

***FOX MANUAL  
&  
WARRANTY***

**READ ME  
BEFORE USING YOUR**

***SEAWARD***

## **HULL PREPARATION**

### **MOTOR**

### **BALANCE**

### **SETTING THE FREE STANDING MAST**

### **LAUNCHING AND RETRIEVING**

### **SAILING**

### **STORING AND MAINTENANCE**

### **TIPS**

### **ELECTRICAL**

SAILING IS A WONDERFUL ACTIVITY THAT CAN RELIEVE STRESS, BRING FAMILIES TOGETHER, AND DEVELOP PHYSICAL AND MENTAL SKILLS. IT IS, HOWEVER, A POTENTIALLY DANGEROUS SPORT DEPENDING ON THE APPROACH, AND (OR) EXPERIENCE OF THE PARTICIPANT(S). PURCHASING THIS BOAT AND READING THIS MANUAL DOES NOT QUALIFY YOU TO USE IT. IT IS NOT LIKE A CAR OR A PRODUCTION APPLIANCE. USING THIS BOAT REQUIRES A GREAT DEAL OF COMMON SENSE AND MECHANICAL APTITUDE. GO SLOW AND CAREFULLY. CONFIDENCE CAN BE DANGEROUS. CAUTION IS YOUR COMFORT. DISCIPLINE WILL CAUSE MORE THOROUGH ENJOYMENT.

**HULL PREPARATION:** IT IS BETTER IF YOU DO NOT HAVE TO PAINT YOUR HULL WITH ANTIFOULING PAINT; BECAUSE IT CREATES MORE FRICTION THAN THE SLICK GELCOATED SURFACE. YOUR BOAT WILL SAIL FASTER AND HANDLE BETTER WITHOUT IT.

THE GELCOAT USED ON YOUR HULL IS RESISTANT TO OSMOSIS BLISTERING AND WE OFFER A 5 YEAR LIMITED WARRANTY WITH EACH BOAT WE BUILD. THE GELCOAT IS BACKED BY AN ADDITIONAL VINYLESTER BARRIER COAT. THIS IS EXTRA INSURANCE AGAINST BLISTERING. WE DO NOT WANT YOU TO REMOVE ANY OF THE THICKNESS OF THESE MATERIALS SO NO PREP SANDING SHOULD BE DONE. "SKIP SAND" PRODUCTS CAN BE USED. THEN APPLY BOTTOM PAINT OF YOUR CHOICE.

### **MOTOR**

RUDDER BOLTS SHOULD BE CHECKED AND TIGHT BEFORE EACH USE. THE TILLER HINGE BOLT SHOULD ALSO BE TIGHTENED SO THAT THE TILLER HANDLE WILL STAY IN ANY POSITION.

THE OUTBOARD MOTOR SHOULD BE AS LIGHT AS POSSIBLE. THE 3 HP YAMAHA LONG SHAFT IS OUR MOTOR OF CHOICE FOR THE FOX...QUIET, HIGH TORQUE, LIGHT-WEIGHT. WEIGHT ON THE TRANSOM IS CRITICAL AND WILL AFFECT PERFORMANCE SUBSTANTIALLY .

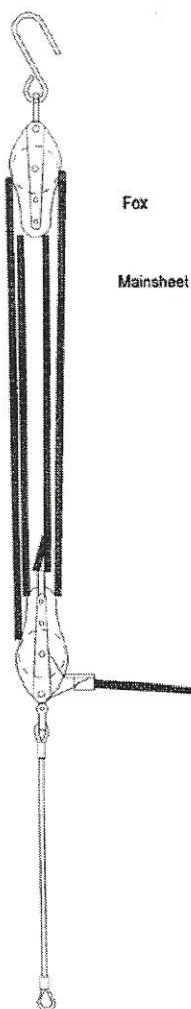
TILT THE OUTBOARD IN THE UP POSITION WHEN NOT IN USE. A DRAGGING PROP CREATES DRAG AND AFFECTS STEERING AND CONTROL.

A FIRE EXTINGUISHER IS REQUIRED ABOARD WITH A MOTOR.

### **BALANCE**

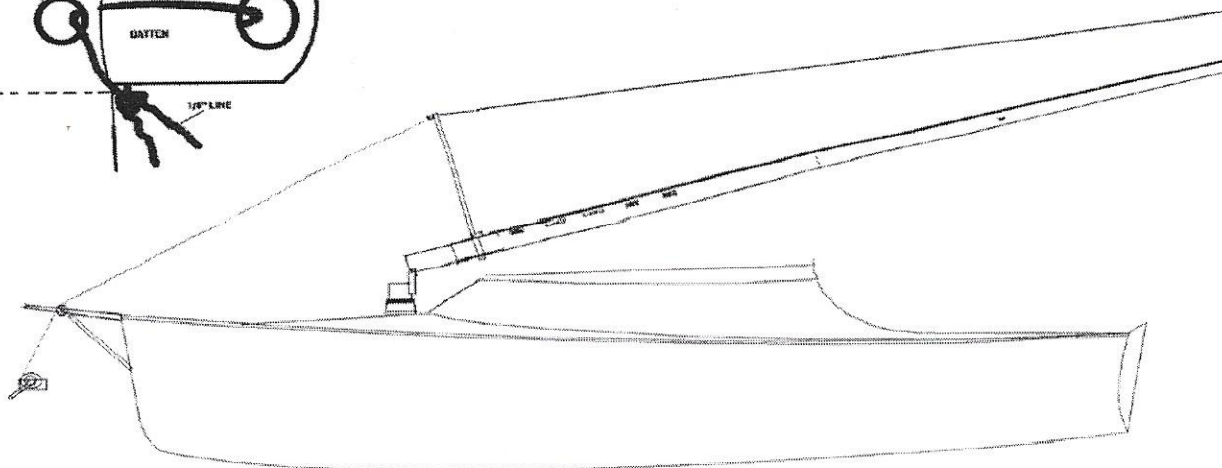
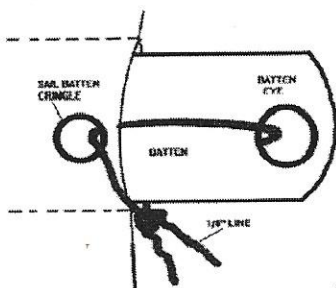
BALANCING THE FOX IS VERY IMPORTANT. THE BOAT SHOULD BE MADE TO SIT ON HER LINES (FOR AND AFT) WHILE SAILING. THIS CAN BE ACCOMPLISHED BY STORING THE ANCHOR ON THE SPRIT, MOVING INTERNAL BAGGAGE AND GEAR FORWARD, AND SEATING EXTRA PASSENGERS IN THE FORWARD PORTION OF THE COCKPIT. EXPECT OPTIMUM PERFORMANCE IF WEIGHT IS DISTRIBUTED SUCH THAT THE TRANSOM STAYS ABOVE THE WATER LINE.

THE FOX SAILS BEST IN A 10 DEGREE ANGLE OF HEEL. IF THE WIND IS LIGHT, SIT ON THE LEEWARD SIDE OF THE BOAT TO INCREASE HEEL ANGLE. ALSO SIT FORWARD TO LOWER THE BOW AND DIP THE KEEL WING. THIS WILL ALSO INCREASE WINDWARD PERFORMANCE.



### SETTING THE FREE STANDING MAST:

- 1> REMOVE PACKAGING MATERIAL. SET THE MAST CRUTCH IN RUDDER.
- 2> POSITION THE MAST BASE OVER THE MAST STEP AND INSTALL THE 4.5" BOLT AND WING NUT HINGE PIN. (BASE HINGE SHOULD CAPTIVATE THE STEP HINGE)
- 3> ATTACH THE MAIN HALYARD SHACKLE TO THE LONGER WIRE ON THE END OF THE GIN POLE, SLIDE THE GINPOLE OVER THE 1" SS TUBE, HOLD THE GINPOLE VERTICAL, AND CLEAT OFF THE MAIN HALYARD SNUG SO THE GINPOLE IS 90 DEGREES TO THE MAST.
- 4> RUN THE TRAILER HOOK UP OVER THE ANCHOR ROLLER, THEN TO THE LARGE EYE ON THE SHORT WIRE END OF THE GINPOLE. SNUG UP THE WINCH BUT DON'T LIFT THE MAST YET.
- 5> ONE PERSON CRANKS THE TRAILER WINCH, SECOND PERSON GUIDES THE MAST SO THAT IT **STAYS ON THE CENTERLINE OF THE BOAT. VERY IMPORTANT: DO NOT LET MAST SWAY FROM CENTERLINE OF BOAT OR GINPOLE BASE (GOOSENECK) WILL BEND OR BREAK.** RAISE MAST **GENTLY**. DO NOT "SLAM" IT INTO THE VERTICAL POSITION.
- 6> AFTER THE MAST IS VERTICAL, RELEASE THE SLEEVE HALYARD SO THAT THE SLEEVE CAN SINK INTO THE MAST STEP AND CONNECT THE MAST BASE TO THE STEP. (YOU MAY HAVE TO ROCK THE MAST FOR AND AFT A LITTLE TO GET THE SLEEVE TO DROP).
- 7> WHEN THE SLEEVE IS FULLY DROPPED AND IN POSITION, YOU SHOULD HERE IT "CLUNK" ON A STOP BOLT POSITIONED JUST BELOW THE DECK LINE. THE SLEEVE IS 20" LONG. 10" SHOULD BE IN EACH SIDE OF THE TUBING. A KNOT SHOULD BE TIED IN THE SLEEVE HALYARD SO THAT THE SLEEVE WILL NOT DROP ANY FURTHER THAN 10". TURN MAST 180 DEGREES. **INSTALL 1/4" SAFETY FAST PIN.**
- 8> INSTALL ALL BATTENS IN SAIL. (DIAGRAM ) BOTTOM (ROUND) BATTEN IS INSTALLED IN THE SAIL AND THEN INTO THE SS ROUND TUBE ON MAST.
- 9> MAKE SURE THE FRONT OF THE MAST IS POINTED INTO THE WIND. REMOVE SAIL STOP AND SLIDE TOP SAIL CAR INTO SAIL TRACK. ATTACH MAIN HALYARD TO SAIL HEAD VIA THE D SHACKLE ON THE SMALL BLOCK. BE SURE THE LINE IS NOT TWISTED. PULL SAIL UP WHILE FEEDING CARS IN TRACK.
- 10> ATTACH TACK SHACKLE. PULL THE SAIL UP SO THAT THE **LUFF IS**





### **TIGHT AND THE MAST BENDS.**

11> SNUG THE VELCRO AROUND THE BOOM-BATTEN TO TIGHTEN THE SAIL FOOT.  
12> ATTACH MAIN SHEET SYSTEM. THE CAM CLEAT END OF THE SYSTEM ATTACHES TO THE COCKPIT FLOOR EYE. THE HOOK CAN BE HUNG ON THE LIFELINE UNTIL YOU ARE READY TO SAIL. THEN CLIP IT THROUGH THE FORWARD MOST HOLE IN THE MAINSHEET SAIL PAD.

### **LAUNCHING AND RETRIEVING**

LAUNCHING AND RETRIEVING IS EASY WITH A FOX. WITH THE MAST UP AND THE SAILS DOWN, TIE A BOW AND STERN LINE TO THE BOAT AND BACK HER INTO THE WATER UNTIL ABOUT 3 FEET OF THE SIDE BUNKS ARE ABOVE WATER.  
LOOK FOR OVERHEAD WIRES!

TRY TO PICK THE RAMP THAT IS IN SUCH A DIRECTION THAT THE WIND BLOWS THE BOAT OFF THE DOCK RATHER THAN BLOWING IT ONTO THE DOCK, REQUIRING FENDERS.

SECURE YOUR VEHICLE IN PARK...WITH PARKING BRAKES, AND A CHOCK BEHIND ONE OF THE FRONT TIRES. REMOVE THE WINCH HOOK FROM THE BOW EYE, REMOVE THE CHOCK, AND BACK THE BOAT INTO THE WATER UNTIL IT FLOATS OFF THE TRAILER. ANOTHER PERSON SHOULD BE HANDLING THE BOW AND STERN LINES.

IF THE RAMP IS POOR, YOU MAY HAVE TO JERK THE BOAT OFF THE TRAILER BY HITTING THE BRAKES HARD AS YOU BACK UP. IF THE BOAT IS ALMOST FLOATING, THE MOMENTUM OF THE BOAT SHOULD PULL IT OFF OF THE TRAILER.

FOR RETRIEVING, PULL 3 FEET OF CABLE FROM THE WINCH, THEN BACK THE TRAILER INTO THE WATER UNTIL THERE IS ABOUT 12 INCHES OF TRAILER SIDE BUNK ABOVE THE WATER. MAKE SURE THE TRAILER IS LEVEL.

DRIVE THE BOAT ONTO THE TRAILER. IF THE KEEL BUNKS ARE ADJUSTED PROPERLY, IT WILL AUTOMATICALLY SELF CENTER. ATTACH THE CABLE TO THE BOW EYE AND CRANK THE TRAILER UP TO THE BOW PAD. PULL THE BOAT OUT OF THE WATER SLOWLY LOOKING FOR OVERHEAD WIRES AND WATCHING TO SEE IF THE BOAT IS SITTING PROPERLY ON THE TRAILER. CRANK THE BOAT UP TO THE BOW PAD AGAIN.

LOWER AND SECURE THE RIG IN ACCORDANCE WITH PROPER OVERHANG LAWS. MOST STATES REQUIRE A TIE-DOWN STRAP.

HOSE DOWN THE TRAILER, BOAT, AND MOTOR. RE-PACK THE TRAILER BEARING BUDDIES WITH GREASE EVERY 3RD LAUNCH. CHECK THAT ALL NUTS AND BOLTS ARE TIGHT ON YOUR TRAILER WHEN YOU FIRST GET IT AND PERIODICALLY THEREAFTER.

### **SAILING**

SAILING IS EASY WITH SEAWARDS. WITH YOUR SELF TACKING JIB OR FREE STANDING RIG, SINGLE HANDED SAILING IS MADE MUCH EASIER.

PICK A LIGHT AIR DAY FOR YOUR FIRST FEW SAILS UNTIL YOU ARE EXPERIENCED WITH THIS NEW RIG. RAISE THE SAIL(S) WHILE HEADING DIRECTLY INTO THE WIND UNDER POWER.

ALWAYS KEEP THE BOAT BALANCED. MAKE SURE THAT THE LUFF IS VERY TIGHT ON BOTH THE MAIN AND THE JIB. YOU WILL LOOSE PERFORMANCE IF YOU DON'T. SAIL THE BOAT RELATIVELY FLAT, SPEED IS LOST IF THE BOAT HEELS TOO MUCH. REDUCE SAIL IN LIEU OF LUFFING. START REEFING IN 15 KNOTS. IT IS BETTER REEF EARLY THAN LUFF THE SAIL.

FREE STANDING RIG - WHEN STARING FROM A DEAD STOP THE BOW WILL TEND TO FALL OFF UNTIL A LITTLE SPEED IS CREATED. THEN IT WILL HEAD UP UNTIL THE SAIL IS TRIMMED OUT. THIS IS DUE TO A FORWARD CENTER OF EFFORT ON A CAT RIG. IT IS IMPORTANT TO UNDERSTAND THIS AND HAVE A FEEL FOR IT IN CLOSE QUARTERS SUCH AS IN AN ANCHORAGE. THE BOAT MAY BE UNMANAGABLE WITH TOO MUCH SAIL AREA EXPOSED WHEN SAILING OFF THE WIND IN 15+ KNOTS. AGAIN, REEF FOR CONTROL.

IF YOU EXPERIENCE A LOT OF HELM, SOMETHING IS WRONG. CHECK THE FOLLOWING: SAIL

TRIM-RELAX THE MAINSHEET UNTIL THE SAIL BEGINS TO LUFF, THEN TIGHTEN SLIGHTLY. LUFF TENSION - REMOVE SAG IN LUFF- AS THE SAIL BECOMES OVERPOWERED THE LUFF WILL NATURALLY SAG BECAUSE OF THE BENDING MAST; PREMATURE SAG IS NO GOOD. BATTEN TENSION - COMPRESS BATTENS MORE.

UNTIL YOU BECOME AQUAINTED TO YOUR FOX AND UNDERSTAND YOUR ABILITIES AND HER POTENTIAL, SAIL ON LIGHT AIR AND MEDIUM AIR DAYS. KEEP THE DECKS CLEAN AND ORGANIZED. PRACTICE BOATING SAFETY AND CONSIDERATION OF OTHER BOATERS...EVEN IF THEY DO NOT. DON'T EXPECT OTHER BOATERS TO KNOW ANY RULES OF THE WATER.

AS EXPERIENCED FOX CAPTAINS WE KNOW YOU WILL HAVE PEOPLE APPROACH YOU AND COMMENT ABOUT THE 'SWEET' LINES OF THE FOX. ACCEPT THEIR PRAISE AND TELL THEM WHERE THEY CAN GET ONE!

### STORING AND MAINTENANCE

PUT A COAT OF A GOOD UV PROTECTED WAX ON YOUR BOAT ONCE A YEAR. TRY TO STORE YOUR BOAT OUT OF THE SUN AND OUT OF THE WEATHER. SUN AND TEMPERATURE CHANGE ARE FIBERGLASS'S TWO WORST ENEMIES. HAVE A COVER MADE FOR YOUR BOAT AND MAST.

ALL OF THE TEAK OILS AND PRESERVERS ARE GOOD, THEY SIMPLY HAVE TO BE APPLIED BEFORE THE TEAK GRAYS OR THE LAST COATING WEARS DOWN.

BLEACH WATER WORKS WELL IN THE INTERIOR OF A BOAT TO GET RID OF MOLD AND MOLD SMELLS.

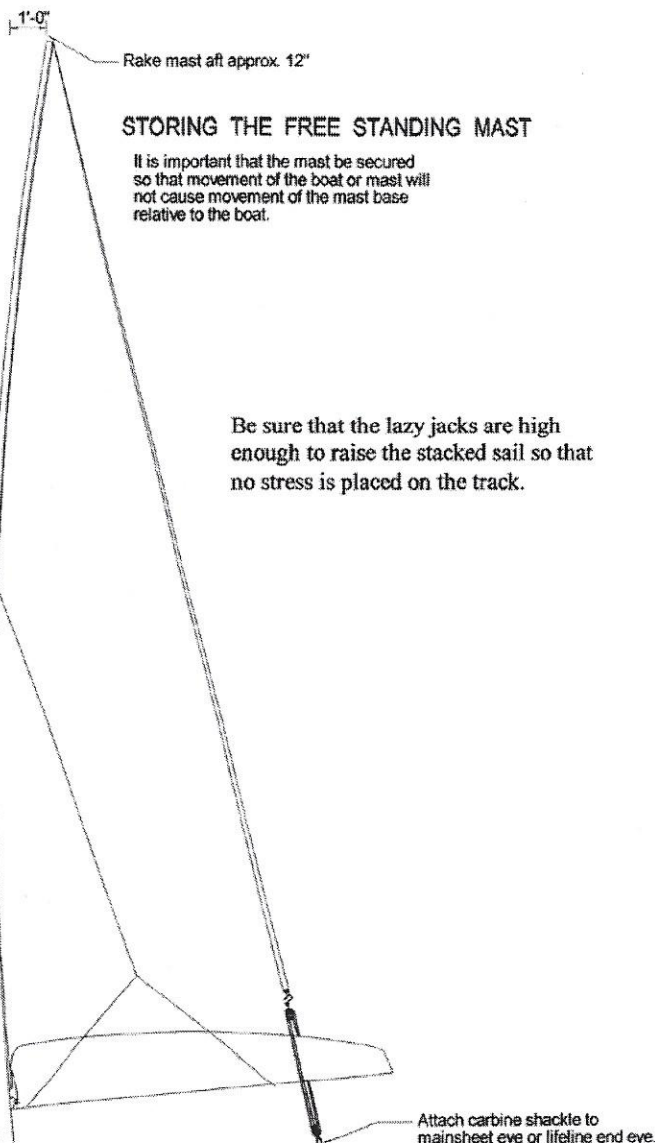
STORE THE UNSTEPPED CARBON FIBER MAST SO THAT IT IS AS STRAIGHT AS POSSIBLE. PUT WEIGHTS ON IT TO ACHIEVE THAT IF NEEDED.

THE CARBON FIBER MAST SHOULD HAVE ABOUT 5 LBS. OF AFT TENSION ON IT WHEN THE MAST IS LEFT IN THE UP POSITION. SPRING THE MAST AFT WITH THE MAIN HALYARD HOOKED DIRECTLY TO THE MAINSHEET. DON'T PULL DIRECTLY ON THE LAZY JACKS. VERY LITTLE IS ACCOMPLISHED.

CONTINUALLY CHECK SCREWS, NUTS, AND BOLTS FOR TIGHTNESS. ALL HARDWARE USED ON SEAWARDS IS MADE FROM STAINLESS STEEL. HOWEVER, STAINLESS STEEL QUALITY VARIES AND IT CAN GET A LIGHT COAT OF OXIDATION OVER IT. TO REMOVE RUST AND PREVENT IT YOU CAN MIX YOUR UV BOAT WAX AND SOME RUBBING COMPOUND 50:50. PUT SOME ON A RAG AND WIPE ALL STAINLESS HARDWARE WITH IT UNTIL THE RUST IS GONE. WIPE WITH DRY RAG AND REALIZE A LONG LASTING SHINE. 3M MAKES A PRODUCT CALLED "ONE-STEP", WHICH IS THE SAME THING.

THE MAST SLEEVE MAY BE LUBRICATED WITH CLEAR TEFLON GREASE. THE U.H.M.W. BEARINGS NEED NO LUBRICATION. IF YOU LIVE IN HOT CLIMATES WITH LOTS OF SUN, IT MAY BE WISE TO GIVE THE MAST A COAT OF LIGHT COLOR URATHANE PAINT TO KEEP IT COOL AND UV'S OUT.

THE KEEL IS CASTED IN ONE PIECE FROM POLYESTER RESIN, FIBERGLASS, LEAD SHOT, STEEL SHOT, 5/8" STAINLESS STEEL THREADED RODS, AND OTHER FILLERS. THE EXTERIOR IS WRAPPED WITH A LAYER OF 1708 BIAXIAL FIBERGLASS AND GELCOAT. IT IS BOTH CHEMICALLY AND MECHANICALLY BONDED TO THE HULL. A DAMAGED KEEL DOES NOT MEAN THE BOAT WILL LEAK. THE KEEL IS OUTSIDE





OF THE HULL. THE WINGS ARE STRONG ENOUGH TO HOLD THE WEIGHT OF THE BOAT, BUT NOT COMBINED WITH ANY MOMENTUM OR KINETIC ENERGY. A BROKEN WING IS NOT A DISASTER; IT CAN BE GLUED BACK ON OR RECONSTRUCTED AT ANY AUTOBODY SHOP OR QUALIFIED MARINA.

#### TIPS:

TIE FIGURE 8 KNOTS ON THE ENDS OF ALL LINES PRIOR TO SETUP SO THEY ARE NOT LOST IN THE MAST OR BOOM. TIE A FIGURE 8 KNOT ON THE SLEEVE HALYARD

MAKE SURE THE BOAT IS POINTING DIRECTLY INTO THE WIND BEFORE RAISING THE MAST AND SAILS.

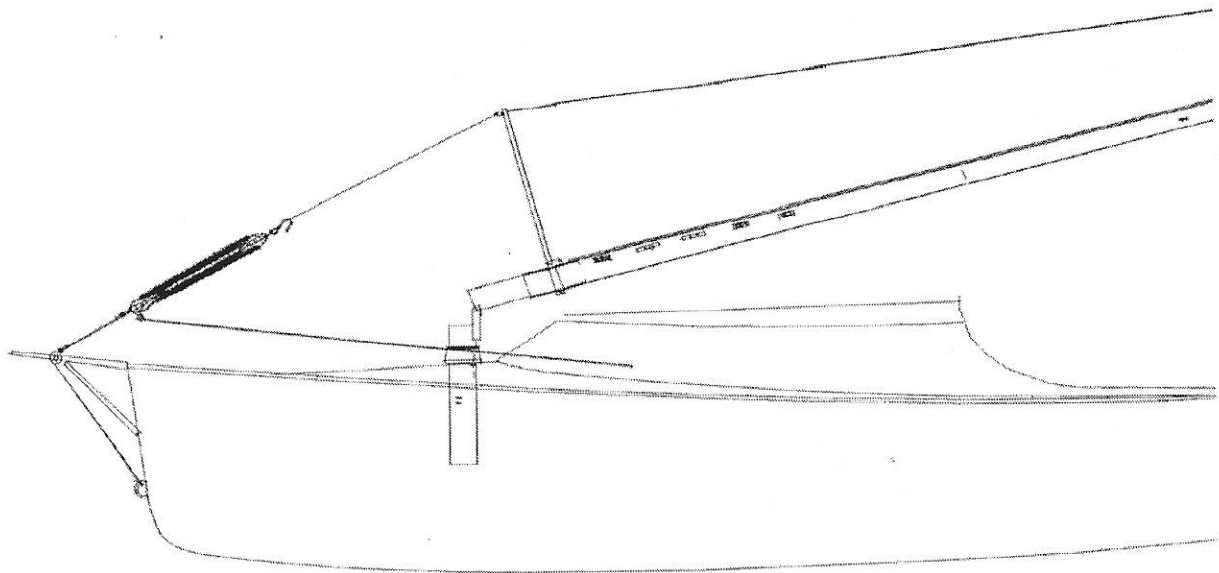
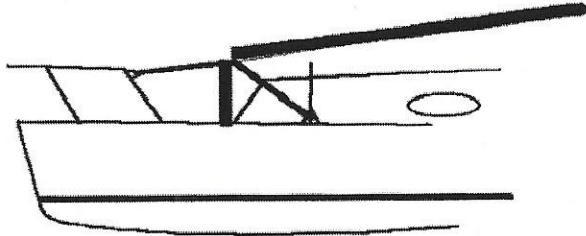
WAX SAIL TRACK PERIODICALLY TO ASSURE EASY LUFF SLIDING.

IF YOU HAVE TO DRILL HOLES IN THE MAST TO INSTALL HARDWARE, ETC. DRILL THEM IN THE 1:00, 5:00, 7:00, OR 11:00 POSITION.

IT IS POSSIBLE TO OVER STRESS THE MAST WITH A SPINNAKER WHEN SAILING DOWNWIND. REDUCE SAIL IN HEAVY AIR.

THE SKETCH TO THE RIGHT IS A MAST STEADYING SYSTEM REQUIRED TO RAISE A FREE STANDING MAST ALONE. THE LAZY JACKS ARE CONNECTED, WITH AN EXTENSION, TO THE CHAIN LINK THAT IS DIRECTLY OPPOSITE THE AXIS OF ROTATION OF THE MAST RAISING HINGE.

Mast stabilizing chain is attached to the bow pulpit and forward lower stanchion. Attach lazy jacks to chain link in line with the mast hinge pin.



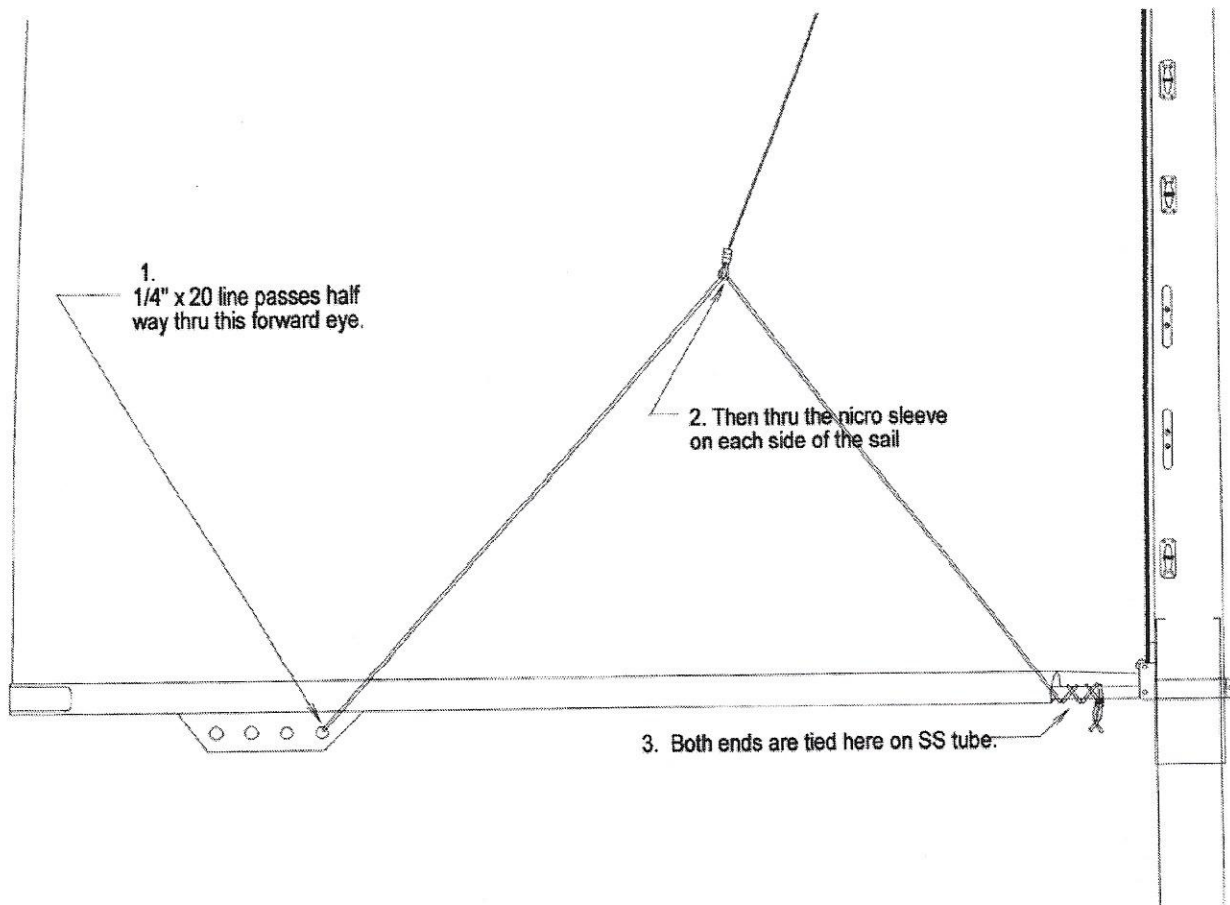
THIS KEEPS THE MAST FROM SWAYING FROM SIDE TO SIDE.

THE SKETCH BELOW IS AN EXAMPLE OF THE USE OF THE MAINSHEET SYSTEM IN LIEU OF THE TRAILER WINCH TO RAISE THE MAST.

TO REMOVE MARKS OR STAINS FROM FIBERGLASS USE THE FOLLOWING PRODUCTS IN THE FOLLOWING

ORDER: BOAT SOAP- SIMPLE GREEN - LACQUER THINNER - ACETONE - PAINT REMOVER - RUBBING COMPOUND - 600 GRIT SAND PAPER. DO NOT GET ACETONE OR LACQUER THINNER ON ACRYLIC PORTS.

IF YOUR OPENING PORTS LEAK THROUGH THE GASKET IT IS PROBABLY BECAUSE THE DOGS ARE TOO TIGHT. BACK THEM OFF WITH A SCREW DRIVER. LET THE PORTS SIT OPEN FOR A DAY. THEN



TIGHTEN THE DOGS JUST ENOUGH TO STOP THE LEAKING.

#### **LAZY JACK SYSTEM**

THE LAZY JACK SYSTEM ON THE FOX IS VERY SIMPLE AND EFFECTIVE.

ELECTRICAL DIAGRAM

