

Before Launching:

- * Check that the drain plug on the deck is tightly in place and the automatic bailer cap is closed.

- * Depending on the depth of the water, begin to slide the daggerboard into the trunk and lower the rudder (lower both down as much as the water permits. Once you are in deep enough water lower completely).

- * Wear your life jacket

- * Make sure that you are wearing the appropriate clothing for the conditions that you are sailing in

- * Be sure to check the weather report before going sailing.

- * Stay hydrated and bring plenty of water

- * Wear plenty of sunscreen

De-rigging:

When you approach shallow water, begin to pull up the daggerboard as much as possible without obstructing the boom and kick up the rudder. After hopping out of the boat, detach the mainsheet shackle from the bridle line. Remove the daggerboard and place it in the cockpit.

De-Rigging a Sunfish

Step 1 – Uncleat the halyard and let the sail down. Doing this right away helps keep the sail and booms from hitting other boats or people.

Step 2 – Remove the Rudder and Centerboard and return them to the appropriate spot in the Sunfish-Laser Storage Shed. Double Check to make sure the label on the rudder and centerboard matches the marking on the storage slot.

Step 3 – Remove the mast from the mast step (but not from the mast ring). Remove the “Boom Sling” if one was used. Lay the sail and spars out to prepare them for bundling and storage.

Pull Sail Out

Make sure no lines are mixed in with the sail.

Halyard Must Run Directly

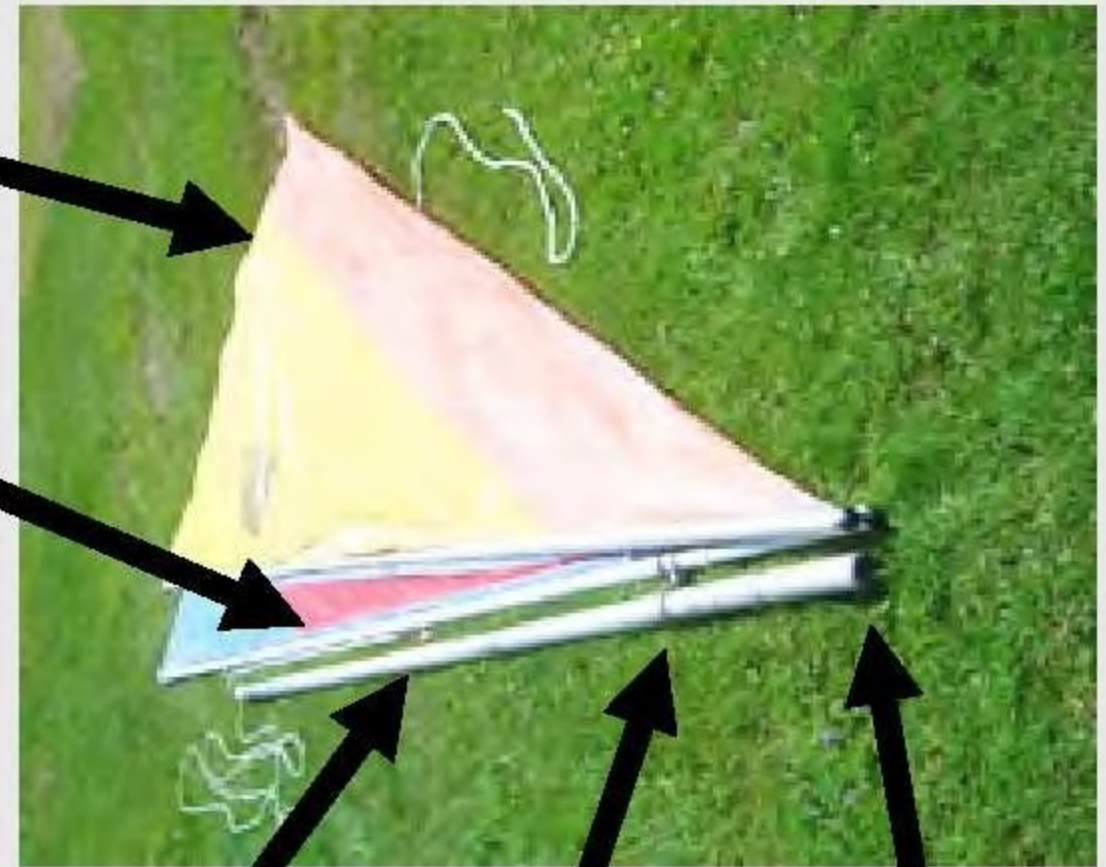
from the upper boom thru the fairlead at the top of the mast.

Take up Slack in Mainsheet – Lay Mainsheet under Sail

Pull the mainsheet from the block in the middle of the lower boom until the end that clips/ties to the traveler is at the boom.

Mast Stays in Mast Ring

Align End of Mast with End of Booms



Wrap Centerboard Bungee or Tie Line around the centerboard so it will store compactly.



De-Rigging a Sunfish (continued)

Step 4 – Roll the Sail.

Step 5 – Bundle the Sail and Spars with the Halyard and Mainsheet using a “Sinnet Chain”.

Roll Sail

Take the corner of the sail and begin rolling it. Create a tight roll and lay it next to the booms.



Using the halyard, reach under the sail/spars and pull the halyard through to make a new loop.



Reach through this loop and over the top of the bundle to pull some halyard through to make yet another new loop.



Reach through this loop and under the bundle to pull some halyard through to make another new loop.



Continue this process of creating loops over, then under the bundle. As you go, keep the bundling tight.



When the halyard is used up, use the loop and remaining halyard to tie a square knot.

Use the mainsheet to continue the bundling process using the same “Sinnet Chain” technique.



