# Speed and Speed Plus Lifting Platform

# **Instruction Manual**



(32750, rev 7) 2018-04, EN



# Foreword

This equipment is used to facilitate high quality repairs to collision-damaged vehicles. All other use of the equipment, or use that is contrary to the instructions in this manual, can cause personal injury and/or equipment damage.

Car-O-Liner Group AB including any company within the Car-O-Liner Group of companies ("Car-O-Liner") can not be held responsible for any claims for loss or damages as a result from incorrect use of this equipment or its use in a manner not intended. Save for product liability claims for loss or damages as a result of personal injury or damage to property to the extent caused by the negligence, gross negligence, breach of contract, or other wrongdoing of Car-O-Liner (as prescribed by the Product Liability Act (1992:18) or similar legislation applicable on other markets), Car-O-Liner shall in no event be liable for any loss or damage to revenues, profits or goodwill or other special, incidental, indirect or consequential damages of any kind.

#### Warranty

Car-O-Liner offers a one-year limited guarantee from the date of installation of the equipment at end users premises. This guarantee covers only material defects and assumes normal care and maintenance according to Car-O-Liner specification.

The guarantee assumes that:

- The equipment is correctly installed and inspected in accordance with current local laws and regulations.
- The equipment has not been altered or rebuilt without prior written approval from Car-O-Liner.
- Genuine Car-O-Liner spare parts are used in any repairs and conducted by Car-O-Liner certified technician.
- Operation and maintenance have been carried out according to the instructions in this manual.

All claims on warranty shall be notified through your authorized Car-O-Liner Distributor by use of Car-O-Liner's VisionWeb platform without undue delay and shall verify that the fault has occurred within the guarantee period and that the unit has been used within its operating range as stated in the specifications. All claims shall include the product type and article number as well as a detailed description of the problem and actions taken trying to solve it. This data is stamped on the name plate (refer to section 1.2 "Marking" for location).

#### Note

This instruction manual provides advice as well as instructions for installation, operation, maintenance and trouble shooting.

*IMPORTANT!* Read this manual carefully to become familiar with the proper operation of the equipment. It is recommended that you use your authorized Car-O-Liner Distributor for maintaining, servicing and upgrading your products. Never perform repairs, adjustments or any other work on the products which may result in personal injury and damage to the product.

Your Car-O-Liner Distributor employs factory trained technicians and is focused on offering you the best overall experience with your new Car-O-Liner product. Any revisions or upgrades of the products, as required by Car-O-Liner, shall be performed by your authorized Car-O-Liner Distributor.

The photographs and drawings in this manual are intended only to be illustrative and do not necessarily show the design of the equipment available on the market at any given time. The equipment is intended for use in accordance with current trade practice, applicable laws and safety regulations. The equipment illustrated in the manual may be changed without prior notice.

The contents in this publication can be changed without prior notice.

This publication contains information which is protected by copyright laws. No part of this publication may be reproduced, stored in a system for information retrieval or be transmitted in any form, in any manner, without Car-O-Liner's prior written consent.

#### Conformity with directives and standards

The equipment is designed and manufactured by Car-O-Liner, which is an EN-ISO 9001 and 14001 accredited development and manufacturing organisation.

The equipment is CE-approved by Inspecta, Sweden. It is required that only Car-O-Liner approved spare parts and accessories are used with the equipment.

### Conformity with directives and standards

The Speed Lifting Platform is manufactured by Car-O-Liner AB, which is an ISO 9001:2008 and ISO 14001:2004 accredited organisation.

Below an example of how the EC Declaration of Conformity for the Speed is outlined.

A signed and dated copy of the EC Declaration of Conformity, including serial number, is included in the documentation for the Speed. Please contact your distributor if you need a new copy of the Declaration of Conformity.

EC DECLAF	RATION OF CONFORMITY
We	CAR-O-LINER GROUP AB Hulda Mellgrens gata 1 SE- 421 32 Västra Frölunda SWEDEN
herewith declare under the	e sole responsibility that the product:
Type of equipment:	Vehicle Lift for Base Frame Speed and Speed Plus
Model/Type:	Speed
Serial number(s):	
is in conformity with the pro-	ovisions of the following EC directive(s):
2006/42/EC	Machinery Directive
References of standards a declaration of conformity:	nd/or technical specifications applied for this
European Standards	EN 1493+A1:2008, EN 12100-1/A1:2009, EN 12100-2/A1:2009
Other references:	
EC Type-Examination Certificate	No. 10-SKM-CM-0569, valid until 20XX-01-15
Ву	Inspecta Sweden AB, Notified Body No. 0409
(Place and date of issue)	
	marking of

# Contents

1	Intro	duction	6
		al	
1.2 Lifting platform			
	1.2.1	Lifting unit	8
	1.2.2	Power unit	9
1.3	Markin	ıg	

2	Safety	
2.1	General	11
2.2	Warnings and important notices	
2.3	Safety signs	
	2.3.1 Placement of safety signs	
2.4	Safety devices	

3	Installation	20
3.1	General	
3.2	Location requirements	
3.3	Transport	
3.4	Packaging and delivery inspection	
3.5		
3.6	Anchoring to the floor	
3.7	Telescopic lifting pads B735 (optional)	
	Sill lift B68 (optional)	

4	Opera	ation	25
		al	
		e setup	
	4.2.1	Vehicle setup with the optional B735 Telescopic lif	ting pads 28
	4.2.2	Vehicle setup with the optional B68 Sill lift	
4.3	Operat	ing the lift	32
		ing the vehicle	

5	Maintenance	35
5.1	Inspection and service plan	36

#### 

7	Dismantling and salvage	
	General	
	Mechanical components	
	Other	

8	Technical specifications	39

9	Spare parts	40
	Spare parts for B735 Telescopic lifting pads	
	Spare parts for B68 Sill lift	

# **1** Introduction

#### 1.1 General



*IMPORTANT!* The lifting platform is CE-approved and requires that only original spare parts are beeing used.

The Speed lifting platform consists of a working-platform and a hydraulic lift. It is mainly intended for minor repair on a vehicle. However, by attaching a draw aligner, one may perform minor alignment work on collision-damaged vehicles.

The lifting platform should not be used for anything other than vehicle repairs.

The Speed lifting platform is suitable for most passenger cars and light transport vehicles. It is easy to use and promotes rapid repairs. The vehicle can easily be rolled over the lifting platform without using ramps, which simplifies setting up vehicles. The lifting platform is easy to install. It only needs to be anchored to the floor by expander bolts. No additional mounting is needed.

The Speed lifting platform lifts continuously, which improves working conditions since it allows the operator to select the most suitable working height.

When the lift is in use, the vehicle should be entirely supported by the lifting platform. The lifting platform should not be used to lift one end of the vehicle while the other end is resting on the floor.

#### 1.2 Lifting platform

The Speed lifting platform consists of a working-platform [1] onto which the vehicles are placed, see Figure 1.1. At lowered position, the lifting platform is only about 100 millimetres (4 inches) above ground, which allows the vehicles to be rolled over the lifting platform without using a ramp. The working-platform is lifted by a hydraulic lift unit [2], refer to *Section 1.2.1*. While being lifted, the vehicle is supported by adjustable lifting pads [3] that are attached to the turnable lifting arms [4].



*WARNING!* It is of vital importance that all four lifting pads support the vehicle during a lift. Otherwise, the vehicle might overturn and cause personal injuries.

The lifting arms can be moved along a rail on the long sides of the platform . The arms can also be rotated 180 degrees horizontally. The lifting pads can be adjusted vertically by rotating them up and down and they can also be moved horizontally along a rail on the platform.

The lifting platform has a maximum lifting height of 1,600 mm (63 in).



**WARNING!** Maximum allowed vehicle weight is 2,500 kg (5,500 lbs). Overloading - risk for platform tilting, which may cause personal injuries.

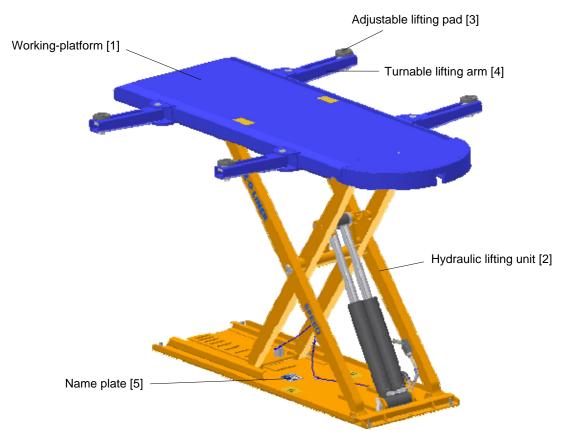


Figure 1.1 Speed lifting platform.

#### 1.2.1 Lifting unit

The hydraulic lifting unit is specially designed for the Speed lifting platform. It is used to lift the working platform with a vehicle standing on the pads. The lift simplifies the set-up procedure of the vehicle and it improves working conditions by offering a choice of working heights.

The hydraulically-operated lifting unit consists of a scissors lift, see Figure 1.2, and a hydraulic power unit, (refer to a separate Instruction manual).

The lift consists of a base frame [1] on to which scissor arms [2] and hydraulic cylinders [3] are attached. The cylinders are operated by an external hydraulic power unit (refer to the separate Instruction manual). The lift is anchored to the floor by foundation bolts [4], refer to *Section 3.6*. The base frame is equipped with a mechanical safety lock [5] which prevents the lift from dropping.

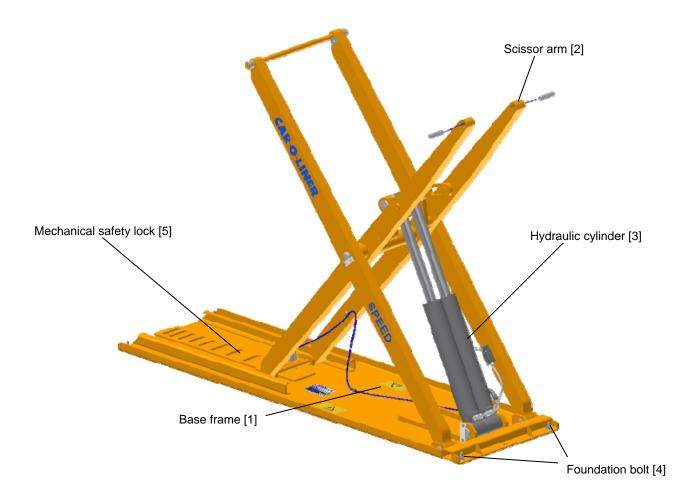


Figure 1.2 Speed scissors lift.

#### 1.2.2 Power unit

The lift must only be connected to a Car-O-Liner Power unit (refer to a separate Instruction manual). The hydraulic power is supplied from a pump unit, which basically consists of an electric motor, a pump and a hydraulic oil tank. The pump operates only when the lift is being raised. When the pump stops, the lift stops and maintains its height by a non-return valve that is built into the pump. The pump is also fitted with a lowering valve.

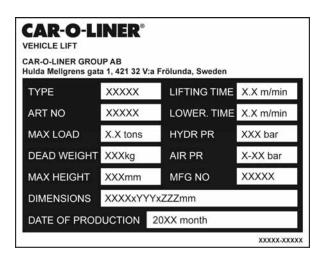


*IMPORTANT!* Speed lifting platform must only be used together with Car-O-Liner T6XX range Power Unit, *see separate Car-O-Liner T6XX range Instruction Manual.* 

There is also a 220V 1 phase UL approved Power Unit version.

#### 1.3 Marking

The name plate is placed on the base frame, see Figure 1.1, position [5].



*Figure 1.3 The name plate of the lifting platform (picture showing an example of name plate).* 

# 2 Safety

#### 2.1 General

Information given in this manual describes the suggested best working practices and should in no way take precedence over individual responsibilities or local regulations.

Great effort has been placed on the design and manufacture of the Speed Lifting platform so that it will comply with all applicable safety aspects for this type of equipment. During operation and other work, it is always each individual's responsibility to consider:

- Their own and others' personal safety.
- The safety of the lifting platform through correct use of the equipment in accordance with the descriptions and instructions given in this manual.

By observing and following the safety precautions, the user of the Speed Lifting platform will ensure safer working conditions for himself/herself and his/her fellow workers.

To avoid personal injury, the following regulations must be observed:

- Maximum vehicle weight = 2,500 kg (5,500 lbs).
- Check to make sure that the lift is fixed securely to the floor in accordance with the installation instruction, refer to *Chapter 3.6*.
- Check to make sure that there are no objects obstructing the movement of the lift.
- Check to make sure that the vehicle is positioned correctly on the lift and that it cannot be set in motion during a lift.
- Always keep a careful watch on the lift and its load when raising and lowering. Keep lift area clear.
- Ensure that nobody is close to the lift when it is operating.
- Read the manual carefully for information regarding installation (refer to *Chapter 3*), operation (refer to *Chapter 4*), maintenance (refer to *Chapter 5*) and trouble shooting (refer to *Chapter 6*).

Various warnings and notices are placed beside illustrations and important descriptive texts in this manual. These warnings and notices are important to ensure the safety of the user and others.

Safety signs must also be in place on the equipment. These are intended to warn of hazardous situations or to draw attention to incorrect use of the equipment.

#### 2.2 Warnings and important notices

The following types of safety signs are used in this instruction manual:



**Prohibited!** Prohibits behaviour that can cause injury.



Warning! Warns of personal injuries and or damages on equipment.

The following warnings and important notices are used in the instruction manual:

**WARNING!** (in bold, italic type) is used in this manual to indicate a possible danger that could lead to personal injury. An instruction is normally given, followed by a short explanation plus the possible effect if the instruction is not followed.

*IMPORTANT!* (in bold, italic type) is used in this manual to indicate practical information. It is also used to indicate a possible danger that could lead to damage to the equipment and/or cause environmental damage.



*Note!* (in bold, italic type) is used to accentuate supplementary information that is required for problem-free use or optimal use of the lifting platform.

In addition to the safety signs illustrated in *Section 2.3*, the following warnings and important notices appear in the manual:



**WARNING!** It is of vital importance that all four lifting pads support the vehicle during a lift. Otherwise, the vehicle might overturn and cause personal injuries.



*WARNING!* Maximum allowed vehicle weight is 2,500 kg (5,500 lbs). Risk for platform tilting, which may cause injuries.



**WARNING!** The lifting platform is heavy. Use only approved lifting equipment to avoid accidents. Risk for injuries.



*WARNING!* All electrical connections must be carried out by authorized personnel. Risk for electric shock.



WARNING! Danger of tripping on loose hoses. Risk for injuries.



*WARNING!* Before lowering the lifting platform, make sure that the immediate area is cleared. Risk for crushing injuries.



*WARNING!* The Speed Lifting platform is designed to be permanently anchored to the floor. If the lift is used without being properly anchored to the floor according to these instructions, there is an imminent risk that the lift will tilt and cause injuries.



*WARNING!* If there is *any* uncertainty regarding the quality of the floor, please get an expert to inspect the floor before the lifting platform is anchored to the floor. Risk for platform tilting, which may cause injuries.



*WARNING!* When tightening the anchor bolts, the torque wrench value [100 Nm (885 lbf·in)] *must* be reached. If the anchoring is unsatisfactory, the lifting platform might overturn during a lift and cause injuries.



*WARNING!* Always be extremely careful when working with jacks or hydraulic equipment. Risk for falling or flying objects.



*WARNING!* It is not allowed to place more than one extension block (Extension 60) on each lifting pad. Risk for vehicle tilting.



**WARNING!** When placing the vehicle on the lifting platform, make sure that the vehicle is placed within the maximum load offset. Otherwise, the vehicle might overturn and cause personal injuries.



*WARNING!* When the lift is in use, the entire vehicle should be supported by the lifting platform. Do not lift one end of the vehicle while the other end is resting on the floor. Risk for vehicle overturning, which may cause injuries.



*WARNING!* Before raising or lowering the lift, ensure that no one is near the lifting platform. Risk for crushing injuries.



*WARNING!* Do not stand on the lift or under it when it is operating. Risk for injuries.



**WARNING!** Do not perform any alignment work when the vehicle is supported by the lifting pads only. Otherwise, the draw aligner might overturn the vehicle and thereby cause serious injuries.



*WARNING!* During all service and maintenance work with the lift in raised position, the bench must be blocked against unintentional lowering. Risk for crushing injuries.



*WARNING*! Make sure that rubber pads are in good condition and not worn through to the metal. Risk of material damage and personal injuries.



*WARNING!* Position center of vehicle as closely as possible to the center line of the lifting platform. Risk of material damage and personal injuries.



*IMPORTANT!* The lifting platform is CE-approved and requires that only original spare parts are used.



IMPORTANT! Take care during transport.



*IMPORTANT!* It is the responsibility of the owner to ensure that the equipment has been installed as specified in the instructions provided. It is also the owner's responsibility to ensure that the lift is inspected in accordance with current and local regulations before it is used.



*IMPORTANT!* The lifting platform should not be used for anything other than vehicle repairs.



*IMPORTANT!* Make sure there are no objects obstructing the movement of the lift.



*IMPORTANT!* Always keep a careful watch on the lift and its load when raising and lowering.



*IMPORTANT!* Observe high standards of cleanliness when working with the hydraulic equipment. Dirt in the hydraulic oil can result in breakdowns and subsequent loss of function.



*IMPORTANT!* For the sake of the environment, dismantle the equipment in an environmentally friendly way.



*IMPORTANT!* The lifting platform should not be used for anything other than vehicle repairs.



**WARNING!** Before lowering the lifting platform, make sure that the immediate area is cleared. Keep feet away. Risk for crushing injuries.



*WARNING!* The edge of the front wheels (or heaviest axle) must never exceed the edges of the lifting platform.



*WARNING!* Take care when lowering the telescopic lifting pad with the lever. Risk of crushing injuries.



*WARNING!* Take care when fitting the sill lift ramp to the drive-on ramps. Risk of crushing injuries.



*WARNING!* ! The sill lift ramp shall always be fitted to the drive-on ramp pegs. Risk of crushing injuries.



*WARNING!* Rubber blocks must be aligned and placed horizontally. Risk of personal injuries and material damage.



*WARNING!* Speed lifting platform must only be used together with Car-O-Liner T6XX range Power Unit, *see separate Car-O-Liner T6XX range Instruction Manual.* 

There is also a 220V 1 phase UL approved Power Unit version.

#### 2.3 Safety signs

 $\bigcirc$ 

Prohibited! (red border, white background, black symbol) Prohibits

The following types of safety signs are used on the Speed Lifting platform:



**Warning!** (black border, yellow background, black symbol). Warns of personal injuries and or damages on equipment.

Undamaged safety signs shall always be affixed at the indicated places, see *Section 2.3.1*. If any signs are damaged or missing, the user is responsible for their immediate replacement. The safety signs are available as accessories.

The following safety signs can be found on the lifting platform and the power unit:

#### Warning!

behaviour that can cause injury.

The highest allowed vehicle weight is 2,500 kg (5,500 lbs). For placement, refer to *Section 2.3.1*. The Kg sign has part no. 32869 and the lbs sign has part no. 32922.

#### Warning!

The end of the vehicle shall not be positioned farther out on the lifting platform during asymmetric loading. For placement, refer to *Section 2.3.1*. The sign has part no. 31899.

#### Warning!

During inspection and maintenance with the lift unit in raised position, the lift unit must be blocked against unintentional lowering. For placement, refer to *Section 2.3.1*. The sign has part no. 31900.



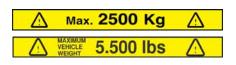
#### **Prohibition!**

It is prohibited to be on the lift during raising or lowering. This sign is placed on the power unit (refer to separate Instruction manual) and has part no. 31896.



#### Warning!

Danger of tripping due to loose hoses, etc. This sign is placed on the power unit (refer to separate Instruction manual) and has part no.. 31892.







#### 2.3.1 Placement of safety signs

The safety signs are placed as follows:



Figure 2.2 Placement of the safety signs.

Also refer to the power unit's Instruction manual for placement of safety signs.

#### 2.4 Safety devices

Both lift cylinders are single-action hydraulic cylinders [1] with a hose malfunction valve [2] built into the lower end, see Figure 2.3. Both cylinders are separate from each other. If one cylinder breaks, the second cylinder would therefore remain unaffected by the malfunction. Hence, there's no risk that the lift would lower unintentionally even if a malfunction occurs.

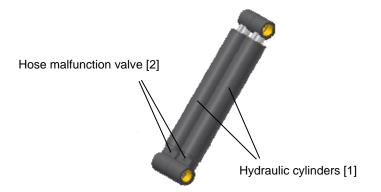


Figure 2.3 Both hydraulic cylinders are separate from each other and have built-in hose malfunction valves, which prevents unintentional lowering of the lifting platform.

To prevent crushing injuries to the feet when the platform is lowered, the hydraulics stop automatically when the platform is at draw aligner height, about 150 mm (6 in) above the floor.



*WARNING!* Before lowering the lifting platform, make sure that the immediate area is cleared. Risk for crushing injuries.



**WARNING!** Before raising or lowering the lift, ensure that no one is near the lifting platform. Risk for crushing injuries.

To avoid unintentional lowering when the lift is more than 600 mm (24 in) above the floor, the lift unit is equipped with a mechanical safety lock, see Figure 1.2, position [5]. The mechanical safety lock prevents the lift from sinking more than a maximum of 100 mm (4 in) in case of a hydraulic leakage.

# 3 Installation

#### 3.1 General

The Speed Lifting platform is inspected and checked prior to leaving the factory to guarantee consistent quality and highest possible reliability.

Instructions for installation, with general tips and directions, are provided as follows.

#### 3.2 Location requirements

The recommended floor space required for installation of the Speed Lifting platform is shown in Figure 3.1.

The lifting platform must be installed on a flat concrete floor of good quality, refer to *Section 3.6*.

When installing the Speed Plus, additional floor space is required on the drive on side.

For more information regarding the Speed Plus dimensions, refer to *Chapter 8, Technical specifications.* 

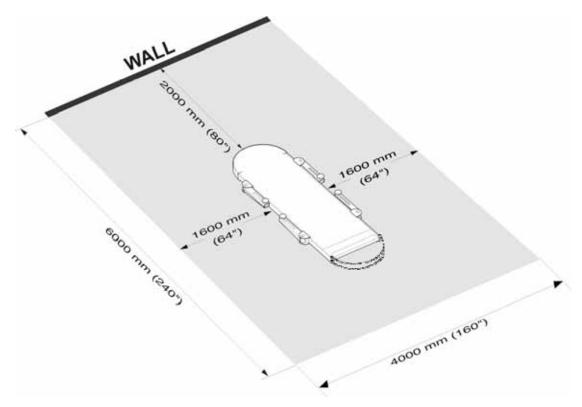


Figure 3.1 Recommended floor space required for installation.

#### 3.3 Transport



**WARNING!** The lifting platform is heavy (weight 550-600 kg, 1,200-1,300 lbs). Use only approved lifting equipment to avoid accidents. Risk for injuries.

Use a forklift to move the lifting platform. The forklift must have a fork width of at least 850 mm (34 in). The lift must be centered along the long side of the lifting platform.



IMPORTANT! Take care during transport. Risk of sliding.

#### 3.4 Packaging and delivery inspection

Check the delivery against the packing list, consignment note, or other delivery documentation to verify that everything is included in the correct quantity. Check the lifting platform carefully to make sure that no damage has occurred during transport. If any part is damaged or missing, the lift may not be used until the component is repaired or replaced. Please contact your supplier.

Remove all packaging material, including the transport tape, from the lifting platform.

For the power unit, refer to a separate Instruction manual.

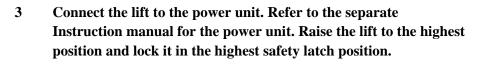
#### 3.5 Installing the lifting platform



*IMPORTANT!* It is the responsibility of the owner to ensure that the equipment has been installed as specified in the instructions provided. It is also the owner's responsibility to ensure that the lift is inspected in accordance with current and local regulations before it is used.

**Note!** During installation, platform and lift must be strapped together. Do not lift the working platform only!

- 1 Make sure that the transport tape is removed from the lifting platform and the lift unit.
- 2 During installation, the platform and lift must be strapped together. Do not lift the working platform only. Place the lift in final desired position before cutting the straps.





*WARNING!* All electrical connections must be carried out by authorized personnel. Risk for electric shock.

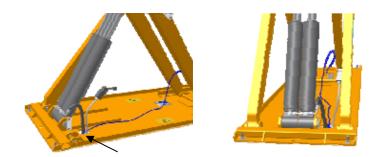


WARNING! Danger of tripping on loose hoses. Risk for personal injuries.

# 4 Drill the four mounting holes in the floor for the base frame and anchor it according to the instructions in *Section 3.6*.

**Note!** When installing through the flexhose  $\emptyset$ 50 in the floor: Do not forget to stretch up a part of the flexhose in the base frame hole  $\emptyset$ 80 for wear protection.

**Note!** Make sure that the hoses and cables not abrades to the hole Ø80 in the base frame when raising or lowering the lift/platform. Make shure the hose has clearence from both hydraulic cylinders and scissor arm.



- 5 Refer to the separate instruction manual for the power unit, if any further actions are needed for the specific power unit.
- 6 Raise and lower the lift a few times (refer to the Instruction manual for the power unit).



*WARNING!* Before lowering the lifting platform, make sure that the immediate area is cleared. Risk for crushing injuries.

7 Apply the safety signs on the lifting platform. These signs are important since they provide instructions regarding the lift and alignment work. For placement of the signs, refer to *Section 2.3.1*.

#### 3.6 Anchoring to the floor



*IMPORTANT!* It is the responsibility of the owner to ensure that the equipment has been installed as specified in the instructions provided. It is also the owner's responsibility to ensure that the lift is inspected in accordance with current and local regulations before it is used.



**WARNING!** The Speed Lifting platform is designed to be permanently anchored to the floor. If the lift is used without being properly anchored to the floor according to these instructions, there is an imminent risk that the lift will tilt and cause injuries.

The lift should be anchored to a flat floor with the following properties:

- A minimum of K25 concrete floor quality.
- A minimum of slab thickness of 150 mm (6 in).
- The requirements of the floor or the flatness of the floor (under the lifting platform) is 2 mm/m or better.

#### Procedure:

Expander bolts M16x125, Car-O-Liners Art No. 36819. 4 bolts are supplied with the Speed Lifting platform system.

- 1 Drill holes in the floor using the base plate holes as a template. Drill diameter 16 mm (5/8 in), hole depth 110-120 mm (4-5 in).
- 2 Clean the holes with vaccum cleaner and air hose. Unscrew the nut so that only the un-threaded top of the bolt is above the nut. Gently tap the expander bolts into the holes with a hammer.
- 3 Tighten the bolts with a torque wrench set to 100 Nm (885 lbf-in).



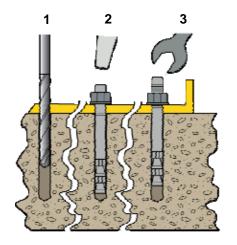
**NOTE!** If the above torque is not attained, the anchorage is not satisfactory.



*IMPORTANT!* If there is any uncertainty about the quality of the floor, contact a building engineer for an inspection.

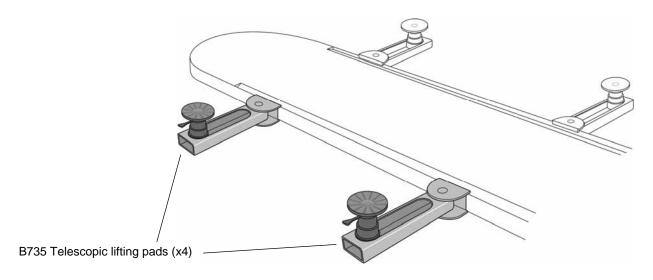


*IMPORTANT!* It is the responsibility of the owner (user) of the equipment to ensure that inspection, in accordance with current local regulations, is carried out before the lift is put into use.



#### 3.7 Telescopic lifting pads B735 (optional)

The optional B735 Telescopic lifting pads with adjustable lifting arms for quick setup.



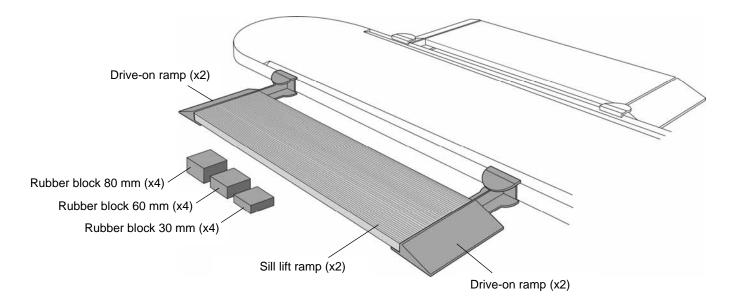
For parts numbers, see section 9.1 B735 Spare parts.

#### 3.8 Sill lift B68 (optional)

Optional B68 Sill lift with drive-on ramps are easily fitted to the Speed lifting platform. Rubber blocks are used to fill the gap between sill and aluminum ramp.

With the B68 Sill lift, your Speed will work as a convenient lift for jobs when pulling is not required.

When you need to reach wider lifting points, longer sill lift ramps 1650 mm (B68-5) are available. For parts numbers, *see section 9.2 B68 Spare parts*.



# 4 **Operation**

#### 4.1 General



*IMPORTANT!* It is the responsibility of the owner to ensure that the equipment has been installed as specified in the instructions provided. It is also the owner's responsibility to ensure that the lift is inspected in accordance with current and local regulations before it is used.

The Speed Lifting platform is inspected and checked prior to leaving the factory to guarantee consistent quality and maximum reliability.

The lifting platform is suitable for most passenger cars and light vehicles. The vehicles can easily be rolled over the lifting platform without using ramps which simplifies setting up vehicles. When the lift is in use, the vehicle should be entirely supported by the lifting platform. Do not lift one end of the vehicle while the other end is resting on the floor.



*WARNING!* Always be extremely careful when working with jacks or hydraulic equipment. Risk for falling or flying objects.



*IMPORTANT!* The lifting platform should not be used for anything other than vehicle repairs.



*WARNING!* Never use B68 Sill lift in combination with draw aligner. Risk of material damage and personal injuries.



*WARNING!* Before lowering the lifting platform, make sure that the immediate area is cleared. Keep feet away. Risk for crushing injuries.

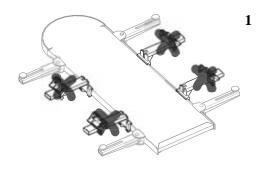


*IMPORTANT!* The B68 Sill lift is designed for panel beating and mounting/demounting jobs only and must never be used in combination with chassis clamps.



*WARNING!* The edge of the front wheels (or heaviest axle) must never exceed the edges of the lifting platform.

#### 4.2 Vehicle setup



- Make sure that no fastening arms and chassis clamps are mounted on the lifting platform. For removing them, refer to the Instruction manual for the Speed Draw aligner.
- 2 Make sure that the lifting platform is lowered to its lowest position. Regarding operation of the lift, refer to *Section 4.3* and to the Instruction manual of the power unit.
- 3 Make sure that the lifting pads are in the lowest position.

*WARNING!* It is not allowed to place more than one extension block (Extension 60) on each lifting pad. Risk for vehicle tilting.

4 Fold the lifting arms along the platform by rotating them horizontally. Make sure that they are placed alongside the lifting platform.

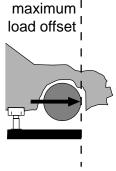
#### 5 Roll the vehicle over the Speed Lifting platform.



*WARNING!* The highest allowed vehicle weight is 2,500 kg (5,500 lbs). Risk for platform tilting, which may cause personal injuries.



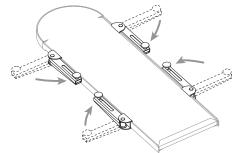
*WARNING!* When placing the vehicle on the lifting platform, make sure that the vehicle is placed within the maximum load offset. Otherwise, the vehicle might overturn and cause personal injuries.

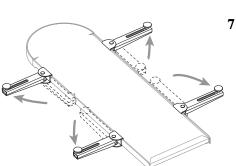


*WARNING!* The edge of the front wheels (or heaviest axle) must never exceed the edges of the lifting platform.

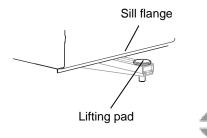


*WARNING!* When the lift is in use, the entire vehicle should be supported by the lifting platform. Do not lift one end of the vehicle while the other end is resting on the floor. Risk for injuries.





- 6 Use the recommended lifting points of the vehicle, refer to the vehicle's Data Sheet.
  - Unfold the lifting arms. Rotate them horizontally until the arms are placed right-angled to the lifting platform.



8

9

Position all four adjustable lifting pads directly under the recommended lifting points on the vehicle.

*Note!* The lifting arms can be moved horizontally and they can be rotated horizontally to position the lifting pads according to the lifting points.

Sill flange

Lifting pad

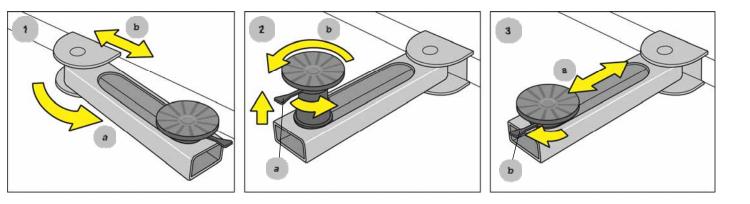
When in position, adjust the four lifting pads so that they all touch the recommended lifting points.

*Note!* The lifting pads can be adjusted vertically by rotating them up or down.

*Note!* Make sure that the center of the lifting pads are placed by the center of the recommended lifting points.

#### 4.2.1 Vehicle setup with the optional B735 Telescopic lifting pads

The optional B735 Telescopic lifting pads are used to facilitate vehicle setup. Lifting arms and pads are easily postioned at the correct lifting points *(see vehicle DataSheet).* 



- Turn lifting arm to a suitable angle [a]. Slide lifting arm along the platform flange to a suitable position [b].
- 2. Raise telescopic lifting pad by pulling up lever [a]. To lock lifting pad in position, turn lever to the right. Fine adjust pad height by rotating pad [b].
- 3. Slide pad to a suitable position on the lifting arm [a]. Lower telescopic lifting pad by turning lever to the left [b].



*Note!* If the vehicle is to be clamped (using B30 bench mountings), make sure to position B735 lifting arm so that it doesn't interfere with B30.



*Note!* Make sure that the center of the lifting pads are placed at the center of the recommended lifting points.



*WARNING!* Make sure that rubber pads are in good condition and not worn through to the metal. Risk of material damage and personal injuries.



*WARNING!* Take care when lowering the telescopic lifting pad with the lever. Risk of crushing injuries.

#### 4.2.2 Vehicle setup with the optional B68 Sill lift

The optional B68 Sill lift is used to facilitate vehicle lifting with Speed Lifting platform.



*WARNING!* Never use B68 Sill lift in combination with draw aligner. Risk of material damage and personal injuries.

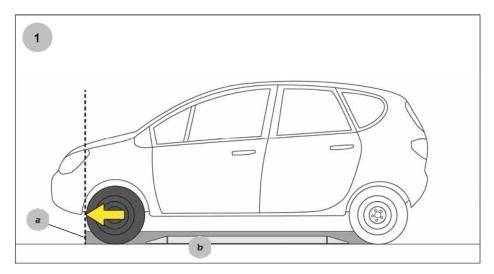


*IMPORTANT!* The B68 Sill lift is designed for panel beating and mounting/demounting jobs only and must never be used in combination with chassis clamps.

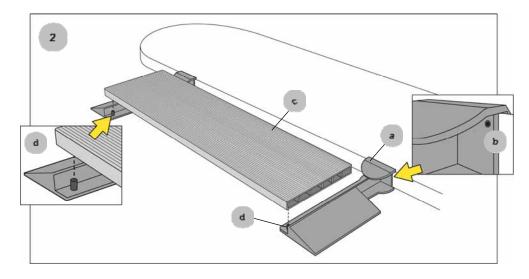


*WARNING!* The edge of the front wheels (or heaviest axle) must never exceed the edges of the lifting platform.

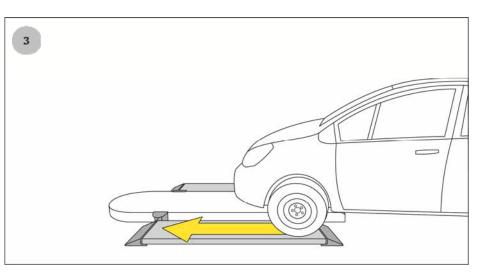
1 The edge of the front wheels must never exceed the edge of the lifting platform [a]. Therefore the sill lift must be placed [b] so that there is enough space for the front wheels in front of the ramp.

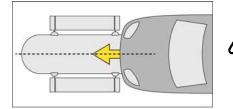


Assemble the sill lift by fitting the drive-on ramps [a] to the flange of the lifting platform in a suitable position, *see step 1*. If drive-on ramps tend to slide, tighten screws [b]. Fit sill lift ramp [c] to drive-on ramp pegs [d].



**3** Drive on vehicle over the sill lift.





*WARNING!* Position center of vehicle as closely as possible to the center line of the lifting platform. Risk of material damage and personal injuries.

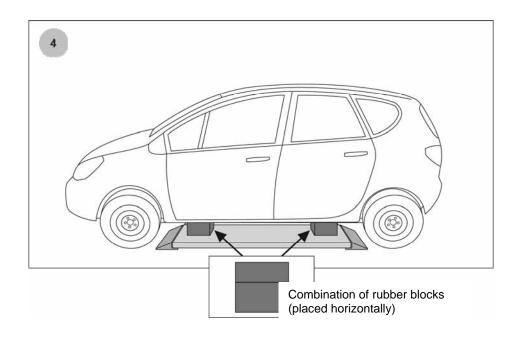


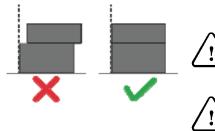
*WARNING!* Take care when fitting the sill lift ramp to the drive-on ramps. Risk of crushing injuries.



*WARNING!* The sill lift ramp shall always be fitted to the drive-on ramp pegs. Risk of crushing injuries.

4 Before raising the lifting platform, fill the gap between lifting point and ramp by using suitable rubber blocks, *see 3.7 Sill lift*. Combine different blocks to achieve correct height.

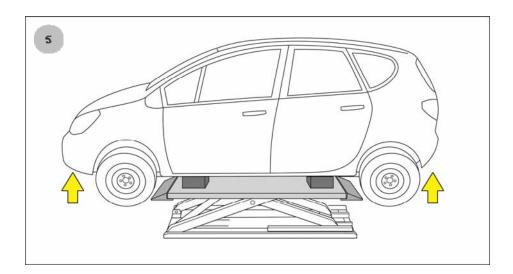




*WARNING!* Rubber blocks must be aligned and placed horizontally. Risk of personal injuries and material damage.

*IMPORTANT!* Place rubber blocks below recommended lifting points. Risk of material damage.

5 Raise lifting platform to achieve convenient height and start to work!



#### 4.3 Operating the lift

The operation procedure of the lift depends on which power unit is used. Therefore, please refer to the separate Instruction manual for the power unit included in the delivery.



*WARNING!* Before raising or lowering the lift, ensure that no one is near the lifting platform. Risk for crushing injuries.

# 1 Make sure that the vehicle is in position over the lifting platform, refer to *Section 4.2*.



*WARNING!* It is of vital importance that all four lifting pads support the vehicle during a lift. Otherwise, the vehicle might overturn and cause personal injuries.

2 Raise the lift. Regarding operation of the power unit, please refer to the separate Instruction manual for the power unit.



*Note!* The lift can be raised to a maximum height of 1,600 mm (63 in).



*WARNING!* Do not stand on the lift or under it when it is operating. Risk for injuries.



*IMPORTANT!* Make sure there are no objects obstructing the movement of the lift.



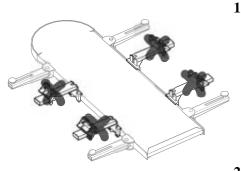
*IMPORTANT!* Always keep a careful watch on the lift and its load when raising and lowering.

3 When the lift is raised and the vehicle is supported by the lifting pads only, it is only allowed to perform coachwork on a vehicle. For alignment work, refer to the Instruction manual for the Speed Draw aligner.



*WARNING!* Do not perform any alignment work when the vehicle is supported by the lifting pads only. Otherwise, the draw aligner might overturn the vehicle and thereby cause serious injuries.

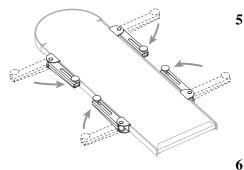
#### 4.4 Removing the vehicle



- Make sure that there are no fastening arms and chassis clamps mounted on the lifting platform, refer to the Instruction manual for the Speed Draw aligner
- 2 Lower the lifting platform. Regarding operation of the power unit, refer to the Instruction manual for the external power unit.

*Note!* The lifting platform will stop automatically at a preset height about 150 mm (6 in) above the floor. To lower the lifting platform below this point, refer to the Instruction manual for the external power unit.

- 3 Make sure that the lifting platform is lowered to its lowest position.
- 4 Lower the lifting pads to the lowest position.
  - Fold the lifting arms along the platform by rotating them horizontally so that they are placed alongside the lifting platform.
- **6** Roll off the vehicle from the lifting platform.



# 5 Maintenance



*WARNING!* Read this manual carefully to become familiar with the proper operation of the Speed Lifting platform. It is recommended that you use your authorized Car-O-Liner Distributor for maintaining and servicing your products. Never perform repairs, adjustments or any other work on the products which may result in personal injury and damage to the product.

Your Car-O-Liner Distributor employs factory trained technicians and is focused on offering you the best overall experience with your new Car-O-Liner product. Addition-ally your authorized Car-O-Liner Distributor is prepared to make sure that any revisions or upgrades, as required by Car-O-Liner, will be performed on your product.



*WARNING!* During all service and maintenance work with the lift in raised position, the bench must be blocked against unintentional lowering. Risk for crushing injuries.

For information on how to engage the mechanical safety lock, refer to the separate Instruction manual for the Power unit.

#### 5.1 Inspection and service plan

Follow the Inspection plan below for correct inspection intervals and service actions:

	Daily inspection	Weekly inspection	Monthly inspection
Check function of the limit switch (controls draw aligner height and foot crush protection)	•		
Check function of the telescopic lifting pad console. Make sure that lifting pad console easily falls into locked position. Clean console with water and soft detergent. Do not lubricate with any type of oil .		•	
Make sure that the hydraulic hoses are positioned properly and that they are in good condition.			•
Ensure that lifting pad joint axles and locking screws are tightened. Tighten if necessary.			•
Check for oil leakage at cylinders and power unit. Contact Service & Support if leaking.			•
Hydraulic cylinders equiped with lubrication nipples needs additional lubrication and should be lubricated every 6 month. Add with Molycote APS2 grease or equivalent.			•
Check the level in the hydraulic oil tank. Top up as necessary. Change oil and filter at least once a year.			•
Check the warning signs and replace if damaged or missing.			•
Check the anchoring to the floor for cracks in the concrete and the tightness of the anchoring bolts.			•
Check that rubber pads are in good condition and not worn through to the metal. Change if necessary.			•

Additional information regarding monthly inspection:



*IMPORTANT!* Observe high standards of cleanliness when working with the hydraulic equipment. Dirt in the hydraulic oil can result in breakdowns and subsequent loss of function.

For maintenance of the power unit, see separate Power unit instruction manual.

# 6 Trouble shooting - Power Unit

For trouble shooting, refer to the separate Instruction manual of the external power unit.

# 7 Dismantling and salvage

#### 7.1 General



*IMPORTANT!* For the sake of the environment, dismantle the equipment in an environmentally friendly way.

To limit the stress on the environment and its natural resources, recycle the different parts of the lifting platform.

For dismantling and salvage of the power unit, refer to the separate instruction manual of the power unit.

#### 7.2 Mechanical components

If the mechanical components in the lift are to be dismantled or scrapped, the oil in the hydraulic cylinder and hose must be drained off.

The mechanical components should then be separated for material recycling and the used oil must be sent for destruction or recovery.

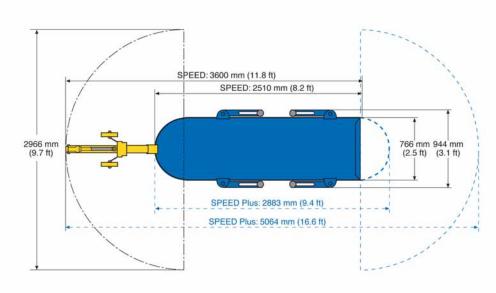
#### 7.3 Other

The electrical components, plastic hoses, steel and aluminium should be separated for material recycling.

# 8 Technical specifications

Total weight of unit (lift and platform)	550-600 kg	1 200-1 300 lbs
Lifting time (electrical power unit)	40-50 s	
Lifting platform dimensions		
Length Speed	2 510 mm	8 ft 3 in
Length Speed Plus	2 883 mm	9 ft 6 in
Width	766 mm	2 ft 6 in
Maximum lifting height (incl. Lift)	1 600 mm	5 ft 3 in
Minimum height (incl. Lift)	104 mm	4"
Operating oil pressure <sup>1</sup>	210 bar	3 050 PSI
Vehicle requirements		
Maximum allowed vehicle weight	2 500 kg	5 500 lbs
Sound level	Below 70 dB (A	A)

Only use Car-O-Liner's power unit.

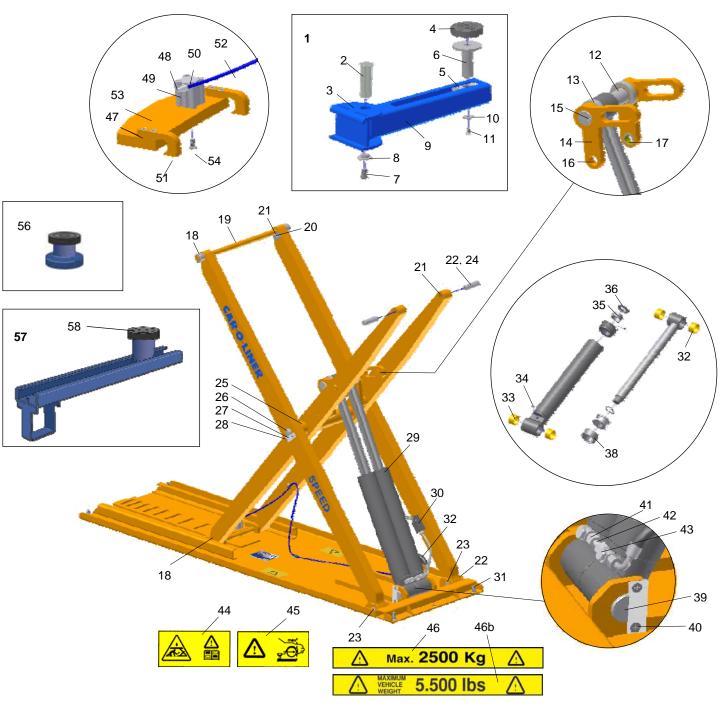


Dimensions and required floor space.

## 9 Spare parts

The spare parts required for the maintenance of the Speed lifting platform are listed in Figure 9.1.

*Note!* Use only genuine Car-O-Liner spare parts in any repairs.



*Figure 9.1 The spare parts required for the maintenance of the Speed lifting platform.* 

Position	Quantity	Part No.	Object
1	1	34475	B635 Articulated arm, complete
2	1	32695	Fastening tap
3	1	32698	Pad bracket
4	1	32794	Rubber pad
5	1	34472	Lifting pad fastener
6	1	32699	Lifting pad
7	1	32890	Screw MLC6S 12x20 8.8 FZB
8	1	34473	Stop washer
9	1	34061	Lifting arm
10	1	31999	Screw MF6S 6x16 FZB
11	1	31508	Washer SRKB 9x28x2 FZB
12	1	32397	Cylinder shaft - upper
13	2	32833	Press roller
14	2	32384	Hinge
15	2	31412	Screw MC6S 10x20
16	2	32778	Slide bearing SBP 30x20
17	2	31574	Circlip SGA 30
18	4	32688	Wheel 40x30
19	1	32388	Arm shaft - outer scissors
20	2	31437	Screw MF6S 8x20
21	2	32549	Lock plate
22	8	32784	Slide bearing SPB Ø25x25
23	4	32395	Axle - scissors arm
24	8	32670	Stop screw SK6SS 10x16
25	2	36820	Slide bearing FBB092 D=40x40
26	1	32387	Centre shaft
27	2	34435	Securing plate
28	4	31473	Screw M6S 8x14
29	2	35050	Cylinder Ø75
30	1	33259	Limit switch
31	4	36819	Expander bolt M16x125 UPAT
32	1	44111	Hydraulic Hose Kit
33	4	41665	Slide bearing WB Ø45/Ø50x30

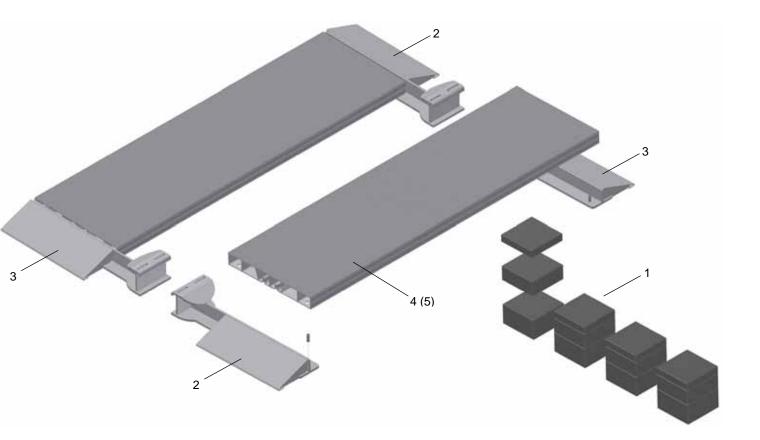
		1		
34	1	32783	Hose break valve	
35	1	32312	Guide BIVAB 4-02-1008	
36	1	32313	Wiper GA 45/55x7x10	
38	1	32777	Cylinder piston sealing	
39	1	32396	Cylinder axle - lower	
40	1	36497	Screw MFT 8.8 TMX 8x16	
41	1	31795	Banjo fitting	
42	1	32793	Hydraulic pipe Ø10x1.5 Din 2391 L=55	
43	1	32786	T banjo fitting	
44	2	31900	Safety sign ""Risk for crushing injuries""	
45	1	31899	Safety sign ""Assymetric loading""	
46	1	32869	Safety sign kg ""Highest allowed vehicle weight"	
46b	1	32922	Safety sign lbs ""Highest allowed vehicle weight"	
47	4	31403	Screw M8x20	
48	2	32902	Screw MC6S M5x50	
49	1	32904	Angle connection 6-M5	
50	1	32905	Cylinder QP 2510	
51	2	34439	Holder	
52	1	31794	Plastic tube 6	
53	2	34437	Latch	
54	1	31446	Screw MRT-TT 6x10	
56	1	32868	B637 Extension 60	
57	1	32984	B638 Inboard extension arm, complete	
58	1	32794	Rubber pad	

# 

### 9.1 Spare parts for B735 Telescopic lifting pads

Position	Quantity	Part No.	Object	
1	1	46942	Flex console complete	
2	1	46941	Rubber pad	
3	1	46943	CF-08 console complete	
4	1	46945	Handle	
5	1	46983	Plastic cover 74 mm	
6	1	46984	Plastic cover 86 mm	
7	1	46944	Bottom plate	
8	1	32695	Pin	
9	1	34473	Stop washer	
10	1	32890	Bolt MLC6S 12x20 8.8 FZB	
11	1	45875	Arm	
12	1	45870	Pad bracket	

### 9.2 Spare parts for B68 Sill lift



Position	Quantity	Kit	Part No.	Object
		Α	46847	B68 Sill lift kit
1	1	А	46870	B68-1, Rubber block kit, 3x4 pcs
2	1	А	46848	B68-2, Drive-on ramp LF RR
3	1	А	46849	B68-3, Drive-on ramp LR RF
4	1	А	45868	B68-4, Ramp 1400 mm
(5)	1	в	48282	B68-5, Ramp kit 1650 mm, 2 pcs

Car-O-Liner<sup>®</sup> is a Leading Global Provider of Assured and Profitable Alignment Processes to the Automotive Industry, including Technical Development, Training and Service. Over 55 000 Car-O-Liner Collision Repair Systems are in use worldwide. Car-O-Liner runs operations of its own in Scandinavia, USA, UK, France, Germany, Thailand, India and China and sells through local distributors in more than 60 countries.

Car-O-Liner products are well known for their high quality, advanced technology and ergonomic design.

