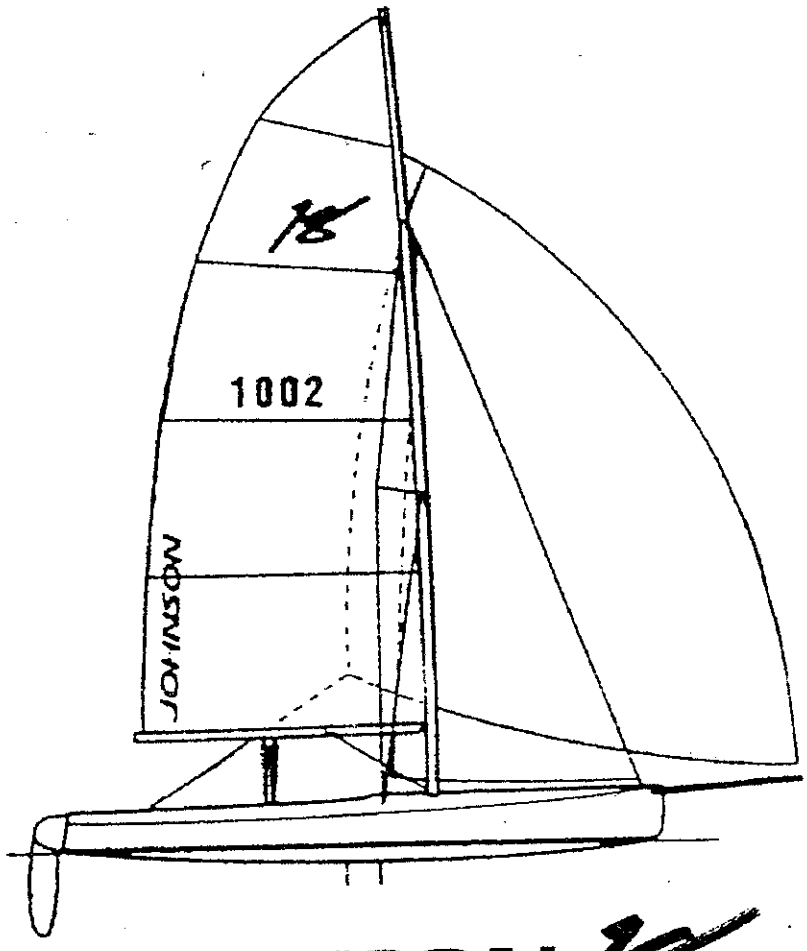


JOHNSON 18

JOHNSON BOAT WORKS

4495 Lake Avenue South
White Bear Lake, MN 55110
Phone: 612/429-7221
Fax: 612/429-3248

WARRANTY

FIVE YEAR LIMITED WARRANTY

Johnson Boat works, inc. warrants that all Johnson 18 sailboats manufactured by Johnson Boat Works are free from defects in materials and workmanship to retail customers in the United States. Johnson Boat Works, Inc. will repair or, at its option, replace defective parts under the following terms:

YEAR	COVERED ITEMS	AMOUNT COVERED
First Year	Hull, Parts, & Accessories	100%
Second Year	Hull	80%
Third Year	Hull	60%
Fourth Year	Hull	40%
Fifth Year	Hull	20%

(Freight and Labor expenses not included)

THIS WARRANTY DOES NOT INCLUDE:

- Sails.
- Normal wear.
- Damage caused by abuse or failure to perform normal maintenance.
- Damage caused by alterations or modifications.
- Discoloration, blistering or crazing of gel coat caused by mooring or storing the boat in water.
- Transportation of boat or parts to Johnson Boat Works or its dealers.
- Any other consequential damages, incidental expenses, including damgage to property.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

TO OBTAIN WARRANTY SERVICE

Within 10 days of discovering the defect, take your boat, along with your sales receipt, to the dealer you purchased your boat from, or if you have moved, to the nearest authorized dealer. Authorized dealers have no authority to make any warranties on behalf of Johnson Boat Works, Inc. in addition to those stated herein.

CAUTION

The aluminum mast and other metal parts conduct electricity. Coming in contact with or near an electrical power line or lightening can cause severe injury or death. For your safety, do not sail, motor, launch or beach near power lines.

INTRODUCTION

Congratulations! You are now the proud owner of one of the most exciting, high performance, one-design sailboats ever built. Johnson 18 owners range from the entry level sailor looking for a simple and stable boat they won't outgrow, to the seasoned racing sailor looking for competitive racing at its best.

The Johnson 18 was designed by Rodger Martin, one of the leading yacht designers in the United States, and built by Johnson Boat Works, one of the oldest and most prestigious custom sailboat manufacturers in the world today. Founded in 1896, it is now in its fourth generation of the same family, and still in its original location on the shores of White Bear Lake, Minnesota.

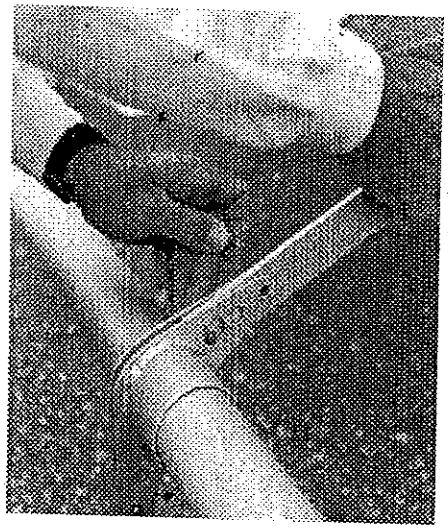
This owner's manual is provided to ease assembly, maintenance and use of your Johnson 18. Please read through it completely before starting and utilize the glossary of terms if needed. We believe these instructions show the easiest methods of rigging, but if you find a better way, be sure to write and tell us. We've learned a lot from our customers over the past 100 years.

Be sure to join the Johnson 18 Class Association. You will receive the Class newsletter that will keep you up-to-date on all the latest tuning articles, news, suppliers, regatta results, and up coming events. We encourage you to get involved in the one-design racing that the Johnson 18 provides. Regattas are being held from coast to coast. There are great social events that accompany these regattas, and if there are no fleets in your area, then start one! All you need is five other Johnson 18 sailors and the fun begins!

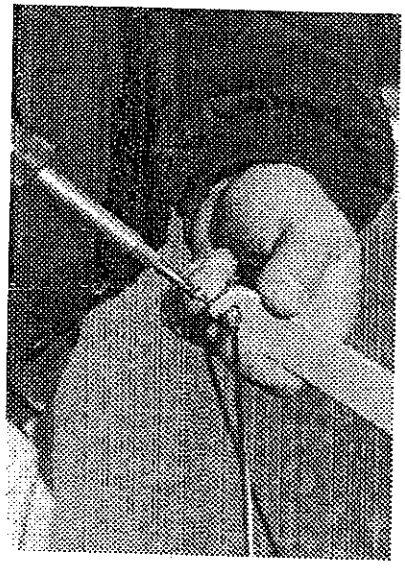
MAST AND RIGGING

PARTS:

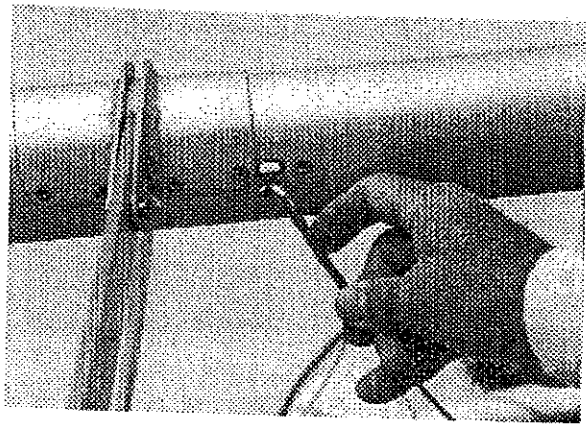
2 Spreaders
2 Lower shrouds
2 Upper Shrouds
1 Furling Swivel
1 Forestay Pennant



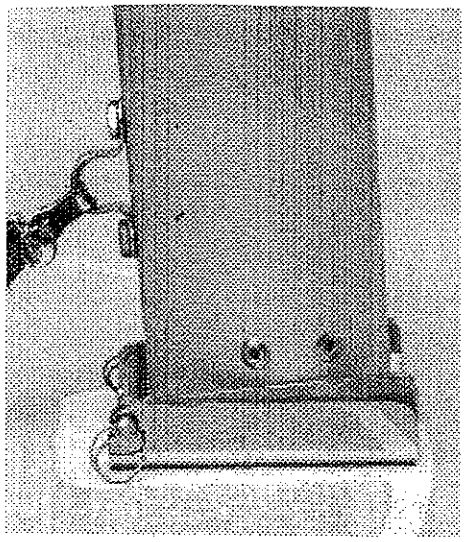
Lay mast alongside boat and using the two clevis pins that are in the spreader bracket, attach the spreader to the spreader bracket.



Install the upper shrouds into the spreader tips and tighten the keeper screw with a screwdriver. Pad the spreader tip with electrical tape to provide a barrier between the spreader and the mainsail.



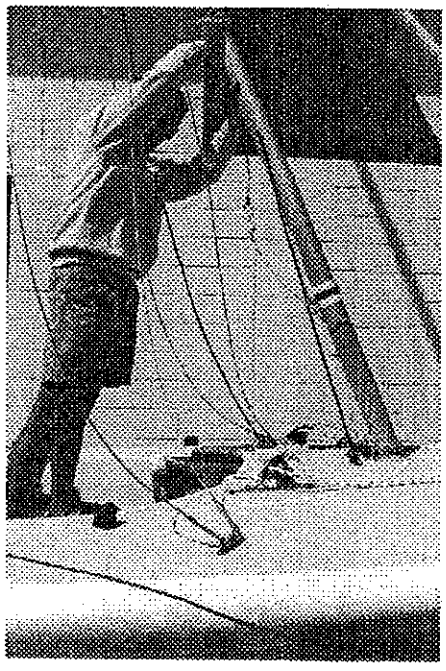
Attach the upper and lower shrouds to the mast by inserting the t-ball fittings and turning them 90 degrees. Bring the main halyard and the spinnaker halyard to the base of the mast.

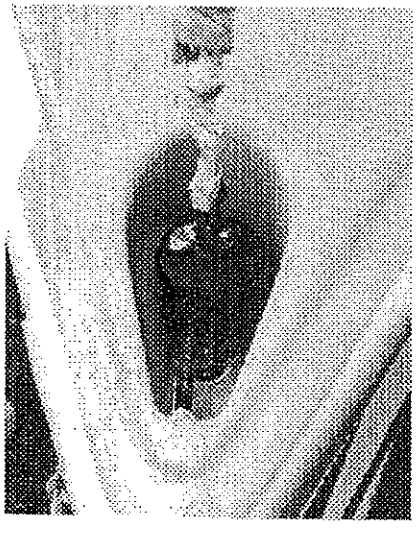


Lay the mast in the boat and attach the mast to the deck by pinning the base of the mast to the mast step and securing the hinge pin with the O ring.

CAUTION: Do not rest mast on deck once hinge pin is in place, as the vang deckstrap on mast could damage the deck.

Make sure the trailer is attached to the car or that the bow is weighted so that you can stand in the back of the boat. Step the mast by raising it in both hands over you head and stepping forward down the centerline of the cockpit until the mast is fully upright.



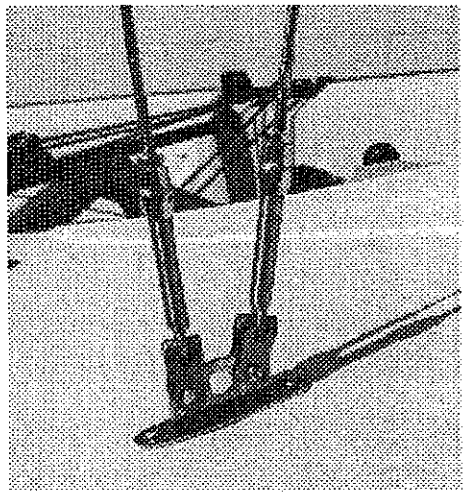


While you are steadying the mast, have your crew attach the jib to the furling drum.

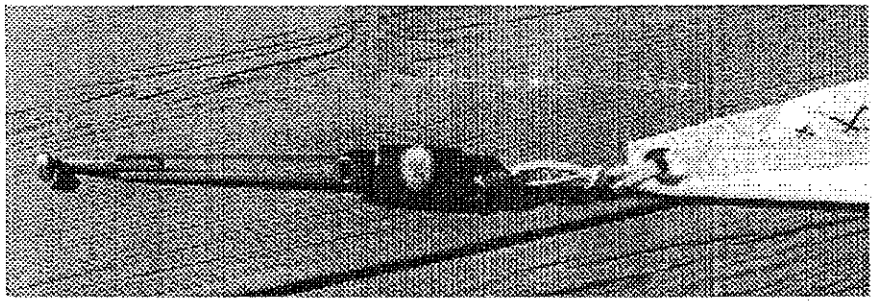
CAUTION

Check for overhead wires before stepping the mast. A mast which comes in contact with electrical power lines can cause serious injury or death.

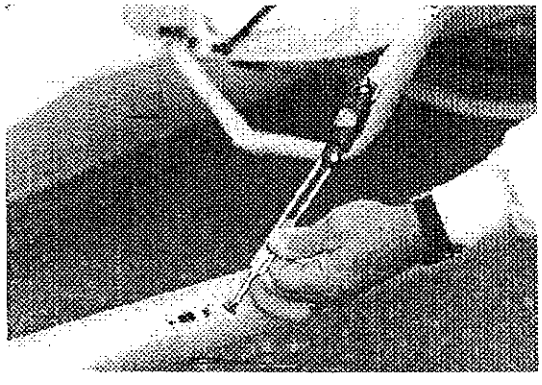
STEPPING THE MAST



Attach the upper sidestay to the outboard hole of the chainplate, and the lower sidestay to the inboard hole, making sure the turnbuckles are on a loose setting. (The middle hole on chainplate is for the lifting bridle).



Attach the forestay pennant to the jib furling swivel. Make sure the furling line is wrapped around the deck furling drum in a counter clockwise direction.



Attach the jib to the mast by inserting the t-ball and rotating it 90 degrees. This now becomes your forestay.

The tack line coming out of the end of the bow sprit must **ALWAYS** have a knot at the end of it when it's not attached to the spinnaker. Tie the tack line to the spinnaker, making sure it runs outside the shrouds. Tie the starboard spinnaker sheet to the clew of the spinnaker. Make sure it runs outside the shrouds, around the front of the furling jib, and over the tack line. Tie the port spinnaker sheet to the clew of the spinnaker. Put the spinnaker in the spinnaker bag by stuffing the foot of the sail in first and then working your way to the head of the sail.

Attach the halyard to the head of the spinnaker. Make sure the halyard is clear to run up the mast.

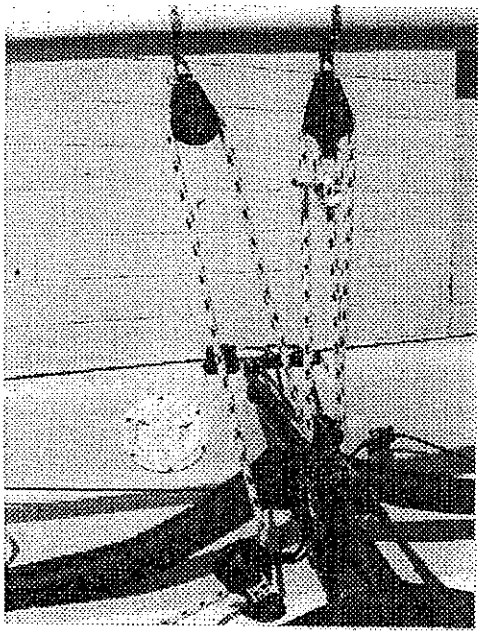
CENTERBOARD

When the boat is out of the water, the centerboard is held up by a velcro strap across the top of the centerboard neck. After the boat is launched, release the Velcro strap and pull the self cleating board line to put the board in the down position. The centerboard should be in the maximum down position when sailing. To raise the centerboard, release the board line allowing the board to float up. To raise the centerboard all the way, place the velcro strap across the centerboard neck. Tie a piece of line across the centerboard neck when trailering.

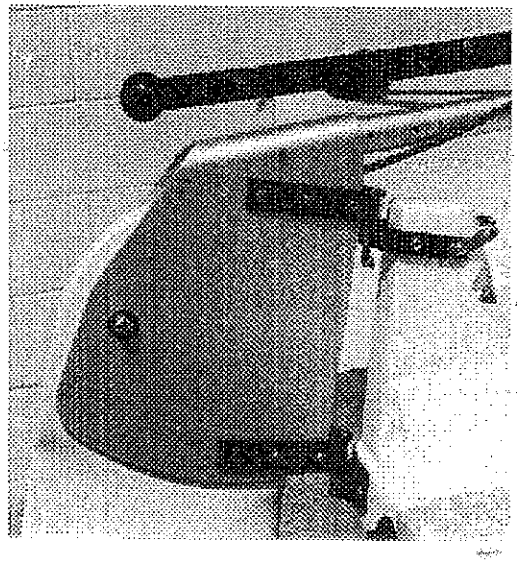
HOISTING THE MAINSAIL

Always head your boat into the wind before hoisting the mainsail or unfurling the jib. Make sure all the battens are inserted into the mainsail.

Insert the tack slug on the sail into the mast. Insert the clew slug into the slot on the back of the boom and attach the outhaul shackle to the grommet in the back of the sail.



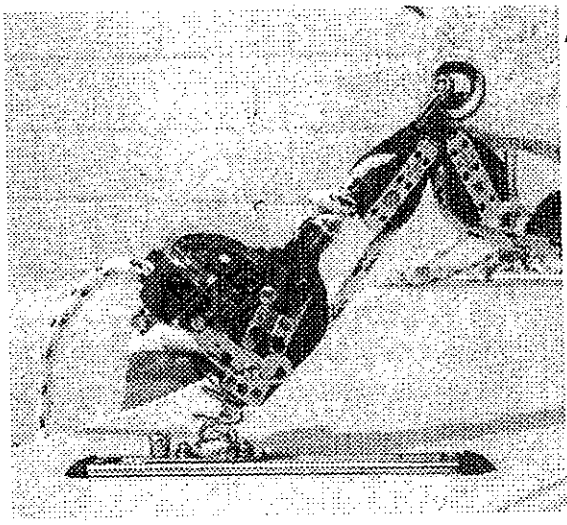
Tie the mainsheet to the becket on the foreward pulley on the boom, then feed it through the pulley on the traveler car, then back to the foreward pulley on the boom, through the pulley on the traveler car, then up to the rear pulley on the boom, then to the ratchet pulley on the floor of the boat.
Thread the spinnaker halyard through the deck, then through the turning pulley, and back to the cam cleat on the backbone behind the traveler.



ATTACHING THE RUDDER

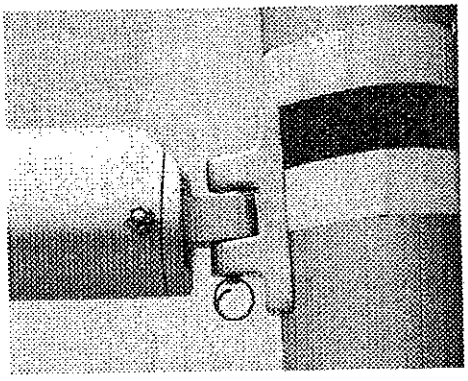
Hold the rudder at the transom of the boat and insert the pintles on the rudder into the gudgeons on the transom. Be sure to insert the keeper ring into the top pintle to prevent the rudder from falling off the boat in the event of a capsize. Insert the tiller into the rudder head and attach the keeper pin to hold the tiller in place.

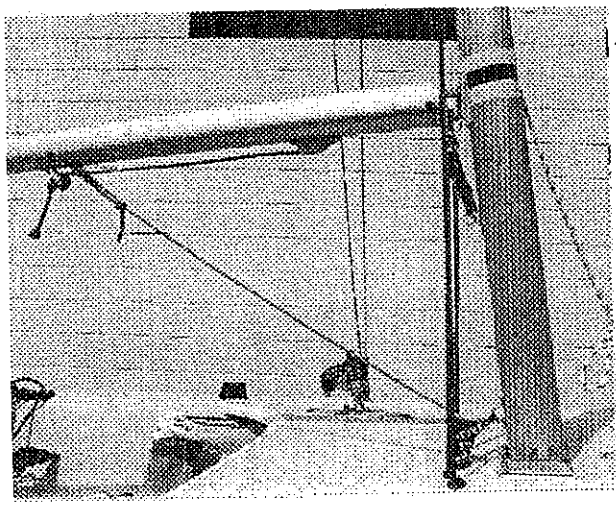
RIGGING THE SPINNAKER



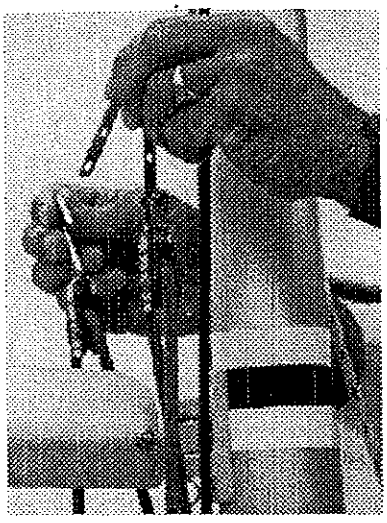
Attach the jib sheet pulleys to the clew of the jib. Place one end of the jib sheet under the spring and eyestrap on the jib car and tie a stop knot. Take the other end and place it through the jib sheet pulley, then through the ratchet pulley on the jib car.

Attach the boom to the mast by inserting the pin through the gooseneck. Attach the center pulley of the cunningham (green line) to the pin terminal just below the gooseneck.





Thread the vang (grey line) through the vang pulley and tie to the vang bail on the boom.



Insert the cunningham through the grommet on the mainsail. Attach the cunningham S-hook to the bail.

RIG TENSION

Upper Sidestays: Tighten with wrench to point where leeward stay, under sail in medium air, has only a slight degree of slack.

Lower Sidestays: Tighten to prevent mast sag at intersect point with spar while sailing. Check by sighting up luff groove in spar. Should be straight to intersect point with upper stays after which tip will fall off to leeward.

SAILING WITH THE SPINNAKER

In the big breezes, bear off when overpowered. The setting technique is to keep the main trimmed so you have adequate space between the main and the tip of the spreader. This prevents the spinnaker from becoming pinched between the mainsail and the tip of the spreader. The procedure is for the crew to pull the bow sprit out; the skipper will hoist while the crew feeds the spinnaker out of the bag and pulls the tack line. The crew furls the jib. To take the spinnaker down, have the crew open the bag, retract the pole and release the trip line. The skipper lowers the spinnaker while the crew stuffs it in the bag.

BOATING SAFETY

Open access plates when not sailing to relieve pressure and vent the hull.

Beware of overhead wires when raising and lowering the mast, launching and retrieving the boat, or sailing on unfamiliar waters.

Aways carry and wear Coast Guard Approved Life Jackets whenever sailing.

Always know which way the wind is blowing before launching.

Secure the drainplugs before sailing.

MAINTENANCE

Rinse entire boat with fresh water after each use in saltwater.

Check sails for rips, tears, and loose stitching. Repair immediately to avoid further damage.

Tape all split rings to prevent loss or damage.

Check for broken battens.

Always dry sails before storing, and rinse with fresh water if sailing in saltwater.

Always roll mainsail, keeping battens parallel when storing. Fold the spinnaker and cover the jib with a jib sock.

Periodically rinse the traveler with fresh water and clean the track for best performance.

Avoid trailer, dollies and boat lifts that point load the hull.

Check mast rigging for any frayed wires or wires that show sign of wear.

Periodically check for and replace frayed and broken lines, shock cord, and frayed or worn wires.

Check all shackles and fasteners for loosening or wear, and adjust or replace as needed.

Periodically check the bearings in the traveler car and replace them, if necessary. If the traveler car seems to be sluggish, rinse with fresh water and move back and forth quickly.

Be sure to have a red flag flying off the end of the mast when trailering.

TRAILERING AND STORAGE

Always use trailers and beach dollies with cradles rather than rollers.

Always remove rudder and tiller when trailering, and make sure the centerboard is pulled all the way up, and that the boat is tied securely to the trailer.

Tie down both ends of the mast, and be sure to have a red flag flying off the end of the mast.

Boat covers are recommended for travel to avoid rocks, gravel and road debris thrown from tow vehicles, and to provide good protection against the sun and weather.

GLOSSARY OF SAILING TERMS

AFT:
Toward or near the rear of the boat.

BACKWIND:
A sail sheeted to the weather side, used to get out of "irons".

BATTEN:
Thin narrow strip of material used to stiffen the shape of a sail.

Thin narrow strip of material used to stiffen the shape of a

BEAT:
To sail to windward or, the windward leg of a race.

BLOCK:
Pulley used to give a mechanical advantage for sail control.

BOOM:
A spar that controls a sail and is attached to the mast.

BOOM BAIL:
A fitting on the boom on which the mainsheet blocks are attached.

BOW:
The forward part of a hull.

BOWSPRIT:
Retractable spinnaker pole used with asymmetrical spinnakers.

CLASS RULES:
A set of rules governing the fairness of competition among boats in a class.

CLEAT:
A device which secures a line or rope by jamming or tying off.

CENTERBOARD:
Vertical, swinging keel which provides lift and lateral resistance.

CLEW:
Lower aft corner of a sail from which it is sheeted.

CUNNINGHAM:
Tackle used to tension the luff of a sail.

DOWNWIND:
Sailing with the wind (same direction).

FOOT:
Side of the sail between the clew and the tack (bottom).

FORE AND AFT:
Orientation in relation to a line drawn between the bow and stern.

FORESTAY:
Forward wire supporting the mast and the luff of the jib sail.

GOOSENECK:
Universal joint connecting the boom to the mast.

GUDGEON:
Fittings bolted on the transom of the hull for attaching the rudder system.

HALYARD:
Line or wire for hoisting and lowering sails.

HEAD:
Top of the sail and the corner which the halyard is connected.

HEAD TO WIND:
Also referred to as "in irons". Boat is pointing with bow directly into the wind.

HEAD UP:
To steer the boat into the wind.

HELM:
Tiller which controls the rudder.

HIKE:
To position body weight as far as possible to windward to stabilize the boat.

HOIST:
To pull up, as in hoisting the sails.

IN IRONS:
Head to wind, unable to tack or go forward without backwinding.

JIB:
The small sail on the front of the boat.

JIBE:
Maneuver in which the sails switch sides by passing the stern through the eye of the wind.

LEE:
Side falling away from the wind.

LEECH:
Side of sail between clew and head (back edge).

LEE HELM:
Improper boat balance causing it to head off.

LUFF:
Side of sail between head and tack (front edge). Flogging of sail due to improper sail trim or boat heading (luffing).

LIFE JACKET:
Wear it always. A life jacket may save your life someday.

OUTHAUL:
Tackle mounted on the boom to move the clew away from the tack, flattening the lower part of the mainsail.

PINTLE:
Pin holding rudder casting to gudgeon.

PORT:
The left side.

PURCHASE:
The amount of mechanical advantage derived from a block system.

REACHING:
To sail across the direction of the wind, usually the fastest point of sail.

SHACKLE:
"U" shaped fitting with removable pin used to fasten lines/parts together.

SHEAVE:
Roller part of block or pulley.

SHEET:
Lines used to control sails.

SHROUD:
Wire on each side of boat supporting the mast vertically.

SLOT:
The opening distance between the jib and the main which the wind passes through. Also a groove in a mast or boom.

SPREADER:
Strut projecting from each side of the mast which attaches to the shrouds.

STARBOARD:
The right side.

STERN:
The back of the boat.

TACK:
Maneuver in which the sails switch sides by passing the bow through the eye of the wind, or the lower forward corner of the sail.

TACK (sail):
Bottom forward corner of the sail.

TELLTALE:
Short piece of ribbon on the sail or rigging used for indicating sail trim or wind direction.

TILLER EXTENSION:
Device which controls rudder steering.

TRANSOM:
Aft most end of boat.

TRAVELER:
A track and car used to change the angle of the mainsail to the wind.

TRIM:
To adjust sheet tension resulting in proper air-flow over the sails.

TURNBUCKLE:
Threaded fitting for adjusting wire length.

WEATHER HELM:
Causes the boat to steer abnormally to weather (into the direction of the wind).

WINDWARD: Side toward the wind.
Side toward the wind.