



# **USE AND MAINTENANCE MANUAL**



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## INTRODUCTION • DELIVERY OF THE TRAILER

Thank you for choosing a road trailer designed and manufactured by Lider. All the information in this Owner's Manual will help you use and maintain your trailer over a maximum lifespan. This Use and Maintenance manual is common to the entire Lider and Sun way range and covers most equipment and options.

All the information and features contained in this brochure are up to date at the time of publication and are provided for informational purposes only and can in no way engage the responsibility of the manufacturer. However, as part of our policy of continuous improvement, we reserve the right to make changes at any time without notice.

If you come to sell your trailer, please pass this manual on to the purchaser so that they have the necessary information for its proper use.

Have a good trip and share with us the pleasure of towing a trailer, which is now considered a vehicle in its own right!

Please read this guide carefully and pay attention to the technical data to ensure its proper operation and reliable safety.

## **European approval:**

Following its objective of guaranteeing a high level of safety and environmental protection, the European Union imposes new technical provisions in terms of vehicle homologation and in particular of trailers through Directive 2007/46/CE,

The purpose of this directive is to certify that trailers have undergone a series of checks before they are marketed in Europe.

All our factory-fitted trailers that comply with this directive are identified by the sticker below:

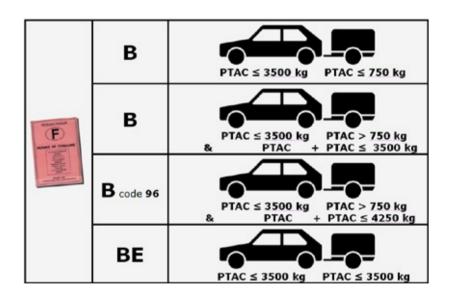


A certificate of conformity is provided with each trailer. With this, it's possible to register throughout Europe according to the national rules in force

## **REGULATORY MATTERS • INSURANCE**

#### WHICH LICENCE FOR TOWING?

## Regulations in force since 19/01/2013

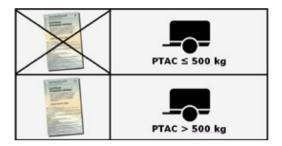


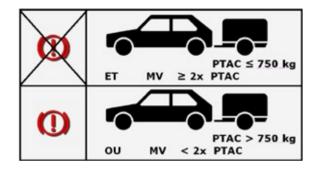
#### **PLEASE NOTE:**

Make sure that the hitching capacity of the towing vehicle is greater than or equal to that of the trailer.

## **REGULATORY MATTERS • INSURANCE**

#### THE GREY CARD? BRAKED TRAILER?





#### **INSURANCE?**

Using a trailer requires specific insurance in most cases. As a minor exception, most insurance covers a trailer not exceeding 750 kg, but only when it's hitched to the insured vehicle; that is, if you have a problem with an unhitched trailer, the insurance doesn't cover it!

Make sure you're well informed – the cost of a year's insurance for a luggage trailer is often very low. It may be worth purchasing.

So that your trailer is always functional, respect the conditions of use, and make sure the obligatory revisions are carried out by a LIDER-SUN WAY dealer. Maintenance varies whether it's for braked or unbraked trailers.

## WARRANTY CONDITIONS

LIDER grants a commercial warranty of 1 year from delivery of the trailer to the customer on condition that the trailer is serviced in accordance with the maintenance requirements by a LIDER-SUN WAY dealer. It is 2 years on certain parts of FAST trailers. The warranty includes free replacement of parts recognised as defective after contradictory assessment, to the exclusion of any other prejudice.

Regardless of the commercial warranty, LIDER is bound by the legal guarantee of conformity mentioned in Articles L. 217-4 to L. 217-12 of the Consumer Code and that relating to defects in the item sold, under the conditions provided for in Articles 1641 to 1648 and 2232 of the Civil Code.

Article L 217-4 of the Consumer Code

The retailer is required to deliver goods in accordance with the contract and is liable for any lack of conformity existing at the time of delivery. The retailer is also responsible for any lack of conformity resulting from the packaging, assembly or installation instructions when this has been made its responsibility by the contract or has been carried out under its responsibility.

Article L 217-5 of the Consumer Code The goods comply with the contract:

1 If they are suitable for the use usually expected of such a good and, if applicable:

- if they correspond to the description given by the retailer and have the qualities the latter presented to the purchaser in the form of a sample or model;

- if it has the qualities a buyer can legitimately expect given the public statements made by the

retailer, the producer or its representative, in particular in advertising or labelling;

2 Or if they have the characteristics defined by mutual agreement between the parties or are suitable for any special use sought by the purchaser, brought to the attention of the retailer and which the latter has accepted.

Article L 217-12 of the Consumer Code

Any action resulting from the lack of conformity lapses two years after delivery of the good. Article L 217-16 of the Consumer Code

When the purchaser asks the retailer, during the course of the commercial warranty granted to him/her during the acquisition or repair of movable property, for a repair covered by the warranty, any period of immobilisation of at least seven days is added to the duration of the warranty left to run.

This period runs from the purchaser's request for intervention or provision for repair of the item in question, if this provision is subsequent to the request for intervention.

#### Article 1641 of the Civil Code

The retailer is bound by the warranty for hidden defects in the item sold which make it unfit for the use for which it is intended, or which reduce this use so much that the purchaser would not have bought it, or would have given a lower price, if he/she had been aware of them.

Article 1648 paragraph 1 of the Civil Code The action resulting from unacceptable defects must be filed by the purchaser within two years of discovering the issue.

## WARRANTY CONDITIONS

The warranty does not apply to:

- Apparent defects, incidents originating from wear and tear of equipment, abnormal use, overload even temporary, lack of maintenance, modifications or conversions not approved by our technical department.
- Costs related to normal wear and tear of the trailer as well as expenses related to its regular maintenance or non-use for a long period (example: tyres, bearings, shock absorbers, bulbs)
- LIDER-SUN WAY dealer workshop labour
- The use of non-original or non-compliant spare parts
- Repairs carried out by an unauthorised workshop without prior agreement from the manufacturer.
- Compensation of any kind. All possible damages suffered by the user of the trailer, such as towing, breakdown costs, rental of a replacement trailer etc.
- The cost of transporting the trailer
- Damage due to overloading, excessive speed or use outside the road network.
- Defects occurring as a result of non-compliance with the manufacturer's instructions for use defined in this manual.
- Defects occurring as a result of non-compliance with the regulations in force.

- Failure to comply with the trailer maintenance and adjustment conditions defined in this manual. The warranty is particularly excluded when the trailer is washed with a high-pressure device or is subjected to external aggressions (salt, manure or any corrosive or incompatible products with zinc and galvanisation).
- The fitting of accessories not carried out by the manufacturer or by a LIDER-SUN WAY retailer

It's important to adhere to the maintenance and inspection intervals prescribed by the manufacturer at the end of this manual. Remember to have it filled in after each review. This completed manual is proof that these intervals have been observed.

For a correct, rapid settlement of your spare parts orders or warranty claims, you must systematically take your purchase invoice and the serial number of your trailer to your LIDER-SUN WAY dealer. The manufacturer will not accept any direct complaints or requests.

IMPORTANT: If the trailer is sold on, give this manual to the new owner.

## BEFORE TAKING TO THE ROAD

For your safety, your trailer must be properly adjusted and checked by a competent person before first use.

The advice and instructions are given for information only and cannot, in any case, engage the responsibility of the manufacturer.

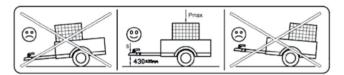
IMPORTANT: Upon receipt of your trailer, our dealer carries out in your presence a series of checks (see page 26), to verify the most important safety points. This document must be signed by both parties before you depart.

## Before you set off, always make sure you:

- Check your tyre pressure. Correct inflation ensures good roadholding and a longer tyre life. (page 13)
- Check the tightening of the wheels (tightening torque). (page 13)
- Check your coupling, namely the ball and ball joint (wear, lubrication), as well as the safety elements (good locking of the ball joint, and installation of the chain or safety cable). (page 16)
- Check the hub oil level if you have transparent hub caps, referring to page 11 of this manual

\*\*Check the distribution of loads. To do this, make sure that the weight on the coupling ball is neither too low (risk of yawing), nor too great (limited by the capacity of the coupling). This weight should represent approximately 5 to 10% of the trailer's mass. (page 7)

The loading surface must be horizontal when the trailer is hitched.



- **Check the signalling.** A malfunction of the lights can result from a bad connection to the 7 or 13-pin socket, a damaged cable or simply a burnt-out bulb.

Always remember that the braking distances of a vehicle plus trailer are much longer and watch out for yawing at high speeds. So drive at a reduced pace.

## LOADING

All necessary precautions must be taken to avoid loading a vehicle causing damage or danger (Art. R312-19 of the highway code).

The trailer's certificate of conformity and manufacturer's plate indicate the maximum working load. We strongly recommend that you do not overload the trailer so as not to affect the handling. Overloading could damage the axles, chassis, etc. in addition to being illegal, as this will void the warranty.

#### Little reminder:



1 m<sup>3</sup> of sand: 1800 kg 1 m<sup>3</sup> of wood: 700 kg

The load must be stowed correctly. Side rails and closures must always be closed when driving.

The load must not be concentrated on an area <30% of the useful area.

The standard equipment of Lider - Sun Way trailers offers tiedown systems on the frame for easier attachment. For vans, see the Vans section.

The weight of options and accessories reduces the payload of your trailer. Example: a set of mesh rails for a 5-metre platform weighs approximately 140 kg, while a spare wheel with its holder weighs about 15 kg.

Make sure that the load's centre of gravity is as close as possible above the axle, and that the load's contact surface is evenly distributed over the chassis.

The mass on the coupling head is subject to regulatory provisions. The Lider-Sun Way plate indicates the maximum allowable mass on the hitch (opposite the number 0-).

9-	LIDER e2*2007/46*0195*14					3		
			46°0195 15K100 600		PV PTAC IxL 1.53	142 500 2x2.63	kg kg m	
Berry	0	-	68	ko	S	4	m2	
	1	-	600	kg	THEFT	THE REAL PROPERTY.	THE REAL PROPERTY.	
	2	-	-	kg				
Street	3	100	**	kg	REM150.3R15	291800417	7.	

Lider-Sun Way trailers comply with ECE/55R regulations and are designed so that the height of the hitch of the loaded trailer is between 395 mm and 465 mm or  $430 \pm 35$  mm (height from ground to mid-ball) - heights for adjustable drawbars listed in the commercial catalogue.

The wrong coupling height can lead to premature ageing of the axles, especially on twin axles: a hitch that's too low causes a load transfer to the front axle / a hitch that's too high causes a load transfer to the rear axle.

Avoid excessive stress due to unreasonable or improper driving. Avoid sudden loads and stresses exerted on the axle(s). Adapt your speed to the load and the road.

It's in your best interest to perform regular maintenance on your trailer. At the end of the catalogue, we provide a maintenance booklet for your trailer. In addition, the warranty is only valid if you follow the maintenance instructions and advice on use. Any intervention on the safety systems (braking, coupling and wheels) must be carried out by a professional from the LIDER-SUN WAY network.

## 1 Storing your trailer

Your trailer must be stored in a place sheltered from bad weather and well ventilated. Trailers should be parked in such a way as to prevent water from stagnating in the trailer. For boat trailers, complete rinsing and lubrication of the mechanisms must be done before storing away for winter. Do not apply the handbrake during a long period parked, as the brake linings may seize.

Store your trailer empty or chock it so as to unload the axle(s) to prevent damage.

## 2 Maintenance of galvanised parts

It's only after their oxidation that the galvanisation of parts forms effective protection against red rust. This results in a matt look. Galvanisation is subject to acid and salt attack. So you need to wash your trailer with plenty of water after each transport on a snowy road, manure, and other acidic or saline substances. It's possible that traces or streaks of white rust appear. These are normal and superficial. They do not alter the protection of your trailer and will not be a valid reason for a warranty claim.

## 3 Maintenance of aluminium parts

They do not require any special maintenance and can be cleaned with a high-pressure cleaner.

## 4 Tarpaulins and nets

Lider tarpaulins are made of woven PVC. They're quick to clean. When unfolding and folding the tarpaulin, make sure the buckle doesn't tear the tarpaulin. A tarpaulin that has been stored for a long time may show white marks in the folds. So make sure you fold your tarpaulin correctly and that it's dry. Tarpaulins and nets should be stored in a dry place protected from UV rays

#### 5 Rails and wooden floor

The rails and wooden floor of Lider trailers are made of multi-ply glued laminates. This high-quality wood doesn't require any maintenance. Wood is a hygroscopic material. This material is required to work over time, causing possible screw breakage or micro-cracks. Over the years and due to inclement weather, the wood can become dull. When storing your trailer, don't allow water to accumulate on the wood and don't store damp substances inside for too long. This could quickly degrade your wood.

#### 6 Rails

Even on a short trip, always close all 4 sides. They must be present to prevent lateral play leading to detachment and possibly damaging the frame.

#### 7 Mesh extensions

As with the rails, all 4 sides must be present. Lider extension sets have an anti-corrosion treatment, and due to this manufacturing process, some sets may have some deformation which in no way affects their function.



#### 8 Thermoformed cover

Our thermoformed ABS cover can be fitted with roof bars. The maximum admissible load is 60 kg for the roof rack kit. It is strictly forbidden to stay inside a trailer with the cover closed. Risk of suffocation! Before setting off, the cover must always be locked to prevent it from opening.

## 9 High tarpaulin

To increase the load volume, Lider offers tarpaulins of different heights that can be adapted to your trailer. The tarpaulin must be closed completely before setting off. It is strictly forbidden to drive with the support bar alone mounted on the trailer (risk of losing the bars during transport). It is strongly recommended that, after use, you fold the tarpaulin correctly to avoid damaging its appearance and avoid tearing. Lider declines all responsibility in the event of a problem with a tarpaulin other than the Lider range.

## 10 Spare wheel

Improper fixing of the spare wheel support can lead to loss of the wheel, tearing of the sheet metal or chassis. Check the tightening of the bolts every 500 km. Spare wheels older than 2 years are no longer suitable for continuous use.

Lider - Sun Way reserves the right to supply you, for a given spare wheel size, with a different brand and load and speed indices for the running gear.



## 11 Ramp & Tailgate

To facilitate loading and unloading your material, Lider offers a complete range of steel and aluminium ramps and tailgates.

To ensure the stability of the trailer and reduce the mechanical stresses on the axles and chassis, it is MANDATORY to use the props when loading and unloading.

Below are some tips to follow.

## Before loading / unloading

Put props or wedges in place (compulsory).

Stabilise the trailer and ramps. It is essential that the nose of the ramps is at the same level and that the loading surface is horizontal

The distance between the two ramps must be adapted to the track of the vehicle to be loaded.

 Make sure that the vehicle to be loaded does not exceed the trailer's maximum payload. (300kg maximum for wooden tailgate and Robust trailers)

## When loading / unloading

■ The speed of the vehicle to be loaded must be slow without sudden directional movement to avoid displacing the ramps or damage.

Watch out for movement of the ramp's nose when

loading.

Position the loaded vehicle with respect to the load distribution (page 7).

#### **IMPORTANT:**

The technical characteristics of the ramps are listed on the side of the

The props intentionally do not touch the ground because the suspension compresses upon loading, although the bottom of the props must not be more than 80mm from the ground, provide

## 12 Jockey wheel

Check its operation by fully turning the wheel. If necessary, lubricate the spindle. Do not manoeuvre the loaded trailer on the jockey wheel as there is a risk of prematurely damaging it.

Some jockey wheels have a grease nipple. Lubrication is essential to ensure proper operation!

If the jockey wheel is held in place by a collar, be sure to lubricate the tightening handle regularly.

## 13 Hydraulic tipping

For extended storage outdoors, the cylinder rods should be retracted or greased. Rod seals and gaskets keep the cylinder fully sealed. The cylinder rods must be kept clean to prevent premature wear of the gaskets which could cause oil leaks.

If you encounter even the slightest problem during tipping, lower the bed completely before looking for causes. Any intervention on the hydraulic system must be carried out by a professional from the Lider network.

You must not use the tipping function on a slope of more than 3%.

BE CAREFUL to properly secure the bed with a strut or prop to prevent accidents if working on a raised bed

Check the condition and the oil level at least once a year. The oil recommended by LIDER is hydraulic oil type H46. Respect the level indicated on the reservoir or fill it completely if there is no marking. For manual pumps, you should fill to 90% of the maximum volume, to avoid any backflow when the cylinder is lowered.

Ón a manual pump: the pressure relief valve is a fragile item. Hand tightening is sufficient. Overtightening

major can damage the pump casing and render it unusable. Remove the pump lever from the bracket when transporting. Lifting the tipper cylinder may require a number of pump strokes for priming.

On electric pump: an end-of-travel safety device engages when the tipper is raised to the maximum. Lowering is then only possible after a few seconds. Do not force the remote control at the end of the lift cycle to avoid locking the cylinder in the high position.

The charger is in a bag: connect it to the remote control or to the charging socket on the chassis and plug it into a 220V socket. The charger is not waterproof, so be sure to store it in a safe place.

You need to charge the battery for 13 hours when it's empty for it to be fully charged. Charging the battery depends on the number of uses. The customer can use the system between 30 and 100 cycles depending on the trailer model. They are deep cycle batteries allowing a high capacity of use.

**PLEASE NOTE**: the battery may be damaged prematurely if it is not recharged for a period >3 months. Partially IMPORTANT: Do not force the end of the cycle, as this will the system and risk breaking the end-of-travel cable, posing a physical risk to the user.

#### 14 Axles

The rubber axle suspension is maintenance-free. Overloading can cause collapse or premature ageing of the axle. Have the bearings checked every year at a competent workshop. Tapered bearings require periodic lubrication and adjustment (minimum every year). The cartridge bearings do not require any maintenance.





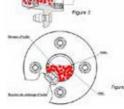


15 Oil bath hub

For axles with an oil bath, the oil should be changed every 2 years. Sun Way sells specific oil (ref: S31001). Sun Way accepts no responsibility if using any other oil.

Be sure to observe the oil level to ensure proper operation.

Park the vehicle on a horizontal surface (Figure 1) Adjust the position of the wheels so that the respective pairs of markings (min/max) are perfectly horizontal (Figure 3) The oil level is correct if it's between these min and max markings. If this isn't the case, you need to add or remove oil using the oil drain bolt to obtain the right level correct oil. 11



Checking the bearing play: Jack the vehicle up and secure it with chocks so that it's held stationary. Turn the wheels manually and shake them. If you notice any play when doing this, you need to contact a professional from the Lider network.

#### 16 Drum braked axles

Lubrication should be done once a year for tapered bearings. Pay attention to the tightening torques.

If your trailer is fitted with an axle with tapered bearings, have your bearings checked every year at a competent workshop for lubrication and adjustment.

The hubs should never be put in water as this will lock the drum brakes.

If the hubs are submerged, rinse them thoroughly with clean water. This rinsing is facilitated by the kit adapted to the braked axles of Sun Way trailers.

Do not neglect all other braking elements such as the linkage, cables, springs, etc. Pay equally close attention to these items for lubrication.

IMPORTANT: As far as possible, avoid cleaning the bearing hub with a high-pressure cleaning device. If such cleaning is really necessary, all components must then be fully greased and/or oiled. You must also check whether all the wheel bearing seals are still in good condition. After contact with salt water or chemical agents, we recommend rinsing all brake components with fresh water.

IMPORTANT: Setting/adjusting the disc brakes must be carried out by a professional from the Lider

#### 17 Disc braked axles

Checking the braking reaction threshold: With the towed vehicle parked, apply the handbrake and gently push the towed vehicle in reverse until the park lever has reached its rearmost end position. Then slide the coupling head/draw rod into the inertia braking device. (This may require some effort depending on the brake model you have). The traction rod should automatically extend to the zero position thanks to the gas contained in the shock absorber. If extension lasts more than 30 seconds, you should see a professional from the Lider-Sun Way network.

If you can retract the traction rod by more than half when the handbrake is applied, consult a professional from the Lider-

Sun Way network immediately.

with discs::



with drums

## 18 Signalling and electrics

Before each use, check that the signalling lights are working properly. The submersible Sun Way range (Fast) is fitted with watertight lights.

Make sure you have your vehicle connection system checked, and make sure it protects the vehicle harness. Lider-Sun Way will not take responsibility for vehicle breakdowns related to a malfunction of the trailer's electrical system. A fuse at the end of the coupling installation is mandatory.

LED specificity: if the lights do not come on with your vehicle, it may be equipped with an unsuitable harness for this new technology. An additional electronic box is available from the Lider-Sun Way network

#### 19 Wheels

Check the pressure and condition of the tyres and rims regularly and have the wheels balanced if necessary (pressure on page 15). In the event of prolonged immobilisation, the trailer must be jacked up to avoid possible deformation. When changing or retightening the wheels, tighten the nuts crosswise with a torque wrench. Wheel bolts/screws should be checked before each journey. Contact with salt or acidic substances on the road or in water may lead to the appearance of traces of white or red rust. Thorough rinsing of the rim prevents the appearance of rust, which in no way affects the characteristics of the product.

#### 20 Brake cable

To ensure proper brake operation and reduce the possibility of premature lining wear due to improper operation, Lider-Sun Way recommends that you change the cables regularly and in pairs.

For disc brake systems in the Sun Way range, lubrication is imperative at least every 6 months because of immersion in water for cables with grease nipples.

MAKE SURE you rinse the braking system well!

## 21 Tipping handle

Do not tilt the trailer unless it is hitched up and the parking brake deactivated. If the brake is activated, when tilting, the parking lever moves back automatically, and when the trailer returns to the flat position, the lever which is locked cannot return to its normal position, which damages the fixing of the lever. Be careful not to cause impact when returning to the flat position, as it may damage certain parts.

2-axle trailers cannot be tipped without a hydraulic kit (kit available as an option depending on the model) or gas spring.

#### 22 Beach cart

Illegal to drive on public roads. On pathways or on the beach, the maximum authorised speed is 10 km/h.

## 23 Stainless steel parts

Stainless steel parts do not require specific maintenance. You must not use the impact wrench for tightening and loosening the stainless-steel screws.

#### 24 Nuts and bolts

Salt is corrosive to all the bolts on the trailer, so rinsing the trailer with clean water is essential to prevent corrosion. On certain product ranges, Lider-SunWay uses stainless steel screws.

The tightening torques are shown on page 15 of this manual

## 25 Adjustable drawbar

Coupling heights are listed in the sales catalogue. The drawbar must always be adjusted so that the loading surface is horizontal

Adjustment method:

Remove the safety pin at the lever Unscrew the locking lever fully

Move the coupling device to the required height using the handle

Make sure the ribs of the adjustment notches engage correctly

Make sure that the brake control is perfectly aligned horizontally with the ground

Tighten the locking handle and secure it with a hard rubber hammer

Replace the safety pin

#### 26 Winch

Winching with cable: make sure the cable isn't overstressed and/or in a position that could damage it. It must remain in the pulleys and/or not damage the body of the trailer. The cable under load should be coiled such that a minimum space of 2 times the diameter of the cable remains on the drum flange. Overloading the winch and damage to the cable must be avoided.

The nominal capacity is given for a slope of 30%. The capacity is greater in the first layers of winding than in the last layers (see indications on winch)

When loading, it isn't necessary to winch the load to the stop. The tilt can be removed and the load can be moved to the stop horizontally. You should leave 5 turns of the cable or strap on the winch to avoid disconnecting the cable or strap and thus avoid an accident.

Winching must be done in line; an angle of 4° maximum is tolerated, otherwise there is a risk of damaging the winch.

Make sure the winch is securely attached to its base and use the correct anchor when hooking the winch hook to the load. After winching, secure the load. Do not rely on the winch to stabilise and hold loaded equipment in place.

For your safety, checks and maintenance should be carried out regularly by a Lider-Sun Way

network professional. The strap, cable or rope must be replaced as soon as any damage becomes apparent.

Double speed: position the crank to the desired speed in accordance with the indications on the winch.

NOTE the winding direction of the cable or strap, and follow the arrows indicated on the

Disengagement: always remove the crank before this operation. If there is a red wheel, then push it well before turning it to avoid degradation, otherwise there's a metal wheel to operate. Do not disengage when a load is hooked on.

If unwinding without a load using the crank, the clutch may not be engaged, and to force the lock, you then need to turn the crank in the winding direction until it clicks, or pull sharply on the strap, cable or rope until it locks.

WARNING Do not stay in the cable or strap line when winching to avoid a "whiplash" impact in the event of failure. Do not oil or grease the from the brake

#### 27 Vans

To optimise your driving, make sure the load is well distributed. It's very easy to place the load on the front partition, but this may not comply with good load distribution. The load must be well secured. Lider sells optional tie-down rails. When tightening, take care not to deform the body, otherwise the structure will deteriorate or the plywood will break.

If you have to load or unload, you must always be hitched up with the rear props in position. Transporting animals or people is prohibited.

We do not recommend that you use a high-pressure washer on your van to preserve its watertightness.

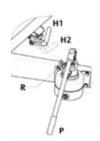
The van has a flat roof. When parking it outside, be sure to tilt it using the jockey wheel or rear props to avoid water stagnation.

NOTE the useful dimensions of your box, especially for when clearance is limited (example toll car park entrance, etc).

## 28 Lowering flat-bed

#### LOWER

- 1. Pump (P) until you feel resistance on the lever
- 2. Unlock the handle (H1 -> H2)
- 3. Maintain position H2 and open valve (R) RAISE
- 4. Close the valve (R)
- 5. Pump (P) until the handle locks properly (H1 -> H2 -> H1)



Tightening torque for coupling / axles / wheels:

Assembl y	Size	Bolt class (min)			Wheel tightening torque (in Nm)
	M10	8.8	8	40-50	74
Time 4	M12	8.8	8	70-80	120
Fixed	M14	8.8	8	115-140	120
	M16	8.8	8	180-200	
	M10	8.8	8	20-40	
With Pivot	M12	8.8	8	20-60	
	M16	8.8	8	140-150	

Tyre pressure:

Designation	Pressure in bars	Designation	Pressure in bars
3.50x8	3	165R13C	4.5
5.00x10	3.5	165/70R13	2.5
4.00x8	cart 5.2	175/70R13	2.7/ cart 3.5
4.00x10	2.5	175R14C	4.5
135R13	2.2	185/70R13	2.7
145R13	2.5	185R14C	4.5
155/70R13	2.5	195R14C	4.5
155R13	2.2	195/50R13C	6.5
155R13C	4.5	195/55-10C	6.2
155/70R12C	6.2	195/70R15C	4.5
165R14C	4.5		

IMPORTANT: When dismantling, any lock nut must be replaced with a new

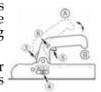
The technical documentation of the elements mounted on our trailers can be requested from professionals in the Lider-Sun Way network.

## **HITCHING**

#### **HOOKING**

IMPORTANT: The ball joint or coupling head must only be used with balls of Ø 50 mm, in accordance with the ECE/55R

1 Bring the towing vehicle as close as possible to the trailer. Present the coupling head above the towing vehicle's coupling ball.



2 Open the ball joint (position A) and lower the trailer until the ball joint engages (position B).

Checks: It's possible to check as follows whether the coupling head is correctly attached to the towing vehicle: the lip of the locking lever must be visible at the manipulation lever (3) and the profile rivet is in the OK zone (green / /+) of the display on the side of the oblong hole (4) / If the profile rivet is outside this display area, check the position of the coupling head or, if necessary, repeat the coupling procedure. If the ball joint is worn (Ø 49 mm), the profile rivet is within the

"ATTENTION" area of the display.

Raise the trailer's jockey wheel or remove it to prevent loss or theft.

Unlock the parking brake (for braked trailers).

3 Connect the electrical socket to the one on your car. Check the lights are working.

IMPORTANT: Make sure your trailer is properly hitched up before setting off and that the safety cable is correctly connected. For good roadholding, the coupling height must be respected (see 7)

Trailers are fitted with a secondary hitch (unbraked trailers) or safety cable (braked trailers) to be installed before setting off.

#### Braked hitch

The coupling head is an integral part of the trailer's drawbar. It may only be used in the fully assembled and tested system for coupling the trailer to the towing vehicle. In this case, respect the permitted weights and loads (see page 7 of this manual)

Engagement is OK when the warning light (1) appears or the profile rivet is in the green / OK zone



#### Maintenance

Oil (1) and grease (2) the ball receiving sphere, joints and support points.



## UNCOUPLING

#### UNHITCHING

- 1 Unplug your car's electrical socket
- 2 Lock the parking brake if the trailer is braked or use wheel chocks. Operate the locking lever, pivot the handling lever forwards, using a rocking movement, and lift the coupling head to unhook the trailer from the car (use the jockey wheel if necessary).

ATTENTION: Do not put your fingers in an open ball joint! The slightest pressure on the cap can trigger the closing mechanism and cause injury to the hands.

Do not manoeuvre the loaded trailer on the jockey wheel.

If the safety cable is worn or twisted, replace it before using the trailer.

**NOTE:** When parking with your trailer on the road, the rear lights must remain visible. Otherwise, other users must be warned of the presence of the vehicles by means of a warning triangle prescribed by national regulations.

When parking your trailer for a long time, it's recommended that you chock the wheels and release the handbrake to prevent the brake shoes from sticking to the drum. When parking it in reverse, it's advisable to make a forward manoeuvre of about 20 cm to decompress the hitch head cylinder and prevent the pads from sticking to the drums.

Before setting off, the jockey wheel must be completely raised by turning the crank until it stops. For models with a clamp, you need to raise the body of the jockey wheel then tighten the bolt clamp.

Hitching parts are safety items. It is obligatory to have them checked and replaced by the Lider-Sun Way professional network.

#### TROUBLESHOOTING:

- If the ball joint does not engage correctly:

The ball joint  $\emptyset$  >50 mm: have the hitching ball replaced. The drawbar load is insufficient: press down by

hand on the coupling head.

The coupling head is dirty or stuck: clean and lubricate the coupling head and replace it if necessary.

- If there is too much play between the head and the hitching ball or if the indicator is not OK:

The ball ( $\emptyset$  <50 mm) or the coupling head is worn: have the worn element replaced.

The seal housings are badly worn: contact your dealer.

Deformation observed: have them repaired by the Lider-Sun Way professional network.

- If it's impossible to unhitch the trailer:

The trailer and the towing vehicle are not at the same level: place them in the same direction of travel and unhook

The hitch ball is oval: replace.

In the event of a problem not described above, contact a professional from the Lider-Sun Way network and do not move the trailer.

## **BULB AND LIGHT CHANGING**

#### 7-PIN MALE PLUG

#### 13-PIN MALE PLUG

ISO 11446

(trailer side) ISO 1724



1 Left indicator - yellow 2

Fog light - blue

- 3 Earth white
- 4 Right indicator green
- 5 Right position light- brown 6

Stop light - red

7 Left position light - black

Our trailers, which meet European homologation, are equipped with a 7-pin plug for trailers weighing less than 750 kg and 13 pins for trailers weighing more than 750 kg.

(trailer side)



- 1 Left indicator yellow
- 2 Rear fog light **blue 2a** Fog return **grey**
- 3 Earth (for contacts 1 to 8 of the circuit) **white**
- 4 Right indicator green
- 5 Right light brown 6

Stop light - red

- 7 Left light black
- 8 Reversing light and/or reverse gear for inertia brake- orange

Not assigned on our trailers:

- 9 Electric current supply (permanent
- positive green
  10 Positive charge line for battery in the trailer area

Earth (for contact 10 of the circuit)
-white
Not wet

13 as**signtac**t 9 to 12 of the Earth (for circuit) - white LED: Watertight lights: contact a network professional. For

any work on a non-waterproof light strip, ensure that the rear connector is positioned bent section down.

## Bulb changing procedure: (Excluding LED)

You'll find below the instructions allowing you to change the bulbs on Lider-Sun Way trailers except for Sun Way waterproof lights.

## For the rear lights: 1

Remove the lens cover:

remove the screws using a screwdriver.

Replace the defective bulb.

Reposition the lens cover and screw in.

## Correspondence of bulbs by type of light.

P21W / PY21W	Flashing - Reversing - Fog
P21-5W	Position and Stop light
T4W-R5W	Marker light
R5W / C5W / P5W / R10W	Number plate light
W5W / C5W	Front position lights







## **BULB AND LIGHT CHANGE**

## For front position lights

- 1 Remove the lens cover: remove the screws using a screwdriver or key.
- 2 Replace the defective bulb.
- 3 Reposition the lens cover and screw in.

## For square front position lights r

- 1 Unclip the front lens cover and internal covers (present depending on the model).
- 2 Replace the bulb.
- 3 Reposition the internal lens covers and front cover.

## For marker lights \$

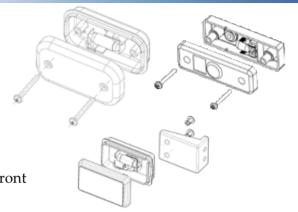
- 1Remove the rubber washer.
- 2 Open the rubber branches, remove the lens covers and turn the bulb part a quarter turn.
- 3 Replace the defective bulb.
- 4 Reassemble the whole thing.
- 5 PLEASE NOTE: Red lens cover on the back and white cover on the front.

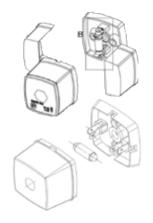
## For separate number plate lights t

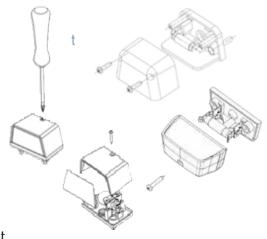
- 1 Remove the lens cover: remove the screws using a screwdriver.
- 2 Replace the bulb.
- **3** Reposition the cover and screw in.

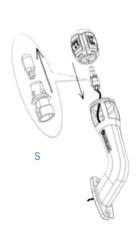
N.B.: For some number plate lights, you need to remove the light from the frame.

NOTES: When positioning the bulbs, make sure that the bayonets of the bulb are fully inside the light support seat. 19









## ADJUSTMENT / LAUNCHING FAST RANGE



## **Boat adjustment:**

Observe the maximum mass on the hitch. For this, the position of the centre of gravity of the boat is very important. The manufacturer's plate tells you in kg at point 0 the maximum permissible mass on the hitch.

When adjusting the trailer, the professional ensures that the wheel axis or middle of the tandem is between the 2 markings on the chassis.



The brake linkage does not support its own weight and must be supported at a minimum point along its length (bow support, guide, etc.)

The setting of the boat-trailer assembly must be validated by a professional from the LIDER-SUN WAY network

## Launching

When launching a boat, there are a multitude of moving parts (boat, strap, etc.), so you must be extra vigilant to avoid material and bodily injury to yourself and others.

- 1 Unstrap the boat.
- 2 Bring the trailer down to the water.
- 3 Rotate the registration plate holder.
- 4 Unhook the boat from the winch.

Be careful of possible movement once the boat is released.

Make sure the boat is moored with a hawser or have a crew member on board before launching the

- 5 Reverse the trailer into the water, then brake so that the boat slips free from the trailer by inertia. Please note: launching requires good grip of the car on the slipway. Be careful when descending wet or slippery slipways.
- 6 Taking the trailer out of the water.
- 7 Rinse the trailer with fresh water after each use.

PLEASE NOTE: This range of trailers can be immersed in water with the exception of the jockey braked hitch and the electrical box located at the front trailer. It is therefore strongly recommended that you wheel from its support during launching and

Before any launch attempt, make sure that the slipway is suitable. The angle of the slope must be greater than or equal to 13% for non-breaktrailers.

## RETRIEVAL FROM THE WATER FAST RANGE



#### Retrieval from the water

Please note. When retrieving your boat from the - The number plate holder is rotated

- When launching or retrieving, never stand between trailer and boat to avoid any risk of getting
- 1 Back the trailer all the way into the water. The trailer hitch must not be in contact with the water
- 2 Back the boat up at reduced speed.



- 3 Mount the boat on the trailer.
- 4 Hook up the boat and winch it until the bow of the boat comes into contact with the stop fixed to the winch support and tighten the strap fully after making sure that the boat is correctly positioned on the trailer. If the boat is not in place, repeat the manoeuvre.



- 5 Taking the boat out of the water.
- 6 Rinse the trailer with fresh water after each use. Pay particular attention to the braking system.

## Before setting off

- Secure the boat to your trailer and make sure the lights are working
- Rotate the number plate holder before setting off.
  Oil or grease the brake cables every 6 months to prevent corrosion if they're fitted with a grease nipple
- Carry out a test to be sure the brakes are working

## LAUNCHING AND RETRIEVING FROM THE WATER SUN WAY/GA



## Launching

When launching the boat, lots of parts are in motion (boat, strap, etc.), so you must be extra vigilant to avoid material and personal injury.

- 1 Remove the light strip and don't leave the plug at the rear of the trailer to avoid it ending up in the water when launching.
- 2 Make sure the slipway is suitable for the boat and trailer. The slope angle must be greater than or equal to 13% for non-break-back trailers.
- 3 Reverse the trailer into the water until the tyres are in the water.

Release the boat

4 To get the boat off: self-braking winch. Always hold the winch crank to operate it.

PLEASE NOTE: In the case of a tipping trailer model, be careful when locking and unlocking. Relock the trailer before going to park it.

IMPORTANT: Never rush launching the boat. Slowly unwind the winch to always control launching the boat.

5 Wind up the strap or rope, take the trailer out of the water, replace the light strip and socket, and park the trailer.

PLEASE NOTE: When launching or retrieving the boat, put the rim and brake drums in the water to prevent premature corrosion of the trailer's wheels and brakes.

#### Retrieval from the water

- 1 Remove the light strip and keep the electrical socket out of the water.
- 2 Make sure the slipway is suitable for boat and trailer.
- 3 Back up the trailer until the tyres are in the water.
- 4 To load the boat:

Line up the boat behind the trailer. Unwind the strap or rope until the hook is attached to the boat's anchor ring.

Winch until you have the bow in the first rollers at the rear of the trailer. Winch until the bow of the boat is in contact with the stop attached to the winch support and tighten the strap fully after making sure the boat is correctly placed on the trailer. If the boat is not in position, repeat the manoeuvre.

PLEASE NOTE: When launching or retrieving from the water, never stand between trailer and boat to prevent any risk of getting crushed.

5 Before setting off:

Secure the boat. Replace the light strip and reconnect the electrical socket. Make sure that the lights are working before setting off.

Carry out a test to be sure the brakes are working.

IMPORTANT: Launch or retrieve the boat only if the trailer is hitched

PLEASE NOTE: In the case of a tipping trailer model, be careful when locking and unlocking. Relock the trailer before going to park it.

## ROUTINE MAINTENANCE INTERVALS

Delivery of the	e trailer	6 months or 1000 km		Every year or 5	Every year or 5000 km		After 4 years or 40 000 km	
		Wheel stud nuts / bolts *	C + Re	Wheel stud nuts / bolts	C + Re	Wheel stud nuts / bolts	C + Re	
		Tyre	С	Tyre	С	Tyre	С	
	ŧ	Tyre pressure	С	Tyre pressure	С	Tyre pressure	С	
	lien	Hitch	C + Re + G	Hitch	C + Re + G	Hitch	C + Re + G	
×	he c	Hub	-	Hub	С	Hub	С	
iver	by t	Bearings	C + Re + G	Bearings	C + Re + G	Bearings	Trailer	
AQ033 Customer delivery form. Pages 26 and 27	To be completed and signed by the client	Electricity Lighting	С	Electricity Lighting	С	Electricity Lighting	С	
stome form. s 26 a	ınd si	Safety cable	С	Safety cable	С	Safety cable	С	
33 Cust fo Pages	eted a	Closing handles	С	Closing handles	С	Closing handles	С	
4Q0	ldm	Rails	C + Re	Rails	C + Re	Rails	C + Re	
7	о ә	Nuts and bolts	C + Re	Nuts and bolts	C + Re	Nuts and bolts	C + Re	
	Tob	Brake linings	-	Brake linings	С	Brake linings	С	
		Braking system	C + Re	Braking system	C + Re	Braking system	C + Re	
		FAST: Callipers	C + G	FAST: Callipers	C+G	FAST: Callipers	C + G	

Check - Tighten - Replace - Grease (The replacement of worn parts should be decided by the professional)

<sup>\*</sup> Retightening is mandatory after 100km

## ROUTINE MAINTENANCE REGISTER

Handover of the trailer	Maintenance 6 months or 1000 km
Lider-Sun Way dealer stamp	Lider-Sun Way dealer stamp
Date:	Date:
Store and customer signature	Store and customer signature
Annual maintenance or 5000 km	Annual maintenance or 5000 km
Lider-Sun Way dealer stamp	Lider-Sun Way dealer stamp
Date:	Date:
Store and customer signature	Store and customer signature

## ROUTINE MAINTENANCE REGISTER

	ROOTHIE WANTE WATER REGISTER
Annual maintenance or 5000 km	Annual maintenance or 5000 km
Lider-Sun Way dealer stamp	Lider-Sun Way dealer stamp
Date:	Date:
Store and customer signature	Store and customer signature
Annual maintenance or 5000 km	Annual maintenance or 5000 km
Lider-Sun Way dealer stamp	Lider-Sun Way dealer stamp
Date:	Date:
Store and customer signature	Store and customer signature

## LIDER TRAILER CHECKLIST

#### (To be completed during delivery, in the presence of the customer)

## 1 Checking the wheels

■ Tighten the 4 or 5 wheel bolts or nuts on the right and left and finish tightening with the torque wrench set to the correct torque (see page 15).

When tightening the wheels, check that the domed face of the nuts is against the rim: an incorrect set-up will loosen the

wheel and damage the rim.

Check the tyre pressure (see page 15).

Check the consistency of the tyre profiles (they should be of the same brand, speed rating, load index and the same wear on the same axle).

# 2 Checking the tightening of the bolts /screws

- Inspect the rails (all 4 sides).
- Inspect the 2 mudguards.
- Inspect the underside of the body (bolts, clipped electric cables).
- Check that the drawbar is correctly secured to the underside of the body (bolts).
- Check that the axle is correctly secured to the underside of the body (bolts).
- Inspect the coupling head.
- Inspect the jockey wheel (if supplied).
- Hitch the coupling head to the ball.

## 3 Checking the electrical harness

- Test the 2 position lights
- Test the right and left indicators
- Test the brake lights and fog light
- Test the reversing light if applicable

#### 4 Miscellaneous

 Check that any optional accessories are correctly attached (tarpaulins, extension, etc.).

Raise the jockey wheel (if supplied): it should never touch the

ground when towing.

Install a number plate in accordance with the regulations.

Inform the customer to retighten the wheel bolts/nuts after about twenty kilometres and then at regular

intervals (approximately every 500 km).

Inform the customer of the need to check and tighten, if necessary, ALL the bolts once the first 100 km limit has been exceeded, as vibrations of the trailer on the roadway can exceptionally cause accidental loosening.

Every 500 km, check the tightness of the main components

(coupling, axle, wheels, drawbar).

For trailers carrying out frequent long journeys, a reapplication of grease may be necessary.

: behind the axle cap which protects the bearings

(tapered).

Overloading can lead to premature ageing of the

axle(s).

In the case of braked trailers, read the instructions available

on the Lider extranet carefully.

- Explain (or re-explain) the concepts of GAW, PL, GACW, licence B or E. No claim can be made against the retailer or manufacturer for non-compliance with the technical constraints relating to the trailer and towing vehicle; only the customer is responsible for compliance with the highway code.
- What's more, it's strongly advisable to drive flexibly, anticipate more, and especially reduce your speed when towing a trailer (significant inertia during braking)

## **BEFORE SETTING OFF, ALWAYS CHECK:**

- Lighting and signalling.
- Locking of the coupling.
- The jockey wheel or prop is correctly raised.
- Tyre pressure: for a heavy load or long journey, increase the pressure by 0.5 bar.
- Loading: always properly wedged and strapped down, as close as possible to the ground, with good load distribution (5 to 10% on the hitch).
- The weight of the load must never exceed the payload of the trailer.

As a reminder: 1 m³ of sand "weighs" around 1800 1 m³ of wood "weighs" around 700

# Please note! The warranty does not apply for trailers subject to:

- Improper or abusive use.
- Negligence, accidents, poor maintenance, modification of any kind or having suffered natural damage.
- Use of accessories not recommended or approved by the manufacturer of the trailer.

The trailer is manufactured and approved for the maximum transport load indicated on the nameplate.

I received the Lider - Sun Way trailer in perfect condition, with the serial number written on the chassis and on the nameplate. The use of the trailer has been explained to me or I have waived the explanation and the receipt control sheet (see p26-27) has been duly completed in my presence and delivered by hand before my departure.

Declare having taken due note of the conditions on pages 26 and 27 of the Lider - Sun Way user manual:
On:
Trailer serial number: V
THE CUSTOMER THE RETAILER (Name and signature) (Name, signature and stamp)

Once completed by the retailer and signed by the customer. This detachable coupon will be attached to the invoice and kept by the Lider-Sun Way distributor.

## NOTES


## OUR NETWORK



We have a nationwide network of troubleshooting professionals.

In case of problem, visit our websites:

www.lider.fr

www.sun-way.fr

# **USE AND MAINTENANCE MANUAL**

