To Hoist or Raise the Mainsail

To raise the mainsail, insert battens and then starting near the gooseneck, feed the foot of the sail, clew first, into the slot on the boom. The pin in the gooseneck slips through the tack of the sail while sailing. A "block-action outhaul" is a help here as it greatly reduces the friction on the outhaul line. Next, fasten the main halyard to the head of the mainsail and feed the luff of the sail into the mast slot cutout. Hoist the sail fully and cleat it.

Downhaul

Tighten the luff of the sail by pulling down on the line attached to the gooseneck and then cleat it to the downhaul cleat. The position of this cleat on the mast may be changed by loosening the two screws, moving the cleat, and then tightening the screws again.

To Hoist the Jib

Insert battens and then fasten all the jib snaps on the luff of the jib to the head stay and attach the fitting on the tack to the stemhead fitting. The jib halyard is then attached to the head of the jib just as the mainsail was. Tie the center of the jib sheet to the clew of the jib, and run them aft on either side of the mast inside the stay wires, through the blocks on tracks mounted on either side of the cuddy, then to the cam action jam cleats on the cuddy. Tie a figure eight knot in the end of each sheet so that you won’t lose them.

Roller Reefing

A “Roller Reefing Claw” is necessary (see current catalog). Your mainsail can be easily reefed, as the boat is equipped with a spring loaded gooseneck. First, remove the block in the middle of the boom. Second, release the main halyard but keep it under tension. Third, pull the boom back from the mast so you can turn it. Fourth, roll the boom either way as you or your crew lets off slowly on the halyard. The sail will roll on the boom. Fifth, when you have rolled about 5 or 6 times, you will have reduced your sail area by about 1/3. Experience will tell you how much to reef under various conditions. Sixth, lock your boom back into place by letting the boom go forward and tighten up halyard. When reefed, the boom block for the main sheet is attached to the roller reefing claw. To shake out, just reverse the procedure.

Outboard Motor – Recommended 10 HP Maximum long shaft

The Transom is reinforced so an engine can be clamped directly to it on either side of the rudder. We recommend a pad or transom plates which will prevent engine loss and scarring of fiberglass.

CAUTION! Be careful when turning the rudder blade as it can come in touch with the propeller.

Flotation

There is sufficient flotation material located in the boat to support the crew and normal gear, should the hull take on water through a leak or hull puncture. Be sure to check these areas prior to sailing and pump out any water.

Cockpit Drains

Check for leaks and be sure the drains are not clogged which will prevent draining.

### General Information

The following information is to be used as a general guide, and if you are not sure or need more help, do not hesitate to call upon us or our dealer.

**Tuning** — Do not overtighten stays, as mainsail tension will dictate tension on headstay. While sailing, the leeward stays will always go slack due to mast bind, stretching, etc., so under no circumstances should you tighten them under sail — all adjustments should be made while at rest with the sails down.

**Maintenance**

**Fiberglass Repairs** — although fiberglass is a relatively simple material to work with, we urge that you familiarize yourself with the proper procedures in order to insure good results.

The surface color (gelcoat) should be cleaned and waxed at least twice a year in order to maintain its luster. The color may fade due to weathering and if ordinary cleaning will not bring the color back, try a regular automotive compound followed up by waxing.

**Sails** — Dry and fold carefully after each use and if used on salt water, wash with fresh water every so often. Fold by stretching out the sail on the lawn or clean surface and allowing it to air dry. The color may fade due to weathering and if ordinary cleaning will not bring the color back, try a regular automotive compound followed up by waxing.

**Woodwork** — Varnish at least once a year, using any good marine varnish. Teak can be either oiled or varnished. Teak should be oiled at least twice a year to prevent splitting.

**Bottom Paint** — Recommended in both fresh and salt water. Follow directions on can carefully. Be sure to paint keel and/or centerboard as well as bottom.

**Leaking** — Should any leaks develop through hardware fastenings, hull and deck joints, etc., these can be easily fixed by applying a good marine sealant.

**Trailer** — Normally any good marine boat trailer is sufficient that will support the complete boat’s weight plus 20 percent which will cover weight of normal gear.

A “trailing package” is a great help, as it keeps mast and boom off the boat and makes tying down easier.

**For The Racer**

The rake of the mast can be changed by adjusting the headstay turnbuckle and then re-adjusting the stays. In general, a boat will perform better while sailing to windward with some aft rake and better downwind with the mast plumb or slightly raked forward. Races are usually won to weather, so favor more aft rake, if anything.

**Sail Set**

The jib halyard should be taken up so that the tension on the luff, while under sail, is the same as on the headstay. The tension on the foot and luff of the mainsail should be such that there are no stress lines or wrinkles in the sail. Apply more tension as the wind increases, which will move the draft forward and decrease heeling moment. In general, the outhaul should be slackened while sailing off the wind in order to create more draft in sail.

**Tell Taps** are an invaluable aid in determining wind direction - 8 inch pieces of yarn tied to sides of 2 ft. to 4 ft. up from chineplate, and a wind pennant on top of mast. 6 to 8 inch pieces of yarn taped to luff of jib on both sides every 3 feet or so on bottom half of sail. 8 inches back from luff wire are excellent wind flow guides. If you point too high, weather yarn flutters, and if pointing too low, leeward yarn flutters. Both should flow back evenly - remember this only tells you flow pattern for a given jib trim, so trim must be correct for sailing angle.