2 POST HOIST
AutoLift AL-9000DD

Symmetric 2 Post Baseplate Vehicle Hoist 4000Kg Maximum Lifting Capacity
Design Registration Approval Number: WAH21203
Design Code: AS1418.9-1996

INSTALLATION MANUAL & OPERATION INSTRUCTIONS

READ FIRST

DO NOT use the machine until you read and understand all the dangers, warnings and cautions in this manual.

- READ THE ENTIRE CONTENTS OF THIS MANUAL BEFORE INSTALLATION AND OPERATION. BY PROCEEDING YOU AGREE THAT YOU FULLY UNDERSTAND AND COMPREHEND THE FULL CONTENTS OF THIS MANUAL. FORWARD THIS MANUAL TO ALL OPERATORS. FAILURE TO OPERATE THIS EQUIPMENT AS DIRECTED MAY CAUSE INJURY OR DEATH.

Specifications subject to change without notice.
Note: While all due care and attention has been taken in the preparation of this document, Advance AutoQuip shall not be liable for any inaccuracies or omissions which may occur therein

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Printing characters and symbols

Throughout this manual, the following symbols and printing characters are used to facilitate reading:

	Indicates the operations which need proper care
	Indicates prohibition
	Indicates a possibility of danger for the operators.
	Indicates the direction of access for motor vehicles to the lift
BOLD TYPE	Important information

	WARNING: Before operating the lift and carrying out any adjustment, read carefully chapter 7 “instruction” where all proper operations for a better functioning of the lift are shown.

Contents

Chapter 1 – General information

This chapter contains warning instructions to operate the lift properly and prevent injury to operators or objects.
This manual has been written to be used by shop technicians in charge of the lift (operator) and routine maintenance technician (maintenance operator).
The operating instructions are considered to be an integral part of the machine and must remain with it for its whole useful life.
Read every section of this manual carefully before operating the lift and unpacking it since it gives helpful information about:

- **SAFETY OF PEOPLE**
- **SAFETY OF THE LIFT**
- **SAFETY OF LIFTED VEHICLES**

The company is not liable for possible problems, damages, accidents, etc. resulting from failure to follow the instructions contained in this manual.
Only skilled technicians of AUTHORISED DEALERS or SERVICE CENTERS AUTHORISED by the manufacturer shall be allowed to carry out lifting, transport, assembling, installation, adjustment, calibration, settings, extraordinary maintenance, repairs, overhauling and dismantling of the lift.
THE MANUFACTURER IS NOT RESPONSIBLE FOR POSSIBLE DAMAGE TO PEOPLE, VEHICLES OR OBJECTS IF SAID OPERATIONS ARE CARRIED OUT BY UNAUTHORIZED PERSONNEL OR THE LIFT IS IMPROPERLY USED.

Any use of the machines made by operators who are not familiar with the instructions and procedures contained herein shall be forbidden.

1.1 Manual keeping

For a proper use of this manual, the following is recommended:

- Keep the manual near the lift, in an easily accessible place.
- Keep the manual in an area protected from the damp.
- Use this manual properly without damaging it.
- Any use of the machine made by operators who are not familiar with the instructions and procedures contained herein shall be forbidden.

This manual is an integral part of the lift: it shall be given to the new owner of and when the lift is resold.

1.2 Obligation case of malfunction

	In case of machine malfunction, follow the instructions contained in the following chapter.

1.3 Cautions for the safety of the operator

Operators must not be under the influence of sedatives, drugs or alcohol when operating the machine.

	Before operating the lift, operators must be familiar with the position and function of all controls, as well as with the machine features shown in the chapter “Operation and use”

1.4 Warnings

	Unauthorized changes and/or modifications to the machines relieve the manufacturer of any liability for possible damages to objects or people. Do not remove or make inoperative the safety devices, this would cause a violation of safety at work laws and regulations.

	Any other use which differs from that provided for by the manufacturer of the machine is strictly forbidden.

	The use of non genuine parts may cause damage to people or objects.

DECLARATION OF WARRANTY AND LIMITATION OF LIABILITY

The manufacturer has paid proper attention to the preparation of this manual. However, nothing contained herein modifies or alters, in any way, the terms and conditions of manufacturer agreement by which this lift was acquired, nor increase, in any way, manufacturer’s liability to the customer.

TO THE READER

Every effort has been made to ensure that the information contained in this manual is correct, complete and up-to date. The manufacturer is not liable for any mistakes made when drawings up this manual and reserves the right to make any changes due the development of the products, at any time.

Chapter 2 – Product identification

The identification data of the machine are shown in the label placed on the control unit.

Two post vehicle lift CE			
Model No.	Z9000DS-D	Power Supply	400V, 3Ph
Lift Height(mm)	1925	Power(Kw)	2.2
Capacity(Kg)	4000	Air Pressure(Mpa)	N/A
NW(Kg)	630	Serial No.	GZ9000DS-D-20121029-0001
GW(Kg)	642	Date of Manufacture	2012.12.15

	Use the above data both to order spare parts and when getting in touch with the manufacturer (inquiry). The removal of this label is strictly forbidden.

Machines may be updated or slightly modified from an aesthetic point of view and, as a consequence, they may present different features fro these shown, this without prejudicing what has been described herein.

2.1 Warranty certificate

The warranty is valid for a period of 12 months starting from the date of the purchase invoice.
The warranty will come immediately to an end when unauthorized modifications to the machine or parts of it are carried out.
The presence of defects in workmanship must be verified by the Manufacturer's personnel in charge.

2.2 Technical servicing

For all servicing and maintenance operations not specified or shown in these instructions, contact your Dealer where the machine has been bought or the Manufacturer's Commercial Department.

Chapter 3 – Packing, transport and storage

Only skilled personnel who are familiar with the lift and this manual shall be allowed to carry out packing, lifting, handling, transport and unpacking operations.

3.1 Transport and package removal

ATTENTION: moving and positioning operations can be very dangerous if not performed with the utmost caution. Send bystanders away; clean, clear and delimit the installation site; check the integrity and suitability of the available means; do not touch the suspended loads and stay at a safe distance from them; move the suspended loads at not more than 20cm height from ground; carefully follow the instructions given below; in case of doubt do not persist.

For transport and volume reasons, the lift is supplied partially disassembled. The different parts are joint together to allow a safe transport and handling. Transport of the lift must be performed by suitable means. Avoid any damage during handling.

3.2 Lifting and handling

When loading/unloading or transporting the equipment to the site, be sure to use suitable loading (e.g. cranes, trucks) and hoisting means. Be sure also to hoist and transport the components securely so that they cannot drop, taking into consideration the package's size, weight and centre of gravity and it's fragile parts.

	**Hoist and handle only one package at a time**

3.3 Storage and stacking of packages

Packages must be stored in a covered place, out of direct sunlight and in low humidity, at a temperature between -10℃ and +40℃.
Stacking is not recommended: the package's narrow base, as well as its considerable weight and size make it difficult and hazardous.

3.4 Delivery and check of packages

When the lift is delivered, check for possible damages due to transport and storage, verify that what is specified in the manufacturer's confirmation of order is included. In case of damage in transit, the customer must immediately inform the carrier of the problem.
Packages must be opened paying attention not to cause damage to people (Keep a safe distance when opening straps) and parts of the lift (be careful the objects do not drop from the package when opening).

Chapter 4 – Product description

The lift is composed by two symmetric vertical posts, which must be safely anchored to the ground. The posts are equipped with lifting carriages with electro-hydraulic control system.
The lift is operated by an electric motor controlling a hydraulic pump, which delivers the hydraulic fluid to the cylinders at the bottom of the posts for lifting carriages with the sole purpose of performing motor vehicle service, repairing and inspection.

Forbid to use for washing and spraying vehicles
Forbid to lift vehicle which weight is over 4000kg
Forbid to park car.

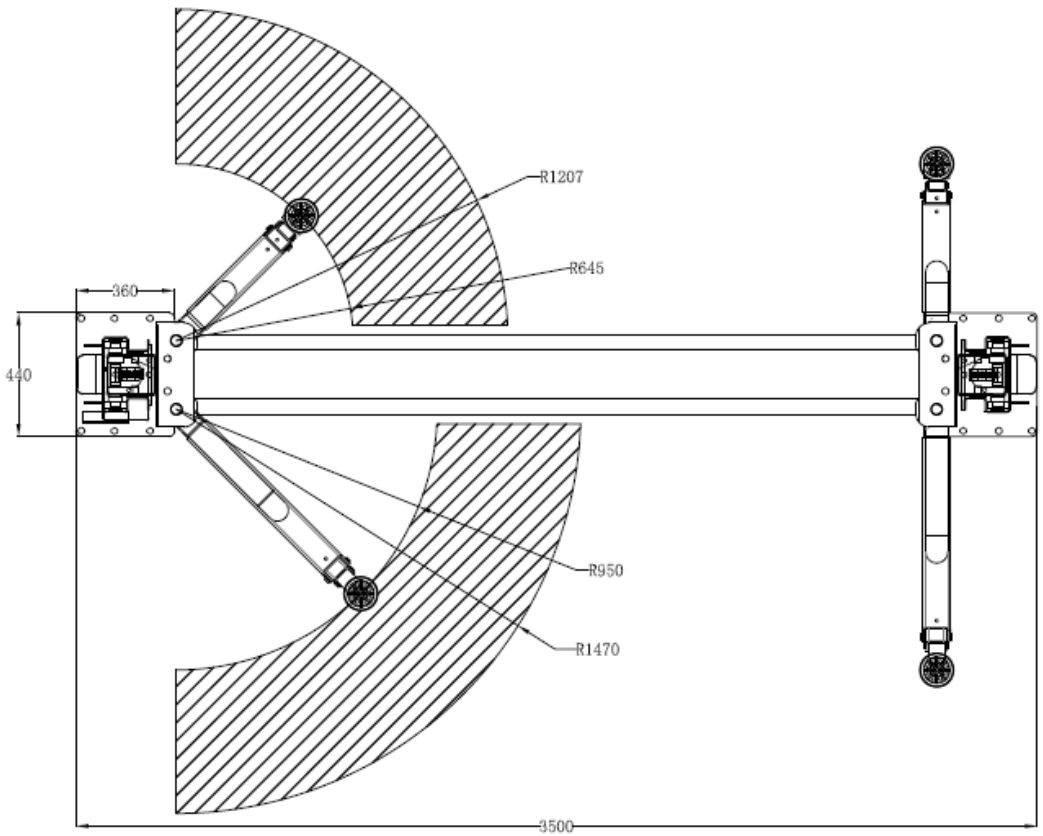
Any other use not described is to be considered as improper and irrational, and thus it will be under the whole responsibility of the operator.

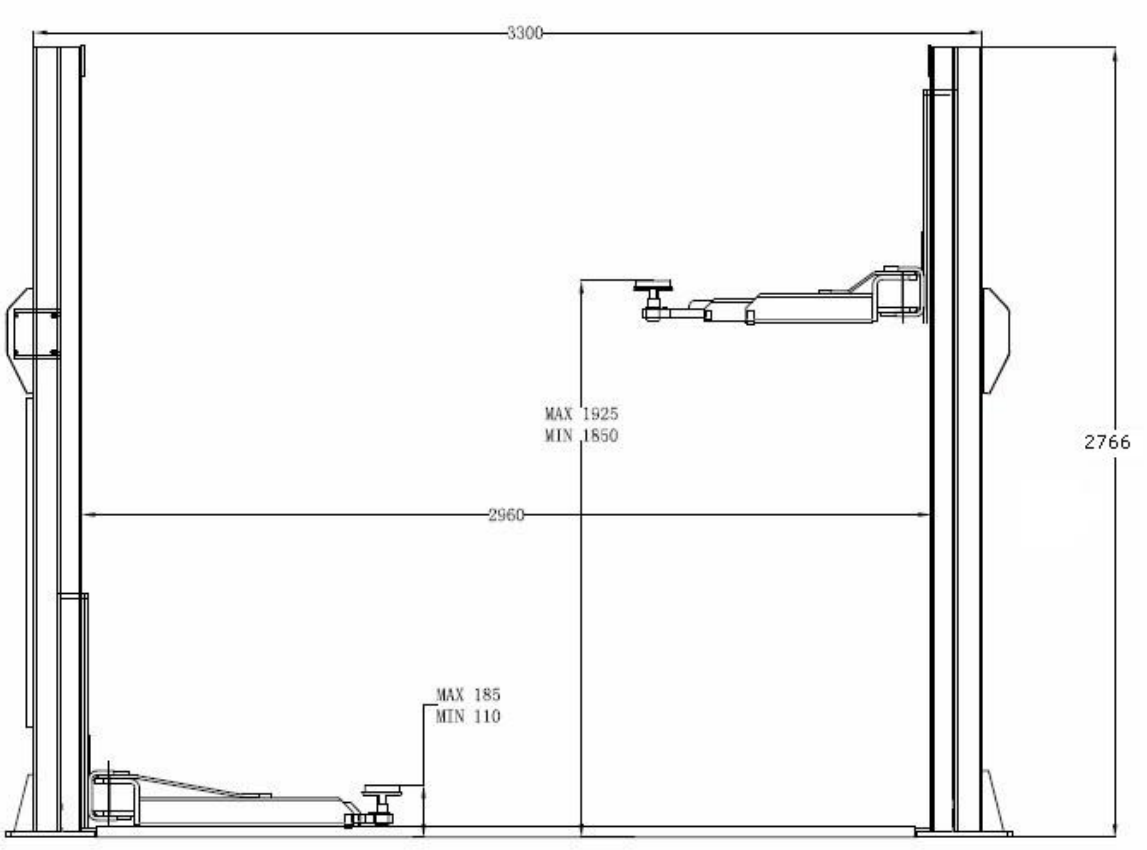
Follow the instructions given by this guide carefully to grant the machine a correct function, efficiency and a long working life. Keep this guide as well as all the supplied technical literature in a safe place close to the lift in order to help the users to consult it whenever necessary. The technical literature is an integral part of the lift and it must always follow the product, even in case of sale.

Follow the directions given by this guide with the utmost attention: the Constructor declines all responsibility for any damage due to negligence and non-observance of the herewith-contained instructions.
The non-observance of herewith-contained instructions will automatically involve the immediate lapse of warranty.

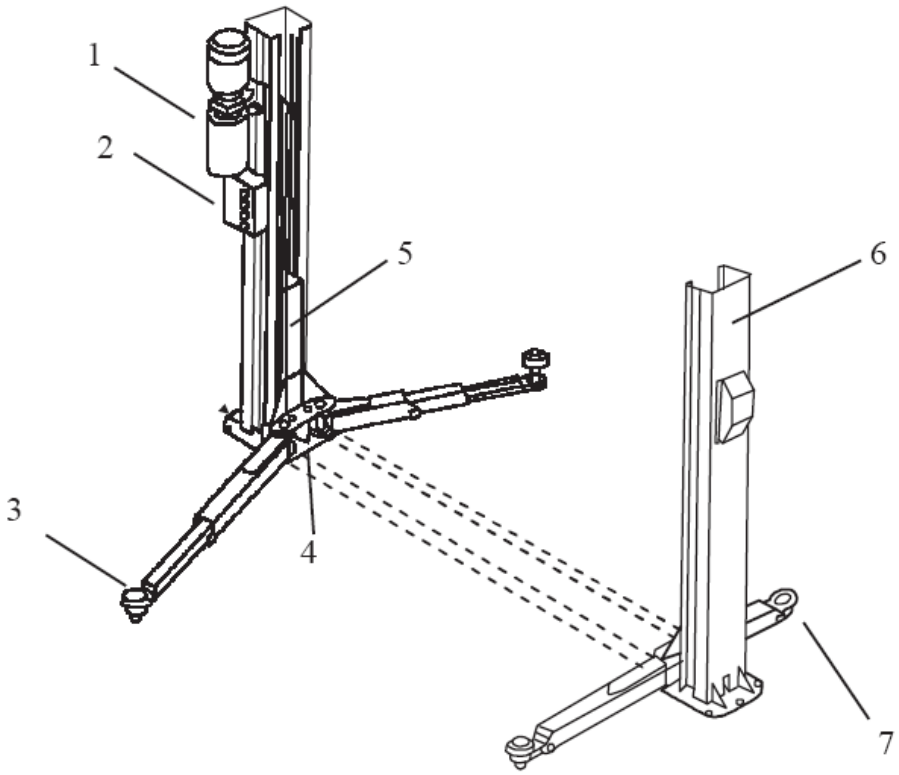
4.1 Dimensional diagrams

Dimensions / Z9000DS-D

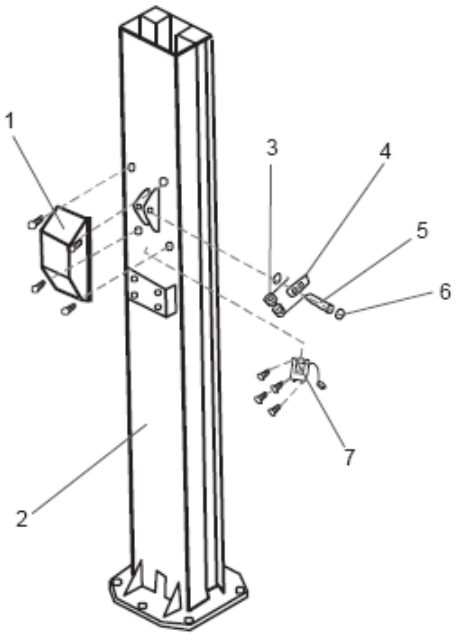




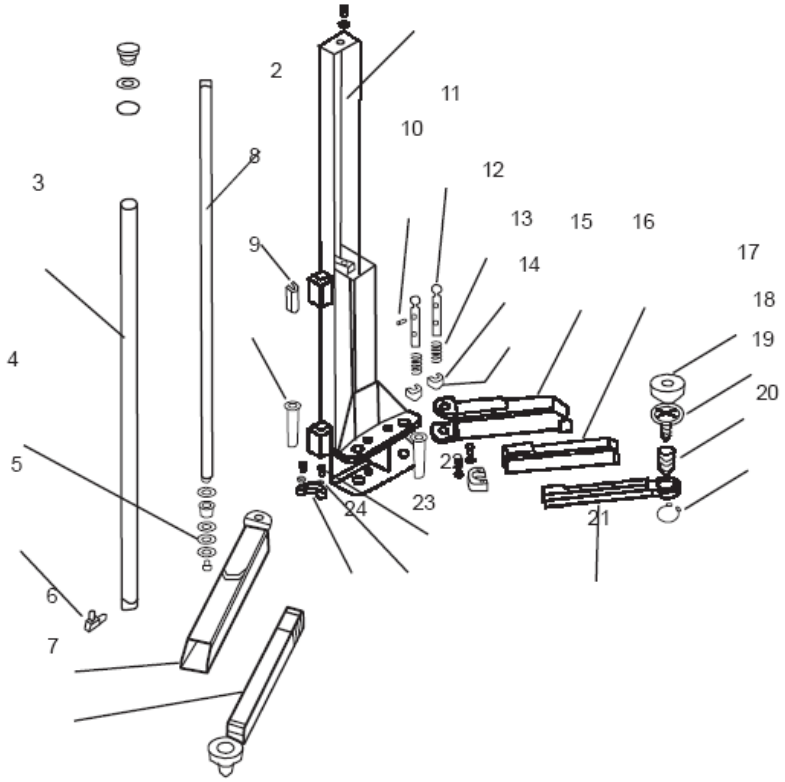
4.2 Parts list



1 .Power Pack
2. Control Box
3 .Rear Arm
4. Base Plate Cover
5. Carriage
6. Post
7. Front Arm

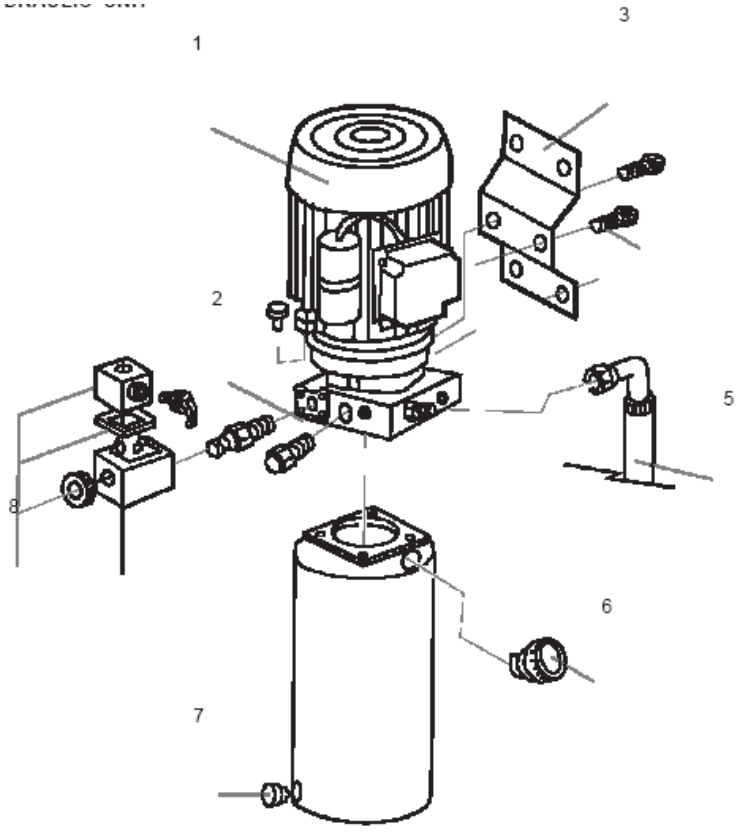


1. Safety Lock Cover
2. Post
3. Safety Lock Return Spring
4. Lock Pawl
5. Lock Pin
6. Circlip
7. Electro-lock Solenoid



1. Carriage
2. Cylinder Load Pipe
3. Cylinder Honing Pipe
4. Cylinder Seal
5. Cylinder Block
6. 1st Rear Arm
7. 2nd Rear Arm
8. PE Guide
9. Arm Fix Pin
10. Spring Pin(long)
11. Arm Lock Gear Pin
12 Arm Lock Gear Pin Spring
13. Arm Lock Gear
14. Spring Pin(short)
15 1st Front Arm
16 2nd Front Arm
17. Rubber lift pad
18. Load Pad Stool
19. 2nd Stage Screw
20. Circlip
21. Inner Front Arm
22. Bolt
23. Spring Washer
24. Half Round Gear

4.3 Hydraulic unit



1. MOTOR
2. RELIEF VALVE
3. SUPPORT
4. SUPPORT BOLT
5. MAIN HYDRAULIC HOSE
6. BREATHER/OIL FILLER CAP
7. DRAIN PLUG
8. DESCENT SOLENOID

Chapter 5 Technical specifications

Model type	Z9000DS-D
Type	TWO POST LIFT WITH BOTTOM BAR
Capacity	4000kg
Lifting time	＜55s
Descent time	＞20s
Max. lifting height	1850~1925mm
Min. lifting height	110mm
Overall width	3500mm
Overall height	2766mm
Drive through	2600mm
Power supply	220V50/Hz/1PH, 380V/50HZ/3PH
Motor	2.2 KW
Noise	≤70dB
Installation place	Indoors
Weight	642kg
Safety catch type	solenoid

Chapter 6 General safety rules

Read this chapter carefully and completely because it contains important information for the safety of the operator and the person in charge of maintenance.

6.1 Safety instruction

The messages and pictographs shown are generic in nature and are meant to generally represent hazards common to all automotives lifts regardless of specific style.

Warning Labels for 2-Post surface mounted lifts. Daily review of these Safety Messages and Warnings is suggested.

READ OPERATING AND SAFETY MANUALS BEFORE USING LIFT

DO NOT OPERATE A DAMAGED LIFT

PROPER MAINTENANCE AND INSPECTION IS NECESSARY FOR SAFE OPERATION

6.2 Warnings hazard and forbidden operation

IN THE EVENT OF RAISED VEHICLE FALLS FROM THE LIFT, RUN AWAY TO A SAFE DISTANCE.

DO NOT STAND UNDER THE VEHICLE ON THE LIFT WHILE LIFT IS OPERATING.

DEATH OR SERIOUS INJURY MAY OCCUR.

DO NOT LIFT ONE SIDE OF THE VEHICLE

POSSIBILITY OF VEHICLE OVERTURN AND/OR DAMAGE TO LIFT MAY HAPPEN

DO NOT PLACE ANY POLES UNDER THE VEHICLE AND LOWER IT TO DISMANTLE THE PART FROM THE RAISED VEHICLE

6.3 Caution

LIFT TO BE USED BY TRAINED OPERATOR ONLY

ELECTRICAL SHOCK MAY EXIST WHEN OPENING CONTROL BOX

AUTHORIZED PERSONNEL ONLY IN LIFT AREA

ALWAYS USE SAFETY STANDS WHEN REMOVING OR INSTALLING HEAVY COMPONENTS

DO NOT HOSE WATER DIRECTLY ON TO LIFT

STOP RAISING LIFT WHEN IMBALANCE IS DETECTED.

USE VEHICLE MANUFACTURER'S LIFT POINTS

USE HEIGHT EXTENDERS WHEN NECESSARY TO ENSURE GOOD CONTACT

DO NOT OPERATE LIFT WHEN HYDRAULIC OIL LEAK IS DETECTED

AUXILIARY ADAPTERS MAY REDUCE LOAD CAPACITY

Chapter 7 Installation

	Only skilled technicians, appointed by the manufacturer, or by authorized dealers, must be allowed to carry out installation. Serious damage to people and to the lift can be caused if installations are made by unskilled personnel.

	Before carrying out any operations, remember to insert the safety piece of wood between the lower booms and the base frame.

7.1 Checking for room suitability

The lift has been designed to be used in covered and sheltered places free of overhead obstructions. The place of installation must not be next to washing areas, painting workbenches, solvent or varnish deposits. The installation near to rooms, where a dangerous situation of explosion can occur, is strictly forbidden. The relevant standards of the local Health and Safety at Work regulations, for instance, with respect to minimum distance to wall or other equipment, escapes and the like, must be observed.

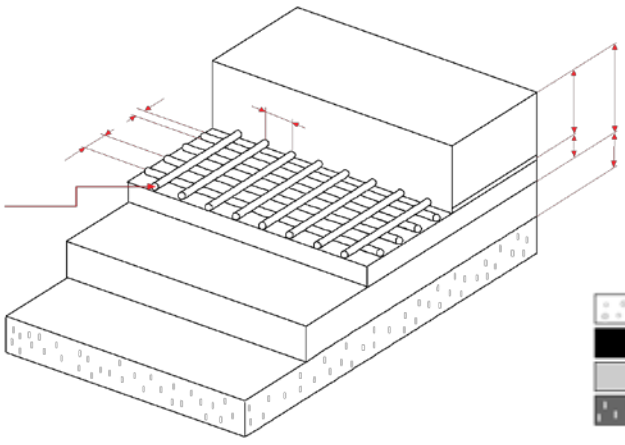
7.2 Lighting

Lighting must be carried out according to the effective regulations of the place of installation. All area next to the lift must be well and uniformly lit.

7.3 Installation surface

The lift must be placed on level floor and sufficiently resistant. The surface must be suitable for bearing maximum stress values, also in unfavorable working conditions. For installations on raised surface, compliance with the maximum carrying capacity of the surface is recommended.

	A level floor is suggested for proper installation. Small differences in floor slope may be compensated for by proper shimming. Any major slope change will affect the level lifting performance. If a floor is of questionable slope (more than 3mm side to side or 5mm within the fill length of lift), considering to pour the new concrete slab.



FOUNDATION DEIMENSIONS IN CM			QUALITY OF CONCRETE	MIN. PRESSURE RESISTANCE OF SURFACE	MAX. REACTION ON EACH BEARING POINT
Length	Width	Thickness	25MPA	425 Kg/cm^2	0.9 Kg/cm^2
1500	1500	150			

7.4 Structure positioning and installation

To install the lift, set some supports under the post upper ends, remove the pallets and position the posts, one at a time, according to the diagram. Use a lifting system having minimum 500kg capacity.

Operations to be executed for mounting and installation:

- Once you have positioned the two posts, mark the position of their anchor holes on the floor at the correct distance and in a way that they are perfectly aligned.
- Use a bit of 20mm to drill 10 anchor holes at a depth of 100mm minimum. Clean both holes and floor from dust.

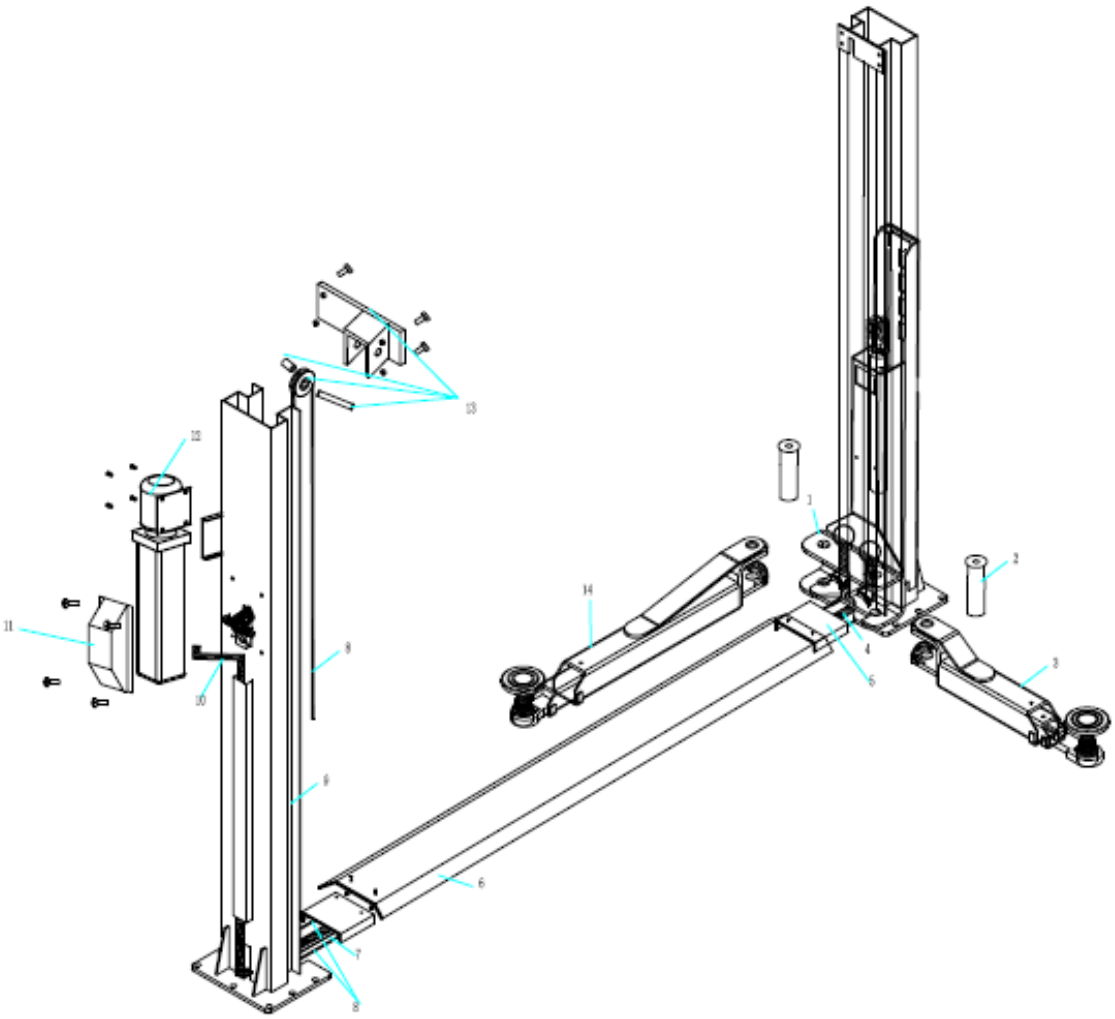
Introduce the anchor bolts M20 by hammering slightly. Set the anchor bolts at the other post checking their positioning and alignment. Then introduce them by hammering slightly.

Before tightening the bolts by nuts, check that the two posts are well leveled.

- Tighten the nuts by torque wrench setting at 150 Nm. If the bolts idle, they must be replaced by bigger ones.

Only after having performed the above mentioned. operations you can go on mounting and connecting the hydraulic and electric circuits.
Levelling the posts by means of a spirit level allows a correct installation of the different parts as well as correct connections.

7.5 Installation procedure



1. Carriage
2. Shaft
3. 3-stage arm
4. Long hose
5. Side plate of bottom bar
6. Bottom bar
7. Solenoid power line
8. Balance cable
9. Column
10. Pump hose
11. Protector
12. Motor
13. cable pulley bracket
14. Long arm

Install Procedure:

1) Unpack lift, attach control box and power pack to main power post.

2) Attach pulley brackets to the top of both posts. Be careful install bracket with pulley offset to the left, fit to power post.

3) Stand up and position both posts. Route balance wire ropes, do not tighten at this stage. Connect hydraulic hose between posts, and main hose from manifold to bottom of power post hydraulic ram fitting.

4) Using base plate cover, move posts in or out for best fitment internal post and external post dimensions supplied are a guide only.

5) Drill, bolt and shim level both posts, using M20 tru-bolts supplied. Tighten to a minimum 150nm of torque.

6) Attach electrical cables: From control box to motor refer, to power post limit switch, safety lock solenoid cable.

7) Electrician to connect to mains supply.

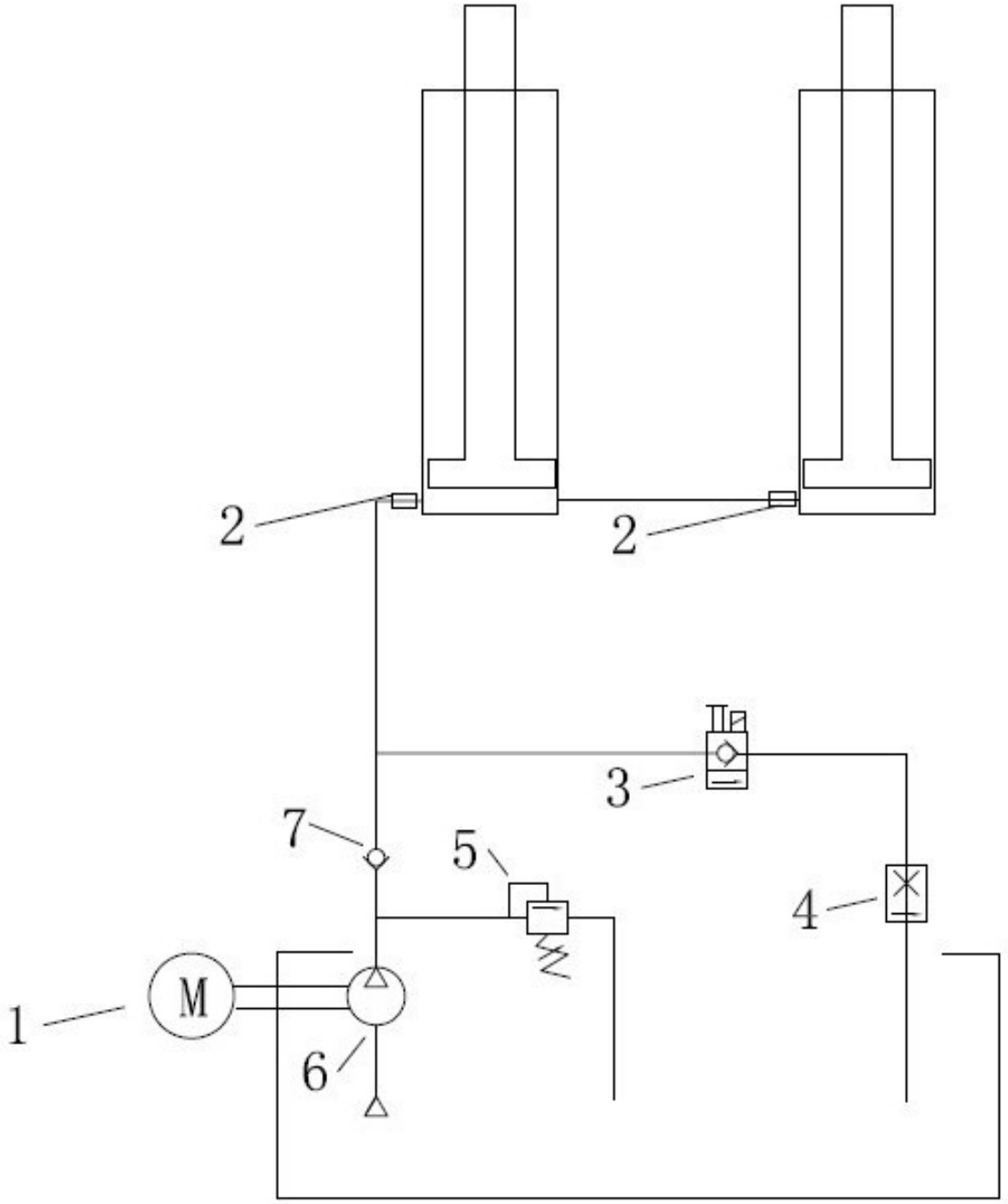
8) Bleed air from hydraulic system ie: Loosen hydraulic hose on slave post, press up button and bleed into container.

9) Adjust balance cables, so both carriage locks engage at the same time.

10) Adjust hydraulic pressure valve to 120-150bar.

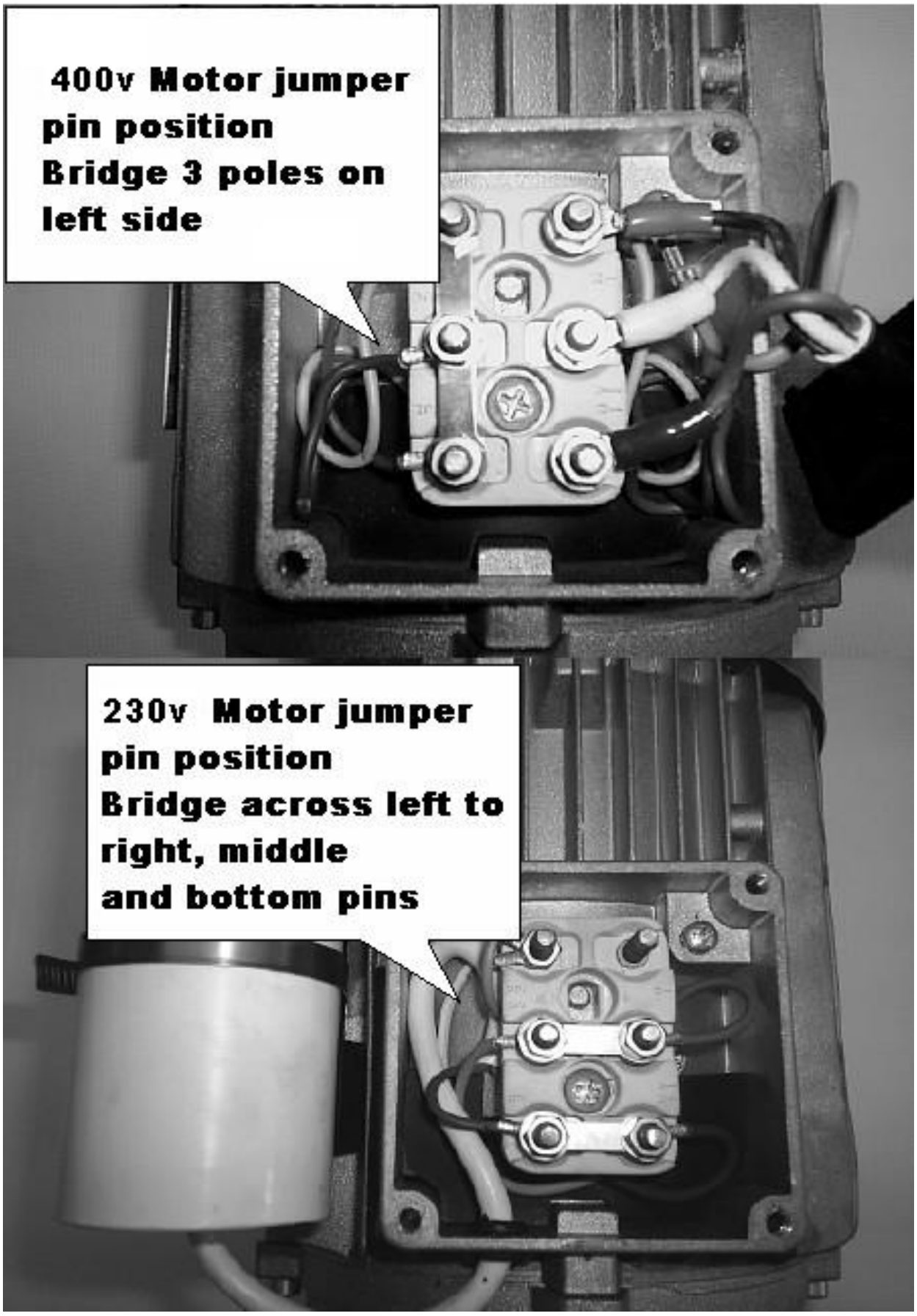
11) Lift is ready for use.

7.6 Hydraulic system diagram



1. Motor
2. Parachute Valve
3. Unloading valve
4. Descend speed regulating valve
5. Relief valve
6. Gear pump
7. Check valve

7.7 Electric motor jumper pins



7.8 Connection to the power sources

Any work on the electrics, however small, must be carried out by qualified personnel only.

The lift power supply is AC, 400V, 50Hz unless otherwise required by the user.

The power lead must be protected against the over current by means of fuses or by means of a magneto-thermal automatic switch with nominal values as indicated by the chart here below:

FEEDING VOLTAGE	FUSE NOMINAL VALUE
220V-1Ph-50/60Hz	15 A
230V-1Ph-50/60Hz	15 A
380V-3Ph-50/60Hz	6 A
400V-3Ph-50/60Hz	6 A

The user must lay a power lead of suitable gauge between the mains socket and the console, in accordance with the relevant national standards.

A differential security breaker set at 10 mA must be fitted on the power supply line.

The hydraulic unit contains synthetic fluid, which is highly polluting for the environment. When filling the tank pay attention not to spill it.

PROCEDURE

- Connect the feeding cable, coming out from the post, to the supply mains respecting all the rules in force in the Country of installation.
- Turn switch once briefly and push "UP" button then release. Check that the motor run direction is correct (the lift shall go up), otherwise turn off the power on electrical board and reverse one phase on the electric plug.
- It is recommended to perform some complete lifting/lowering cycles to bleed the hydraulic circuit from residual air.

7.9 Machine alignment

1, Before alignment, to check if the electric circuit and oil hydraulic circuit in good condition, if the lift be installed by correct drawings and if there are some mechanical parts be omitted.

2, To connect the power line to the power source. Open the rotated power switch to 1 position and the power light lights.

3, Press UP button for a while, to see if the pump oil-taking. If the pump is working but not oil inlet, please exchange the position of the left and right external connection.

4, Press UP switch, the lift lifting to a certain height. Press DOWN switch, the lift lifting around 40mm by itself and then solenoid run and the lift lowering. Repeat above steps , which can discharge the air from the cylinder. Then adjust the balance cable to align the carriages lifting synchronously.

5, After alignment, press DOWN button, lower the lift to the floor and shut off the power switch.

Chapter 8 Operation and use

ATTENTION: Read the instructions in chapter "GENERAL SAFETY RULES" with the utmost attention.

ATTENTION: Before operating on the control board, make sure that there are no bystanders and around the lift.

8.1 Control board

1. Main body of control board
2. Power lamp
3. Rotated switch
4. UP button
5. DOWN button

The operations controlled by control board are described below.

1. Turn on the power source: Rotate the power switch(2) to ON, the power light shine.
2. UP: Push the "UP" button until the lift reaches the desired height.
3. DOWN: Release the lock, then Push DOWN button, lift go up around 40mm properly, the solenoid start to work and upspring the lock block, the oil pump stop fuel feeding. The lift go down until it reaches desired height, stop pushing the DOWN button, the lift locked.
4. If need to UP and DOWN, repeat above step 2 or step 4.
5. Work finished, repeat step 4, down to the ground and shut off the power switch.

ATTENTION: This operation shall be always performed before entering the working area when the machine is lifted up.

The lift is equipped with two wire cables to prevent a possible misalignment between the carriages. This can happen, e.g, when the lift descends on an object left in its area.

ATTENTION: This operation must always be performed before entering the work area.

8.2Lifting procedure

To lift the vehicle, proceed as follows:

- Check that the lift is in its lowest position
- Check that the arms are turned in a way not to hamper the vehicle when driving.
- Turn the arms and pull the extensions in a way that the pads are behind the points foreseen for lifting as indicated by vehicle manufacturer.
- Push “UP” button to let the lift go up about 10cm
- Check the correct positioning of the rubber pads
- Check the vehicle stability
- Lift the vehicle at the desired height
- Press the “LOCK” button to secure the lift on mechanical safety racks.

8.3 Lowering procedure

- Push “DOWN” button for carriages to raise for some seconds disengage from safety racks and lower it.
- Hold “DOWN” button until carriages descend to minimum height
- Turn the arms in a way not to hamper the vehicle when driving out and set the extensions back in original position.
- Drive the vehicle out of the working area.

Chapter 9 Maintenance

The several maintenance operations to be carried out are described below. A low operation cost and a long life of the machine depends from constant observation of the operations.

CAUTION: The listed intervention times are given for information and they refer to normal operating conditions. They can change according to the kind of service, environment (more or less dusty), frequency of use, etc. In case of heavier conditions, servicing must be increased. When filling up or changing the hydraulic fluid, use the same kind of oil used previously.

9.1Periodical maintenance operations

9.1.1 EVERY WEEK

- Check the cleanness of the mobile parts
- Check the safety devices as previously described.
- Check hydraulic fluid levels as follows
- If maximum lift height is not achieved, check limit switch position, if ok check oil level, add oil.
- Fill up through the filler cap using 32-45 viscosity hydraulic oil.
- Check tension of foundation bolts.

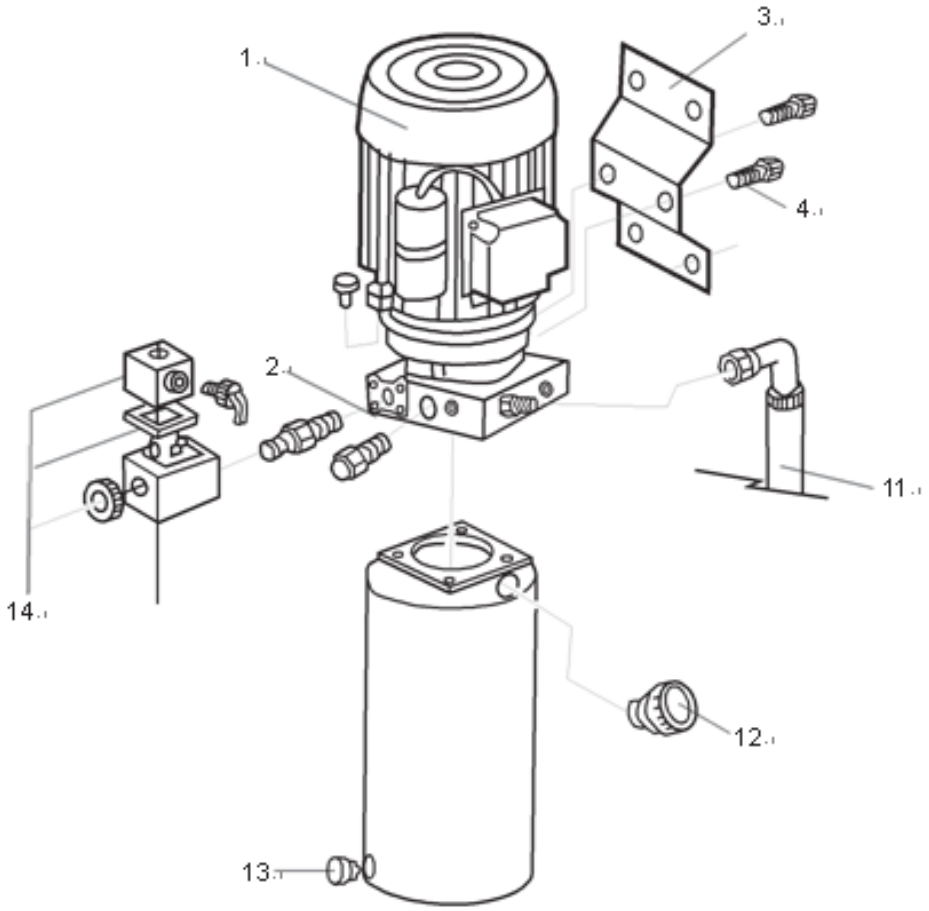
9.1.2 EVERY MONTH

- Check tightening of screw.
- Check the hydraulic system seal and tighten the loose unions, if necessary.
- Check the hydraulic hoses condition. In case they are worn, replace them by new hoses of the same kind.
- Check the greasing and wear condition of pins, rollers, bushes of trolleys structure as well as arms and relevant extensions. If necessary, replace the damaged parts by original spare parts.

9.1.3 EVERY 200 HOURS RUNNING

- Empty the tank and check the condition of the hydraulic fluid. Clean the oil filter. If the a.m. operations are carried out with care, there will be an advantage for the user who will find the equipment in perfect condition each time he restarts work.

9.2 Instructions for adjusting hydraulic pressure



(1) Raise lift up to maximum height.

(2) Lower lift to rest using down button NOTE: DO NOT REMOVE FINGER FROM DOWN BUTTON FOR AT LEAST 20 SECONDS AFTER LIFT HAS REACHED GROUND LEVEL THIS RELEASES OIL PRESSURE FROM HYDRAULIC HOSES.

(3) Remove main hydraulic hose from the fitting.

(4) Attach and tighten hydraulic oil pressure gauge to main fitting on manifold.

(5) Press up button and check pressure reading on gauge.

(6) Recommended pressure setting is 120 - 150 bar.

(7) If required adjust pressure valve.

(8) There are (2) different types of pressure valves. Allen key type wind in clockwise to adjust. Remove outer cap nut. Loosen outer nut, wind in flat blade inner screw.

(9) After adjustment is made press the down button for 10-15 seconds to release pressure. remove pressure gauge, re-fit and tighten main hose.

NOTE: IF VALVE ADJUSTED IS THE (2) TYPE MAKE SURE YOU TIGHTEN OUTER LOCKING NUT AND REPLACE NUT COVER.

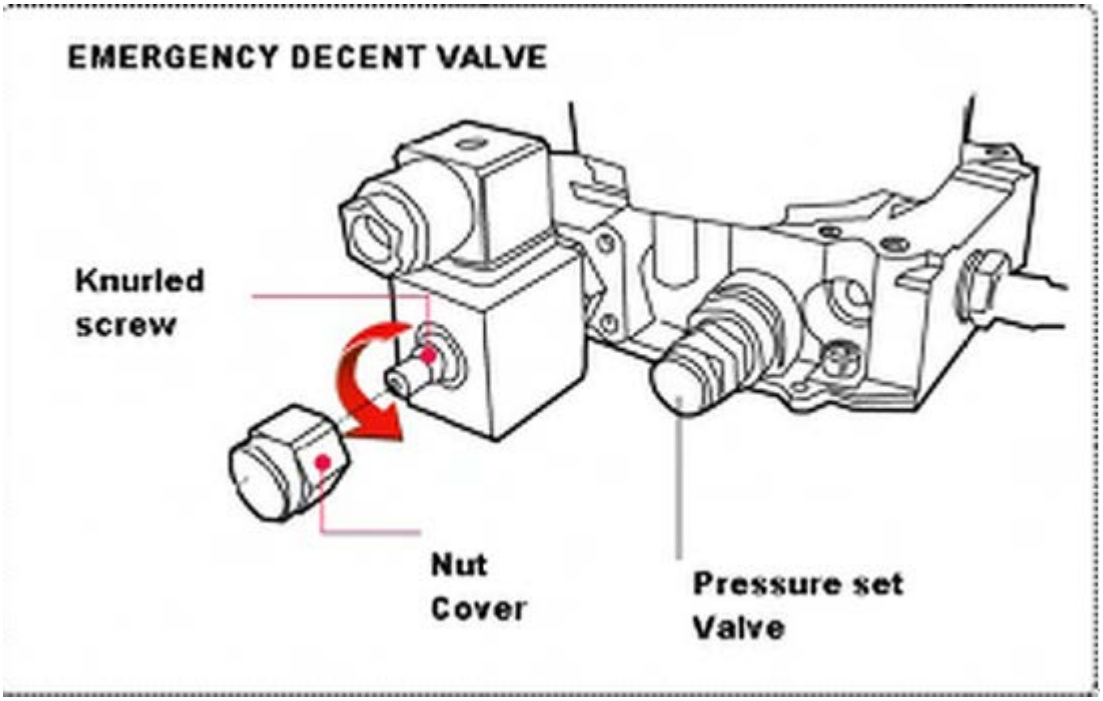
Chapter 10 Lowering in emergency case

ATTENTION: When performing the "emergency lowering" of the lift, the carriage safety locks must be disengaged first.
The following operations shall therefore be performed only when:

- The lift won't descend due to electric power cut.
- In case of absolute need.
- By a sole qualified person.
- Delimiting the lifting area and making it reachable only to the qualified person in charge of operations.

2-Post Lift lowering procedure in case of emergency.

- If the lift has been lowered onto the safety locks, remove lock covers on both posts. Jack up individual carriages with a trolley jack and suitable timber just enough to manually lift up locks. Lift up locks manualy, wedge a screwdriver through the lock pawls to stop locks re-engaging. Remove trolley jack.
- Refer picture below of emergency descent valve. Located on hydraulic manifold just below motor.
- Undo cover cap, underneath cap is a knurled screw, replace cap, remove screwdrivers from lock pawls. Replace lock covers.



Chapter 11 Trouble shooting

A list of possible troubles and solutions is given below

TROUBLE	POSSIBLE CAUSE	SOLUTION
The lift does not work	The main switch is not turned on	Turn the switch on
	There is no power	Check Power on to the restore if necessary
	The electrical wires are disconnected	Replace
	Fuses are blown	Replace
The lift does not raise	The motor direction of rotation is not correct	Interchange the two phases on the main switch.
	The oil in the hydraulic unit is not sufficient.	Add some hydraulic oil
	The UP button is faulty	Check UP button and connection for proper operation. Replace, if needed.
	The maximum height limit switch is faulty.	Check the switch and relevant connection for proper operation. Replace, if needed.
	The lowering solenoid valve does not close	Check and clean, if dirty, or replace, if faulty.
	The suction pump filter is dirty	Check and clean if needed.
The lifting capacity is not sufficient	The pump is faulty	Check the pump and replace, if needed
	Oil leakages in hydraulic circuit	Check the circuit for any leakage
The lift does not lower when the DOWN button is pressed	The lowering solenoid valve does not work properly	Verify if it is powered and check magneto for damage (replace if disconnected or blown)
	Safety solenoid valve is jammed	Verify if it is powered and check magneto for damage (replace if disconnected or blown)
	The DOWN button is faulty	Replace the DOWN button
Carriages do not stop in standing position	The lowering and solenoid valves stay opened.	Verify that solenoid valve sliders are not blocked
	Leakage in the hydraulic pipelines.	Check connections for proper tightening and tubes for damage(replace if damaged)
	Hydraulic cylinders are faulty	Check and replace if needed.
The lift does not lower smoothly	Presence of air in the hydraulic system	Bleed the hydraulic system.
Lifting is not synchronized	Leakages or presences of air into hydraulic circuit	Bleed the hydraulic system
The lift does not stop at safety height	The safety height limit switch does not work	Check the limit switch and replace if needed.
The motor does not stop when the lift reaches it maximum height	The maximum height limit switch does not work	Check the limit switch and replace if needed.

Chapter 12 Disposal of used oil

Used oil, which is removed from the power unit and the plant during an oil change, must be treated as a polluting product, in accordance with the legal prescriptions of the country in which the lift is installed.

Chapter 13 – Machine demolition

The machine must be demolished by authorized technicians, just like for assembling. The metallic parts can be scrapped as iron. In any case, all the materials deriving from the demolition must be disposed of in accordance with the current standards of the country in which the rack is installed. Finally, it should be recalled that for tax purposes, demolition must be documented; submitting claims and documents according to the current laws in the country in which the rack is installed at the time the machine is demolished.

SAFETY OPERATING PROCEDURES
Vehicle Hoist

DO NOT use this machine unless the operator has been thoroughly instructed in its safe use and operation.


Safety glasses must be worn at all times in work areas.


Sturdy footwear must be worn at all times in work areas.


Rings and jewellery must not be worn.


Long and loose hair must be contained.


Close fitting/protective clothing must be worn.


Do not stand on hoist whilst hoist is in operation.

A vehicle hoist must not be operated unless it has a current certificate of inspection.

PRE-OPERATIONAL SAFETY CHECKS

1. Ensure that vehicle hoist has operating and maintenance instructions permanently located and clearly visible.
2. The equipment must be used in accordance with manufacturer's instructions.
3. Check the capacity of the hoist compared to the weight of the vehicle. If vehicle is too heavy, do not proceed.
4. Ensure the area is clean and clear of grease, oil, and objects that may be a slip/trip hazard.
5. Familiarise yourself with and check all machine operations and controls.
6. Check all safety devices are in good condition.
7. Ensure support arms are capable of being locked in position.
8. Ensure rubber pads are in good condition on all load points.
9. Faulty equipment must not be used. Immediately report suspect equipment.

OPERATIONAL SAFETY CHECKS

1. Centre vehicle on hoist, ensuring that the weight is evenly distributed to the front and rear.
2. Identify the correct jacking points.
3. Only one person shall operate the hoist at a time.
4. Ensure hoist area is clear of people and equipment before operating.
5. Never leave the hoist running unattended.
6. Check vehicle stability by looking at the jacking points.
7. Engage and check for the correct engagement of the locks.
8. At the completion of work lower the vehicle hoist and ensure all equipment is left in a safe position.

HOUSEKEEPING

1. Switch off equipment.
2. Leave the equipment and work area in a safe, clean and tidy state.

POTENTIAL HAZARDS

■ Falling objects ■ Trapping hazards ■ Crushing hazards ■ Entanglement hazards

4 TONNE

2 Post Base Plate Lift

OPERATING INSTRUCTIONS

The lift should only be operated by personnel that have been thoroughly trained in operation and maintenance of the lift.

1. Position the vehicle between the columns, turn off the engine and apply the park brake.

2. Adjust the lifting arms until they reach the supporting position of the vehicle.
   Note: It is important that the vehicle is evenly balanced on the lift.

3. Make sure that all personnel are clear and there are no obstructions around the lift.

TO RAISE THE LIFT

1. Press the “UP” button on the control box.
2. Raise the lift to approximately 500mm, stop and check that the lifting pads are evenly supporting the lifting positions of the vehicle.
3. Continue raising the lift to the desired working height checking for any obstructions.

   Once the lift has reached the desired working height lower the lift onto the safety locks by means of pressing the lock lowering button on the control box.
   Note: Check for correct engagement on the locks.

TO LOWER THE LIFT

1. Check for any obstructions under the lift prior to lowering the lift
2. Press the “DOWN” button on the control panel until the locks are clear
   Please note: the lift will raise approximately 100mm and then will descend automatically.
3. Once the lift has reached its lowest position, swing the arms back into their rest position
4. Turn the power switch to the off position on the control panel.

MODEL:	SERIAL NO.:	APPROVALS:
AL-9000DS-D		**WAH21203**

Design Code: AS1418.9 -1996

ADVANCE AUTOQUIP WARRANTY

GENERAL WARRANTY INFORMATION:
ADVANCE AUTOQUIP'S OBLIGATION UNDER THIS WARRANTY IS LIMITED TO REPAIRING OR REPLACING ANY PART OR PARTS RETURNED TO THIS FACTORY, TRANSPORTATION CHARGES PREPAID, WHICH PROVE UPON INSPECTION TO BE DEFECTIVE AND WHICH HAVE NOT BEEN MISUSED. DAMAGE OR FAILURE TO ANY PART DUE TO FREIGHT DAMAGE OR LACK OF MAINTENANCE IS NOT COVERED UNDER THIS WARRANTY. ADVANCE AUTOQUIP RESERVES THE RIGHT TO DECLINE RESPONSIBILITY WHEN REPAIRS HAVE BEEN MADE OR ATTEMPTED BY OTHERS, OR WHERE NON GENUINE PARTS HAVE BEEN USED. THIS WARRANTY DOES NOT COVER DOWNTIME EXPENSES INCURRED WHEN UNIT IS IN REPAIR. ADVANCE AUTOQUIP ARE NOT LIABLE FOR POSSIBLE ISSUES, DAMAGES, ACCIDENTS ETC RESULTING FROM FAILURE TO FOLLOW THE OPERATION OR INSTALLATION INSTUCTIONS CONTAINED IN THE MANUAL OR ON THE EQUIPMENT. THE MODEL NAME AND SERIAL NUMBER OF THE EQUIPMENT MUST BE PROVIDED WITH ALL WARRANTY CLAIMS. THIS WARRANTY STATEMENT CONTAINS THE ENTIRE AGREEMENT BETWEEN ADVANCE AUTOQUIP AND THE PURCHASER UNLESS OTHERWISE SPECIFICALLY EXPRESSED IN WRITING. THIS NON-TRANSFERABLE WARRANTY APPLIES TO THE ORIGINAL PURCHASER ONLY. THIS WARRANTY IS APPLICABLE TO UNITS LOCATED ONLY IN AUSTRALIA. CONTACT ADVANCE AUTOQUIP FOR SPECIFIC WARRANTY PROVISIONS FOR UNITS LOCATED OUTSIDE OF THESE COUNTRIES.
NOTE: THE EQUIPMENT IS NOT TO BE USED FOR WASH DOWN PURPOSES OR TO BE INSTALLED IN AN OUTDOOR ENVIRONMENT WHERE IT IS SUBJECT TO WEATHER OR WATER DAMAGE. WARRANTY WILL BE IMMEDIATELY VOID.

STRUCTURAL COMPONENTS:
ALL STRUCTURAL AND MECHANICAL COMPONENTS OF THIS UNIT ARE GUARANTEED FOR A PERIOD OF FIVE YEARS, FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS
WHEN LIFT IS INSTALLED AND USED ACCORDING TO RECOMMENDATIONS.

POWER UNIT:
POWER UNIT COMPONENTS (PUMP AND RESERVOIR) ARE GUARANTEED A PERIOD OF ONE YEAR, FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE LIFT IS INSTALLED AND USED ACCORDING TO RECOMMENDATIONS.

ELECTRICAL COMPONENTS:
ALL ELECTRICAL COMPONENTS (INCLUDING MOTOR) ARE GUARANTEED A PERIOD OF ONE YEAR FOR PARTS ONLY (EXCLUDING LABOR), FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE LIFT IS INSTALLED AND USED ACCORDING TO RECOMMENDATIONS.

PNEUMATIC (AIR) COMPONENTS:
ALL PNEUMATIC (AIR) COMPONENTS (I.E. AIR CYLINDERS AND POPPET AIR VALVES) ARE GUARANTEED FOR ONE YEAR FOR PARTS ONLY (EXCLUDING LABOR), FROM THE DATE OF INVOICE, AGAINST DEFECTS IN WORKMANSHIP AND/OR MATERIALS WHEN THE LIFT IS INSTALLED AND USED ACCORDING TO RECOMMENDATIONS.

EXCLUSIONS:
WARRANTY DOES NOT INCLUDE CONSUMABLE ITEMS SUCH AS HYDRAULIC OIL, LIFTING PADS, OIL SEALS, VEE BELTS AND SLIDING BLOCKS.

THIS WARRANTY SUPERSEDES ALL OTHER WARRANTY POLICIES PREVIOUSLY STATED AND IN ALL OTHER ADVANCE AUTOQUIP's PRODUCT SPECIFIC LITERATURE.

Advance AutoQuip
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COMMISSIONING REPORT

1.	**Details of Customer**				
	Customer Name:				
	Installation Address:				
2.	**Hoist Details**				
	Model No:				
	Hoist Type:				
	Installation Date:				
3.	**Commissioning Report**	**Yes**	**No**	**N/A**	**Comments**
	Safety Devices				
	Safety devices incorporated into the design of the vehicle to AS/NZS 1418.9				
	Welds				
	Visual check all welds completed and comply to requirement of AS/NZS 1554				
	Hydraulic Equipment and Controls				
	Visual check carried out for leaks				
	Pneumatic Equipment and Controls				
	Visual check carried out for leaks				
	Safety Locks				
	Safety locks tested for correct operation				
	Support Pads				
	Checked for good working order				
	Wheel Stops				
	Supplied with the hoist and in good working order				
	Hoist Motion Limits				
	Checked for correct operation				
	Load Test and Speed Check				
	Hoist checked with load for correct operation and speed control tested				
	Wire Ropes				
	Checked wire ropes for correct installation and tension				
	Concrete Floor				
	Concrete floor is a suitable depth for installation				

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Bassendean WA 6054
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COMMISSIONING REPORT

	Location of Vehicle Hoist & Vehicle Clearances				
	Vehicle hoist or any part of the load is positioned no less than 600mm away from any fixed structure				
	Provisions have been made for effective clearances above the vehicle when the hoist is in its fully raised position.				
	Markings - Hoist Checked for Relevant Marking Including:				
	Make & Model Number				
	Serial number				
	Rated Capacity				
	Reference to maintenance				
	Operation instructions				
	Screw and Nut Gaps				
	Hoist compliance plate showing design registration				
	Functional Test				
	Vehicle hoist has been tested and all safety devices, limit switches and control function interlocks have been tested for correct operation.				
	Demonstration				
	The installer has demonstrated the operation of the vehicle hoist to the owner or operator				
	Electrical Equipment and Controls				
	Lock off isolating switch installed				
	Emergency stop button installed				
3.	**Details of Electrical Contractor**				
	Trading Name:	EC Licence Number:			
	Address:	Telephone Number:			
4.	**Signature**				
		Name:			
	_____	Date:			
	I, being the person responsible for completing the commissioning report have exercised reasonable skill and competency when completing the report and herby certify that the vehicle hoist has been commissioned fit for use as per the Australian / New Zealand Standard 1418.9:1996 Vehicle Hoists.				