			D							
	Contents		Page			3.11.2	Towing the boat	13		
0. Declaration		ion of conformity	2	4.		Safety a	14			
						4.0	Important safety information	14		
1. General						4.1	Pre-operating checklist	15		
	1.1	Introduction	4			4.2	Stability and buoyancy	15		
	1.2	design category	4			4.3	Hazards	16		
	1.3	Capacity plate	5	-		Maintan				
	1.4	National legislation	5	5.		Mainten		10		
	1.5	General safety information	5			5.0	General maintenance	18		
2.	Specific	Specifications, description and features				5.1	Repairs	18		
2.	2.1 Specifications		6			5.1.1	Small repairs	18		
	2.2	Boat model	7			5.1.2	Repair leak in air deck	19		
	2.3					5.1.2.1	Air leak through pinhole	19		
		Number of persons	7			5.1.2.2	Air leak from side seam deck	19		
	2.4	Payload	7			5.1.3	Air leak in tube by cut	19		
	2.5	Outboard engine	7			5.2	(Winter) Storage	20		
	2.6 Drawings		8	6.		Environment				
3.	Assembly and disassembly					6.1	Discharge of pollutants	20		
	3.0	floorboard	8			6.2	Discharge and disposal of waste	20		
	3.1	The valves	9			6.3	Advisable speeds	20		
	3.2	Rowing equipment	9			6.4	Excessive noise	20		
	3.3	Seats and benches	9			6.5	Exhaust emissions	21		
	3.4	Inflation of tubes	10							
	3.4.1	Order of inflation of tubeS	10		10	Wa	rrantee conditions	22S		
	3.4.2	Inflation order	10		11	Pro	of of reception of Documents			
	3.5	FLOOR installation	10							
	3.6	Air deck installation	11							
	3.7	Rowing equipment	12							
	3.8	Engine installation	12							
	3.9	Deflation	13							
	3.10	Folding the boat	13							
	3.11	Transportation	13							
	3.11.1	lifting the boat out of the wa	ter 13							

O. Declaration of conformity (European Legislation)



Declaration of Conformity

Marine Powe Europe, Parc Industriel de Petit-Rechain, B-4800 VERVIER, BELGIUM declares to have supplied the LodeStar inflatable boat model and serial number (HIN) as noted below complies with the *European Recreational Craft Directive 94/25 EC* and that it is applicable to this product.

Description of	product:							
Brand:	LodeStar	Model:						
HIN code:								
		I lavele						
This Product i	s tested by the foll	lowing Notified Rody:						
This Product is tested by the following Notified Body:								
Notified Body: Lloyd's Register of Shipping,								
Eloyu 5 Register of Shipping,								
Address : Entrada 124, 1096 EB Amsterdam, The Netherlands.								
		,						
fax:31 (0))20 437185							
Number Notif	ied Body_: 067 6	6 Type certificate number: GRO 0102602						
Reference F	EG type-examinati	on: ECB 100496001						

List of standard applications for use of the product							
STANDARD	OBJECT						
ISO CD 6185-1	Inflatable boats, boats less than 8 metres over all length and minimal Buoyancy of 1800N and a maximum power of 4.5 KW (6HP).						
ISO CD 6185-2	Inflatable boats, boats less than 8 metres over all length and minimal Buoyancy of 1800N and a maximum power from 4.5 KW (6HP) till 15 KW (20HP).						
ISO CD 6185-3	Inflatable boats, boats less than 8 metres over all length and minimal Buoyancy of 1800N and a maximum motor power of 15 KW (20HP) or higher.						

ISO 8666	Length measurements.
ISO 10087	Hull identification / code system.
ISO 10240	Owners manual.
ISO 11192	Graph symbols
ISO 11592	Maximum propulsion power rating
ISO 14945	Builders plate
ISO 14946	Maximum load capacity

Signed by:	
Signature:	

 $Henry\ Werkhoven.$ Allos Trading Lodestar, NL 1221BP nr 181, Hilversum, The Netherlands.

1. General

1.1 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 operation experience before assuming command of the craft. Your dealer or national sailing federation or yacht club will be pleased to advise you of the local sea schools or competent instructors

This manual uses the following safety alerts to draw your attention to special safety instructions that should be followed.

WARNING - indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

DANGER - indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

CAUTION - indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury or property damage. It may also be used to alert against unsafe practices.

PLEASE KEEP THIS MANUAL IN A SECURE PLACE AND HAND IT OVER TO THE NEW OWNER WHEN YOU SELL THE CRAFT.

1.2 Design Category

Category A – "Ocean". Craft designed for voyages where conditions experienced may exceed wind force 8 Beaufort and include significant wave heights of 4 m, for vessels that are largely self-sufficient.

Category B – "Offshore". Craft designed for offshore voyages where conditions up to and including wind force 8 Beaufort and significant wave heights up to and including 4 m may be experienced.

Category C – "Inshore". Craft designed for voyages in coastal waters, large bays, estuaries, lakes and rivers, where conditions up to and including wind force 6 and significant wave heights up to and including 2 m may be experienced

Category D – "Sheltered waters". Craft designed for voyages on small lakes, rivers and canals, where conditions up to and including wind force 4 and significant wave heights up to and including 0,5 m may be experienced.

The boat you obtained is meant to be used in Design Category **B**, **C** or **D**, depending on the model you are using, see table 2.1.

△ warning

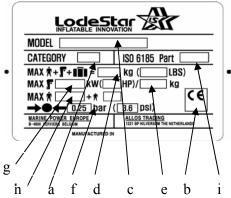
If this boat is used around the mother ship at open sea, take the necessary precautions!

Don't LOSE contact with the mother ship!

ALWAYS WEAR A LIFEJACKET

1.3 Capacity Plate

The manufacturer's CAPACITY plate is located on the inside of the boat transom.



- a Boat design category see table 2.1
- b Certified Europe Insignia
- c Model number
- **d** Maximum load capacity people + outboard + fuel tank and equipment
- e Maximum outboard weight
- **f** Pressure of the air chambers
- g Maximum outboard power
- h Maximum number of people
- i ISO 6185 part I-III

1.4 National legislation

Before you prepare for the water with your Lodestar inflatable, check the local legislation on any restrictions on the specific water you want to use. You might check for sailing restrictions, speed-restriction, restrictions on the use of outboard engines, restrictions on the airborne sounds, etc.

1.5 General safety information

Safe Boating Suggestions.

In order to safely enjoy the waterways, familiarize yourself with local and other governmental boating regulations and restrictions, and consider the following suggestions.

Use flotation devices. Have an approved personal flotation device of suitable size for each person aboard (it is the law) and have it readily accessible.

Do not overload your boat. Most boats are rated and certified for maximum load (weight) capacities (refer to your boat capacity plate). If in doubt, contact your dealer or the boats manufacturer.

Perform safety checks and required maintenance. Follow a regular schedule and ensure that all repairs are properly made. Know and obey all nautical rules and laws of the waterways

Make sure everyone in the boat is properly seated. Do not allow anyone to sit or ride on any part of the boat that was not intended for such use.

This includes the back of seats, gunwales, transom, bow, decks, raised fishing seats, any rotating fishing seat; or anywhere that an unexpected acceleration, sudden stopping, unexpected loss of boat control, or sudden boat movement could cause a person to be thrown overboard or into the boat.

Never be under the influence of alcohol or drugs while boating (it is the law). Alcohol or drug use impairs your judgment and greatly reduces your ability to react quickly. Prepare other boat operators. Instruct at least one other person on board in the basics of starting and operating the outboard, and boat handling, in case the driver becomes disabled or falls overboard.

Passenger boarding. Stop the engine whenever passengers are boarding, unloading, or are near the back (stern) of the boat. Just shifting the outboard into neutral is not sufficient.

Be alert. The operator of the boat is responsible by law to maintain a proper lookout by sight and hearing. The operator must have an unobstructed view particularly to the front. No passengers, load, or fishing seats should block the operators view when operating the boat above idle speed.

Never drive your boat directly behind a water skier in case the skier falls. As an example, your boat TRAVELLING at 40 km/h (25 MPH) will overtake a fallen skier 61 m (200 ft.) in front of you in 5 seconds. Watch fallen skiers. When using your boat for water skiing or similar activities, always keep a fallen or down skier on the operator's side of the boat while returning to assist the skier. The operator should always have the down skier in sight and never back up to the skier or anyone in the water.

Report accidents.

2. Specifications, description and features

2.1 Specifications

Model	CE Design Category	Max Load (kg)	Max KW	Мах НР	Max engine weight (kg)	Max Persons	Number of Air Chambers	Length (cm)	Width (cm)	Tube Diameter (cm)	Weight including oars (kg)
Quick Roller 190	D	276	2	2,5	18	2	2+1	190	120	34	17
Quick Roller 230	D	325	3	3,5	18	3	2+1	230	137	35	22
Ultra Light 195	D	350	2	2,5	18	2	2+1+1	195	136	40	21
Ultra Light 220	D	376	3	3,5	18	3	2+1+1	220	143	40	25
Ultra Light 250	D	422	4	5	26	3	2+1+1	250	143	40	27
NSA 230	D	376	4	5	26	3	2+1+1	230	143	40	30
NSA 260	D	422	4	6	26	3	2+1+1	260	143	40	33
NSA 290	D	474	7	10	42	4	3+1+1	290	143	40	35
NSA 320	С	532	11	15	55	5	3+1+1	320	151	40	38
NS 230	D	376	4	5	26	3	2+1	230	143	40	34
NS 260	D	422	4	6	26	3	2+1	260	143	40	42
NS 290	D	474	7	10	42	4	3+1	290	143	40	50
NS 320	С	532	11	15	55	5	3+1	320	151	40	52
NS 350	С	700	19	25	75	6+1	3+1	350	181	47	71
NS 380	С	760	22	30	85	7	3+1	380	181	47	76
NS 430	С	980	22	30	85	9	4+1	430	196	50	93
NSA 3D-V 230	D	376	4	5	26	3	2+1+1	230	143	40	30
NSA 3D-V 260	D	422	4	6	26	3	2+1+1	260	143	40	33
NSA 3D-V 290	D	474	7	10	42	4	3+1+1	290	143	40	35
TriMAX 3D-V 320	D	532	11	15	55	5	3+2+2	320	151	40	48
TriMAX 3D-V 350	С	700	19	25	75	6+1	3+2+2	350	181	47	62
TriMAX 3D-V 380	С	760	22	30	85	7	3+2+2	380	181	47	68
TriMAX 3D-V 430	С	980	30	40	110	9	4+2+2	430	196	50	90
TriMAX ALU 320	С	532	11	15	55	5	3+1+2	320	151	40	62
TriMAX ALU 350	С	700	19	25	75	6+1	3+1+2	350	181	47	82
TriMAX ALU 380	C C	760	22	30	85	7 9	3+1+2	380	181	47	88
TriMAX ALU 430 TriMAX ALU 530	C	980 1350	30 37	40 50	110 115	12+1	4+1+2 5+1+2	430 530	196 229	50 60	104 154
Hypalon 230	D	376	4	5	26	3	2+1+1	230	143	40	31
Hypalon 260	D	422	4	6	26	3	2+1+1	260	143	40	34
Hypalon 290	D	474	7	10	42	4	3+1+1	290	143	40	36
RIB 260 open	D	444	4	6	26	3+1	2	260	149	40	52
RIB 310 open	C	528	7	10	42	5	2	310	149	40	61
RIB 330 open	С	565	11	15	55	5+1	3	330	159	40	69
RIB 360 open	С	700	19	25	75	6	3	360	170	46	74
RIB 430 open	С	980	22	30	85	8	4	430	180	47	86

Declaration of conformity: The Quickroller 190-230, Ultra Light 195-220-250, NSA 230 and NS 230 model boats do not come under the aegis of the recreational Craft Directive 94/25/EC and therefore cannot be certified as

complying with it. However these models are built to meet all specifications required in the above mentioned Directive as well as the ISO 6185 standards

2.2 Boat Model

This is an inflatable boat that gets its form, strength and buoyancy by means of inflation with air. The boat is designed for small voyages in sheltered and open waters, depending on the design category (see 2.1). **QR model** means an inflatable boat with an inflatable FLOOR. Light and easy to stow. **UL model** means an inflatable boat with inflatable FLOOR and a separate inflatable keel. Light and easy to stow.

NS model means an inflatable boat with a wooden or aluminium or honey comb FLOOR and an inflatable keel.

NSA model means an inflatable boat with inflatable FLOOR and separate inflatable keel or an integrated inflatable keel-floorboard (3D-V), dependable on specification.

Trimax model means an inflatable boat with two extra (speed) tubes underneath the main tubes and it may have an aluminium or an integrated inflatable keel-floorboard (3D-V).

RIB model means Rigid Inflatable Boat. These boats have a rigid glassfibre reinforced hull with an inflatable tube around. (OMIT THE WORD COLLAR FROM ABOVE)

2.3Number of persons

Do not exceed the maximum recommended number of persons. Regardless of the number of persons aboard, the total weight of persons and equipment must never exceed the maximum recommended load. Always use the seats/seating spaces provided.

2.4 Payload

When loading the craft never exceed the maximum recommended load. Always load the craft carefully and distribute loads appropriately to maintain design trim (approximate level). Avoid placing heavy weight high up.

2.5 Outboard engine

The maximum motor power of this boat is given in the table 2.1 in this manual.

△ danger

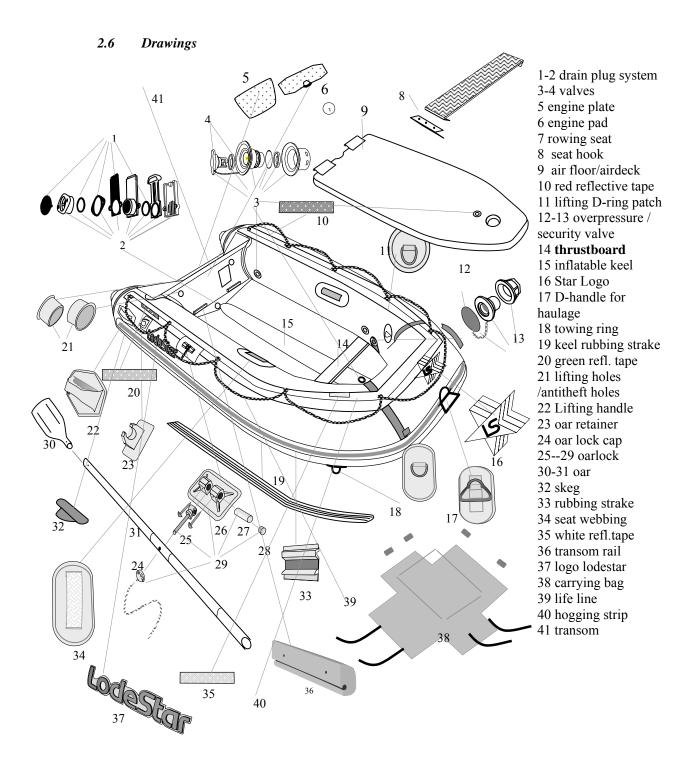
Overpowering a boat can result in serious injury, death or boat damage

The installation and operation instructions of the outboard motor can be found under point 7 in this manual.

You might lose control of the boat when using the motor at full speed.

Accidents may occur.

Lodestar can not be held responsible for these actions.



3. Assembly and disassembly

3.0 Floor

LodeStar boats which are equipped with an inflatable or a non-inflatable FLOOR must be

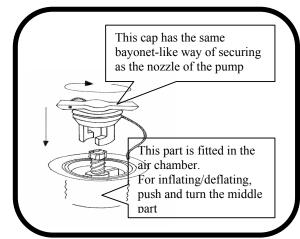
operated with these FLOORS properly installed before use. Using the boat without THE provided FLOOR is unsafe, uncomfortable and MAY result in damage to

the boat. See point 3.5 and 3.6 for FLOOR installation.

3.1 The valves

The Lodestar valves are especially designed for safe and comfortable use.

The valves are designed flat to increase the comfort in the boat and to prevent damage to the boat



Operation of the valve:

- Take off outside cap. The valve is closed when the middle screw is in upside position.
- To **open** the valve put your finger in the middle of the valve and push the middle screw down, turn your finger ½ turn **anti-clockwise** until the screw LOCKS
- To **close** the valve push the screw and turn your finger ½ **clockwise** until the screw comes up

Pump connection:

- Put end piece (THE NOZZLE FITTING) of the pump on the valve
- Turn right (clockwise) and start pumping
- Keep pumping until no air can be put into the boat (see above)
- When ready, be sure to take off the pump
- Be sure to put on the protection cap again.(for protection from dirt and damage)

Check the valve to make sure no air is lost in the vicinity of the valve.

If any air is lost:

- Take the valve key out IF there is one in your repair kit.
- Put the valve key into the valve and turn the key clockwise.

- If air leakage persists inform your local dealer and check warrantee conditions.
- Take back of valve in your hand and turn the valve stem with the key to the left (anti-clockwise) and take out the valve stem..
- Inspect the valve FOR damage
- If there is any damage (see warrantee conditions point 8), take the defective valve to your selling dealer. You will receive a new valve.
- Reinstall and lubricate valve stem with silicone or soapy water solution to ease installation

3.2 Rowing equipment

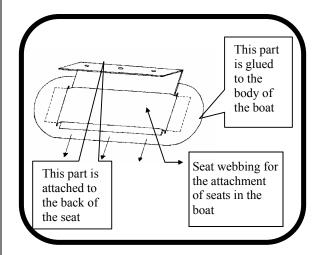
With the boat you have two oars or paddles. EACH OAR can be taken apart into 2 pieces for easy transport.

The oars should be used in the rowlocks.

3.3 Seats and benches

To increase comfort during the use of the boat you can install as an option an inflatable sit roll" as a bench/chair.

If your boat is equipped with a separate seat and a "seat webbing" on the tubes, you can install the seat bench as in the following drawing.



You must install the seat before fully inflating the boat.

3.4 Inflation of tube



The proper inflation and deflation is essential for THE long life of your boat.

To inflate the boat, roll THE BOAT OUT on the floor. Remove any sharp objects from flat surface where boat will be assembled.

- If the boat is unpacked, check if all parts are present.
- Check THAT the valves are closed. This
 can be done by putting your finger in the
 valve, push the little COLOURED knob in,
 and turn to the right one stroke.
- If the knob jumps up a little it is possible to get air into the boat.
- (To let air out of the boat you have to turn the knob to the left!)
- Get your delivered pump. Push the nozzle, end piece on the valve and turn right. The pump will tighten on the valve.
- Put enough air in the boat to give the boat some form.



All chambers should be inflated **equally** to avoid damage to the bulkheads that separate the chambers.

3.4.1 Order of inflation of tubeS:

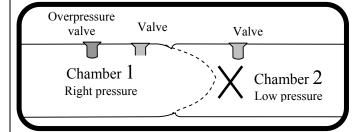
Inflate the boat in the following order if it is not written on a tag near the valves:

- 1. front chambers (if applicable)
- 2. side chambers
- 3. floor chamber (if applicable)
- 3. keel chamber (if applicable). ALWAYS INFLATE THE KEEL CHAMBER LAST.

Inflation order

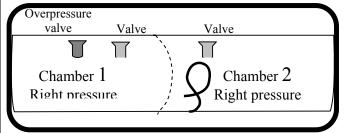
Step 1: Take OFF the red cap from the overpressure valve. Inflate the chamber with the overpressure valve first, then Step 2: the remaining chamber(s). (see inflation order printed near valves).

Put in enough pressure to allow the boat to spread out, but do not fully inflate the tube. Step 3: Pump the chamber with overpressure valve until it starts leaking air,



then

Step 4: pump remaining chambers in right order until overpressure valve starts leaking again.



If inflation is done in right order then the boat has the right pressure and there is **no distortion of fabric near the bulkheads.**Step 5: Replace the red cap on the overpressure valve



Never surpass these values! Inflate the boat to a maximum 0,33 bar = 4,8 PSI = 33 kPa and minimum 0,28 bar = 4,1PSI = 28kPa

Inflate the keel to a maximum 0.4 bar Inflate the high pressure bottom to a maximum 0.8

Over-inflation can cause structural damage to your boat. Avoid the boat to stand in the direct sunlight when the boat is not in the water. This might heat up the air in the boat so much that expansion causes damage to your boat (!!!!except with proper used safety valve).

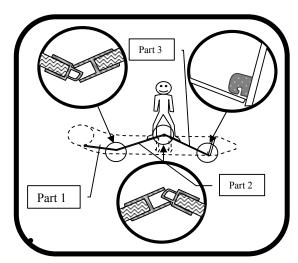


Do not use mechanical compressors to inflate your boat. The pump that is delivered gives exactly the right pressure to your boat.

3.5 Floorboard installation

Instructions to install the floorboards in the Lodestar models NS and Trimax Alu:

- Inflate the boat inclusive the keel section. (see the section on inflation)
- Check THAT no parts of the tubes ARE STUCK together
- Open the valve of the keel section and deflate the boat for about 2/3.
- Place the front section (bow board 1) of the floorboard as far in the front of the boat as possible. Make sure the hole in the bottom is straight above the valve of the keel section.
- Place part two into the boat. Put the two parts of the floorboard "in line".
- Take part three and eventually part four of the floorboard and make a "bridge" with part two and three.

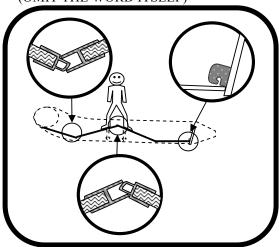


- Push down the two parts to the bottom of the boat.
- Inflate the keel approximately 5-10 strokes. The floorboards will be in a level position.

• Deflate the side-tubes of the boat completely and install the aluminium stringers (not on model NS 230).

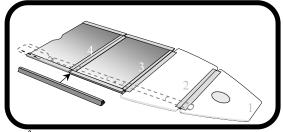
With more than 3 floorboards make a bridge between the second and third floorboard seen from the transom.

Floorboards are numbered from the bow. (OMIT THE WORD ITSELF)



Installation of the aluminium stringer

After installation of the floorboards, put the stringers in the sides of the floor.



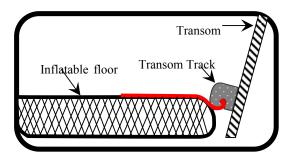
TO MAKE THE INSTALLATION OF THE STRINGERS easier WE recommended PUTTING an oar (paddle) under the bottom of the boat.

This lifts up the PVC floorboards to have easier access to put the stringers on the sides of the floor.

3.6 High pressure Inflatable Floorboard

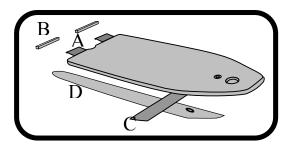
If you fully inflate the air deck, it will push itself underneath the tube and it will stay there tight in its place. In the back of the boat there

are two transom tracks fixed against the transom. To fix the floor at the transom, you have to slide the flaps that are attached at the back of the floor through the track (see below).



Lodestar has two types of inflatable floorboards

Type 1: NSA MODELS. This is a flat inflatable FLOOR with a separate inflatable keel and a thrustboard:



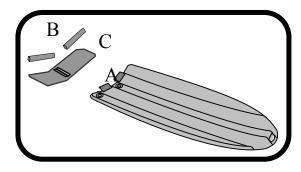
- 1. Put the flaps A at the AFT side of the floor in the transom track B
- 2. Install the thrust board C at the forward most point of the port and starboard tubes. The thrust board must be placed under the air floor and on top of the keel D on the reinforced spot that you find on the inside in front of the tubes.
- 3. Place the deflated air floor D in the bottom of the inflated boat (DO NOT inflate the keel). Make sure the hole is exactly on top of the keel-valve
- Inflate the inflatable FLOOR to approximately 50% air pressure
- Push the sides of the FLOOR under the tubes as far as possible.
- 4. Inflate the air floor to minimum 700 mb, maximum 825 mb.

Lodestar double action pump (e) is recommended for inflation of the air floor. DO NOT use a compressed air source unless it is FITTED with a pressure regulator set to 825 mb.

- 5. Inflate the keel.
- 6. Close the valves by putting the caps on and turning them to the right.

(OMIT TOP OF IT)

Type 2: Models 3D-V. This is a inflatable floorboard with integrated keel function and thrustboard.



- 1. Put the foldable thrust board C in the back of the boat and push it towards the transom.
- 2. Put the flaps A at the AFT side of the floor in the transom track B.
- 3. Inflate the boat to approximately 25% air pressure
- Put the 3D-V floor 25% inflated on the bottom of the boat.
 Take care the bottom/keel section is in the middle of the boat.
 Push the sides of the floorboard under the tubes as far as possible
- **5.** Fully inflate the whole boat (See section 3.4 for proper inflation of the total boat.)
- 6. THEN fully inflate the integrated inflatable floorboard.

3.7 Rowing equipment.

LodeStar boats come AS STANDARD WITH PADDLES or with oars, ROWLOCKS, and a rowing seat.

- ENSURE seat is properly installed (see point 3.3)
- To install the oars in the oarlocks, put the oars over the ROWLOCK pins
- To prevent loss of the oars, be sure to put the cap on the ROWLOCK.
- If the oars are not in use, put the oars in the clips on the sides of the boat

Local water conditions must be taken into account before operating boat with oars or a small outboard. Boat power may not be strong enough to overcome currents in tidal inlets, open seas, small channels or shallows of shoal water regions.

3.8 Engine installation

Outboard power.

△ danger

Overpowering a boat can result in **serious injury, death or boat damage**.



Using an outboard that exceeds the maximum horsepower limit of a boat can:

- 1) result in severe handling and/or stability problems
- 2) place too much weight at the transom altering the designed flotation characteristics of the boat
- 3) cause the boat to break apart particularly around the transom area.



The maximum motor power to be used see 2.1 of this manual.



USE A LANYARD SWITCH. This switch will stop the engine if, for any reason, the operator leaves the control, see point 4.

Mounting the engine:

- Make sure you are standing safely and ARE stable
- Unlock the motor for tilting and mount the motor on the transom.
- The motor must be in the middle of the transom for proper operation
- Screw the brackets securely on the stern.

Position of the outboard engine

The outboard motor must be so installed that in the normal running position, it stands vertically in the water.

This means that the "cavitation plate" on the low side or the outboard engine is horizontal in the water if the boat is lying in its normal position.

Starting the engine

- Pull the boat into the water
- Secure the motor in the downwards position
- Stand securely and start the engine.
- Avoid very high speeds when running the boat backwards, water can come in the boat over the transom.



Before putting the boat into the water: Check THAT the water plug in the transom is in place.

3.9 Deflation

General information:



NOTE: Boat should be clean and dry before rolling up for storage.

Remove any sand and debris that may cling to the fabric.



When deflating the boat, do not deflate one chamber at once.

Deflate all chambers evenly ,this prevents damage to the bulkheads in the boat.

To deflate the boat:

- Put the boat on the floor
- Put your finger in the valve and turn right (See for operation of the valves section 5.2 "the valves")
- Release some air from all chambers
- Make sure the inside of the valve stays open (to enable the air to get out during folding)
- Push evenly on the whole boat to let as much air out as possible

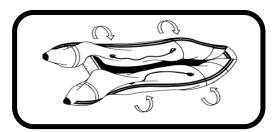
•



If you deflate and store your Lodestar, you can leave the inflatable floorboard as it is installed, just leave out the air and fold the boat.

3.10 Folding the boat

- Put the boat on the floor
- Take out the PVC floorboards, if applicable.
- Fold the boat to the middle of the boat, so that the whole boat is as wide as the transom



• Bring the cones at the back of the side chambers to the middle of the transom



- Roll the transom forward. This helps to get the air out. Be sure all valves are in the open position.
- Folded this way the boat fits in the delivered pack (sack) for transportation.



If you prefer the oars to be in the same pack / sack as the boat take care that the oars will not damage the pack / sack. Put in the round parts of the oars first.

3.11 Transportation

3.11.1 Lifting the boat out of the water

Make sure there are no sharp edges under the boat on the place where you want to lift the boat out of the water

Try to use the handgrips for lifting instead of the ropes.

3.11.2 Towing the boat

If the boat is to be towed by another boat, the boat must be empty. Remove outboard, fuel tank and equipment.

△ warning

- Never tow your craft with people aboard.
- Frequently inspect the towing painter.
- Periodically check the towing conditions and especially that the craft is not taking in water.

3.11.2.1 Towing of an inflatable

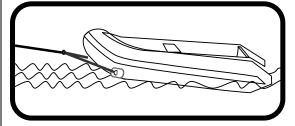


IMPORTANT: The bow ring handle should not be used for towing, anchoring, or mooring.

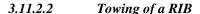
Use the port and starboard points of the boat for towing.

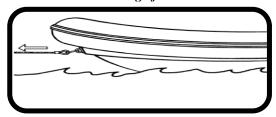
Towing this way makes the boat steady and secure behind the towing boat, and helps to avoid damage to your Lodestar.

Attach the towing ropes as in the following scheme:



Attach a line between the towing rings to form a BRIDLE. Attach a towing line to this bridle and tow the boat at slow speed.





4. Safety and operation recommandations

4.0 Important Safety Information.

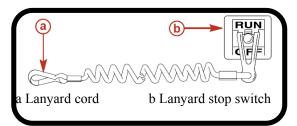
Read this:

Lanyard Stop Switch.

The purpose of a lanyard stop switch is to turn off the engine when the operator moves far enough away from the operator's position (as in accidental ejection from the operator's position) to activate the switch.

Tiller handle outboards and some remote control units are equipped with a lanyard stop switch. A lanyard stop switch can be installed as an accessory - generally on the dashboard or side adjacent to the operator's position.

The lanyard is a cord usually between 122 and 152 cm (4 and 5 feet) in length when stretched out, with an element on one end made to be inserted into the switch and a snap on the other end for attaching to the operator. The lanyard is coiled to make its at-rest condition as short as possible to minimize the likelihood of lanyard entanglement with nearby objects. Its stretched-out length is made to minimize the likelihood of accidental activation should the operator choose to move around in an area close to the normal operator's position. If it is desired to have a shorter lanyard, wrap the lanyard around the operator's wrist or leg, or tie a knot in the lanyard.



The purpose of a lanyard stop switch is to stop the engine when the operator moves far enough away from the operator's position to activate the switch. This would occur if the

operator accidentally falls overboard or moves within the boat a sufficient distance from the operator's position. Falling overboard and accidental ejections are more likely to occur in certain types of boats such as low sided inflatables, bass boats, high performance boats, and light, sensitive handling fishing boats operated by a hand tiller. Falling overboard and accidental ejections are also likely to occur as a result of poor operating practices such as sitting on the back of the seat or gunwale at PLANING speeds, standing at planing speeds, sitting on elevated fishing boat decks, operating at planing speeds in shallow or obstacle infested waters, releasing your grip on a steering wheel or tiller handle that is pulling in one direction, drinking alcohol or consuming drugs, or daring high speed boat manoeuvres.

While activation of the lanyard stop switch will stop the engine immediately, a boat will continue to coast for some distance depending upon the velocity and degree of any turn at shut down. However, the boat will not complete a full circle. While the boat is coasting, it can cause injury to anyone in the boat's path as seriously as the boat would when under power.

We strongly recommend that other occupants be instructed on proper starting and operating procedures should they be required to operate the engine in an emergency (e.g. if the operator is accidentally ejected).

Should the operator fall out of the boat, the possibility of serious injury or death from being run over by the boat can be greatly reduced by stopping the engine immediately. Always properly connect both ends of the stop switch lanyard to the stop switch and the operator.

Accidental or unintended activation of the switch during normal operation is also a possibility. This could cause any, or all, of the following potentially hazardous situations:

- Occupants could be thrown forward due to unexpected loss of forward motion - a particular concern for passengers in the front of the boat who could be ejected over the bow and possibly struck by the gearcase or propeller.
- Loss of power and directional control in heavy seas, strong current or high winds.
- Loss of control when docking.

△ warning

Avoid serious injury or death from deceleration forces resulting from accidental or unintended stop switch activation. The boat operator should never leave the operator's station without first disconnecting the stop switch lanyard from the operator.

4.1 **Pre-Operating Check List**

- Check the inflation pressure of the air chambers.
- Remove the plug from the self bailer floor drain.
- Remove any obstruction from the self bailer floor drain.
- Check outboard for tightness on transom.
- Know the fuel capacity and cruising range.
- Check that the lanyard stop switch for the outboard works correctly.
- Be sure the boat is not overloaded. Do not exceed the maximum number of passengers or load capacity. Look at the boat capacity plate.
- •Be sure there is an approved personal flotation device of suitable size for each person aboard and readily accessible.
- Check that the paddles are in the boat in case of engine trouble.
- Operator knows safe navigation, boating, and operating procedures.
- A ring type life buoy or buoyant cushion designed to be thrown to a person in the water.
- Arrange passengers and load in the boat so the weight is distributed evenly and everyone is seated in a proper seat or on the floor.
- Instruct at least one passenger in the basics of boat handling and the starting and operation of the outboard, in case the driver becomes disabled or falls overboard.

- Before departing, tell someone where you are going and when you expect to return.
- No alcohol or drugs. It is illegal to operate a boat while under the influence of alcohol or
- Know the waters and area WHERE you will be boating; tides, currents, sand bars, rocks, and other hazards

4.2 Stability and buoyancy

4.2.1 Position of persons and luggage

For safe operation it is advised to have people sit in the middle of the boat as much as possible. The position of the people will directly influence the stability of this craft. Sitting on the sides of the boat is ALSO ACCEPTABLE, if there is sitting someone opposite.

4.2.2 2Rowing.

LODESTAR BOATS ARE DESIGNED TO GIVE YOU a comfortable rowing position. Use the delivered bench to make maximum use of the rowing possibilities

4.2.3 Under engine power

The bottom of your Lodestar is designed to have a "V" shape (except the model type Ouickroller). This improves the sailing characteristics, especially when operating an outboard engine.

It is POSSIBLE TO GET YOUR LODESTAR ONTO THE PLANE.

△ caution

While you are sailing AT high speed or in "aquaplaning": avoid abrupt corners and high waves, this might endanger the passengers. Make sure everybody holds on to the safety ropes.

For comfort and safety, reduce speed in waves. Small children must be sitting **IN** the boat.

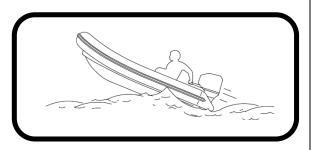
Always wear a lifejacket!



Wave And Wake Jumping:

Operating recreational boats over waves and wake is a natural part of boating. However, when this activity is done with sufficient speed

to force the boat hull partially or completely out of the water, certain hazards arise, particularly when the boat re-enters the water.



Avoid serious injury or death from being thrown within or out of a boat when it lands after jumping a wave or wake. Avoid wave or wake jumping whenever possible. Instruct all occupants that if a wake or wave jump occurs, get low and hang on to a boat hand hold.

- The primary concern is the boat changing direction while in the midst of the jump. In such case the landing may cause the boat to veer violently in a new direction. Such a sharp change in direction can cause occupants to be thrown out of their seats, or out of the boat.
- There is another less common known hazardous result from allowing your boat to launch off a wave or wake. If the bow of your boat pitches down far enough while airborne, upon water contact it may penetrate under the water surface and submarine for an instant. This will bring the boat to a nearly instantaneous stop and can send the occupants flying forward.

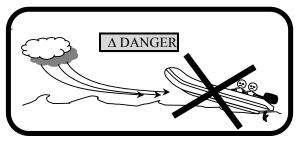
The boat may also steer sharply to one side.

When accelerating with the boat, the bow can make an upward movement. This might limit the sight of the coxswain temporarily. When the speed of the boat increases, the boat will come back to a level position again.

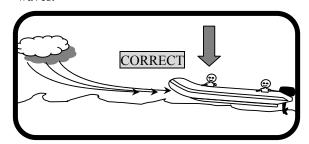
- If the wind blows towards you when running, a bow pointed upwards can cause the wind lift the front of the boat up.
- SINGLE OPERATION. When operating under power without passengers, SIT NOT on inflation tubes or seat, weight should be as far forward and in the middle as practical.

Avoid heavy weights near the transom.

RAPID ACCELERATION should be avoided to prevent the possibility of backward flipovers.



Wind and wave conditions can be highly dangerous for your inflatable. You can easily be flipped over if the load in the boat is not distributed in the bow of the boat and wind and tide are against. Especially the TriMax models should be driven carefully in headwind and waves.



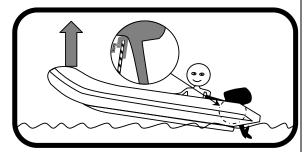
- Distribution of load and weight take the bow down to a safe situation.
- The anti-cavitation plate on the engine should be about 20 mm under the bottom of the transom.
- If your outboard is too high on the transom, you will experience a lot of cavitation (air bubbles and slippage around the propeller).

• If your outboard is too low on the transom it will create drag and it will throw up water into the boat.

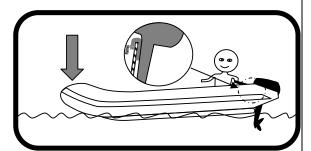
In both cases you end up with loss of speed, so try to find the ideal position before you FINALLY bolt your engine to the transom (consult your engine supplier).

- AT ALL SPEEDS IT IS ADVISABLE to keep the boat LEVEL. Prevent the bow FROM POINTING UP, and prevent the bow from pointing DOWN towards the water.
- Use the weight of the people on board to achieve the level position.
- Adjust your engine angle (see below)

REMEMBER:



 An outboard tilted too far from the transom will drive the boat with a bow up attitude which is both very dangerous and inefficient.



- An outboard tilted too close to the transom will drive the bow section too deep into the water which ends up in loss of speed and/or cavitation.
- 1. Occasional checks should be made TO THE motor attachment screws. Loose screws will cause erratic boat operation and possible loss of engine overboard.

- 2. MAKE A thorough review of the motor's manual before operation.
- 3. On board loads should be monitored to avoid chaffing or puncturing THE BOAT'S SKIN.

Turning the boat

When taking a sharp turn, reduce the speed of your boat. The boat will tilt considerably inside towards the turning centre.

4.3 Hazards

Water hazards

- 1. Wrecks, reefs, rocky shores, sand bars, and shallows should be avoided or approached with caution.
- 2. When boating in unfamiliar waters, obtain information on local water hazards before launching.
- 3. BEWARE OF OFFSHORE WINDS AND CURRENTS.

Air chamber failure

Your Lodestar is designed with more than one air chamber. Therefore, IN THE EVENT OF ONE OF THE AIR CHAMBERS LEAKING OWING TO a puncture, the boat will SAVE AT LEAST 50 % of the buoyancy. Shift the weight to the opposite side. Secure the leaking chamber as necessary (by tying—up or holding—up) and immediately proceed to the nearest shore or mother ship, WHICHEVER is nearest. However, be careful about shallows or reefs, because they can scratch or further damage your boat.

Beaching

It is recommended that the boat NOT be powered onto the beach, dragged across rocks, sand, gravel or pavement as damage to the boat skin may result.

Davits

If the boat is suspended on davits, remove the drain plug so that no water can accumulate INSIDE the boat.

Drain plug (Rib Models)

The Rib is equipped with a hull/cavity drain plug. Both must be installed when launching

the boat. The hull cavity plug should be removed periodically to eliminate water from CONDENSATING in the inner hull. The deck drain plug should be removed only when the boat is under power in forward motion or when the boat is stored out of the water on davits or boat storage racks exposed to rain and water.

Sunlight

Avoid EXPOSURE TO THE SUN FOR PROLONGED PERIODS. The changing air pressure inside the tubes might cause damage to your boat.

Extreme sunshine (ultra-violet rays) over a LONG PERIOD OF TIME may accelerate ageing of the materials.

Cover the boat to block direct sunlight exposure if the boat is to be removed from the water for an extended PERIOD

Smoking

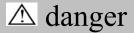
Refrain from smoking especially while refuelling your boat.

- Portable fuel tanks should be placed on a cushioning base and should be strongly secured to the craft by means of a girth to avoid bumps and risks of breaking during navigation.
- When refuelling, always stick to the following recommendations:
- If possible, remove portable tanks from the craft to refuel.
- Refuel the tanks in the open air, far from heat sources, sparks or flames.
- Do not fill the tanks to the brim. The fuel increases IN volume with a rise in temperature and there is a possibility of the tank overflowing or even breaking.

High altitude use

Normal full inflation pressure—is 330 mbar. If boat is inflated at sea level (low altitude) and transported to a high altitude (i.e., for use in a mountain lake) the air pressure must be reduced at the higher altitude to prevent over inflation.

Swimming



Stop the propeller of your outboard engine when people are swimming close to your boat. The propeller can be extremely dangerous to anyone or anything in the water.

Stop the outboard motor immediately if you spot swimmers in the vicinity of your boat.

5. Maintenance

5.0. General maintenance

Cleaning agents.

Household cleaners should be used sparingly and not discharged into waterways. Never mix cleaners and be sure to use plenty of ventilation in enclosed area. DO NOT use strong detergents, solvents or products which contain phosphates, chlorine, solvents, non-biodegradable or petroleum based products. Citrus based cleaners are excellent for marine cleaning purposes and are safe for you and the environment. Cleaning your Lodestar can best be done with just clean water and normal soap.

Paints.

If your boat is kept in water where marine growth is a problem, the use of anti-fouling paint may reduce the growth rate. Be aware of environmental regulations that may govern your paint choice. Contact your local boating authorities for information.



IMPORTANT: Waxes or cleaners containing alcohol or hydrocarbons SHOULD NOT BE USED on the boat fabric. These products will prematurely dry out or damage the boat fabric.

5.1 Repairs

Avoid serious injury or death from a fire, explosion or poisoning. The glues and solvents used for repairing inflatables are toxic and highly flammable. As a safety precaution, always work outdoors or in an area that is well ventilated, and away from any open flames, sparks, or appliances equipped with pilot

lights. Breathing the vapours or exposure to the skin may be hazardous to your health. Avoid breathing the vapours and contact with skin and eyes by wearing a carbon filter respirator and protective gear over all exposed areas of the body.

5.1.1Small repairs

If you have any damage to your Lodestar, WE STRONGLY RECOMMEND THAT YOU REFER TO YOUR LODESTAR DEALER. If the damage is a small puncture you can use the material you find in the repair kit. Larger areas OR, IF THE PATCH OVERLAPS A SEAM, should be patched by a professional repair technician at an inflatable repair station. Contact your local Lodestar dealer for the nearest inflatable repair station. For the best results when gluing, the relative humidity should be less than 60%, ambient air temperature should be between 18 °C to 25 °C (65 °F to 77 °F) and not in direct sunlight.

In general, work as follows:

- Cut out a patch large enough to overlap the damaged area by 30 mm from all sides.
- Centre the overlapping patch over the damaged area and trace with a pencil the outline of the patch.
- If the fabric of your boat is **Hypalon** you have to buff, roughen with sandpaper, the patch area on the boat as well as the backside of the patch.
- (Buffing: getting rid of the stains from the surface around the air leakage and the patch by abrading with the sand paper evenly, however not deeply to avoid making the thread of the fabric exposed.)
- Clean the surroundings of the puncture and the patch with solvent.
- Apply two thin layers of adhesive using a short bristle brush, in a circular pattern on both the backside of the patch and the patch area on the boat. Allow the first layer to dry completely (approximately 15 minutes) before applying the second layer. The second layer should dry until tacky, then apply the patch to the prepared area and

- press down firmly. Using a smooth object (the back of a tablespoon works well), force out any air bubbles that may have been trapped under the patch, working from the centre of the patch to the outside.
- Wait 24 hours before you inflate the boat again

5.1.2 How to repair air leak on air deck

Materials to be prepared: Soap Water, Brush, Pin and Awl(both dull pointed), PVC fabric(0.45mm or 0.7 mm thick), Glue, MEK(Cleaning agent), Cotton Cloth(Rag)

5.1.2.1 Air leak through pin hole.

Brush soap water to suspicious area to find bubbling pin hole(s). Deflate Air Deck by 30%-40% to proceed to repairing.

- 1.a **Minor pinhole** Dip the tip of a pin or awl in glue, poke the pinhole 3 or 4 times to fill it completely with the wet glue, and wait for 15 minutes for drying. Deflate air deck.
- 1.b. **Large pinhole**(s) Make a round patch from PVC fabric in proper size to cover the hole.
- 1.c. Clean with MEK backside of patch and the leaking hole area and brush the glue evenly to both surfaces(1st layer of glue). Wait for 15-20 minutes.
- 1.d. Brush the glue again to both surfaces and wait for another 15-20 minutes (2nd layer of glue).

Apply the glued patch and press it gently to the leaking hole on Air Deck. Press it hard using pressing roller or rub it down with a dull edged metal until it is tightly adhered.

1.e. Repaired Air Deck must be aged for at least 24 hours at 80% of the recommended air pressure.

5.1.2.2 Air leak from side seam of air deck.

- 2.a Brush SOAPY WATER along the seam lines to find the leaking spot. Dip the tip of a dull pointed awl in glue and poke the spot with the awl and widen the hole. Deflate the Air Deck completely.
- 2.b Clean the leaking hole(B) with MEK or

toluene using a cotton stick and glue the inside of slot

- 2.c After 15-20 minutes, apply the glue again to the hole and wait for 24 hours.
- 2.d. If the leaking spot is too small to follow point 2.a procedures or the dull pointed awl is not available, make a rectangular patch in proper size and patch the leaking spot, following 1.c and 1.d procedures.

5.1.3 Air leak in tube by cut.

A. Air leak caused by an angled cut ("L" shape)

- Check size of the cut to measure if your fingers can work **inside** with a small brush. If the cut is not large enough to let your fingers in, just extend the cut using a knife to get a proper space your fingers can work through. Make a patch out of 0.45 mm thick reinforced PVC material in a suitable size which will be large enough to cover up the entire cut area.
- 3.a. Clean with M.E.K. one side of the patch and **inside** of the area to be patched as well. Then, apply glue with a brush to both sides you have just cleaned.
- 3.b. Wait for 15 20 minutes and make sure the 1st layer of glue is dry. Apply a 2nd layer of glue to the same areas and wait for another 15-20 minutes until they are dry.
- 3.c. Insert the patch and place it properly underneath the cut area. Press gently the matching top side and when it is well positioned, press it hard by a pressing tool to attain a tight adhesion.
- 3.d. Inflate the air chamber up to 70-80% of the recommended air pressure and apply soap water to the sealed area to detect any air leak.
- 3.e. If no air leak is detected, dry the SOAPY WATER completely. Now you are going to put a patch on the outside of the cut.

 Make the same size of patch out of 0.9mm thick reinforced PVC material (included in Repair Kit) and follow the same procedures as done in point 1.c and 1.d.

Repaired air chamber must be aged for at least 24 hours from repair at less than 80% of the recommended air pressure. Full inflation or premature use of the boat may cause poor adhesion of the patches.

B. Air leak caused by straight cut or small hole

- Check the size of the cut or the hole to determine if your fingers can work **inside** with a small brush through the rip. If the rip is too small to let your fingers in, just extend the cut using a knife to get a proper space your fingers can work through. Then, make a tape out of 0.45mm thick reinforced PVC material in a slightly larger length than the cut in approx. 20-30mm width, so that the actual area of cut can be completely covered.
- Follow the same procedures as described in point 3.a through 3.e. Inflate the chamber at less than 80% of the recommended air pressure and keep it at a dry place for 24 hours.

If any problem occurs, ask advice with your local dealer.

5.2 (Winter) Storage



IMPORTANT: To prevent hull or tube discoloration from marine growth or polluted waters, DO NOT store boat in the water for extended periods of time.

- 1. After use, the boat and all components should be washed with a mild soap and rinsed with fresh water. Dry all parts before storage in the carrying bag. This will help prevent mould or mildew.
- 2. Wood components should be inspected for damage or deterioration of the finish. Surface

scratches or abrasions should be refinished with a marine grade varnish.

- 3. To keep the boat looking new, store the boat in a cool dry area and avoid excess exposure to direct sun light.
- 4. An accessory cover is available to cover and protect your boat during storage.
- 5.If you store your boat for a longer period do not keep the boat in the delivered pack (or sack).

The boat is folded too tight in the pack, which gives sharp folds in the material.

Role or fold up the boat loosely and store IT IN A DRY PLACE

To avoid damaging the boat during storage, do not place heavy objects on the boat.

6. Environment

6.1 Discharge of pollutants

Prevent pollutants REACHING the water around your boat. Using the water for water sports also means taking care of a clean water sports environment.

6.2 Discharge and disposal of waste

Waste means all forms of garbage, plastics, recyclables, food, wood, detergents, sewerage and even fish parts in certain water – in short, nearly everything. We recommend you bring back everything you take out with you for proper disposal ashore.

If you have a marine sanitation device (head or marine toilet) installed, use an approved pumpout facility at your marine.

Many areas prohibit the discharge of sewerage overboard or even an operable overboard waste discharge.

6.3 Advisable speeds

When running, take care AT HIGH SPEED AS THIS MAY

- be dangerous to yourself or anyone OR anything in the water in front of you.
- cause considerable waves behind the boat which damages the waterfront.
- cause unnecessary noise to fellow water sporters.

6.4 Excessive noise

Noise means engine noise or even yelling.
 Many bodies of water have adopted noise limits. Don't use thru-transom exhaust unless you're well offshore. Music and loud conversation can carry a considerable distance on water, especially at night

6.5 Exhaust emissions.

 Increased exhaust (hydrocarbon) emissions pollute our water and air. Keep your engine tuned and boat hull clean for peak performance. Consult your dealer and engine manual for information

10. Warranty

LIMITED WARRANTY

- I. We warrant each new production LodeStar inflatable boat and accessories attached thereto (hereafter referred to as "Product") to be free from defects in material and workmanship, but only when the consumer sale is made in a country to which distribution is authorized by us.
- II. The warranty shall become effective only upon receipt of a completed Warranty Registration Card or digital registration confirmation, which shall identify the product so registered by serial number. This warranty shall remain in effect as described below.
- A. Hull fabric is covered by a 5 year warranty against cracking, porosity and rot.
- B. Hull seams are covered against delaminating by a limited 5 year warranty.
- **NOTE**: Seams are determined to have delaminated when the outer coating separates from the fabric base or the seam loses its structural strength. If delamination is occurring on only one seam and not on the entire boat, the seam is to be repaired under warranty.
- C. All other boat parts, including but not limited to components such as car locks, lifting handles, foot pumps, boat bag transom holder, transom, "D" rings, stringers, "H" fittings, floor boards are covered by a limited 2 year warranty.
- III. Since this warranty applies only to defects in material and workmanship, it does not apply to normal wear and tear, or to damage caused by:
- A. Neglect, lack of maintenance, accident, abnormal operation or improper installation or services;
- B. Use of an accessory or part not manufactured or sold by us;
- C. Participating in or preparing for racing or other competitive activity;
- D. Alteration or removal of parts.
- IV. This warranty does not cover incidental or consequential costs or expenses such as: haul—out, launch, towing transport and storage charges; telephone or rental charges of any type, inconvenience, or loss of time or income; or other consequential damages.
- V. Customer must provide reasonable access to the product for warranty service by delivering the product for inspection to a Marine Power dealer authorized to service the purchaser's product. If a purchaser cannot deliver product to such authorized dealer, the may give notice in writing to the company. We shall then arrange for the inspection and repair, provided such service is covered under this warranty. Purchaser shall pay for all related transportation charges and/or any other expenses associated with that service. Any product or parts shipped by purchaser for inspection or repair must be shipped with transportation charges prepaid. The Warranty Registration Card is the only valid registration identification and must be presented at the time warranty service is required. Warranty claims will not be accepted without presentation of the Warranty Registration Card.
- VI. Our obligation under this Warranty shall be limited to repairing a defective part, or at our option, refunding the purchase price or replacing such part or parts as shall be necessary to remedy any malfunction resulting from defects in material or workmanship as covered by this Warranty. We reserve the right to improve the design of any product without assuming any obligation to modify any product previously manufactured.
- VII. This warranty gives you specific legal rights, and you may also have other legal rights which vary from country to country.