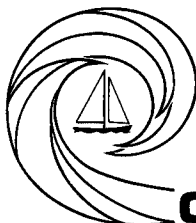
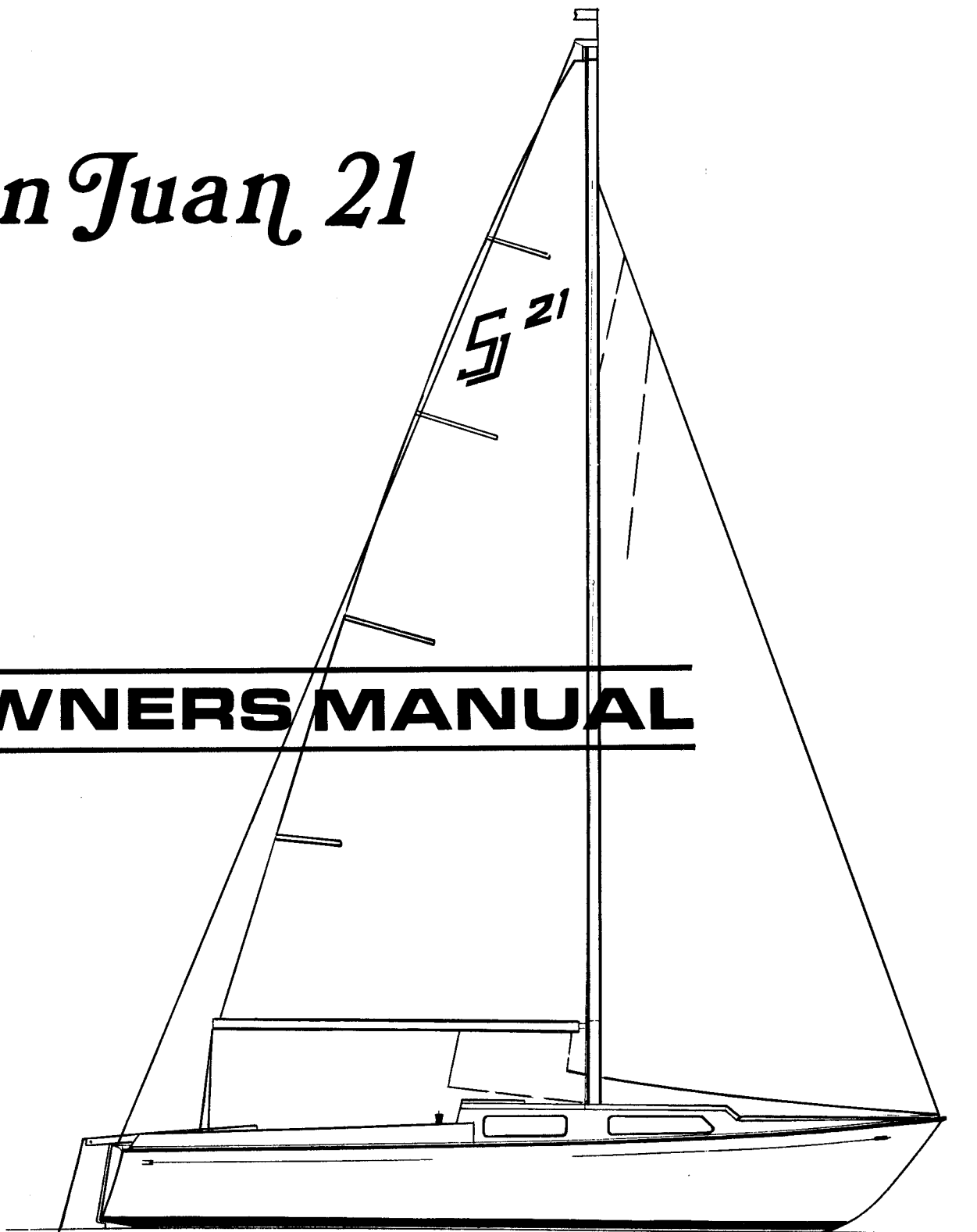


San Juan 21

OWNERS MANUAL

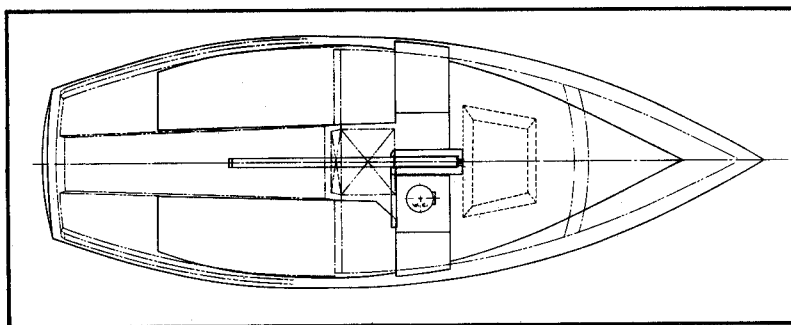


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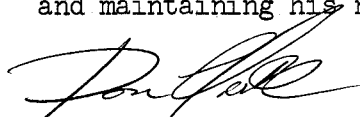
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INDEX

| | Page |
|-------------------------------|-------|
| I. TRAILER HOOKUP | 1 |
| II. RIGGING AND LAUNCHING | 2 |
| III. RIGGING FOR SAIL | 3 |
| IV. HAUL OUT PROCEEDURE | 4 |
| V. MAINTENANCE | 4 & 5 |
| VI MAST TUNE AND SAILING TIPS | 6 & 7 |
| VII WARRANTEE | 8 |



Congratulations on your purchase of the San Juan 21. Built by racing sailors the San Juan is of the same high quality as all Clark Boats. With a minimum of maintenance, your San Juan will provide years of sailing pleasure. This booklet is designed to give the new owner useful information about rigging and maintaining his new boat.


Don Clark, Designer

I. TRAILER HOOK-UP

IMPORTANT: To prevent trailer damage to the hull, trailer boat only with normal sailing gear stowed inside to prevent excessive weight on the trailer bunk supports. When loading your San Juan 21, be sure all gear is stowed properly to avoid damage by shifting around.

A. TRAILER HITCH WEIGHT

The weight at the tongue of the trailer should be 100-125 lbs. for proper balance and steering. Minor adjustments can sometimes be made by moving any gear stowed inside. Major adjustments should not be necessary but are accomplished by shifting the bow support and/or moving the adjustable axle.

B. CHECKLIST BEFORE TRAILERING

1. Hook up to car
 - a) Safety chains connected
 - b) Lights connected and working
 - c) Bolt for tilt tongue tight and horizontal
2. Bow snug in bow chock - winch line tight and locked
3. Weight of keel resting on trailer with keel lift wire slack
4. Proper stowage of gear
5. Main hatch and companionway closed
6. Mast secured with legal overhang
7. All rigging secured
8. Aft tie down secured

- NOTE:
- a) Trailer hitch ball is 1 7/8"
 - b) Trailer tires inflated to 32 P.S.I.
 - c) Keep trailer bearing lubricated

DRIVE CAREFULLY

A car pulling a boat trailer has its mobility, and its ability to avoid an accident, seriously reduced. The principles of defensive driving which are always important, become critical when you're pulling a boat trailer.

II RIGGING AND LAUNCHING

Before launching, park on level spot to rig your San Juan. Also check to see there are no overhead wires between you and the launch ramp. Clearance required after stepping mast is approx. 34 feet.

A. STEPPING THE MAST

1. Remove from mast supports and walk it aft until you are able to match the mast step hinge to the deck plate. Pin in position with the mast resting on rear support. Make sure mast hing pin is cottered on both sides.
2. Check that all halyards are free and cleated.
3. Check that the backstay, uppers and lowers are connected to their chainplates and that the turnbuckles are lying aft of chainplates. Normally these will be left connected for trailering.
4. One person "walks" the mast up from inside the cockpit as another pulls on the forestay from the foredeck. This operation can be done eliminating the second person. However, the jib or spinnaker halyard must be used as a temporary forestay until the person stepping the mast can move forward to secure the forestay. Watch carefully for fouled rigging and turnbuckles while walking up the mast.
5. After connecting forestay, tighten to same tension as backstay and tighten the lock nuts.
6. Before sailing it is recommended that the locknuts on turnbuckles be checked for tightness.

B. RIGGING THE BOOM

1. Gooseneck fitting slips into the mast groove.
2. Clip the boom holder from the backstay to the end of the boom.
3. Rig the mainsheet by starting with a bowline on the becket block running through the lower sheave on the fiddle block on the end of the boom then through the single block and back through the becket block and to the main cam.
4. Attach the boom vang with the shackle provided.

C. LAUNCHING PROCEEDURE

1. Winch keel up fully
2. Remove all tie downs
3. De-mount light bar
4. Attach bow line
5. Back down ramp until axle of trailer just clears the water

SET PARKING BRAKE

6. Remove bolt handle on tilting device.
7. Slack bow winch and muscle assist launch if necessary
8. Before removing trailer, remember to replace the bolt handle for the tilting device.

III RIGGING FOR SAIL

A. LOWER THE KEEL AND PIN IN POSITION

B. ATTACH TILLER TO RUDDER AND HANG RUDDER ON TRANSOM FITTINGS.

C. RIG SAILS

1. Working jib - shackle tack to bow tang. Then snap sail to forestay and attach halyard shackle to head of sail. Check to see that jib halyard is not fouled. Lead jib sheets through blocks on cabin top then through fairleads to the cleats at rear of cabin top.

2. Genoa Jib - The genoa is rigged the same as the working jib, except that the sheets are lead outside the shrouds to the genoa tracks along the cockpit sides.

3. Main - Slide the foot of the sail into the boom. Secure the tack at the gooseneck and connect the outhaul. The outhaul runs from forward hole in end of boom through clew grommet back through aft hole in boom end and then to cleat. Start head feeding into mast groove then connect main halyard.

Insert battens - thin end first.

Sails are now ready for hoisting. When hoisting the main, hoist completely then cleat. When hoisting the jib, use the halyard block to obtain a purchase to get a good luff tension. ALWAYS HOIST SAILS WITH BOAT HEAD TO WIND.

IMPORTANT NOTE

Under sail the keel can be safely raised and pinned up to halfway. Never sail with the keel pin out or with the keel more than halfway up as there could be danger of swamping or capsizing.

IV HAUL - OUT PROCEDURE

Basically the haul out is the same as the previous instructions in reverse. When hauling the boat on to the trailer care must be taken that the boat remains centered. Also remember to let the keel down to rest on the trailer before trailering.

V. MAINTAINANCE

A. MAST AND BOOM

The mast and boom of your San Juan 21 are anodized to give the aluminum protection from salt spray and natural elements. It is good to tie all halyards and shrouds away from the mast while trailering and mooring to prevent chafing the anodized finish. Washing with a waterhose after sailing in salt water is a good practice. A clean mast and rigging helps keep sails clean so wipe road dirt etc. off before stepping the mast.

B. RIGGING

Standing rigging should be inspected periodically for broken strands or loose bolts and clevis pins. Also check turnbuckle barrel locknuts for tightness. Keep the spreader tips well taped to prevent damage to the sails.

Running rigging may become stiff with dirt and salt after use. This can be remedied by washing in light detergent or flushing with a gardenhose,

Always tie a figure eight knot in the ends of the sheets to prevent them from coming out of blocks or fairleads.

C. FITTINGS.

All fittings are stainless steel, aluminum or plastic. All good quality stainless has a slight amount of carbon steel in the alloy, therefore, you may notice a slight rust film occasionally. This will clean up with soap and water and occasionally a mild abrasive soap such as ajax or comet can be employed. A good boat wash after salt water sailing will help keep your fittings looking like new.

D. KEEL MECHANISM

Periodically inspect the keel wire for wear or broken strands. Replace at the first sign of any damage. Always replace with Stainless Steel 5/32" 7 x 19 flexible cable. The replacement can be carried out easily with the boat on the trailer or laid over on a sandy beach. The mast post and keel brace inside the cabin is anodized aluminum and should need little care. Check the miharta sheaves periodically to see that they turn freely under load. Remember while sailing keep the load off the keel wire and winch and keep the keel pin inserted.

E. FIBERGLASS SURFACES

Although your San Juan fiberglass surfaces are maintenance free a little care is needed to keep the boat in like new condition. Frequent washings with soap and water will keep abrasive dirt and salts off the hull and deck (which helps also to keep sails clean). A good paste wax applied at least twice a year will preserve the gloss and help prevent oxidation. Remember strong detergents and abrasive cleaners remove wax so be sure to re-wax after their use.

F. TEAKWOOD CARE

Many sailors prefer to leave their teakwood 'bleach' and thus do nothing for maintenance. To preserve the oiled finish however, it is necessary to re-oil the teak with a good teak oil such as Watco or Tung oil whenever it becomes noticeably weathered.

G. CUSHIONS

The cushions are vinyl and may be cleaned with soap and water. Care must be taken to prevent mildew by turning cushions upright when leaving the boat. When boat is out of use for a longer period of time, remove the cushions and store in a dry place.

H. SAILS

Always remove the battens, fold, bag and store sails in a dry location. Never fold wet sails but wait until dry to prevent any possible mildew. Dacron sails can be rinsed free of salt with fresh water, lay them on the grass and rinse with water hose. Never iron sails to remove the wrinkles.

VI. MAST TUNE AND SAILING HINTS

A. MAST RAKE

1. Adjust forestay so that mast has approx. 6-8" of aft rake. This may be accomplished either on the trailer or in calm water with the keel down. In either case suspend a weight from the main halyard.
 - a) On trailer: Place level on cockpit seats, block trailer tongue until boat is level.
 - b) In water: Lower keel and keep body weight close to hatch opening when measuring.
2. Make pencil marks on the boom 6" and 8" aft of the aft face of the mast.
3. Adjust forestay until main halyard hangs between these pencil marks.
4. Snug up backstay and check mast to ensure you have not overtightened the backstay and "hooked" mast.
5. Recheck rake measurements and redo if necessary.
6. Lock forestay and backstay turnbuckles up tight.

B. SHROUD TENSION

1. Adjust long upper shrouds so that turnbuckles are equally extended and tension is just snug.
2. Adjust lower shrouds so that there is slightly more tension than on the upper shrouds and the mast stands straight with no curvature to either side.
3. Slack off upper shroud turnbuckles 1/2 turn of the turnbuckle barrel.
4. Lock up all 4 shroud turnbuckles.

C. SAILING ADJUSTMENTS.

1. Keel must be fully down for these tests.
2. Take the boat out in a moderate wind with the headsail you will be using the most.
3. Sailing to windward with a moderate amount of heel and with main and jib sheeted fairly well snug there should be the slightest tendency for the boat to head up to windward.
4. If so; your boat may be considered properly tuned and will require either no or only minor adjustments.
5. If you experience more than slight weather helm
 - a) Make certain main is not under sheeted
 - b) Try moving jib or genoa leads forward

contin:

- c) Try tightening outhaul, downhaul and/or cunningham adjustments on the main.
- d) You may be trying to sail in too much wind with the genoa. Try the jib.
- e) Crew weight may not be properly distributed.
- f) Rake mast forward more.
- g) Move mast butt forward on hinge plate
- h) Relocate keel stop roller so keel does not come down quite so far.

NOTE: If any adjustments are made to mast rake or mast butt position the shrouds must be readjusted also.

6. If you experience slight lee helm or neutral helm

- a) Before you panic: The San Juan 21 was designed to sail with the jib in light winds with no or little heel with NEUTRAL or slight lee helm - with the addition of the genoa and a little heel the boat should have a slight weather helm.

7. If you experience excessive Lee Helm

- a) Make certain main is not over sheeted
- b) Try moving jib or genoa leads aft
- c) Try slacking - outhaul, downhaul and/or cunningham adjustments on the main.
- d) You may be trying to sail in too little wind for the jib - try the optional Genoa.
- e) Crew weight may not be properly distributed.
- f) Rake mast aft more.
- g) Move mast butt aft on hinge plate.
- h) Relocate keel stop roller so keel goes down further.

WARRANTEE

All fiberglass sailboats built by Clark Boat Co. are warranted against any defects in workmanship, construction and materials, for a period of one year from date of delivery to either purchaser or original dealer.

Any defect in material, workmanship or construction will be repaired or replaced by Clark Boat Co. at it's factory or any reputable boat Co. designated by Clark Boat Co. upon the owners notification to the company of any defect within one year of date of the original delivery to said owner or dealer.

Clark Boat Co. reserves the right to examine any defective boat to determine whether the warrantee applies.

Said warrantee shall extend only where a boat has been properly used and operated in accordance with factory recommendations or instructions. Any boat or equipment which has been misused, reconstructed, redesigned or changed substantially in any way, or has been damaged as a result of accident or collision whether or not due to owners negligence or which is moved or stored on anything other than a factory approved trailer or cradle is expressly disclaimed from this warrantee.

As pertains to all One-Designed fiberglass boats except unfinished kits they will be guaranteed as to class design, measurement and other class specifications.

This warrantee is exclusive of all spars, rudders, centerboards and sails except that the above items are guaranteed as to measurement as to class specification in the case of One Design Class.



CLARK BOAT CO.

18817 E. VALLEY HIGHWAY, KENT, WASHINGTON 98031 206-226-5171

Please sign the below registration and return to Clark Boat Company within thirty days from purchase.

CLASS MODEL _____ NUMBER _____

DEALER _____

CUSTOMER _____

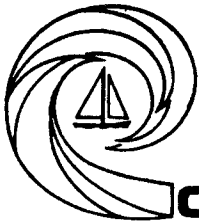
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CITY _____ STATE _____ ZIP _____

DATE OF DELIVERY TO CUSTOMER _____

SAN JUAN 21 PRICE LIST
 REVISED 2/18/72

PRICE RISE EFFECTIVE DEC. 1st 1972 \$2750.00
 (includes the forward hatch.)



CLARK BOAT CO.

EAST — U.S. HIGHWAY 17 SOUTH, NEW BERN, NORTH CAROLINA 28560 919 638-2157

| <u>Description</u> | <u>Cost</u> | <u>Ordered</u> |
|--|-------------|----------------|
| STANDARD BOAT (less sails) Includes vinyl covered berth cushion, sliding hatch, anodized aluminum mast and boom, boom vang gear, stainless steel standing rigging, dacron running rigging and teak trim. Complete and ready to sail, less sails. | \$2595.00 | () |
| FORWARD HATCH | \$ 75.00 | () |
| SAILS-CLARK | | |
| Main | \$ 140.00 | () |
| Jib | \$ 95.00 | () |
| Genoa Jib | \$ 120.00 | () |
| Spinnaker | \$ 165.00 | () |
| SPINNAKER GEAR (including pole) | \$ 135.00 | () |
| WHISKER POLE (same as spinn pole) | \$ 35.00 | () |
| INTERIOR PACKAGE | \$ 150.00 | () |
| Curtains | \$25.00 | () |
| Forward Bow Storage | \$45.00 | () |
| Glove Box | \$25.00 | () |
| Cabin Head Storage | \$60.00 | () |
| MARINE HEAD (self contained) | \$ 112.00 | () |
| BASIN TANK SINK | \$ 45.00 | () |
| GIMBLE STOVE | \$ 29.95 | () |
| MOTOR MOUNT | \$ 30.00 | () |
| CABIN HANDRAILS | \$ 30.00 | () |
| BOW PULPIT | \$ 80.00 | () |
| RUNNING LIGHTS | \$ 50.00 | () |
| SAIL COVER | \$ 38.00 | () |
| KICK UP RUDDER (in lieu of std.) | \$ 50.00 | () |
| GENOA GEAR | | |
| Tracks with adj. lead blocks and with two Seaboard #7200 winches and handle | \$ 125.00 | () |
| WATERLINE STRIPE (moulded in) | \$ 45.00 | () |
| THREE COLOR HULL | \$ 100.00 | () |
| ANTI FOULING BOTTOM MOULDED IN (white only) | \$ 150.00 | () |
| TRAILER | \$ 350.00 | () |
| Tilt tongue extra | \$ 10.00 | () |

HULL COLOR _____ DECK _____ INTERIOR _____

WATERLINE _____ WEBBING _____

DEALER _____ CUSTOMER _____

CUSTOMERS ADDRESS _____

PRICES SUBJECT TO CHANGE WITHOUT NOTICE, FOR PLANT