Access 303

Sailing Dinghy

Owner's Manual

Manufacturer:

Steve Sawford Marine

Registered by:

Access Dinghy Sailing Systems

Index

Introduction

This manual has been compiled to help you to operate your craft with safety and pleasure. It contains details of the craft, the equipment supplied or fitted, its systems, and information on its operation and maintenance. Please read it carefully, and familiarise yourself with the craft before using it.

if this is your first craft, or you are changing to a type of craft you are not familiar with, for your own comfort and safety, please ensure that you obtain handling and operating experience before assuming command of the craft. Your dealer or national sailing federation or yacht club will be pleased to advise you of local sailing schools or competent instructors.

Please keep this manual in a safe place, and hand it over to the new owner when you sell the craft.

Declaration of Conformity

Model:

Hull Identification No:

Sail No:

Design Category D: "Sheltered Waters"

Craft designed for voyages on small lakes, rivers or canals where conditions up to and including wind force 4 and significant wave heights up to and including 0.5mtr may be experienced.

Built by:

Steve Sawford Marine
Lime Grove, 1 Main Street
Loddington Northants NN14 1LA
Telephone: 01536 330477
Mobile: 01832 733540

Using the moulds, parts, and measurements authenticated by the:

Access Dinghy Sailing Systems

Ref:	Essential Safety Requirements	Standard or Documentation Used
2	**General Requirements**	
2.1	Hull Identification No (HIN)	ISO 10087.95 Small Craft Hull Identification Coding System
2.2	Builders Plate	Fitted to craft
2.3	Visibility from steering position	Manufacturers test
2.4	Owner's Manual	Attached
3	**Integrity and Structural Requirements**	
3.1	Structure	In accordance with SSM Builders manual
3.2	Stability and freeboard	Tested by self righting Access Dinghies Sailing Systems
3.3	Buoyancy and flotation	Tested by Access Dinghies Sailing Systems
3.4	Manufacturers recommended load	KG: shown on builders plate
3.5	Towing	Method laid out in manual. Tested by Access Dinghies Sailing Systems
4	**Handling Characteristics**	
4.1	Joystick steering	Tested by Access Dinghies Sailing Systems

Signed: ..... Date: .....

Description of Craft
The Access 303

Specification

Length 303 mtrs.
Beam 1.35 mtrs.
Draft 1mtr.
Weight 90 kg (including 30 kg in the keel).
Maximum number of people: 2.
Maximum weight of people 160 kg.
Maximum weight of additional load 20 kg.

Sail Plan Mainsail and free standing Jib.

Sail Area Mainsail 4.5 sq. mtrs (unbattened and reefable to .5 sq. mtr).
Jib 1 sq. mtr (full roller reefing).

Mast Main Mast (unstayed 4.75 mtr. Incorporating reefing drum in foot).
Jib Mast (unstayed 2.85 mtr. Incorporating reefing drum in foot).

Hull Positive buoyancy.
Heavily rockered for easy manoeuvrability.
Strong construction with solid bonded hull/deck joins.
Seating design keeps helm weight low, plus weighted centre board makes the boat uncapsizable.

Seating Double hammock seat (suitable for two adults).

Controls Steered by manual joystick.
Mainsail is reefed and unreefed by a single hauling line.
Jib is reefed and unreefed by a single hauling line.
Mainsail and Jib controlled by manual mainsheets.

Electric Controls Servo-assist electric controls can be fitted to the Access 303.
The servo-assist drives can be fitted to the helm and to the mainsheet.
The drives are operated by a four way joystick mounted on a console that is strapped to the helm's chest.
The controls are powered by two 12 volt rechargeable batteries. Charger is included.
It is possible to customise electric controls by changing the type and positioning of the joystick or fitting servos to just the mainsheet or just the helm.

General

The boat has an engraved plate fitted to the starboard side of the cockpit, showing the manufacturer, boat design category, maximum person capacity, maximum additional load and the CE Mark.
The parameters shown on this plate should not be exceeded.

Steering is by a manual joystick located between the helm's legs, moving it to the left to go left and to the right to go right.

The sail area can be reduced or increased whilst under way using a reef furling system operated by hauling on a single continuous line. (For further information on reefing see: "How to Rig a 303 Access Dinghy: page 8 of the Manual).

Maintenance

It is recommended that the boat is covered when not in use to prevent UV and other weather damage. A specially designed keel-up cover is available from Steve Sawford Marine for this purpose.

If sails are to be left furled on the boat when not in use it is recommended that these are covered using a protective sail sock to prevent UV and other weather damage. These are available from Steve Sawford Marine.

Do not let water remain in the boat when not in use. This can accelerate the deterioration of running rigging, finishes and electrics where applicable.

Winter Storage: Remove electrics, remove sails and fully cover the boat.

Repairs

Contact Steve Sawford Marine, who will provide the best advice, along with adapted parts or materials for the repairs you can carry out yourselves. Major repairs should preferably be carried out by professionals. Steve Sawford Marine will be able to carry out these repairs if required.

Safety Recommendations

Access Dinghies are designed with a hull form and other features which combine to give considerable stability. There is a simple set of rules which we must follow to continue our excellent safety record and prevent any accidents. The stability of the Access Dinghies are reliant upon the following factors.

Centreboards
It is most important that the keel be fully down when sailing. The hole one third down the keel is there purely to facilitate sailing off a beach, and under no circumstances should people with disabilities be allowed to sail around with the keel held in this position. There is provision to lock the keel fully down so as even in a "knock down" it remains in place.This locking pin must be in the locked position at all times that the boat is sailed by people with disabilities.

Seating
Because the placement of sailor's weight affects stability it is important that people remain seated low in the boat. If a sailor needs support from strapping, use only quick release velcro straps to hold the sailor in place. In no circumstances should any other strap fixings be used.

Reefing
Being a displacement type hull extra sail area in strong winds does not mean more speed, all it does is push the bow too far into the water and make it more difficult to handle. In a breeze it is therefore recommended always to reef to suit the stronger gusts.

Towing
If an Access dinghy needs to be towed on the water by another boat, it is safer and easier to tie the dinghy close along side and remove the rudder blade so that it cannot be "steered" in the wrong direction.

Transferring
A pontoon system which enables safe, keel down transfer of sailors to and from the dinghy is available. Using this avoids off the beach keel handling and transferring problems. It ensures that keels remain down throughout transferring.

Discriminatory Keel and Reefing Adjustments
For safety reasons people with disabilities need the keel down and because many are unable to raise and lower the keel to improve sailing performance and also unable to adjust the size of the sail by reefing, it is discriminatory to allow anyone to make these adjustments during a race.

How to Rig a 303 Access Dinghy

Stepping the Main Mast

1. With the mainsail reefing line knot positioned as far as it will go on the port (left) side.
2. Loosen the knob under the console on the reefing drum
3. Carefully step the mast making sure the foot is firmly in the step.
4. With the sail full tighten the knob to lock the reefing drum onto the mast.

Stepping the Foremast

1. Unhook the headsail reefing line shock cord hook and set up the reefing line in a loop to complete a full turn around the foremast reefing drum.
2. Step the mast, fit the reefing line and re-tension the shockcord.
3. Rotate the mast to move the reefing line knot as far as it will go on the port side but still leave the sail pointing aft.
4. Unroll the sail and reeve the two sheets through their respective fairleads and cleats. NB. Make sure the sheets lead forward of the mainmast.
5. Tie a figure of 8 stopper knot in the end of each sheet.
6. Position the fairleads towards the aft end of the track for a full sail.

Fitting the Boom

1 The boom should be kept tidy with no loose ends.
2 Untie and sort out the two ropes.
3 Position the boat facing into the wind.
4 Push the rowlock at the front end of the boom onto the bobbin.
5 Take the outhaul which runs along the boom and shackle it onto the corner of the sail (called the clew).
6 Pull the sail out to the boom end by pulling the outhaul tail and cleat it at the front end of the boom.
7 Now sort out the other rope, (called the sheet), and shackle it onto the rope traveller which runs across at the stern of the boat.
8 The other end of the sheet passes through the sheave on the forward end of the console. Feed it through so you can work it from the seat.
9 Tie a stopper knot at the end of the sheet.

Reefing the Mainsail: shortening sail area

1. Pull on the port reefing line to reduce sail area
2. Pull the starboard line to increase sail area.
3. Never pull on both at once.
4. Use the white “clamcleats” on the left (port) side of the console to cleat the reefing line or the sail will unroll.
5. You can put one complete turn of sail around the mast without adjusting the outhaul.
6. To reef further the outhaul needs to be released to allow the sail to travel forward along the boom.
7. Conversely, when unreefing, you need to pull on the outhaul.
8. Always recleat the outhaul in its white “clamcleat” positioned on the boom.
9. The idea is not to flatten the sail along the boom as it should have enough slack to form a gentle curve.

Reefing and Furling the Headsail

1. Uncleat the headsail sheets before attempting to reef.
2. Use the port reefing line to reef, the starboard to unreef.
3. Remember to cleat the reefing line (use the "clamcleat on the console port side) or the sail will unroll.
4. Move the sheet fairleads forward on the tracks when sailing with reefed headsail.

The Steering

1. Make sure the steering lines pass under the joystick correctly.
2. Fit the rudder making sure the rope traveller is above the tiller.
3. Remove the spring clip and pass the clevis pin up through the hole at the end of the tiller. Re-insert the clip.
4. Fit the alloy joystick extension.

Launching

1. Pass the bow line(called a painter) through the guide ring at the bow and fasten it around the mast with a bowline (a knot which is always easy to untie).
2. Use the short alloy tube to pin the centreboard up when moving the boat around onshore.
3. Pin the centreboard in the half way position if you need to move the boat around in shallow water.
4. **Do not allow anyone to sail without the centreboard fully down or they may capsize.**
5. Use the long alloy pin to lock the centreboard down.
6. **Never use seat belts or harnesses unless the centreboard is locked down.**

How to operate the Servo Assist Access Dinghy

The Servo Assist Access Dinghy can be sailed both manually and controlled by a variety of joysticks and switches. The basic unit has sheet and helm winches operated by a four way joystick. Push joystick forward for sail out, back for sail in, left for steer left and right for steer right. This standard joystick is typically strapped around the chest and moved by hand, but can also be up high and worked with the chin.

There is also the option of a paddle switch which has very large flaps which activate micro switches. This unit is fully adjustable and mountable in any position, held by suction cups. many people have difficulty with fine finger control, and the paddle switch can be bumped with the wrist or foot, giving very precise commands for both winches.

There is also a four way joystick mounted on a small box which will suit some applications, and a radio control unit which allows the boat to be sailed remotely.

We advise the most electrically inclined club member to take a close interest in the servo assist boat and to maintain it. Remove the electrics now to see how it works. All the parts are easily removed and a set of bungs are supplied to seal up all holes. remove them regularly and spray with water inhibitor. if the electrics are seldom used, don't leave them in the boat to corrode.

Always start off a newcomer with a heavily reefed sail in any sort of breeze. try it yourself to see why. Be careful in gusty conditions. Always have the rescue boat close by a novice sailing an electric boat. It is recommended to assist and instruct from another dinghy sailing nearby.

I**nvariably people have to be strapped into the electric boat.** Never strap someone into a boat unless the centreboard locking pin is inserted through the centreboard handle. Sail from a pontoon if possible.

The boom comes fitted with a sheet for manual use. When the electric sheet winch is used, remove the manual sheet from the boom and reeve the servo assist sheet as a two part only through the block on the traveller with the dead end tied off with a bowline at the block at the boom end. Leave the traveller very long, adjust it's length so the mast won't be over bent if the sheet is over tensioned. In some cases set the reefed sail on a tight reach and disconnect the sheet winch lead plug if the sailor has difficulty controlling the joystick. A lot of fun can be had steering only.

If you want to sail the boat manually while the electrics are fitted, run the sheet nearly right out so there is enough to work by hand, and wind the helm winch drum out to disconnect the dog so the main joystick can also be worked by hand. To re-engage the helm winch, wind in the drum till you feel it loading, then move the joystick and feel the dog engage, then fully wind in the drum.

The control box is very simple, with four relays controlling the four functions. The box is suspended by shock cord under the right arm rest. The battery lead and sheet winch lead run forward and pass through the right lower seat tubes. a simple two hole rubber bung acts as the seal.

The sheet winch lead is held up under the console with a small block of foam. Remove the sheet winch and check its workings. The 8mm allthread can be turned by screwdriver to adjust tension as the rope wears.

There are two 12 volt gel batteries. They will run the boat all day, and should be charged after every day's use. Ideally charge one at a time. The charger will trickle charge overnight. The batteries are lead acid and don't need to be run down. Never run them down. Keep them charged.

The helm winch and joystick leads run aft from the control box. The joystick lead and plug can pass through the seat under the tube to keep them out of any water. The helm winch can be removed through the inspection port. it fits when you hold it correctly. Adjust the steering lines at the joystick and at the fitting at the tiller to centralise the steering when needed. Keep it on the tight side.

The electrics are very simple and robust, but not water or fool proof. They will however last for many years if cared for and not just ignored. remove everything and spray it if the boat is flooded. Make sure the control box is suspended properly and not lying vulnerably in the bilge.

Encourage everyone to use the electric boat, as it is a lot of fun. Don't stigmatise the boats as only for people with a disability. All disabled people have relatives and friends who also want to sail. Use the boat in the club's everyday training programme. Non sailors love them, and you will find that club membership will grow.

Guarantee

If you need any help to resolve any problems with the boat, contact:

Steve Sawford Marine
Lime Grove
1 Main Street
Loddington
Northants
NN14 1LA
Tel: 01536 330477
01832 733540

Terms of Guarantee

1 This guarantee is valid for a period of 12 months from the date of purchase from Steve Sawford Marine.

2 If any part or parts of the boat, including the rigging and fittings, is proved to be defective by reason of faulty design, workmanship or materials, we undertake to repair or replace the same free of charge, upon the following conditions:

3 (a) This guarantee applies only to the original boat and fittings, and not to any subsequent alterations, repairs or renewals.
(b) That, if at any time during the guarantee period, any parts are altered or repaired by any person not authorised by us, then this guarantee will immediately cease and become void concerning that part, or any other part affected by the work.
(c) That our decision on all questions relating to any defect shall be conclusive.
(d) That any part which has been replaced shall become our property.
(e) This guarantee specifically excludes damage resulting from external impact.

None of the terms of this guarantee effect your statutory rights.

Name: .....
Address: .....
Owner of Access Dinghy .....
Sail No: .....
HIN No: .....

is covered by the guarantee conditions displayed (above) in this Owner's Manual, delivered with this craft.

This guarantee begins ..... (date)

Signature for Steve Sawford Marine .....

Change of Ownership

Please ensure this Owner's Manual is handed to the new owner as it contains safety information that is of great importance to the new owner and is essential to compliance with the EU Recreational Craft Directive.

The Access Dinghy Sailing Association is hoping to keep a continuous register of all Access Dinghies. Your boat has been registered with them under your name and address. In order to enable us to keep this register up to date it would be very helpful if you could inform us of any change of ownership.

The form below is provided for you to photocopy and use to give us this information if you sell the boat.

Please photocopy or copy:
Do not cut this form out of the manual.

Change of Ownership Form

Model:

Sail No:

Hull Identification No:

New Owner:

Name: .....

Address .....
.....
.....
.....

Phone No: .....

Please send completed **copy** of this form to:

Steve Sawford Marine
Lime Grove, 1 Main Street
Loddington,
Northants,
NN14 1LA

Access 303
Sailing Dinghy

Owner's Manual

Manufacturer:

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