

ASS-SERIE

Platform scissorlift



INHOUDSOPGAVE	PAG
1 Introduction	02
2 How to use this manual	02
3 Description of the lift	02
4 Technical specifications	03-04-05-06
5 Safety	07
6 Controls and operation	10
7 Maintenance	16
8 Troubleshooting	16
9 Conformity declaration	17

1. INTRODUCTION



CAUTION

This manual is intended for factory personnel who are going to operate the lift; read the manual before you use the platform in any way or perform any actions on it. This Manual contains important information about the following points :

- THE PERSONAL SAFETY OF THE OPERATOR
- PREVENT DAMAGE TO THE LIFTS
- PREVENT DAMAGE TO THE VEHICLE

2. HOW TO USE THIS MANUAL

The manual forms part of the lift and must be available for reference in the immediate vicinity of the lift at all times. The operator of the lift must be able to refer to the manual quickly and at any given moment.

IT IS STRONGLY RECOMMENDED THAT YOU SHOULD FIRST CAREFULLY READ THE SAFETY INSTRUCTIONS.

The manufacturer hereby refuses to accept any responsibility for injury to persons or damage to equipment or property if it appears that incorrect handling of the lift has taken place. This instructions manual only describes the operating- and safety aspects which persons who are installing the machine need to know. In order to understand the terminology used in this manual, it is necessary that the person performing the installation work should have specific experience in industrial work, service, maintenance and repair activities, and must also possess the ability to explain the drawings and the descriptions contained in this manual to other people. At the same time he must also be aware of the general and specific safety regulations which apply in the country where the lift is being installed. The word "operator", which has been used throughout this manual, refers to a person who is authorised to use the platform. The minimum legal age for using the lift is 18 years.

3. DESCRIPTION OF THE LIFT (Fig.2)

The electro hydraulic lift model **ASS-4009**, is anchored to the ground, and is designed and manufactured for lifting passenger cars and delivery vans and to hold them in a certain lifted position. The main components of the lift are :

- Welded floor frame
- Movable parts (supports and arms)
- Lifting components
- Control cabinet
- Safety arrangements.



Fig.2

See Fig. 3 for the following terms :

1. **Operating side** : the area in which the operator operates, and from where he can access the control cabinet.
2. **Rear**: drive-on side.
3. **Front**: the side on which the controlbox is mounted.

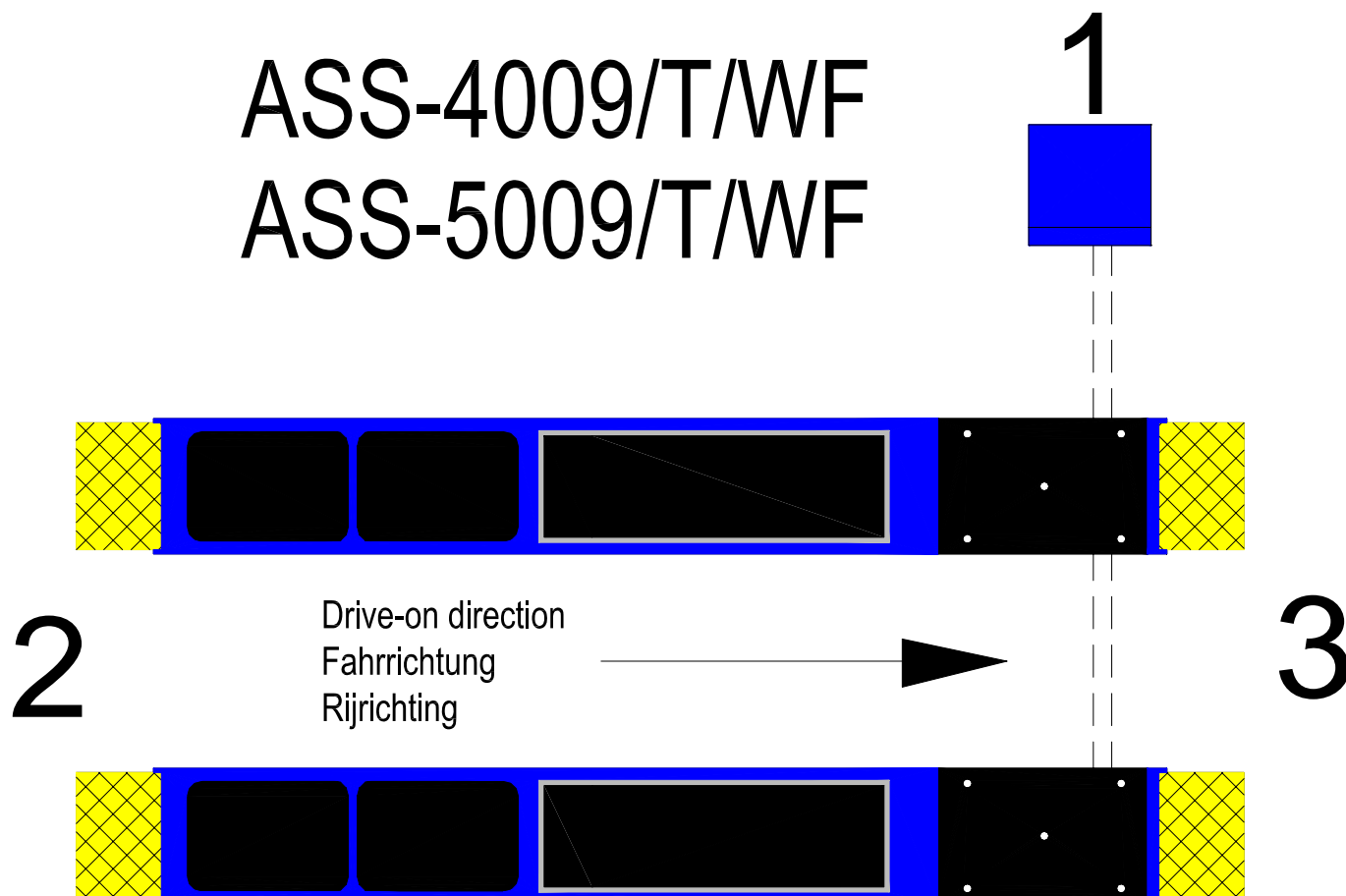
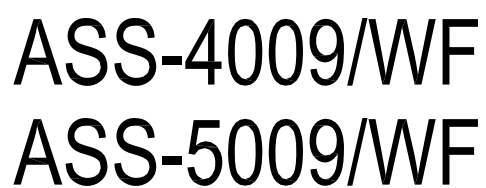


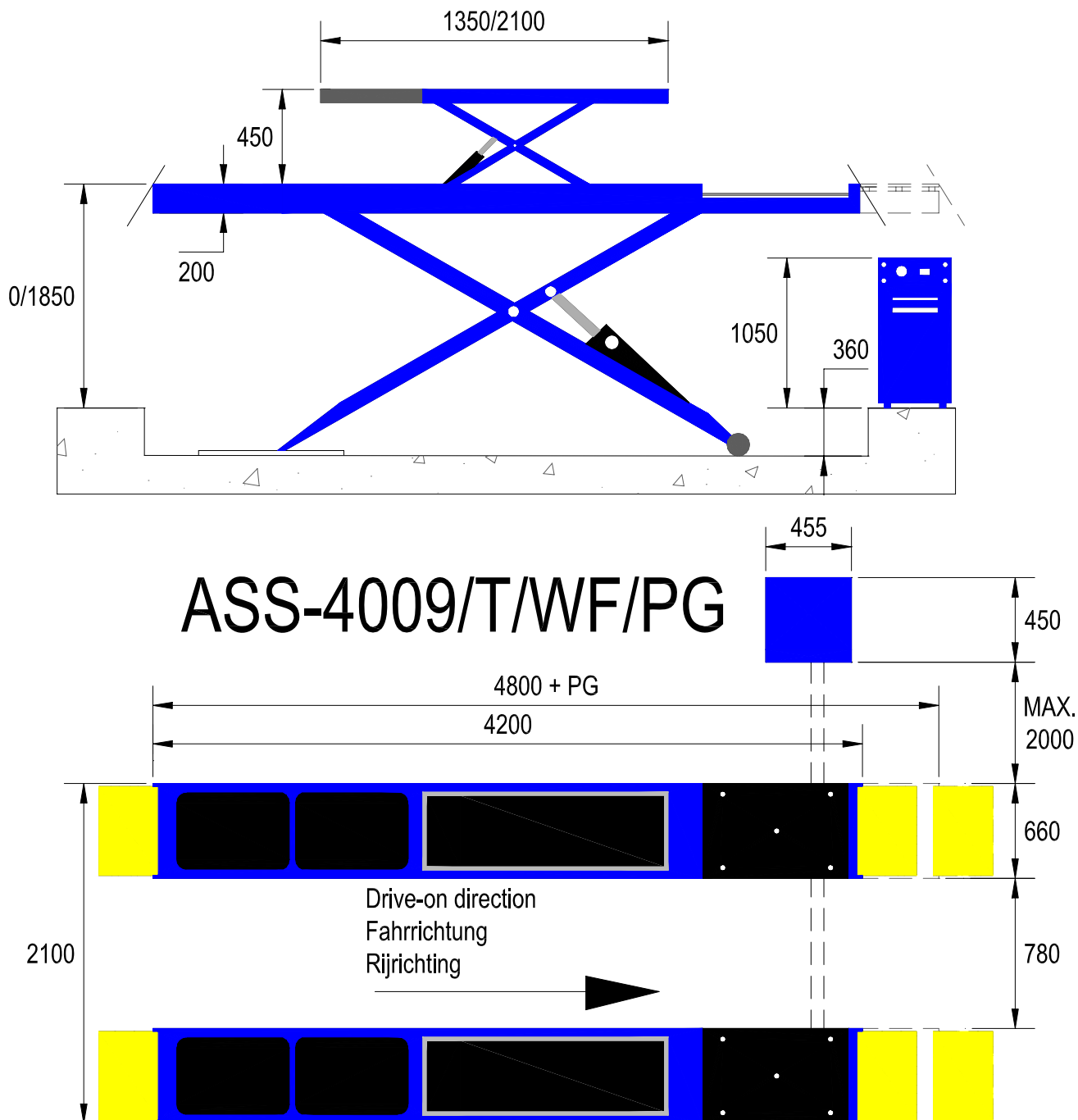
Fig.3

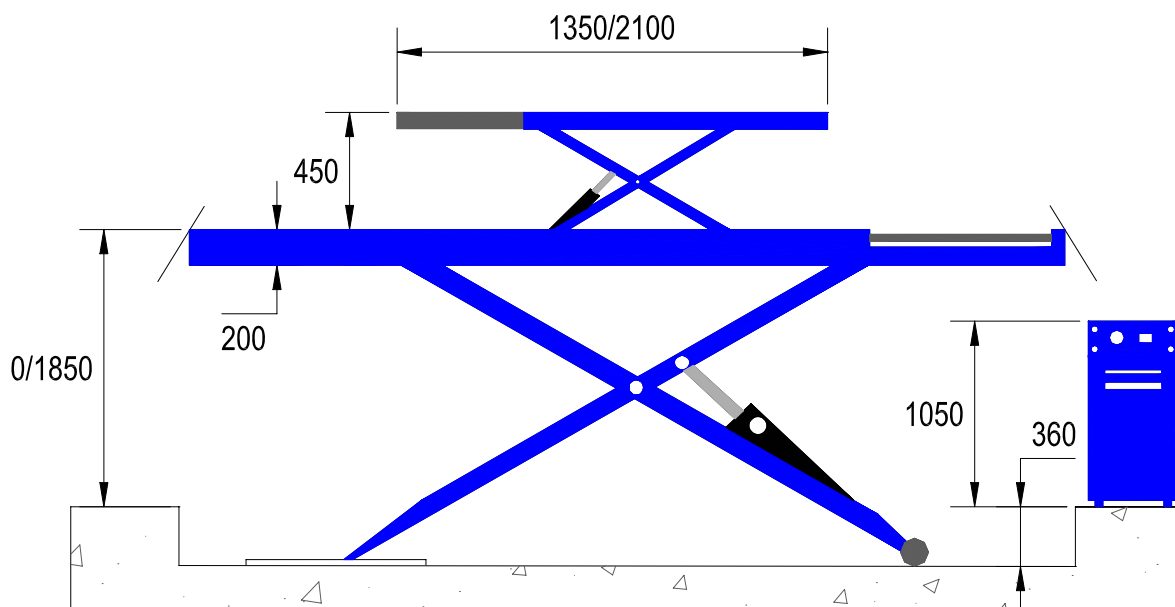
4. TECHNICAL SPECIFICATIONS

ASS-4009/5009 serie		
CAPACITY ASS-4009		4000 kg
CAPACITY ASS-5009		5000 kg
Lifting time		45 sec
Lowering time		45 sec
Total weight	4009/5009/WF	2200 kg
	4009/5009/T/WF	2500 kg
	4009/T/WF/PG	3200 kg
Working temperature		-10°C / +40°C
Environment		Covered
Dimensions:		Fig.4

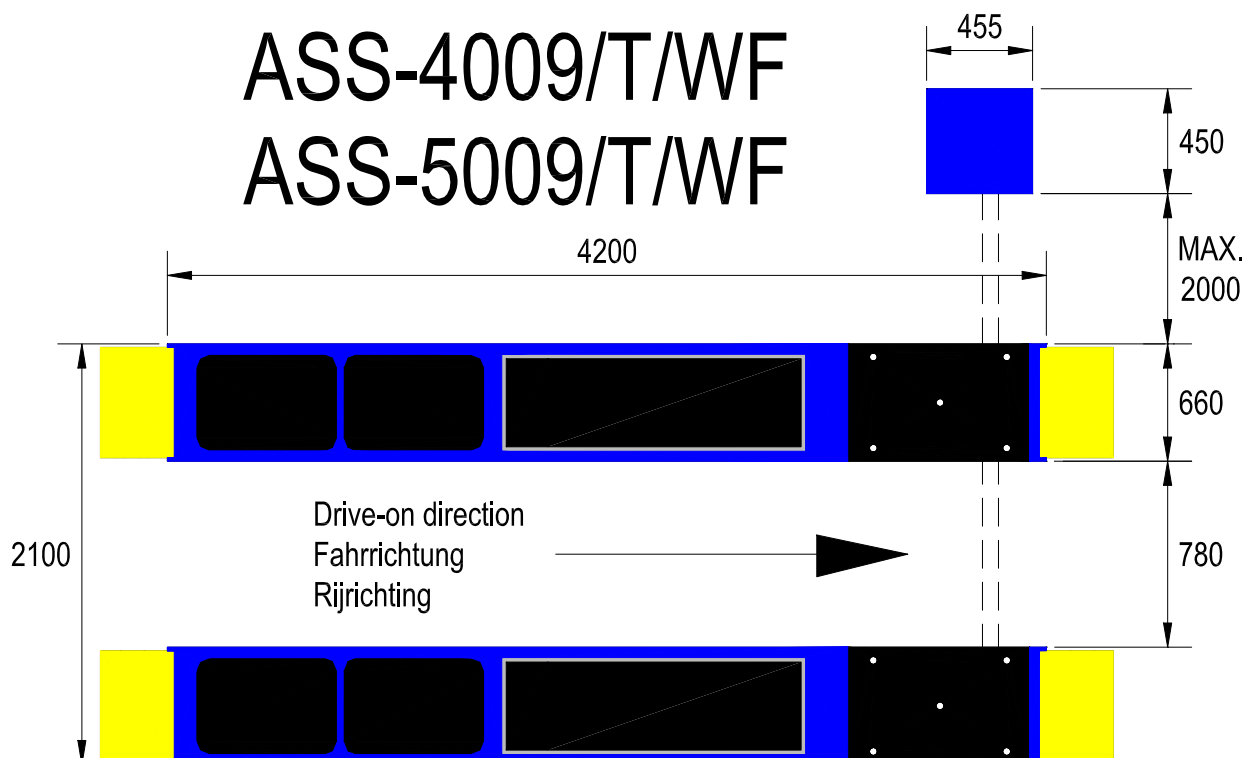
ELEKTROMOTOR ASS-4009/5009 serie	
Motor power	3,0 KW
Voltage	400V/230V(3-Ph). +/- 10%
Frequency	50 Hz
Amperage	230V: 13,5 A 400V: 7,8 A
No. of wires	4
Speed	1400 rpm







ASS-4009/T/WF
ASS-5009/T/WF



THE WEIGHT OF THE VEHICLE

The lift can be used for practically all vehicles provided that the maximum loading capacity is not exceeded.

The safety zone (Fig. 5) is to some extent determined by the dimensions of the vehicle to be lifted.

1= Operatingzone 2= Safetyzone

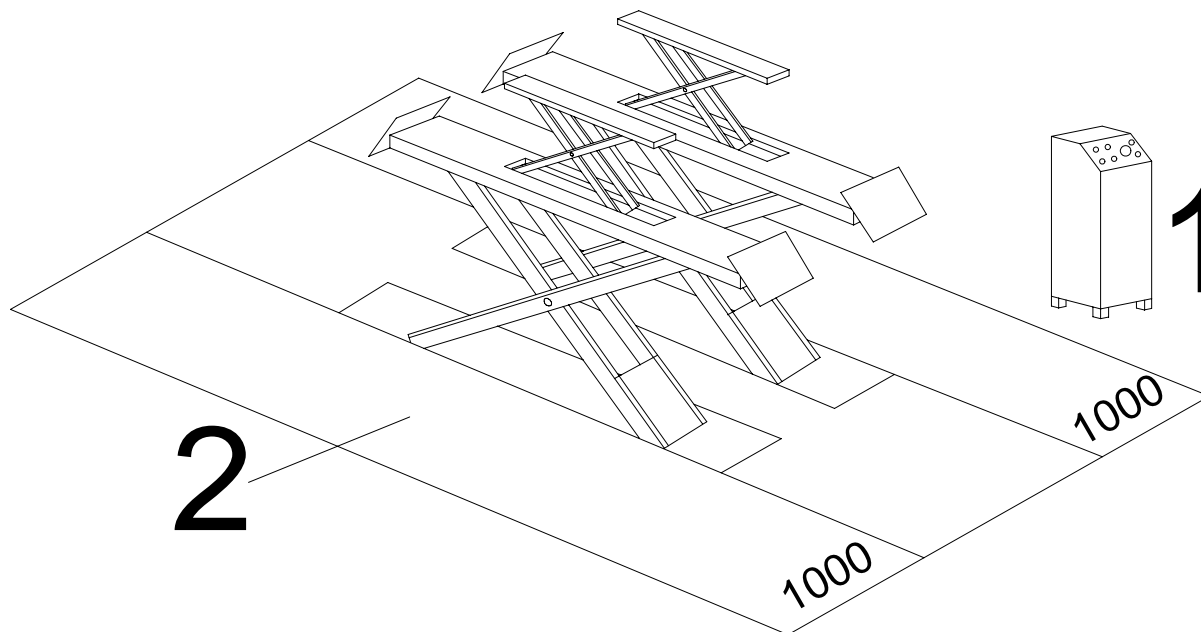


Fig.5

MAX.4000 kg ASS-4009 and 5.000 kg ASS-5009.

5.SAFETY

It is important to read point number 5 of this manual properly since it contains important information about the risks which the operator of the lift will be exposed to if the lift is not used properly. In what follows, you will find information about how to avoid dangerous situations.



WARNING

The lift is designed and constructed to lift vehicles and to hold them in a certain position in a covered working place. Any other form of use is not permitted. In short, the lift is not suitable for the following purposes :

- Washing and spraying work.
- To be used as a device for applying force.
- To be used as a goods lift.
- To be used as a jack or for lifting vehicles for changing wheels.

The manufacturer hereby refuses entertain any claims for damages arising in connection with injury to persons or damage to vehicle or other property caused due to incorrect and/or unauthorised use of the lift.

During lifting- and lowering movements, the operator must be within the zone of operation (1), as shown in Fig. 5. The presence of any person in the safety zone (2) is strictly forbidden. The presence of persons under the vehicle is only permitted if the vehicle is parked in the lifted position.

USE THE LIFT ONLY IF ALL THE SAFETY ARRANGEMENTS ARE WORKING PROPERLY. IF THESE RULES ARE NOT FOLLOWED, SERIOUS INJURY COULD BE CAUSED TO PERSONS AS WELL AS IRREPARABLE DAMAGE TO THE LIFT AND THE VEHICLE ON THE LIFT.

GENERAL PRECAUTIONS:

- The operator is bound to follow the regulations which apply in the country in which these lifts are installed.

In addition, the operator must :

- Always work in the operator area as designated in the manual.
- Never remove the protective guards or dismantle or shut down the mechanical, electrical or other types of safety arrangements.
- Read the safety regulations relating to the lift and take cognisance of the safety information provided in this manual.

The following terms may have been used in this manual to describe the various types of risk :

DANGER : there is a direct possibility of danger which could lead to serious injury or death.

WARNING: this indicates situations and/or actions which are unsafe and could lead to injuries of various types except death.

CAUTION : this indicates situations and/or actions, which are unsafe and could lead to light injuries to persons and/or damage to the lift, the vehicle or other properties.

RISK OF DAMAGE DUE TO ELECTRICITY : Special safety arrangements have been made on the lift in places where the risks are very high.

RISKS AND PROTECTIVE MEDIA

The risks to which the operator is exposed when the vehicle is in a raised position, together with the protective media which have been installed, in order to limit the possible dangers.



WARNING

Do not move the vehicle when it is on the platform.

It is important that the vehicle is placed on the lift in such a manner that there is an uniform distribution of weight.

To ensure the safety of persons and of materials, you must see to it that :

The safety zone is kept under observation during the lifting process.

RISKS INVOLVED IN LIFTING A VEHICLE

The following safety arrangements have been installed to prevent overloading and damage :

- Een pneumatisch bediende vergrendeling voorkomt terugzak-ken in geval van slangbreuk.
- The hose rupture protection arrangements prevent the platform from sinking back to the original position in case any hoses get ruptured.
- The thermal protection cuts off the power in case of overloading.
- Overpressure valves protect the lift against damage caused by excessively high oil pressure.
- Limit switches limit the lifting and lowering motion

- Photo-cel protection prevents the lift from levelling.

RISKS TO PERSONS

This paragraph describes the risks to which the operator or any other person near the working area where the lift is in operation, in case the lift is not used in the appropriate manner.

Never rest any fittings or other objects against the platform and never place such objects under the platform when it has a load mounted on it, since this can impede the lowering operations and may cause the vehicle to fall off the platform (Fig. 6).

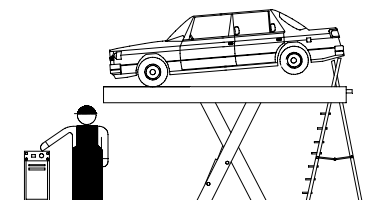


Fig.6

RISKS OF USE/MAINTENANCE

Autec uses material of the highest quality in its lift. These must be used according to the standard specified, and maintenance must be carried out regularly.

RISKS INVOLVED IN POSITIONING A VEHICLE

This type of risk may arise if the vehicle is not properly placed on the platforms (Fig. 7), or if the platforms are not properly aligned with respect to the vehicle. One can avoid this by always lifting the vehicle as far as possible in the centre of the platform.

Attention : while dismantling heavy parts (for example the motor or shafts) please note that the weight distribution ratios change !

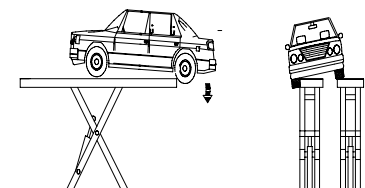


Fig.7

RISKS FOR THE OPERATOR

This risk arises in cases where the operator is not standing at the appointed place at the control cabinet; when the lift with the vehicle is being lowered, it is not permissible for the operator to stand below the descending system and its load to any extent. It is imperative that the operator must be standing in the operating zone during the lifting and lowering operation. (Fig.8).

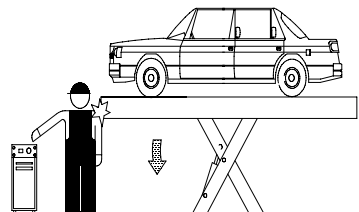


Fig.8

RISK OF ELECTROCUTION

Never spray water or steam or solvents or paint in the area immediately surrounding the platform and the control cabinet (Fig. 9).

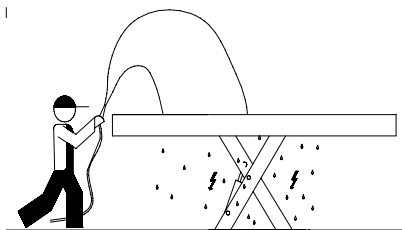


Fig.9

RISK OF SLIDING OUT

This risk can be overcome by avoiding the spillage of oil or grease in the area surrounding the lift (Fig. 10). Apart from that, any oil spillage which may occur should be thoroughly removed from the spot.

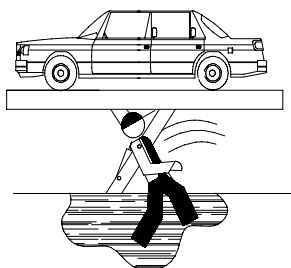


Fig.10

Never enter the vehicle or start the motor when the vehicle is on the lift (Fig. 11).

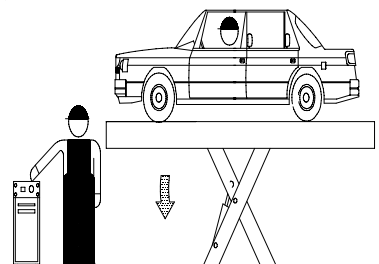


Fig.11

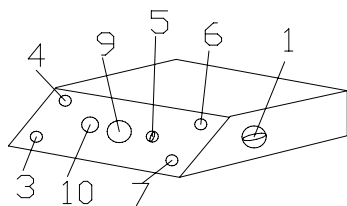
6. CONTROLS AND OPERATION

(Fig. 12)

The operating section (may) include(s) depending on the type:

1. Main switch
2. Controls slip plates
3. Parking button + descent final 40 cm.
4. Voltage control lamp
5. Selection button for raising vehicle tracks, wheel-free and test systems
6. Raising button
7. Lowering button
8. Transition button for the top position of the lift, the WF system and the photocell. The button is situated in the control unit under the control panel.
9. Emergency stop button
10. Low alignment position
11. High alignment position
12. Claxon

ASS-4009/5009/WF



SEQUENCE OF OPERATION

Check that the lift is in its lowest position.
Turn the main switch (1) to position "1".

RAISING

Drive the vehicle carefully onto the driving plates and park it in the centre of the lifting bridge.
Depress the raising button (6) until the bridge has reached the height required.

PARKING

Lower the bridge into its locking device by operating the locking button (3).

WHEEL-FREE SYSTEM

Turn the selection button (5) to "lifting table" (applies only to WF series). Raise and lower the wheel-free system by operating the raising (6) and lowering (7) buttons.

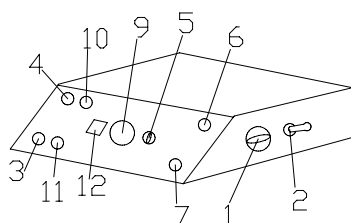
LOWERING

Check that there are no persons or obstacles under the bridge before starting to lower.

Keep the lowering button (7) depressed until the height required has been reached. The bridge will rise slightly at the start of its movement down in order to release the locking device.

The movement downwards will stop at approximately 40 cm above the ground. Check once more that there are no obstacles under the bridge. Lower the bridge the final 40-cm by operating button 3.

ASS-4009/5009/T/WF



SEQUENCE OF OPERATION

Check that the lift is in its lowest position and whether the slip plates are blocked. Block the slip plates with handle (2).

Turn the main switch (1) to position "1".

RAISING

Drive the vehicle carefully onto the driving plates and park it in the centre of the lifting bridge.
Depress the raising button (6) until the bridge has reached the height required.

PARKING

Lower the bridge into its locking device by operating the locking button (3).

WHEEL-FREE SYSTEM

Turn the selection button (5) to "lifting table" (applies only to WF series). Raise and lower the wheel-free system by operating the raising (6) and lowering (7) buttons.

SLIP PLATES

Release the slip plates by operating handle (2).

ALIGNING

Check that the bridge is in its lowest position and that the slip plates are secured.

Drive the vehicle carefully onto the bridge, with the front wheels on the turntables.

Depress button no.10 and keep it depressed and the bridge will then progress to the first set height and lock there.

Turn option switch (5) to WF and raise the caravan until all 4 wheels are free.

Now any cameras etc. can be fitted to the wheels. The wheels can now be aligned.

Now release the slip plates with handle 2 and lower the WF system, reversing the option switch (5).

The measurements for alignment can now be conducted.

When adjustments have to be made under the caravan: depress button no. 11 and keep it depressed and the bridge will then progress to the second height set and lock there.

When these procedures have been completed, the bridge can be lowered using lowering button no.7 and for the last 40 cm lowering button no.3. Make sure before driving the vehicle from the bridge that the slip plates are blocked once more (handle no.2)

LOWERING

Check that no persons or obstacles are under the bridge before proceeding with lowering.

Keep the lowering button (7) depressed until the height required has been reached. The bridge will rise slightly at the start of the lowering movement to release the locking device.

The lowering movement will stop at approximately 40 cm from the ground. Check once more for persons or obstacles under the bridge. Operate the bridge for the final 40 cm using button 3.

HYDRAULIC CLEARANCE DETECTOR

Activate the clearance detector remote control by setting the selection switch (5) to the "clearance tester" position. The lamp of the remote control will now light up. The clearance detector plates (1) can be moved using the buttons (4) of the remote control.

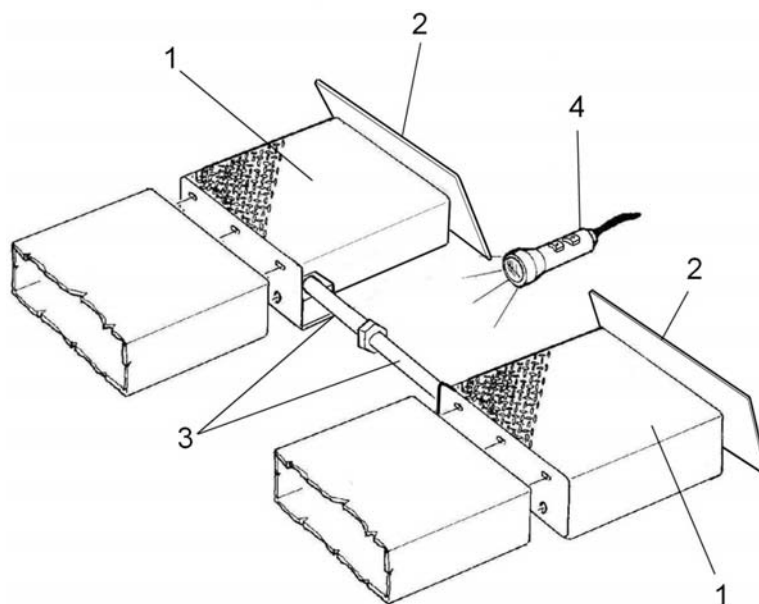
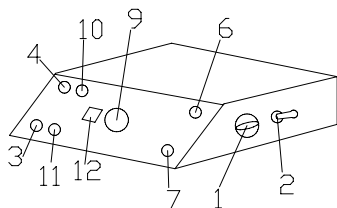


Fig.13

ASS-4009/5009/T



SEQUENCE OF OPERATION

Check that the lift is in its lowest position and that the slip plates are blocked. Block the slip plates using handle (2).

Turn the main switch (1) to position "1".

RAISING

Drive the vehicle carefully onto the driving plates and park it in the centre of the lifting bridge.

Depress the raising button (6) until the bridge has reached the height required.

PARKING

Lower the bridge into its locking device by operating the locking button (3).

SLIP PLATES

Release the slip plates by operating handle (2).

LOWERING

Check that no persons or obstacles are under the bridge before proceeding with lowering.

Keep the lowering button (7) depressed until the height required has been reached. The bridge will rise slightly at the start of the lowering movement to release the locking device.

The lowering movement will stop at approximately 40 cm from the ground. Check once more for persons or obstacles under the bridge. Operate the bridge for the final 40 cm using button 3.

• EMERGENCY LOWERING

Caution: in the event of power cut the wheel-free system (when present) must be lowered first. When the driving plates are lowered first it is no longer possible to lower the wheel-free system until power is restored.

EMERGENCY LOWERING WHEEL-FREE SYSTEM

Check that there are no persons or objects under the load to be lowered.

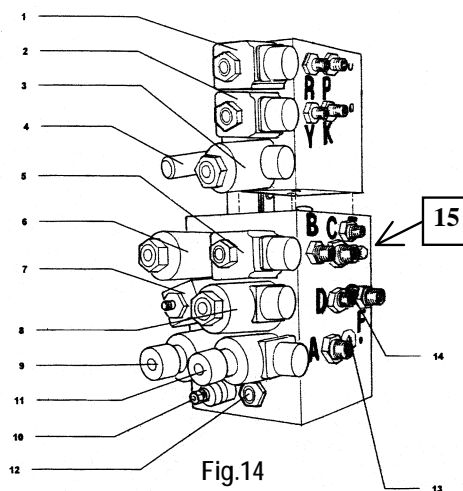


Fig.14

Unscrew the hexagonal bolt (ref.15 fig.14) anti-clockwise.

Keep depressed the button on the rear of the cylinders using for example Allen key 4 (ref.1 fig.15). When this is pressed on one of the cylinders it will descend. Make sure both sides descend evenly.

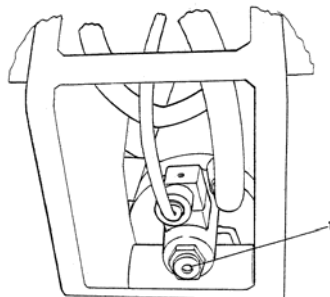


Fig.15

BLEEDING HAND PUMP

Before the bridge can be lowered on an emergency basis the mechanical locking device will have to be released. Do this by raising the bridge with the hand pump. If the hand pump is not working it will need to be bled. Do this in the following manner:

- Remove screw (1).
- Pump with handle (2) until oil emerges from the aperture of screw (1).
- Replace screws (1) and pump until you feel backpressure.

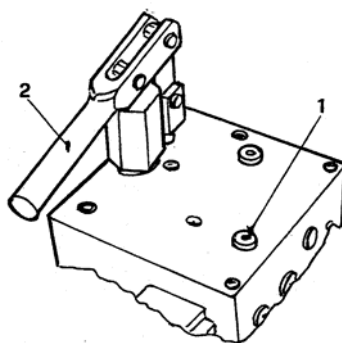


Fig.16

EMERGENCY LOWERING OF THE BRIDGE

- Check that the lowering area is free of people and obstacles.

Unscrew the nut (see ref 10) from the valve.

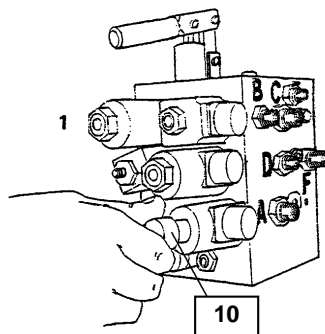


Fig.17

- Remove the magnetic coil (see ref.11 fig.18) from the valve.

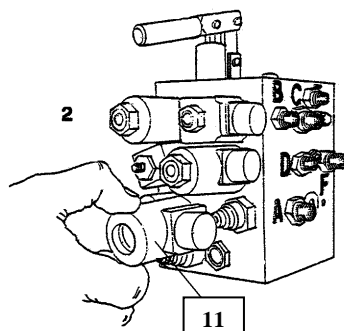


Fig.18

- Place the nut (see ref 12 fig.18) back on the valve, but do not tighten too much or the platform will start to descend.

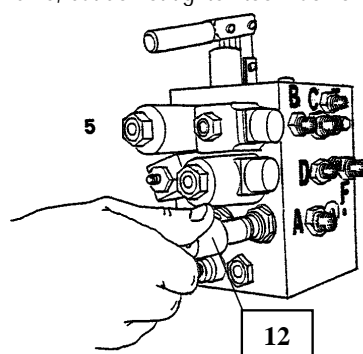


Fig.19

- Raise the bridge with the hand pump. Put some object between the pneumatic protective devices of the lifting bridge to stop it settling back into its locking device.
- Unscrew the nut from the second valve (see ref 20).

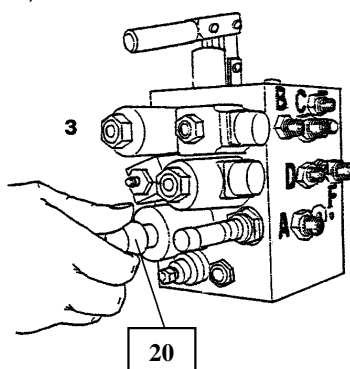


Fig.20

- Remove the magnetic coil from the valve.

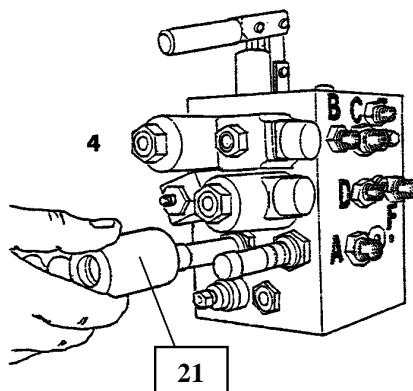


Fig.21

- Place the nut (21) back on the valve.

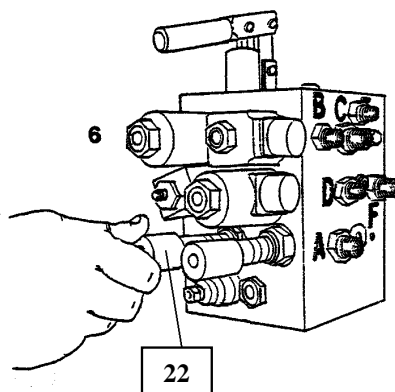


Fig.22

Turning the nuts (ref 12+22) simultaneously will result in the bridge starting to descend.
When the lifting bridge has reached its lowest position the magnetic coils should be put back.

Make sure: that each magnetic coil is restored to the correct valve.

After lowering always remove the object that was used to circumvent the pneumatic locking device.

7. MAINTENANCE

The lift doesn't need special maintenance because all the hinged connections and pin connections are self lubricating:

- Grease 3-monthly the lubricating nipple on the locking with grease molytex EP2.

Replace the hydraulic oil at least one time every 5 years.

8. TROUBLE SHOOTING TABLE

The detection and, wherever required, the repairs may only be carried out if all the SAFETY INSTRUCTIONS as described have been followed.

i ALL "RESETTING" ACTIONS, REPAIRS TO THE SAFETY ARRANGEMENTS AND THE ELECTRICAL COMPONENTS OF THE LIFT MAY ONLY BE DONE BY AUTHORISED PERSONNEL.

PROBLEMS	POSSIBLE REASON	REMEDIES
<ul style="list-style-type: none"> The lift does not rise when the lifting-motion button is pressed 	<ul style="list-style-type: none"> The fuse is burnt out. The lift is greatly overloaded. The switch is not working There is a fault in the electrical system. There is too little hydraulic oil The suction pump is soiled 	<ul style="list-style-type: none"> Replace the fuse. Maintain the max. weight according to the specifications. Change the switch, call Autec or dealer Call the Service Department of Autec or dealer Fill in hydraulic oil Clean the suction pump
<ul style="list-style-type: none"> The bridge ascends only partially 	<ul style="list-style-type: none"> The bridge is too heavily loaded Voltage to low There is too little oil The suction pump is soiled Leakage in the hydraulic system The hydraulic cylinder is soiled The non-return valve is leaking 	<ul style="list-style-type: none"> Adhere to max. weight specified Check voltage Fill in hydraulic oil. Clean suction pump Call the Service Department of Autec or dealer Call the Service Department of Autec or dealer Call the Service Department of Autec or dealer
<ul style="list-style-type: none"> The lift falls back 		

DETAILS REQUIRED WHILE CALLING AUTEC SERVICE

If you are reporting a fault, try to provide at least the following data:
The serial number, the type and the year of manufacturing.

SPARE ORDERING PROCEDURE

For spare parts we refer to the next TIB-pages available on request:
uni/TE-ASS-4009

9. CERTIFICATE OF CONFORMITY

AUTEC Hefbruggen b.v.
Waardsedijk Oost 8b
NL 3417 ZK Montfoort
The Netherlands
hereby declares that the lift type

ASS-4009

manufactured in accordance with the specifications:

89/392 EEC, 91/368/EEC, 93/44 EEC, 93/68 EEC

The european technical specifications:

EN 291/1992, EN 292/1992, EN 60204

And that the lift complies with the said specifications and guidelines, and after inspection the lift has been awarded with a CE-certificate

97016593802

received and issued in 1997 by:

TÜV PRODUCT SERVICE GMBH
Ridlerstrasse 31
D-80339 München