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Congratulations on your new Linder boat!

The owner's manual is based on the ISO 10240 standards.

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 installed, its systems and information on its operation and maintenance. Please read it carefully and familiarize yourself with the craft before using it. The owner's manual is not a course in seamanship or boats safety.

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 sea schools, or competent instructors.

It's up to the user to judge if the weather condition consists with the CE-mark and that he/she is able to maneuver the boat. It's the user's responsibility to adjust the speed and direction of the craft to the sea condition.

Boats in category C shall manage wind force up to strong wind or squall, with risk for capricious waves and squall. Even if your boat are constructed for this category please beware that these type of weather could be dangerous and it takes a fit and skillful crew with a good maintained boat to operate in such weather.

This owners manual is not a detailed service or repair manual. In case of mechanical trouble please contact your representative Linder Aluminiumboats dealer or contact Linder Aluminiumbåtar AB directly. Always use recommended workshop for maintenance, service and repair. Avoid modifications that affect the marine safety. Linder Aluminiumbåtar can not be hold responsible for modifications that not are written approval.

Please notice that you need license or power of attorney to operate this boat in some countries, some countries has it's own regulations for boating.

Always keep your Linder Aluminiumboat in good condition, observe the wear due to the age and wrongly use. Every boat can be damaged if they are wrongly used no matter how durable the product is. That type of using is no good seamanship. Always adjust the speed and direction of the craft to sea conditions.

Always use approved lifejacket, in some counties are you obligated to use lifejacket. Before you start your trip we do recommend the crew to be well informed about the safety, such as man over board, risk of fire, personal injuries and towing.

Please keep this manual in a safe place, and hand it over to the new owner if you sell the craft. This manual has been translated into a language acceptable in the country where the boat is to be sold.

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Certificate of Type Approval

Linder Aluminiumbåtar AB produces according to a certificated quality management system in line with the Recreational Craft Directive module D. The Linder SPORTSMAN 445 is provided with CIN-code and is also security marked with micro dots (Securmark*). It is safety approved according to Det Norske Veritas.

The 445 SPORTSMAN is CE-marked in compliance with boat design category C. Coastal waters and inshore waters: boat designed for trips close to shore, in large bay areas, river deltas, lakes and rivers where wind forces can reach up to 6 on the Beaufort scale (10.8 to 13.8 m/s) and with significant waves of up to and including 2 metres. (The significant wave height is the mean height of the highest onethird of the waves, which approximately corresponds to the wave height estimated by an experienced observer. Some waves will be double this height.)

* Securmark is one of the best systems in Scandinavia for the security marking of boats. There are small microdots with an individual ID number hidden on several parts of the hull. www.securmark.no
 All costs for the registration of the security marking are already paid by the manufacture. You have to register your boat by internet or fill in the form which comes with the boat.

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Technical Data	SPORTSMAN 445 BASIC	SPORTSMAN 445 MAX
Length (LH):	451 cm (14.8 ft)	451 cm (14.8 ft)
Width (BH):	175 cm (5.7 ft)	175 cm (5.7 ft)
Weight with steering console:	178 kg (392 lb)	203 kg (448 lb)
Weight with max engine weight (mLCC):	261 kg (575 lb)	305 kg (672 lb)
Max engine weight:	63 kg (140 lb)	82 kg (182 lb)
Max load cap (mMTL):	484 kg (1067 lb)	465 kg (1025 lb)
Max. total weight (mLDC):	745 kg (1642 lb)	770 kg (1698 lb)
Max. weight with transport on trailer (mT): ..	326 kg (718 lb)	370 kg (815 lb)
Max number persons:	4	4
Depth of hull:	73 cm (28.7 in)	73 cm (28.7 in)
Max power:	14.7 kW (20 hp)	22 kW (30 hp)
Rec power:	14.7 kW (20 hp)	22 kW (30 hp)
Outboard length:	long	long
Hull thickness:	2.0 mm (0.079 in)	2.0 mm (0.079 in)

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The following abbreviations are used to highlight important information.

The following abbreviations are used to highlight important information.

(D) = Danger Means that a serious built in risk exists, with great probability of serious injury, if you are not careful enough.

(W) = Warning Means a risk that can lead to injury, if correct precaution is not observed.

(C) = Caution Means precaution must be exercised, or attention must be paid to the fact that unsuitable handling can cause personal injury or damage to the boat, damage to components or harm the environment.

Explanation of symbols to be found on the blue plate on the boat:

Declares max. no of persons

Declares max. loading capacity (person, luggage, fuel and engine)

Declares max. engine power

Identification number (CIN-code)

The boat has two identical numbers (14 digits) engraved in the hull. One is easily visible on the outside of transom stern on the starboard side, while the other one is well concealed in the boat.

Aluminum oars

Aluminum oars inclusive safety oarlocks is delivered with your new Linder SPORTSMAN boat, they are attached to the boat inside the boat package. SPORTSMAN 445 BASIC – 9 feet oars

A. Mounting of oars (SPORTSMAN 445 BASIC)

Fit the rowlock with the centre of the pin as per the measurement below. The oarlocks have an in-built locking device and are not interchangeable from side to side. To SPORTSMAN 445 MAX there is, as accessory, an oar lock for assembling on the gunwale.

B. Holder for oarblade (SPORTSMAN 445 BASIC)

Wipe the stern fittings clean and dry. Remove the covering tape. Put in place and press downwards for a few seconds. Please note, lowest temperature when mounting +15 °C.

SPORTSMAN 445 BASIC
max 73 cm (2,4 ft)

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Storage for winter

When storing the boat on land, please make sure to provide adequate ventilation. Avoid covering the boat with tight closing plastic film or anything else of that kind. The battery can only be left on board if it is fully charged. A low-charged battery can be damaged if it freezes. The ideal solution is to keep the battery on maintenance charge. Refer to the engine operating instructions (C). Make sure that you have bilge all the water from the boat before storage for winter, if not you have a risk of frost damage.

Painting

If you keeping the boat in water where marine growths occur or if you suspect that there is pollution in the water, the bottom can be cleaned and a coat of anti-fouling paint applied. (refer to the waterline drawing on page 32). A correct anti-fouling will protect you Linder Aluminiumboat from marine growths and possible damages due the pollutions from the water. Your nearest paint or boat dealer will provide you with all the information necessary for painting aluminium boats. Never use alkalicolours containing copper, lead or quicksilver. The combination with aluminium can cause galvanic currents with corrosion as a consequence (C).

Cleaning

When cleaning, rinse with clean water and use a sponge. If necessary, a mild detergent can be used. A high pressure washer can also be used (protect the seat pads). The boat has in production been applied with a layer of paraffin oil on the outside hull. The boat will oxidate. The material build its own natural protecting surface, an oxide layer, which is not recommendable to remove by polish.

Mooring

The boat is equipped with a mooring loop in the front of the bow and on the transom stern (C). SPORTSMAN 445 is equipped with four mooring bollards on the gunwale.

Repairs

Contact your dealer for advice for repairs that you can carry out by yourself. Larger repairs should preferably be carried out by professionals (C).

Modifications

Contact your dealer for information of the possibilities and, above all, for recommendations of what you should not do! You could endanger your own safety and lose your warranty! (D).

Floation

Foam buoyancy is located in the seat banks and the stern bulkhead and should not, under any circumstances, be removed! This will cause the boat to lose some important flotation (D).

Fitting a motor

Only CE-marked engine meeting the requirements of ISO11547 may be fitted. Engine mounting washers have been supplied with the boat, and these need to be utilised when fitting the engine. Rec. length of cables of control for SPORTSMAN 445 is 2.10 mtr.

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Mounting accessories

Any extra equipment or accessories must be fitted to the boat using acid-proof, stainless steel or aluminium brackets and screws. Copper, brass or incorrect brackets can cause galvanic corrosion (C). Pressure-creosoted wooden floor boards can cause corrosive damage to the boat (C). Do not use any treatment to the wooden floor board, which can affect the aluminium negatively.

Automatic bilge pump

The boat is equipped with an automatic bilge pump. Check periodically the function on the bilge pump. A handoperated bilge pump is also fitted in case the electrical power should fail. If the bilge pump valve needs to be cleaned, can you go through the inspection hatch. The upper section of the bilge pump is lifted out by pressing the snap lock fittings together. Reassemble the valve in reverse order.

Manoeuvre ability, fire protection, non start device

Do not equip or use an engine with higher power than is stated on the blue plate in the boat (W). Do not drive the boat at high speed in heavily trafficed waters or in weather conditions involving reduced sight or high seas. Breaking waves makes a high security risk. Respect and obey speed restrictions and other traffic regulations. Follow international searoute rules (COLREGS) and national traffic instructions.

Loading (W)

Do not exceed the maximum loading capacity for this boat. Refer to the specification table in this manual or the manufacturer's plate on the boat for the maximum load capacity of the boat. Distribute the load evenly in the boat to help counterbalance the weight of the outboard. Avoid a high placement of heavy items. Secure the load well. Never exceed the approved number of people in the boat. For your own comfort and safety, lower the speed in bad weather.

Safety contact

Safety contact must be used (D).

Safety

Be sure, before boating, that you have the required safety equipment onboard. For example anchor, rope, bailer/draw bucket (secured against accidental loss), oars etc. Avoid standing up and be sure to wear your life jacket (W)! Do not fill the petrol tank when the motor is running (W). Do not smoke when handling fuel (D). Read the operator's handbook for the motor regarding correct handling with manual start. The motor must always be supplied with a built in stop which makes the motor impossible to start when the shift is in gear.

Safety sign (W)

Access by the aft deck shall only be used in unique situation due to the stability. This sign warns for that. The safety sign are placed on the inner transom and the aft deck, if some or all sign would be removed will a check pattern appear. In these cases please contact Linder Aluminiumboats.

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Transportation on trailer

Make sure that the center rollers on the trailer support all the weight of the boat on the keel. Adjust the side supporters to eliminate all movement of the boat. Do not forget to secure the boat with appropriate straps. Make sure the boat is empty during transportation (C). When trailing the boat with drivable cover (not harbor cover) max speed is 30 km/h.

Environment

By filling up the fuel, avoid fuel waste. A running engine releases exhaust gases that can have a detrimental effect on the environment. Reduce speed and surges out of regard for people's security and comfort. Your Linder is produced in recyclable material that you get paid for when the boat has made the last trip. The

material can be recycling time after time! The amount of aluminum is approx 90% of the boat weight. You don't have to disassemble the boat, just leave it to the recycle company.

If you fall overboard

Use the ladder at the stern of the boat to climb back into the boat. NOTE! The engine must be shut down (D).

Regular service checks (C)

- bilge pump
- battery
- steering system
- tank and fuel pipe

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Electrical system

Electrical system is powered by 12 V current. The main power switch, only placed in 445 MAX, is located in the stow box of the stern seat. Please also refer to the outline drawing on Page 36. The battery has to be stored in the box provided. Refer also to the wiring diagram on the Pages 33-34. The main power switch (445 MAX) isolates all power except for the engine and the bilge pump.

Service (electrical system)

It is important to treat the battery with care if all electrical equipment is to operate as expected. Check battery levels regularly to make sure that it maintains the correct level (C). Smoking is prohibited when servicing the battery as it emits an explosive gas (W), when charging. Use distilled water when topping up the battery.

Corrosion

Prevent metal items, iron, copper, brass or similar metals from remaining in contact with aluminium surfaces on the boat for more than necessary, as this will reduce levels of corrosion (C).

Information of electrical bilge pump and main power switch

SPORTSMAN 445 is fitted with an automatic bilge pump and main power switch.

Position AUT

In normal position the bilge pump is in AUT position and the bilge pump bail the boat automatically if needed. Always make sure that there is sufficient power in the battery.

Position MAN

In position MAN the pump is operated manually.

If the bilge pump does not work

The boat is equipped with an automatic electric bilge pump, which requires occasional checking. Always make sure there is sufficient charge in the battery (C).

If the bilge pump does not work, please check the following;

- The battery is fully charged and connected
- The fuse has not blown
- The filter to the pump is clean and free from debris
- The wiring to the pump and switch is intact

If the pump fails and the boat fills with water, it may overrun the battery, which will short out the electrical system and may cause galvanic corrosion to the boat. The bilge pump is not meant to be able to bilge the boat after a hull damage. The pumps capacity is max 38 l/min.

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Waterline

The waterline is marked with maximum weight of the engine
(see technical data page 26)

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Wiring diagram SPORTSMAN 445 MAX

Bilge pump

Battery

Power socket

Optional Equipment

Optional Equipment

Bilge pump

Notice: There must be a battery box for the battery, if it is stored in the stow compartment. Battery capacity max. 75 Ah.

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Wiring diagram SPORTSMAN 445 BASIC

Bilge pump

Battery

Bilge pump

Notice: There must be a battery box for the battery, if it is stored in the stow compartment. Battery capacity max. 75 Ah.

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Switch panel

Main switch with fuse
1 Fuse for main switch
2 Fuse for bilge pump
3 Main switch

Switch panel with fuse
4 Switch for bilge pump
5 Blank cap
6 Blank cap
7 Fuse for 12-volt sockets
8 Spare fuse
9 Spare fuse

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Outline drawing

SPORTSMAN 445 MAX

1 Main power switch including fuses
2 Battery
3 Fuel tank compartment with pre-mounted fuel hose
4 Steering cable (L=2,44 m)
5 Automatic bilge pump
6 Fuses
7 Power socket (12 V)
8 Lock and mooring rings
9 Bollards
10 Bathing/rescue ladder
11 Hull opening

SPORTSMAN 445 BASIC

1 Battery
2 Fuel tank compartment
3 Automatic bilge pump
4 Lock and mooring rings
5 Bollards
6 Bathing/rescue ladder
7 Hull opening

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Declaration of Conformity

Recreational Craft directive 94/25/EG and 2003/44/EG

Name of manufacturer: Linder Aluminiumbåtar AB

Address: Kanotleden 5

Post Code: SE-362 32

Town: Tingsryd Country: Sweden

Notified body: DNV (Det Norske Veritas)

Address: Veritasvein 1

Post Code: NO 1322

Town: Hövik

Country: Norway

ID Number: 0575
 EG type-examination
 Certificate number: RCD-B-327 (SPORTSMAN 445B)
 RCD-B-328 (SPORTSMAN 445M)
 Date (yr/mo/day): 2008-01-05
 Conduct of certification: B + D

Description of craft
 Craft Identification Number (CIN):

Brand name of the craft: Linder Type: SPORTSMAN 445B
 Type: SPORTSMAN 445M

Type of craft:
 sailboat motorboat inflatable
 other (specify):

Type of hull:
 monohull multihull
 other (specify):

Construction material:
 aluminium, aluminium alloys
 plastic, fiber reinforced plastic
 steel, steel alloys
 wood
 other (specify):

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SPORTSMAN 445B
 Maximum design category: A B
 C D

Max. recommended engine power: 14,7 kW
 Length of hull Lh: 4,51 m Beam of hull Bh: 1,75 m

SPORTSMAN 445M
 Maximum design category: A B
 C D

Max. recommended engine power: 22 kW
 Length of hull Lh: 4,51 m Beam of hull Bh: 1,75 m

Type of main propulsion:
 sails petrol engine diesel engine
 electric motor oars
 other (specify):

Type of engine:
 outboard inboard
 other (specify):

Deck:
 fully decked partly decked open
 other (specify):

This declaration of conformity is issued under the sole responsibility of the manufacturer. I declare on behalf of the craft manufacturer that the craft mentioned above complies with all applicable essential requirements in the way specified and is in conformity with the type for which above mentioned EC type examination certificate has been issued.

Signature:

Clarification of signature: Lars-Göran Linder

Date (yr/mo/day):

2013-06-01

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Small craft directive 94/25 EC & 2003/44 EC (SJÖFS 2004:16 & 2005:4)

Standards

Other normative document/methods

See the technical file

Used standard

Craft principal data	2.0	
Craft identification	2.1	
Builder's plate	2.2	
Man over prevention	2.3	
Field vision from helm position	2.4	
Owners manual	2.5	
Hull construction and scantling, material	3.1	
Hull construction and scantling, workshop	3.1	
Hull construction and scantling, design, stress, determination		3.1
Stability and freeboard	3.2	
Buoancy and floatation	3.3	
Seacocks and through-hull fittings	3.4	
Bilge pumping system	3.5	
Maximum load capacity	3.6	
Anchoring, morin and towing	3.9	
Maximum propoulsion power rating	4.0	
Start in gear protection	5.1.4	
Fuel system	5.2	
Electrical devices	5.3	
Remote steering systems for outboard motors	5.4.1	
SPORTSMAN 445 MAX		
General - steering systems	2.4	

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WARRANTY (To be filled in by the dealer)

Linder Aluminiumbåtar are covered by a 3 year warranty, concerning faults which can be attributed to production and/or defects in the material.

Your dealers stamp:
(To be used outside Sweden)

Buyers name:
Address:
The boats Id.no.:
Dealers Signature and date:

Dealer

Manufacturer
Linder Aluminiumbåtar AB
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www.linder.se e-mail: info@linder.se