

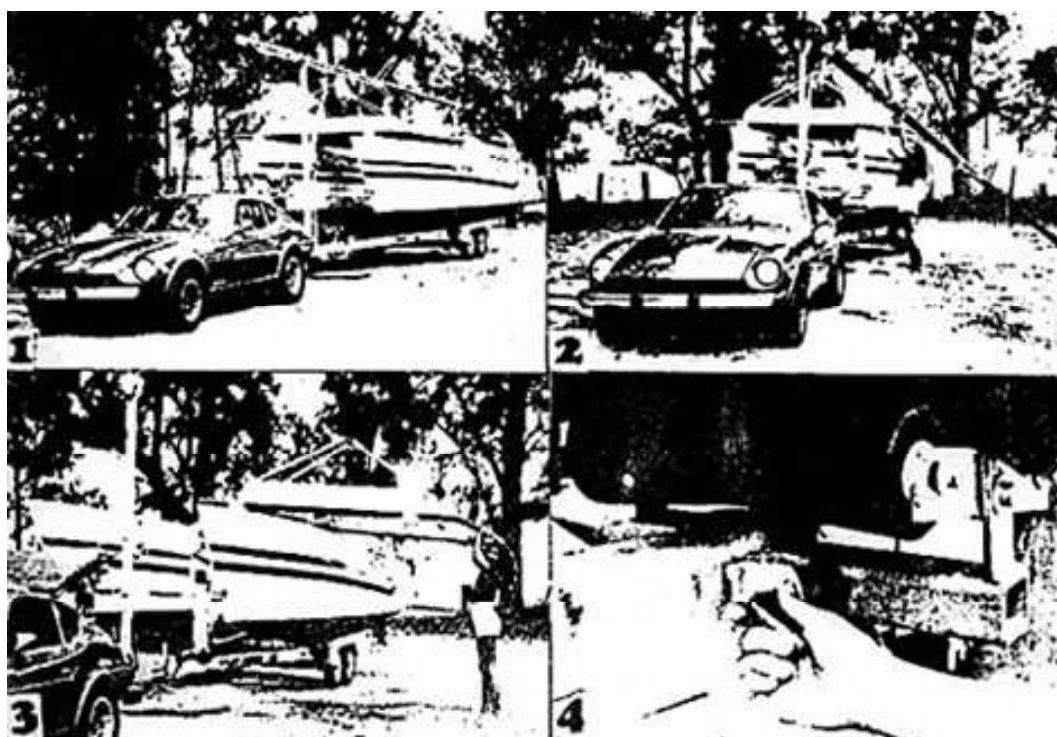
## STILETTO ASSEMBLY MANUAL

STILETTO has been designed and engineered to be easily trailered and there are numerous innovations on the boat and trailer which carry out this concept. As a result, two people can set up STILETTO from the trailering to sailing configuration in approximately forty-five minutes. The addition of one or two more people makes the procedure even faster and easier. One nice thing about setting up a STILETTO is that she never fails to draw a crowd so help is usually available if you are short handed. The following procedure will assure a fast, easy and safe launching or recovery. We suggest that you familiarize yourself with the sequence by reading through these instructions before beginning your first set up.

**CAUTION:** Be sure to choose a suitable launching site. The ramp and SET UP AREA MUST BE FREE OF OVERHEAD POWER LINES and tree limbs. The ramp should be at least 15 feet wide. STILETTO's mast is 36 feet long - when sailing, the mast is about 40 feet off the water and when on the trailer it is about 43 feet high.

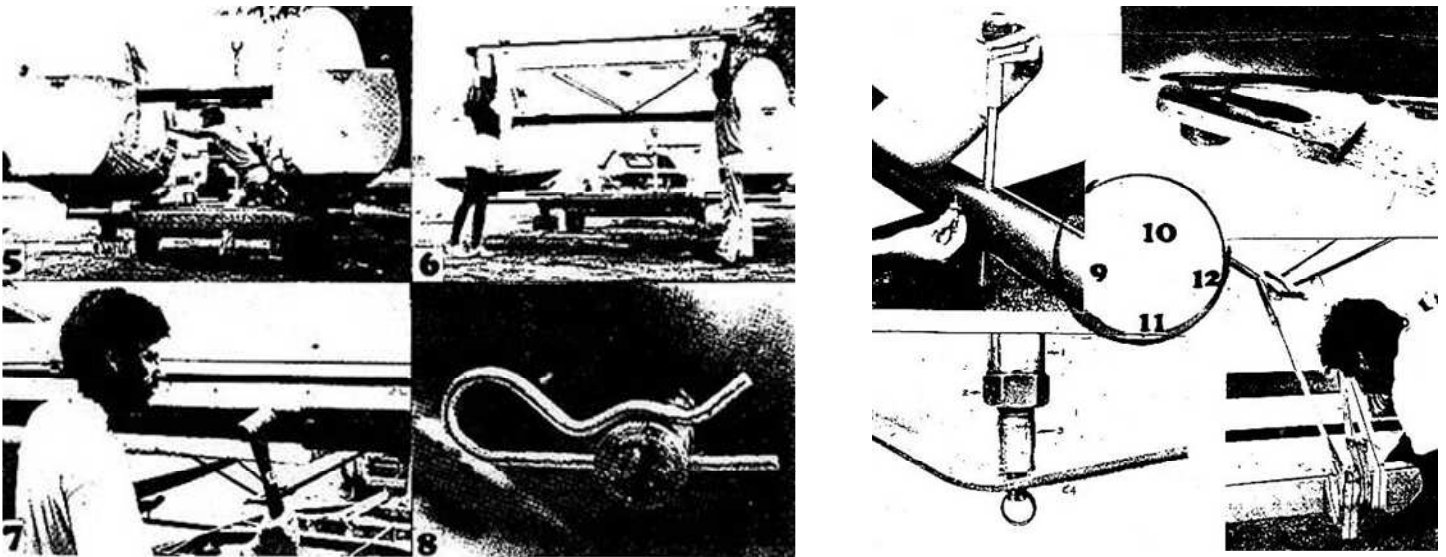
### **ALWAYS ALLOW AMPLE CLEARANCE AROUND POWER LINES!**

Remove mast from trailer stanchions and place it on the ground behind the boat. (Photo 2) Remove all tie-down straps. Remove cockpit from fore decks. (Photo 5) Disconnect winch cable from over the forward torsion tube, remove aft mast stanchion from trailer and push boat aft on trailer approximately 12 inches to clear bow chocks as the boat is expanded. Expand one hull at a time by pulling the 2 spring loaded release pins on one side of the trailer (Photo 4) and pushing outward from a position midway between the torsion tubes, as Shown in photo 5. pull the release pin as far a possible and cock it to one side so it will stay in the released position until you have telescoped the boat slightly. Then put the pins back in their normal position so they will spring into place when the arm is at its correct expanded position. Insert the vertical taper pins into the tapered holes furthest outboard on the torsion tubes of the expanded hull. The forward vertical pins (which also secure the dolphin striker) are grooved at the small end of the pin. With one hull expanded and secured by the vertical taper pins, follow the same procedure for the other hull.



Place the cockpit into position by carrying it over the aft torsion tube and resting it on its supports between the torsion tubes. (Photo 6) Insert the 4 horizontal taper pins making certain that they pass through the cockpit hold down brackets on the underside of the cockpit. Seat in all taper pins by pounding them firmly with a brass mallet. (Photo 7) Insert hitch pins clips into the taper pins.

**CAUTION:** Check all taper pins periodically to insure that they remain seated in their proper position, particularly during the first several times the boat is sailed. Putting a coating of grease on the pins before inserting will help prevent corrosion of the aluminum torque tube around the pins and sticking of the pins with time. Always use a brass mallet when seating in or removing taper pins. We recommend a 2. lb. mallet. Use of a steel hammer will result in deformation of the taper pin which will hamper its removal.



Now is a convenient time to unload all the rigging and gear from inside the hulls.

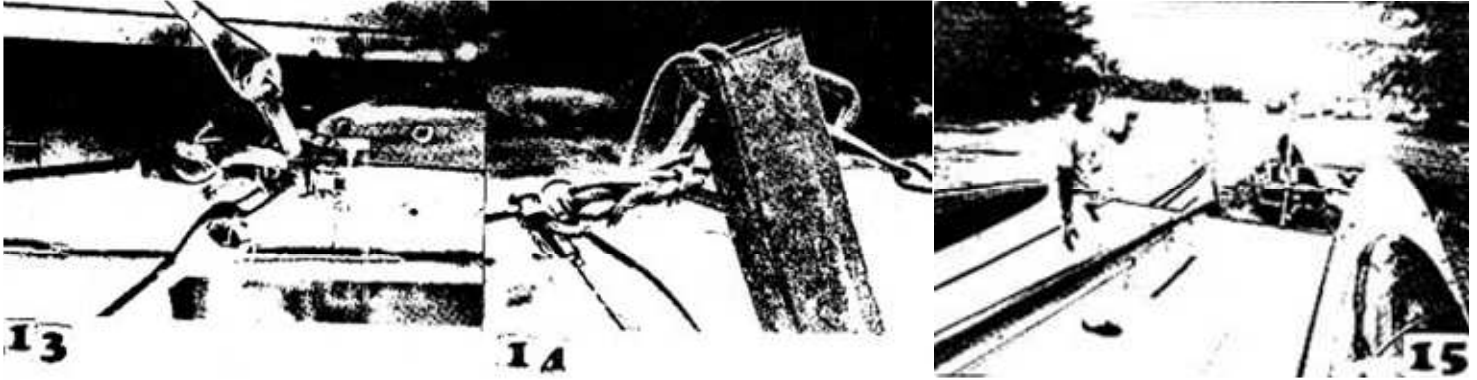
Install dolphin striker by removing the adjuster on the strut and inserting the strut into the hole in the center of the main beam. (Photo 9) Be certain that the spacer remains in position between the mast support ball and the main beam. Slide the out board ends of the dolphin striker strap into position on the dolphin striker taper pins. (Photo 10) After screwing the adjuster back into the strut, remove the keeper ring and insert the end of the adjuster into the hole in the dolphin striker strap. (Photo 11) Replace keeper ring. Adjustment of the dolphin striker takes place later in the sequence.

**CAUTION:** The next step is to raise the mast, but before doing so it is necessary to secure the boat to the trailer in such a manner that the boat cannot slide forward. Securing a line or hold-down strap between the daggerboard support bracket and an aft cross member on the trailer frame as shown in photo 12 will restrain the tendency of the boat to move forward brought about by raising or lowering the mast. Attach shrouds and forestay to mast hound using the shackle provided. Be certain the forestay is in the middle between the two shrouds. The head of all shackle pins should be pointed away from the mast as in photo 13 to prevent them from scarring the mast.

**CAUTION:** After securely tightening, be sure that all four shackles are safety wired.

Attach the topping lift at the top of mast to the pin that separates the main halyard sheave cheek plates and tie off the other end temporarily to the mast rotator or anything convenient at the bottom of the mast. Be sure that all halyard shackles are secured at the **bottom** of the mast.

Step mast base on to the mast support ball and support aft end of mast with the rear mast stanchion off the trailer at a point about 15-20 feet behind the boat. Do not allow the mast to slide art off the mast support ball at this point or scratching the cockpit may result. Angling the stanchion toward the mast base will help keep the mast step safely on the support ball. Secure lower shroud shackles to chain plates and pass the shrouds over the canopies so they remain inboard. Close and latch canopies and insure that the shrouds will not get caught on anything while raising the mast. Raise the gin pole on the trailer to the vertical position and attach 0-ring in forestay bridle to aft side of gin pole. Use several wraps of heavy line tied securely as the strain here is great. (Photo 14) Attach winch cable to forward side of gin pole.



**CAUTION:** Before Proceeding to raise mast check the following:

- **ARE OVERHEAD WIRES OR TALL LIMBS IN THE VICINITY? ALLOW A MINIMUM OF 50 FEET CLEARANCE IN ALL DIRECTIONS.**
- Is the line or strap restraining boat from moving forward on trailer attached?
- Are shrouds and forestay in proper alignment at hound?
- Are all shackles properly aligned - not twisted? Are they safety wired?
- Are shrouds free from any possible entanglement while mast is being raised? Are they attached at chain plates?
- Are halyard shackles and topping lift secured temporarily at bottom of mast?
- Is the line between 0-ring and gin pole secure? Is the ratchet securely engaged on the trailer winch?

After taking the above precautions you are ready to raise the mast With one person standing in the cockpit guiding the mast and one person operating the winch, simply winch the mast up to its vertical position. (Photos 15 & 16) Attach forestay bridle to chain plates with the shackles provided. You may have to extend the forestay turnbuckle to accomplish this. Make sure the ring in the bridle is on the aft side of the toggle. Once the bridle is attached you may release the gin pole.

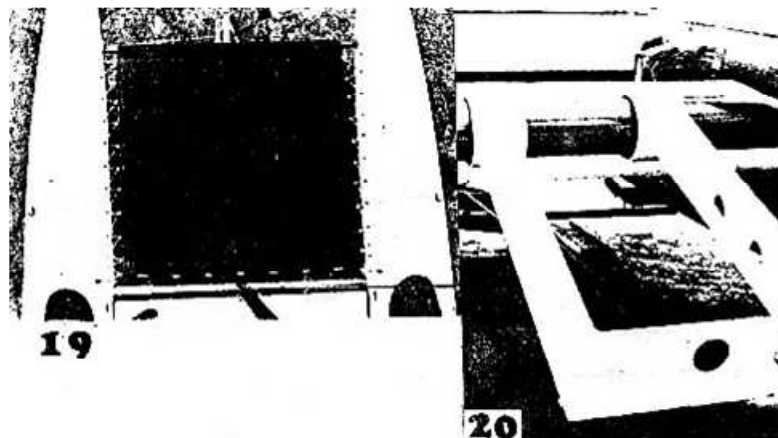
Insert the compression tube into the sleeve in the leading edge of the safety net. (The forward sleeve of the trampoline is the one that does not have any holes cut out.) Then, with the port side (end without notch) of the compression tube fitted over the compression tube socket, slide the starboard side on to the lower flange as shown in photo 17 and rotate the com pression tube 90° Slide the tube straight up, over the top flange (Photo 18) then rotate the compression tube 180° so that the cut-out on the tube points straight down.



You will probably have to force the hulls apart slightly to get the compression tube started on the socket. Tighten the headstay until the rig is snug. The standing rigging should always be kept tight; the mast should be relatively plumb. After sailing awhile you may need to move the shrouds down a notch in the adjusters to compensate for wire stretch. Now is a good time to adjust the dolphin striker. The purpose of the dolphin striker is to accept some of the compression loading from the mast and transfer that load back to the outboard end of the main beam. The dolphin striker is essentially superfluous except under the most severe conditions of high wind and seas and a heavily laden boat. Therefore, the dolphin striker should be adjusted to where it is just snug while the boat is static. Starting with the dolphin striker adjuster screw (#5 in photo) in the full up position, back the adjuster screw out (turn counterclockwise) until the adjuster is snug against the strap (#4). Then simply tighten the lock nut (#2) against the dolphin striker rod (#1) to secure the adjuster in its proper position. You may need to readjust the dolphin striker from time to time to maintain the proper tension. Complete the attachment of the forward safety net by inserting the length of 1" PVC tubing into the sleeve in the aft end of the net; a short piece of line tying the PVC tube to the mast step holding the trampoline roughly in place will speed the lacing operation. Then lace the safety net into place by starting with a knot at the bridle chain plate and threading the lace line aft through the loops along the side of the safety net. Hook the lace line at the appropriate intervals, over the lash hooks mounted on the deck. At the *aft* end, the lace line should be wound in large loops around the forward torsion tube and around the piece of PVC tubing. The bitter end of the lace line should be tied off temporarily at the mast support rod. Follow the same procedure at the other side of the safety net tightening and centering the net as you go. Stretch everything tight and tie the two ends of the lace lines together around the mast support rod. When completed your safety net installation should appear as in photo 19. You will probably find it necessary to retighten the lace lines another time as everything stretches a little the first few times you use the safety net.

**CAUTION:** During this lacing most people are preoccupied with the trampoline and walk into the greased arms of the trailer or pull the tramp lines through the grease.

Install the outboard motor bracket by positioning it over the mounting holes in the center of the aft torsion tube and dropping in the stainless steel quick pins as shown in photo 20. Be sure to insert the hitch pins (safety pins) into the bottom of the quick pins. Your motor can now be mounted on the bracket - be sure to tilt the motor up for launching.

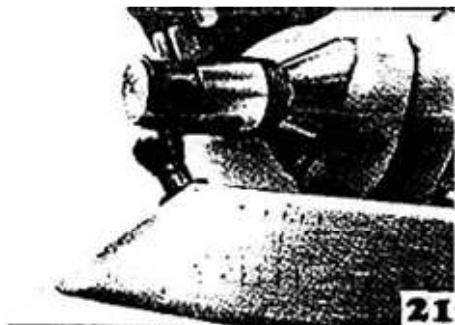


Install the rudders by dropping the pintles into the gudgeons. Note that there is a port rudder and starboard rudder as indicated by tiller angle. When properly installed, both tillers will point in toward the mast. Be sure to insert the clevis pin into the pintle pin once the rudder is in position. This will prevent the pintles from accidentally coming out of the gudgeons.

Install the tiller cross arm by sliding the sleeve on the slip joint and inserting it over the ball as shown in photo 21. The slip joints must be kept lubricated.

Install boom by dropping 1/4" bolt into the gooseneck fitting and tightening the self-locking nut. Do not overtighten this bolt - the gooseneck must swivel freely. Attach topping lift to eyestay at outboard end of boom. Attach mast rotator line between shackle on mast rotator and eyestay on boom and adjust line so that the mast can rotate approximately 30° 40° out of alignment with the boom.

Install traveler by removing an end-stop on the traveler track and sliding traveler car on to the track. replace end-stop and reeve traveler line according to diagram 21.

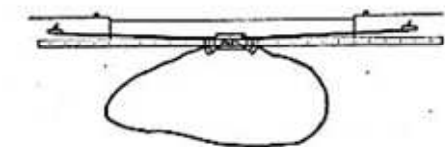


Install mainsheet by shackling the triple block to the pigtail at the outboard end of the boom. Shackle ratchet block to traveler car and reeve mainsheet between the two as in photo 22.

Install jib sheets by attaching jib blocks with stand up spring to jib car. Then tie the two bullet blocks to the jib tag line with a bowline. Temporarily tie the other end of the jib tag line to the 0-ring in the headstay bridle.

Thread the continuous jib according to diagram 23 by tying off at becket on one jib block, passing through bullet block and back through the jib block, then over through the other jib block, up to the other bullet block and back to the becket.

Attach optional reacher bridle by shackling it to the forward-most padeyes. The reacher tack adjustment line attach under the drum of the roller-furler (or to the snap shackle if you don't have furling gear) and lead through the blocks at the outboard ends of the bridle, aft along the sheer to the clam cleats on deck near the forward corner of the cockpit. The reacher sheets are lead from the clew aft (passing outside the shrouds) to the stand up blocks on the after deck and forward to the cheek blocks on deck then inboard to the cam cleats near the forward corners of the cockpit. The optional genoa bridle attaches by either lacing or shackling it between the padeyes at the base of the forestay bridle.



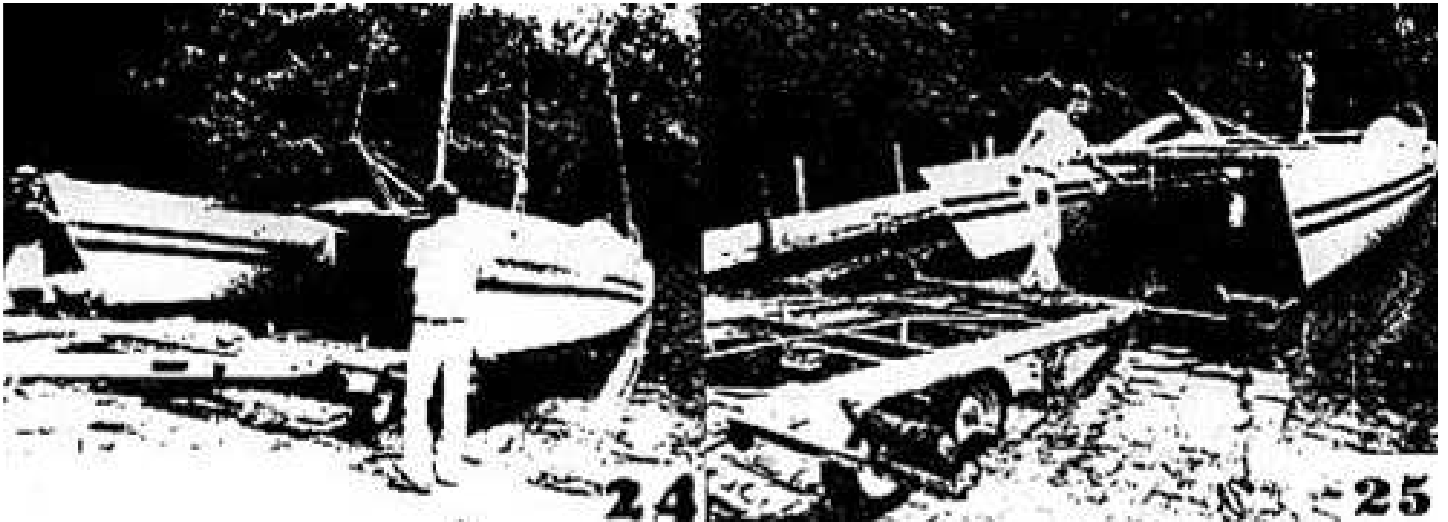
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The cunningham (downhaul) is reeved by tying one end to the eyestay on the mast, passing it up through the grommet in the mainsail, down through the cheek block located under the mast rotator, up through the cunningham grommet again and down to the clam cleat on the other side of the mast. With daggerboard and sails lying in the forward safety net - STILETTO is now ready for launching. Drive slowly and carefully to launch ramp being cautious of overhead wires and obstructions. A line or the winch cable should be secured between boat and trailer to prevent the boat from rolling off the trailer prematurely. You may or may not want to tilt the trailer, depending on the angle of the ramp. Simply back the trailer in until the aft trailer wheels touch the water and guide the boat off, keeping it in alignment with the trailer to avoid scratching the boat on the trailer. (Photos 24 & 25)

When recovering the boat a stout line should be tied to the main beam (**not** to the dolphin striker rod) and run forward under the trampoline. The trailer winch cable can then be hooked into a knot at the end of this line insuring a safe attachment to the boat that won't mar the paint on the main beam. Then, simply release the tilt mechanism and winch the boat back on to the trailer keeping it aligned so as not to scratch anything.



## Check List

1. Unstrap boat from trailer.
2. Lift mast off, set aside.
3. Lift cockpit off, set aside.
4. Remove rear mast stanchion.
5. Unfasten winch cable.
6. Slide boat back about a foot.
7. Pull pins on trailer on one side.
8. Slide that side partially out.
9. Re-insert trailer pins.
10. Slide that side the rest of the way out.
11. Insert vertical taper pins that side.
12. repeat 7-11 for the other side.
13. Set cockpit in place.
14. Insert horizontal pins all around.
15. Install dolphin striker.
16. Strap boat to trailer to restrain it from moving forward.
17. Shackle stays to mast1 headstay in center, shackle pins pointing outward.
18. Safety wire shackles. Pull halyards down, attach topping lift.
19. Place mast on ball, shackle shrouds to chain plates.
20. Tie headstay and hook trailer cable to lever arm.
21. Be certain that the shrouds are clear of obstructions (e.g. canopy latches).
22. **CAUTION:** BEWARE OF OVERHEAD WIRES AND OBSTRUCTIONS.
23. Raise mast.
24. Shackle bridle wires to padeyes.
25. Release cable, and lever arm.
26. Remove strap securing boat to trailer.
27. Insert compression tube into sleeve on leading edge of trampoline.
28. Install compression tube, lace trampoline.
29. Tighten turnbuckle on headstay..
30. Install boom, motor mount, rudders, running rigging, etc.
31. Launch boat - BEWARE OF OVERHEAD OBSTRUCTIONS.