

Sail No:

Liberty

Owner's Manual



Manufactured by
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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.

Personal Floatation Devices (PFD's)

There are many types and variety of buoyancy aids available, manufactured to different sets of standards. The PFD is a personal item of safety equipment, designed specifically to assist in preserving a person's life when in the water. Some PFD's provides buoyancy to help you float with your head above the water.

All sailors and volunteers should wear a PFD at all times whilst on, or near water.

PFD's are subject to normal wear and tear. Each one should be checked regularly and if in doubt about its serviceability it should be replaced. If they become wet from salt water they should be hosed down with fresh water and allowed to dry.

PFD's and Children

A properly designed PFD of the correct size will keep a child's mouth and nose clear of the water. A child should be taught how to put on a device and should be allowed to try it out in the water. It is important that the child feels comfortable and knows what the PFD is for and how it functions.

Safety Precautions

If sailed with care, this boat is unlikely to capsize in normal use, provided that the sail area is adjusted to suit the prevailing conditions and the main sheet is not belayed. Whilst Hansa sailing craft have inherent design features ensuring maximum stability thereby reducing the chance of capsize, it should be remembered that these are small sailing vessels and under certain weather, water and sailing conditions sensible precautions should be taken :

- Always reef the sails according to the weather conditions.
- Always have a manned safety boat in the sailing area.
- Always cancel sailing activities if inclement weather conditions dictate.
- **Always lock keel in position with long keel locking pin provided.**

Capsize and Man Overboard

Re-boarding after man overboard. In the event of man overboard, use keel handle as a handhold. Board over the aft port or starboard sides.

Towing

The strong point for towing is the main mast. Pass the tow line through the guide ring at the bow and attach to the mast with a bowline.

The safety of the sailors should come first under all circumstances.

Description of Craft
The Liberty

Specification

Length	3.6 mtrs.
Beam	1.35 mtrs.
Draft	1mtr.
Boat Weight	72 kg Maximum number of people: 1. Maximum weight of people 120 kg. Maximum weight of additional load 30 kg.
Keel Weight	72 kg
Sail Plan	Mainsail and free standing, ` self tacking Jib.
Sail Area	Mainsail 4.5 sq. mtrs (unbattened and reefable to .5 sq. mtr). Jib 1.75 sq. mtr (full roller reefing).
Mast	Main Mast (unstayed 5.6 mtr. Incorporating reefing drum in foot). Jib Mast (unstayed 3.5 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	Fibreglass adjustable seat.
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 Liberty.

General

The boat has an engraved plate fitted on the starboard side of forward 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 2.3": page 10 of the Manual).

Included with your Liberty is:

- | | |
|-----------------------------|--------------------------------|
| 1. Liberty | 11. Foresail (Jib) |
| 2. Main Mast | 12. Bobbin |
| 3. Fore Mast | 13. Mainsheet |
| 4. Boom | 14. Outhaul |
| 5. Keel | 15. Traveller |
| 6. Rudders x 2 | 16. Painter |
| 7. Rubber Box x 2 | 17. Jib Sheet with clew sheave |
| 8. Rudder Box Pin x 2 | 18. Jib strut downhaul |
| 9. Installed reefing system | 19. Jib Strut and Claw |
| 10. Mainsail | 20. Boom vang |

ITEMS WITH SERVO ASSIST

Installed:

main sheet winch
jib sheet winch
helm winch
control box
rubber bungs

Plus:

Batteries x 2,
Battery Y Connector,
Battery Charger (if 240V),
Controller
Controller holder

Maintenance

It is recommended that the boat is covered when not in use to prevent UV and other weather damage. A specially designed cover is available from Hansa Sailing Systems 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 Hansa Sailing Systems.

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 Hansa Sailing Systems, 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.

Safety Recommendations

Hansa boats 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 Hansa boats are reliant upon the following factors.

Keels

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.

The Liberty keel weighs 72kg and therefore must not be lifted manually. Always use a hoist to place the keel into position.

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 a Hansa boat needs to be towed on the water by another boat, it is safer and easier to tie the boat 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 boat 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.

Liberty Special Features

1. The Liberty has 2 rudders which give directional control at even extreme angles of heel.

Fig 1



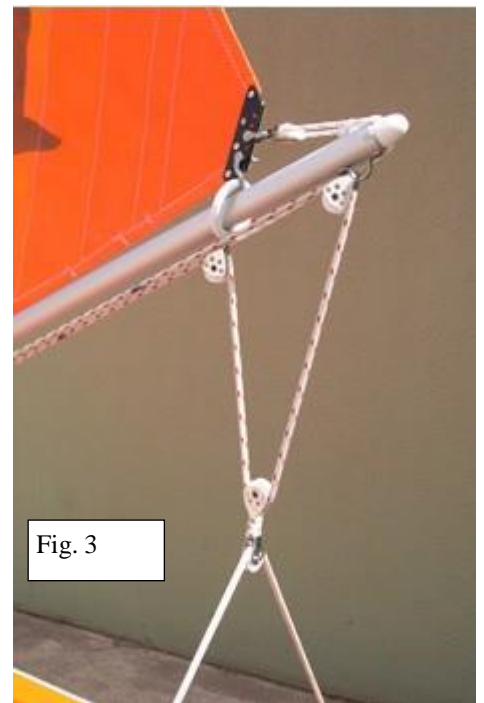
2. There is the option of fitting a boom with a 3 part manual mainsheet, rigged as per the 303W, (fig 2)

Fig. 2



or a 2 part double ended mainsheet (fig 3), one end going to a servo assist sheet winch and the other through a conventional swivel/deadeye/camcleat for manual operation, (fig 4)

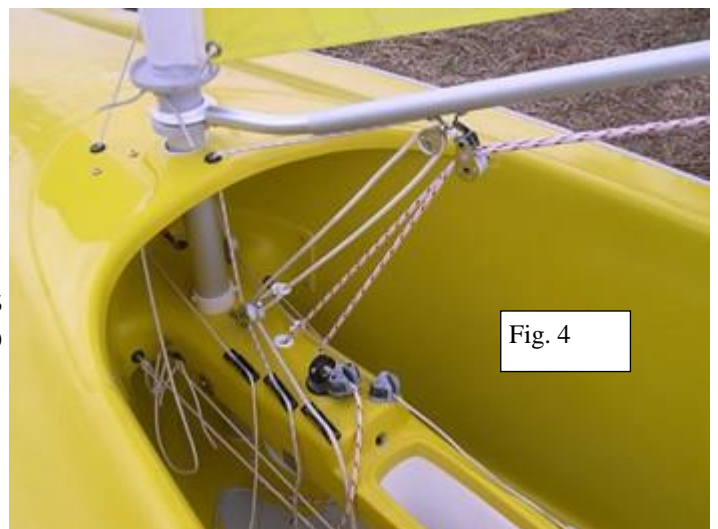
Fig. 3



Both these ends pass through a double block attached to the boom about 400mm back from the mast. (see fig 4)

3. A boom vang is fitted which prevents the boom skying when running in fresh to strong winds. (see fig 4)

Fig. 4



4. The mainsail outhaul primarily cleats at the boom, (fig 5) but passes thru a deckeye just behind the main mast, down to the console and turns through the boom vang/outhaul double bucket block and back to the central of the 3 clamcleats on the port side of the console. (fig 6)



Fig. 5



Fig. 6

5. The jib is self tacking with a diagonal strut between the clew and a claw at the mast which holds the jib flat and prevents twisting as the sheet is eased. (fig 7, view)



Fig. 7



Fig. 8

6. The jib sheet is 2 part which gives the option of one end going to a servo assist winch and the other down to the camcleat on the starboard side of the console for manual operation. (fig 8 shows the jib sheet winch behind mast, jib sheet and camcleat).

7. The Liberty has a solid seat designed to take cushions and padding to suit individual needs. The adjustable backrests are available in short and long versions. Thoracic supports, headrests and various types of seat belts are available. (fig 34 & 35)

If fig 34 is in B&W the yellow cross-over shoulder straps will be hard to see.



Fig. 34



Fig. 35

Rigging the Liberty

1. STEPPING THE MAINMAST, FITTING THE BOOM.

1.1 With the sail rolled and tied up, bobbin in place tied to the tack of the sail (fig 9), carefully step the mainmast making sure the foot is firmly in the step.

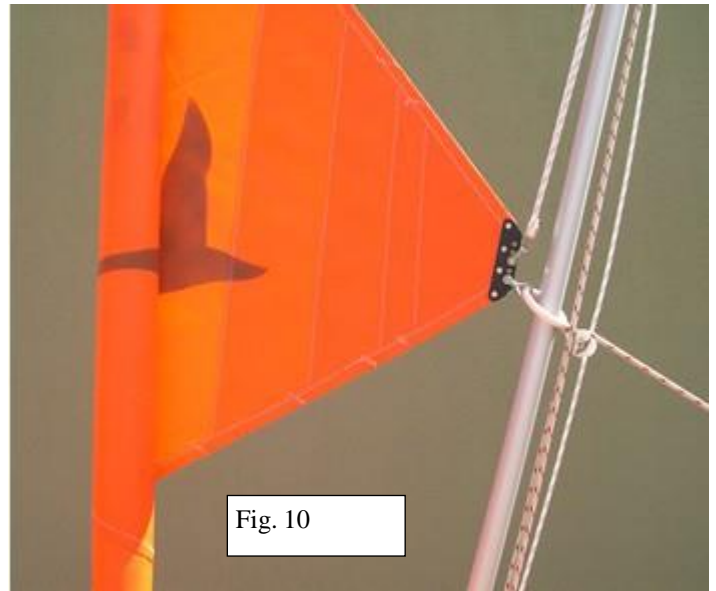
Fig. 9



1.2 Take the boom, free its outhaul and sheet, pull the outhaul block and traveling ring as far forward as it will go, then shackle the traveling ring onto the lowest hole of the clew board, and shackle the outhaul to the central hole of the clew board. (fig 10)

1.3 Unroll the mainsail (about 5 turns) until the rowlock at the front end of the boom can be pushed onto the bobbin.

1.4 Then pull the sail out tight with the outhaul. Cleat the outhaul on the boom. (see fig 5—page 10)



1.5 Run the outhaul through the deck eye in the cowling just aft of the main mast, down through the deadeye on the console just aft of the mast, then back to the black clam cleat on the console port side. Pull on the outhaul, but cleat it at the white clam cleat on the starboard side of the boom. (see fig 4—page 3)

1.6 Pass the boom vang through its block on the boom and back through its block on the console just aft of the mast and cleat it at the furthest aft of the 3 black clamcleats on the port side of the console. Do not overtension the boom vang, it is there to prevent the boom skying when running downwind in fresh to strong winds, not to flatten the mainsail when going to windward. (see fig 4- page 9).

1.7 If the boat is to be sailed manually, and has a 3 part sheet fitted to the boom, use the following procedure.

a) Unravel the sheet, clear any twists and shackle its block onto the traveler and rig as per fig 2—page 9.

b) Pass the live end of the sheet through the deadeye and camcleat on the console and tie a figure of eight knot in its end.

1.8 If the boat is to be sailed servo assist and has the sheet on its winch and a bare boom, unravel the mainsheet which comes up through the console from the sheet winch then: (as per figs. 3 & 4—page 9)

a) pass its end through the right side of the double block on the boom,

b) then through the plastic guide-ring half way along the boom,

c) then through the first of the blocks towards the end of the boom,

d) then down and through the block on the traveler,

e) then back up and through the block at the end of the boom,

f) then again through the plastic guide-ring, and then through the right side of the double block,

g) and then down through the fairlead and cam cleat on the centre of the console.

h) tie a stopper knot in its end. If there was not enough rope for this operation set up the servo assist electrics and feed out sufficient rope. (see 3.1 on page 15)

1.9 Rotate the mast to fully unroll the sail, haul in on the outhaul and cleat it, pull the starboard reefing line till its knot is as far as it will go on the port side, then tighten the reefing drum clamp. (The reefing drum clamp is under the console and as per fig 11). If full sail is not needed at this time release the outhaul and pull the port side reefing line till its knot stops at the starboard side, cleat the reefing line on the port side aft of the console, then haul on and cleat the outhaul. (fig 12, reefing lines)

Fig. 11



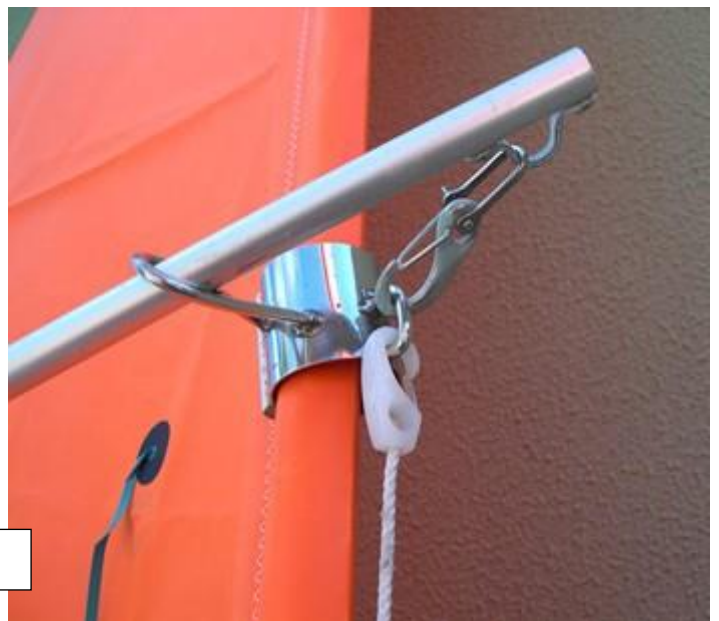
Fig. 12



2. STEPPING THE FOREMAST.

2.1 Before stepping the mast, unroll the sail, fit the claw and strut, then attach the strut to the claw with the stainless steel spring hook. (as per fig. 7- page 10; fig. 9—page 11 & fig. 13)

Fig. 13



2.2 At the bow pull the port side jib reefing line till its knot is at its stop hard up on the port side of the console in the cockpit. (see fig 12- page 13, reefing lines)

2.3 Unhook the jib reefing line tension shock cord hook (located on back bulk-head behind the seat) and set up the reefing line in a loop to complete a full turn around the foremast reefing drum. (fig 14, view of loop)



Fig. 14

2.4 Step the mast, fit the reefing line and re-tension the shockcord. (fig 15)



Fig. 15

2.5 Presuming the jib sheet block is shackled to the bottom hole of the clewboard, feed the sheet through the block and down through the deckeye to the turning block, then thru the deadeye and the cam cleat, then tie a stopper knot in its end. (see fig. 8—page 10 & fig. 9—page 11).

2.6 At the bow is the jib strut downhaul, free it and attach its plastic hook to the lug on the front of the claw. (fig 13—page 13).

2.6 Pull in on the downhaul (located on the left side of the console) and cleat it on the most forward of the 2 black clamcleats. (fig 6 on page 10)

2.7 Check the manual operation of the jib sheet located at the cam cleat on the right side of the console.

2.8 To furl the jib, remove the strut, unhook the downhaul, slide the claw to the base of the mast then pull the port jib reefing line to completely roll up the sail. (fig 16)

If fig. 16 is in B&W it may be hard to see the orange sails rolled around the mast.

2.9 Its OK to roll 1 to 3 turns on the foremast to reef for strong winds, but for furling do as per 2.8.

LAUNCHING

1. Pass the tow-line (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 keel up when moving the boat around ashore
3. Pin the keel in the half-way position if you need to move the boat around in shallow water
4. After removing the short pin, gently lower the keel into its fully down position
5. Use the long pin inserted through the keel handle and into the console moulding to lock the keel down

Note: Do not sail unless the keel is locked fully down as this risks capsizing and dislocation of the sailor/s and keel

Guarantee

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

Hansa Sailing Systems Pty Ltd
P.O. BOX 5048, South Nowra DC, 2541
Australia
Ph: 61 2 4403 0595 Fax: 61 2 4403 0598
Email: info@Hansasailing.com

Terms of Guarantee

- 1 This guarantee is valid for a period of 12 months from the date of purchase from Hansa Sailing Systems.
- 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:
 - (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 Liberty
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 Hansa Sailing Systems

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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 Hansa Sailing Association is hoping to keep a continuous register of all Hansa boats. 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:
Hansa Sailing Systems Pty Ltd
P.O. BOX 5048, South Nowra DC, 2541
Australia