

OWNER'S MANUAL

INFORMATION FOR OWNERS AND USERS

ZS MK2 Liftgate

SLIDER LIFT

79256TL - Owner's Manual, English translation

2025-04-08

Must be kept in the vehicle on which the liftgate is installed



WALTCO

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1 Important information

Before using the Waltco Liftgate, you must read and understand the contents of this manual and especially the sections describing safety.

The owner's manual is primarily intended to inform you about the Liftgate's functions and characteristics and how to use it in the best way. It also contains important safety and maintenance information and describes any problems that might occur during operation.

Always keep the owner's manual in the vehicle, as the need for important information regarding operation, safety and maintenance may be necessary.

Information about our products is also available on our website. You can find us at www.Waltco.com.

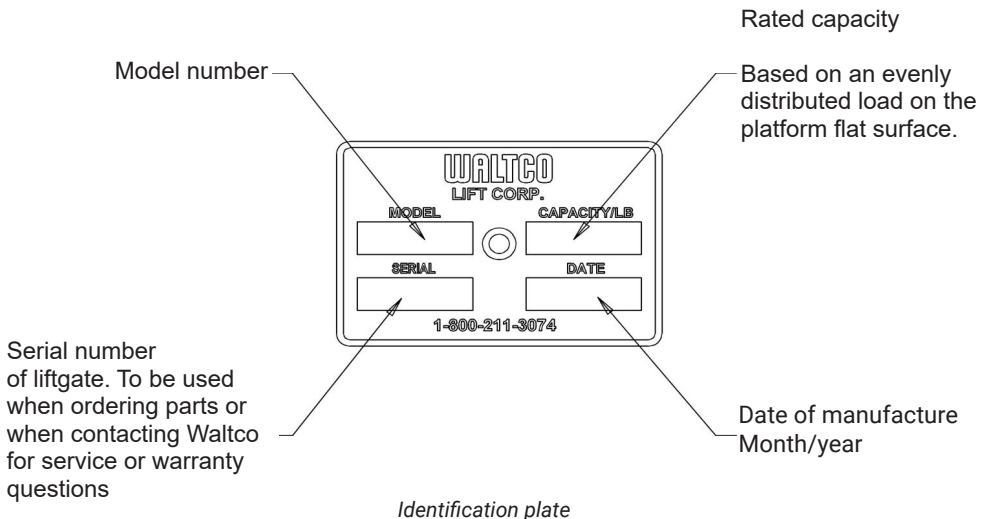
All information, images, illustrations and specifications are based on the product information available when this manual was printed. Images and illustrations contained in the Instructions for use are generic and not intended to be exact depictions of various parts of the product.

We reserve the right to make changes to the product without prior notice.

1.1 Technical support

If technical support is required, contact your nearest service provider.

Always quote the Liftgate's serial number to make sure you receive the correct information. The serial number is found on the rating plate located on the Liftgate frame.



1.2 Spare parts & accessories

If spare parts or accessories are required, contact your nearest service provider.

1.3 Service

If service is required, contact your nearest service provider.

1.4 Product discontinuation

For information on product discontinuation, see section "9 Product discontinuation" on page 61.

1.5 Warranty

1.5.1 Warranty period

The Liftgate comes with a 24-month warranty valid from the ex-works delivery date.

If the Liftgate is stored before being put into service or delivered to the end customer, the warranty period may be extended by a period corresponding to the storage period, but not more than 6 months, i.e. the warranty is valid for a maximum of 30 months from the factory delivery date.

Spare parts are supplied with a 12-month warranty from the ex works delivery date.

When storing spare parts before installation on the Liftgate, the warranty period may be extended by a period corresponding to the storage period, but not more than 6 months, i.e. the warranty is valid for a maximum of 30 months from the factory delivery date. The spare parts warranty is subject to proof of purchase.

1.5.2 Warranty conditions

Waltco warranty rights are only valid if the following conditions are met:

- Claims are made within 30 days of the repair.
- Installation was carried out in accordance with Waltco installation instructions and also by a Waltco-approved superstructure builder.
- Delivery acceptance inspection was carried out in accordance with Waltco's instructions and certified in this owner's manual. See section "12 Declaration of conformity during assembly" on page 67.
- The annual service was carried out according to Waltco's instructions and by a Waltco-approved service provider. Service must be noted in the service record. See section "10 Service record" on page 63.
- Warranty work may only be carried out by Waltco-approved service provide.

There is information on our website about service providers and distributors. If no service provider information is available, contact Waltco

1.5.3 Warranty compensation:

Liftgate

Following an approved Liftgate claim during the ordinary warranty period, the warranty will cover material and labour costs for the person performing the warranty work.

Spare Parts

Following an approved part claim within the ordinary warranty period, the warranty will cover material costs for the person performing the warranty work. The warranty on parts does not cover labour costs.

1.5.4 The warranty covers:

Factory and material defects on:

- Waltco original parts found to be defective.
- Waltco original spare parts found to be defective.
- Waltco original accessories found to be missing.

1.5.5 The warranty does not apply in the case of:

- **Damage caused by electrical overload:**
Damage to electrical parts caused by insufficient battery capacity, e.g. insufficient installed battery capacity and/or insufficient battery charge in relation to the amount of lift use.
- **Damage caused by hydraulic overload:**
Damage to lift parts caused by tampering with the hydraulic system
- **Damage caused by mechanical overload:**
Damage to lift parts caused by overloading or external force.
- **Wear parts:**
e.g. support wheels, bearings, shafts, worn or damaged paint, warning flags, decals, batteries, rubber bellows, seals between the Liftgate and vehicle.
- **Service and maintenance related:**
Measures of a purely service and maintenance character. Replacing fuses, adjusting hydraulic pressure, adjusting tilt cylinders, adjusting torque. Hydraulic components contaminated by dirty hydraulic oil. Dissonance caused by neglected maintenance (lubrication).
- **Incorrect installation:**
Damage caused by incorrect installation. Claims for this type of damage must be submitted to the Liftgate seller or installer, or to the service provider that installed the spare part.
- **External equipment:**
Damage caused by external equipment or materials not approved by Waltco. For example, equipment connected to the Liftgate electrical system. Parts that have previously been repaired without Waltco approval.
- **Parts that have been disassembled:**
For example, motors, cylinders, solenoids, pressure switches, valves and similar parts.
- **Corrosion:**
Surface corrosion on standard fasteners or on components with damaged surface treatment.

- **External costs:**
Emergency actions, on-call, travel expenses, rental, lost income, damage to goods.
- **Missing parts:**
If multiple parts are submitted with a claim application, parts that have no identified defects covered by the warranty will not be replaced. Example: A valve is found to be faulty and the valve and solenoid are both submitted; however, only the part that has a defect covered by the warranty is replaced.
- **Transportation costs:**
Transportation costs for returned goods (claims). The claimant is liable for transportation costs for returned goods (claims).
- **Painted-over parts:**
Hoses, piston rods, control devices, cables and similar. Parts where the ID plate has been painted over, making identification impossible.

1.6 Information concerning the clause on remote diagnostics

Waltco, or a third party designated by Waltco, shall at all times have the right to (i) install, maintain and dismantle a remote diagnostics device in and from the products; and (ii) access, send, receive, collect, store, copy, aggregate, combine with other information, process, make available, further develop and use any and all information and data gathered through the remote diagnostics device, including but not limited to, information concerning equipment identity, efficiency, availability, downtime, operation, operating environment, movement, condition, logon, location and similar information relating to the products (the "Information"). Such Information may be used for providing, delivering, optimizing, developing, servicing and offering the products or any related equipment and services. The Information may also be used for example for sales and marketing, Waltco's internal business and/or operating purposes as well as for regulatory, warranty and contract compliance and for proactive maintenance and diagnostics. The Information may be shared to Waltco's group companies and to Waltco's and its group companies' dealers, subcontractors, service providers and other business partners for the above described purposes.

1.7 Privacy

For administrative purposes relating to the warranty program and in order to fulfil the obligations under the contract and the law, and to manage the customer relationship, the seller of the products, and Waltco as the manufacturer of the products, is required to collect and process information regarding the customer and owner of the product, which may include personal data of the contact persons and other possible representatives and employees of the customer and owner of the product. Information collected may also be used, among other things, to satisfy requests made by the customer, to inform the customer about new products and services, as well as for other promotional or marketing purposes. The information may be shared within the Waltco Group of companies and its associated companies, and Waltco's authorised dealers, distributors and service workshops, and other companies providing services for the customer's benefit for the above described purposes. Waltco Group may also receive and use information provided to Waltco Group through its authorised dealer and service network (such as from the authorised Waltco distributor or dealer from whom the customer has purchased the product).

A more detailed description of how Waltco processes personal data is available in its privacy policy (<https://hiab.com/en/privacy-policy>). The Privacy Policy applies to the processing of personal data by Waltco's group of companies. Please note that in case you have purchased the product from a Waltco distributor or dealer, personal data may be further processed by the seller of the product. In such case, please refer to the applicable policies of the seller of the product.

1.8 Attention!

The Instructions for use contain the following warning signs. They are intended to alert you to conditions that could cause problems, incidents, injury, and/or damage to the product, etc.



WARNING!

WARNING indicates a potential hazard, which if ignored may lead to serious, life-threatening injury.



CAUTION!

CAUTION indicates a potential hazard, which if ignored, may lead to minor injuries.

IMPORTANT!

IMPORTANT indicates a risk of equipment damage.

NOTE!

NOTE! refers to additional information that may help the reader understand, or perform, a given operation.

2 Safety rules

2.1 General

Because the Liftgate is used for handling heavy loads, extra care must be taken when using it. It is important that you read and follow the instructions and safety regulations in these instructions for use before using the Liftgate. Improper use may result in injury, or damage to the Liftgate and the vehicle to which it is fitted.

NOTE!

Waltco is not liable for any injury to persons or damage to property that may result from failure of the operator or other person to comply with the recommendations, warnings and instructions set forth in these instructions for use.

2.2 Damage and malfunctions

If in any situation you feel the Liftgate and its various functions are not behaving as expected, or if you suspect something is wrong, discontinue use as soon as possible, switch off the main power supply to the Liftgate and contact your authorised dealer for assistance without delay.

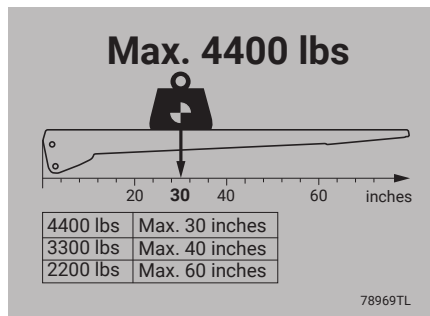
2.3 Max permissible load

Under no circumstances may the lift be burdened with more weight than the specified maximum load. Under no circumstances may the max load centre be placed further out on the platform than the load centre distance specified for the Liftgate.

Information about the max permissible platform load and the load centre distance for max load is shown on decals affixed to the Liftgate or vehicle.

WARNING!

Under no circumstances is it permitted to load the platform with loads greater than those specified on the decals. Excessive load can cause structural damage. Risk of material damage and life-threatening injury.



Sticker, max permissible load 4400 lbs. Load centre distance 30".

Example: This Liftgate has a maximum load of 4400 lbs when the load's centre of gravity is no more than 30 inches from the edge of the vehicle floor. If the load's centre of gravity is placed 60 inches from the edge of the vehicle floor, max permissible weight decreases to 2200 lbs.

2.4 Maintenance, repairs and service

Only perform the service and maintenance procedures specified in this manual.

All other service, repairs, modifications or actions on the Liftgate and the vital systems of its accessories must be carried out by an authorised provider.

When working on the Liftgate, switch off the main power supply.

Use only spare parts and accessories approved or recommended by Waltco. Any other use may lead to changes that impair Liftgate function and safety. This may also render your Liftgate warranty invalid.

2.5 Modifications

Modifications not described or approved by Waltco may not be made. Such modifications may entail an increased risk of accidents, a negative impact on product life and render the product warranty invalid.



WARNING!

Modifications to the Liftgate may affect safety. In the case of deviations from the documented CE-marked Liftgate, the CE-marking will cease to apply. Risk of material damage and life-threatening injury.

2.6 Operation

2.6.1 General

Because the Liftgate is used for handling heavy loads, extra care must be taken when using it. It is important that you read and follow the instructions and safety regulations in these instructions for use before using the Liftgate. Improper use may result in injury or damage to the Liftgate and the vehicle to which it is fitted.



WARNING!

Do not allow heavy loads to drop onto the platform. Risk of material damage and life-threatening injury.



WARNING!

Exercise caution when present or working on or in the immediate vicinity of the platform or Liftgate with respect to protruding parts and sharp edges. Never leave the Liftgate with the platform raised and extended. Risk of material damage and life-threatening injury.



CAUTION!

Waltco is not liable for any injury to persons or damage to property that may result from failure of the operator or other person to comply with the recommendations, warnings and instructions set forth in these instructions for use.

2.6.2 Working in the dark



CAUTION!

Make sure the necessary and appropriate lighting is available when working in the dark. Waltco recommends fitting the Liftgate with warning lights for working in poorly lit areas. Risk of injury.

2.6.3 Working on the platform

WARNING!

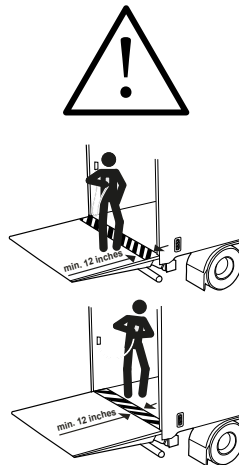
The greatest risk for cut and crush injuries is in the hazard area between the liftgate and the vehicle floor when the lift is raised to vehicle floor height. Anyone standing on the liftgate or the vehicle floor must keep their feet and other parts of the body away from this hazard area when the liftgate is in operation. Risk of life-threatening injury.

CAUTION!

To reduce the risk of foot injuries, wear safety shoes with protective steel toe-caps when working on the platform. Even though the platform has a non-slip surface, take care when transferring goods. Waltco recommends the use of anti-slip safety shoes with protective toecaps in accordance with EN ISO 20345. Risk of injury.

CAUTION!

Always be aware of the platform edges to avoid stepping off by mistake. Also be aware of the risk of tripping, especially if the platform is fitted with warning lights or wheel stops. Risk of injury.



2.7 Intended use

WARNING!

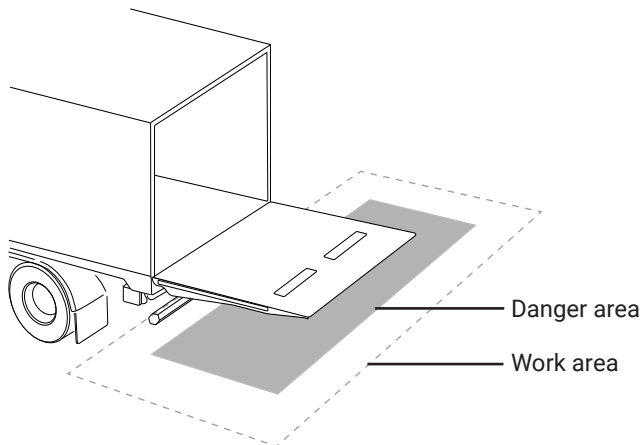
The liftgate may only be used for its intended purpose, i.e. the loading and unloading of goods, and then only in accordance with the regulations contained in this owner's manual. No other type of use is permitted as this may damage the liftgate and give rise to dangerous situations. Risk of material damage and life-threatening injury.

Use of the liftgate in a manner not described in this manual may also render the product warranty invalid.

2.8 Danger area

WARNING!

The hazard area is the area in which the liftgate moves during operation. Under no circumstances may the operator or any other person enter this area when the liftgate is in operation. Risk of material damage and life-threatening injury.



2.9 Work area

The operator must make sure that the working area behind the liftgate is free from persons and every kind of object when the liftgate is used. The operator must also pay attention to the surroundings beyond the working area to have good forewarning of approaching persons or objects that may cause a hazardous situation. Negligent operation of a liftgate may entail a risk of injury and material damage.

WARNING!

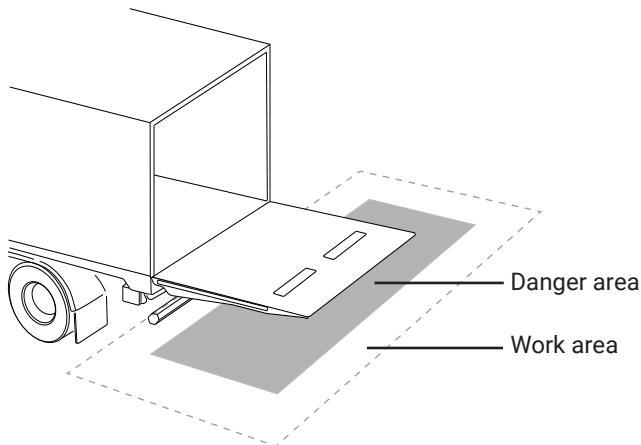
Make sure other vehicles are parked no closer than 5 m from the rear of the vehicle.

Make sure the work area is clear of persons and objects. Be especially aware of children and animals.

Pay attention to the surroundings to have good forewarning of approaching persons or objects that may cause a hazardous situation. Stop work immediately if unsure.

During loading and unloading, handle cargo as described in this manual. In the event of instability, loads may move uncontrollably. Risk of material damage and life-threatening injury.

When handling loads with wheels, the liftgate platform must be equipped with roll stops. Risk of material damage and life-threatening injury.



2.10 Operator working position

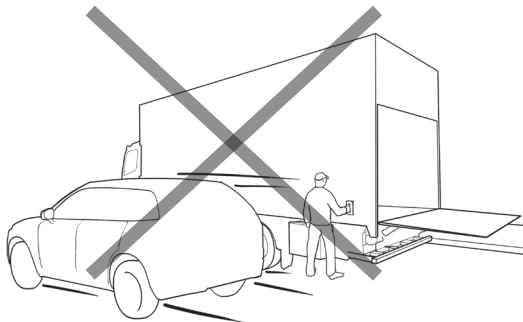
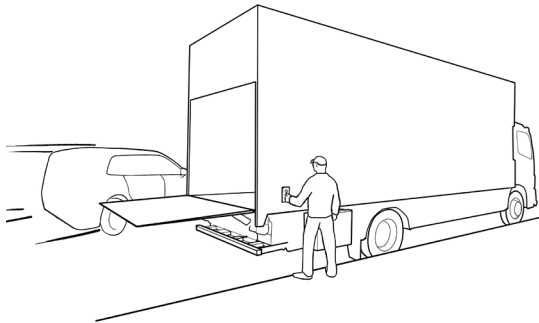
Always position the vehicle to allow liftgate operation without danger from passing traffic. Also make sure the work area is clear.

WARNING!

The vehicle must be positioned to allow liftgate operation without danger from passing traffic. Risk of material damage and life-threatening injury.

CAUTION!

Always make sure the work area is clear during platform operation. Risk of injury.



3 Design and Function

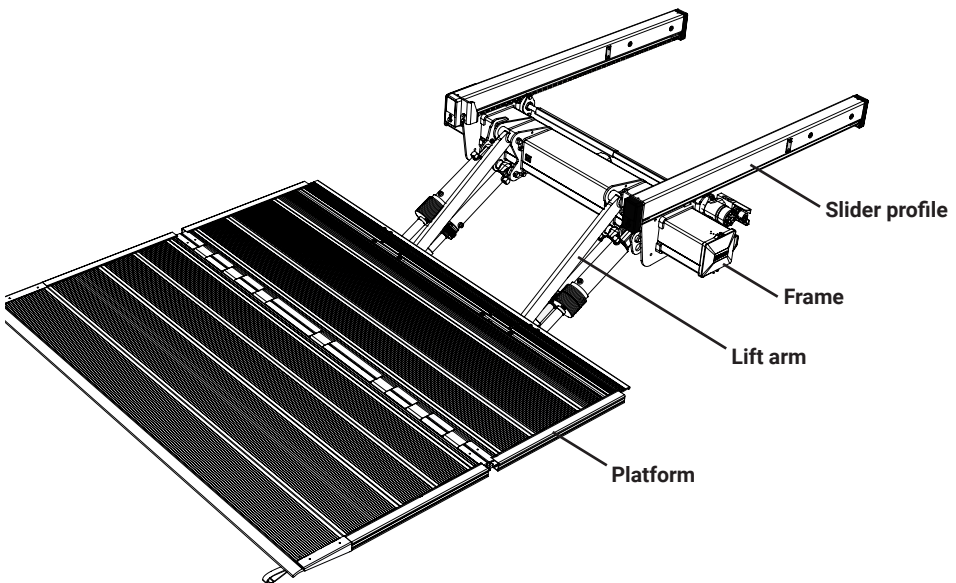
3.1 General

The Waltco liftgate consists of a number of main components, namely the frame, lift arms, platform and slider profiles. The liftgate is operated electro-hydraulically. A hydraulic pump powered by the vehicle's ordinary battery supplies hydraulic oil to the actuating hydraulic cylinders. The hydraulic system is controlled by the control system, which is operated by control devices.

3.2 Frame

The frame constitutes the liftgate's chassis to which other components such as the slider profiles, lift arms and hydraulic units are mounted.

Overview



3.3 Lift arm

The lift arms connect the platform to the frame. Lift and tilt is accomplished with associated cylinders.

3.4 Platform

The platform is made of steel or aluminium and has a non-slip top surface. The platform can be a single piece or foldable to take up less space when not in use.

3.5 Slider profiles

The slider profiles allow the liftgate body and thus the rest of the liftgate to be moved forward and rearward in relation to the vehicle. This is to align the platform with the vehicle floor before use and to put the liftgate in a transport position where it does not interfere with transport, loading and unloading when it is not used.

3.6 Hydraulic system

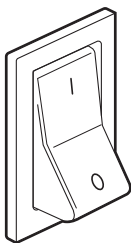
The hydraulic system is engineered to ensure the liftgate enjoys high performance and reliability. An electrically-driven hydraulic pump supplies oil to the product's hydraulic cylinders via hoses and valves and to power the hydraulic functions.

Great importance has been given to safety. A bypass valve protects against overloading. The hydraulic pump motor is fitted with a thermostat that cuts the power supply should the motor overheat. The hydraulic system is designed to meet statutory lifting speed requirements.

The hydraulic cylinders equipped with hose rupture valves protect the platform and any load from dropping suddenly in the event of a hydraulic hose failure. The liftgate is also equipped with electrically operated lowering valves on the tilt and lift cylinders. These valves allow hydraulic oil flow only when electrically actuated, i.e. only when the operator is operating the lift with one of the control devices. In the event of a hydraulic system leak, the platform is locked in position by the hydraulic oil captive in the cylinders. The electric lowering valve also acts as a locking device during transport.

3.7 Cab switch

The Liftgate can be fitted with a cab switch to switch control power On/Off. When the control circuit is switched off, the lift is 'locked'. The cab switch should always be in the OFF position during transport and whenever the Liftgate is not in use.



Typical cab switch

3.8 Safety devices

3.8.1 Limiting to a single operator

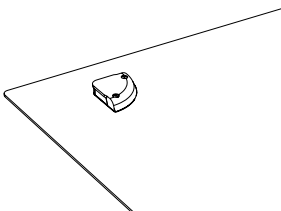
The Liftgate may only be operated by one person at a time. The control system has a safety feature that prevents two people from operating the Liftgate simultaneously from different control devices. The active control device temporarily disconnects other control devices while it is in use.

3.8.2 Warning flags

In order to draw attention to an extended platform, warning flags are installed to make it more conspicuous when deployed.

3.8.3 Main fuse

A fuse is fitted between the battery and the Liftgate to reduce the risk of electrical overload and thus the risk of fire.



Warning lighting (accessory)



Warning flags

3.9 Controllers

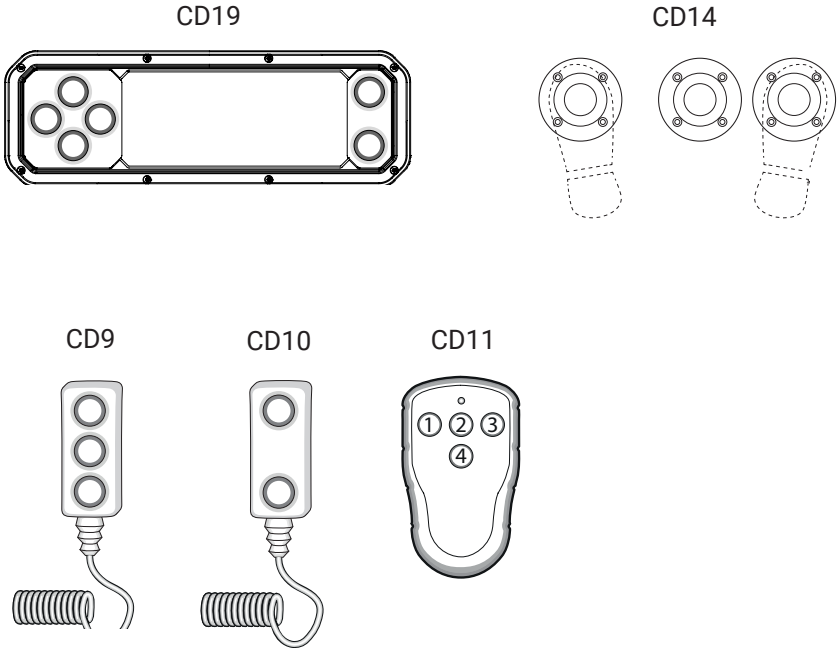
All liftgate functions are controlled by one or more control devices. The lift can be operated by several different types of fixed, hardwired control devices and remote (radio) control devices.

One of the control devices is the primary control device, which means it includes all possible functions for the liftgate concerned. The remaining control devices are secondary, which may mean the number of functions is limited for safety reasons.

3.9.1 Applicable control devices

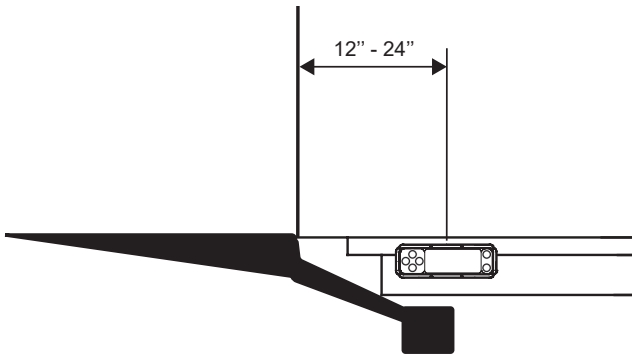
A selection of the most commonly available controllers is shown below. Possible models vary depending on lift model, configuration and relevant market.

CD= Control Device



3.9.2 Location of fixed control device

The liftgate is fitted with one or more control devices. Only control devices approved by Waltco may be used. Fixed control devices are installed on the vehicle superstructure or on brackets below the superstructure. The control devices must be positioned according to applicable regulations, with a certain distance from the crush hazard area between the platform and the superstructure, but without restricting the operator's clear view of the working area.



Location of fixed control device

3.10 Electric autotilt

The optional electric autotilt feature simplifies liftgate operation.

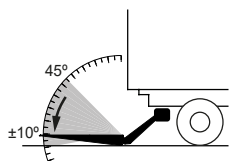
Autotilt-down is enabled automatically when the Down function is used and when the platform rests on the ground, provided that the platform angle is less than 45°. This function automatically tilts the tip of the platform down towards the ground.

In autotilt down, the tilt function is driven solely by gravity. For fastest operation, the platform should first be tilted manually to the horizontal position before enabling autotilt.

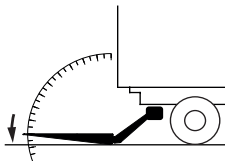
Autotilt-up is enabled when using the Up function with the platform in the ground position. When this function is enabled, the platform is automatically tilted up to the set angle (horizontal position) before moving upwards.



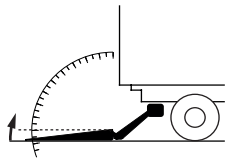
Autotilt symbol



Zone where autotilt is available



Lowering to ground

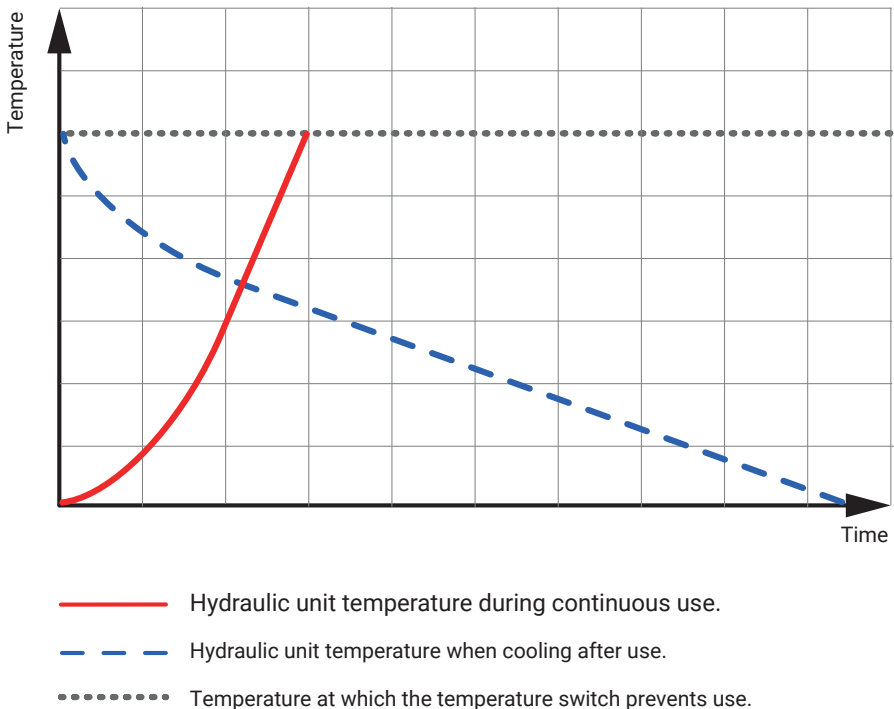


Raising from ground

3.11 Overheating protection

The hydraulic system is equipped with a thermostat which cuts control circuit power and reduces the risk of damage to the motor if it overheats, which may occur during e.g. continuous, intensive use.

The amount of continuous work the liftgate is able to perform is influenced by ambient temperature and the load the liftgate is exposed to. Generally speaking, it takes considerably longer for the motor to cool down after use than the time spent working. Insufficient pauses between intensive periods of work cause the motor to grow increasingly hot until the thermostat cuts the control circuit and prevents further use. When the motor has cooled to a permissible temperature, the thermostat resets automatically and the liftgate can be used again.



4 Operation

4.1 General

NB!

Always operate the lift calmly and with due care and attention. This enhances safety and reduces maintenance costs and the risk of downtime.

Waltco is not liable for any injury to persons or damage to property that may result from failure of the operator or other person to comply with the recommendations, warnings and instructions set forth in this owner's manual.



CAUTION!

Check and secure the load before operating the liftgate. Otherwise, there is a risk that the load will topple or fall off. Risk of injury and material damage.

NB!

In the event of damage or accident:

- *Immediately report such to the person responsible for action.*
- *If damage to the liftgate is suspected, contact an authorised workshop.*

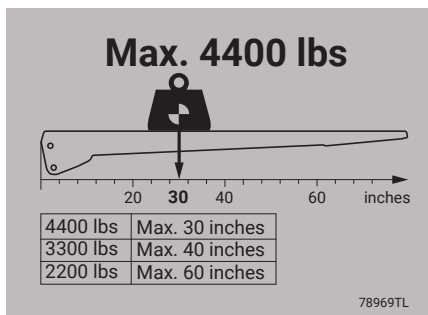
4.2 Max load

Under no circumstances may the liftgate be laden with more weight than the specified maximum load. Under no circumstances may the max load centre be placed further out on the platform than the load centre distance specified for the liftgate.

Information about the max permissible platform load and the load centre distance for max load is shown on stickers affixed to the liftgate or vehicle.

WARNING!

Under no circumstances is it permitted to load the platform with loads greater than those specified on the stickers. Excessive load can cause structural damage. Risk of material damage and life-threatening injury.



Sticker, max permissible load 4400 lbs. Load centre distance 30".

Example: This Liftgate has a maximum load of 4400 lbs when the load's centre of gravity is no more than 30 inches from the edge of the vehicle floor. If the load's centre of gravity is placed 60 inches from the edge of the vehicle floor, max permissible weight decreases to 2200 lbs.

4.2.1 Working in the dark

CAUTION!

Make sure the necessary and appropriate lighting is available when working in the dark. Waltco recommends fitting the liftgate with warning lights for working in poorly lit areas. Risk of injury.

4.3 Operator working position

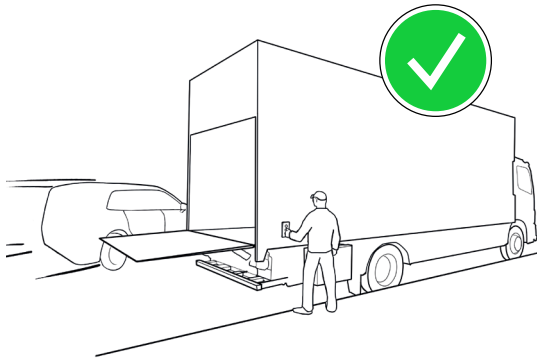
Always position the vehicle to allow liftgate operation without danger from passing traffic. Also make sure the work area is clear.

WARNING!

The vehicle must be positioned to allow liftgate operation without danger from passing traffic. Risk of material damage and life-threatening injury.

CAUTION!

Always make sure the work area is clear during platform operation. Risk of injury.



4.4 Working on the platform

CAUTION!

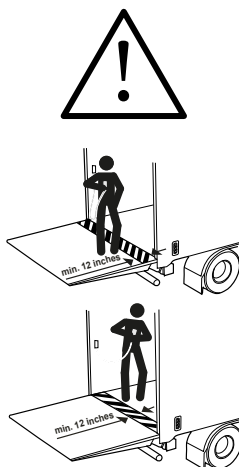
To reduce the risk of foot injuries, wear safety shoes with protective steel toe-caps when working on the platform. Even though the platform has a non-slip surface, take care when transferring goods. ZEPRO recommends the use of anti-slip safety shoes with protective toecaps in accordance with EN ISO 20345. Risk of injury.

CAUTION!

Always be aware of the platform edges to avoid stepping off by mistake. Also be aware of the risk of tripping, especially if the platform is fitted with warning lights or wheel stops. Risk of injury.

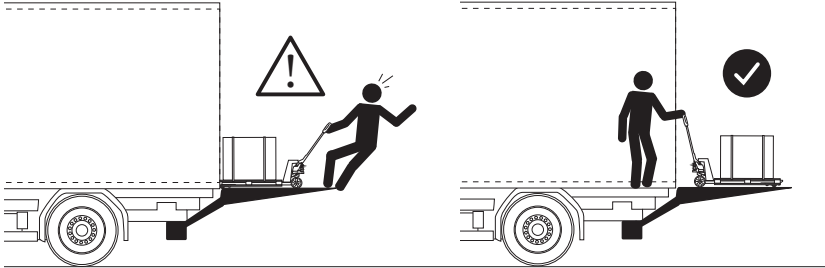
CAUTION!

The greatest risk for cut and crush injuries is in the hazard area between the liftgate and the vehicle floor when the lift is raised to vehicle floor height. Anyone standing on the liftgate or the vehicle floor must keep their feet and other parts of the body away from this hazard area when the liftgate is in operation. Risk of injury.



⚠ CAUTION!

if possible, always stand inboard of the load when rolling it onto the platform. If necessary, turn the load and hand pallet truck around on the vehicle floor before rolling them out. Standing outboard of the load when rolling it onto the platform increases the risk of tripping and falling over the edge. Risk of injury and material damage.

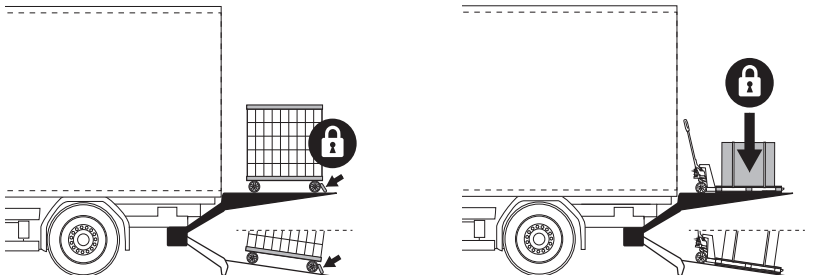


⚠ CAUTION!

Make sure the load is placed securely on the platform when the liftgate is operated.

When handling loads with wheels, the platform must be equipped with roll stops, which are then used to hold the load in place.

When handling loads with a hand pallet truck, always lower the load so that it rests on the platform when operating the liftgate.



4.5 Loading and unloading with the platform on ground

IMPORTANT!

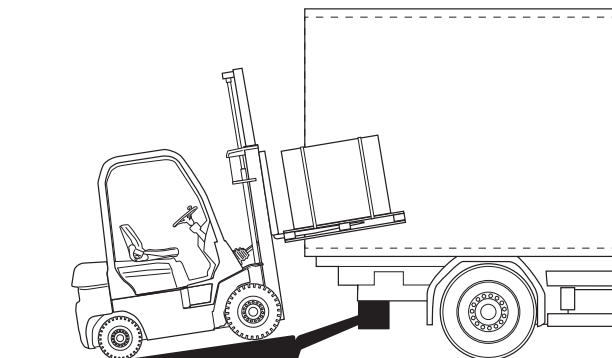
It is only permitted to drive a forklift on the platform when the platform is resting fully on the ground. Otherwise, the load on the liftgate will be too great. Risk of material damage.

During loading, the vehicle will get lower and the ground pressure on the liftgate will increase by a weight equivalent to the total weight loaded in to the vehicle. Once the vehicle has been loaded with a weight equivalent to the maximum load specified for the liftgate, the platform must be raised slightly and then lowered back to the ground to remove the pressure from the ground before loading can continue. This procedure must be repeated as soon as the vehicle has been loaded with an additional weight equivalent to the specified maximum load.

The weight of the load may not exceed the maximum capacity of the liftgate.

- Platform load = Forklift+ Load on truck.
- Liftgate load = Total load since the platform was last placed on the ground.

The vehicle will rise during unloading. When the platform is raised from the ground, it must be lowered back onto the ground before unloading may continue.



Loading and unloading with the platform on ground

4.6 Loading and unloading with the platform on a loading dock

IMPORTANT!

Maximum overrunning weight = Liftgate load capacity x 0.5. Exceeding liftgate load capacity may cause material damage.

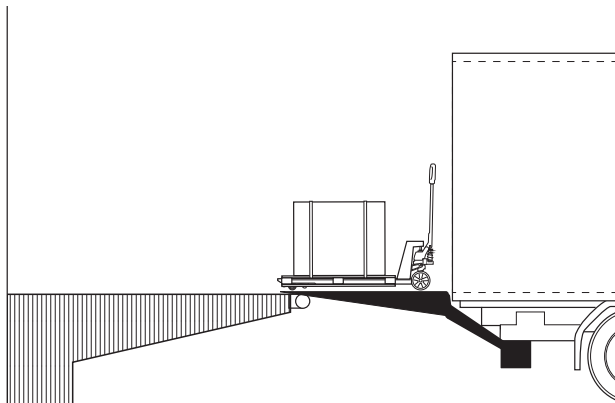
It is forbidden to drive forklifts onto the platform as the load on the liftgate would be too great. Risk of material damage.

When loading, the vehicle will get lower and the pressure on the lift increase by the weight loaded in the vehicle. In cases where the total laden weight exceeds the maximum capacity of the liftgate, the platform must be tilted up slightly and then lowered back to the dock before loading may continue. The platform must be unladen when tilting.

When unloading, the platform will rise relative to the dock depending on the weight of the load removed from the vehicle. It can happen that the platform rises so far that it must be tilted down to the dock before unloading can continue, especially when unloading heavy goods.

The transfer load may not exceed half the load capacity of the lift.

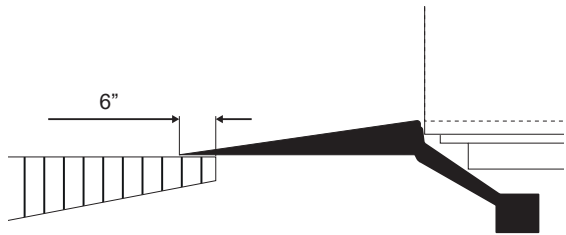
Example: Lift with lifting capacity 4400 lbs = maximum permissible overrunning weight 2200 lbs.



Loading with the platform on a loading dock

4.6.1 Adapt the platform to the dock

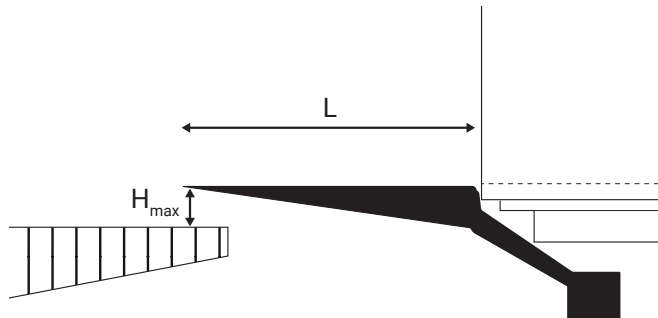
As the vehicle is unloaded, the platform will rise relative to the loading dock. Tilt the platform down at regular intervals. Check that the platform has sufficient overlap (min 6") and that it rests safely and stably on the dock.



4.6.2 Maximum tilt-down angle

It is forbidden to tilt the platform down more than 10° while laden. Use the table below to check that the angle is not exceeded.

| Platform length (L) | H _{max} |
|---------------------|------------------|
| 47" | 8" |
| 59" | 10" |
| 67" | 11.6" |
| 79" | 13.7" |
| 98" | 17" |



4.7 Moving load from one vehicle to another

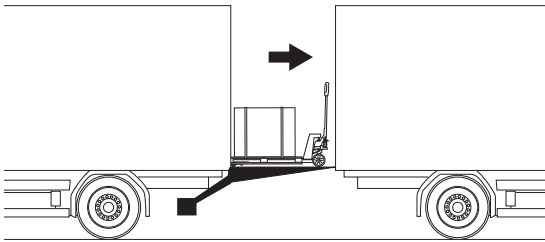
IMPORTANT!

Maximum overrunning weight = Liftgate load capacity x 0.5. Exceeding Liftgate load capacity may cause material damage.

It is forbidden to drive forklifts onto the platform as the load on the Liftgate would be too great. Risk of material damage.

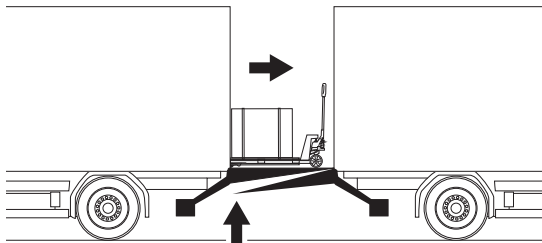
If possible, use the Liftgate on the vehicle from which the load will be transferred as the transfer ramp. The transfer load may not exceed half the load capacity of the lift.

Example: Liftgate with lifting capacity 4400 lbs = maximum permissible overrunning weight 2200 lbs.



Maximum overrunning weight = Liftgate load capacity x 0.5

If the receiving vehicle is equipped with a Liftgate, make sure the tip of its platform is always free and clear when transferring loads.



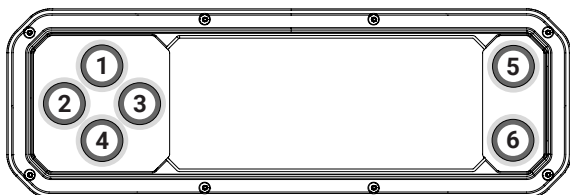
The tip of the receiving vehicle platform should always be free and clear

4.8 After use

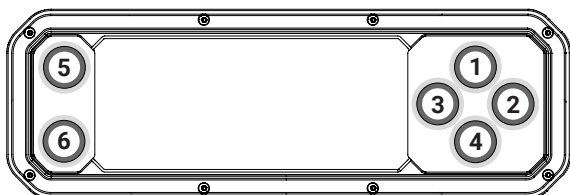
- **Move the liftgate into transport position.** Refer to the relevant control device section for detailed information.
- **Lock the liftgate**
On liftgates with cab switches, switch off control power by setting the cab switch to Off.
On liftgates with cab switches, switch off the main power supply by setting the main switch to Off.

4.9 Operating with the fixed control device (CD19)

The control device governs all liftgate functions. The control device is fitted with dead-man's buttons; when a button is released, liftgate movement stops immediately. The control device has a customised layout for mounting on the left and right sides of the vehicle.



Control device installed on the right side of the vehicle



Control device installed on the left side of the vehicle

FUNCTIONS

1. Up
2. Tilt down / Slider out
3. Tilt up / Slider in
4. Down
5. Two-handed function (Up/Down, Tilt down / Tilt up)
6. Two-handed function (Slider out / Slider in)

4.9.1 Switching from transport position to working position

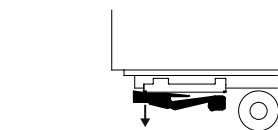
This procedure describes how to prepare the liftgate for use following transport. The illustrations show a control device installed on the right side of the vehicle.

Down

Depress and hold down the 'Down' button (3). The platform is lowered at an even pace. Lower the platform 5-10 cm to release it from the transport locks.

IMPORTANT!

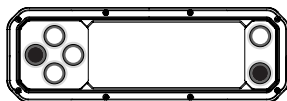
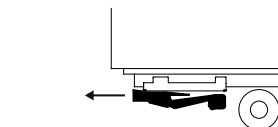
It is important to lower the platform to clear the transport stops before moving it outwards. Failure to do so may result in damage.



Down

Slider out

Depress and hold down the 'Slider out' button (4). The liftgate moves outwards. Run the liftgate out to the working position.



Slider out

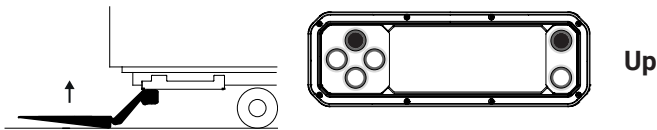
With the liftgate in the working position, unfold the platform.

4.9.2 Operation in the working position

This procedure describes how to operate the liftgate in the working position. The illustrations show a control device installed on the right side of the vehicle.

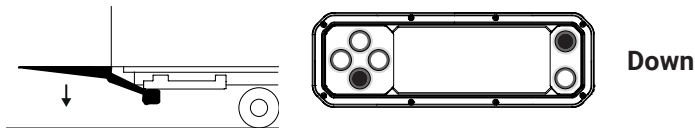
Up

Depress and hold down the 'Up' button (1). The platform is then raised at an even pace.



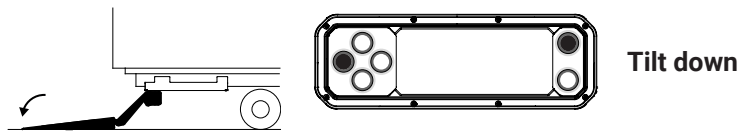
Down

Depress and hold down the 'Down' button (3). The platform is lowered at an even pace.



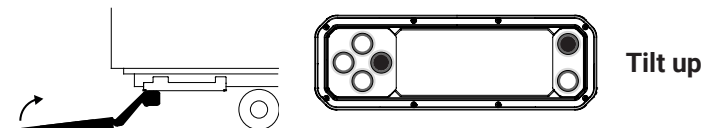
Tilt down

Depress and hold down the 'Tilt' (2) and 'Down' (3) buttons in that order.



Tilt up

Depress and hold down the 'Tilt' (2) and 'Up' (1) buttons in that order. The platform is then tilted up at an even pace.



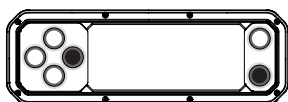
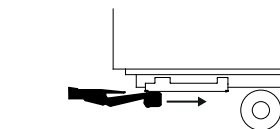
4.9.3 Moving from the working position to the transport position

This procedure describes how to prepare the liftgate for transport after loading or unloading. The illustrations show a control device installed on the right side of the vehicle.

First operate the liftgate up or down until the platform is 5-10 cm above the ground. Fold the platform together and then operate the liftgate as described below.

Slider in

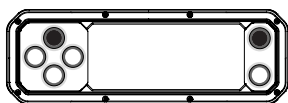
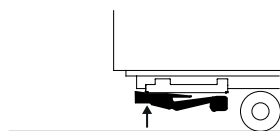
Depress and hold down the 'Slider in' button (5). The liftgate moves inwards. Move the liftgate inwards to the mechanical stop.



Slider in

Up

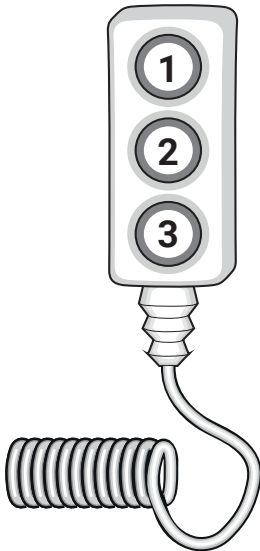
Press the 'Up' button (1). The platform is then raised at an even pace. Raise until the platform is secured against the transport locks.



Up

4.10 Operating with the coiled cable control device (CD9)

The control device is used when the liftgate is in the working position and to control the Up, Down and Tilt functions. The control device is fitted with dead-man's buttons; when a button is released, liftgate movement stops immediately.



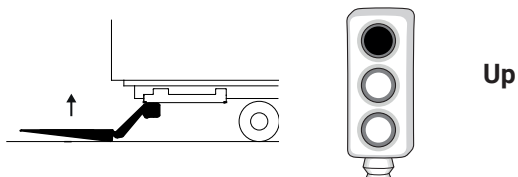
| FUNCTIONS | |
|-----------|------|
| 1 | Up |
| 2 | Tilt |
| 3 | Down |

4.10.1 Operation in the working position

This procedure describes how to operate the liftgate with the coiled cable control device (CD 10).

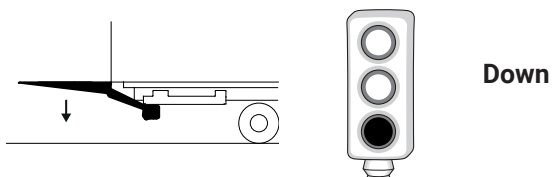
Up

Depress and hold down the 'Up' button (1). The platform is then raised at an even pace.



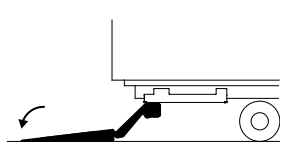
Down

Depress and hold down the 'Down' button (2). The platform is lowered at an even pace.



Tilting down

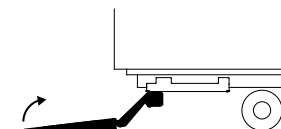
Depress and hold down the 'Tilt' (2) and 'Down' (3) buttons in that order. The platform is then tilted down at an even pace.



Tilt down

Tilting up

Depress and hold down the 'Tilt' (2) and 'Up' (1) buttons in that order. The platform is then tilted up at an even pace.



Tilt up

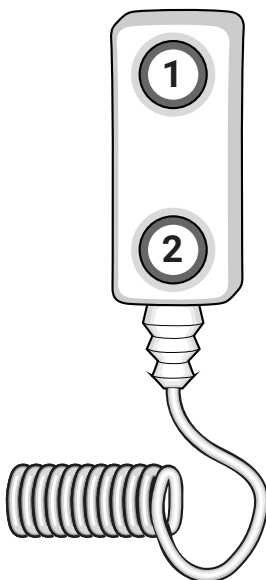
WARNING!

Use of the 'Tilt up' and 'Tilt down' functions is strictly forbidden at all times while standing on the platform. Risk of life-threatening injury.



4.11 Operating with the coiled cable control device (CD10)

The control device is used when the liftgate is in the working position and to control the Up and Down functions. The control device is fitted with dead-man's buttons; when a button is released, liftgate movement stops immediately.



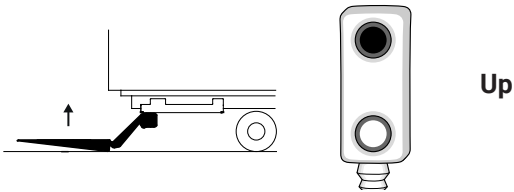
| FUNCTIONS | |
|-----------|------|
| 1 | Up |
| 2 | Down |

4.11.1 Operation in the working position

This procedure describes how to operate the liftgate with the coiled cable control device (CD 10).

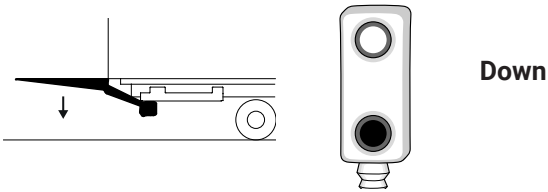
Up

Depress and hold down the 'Up' button (1). The platform is raised at an even pace.



Down

Depress and hold down the 'Down' button (2). The platform is lowered at an even pace.



5 Service and maintenance

Regular service and maintenance are essential for keeping maintenance costs low, safety high and product life long. Daily and weekly maintenance and regular lubrication as described in this owner's manual must be carried out for the best results. Once a year, the Liftgate must also be handed to an authorised provider for service.

This manual includes Waltco's recommendations for checks, lubrication and service.

5.3 Daily checks

5.4 Weekly checks

5.5 Lubrication

5.6 Service

5.1 Hydraulic oil

If the hydraulic oil needs to be replenished, only the oil recommended by Waltco is permitted to be used. Waltco ships and recommends all liftgates use Shell Tellus 15 or equivalent. Recommended all year round.

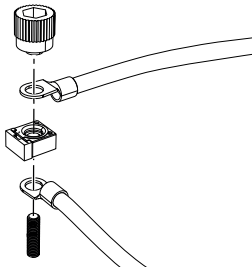
Hydraulic systems with hydraulic oil tanks marked with a specification for the hydraulic oil May only be filled with the oil specified on the label.

5.2 Before starting work

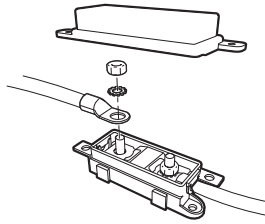
IMPORTANT!

Carry out the following before starting any service or maintenance:

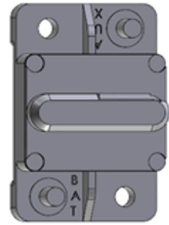
- Lower and tilt the platform down so that it rests on the ground to reduce pressure in the hydraulic system to a minimum.
- Cut the power supply by disconnecting the cable at the main fuse or by switching off the main power supply with the circuit breaker, where fitted. Main fuses and circuit breakers come in several different designs; below are some typical examples.



Main fuse Type 1



Main fuse Type 2



Circuit Breaker

5.3 Daily checks

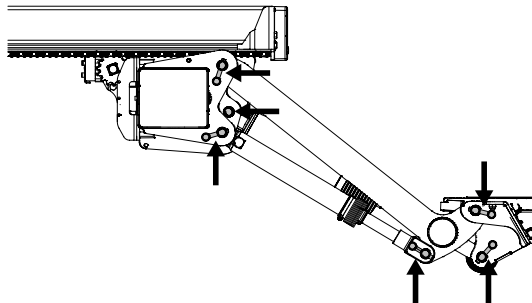
Perform the following checks before using the lift.

1. Check all decals for damage and legibility. Replace as necessary. See section "6 Marking" on page 53.
2. Check flags for damage. Replace as necessary. See section "6.7 Warning flags" on page 58.
3. Look beneath the Liftgate to check for oil leaks. Contact a qualified service engineer for troubleshooting or repair.
4. Visually inspect all Liftgate components for cracks and deformations. Contact a qualified service engineer for troubleshooting or repair.
5. Check that the platform is clean and safe to access. Remove any snow, mud, dirt, rubbish or slippery fluids. Waltco recommends the use of anti-slip safety shoes with protective toecaps to reduce the risk of injury.

5.4 Weekly check

Carry out the following checks:

1. Test all liftgate functions using all control devices. Contact a qualified service engineer for troubleshooting or repair.
2. Check hoses, connections and cylinders for cracks and leaks. Contact a qualified service engineer for troubleshooting or repair.
3. Check the hydraulic cylinder boots for damage and secure fit. Contact a qualified service engineer for troubleshooting or repair.
4. Check operation of the cab switch and main switch. Their function is described in section "3.7 Cab switch" on page 22. Contact a qualified service engineer for troubleshooting or repair.
5. Check that visible cables, cable glands and connectors are securely fastened and undamaged. Contact a qualified service engineer for troubleshooting or repair.
6. Check that the hydraulic unit's cover is securely fastened and undamaged. Contact a qualified service engineer for troubleshooting or repair.
7. Check that bearings and locking screws are securely fastened and undamaged. See example below. Contact a qualified service engineer for troubleshooting or repair.
8. Check electrical hose rupture valves (located on cylinders) for wear and damage. Contact a qualified service engineer for troubleshooting or repair.



Example of storage

5.5 Lubrication

5.5.1 General

Check all grease zerks for damage and function. Defective grease zerks must be replaced. If grease cannot be charged even if a new grease nipple is fitted, the bearing must be removed. Contact service provider.

5.5.2 Interval

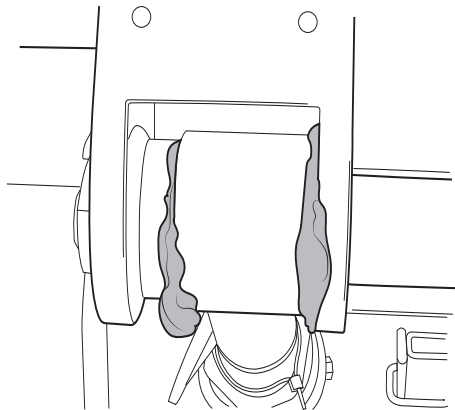
At a minimum, lubrication must be done every 3 months. More frequent intervals may be necessary when driving in aggressive surroundings or the lift is washed often. Contact Waltco for advice.

5.5.3 Before lubrication

Before lubricating, clean the lift, especially the lubrication points and grease zerks.

5.5.4 Correct design

Lubrication must be carried out such that a ring of grease is visible on both sides of the bearings to protect against the intrusion of water, salt, sand and dirt. See illustration below.



Lubrication must be carried out such that a ring of grease is visible on both sides of the bearings.

5.6 Service

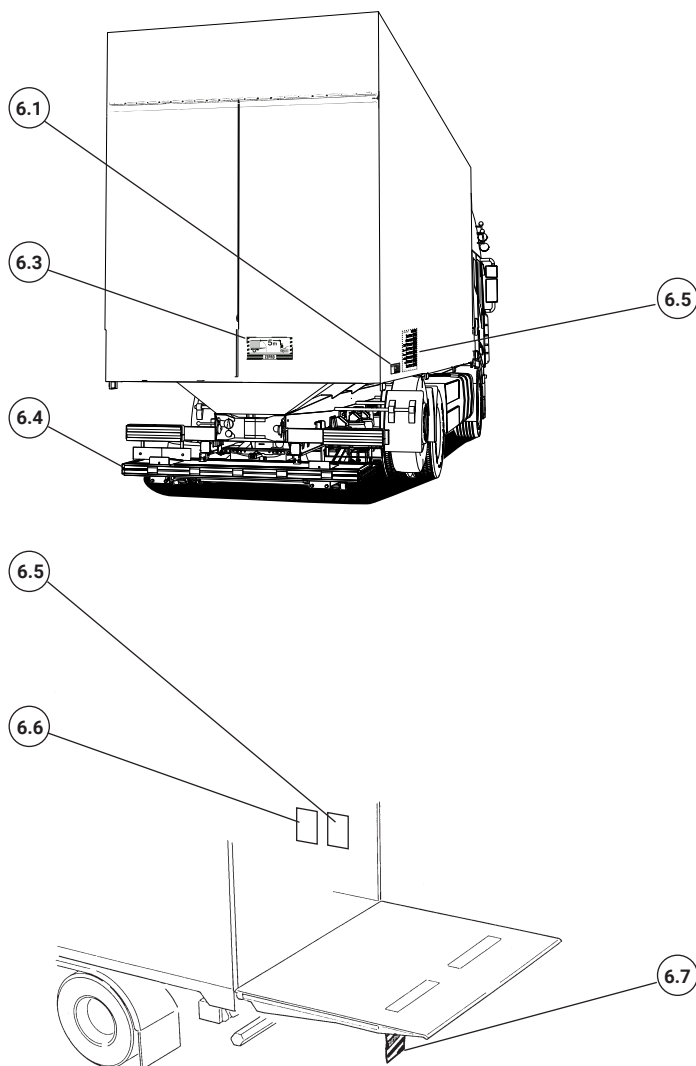
Service the lift regularly to keep maintenance costs low, safety high and product life long. An annual service must be carried out by a Waltco approved provider for the warranty to remain valid. For information about the nearest provider, visit the Waltco website or contact your distributor. The service record must be completed and signed following service or repairs.

Each Year do an L Service to the liftgate

The service record sheet can be found in section 10 of this Owner's Manual.

6 Marking


Below is an overview showing the location of the different markings. Marking illustrations can be found under the relevant subheadings in the following pages.



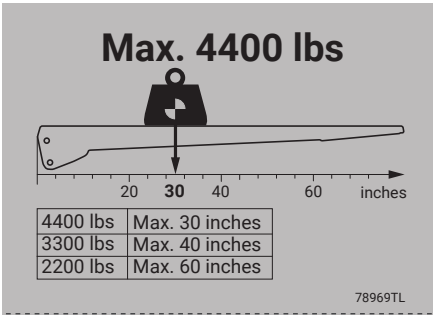
6.1 Maximum load rating

The marking shows the max permissible load on the platform. The liftgate must never be laden with weights higher than permitted by the marking.

Max permissible load only applies at a specific distance from the vehicle body (load centre distance). Behind this point, max permissible load is reduced. Refer to the marking on the platform or vehicle.



WARNING!
Under no circumstances is it permitted to load the platform with loads greater than those specified on the marking. Excessive load can cause structural damage. Risk of material damage and life-threatening injury.



Sticker, max permissible load 4400 lbs. Load centre distance 30".

Example: This Liftgate has a maximum load of 4400 lbs when the load’s centre of gravity is no more than 30 inches from the edge of the vehicle floor. If the load’s centre of gravity is placed 60 inches from the edge of the vehicle floor, max permissible weight decreases to 2200 lbs.

6.2 Identification plate

The identification plate is fixed on to the liftgate's frame. Affix the corresponding sticker version of the identification plate, preferably by the cab door post to facilitate identification.

The identification plate contains the following information:

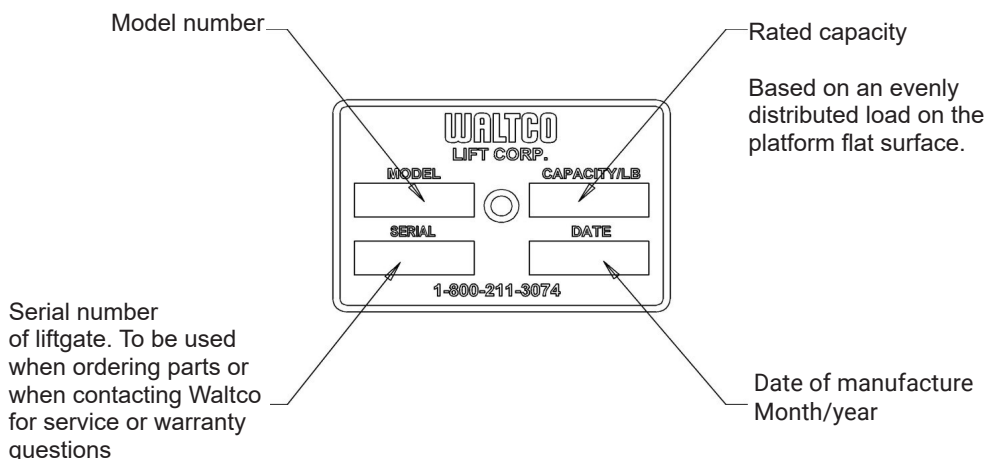


Bild 1. Identification plate

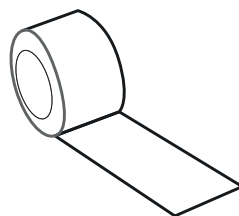
6.3 Work area

The sticker is positioned clearly visible at the rear of the vehicle and describes the working area that must be kept clear for loading and unloading.



6.4 Warning tape

The warning tape is affixed along the edges of the platform to make them more conspicuous when the platform is deployed.



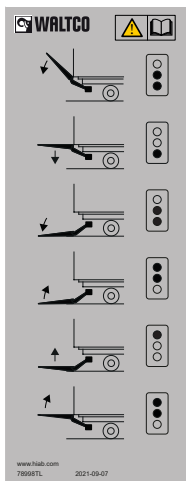
Comment

The warning tape location often coincides with the edge marking and may in this case have expired.

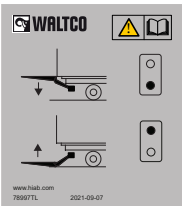
6.5 Control device sticker

The control device sticker is affixed next to or on the relevant control device depending on its type.

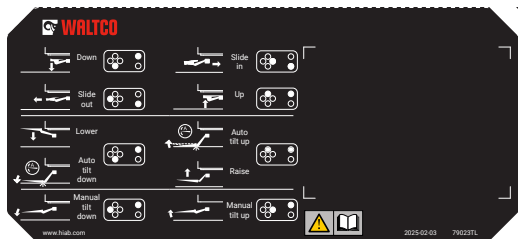
The stickers are available in standard versions and in reversed version (Option) for affixing on the opposite side of the vehicle.



Control device sticker for CD 9



Control device sticker for CD 10

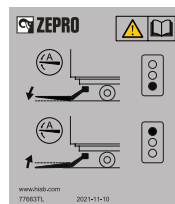


Control device sticker for CD 19

6.5.1 Autotilt additional sticker

There is an additional sticker affixed next to the control device sticker on liftgates fitted with autotilt.

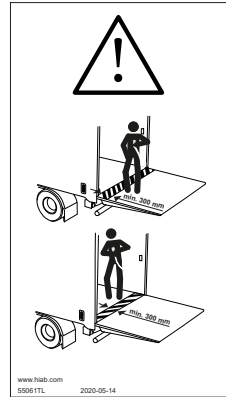
The stickers are available in standard versions and in reversed version (Option) for affixing on the opposite side of the vehicle.



Additional Auto-tilt sticker for CD 9

6.6 Danger area

The sticker is affixed on the inside of the superstructure next to the manual control device where fitted. The sticker informs about the hazards area between the vehicle floor and platform where the risk of crush injuries is especially great when operating the liftgate.



Danger area

6.7 Warning flags

Warning flags are mounted near the tip of the platform and the left and right edges to improve conspicuity when the platform is in the horizontal position.



Warning flags

7 Troubleshooting

The table below provides information about the most common problems and suggests steps to resolve them. If this simple guide does not help or in case of doubt, contact a qualified service engineer.

| Problem | Probable cause | Action |
|--|--|--|
| Liftgate not working, hydraulic pump does not start. | Cab switch and/or main switch in Off position. | Set the cab switch and/or main switch in the On position. For information about the cabin switch and main switch, see section "3.7 Cab switch" on page 22. |
| | Motor overheated. | Wait for the motor to cool and try again (may take up to 30 minutes depending on external conditions). See section "3.11 Overheating protection" on page 27. |
| | Blown fuse / tripped circuit breaker. | Check fuses in cab and liftgate. in the case of a blown fuse, check that visible cables, cable glands and connectors are securely fastened and on damaged. Contact a qualified service engineer for troubleshooting or repair. Replace blown fuse / reset tripped circuit breaker. |
| | | Check the main fuse. The cause of the blown main fuse / tripped main circuit breaker should be carefully investigated before replacing/resetting. Contact a qualified service engineer. |
| | Other fault | Contact a qualified service engineer |
| The platform does not tilt all the way up. | Oil level too low. | Lower the platform to the ground, fill with oil to the maximum level. |
| Other problem | | Contact a qualified service engineer |

8 Technical specifications

8.1 Noise declaration

Average emission sound pressure level does not exceed 70 dB

Noise Directive 2000/14/EC

Noise measurement according to EN ISO 11200-11204

Measurement was carried out in accordance with EN ISO 3741-3746 Class II

9 Product discontinuation

8.2 General

Liftgate disassembly must be carried out by personnel with the necessary knowledge and experience to ensure no dangerous incidents or environmental impact can occur due to ignorance.

8.3 Applicable regulations and legislation

When disassembling and/or recycling, comply with local and national regulations and guidelines.

8.3.1 Before disassembly

Before disassembly, drain the hydraulic oil tank, hoses and cylinders. The oil must be handed in for destruction.

**CAUTION!**

Make sure the platform is resting completely on the ground and that the hydraulic system is depressurised before beginning to drain. Always wear personal protective equipment as per the safety data sheet when handling hydraulic oil. Risk of personal injury.

9.3.1 Disassembly

Disassembly is best carried out in the following order:

1. Platform
2. Hydraulic cylinders and hoses
3. Hydraulic unit
4. Lift arms
5. Frame including brackets

CAUTION!

Always use lifting aids and exercise great caution when lifting heavy loads. Make sure that heavy parts are completely resting on the ground or secured by a lifting device before removing shafts, bolts or other fasteners. Risk of injury.

9.3.2 Recycling

Metals, cables, electronic parts, plastics, rubber, ceramic, etc., must be separated from each other and disposed of in the manner prescribed for the respective materials. Also refer to the safety data sheets for hydraulic oil.

Service Protocol L-Service (annual)

| | | | |
|---|--|---|--|
| Customer: | | Vehicle: | |
| | | Reg.No: | |
| Lift model: | | Prod.No: | |
| C=Check R=Replace L=Lubrication * If the lift has the equipment | | | |
| Comments OK <input type="checkbox"/> <input checked="" type="checkbox"/> | Service points | Information | See instructions for resp. lift models |
| | Mechanics (Visual inspection of any cracks and / or damage) | | IE-0110 |
| C | 1.1 Mounting bracket | Any cracks / damage, Torques | IE-0105 / IE-0104 |
| C | 1.2 Support frame | Any cracks / damage, drainage holes | IE-0105 |
| C | 1.3 Liftarm | Any cracks / damage | IE-0105 |
| C | 1.4 Platform | Any cracks / damage | IE-0105 |
| C | 1.5 Bumper bar | Any cracks / damage, Torques | IE-0105 / IE-0104 |
| C | 1.6 Cylinders | Any cracks / damage, gaiters | IE-0105 |
| C | 1.7 Pivot bolt, bushing (all) | Wear and tear, Torques | IE-0105 / IE-0104 |
| C | 1.8 Slide system* | Any cracks / damage, Torques, and functional check | IE-0105 / IE-0104 |
| L | 1.9 Lubrication | All lubrication points | IE-0101 |
| C | 1.10 Sealings against bodywork* | Wear and tear, condition | IE-0106 |
| | Hydraulics (sequence) of an oil change (Visual inspection of oil leak on the entire hydraulic system) | | IE-0109 |
| C | 2.1 Main fuse | Cleanliness, contact surfaces | IE-0103 |
| R | 2.2 Hydraulic oil | NB! Only at XL-Service IF equipped with oil filter | IE-0102 |
| | 2.3 Oil filter* | Changes at XL-Service. Every three years | |
| C | 2.4 Hydraulic hoses | Oil leak, wear and tear, free movement | IE-0104 |
| C | 2.5 The system's leakproofness | Hydr.connection.unit+tank, cyl. torques | IE-0104 |
| C | 2.6 Pressure Relief Valve | Valve should open when tilting against body, check pressure if not opening. | IE-0108 |
| C | 2.7 Velocity lifting, lowering, tilting | That the lifts speed is within the correct range | IE-0111 |
| | Electrical equipment (check all the points cable and interfaces) | | |
| C | 3.1 Main power cable, ground cable | Wear and tear, attachment, contact surface | IE-0103 |
| C | 3.2 Control units | All functions of all control units | IE-0103 |
| C | 3.3 Connection box for control units | Tightness, cleanliness | IE-0103 |
| C | 3.4 Circuit card | Function, connections, wear and tear | IE-0103 |
| C | 3.5 Alarm for open platform | That the lamp shine when platform is not closed | IE-0103 |
| C | 3.6 Battery voltage, vehicle and lift inactive | Difference between the battery and hydraulic unit (not more than 6% difference) | IE-0103 |
| C | 3.7 Cabin switch* | Functional test | IE-0103 |
| | Signs, stickers (Visual inspection of the function and interpretable) | | |
| C | 4.1 Warning flags, -tape | 2 pcs on platform, platform edge | IE-0107 |
| C | 4.2 Load chart | 1 pc on platform, 1 pc outside control unit | IE-0107 |
| C | 4.3 Working area | Sticker on platform | IE-0107 |
| C | 4.4 Instruction control units | Outside control unit | IE-0107 |
| C | 4.5 Type plate | Is firmly attached and is INTERPRETABLE | IE-0107 |

If there are remarks concerning any of the service items, indicate any action below:

Service check (in the table below, confirm actions have been carried out for each service item.

| Service item | Remark/Action |
|--------------|---------------|
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Checks and actions have been carried out:

.....

Date

.....

Signature

Company stamp

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting or typing. There are no margins, text, or other markings on the page.

12 Declaration of conformity during assembly

The installer hereby declares/assures under his sole responsibility that the liftgate has been fitted in accordance with Waltco's instructions and that the assembly/delivery checks have been carried out. The vehicle manufacturer's instructions were also taken into account when building the superstructure.

Because Waltco's installation instructions have been followed and any modifications are approved by Waltco, this document constitutes confirmation that the liftgate and its installation are in compliance with the following directives.

Machinery Directive 2006/42/EG

The installer hereby certifies that:

- installation was carried out according to Waltco's instructions
- installation/delivery inspections have been performed

.....
Installer's signature

.....
Date

.....
Serial number (manufacturing number)

See the type plate located on the liftgate frame.

Paste the enclosed copy of the type plate on the back of the owner's manual.

.....
Company details/stamp

13 Certificate of registration, delivery card

The delivery card must be registered in C-Care for the warranty to be valid.

The superstructure builder is responsible for registering the delivery card in C-Care (www.c-office.com). User name and password are required to log in. There is no need to file the attached paper copy of the delivery card supplied with the liftgate documentation after registration in C-Care.

This is to certify that the delivery card is registered in C-Care:

.....
Superstructure builder (Company)

.....
Date

**Affix a copy of the Liftgate rating
plate here!**

Waltco Dealer / Importer

Waltco

Phone: 800-211-3075

Email: Waltco@Waltco.com | Waltco.com



HIAB

BUILT TO PERFORM

Waltco, Del and ZEPRO are Hiab liftgate brands. Hiab is a world-leading supplier of equipment, intelligent services and digital solutions for on-road load handling. As an industry pioneer, our company commitment is to increase the efficiency of our customers' operations and to shape the future of intelligent load handling.