

PRO BOAT *Sunrise™ 24*

Instruction Manual



Specifications

Length	24 in (609.6 mm)
Beam	6 in (152.4 mm)
Main Sail Area.....	199 in ² (1284 cm ²)
Jib Sail Area.....	87 in ² (561.3 cm ²)
Mast Height	36 in (914.4 mm)
Overall Height.....	47 in (1193.8 mm)
Radio System.....	JR AM Beat Gear (RTR Version)

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Introduction

Thank you for purchasing the ProBoat™ Sunrise™ 24 Ready-To-Run sailboat. This sailboat has been designed to provide many hours of scale sailing pleasure, without the long hours of assembling that is usually associated with a model R/C sailboat. The Sunrise 24 can be completed in less than an hour of assembly time.

No Building!

The Sunrise 24 comes almost completely assembled. Its durable molded fiberglass hull has been painted for your convenience. You will only need to finish rigging the sails and attach the rudder. The detailed instructions, photos, and glossary at the back of the manual will allow you to easily complete the assembly. A box is provided for each step of the manual so that you can check off that particular section when complete.

Radio

RTR Sunrise (PRB2170)

Your RTR Sunrise comes with the JR Beat Gear 2-channel AM radio system installed. Please refer to the manual of the Beat Gear radio system before attempting to sail your Sunrise. This manual will answer any questions that you may have regarding the radio system.

ARR Sunrise (PRB2171)

Your ARR Sunrise arrives ready for radio installation and completely assembled. A 2-channel radio system is needed to complete it. Please follow your radio system instructions for the set up. The sail servo arm is included with the Sunrise, and the rigging line has already been attached to the sail servo arm to make installation easier. Please refer to the box art to see a photo that shows how the radio box should appear when installation is complete.

Section 1—Inspection of Sunrise 24

Carefully remove the boat, boat stand, and radio transmitter from the box. Inspect the boat and make certain that no

damage is present. If you notice any damage, please contact the ProBoat retailer where it was purchased.

Section 2—Completing the Boat

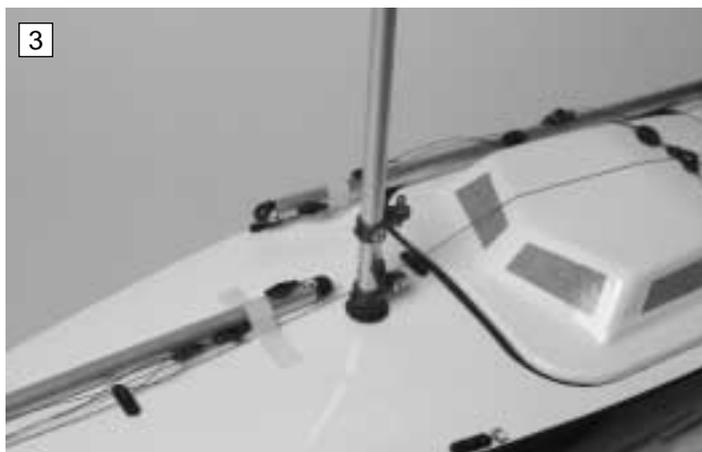
- Locate the cardboard box that contains the sails and hardware. Remove the two-piece mast (one part of the mast will have the sails rolled around them). Also remove the rudder, boat stand, and small hardware bag.



- Carefully place the hull on the boat stand. Note the two-piece mast, rudder, and hardware bag.



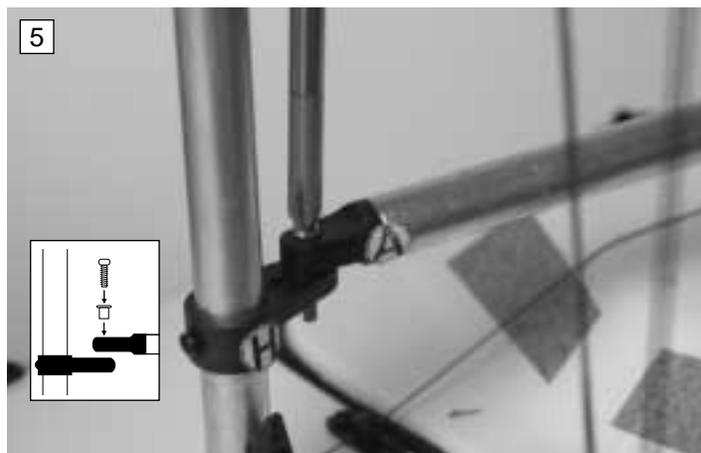
- Join the mast halves as shown.



- Insert the joined mast into the hull as shown above.



- Carefully unroll the sails from the mast. The main sail will be attached to the top of the mast at the crane, and the jib sail will be attached at the triangular shaped spreader.



- Locate the main sail boom. It will have an "A" on one end. After removing the brass eyelet and the included screw from the gooseneck labeled "H", install the boom and secure it as shown.



- View of previous completed step

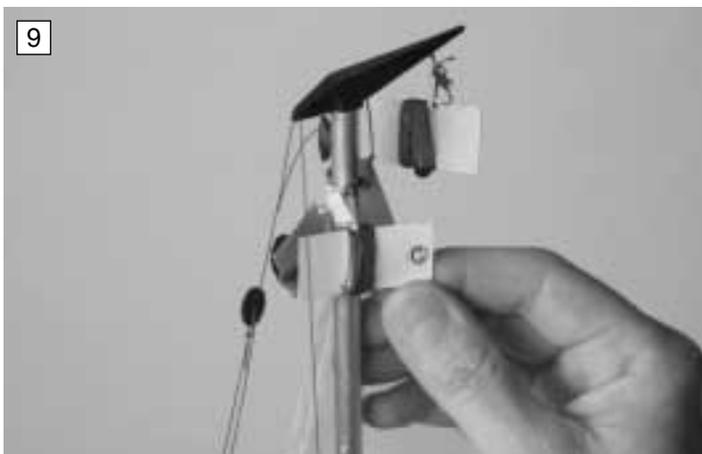
Section 2—Completing the Boat (continued)



- Locate the jib sail boom. It will have a "B" sticker on one end. Find the rig line from the jib sail that is marked "B". Remove the tape from the line and insert it through the eyelet.



- After pulling the rigging line through the eyelet, make certain that the space between the bottom of the sail and the sail boom is approximately 1/2" to 1" (see photo 23). Now, tie a secure knot in the line.

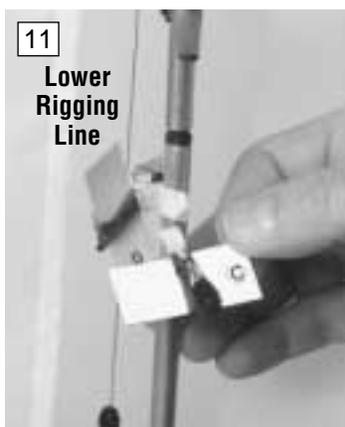


- Carefully unwrap the top rigging line that is marked "C."

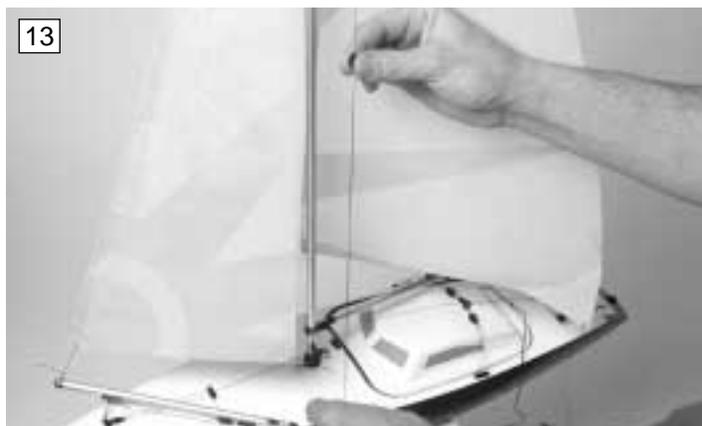


- Insert the line into the spreader as shown.

Note: The spreader has a small factory made slot in the outer hole. The inner hole will not be used. This makes it much easier to insert the line into. You can simply push the rigging line through the slot.



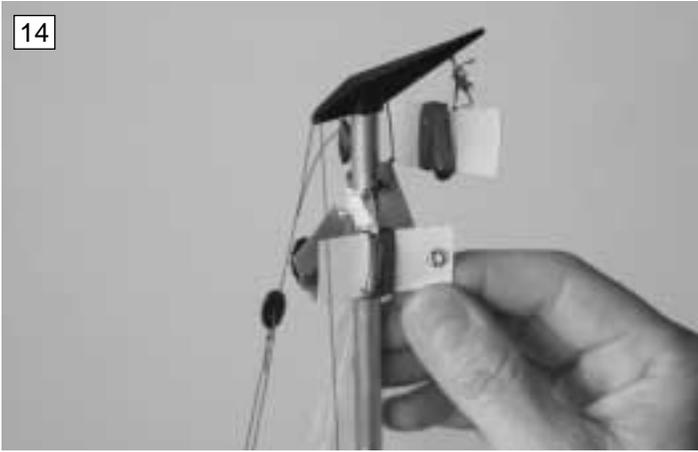
- After feeding the rigging line through the spreader, open the rigging clip and attach it into the eye plate marked "C." Close the wire clip. Repeat this step with the lower rigging line that is marked "C." This lower rigging line is located directly below the black spreader, and it will also clip to the eye plate that is labeled "C." When you have completed this step, both rigging lines marked "C" will be clipped to the eyelet marked "C."



- Locate the jib stay on the rigging line. Pull up carefully on the jib stay to adjust the tension as shown until there is no slack in the line, but the mast is still completely vertical.

Section 2—Completing the Boat (continued)

14



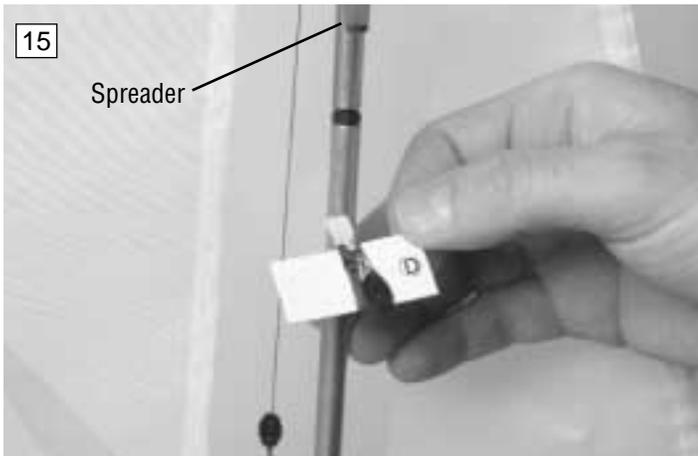
- Locate the top rigging line that is marked "D." Carefully unwrap the line. After feeding the rigging line into the spreader proceed to the eyelet labeled "D" and clip into the eyelet (refer to photo 16).

17



- Locate the jib stay on the rigging line and pull up carefully on the jib stay to adjust the tension slightly taut as shown. Again, there should be no slack but the mast should remain completely vertical.

15



- Locate the lower rigging line just below the spreader marked "D." Carefully unwrap the rigging line.

18



- Locate the rigging line at the top of the mast marked "E." Carefully unwrap the line.

16



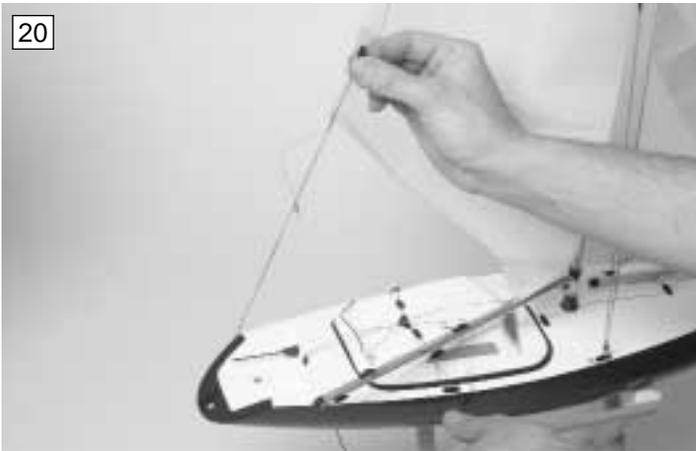
- Clip the rigging line into the eyelet marked "D" as shown. At the end of this step, both rigging lines that were marked "D" will be clipped to the above eyelet marked "D."

19



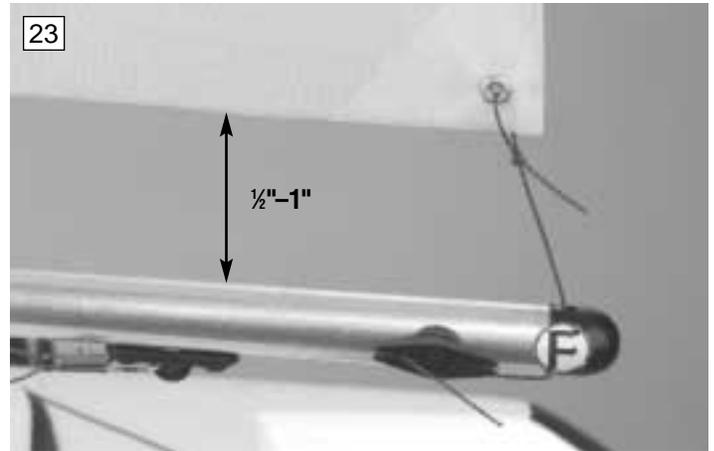
- Proceed directly to the eye plate on the rear of the hull marked "E." Clip the rigging line as shown.

Section 2—Completing the Boat (continued)



20

- Locate the jib stay on the rigging line and pull up carefully on the jib stay to adjust the tension as shown. Remove all unnecessary slack as was done in prior steps.



23

- After the rigging line has been inserted through the eyelet, adjust the space between the bottom of the sail and the boom until it is 1/2" to 1". Wrap the line around the black cleat that is attached to the boom as shown. Secure the excess line inside the grooves of the cleat.



21

- Locate the main sail boom. You will find that one side of it is labeled "F." Locate the rigging line from the back of the main sail that also is labeled "F."



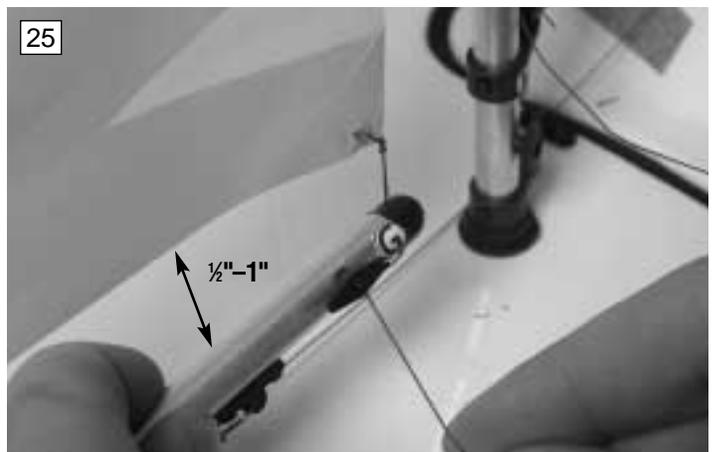
24

- Locate the jib sail boom. The back side of it is labeled "G." Locate the rigging line from the back of the sail as shown.



22

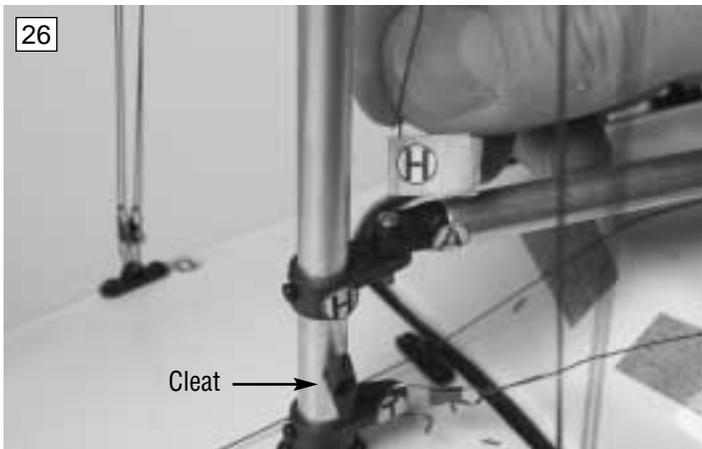
- Remove the label from the rigging line. Next, insert the rigging line into the eyelet of the sail boom as shown.



25

- Remove the label from the rigging line and insert the line through the eyelet as shown. Once again, make certain the the space between the bottom of the sail and the boom is approximately 1/2" to 1". Wrap the excess line around the black cleat as shown. Secure the excess line inside the grooves of the cleat.

Section 2—Completing the Boat (continued)



- Locate the front of the main sail and find the rigging line marked "H." Remove the label from the rigging line and insert it into the inner eyelet of the gooseneck ("H"). The main sail boom should be already attached to the outer hole of this gooseneck. Leave approximately $\frac{1}{2}$ " to 1" of space between the bottom of the sail and the boom and secure around the black cleat below the letter "H."



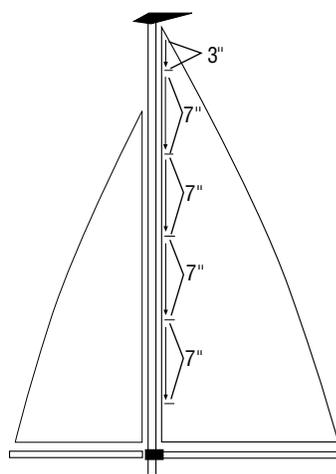
- Locate the rigging line from the main sail boom that is labeled "I."



- Clip the rigging line to the lower gooseneck as shown.



- Adjust the tension with the jib stay as shown.



- Using the ruler on page 15, begin at the top of the main sail and measure 3" down. Mark that spot on the sail between the seam on the right and the left edge. Make four more marks that are exactly 7" apart down from the initial mark.



- Use a hobby knife, sharp tweezers, or small drill bit to carefully make the holes where you have just marked the sail.



- Secure the luff rings on the sail as shown.

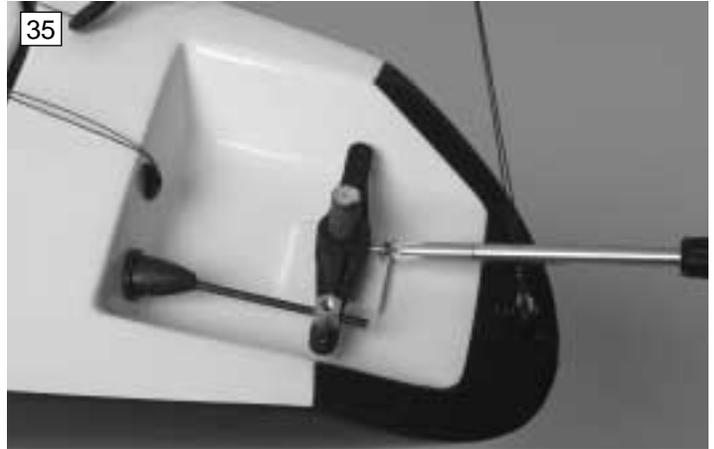
Section 2—Completing the Boat (continued)

32



Make certain that each of the rings are attached as shown.

35



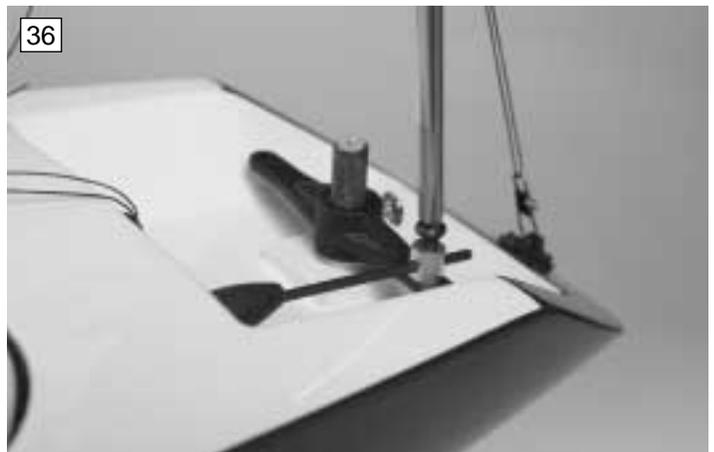
Attach the rudder arm onto the rudder as shown. Secure the rudder with the included screw.

33



Locate the rudder and hardware to attach rudder.

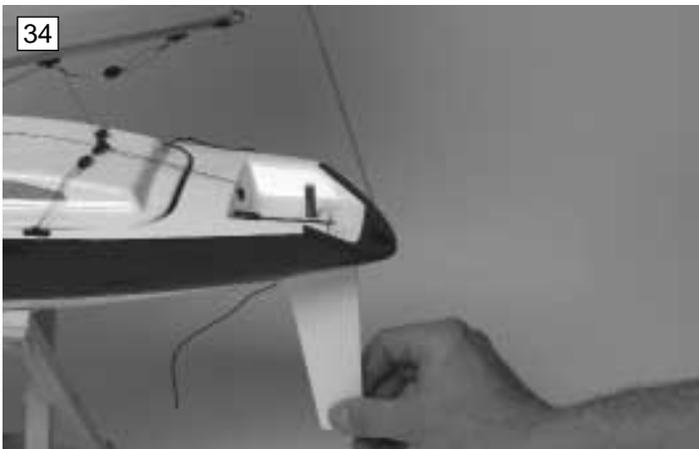
36



Secure the EZ connector to the pushrod by inserting and tightening the screw as shown.

Note: Once the radio system is turned on, it may be necessary to center the rudder servo. This is done by turning the radio system on, loosening the EZ connector screw, allowing the rudder to be re-centered, and re-tightening the screw with the rudder in that position.

34



Insert the rudder into the hull from the bottom as shown.

37



View of radio box with radio system installed

Section 3—Installation of Batteries for Radio Transmitter and Receiver

□ Install 8 "AA" alkaline batteries into the radio transmitter following the instructions for your radio system. Carefully place the sailboat hull into the included boat stand if it is not already on the stand. Next, carefully remove the radio box lid

(scale cockpit) of the boat. Care must be taken when doing this as the cockpit is secured by a rubber band. Locate the receiver battery box. Install 4 "AA" alkaline batteries into the battery box. Return the battery box back into the allotted space.

Section 4—Checking the Radio System

□ After you have finished completing the boat, turn on the radio system and test to make certain that it is functioning correctly. First turn on the transmitter. Next, turn on the switch that controls the receiver.

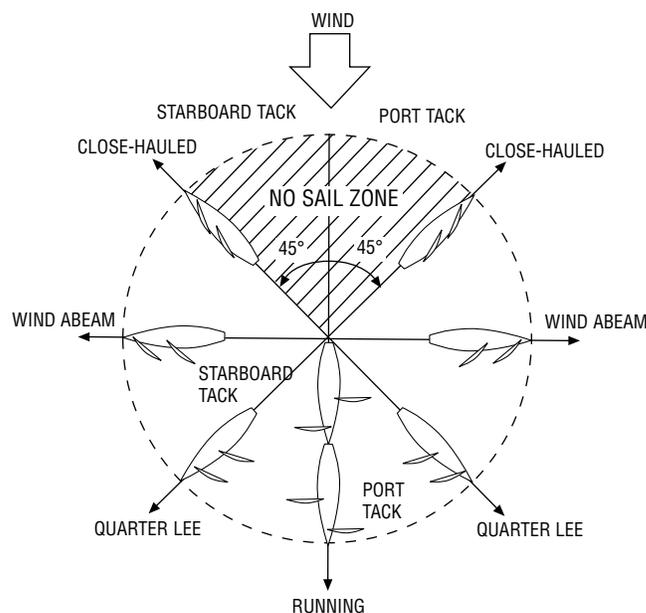
- By moving the right stick of your transmitter, you will control the rudder. If you want to turn to the right, simply move the stick to the right, and the rudder should also move to the right. Do the opposite to turn left.

- By moving the left stick of your transmitter, you will control the sails. By moving the left stick upward, you will let the sails out. By pulling the left stick down, you will tighten the sails.
- When you have finished sailing, turn the receiver off before turning the transmitter off.
- Always extend the transmitter antenna prior to sailing.
- Make certain that the receiver antenna is completely uncoiled.
- If the radio system works correctly and you are certain that each sail and fitting is properly adjusted, you are ready to sail.

Section 5—Sailing Tips

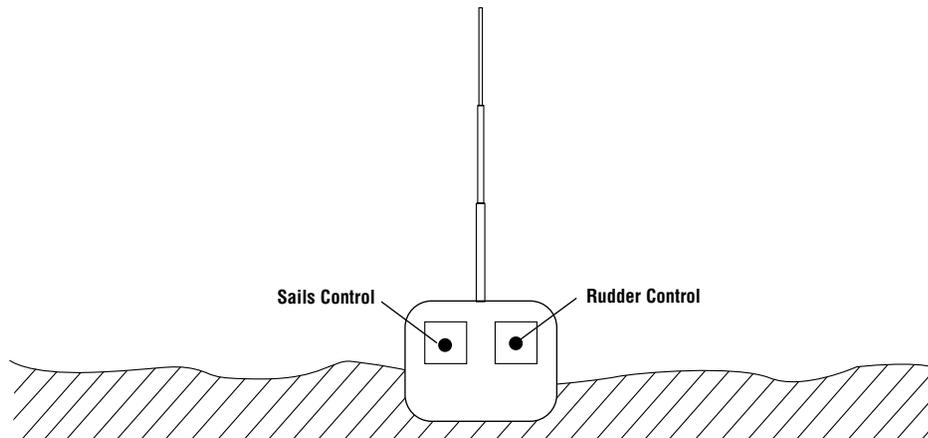
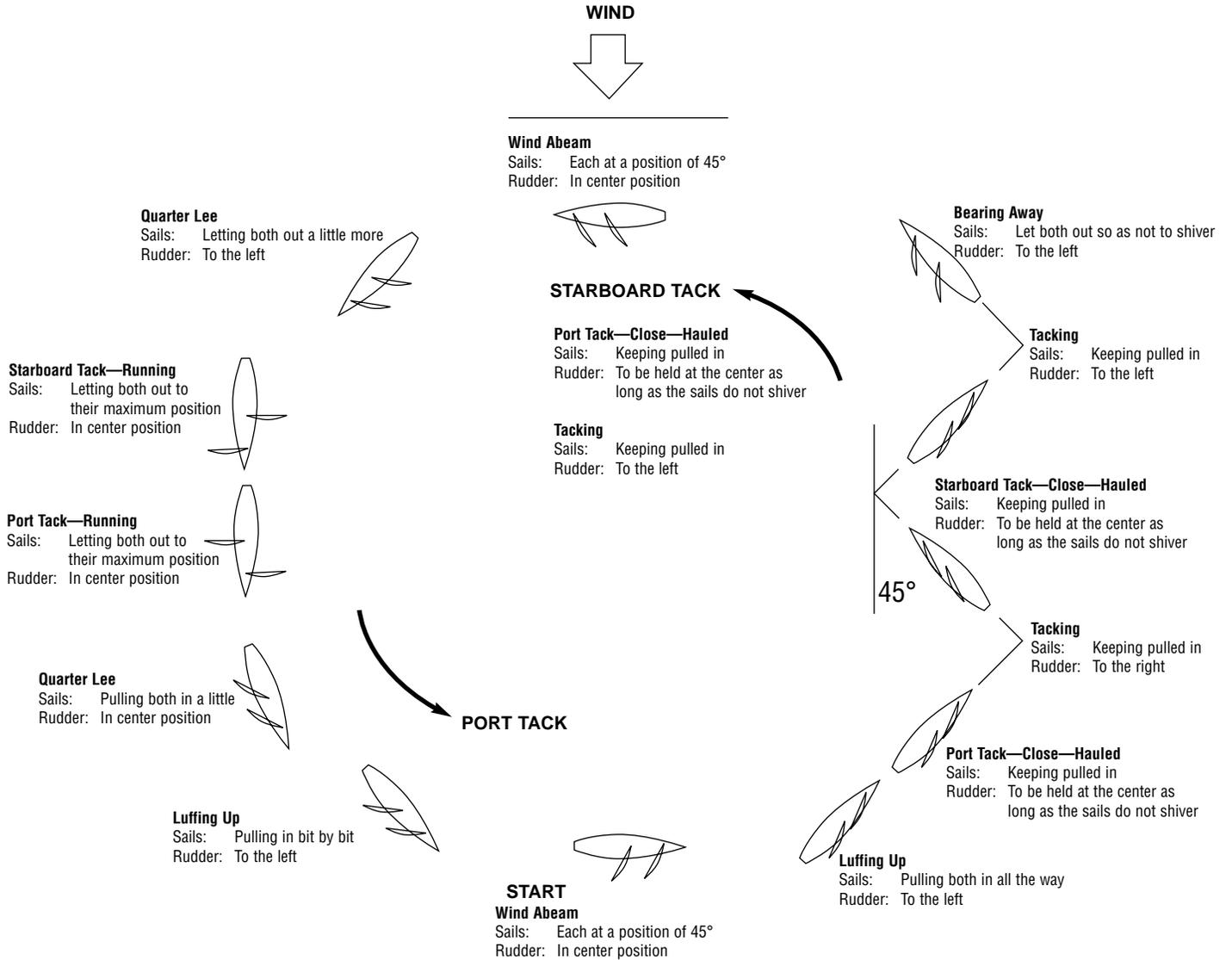
The following may help you get started in sailing. Follow the instructions and understand that it takes some practice to become an accomplished yachtsman.

Do not sail if the winds are too strong. Best results will occur with winds between 5 and 12 mph.



Section 5—Sailing Tips (continued)

Starboard Tack and Port Tack



Basic Glossary

Beam Reach: Sailing at approximately 90 degrees to the wind source with the wind coming from abeam

Beating: Sailing toward the wind source or against the wind with the sails pulled in all the way, tacking as you go, to reach a destination upwind

Boom: The horizontal spar to which the foot of a sail is attached

Bow: The forward end of a boat

Cleat: A fitting to which the rigging line may be secured

Downwind: Sailing away from the wind with the sails let out all the way

Knot: One nautical mile per hour, one knot equals 1.2 mph

Main sail: The largest working sail that is attached to the mast

Mast: Vertical spar to which the rigging and sails are attached

Port: The left side of the boat (when facing forward)

Rudder: Vertical plate attached at the stern that controls the movements of the boat

Starboard: The right side of the boat (when facing forward)

Starboard Tack and Port Tack:

The right side of the boat is called the starboard side and the left side is called port. When the boat sails with the wind coming across the starboard side and the main sail is on the port side, the boat is sailing on a starboard tack. When the boat sails with the wind coming across the port side of the boat and the main sail on the starboard side, the boat is sailing on a port tack.

Stern: The back end of a boat

Tack: To turn the bow of a sailboat through the wind so that the sails fill the opposite side

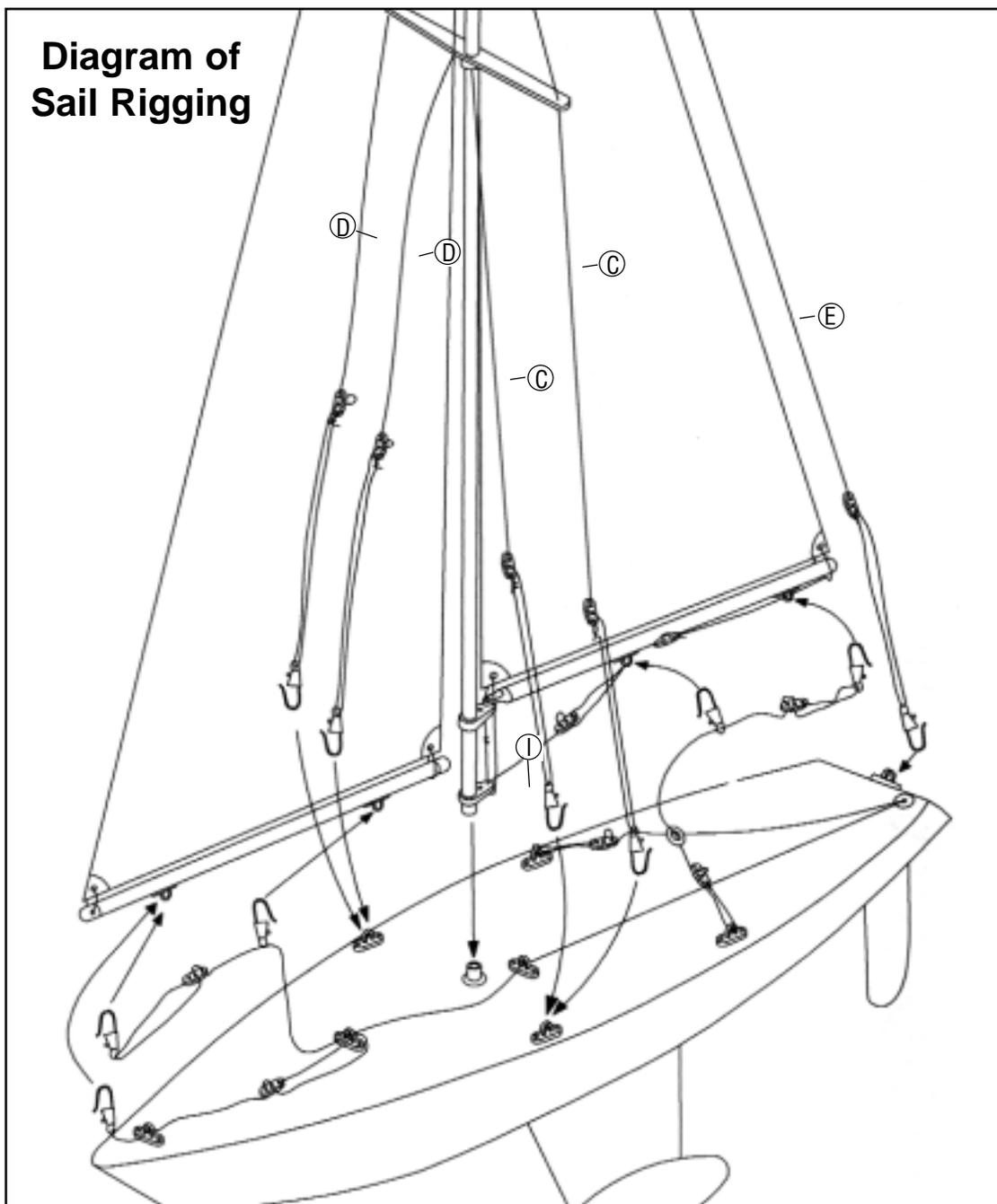
Weather Helm: The natural tendency of a boat to turn toward the wind

Replacement Parts

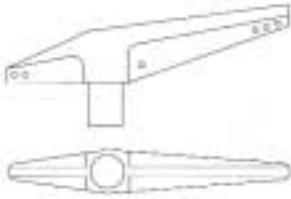
Replacement parts are available at your local hobby retailer.

PRB2172	Replacement Hull with Radio Box	PRB2182	Rubber Boot
PRB2173	Main and Jib Sails	PRB2183	Rigging Line Clips (10)
PRB2174	ABS Cockpit	PRB2184	Boat Stand
PRB2175	Rudder	PRB2185	Hull Fitting Screws (40)
PRB2176	Rudder Arm	PRB2186	Sail Luft Rings (6)
PRB2177	Two-Piece Mast	PRB2187	Rudder Pushrod Clevis
PRB2178	Complete Plastic Parts Set	PRB2188	Sail Boom Screw and Eyelet
PRB2179	Rudder Pushrod		
PRB2180	Rigging Line (10 meters)		
PRB2181	Push Rod EZ Connector		

If you encounter any difficulties with the Sunrise™ 24, please contact the Horizon Service Center at 1-877-504-0233.



Sunrise Plastic Parts (PRB2178)



Masthead Crane



Spreader



Spreader



Gooseneck
(2 pcs.)



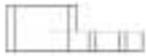
Eyeplate
(8 pcs.)



Jib Stay
(12 pcs.)



Cleat
(4 pcs.)



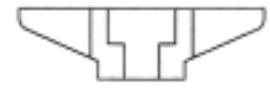
Rigging Line Grommets
(2 pcs.)



Boom Pivot



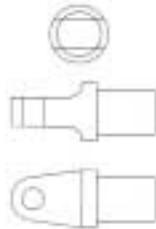
Rigging Line Eyelet



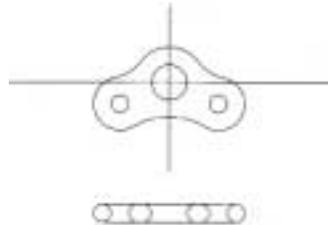
Boom Plugs
(3 pcs.)



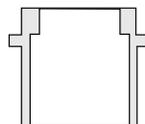
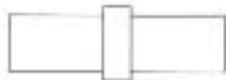
Mast Joiner

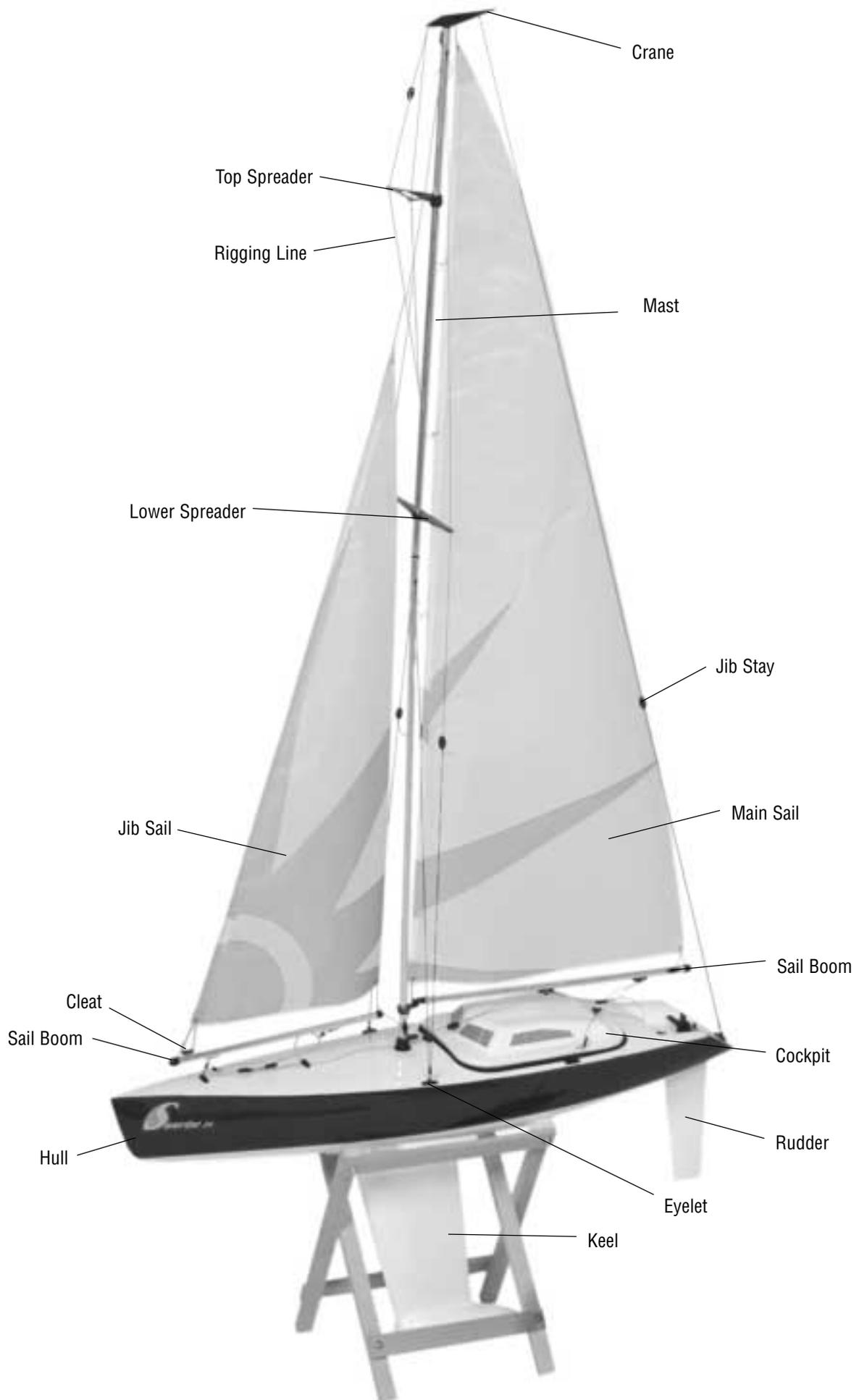


Mast Holder



Sail Servo Arm





Notes

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cut here



MADE IN CHINA
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