



MOLNAR

By NEXION



CM5500-A/AL

Installation Instructions

ALWAYS KEEP
operating instructions
ready to hand on the unit

Read the operating
instructions before working
with the unit

Date: 30.11.2023

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TECHNICAL DATA

MAIN LIFT

Maximum load capacity	5500kg
Runway length	4200 mm / 4600 mm / 5200mm
Runway width	710 – 725 mm
Distance between runways	800 / 1100mm
Lifting time	45 s
Lowering time (without loads)	40 s
Oil tank capacity	29 l
Recommended hydraulic oil	46 or equivalent
Compressed air supply	6-10 bar

POWER SUPPLY - MOTOR

.....	400 V – 3 ph – 50/60 Hz
Absorbed Power	5,3 kW
Main Lift Motor Power	3,0 kW
Lift Table Motor Power	1,5 kW
Current Consumption	11.3 A at 400 V
Main Lift Motor Weight	25 kg
Lift Table Motor Weight	15 kg
Electrical Components Weight	2 kg
Noise Level Measured in Operator's Working Position	75,5 dB (A)

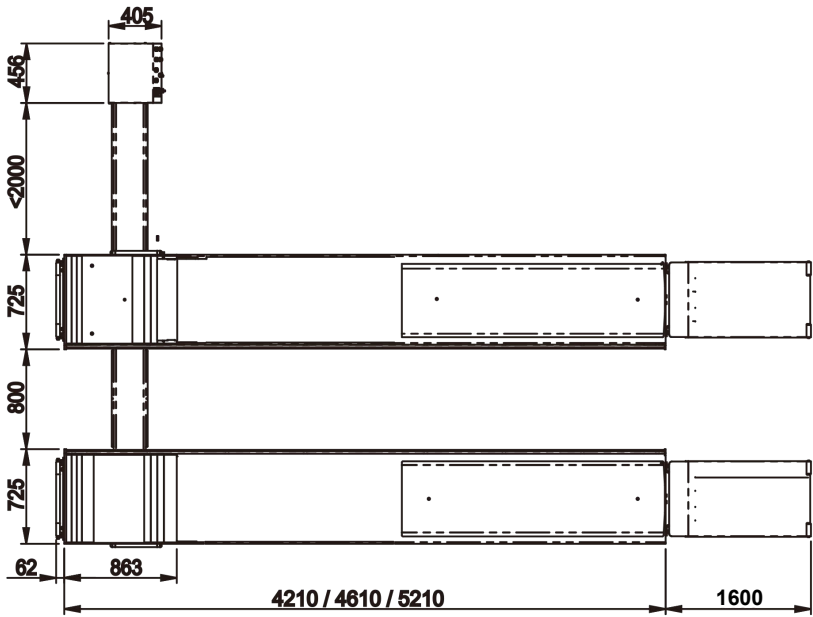
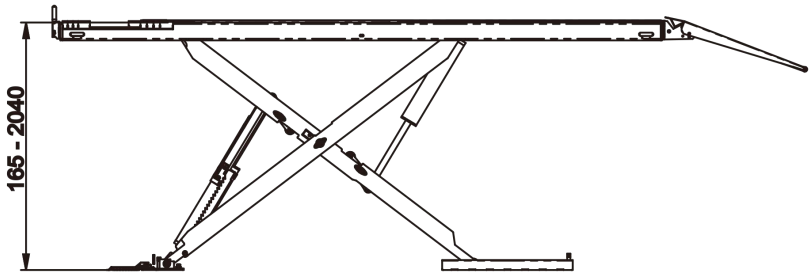
FASTENING TECHNICAL SPECIFICATIONS

Type of floor	C25/30 class concrete
Admissible tensile load on C25/30 class concrete	390 kg
Floor flatness	3 mm/m
Fastening anchor type	mechanical
Length	140 mm
Hole diameter	Ø 16 mm
Thread diameter	M16
Tightening torque of the anchors	Refer to brand of bolt
Min. thickness of concrete	140 mm

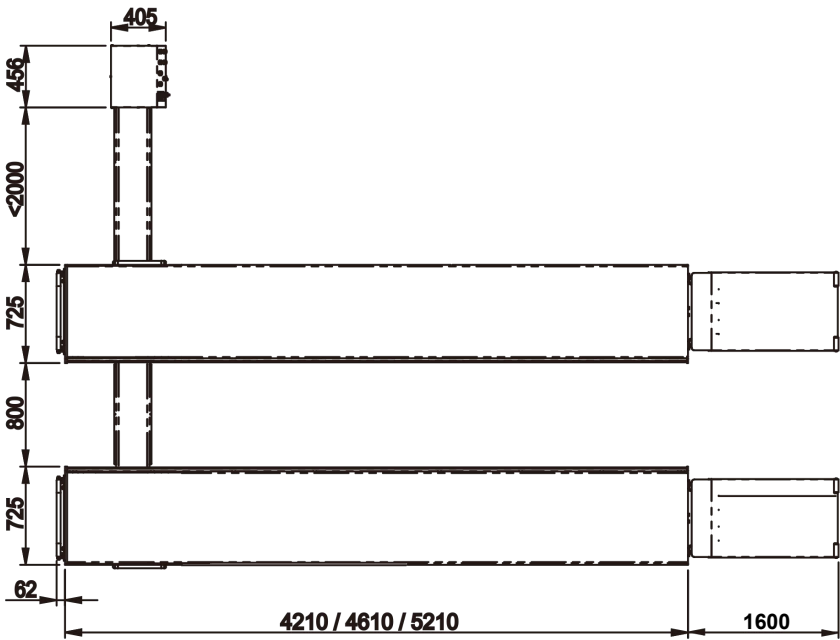
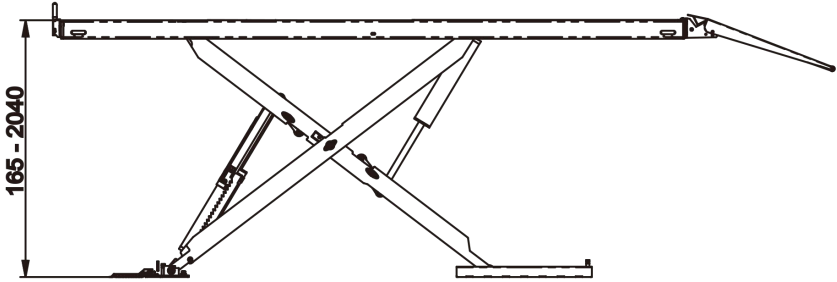
LIFT WEIGHT

Lift Total Weight	2205 kg
Control Unit Weight	105 kg

1.1



1.2



LIFT IDENTIFICATION DATA

Lift identification data are indicated on the plate positioned on the control unit and under the runways. Each plate carries identification elements and some technical data; besides manufacturer's data, the plate also includes:

Mod. - Model

V – Supply voltage in Volt;

A – Current absorption in Ampere;

kW – Absorbed power in kW;

Hz – Frequency in Hz;

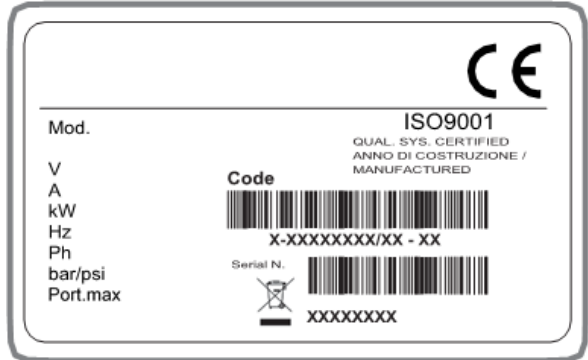
Ph – Number of the phases;

bar/psi – Operating pressure in bar;

Serial N. - Serial number;

ISO 9001 - Company Quality System Certification;

CE - CE Marking



Design Registrations

WSV-0150526975 - CM5500-A

WSV-0150536800 - CM5500-AL



Use these data to order spare parts and for any communication with the manufacturer (request of information), It is strictly forbidden to remove this plate.

The machines may undergo updates or minor aesthetic changes and therefore have different details from those shown, without prejudice to the descriptions contained in these instructions.

INTENDED USE

This operator's manual forms an integral part of the product: if the lift is sold, all the documentation must accompany it.

Read the warnings and instructions in this manual carefully; they provide important information concerning **SAFE USE** and **MAINTENANCE**.

KEEP THIS MANUAL IN A SAFE PLACE FOR FURTHER REFERENCE

This lift has been designed to be used as a lifting device for cars and light transport vehicles up to a maximum weight of 5500 Kg.

The design specifications of this lift make it suitable for use indoors and outdoors sheltered under a roof.

The load must be distributed over the runways in accordance with the regulations in force which, for lifts having maximum capacity in excess of 3500 kg, stipulate 1/3 at the front and 2/3 at the rear or vice-versa, with the vehicle's wheels placed at least 300 mm from the end of the runway.

Therefore, the maximum useful load fraction, 3000 kg per axle of the vehicle corresponding to 2/3 of the maximum capacity, must never be exceeded, as this may

impair the stability and thus the intrinsic safety of the lifting device. For the same reason, load differences between the two runways must not exceed 10% of lift maximum load capacity.

example: left hand runway 1800 Kg, right hand runway 2700 kg.

IMPORTANT: for correct, safe use of the equipment, users must ensure a lighting level of at least 300 lux in the place of use.



WARNING

Never use the lift for washing cars.



WARNING

The use of the machine in potentially explosive atmospheres is forbidden.



WARNING

Never lift even very light loads on one runway only, as the lift might become dangerously unstable.



WARNING

The lift may not be used in any working condition not specifically envisaged in this manual. In particular, lifting people is absolutely forbidden.

The manufacturer cannot be held responsible for any damage caused by improper, incorrect or unreasonable uses.



WARNING

Never use the lift for lifting rail vehicles.

Warranty certificate

The warranty period is 3 years from the date of the purchase invoice.

The warranty will expire immediately if changes are made to the machine or parts of it that are not authorized.

The ascertainment of the actual existence of manufacturing defects will be carried out by personnel appointed directly by the manufacturer.

Technical assistance

For all service and maintenance operations not described or indicated in these instructions, it is always advisable to contact the Dealer from whom the purchase was made or the Sales Office of the supplier Company.

GENERAL SAFETY REGULATIONS

This equipment is for professional use only.



WARNING

Only one operator may work with the equipment at a time.

The lift must only be used by specifically trained and authorized staff.

Any tampering with or modification of the equipment not authorized in advance by the manufacturer relieves the latter from any responsibility for damage deriving from or due to such procedures.

Removal of or tampering with the safety devices constitutes a violation of European Regulations on safety. The manufacturer therefore declines all liability deriving from tampering with these devices.

- The machine may only be used in places free from explosion or fire hazards.
- Original accessories must be used. Our machines are designed for the use of original accessories.
- Installation must always be carried out by qualified staff in full accordance with the instructions given below.
- Make sure there are no risky conditions while the equipment is being operated: in case of malfunctioning, stop the machine at once and consult the technical support service of the authorized dealer.
- Standing underneath the vehicle during lifting and lowering is forbidden.



WARNING

Even minor work on the electrical system must be done by professionally qualified staff (see specific legislation on this subject).

Forklifts are recommended during install

LIFTING AND HANDLING

When loading / unloading or transporting the equipment to the customer, it is necessary to ensure the adequacy of the vehicles and loading vehicles (e.g. cranes, trucks, etc.) and the lifting equipment used. It is also necessary to ensure that the components are lifted and transported without the risk of falling, taking into account the size, weight, center of gravity of the package and delicate parts not to be damaged.

Transport conditions of the machine

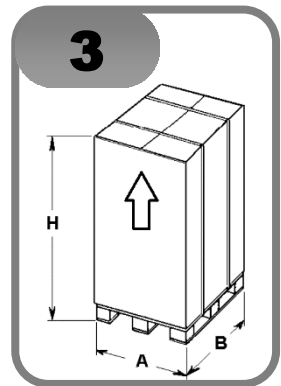
The lift must be transported in its original packaging and kept in the position indicated on the packaging itself.

Protect the control unit from exposure to the weather and ensure that it is not subjected to substantial variations in temperature. Since it is in its packaging, it must be handled with a pallet truck or fork-lift truck, inserting the forks in the points shown in figures 3 and 4.

As the lift structure is of considerable size, it is packaged with a wooden structure that allows slinging with suitable slings. Never use steel ropes. The positions of the slings and the hook are indicated in figure 6. For correct lifting, with the slings duly tensioned, the hook should be at least 2.5 m from the packaging.

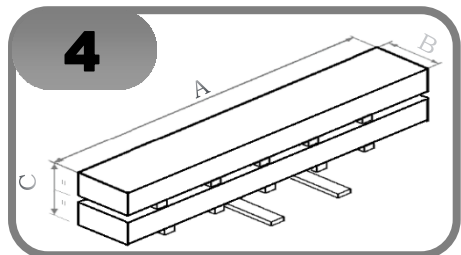
Packaging dimensions

Width (A)	650 mm
Depth (B)	520 mm
Height (H)	1250 mm



Packaging dimensions

Width (A)	5350 mm
Depth (B)	800 mm
Height (C)	400 mm



Lift and move only one package at a time

UNPACKING

After removing the packaging make sure that equipment components are undamaged, by checking that there are no visibly damaged parts (control unit, lift structure). In case of damage, do not use the equipment (the lift) and contact professionally qualified staff (your dealer).

The packaging materials (plastic bags, expanded polystyrene, nails, screws, pieces of wood, etc.) must not be left within reach of children since they are potential sources of danger.

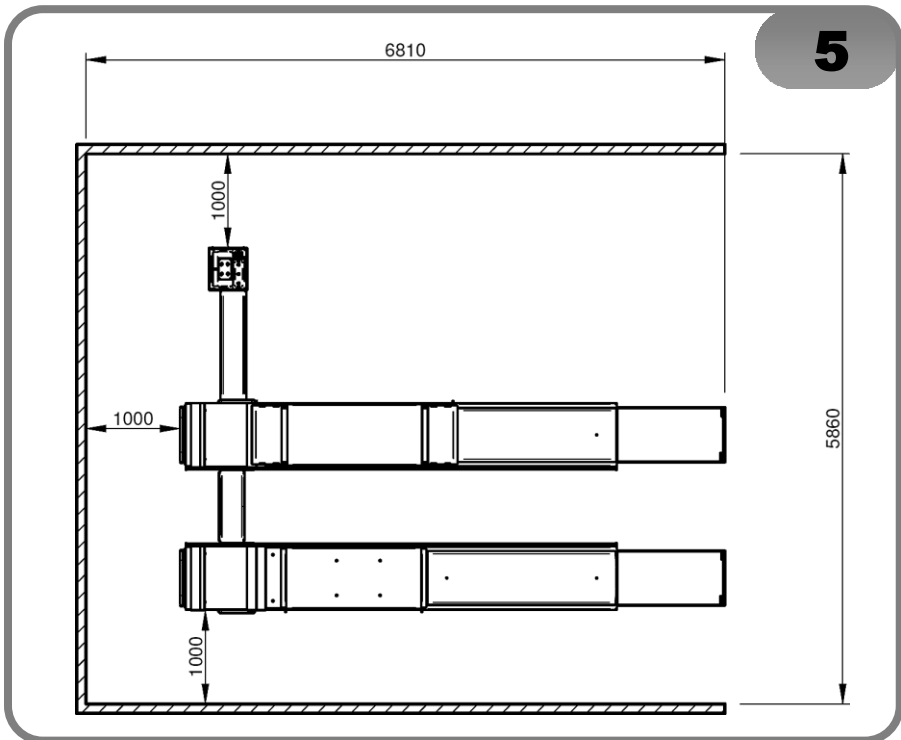
Consign these materials to the specific collection centers if they are pollutant or not biodegradable.

INSTALLATION AREA

Machine installation requires a usable space of min. 4060 x 7760 mm (fig.5).

From the control position the operator has a clear view of the entire lift and the surrounding area. The operator must not let any unauthorized person enter this area and must ensure that it is clear of potentially hazardous objects. Do not install on loose or unstable surfaces. The surface on which the lift is installed must withstand the loads transmitted during operation. This surface must have a capacity of at least 25 kg/sq.cm and a resistance class of 250 Rck.

The lift contact zones to the floor must be levelled.



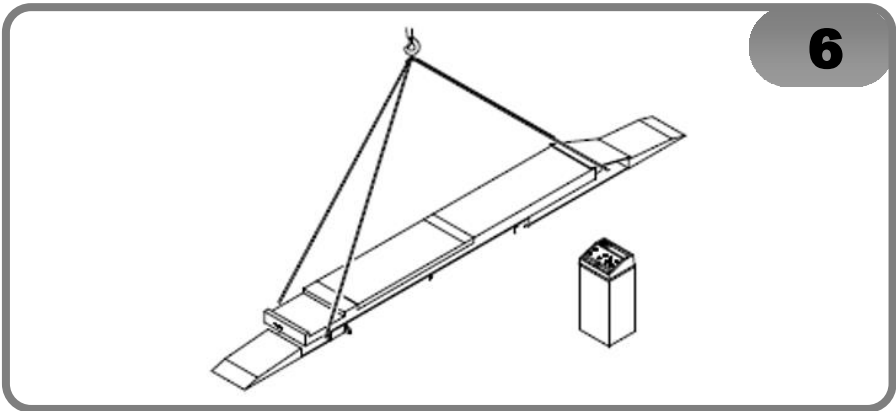
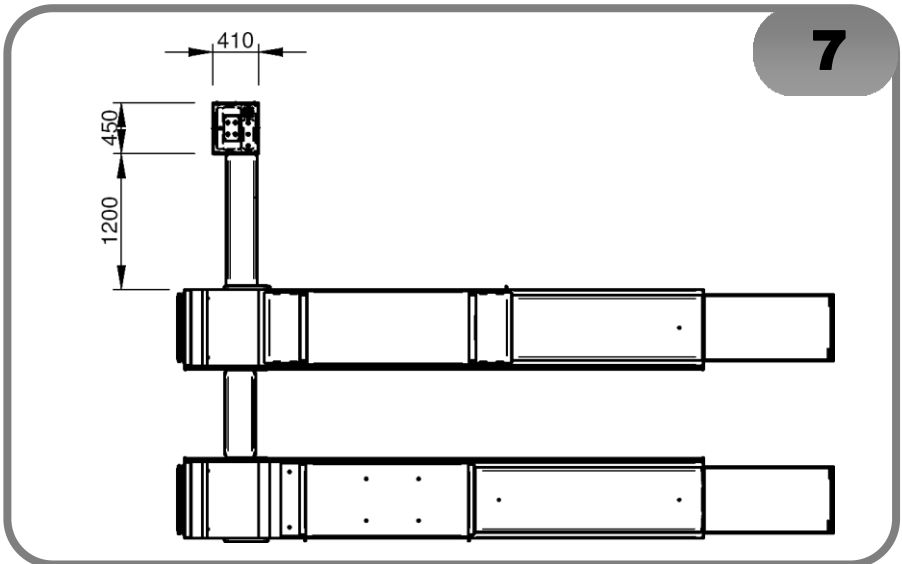
Environmental working conditions

- Relative humidity: 30% to 95% without condensation.
- Temperature range: -5°C to 55°C.

INSTALLATION

After unpacking, position the parts ready for assembly. During handling, necessary to find the right positioning of the lift on the ground, suitable slings or chains must be used (fig. 6). Once the exact position of the lift has been established, position the control unit. The standard positioning is the one shown in figure 7, with the control unit on the left of the lift and its control panel oriented on the other side of the lift. This will allow the operator a good view of the whole working area.

The positioning distances are shown in figure 7, assuming as reference the front left corner of the runway.

**6****7**

Anchor Fitting Procedure

The lift must be fixed to the floor; for this operation, the following devices are necessary:

1. Hammer drill for drilling concrete, with \varnothing 16 mm bit.
2. Use HST3-M16x145 or equivalent
3. Torque wrench to bolt brand specifications

Make sure that the concrete is 32mpa with a minimum depth of 140 mm.

Proceed as follows:

Drill with bit \varnothing = 16 mm to a depth of 140 mm.

Clean the hole.

Tap the expansion plugs into the hole with a hammer.

If necessary, use the supplied shims.

Tighten the bolts with a torque wrench, set at the bolt manufacturers torque specifications.



WARNING

Any damage deriving from failure to follow the instructions given above cannot be charged to the manufacturer and may cause the warranty to become null and void.



WARNING

When choosing the installation site, current regulations on safety at work must be complied with.



WARNING

Lift may only be installed indoor or covered locations protected from the weather.

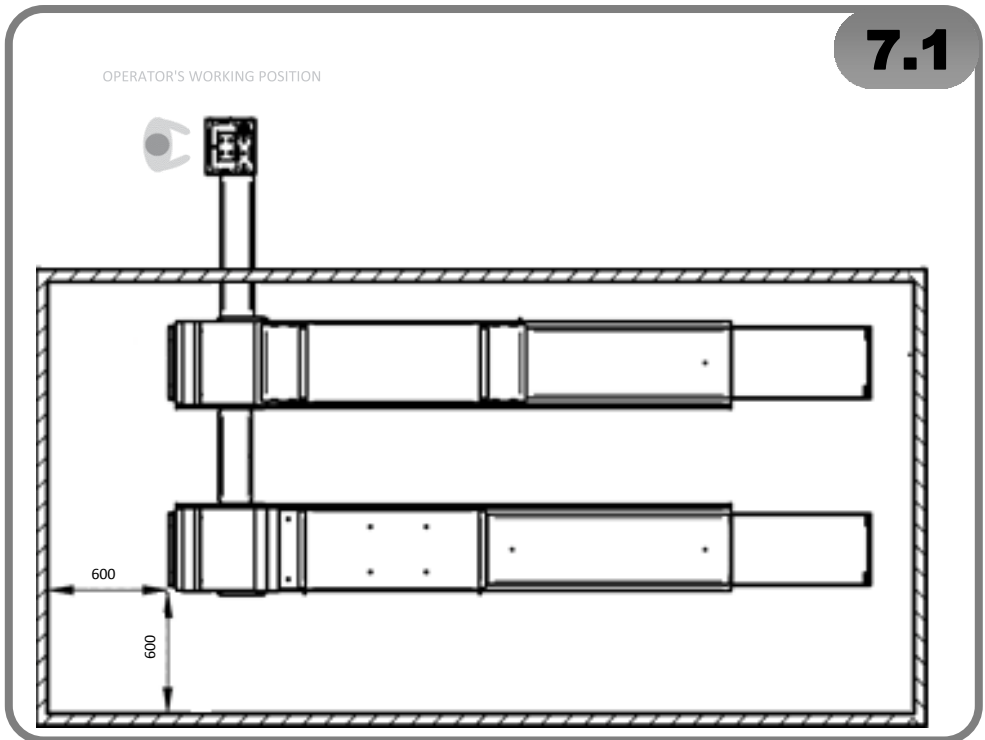
IN THE CASE OF RECESSED INSTALLATION, USE THE DOCUMENTATION SUPPLIED BY THE MANUFACTURER AS REFERENCE FOR THE PIT.

HAZARDOUS AREAS

Before using the lift, make sure that no unauthorized persons are present within the hazardous area delimited by the yellow stripe (Fig. 7_1).

Persons shall by no means stop or pass within the hazardous area delimited by the yellow stripe (Fig.7_1).

Figure 7_1 indicates the lift hazard areas for persons. It is strictly forbidden to approach this area if lift is moving due to the hazard of all machine moving parts.



HYDRAULIC CONNECTION

Proceed as follows to connect the lift hydraulically to the control unit:

Remove the control unit door by loosening the 4 fixing screws.

Remove the protective cover.

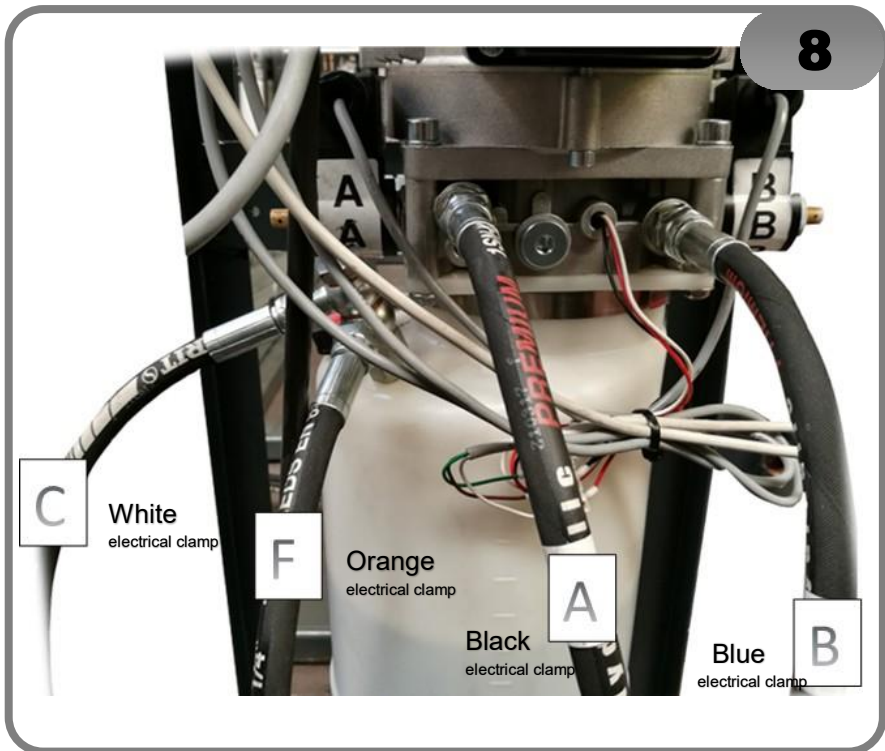
Extract the hydraulic pipes positioned inside the control unit. Extract the hydraulic pipes under the main lift runways.

Remove the hydraulic plugs from the hydraulic pipes.

Connect the hydraulic pipes to the control unit, matching the numbers present on the pipes (as shown in figure 8), and tightening correctly.

Connect the fluid recovery lines C & F (figure 8).

Note: Once connections are completed, restore control unit initial conditions.



PNEUMATIC CONNECTION

The pneumatic network to which the lift pneumatic system is to be connected must be equipped with a service unit consisting of a filter, regulator and lubricator unit (FRL). FRL units may be ordered from the manufacturer if required.

To connect the lift pneumatically to the control unit, proceed as follows:

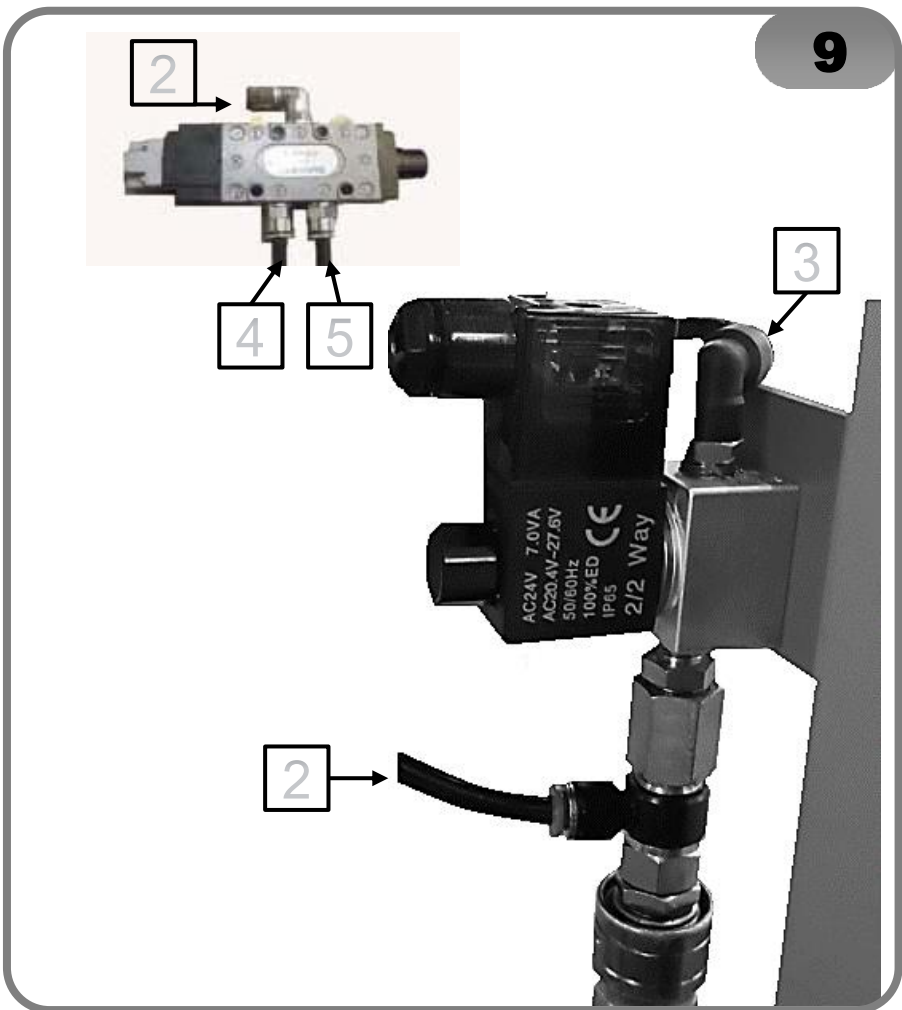
Remove the control unit door by loosening the 4 fixing screws.

Extract the hydraulic pipes under the main lift runways.

Extract the hydraulic pipes positioned inside the control unit.

Connect the pneumatic pipes, matching the numbers indicated on the pipes correctly as shown in figure 9

Connect the pneumatic supply network to the screw connection provided, shown in figure 9.



ELECTRICAL CONNECTION

The electrical system connection procedure consists on the following steps:

- Connection to the mains
- Connection of the lighting system (if any).

Connection to the mains



WARNING

All the operations required for machine electrical connection to the mains must be carried out exclusively by qualified personnel.

- Electrical wiring must be sized according to:
 - the electrical power absorbed by the machine, specified in the machine data plate;
 - the distance between the machine and the power mains connection, so that voltage drops under full load do not exceed 4% (10% when starting up) of the rated voltage specified on the data plate.
- The user must:
 - fit a plug that respects the current regulations onto the power supply cable;
 - connect the machine to its own electrical connection fitted with a suitable differential circuit breaker;
 - fit power supply protection fuses sized in compliance with the specifications in the main wiring diagram of this manual;
 - provide the workshop electrical system with an efficient grounding circuit.
- To prevent unauthorized use of the machine, always disconnect the power supply plug when the machine is not used (switched off) for extended periods of time.
- If the machine is connected directly to the power supply by means of the main electrical panel and without the use of a plug, a key-operated or pad lockable switch must be installed to restrict machine use exclusively to qualified personnel.



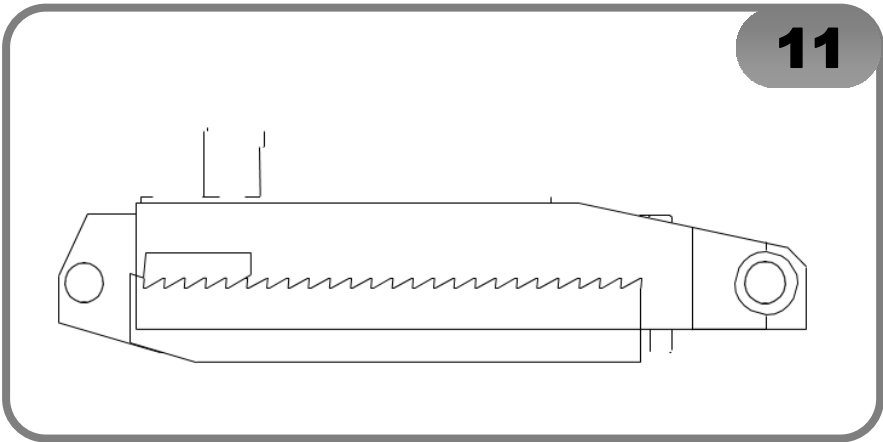
WARNING

**A good ground connection is essential for correct operation of the machine.
NEVER connect the ground wire to the gas pipe, water pipe, telephone line or other unsuitable item.**

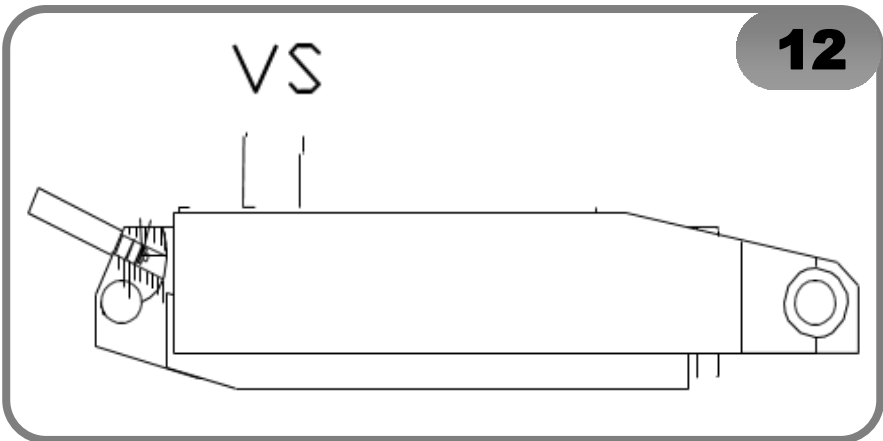
SAFETY DEVICE SPECIFICATIONS

The lift is provided with safety devices granting the user maximum safety in the event of failure. The safety devices are the following:

Mechanical device: this device is essentially composed of a claw and a rack (see fig. 11), and immediately stops the sudden downstroke of the lift (within 100 mm height) in the event of hydraulic line failure or a blow-out in the circuit. Therefore, this essential device must always be kept in perfect efficiency and any tampering with or removal is forbidden. It is pneumatically operated.



Hydraulic device: it is the burst valve (see fig. 12) positioned on the discharge of the lifting cylinder, which has the function of stopping the sudden downstroke of the lift in the event of hydraulic pipe breakage. The valve is calibrated so that the lift downstroke speed will be lower than the value set by the regulations in force.



Electronic aligner (fig.13): this device consists of 2 position transducers (potentiometers) and the electronic control board.

The electronic control board reads the signals from the two position transducers to constantly check whether the misalignment of the two runways has reached or exceeded 50 mm; if so, the circuit board cuts out the current function immediately, and switches the lift to "alarm" status.

For further information on the behavior of the lift in case of misalignment between the runways, read the Chapter "Light and audible signals".

The device does not cover the runways of the built-in lift table.

Anti-crushing safety device: the control board interrupts the downstroke movement when runways reach a height of approximately 780 mm from the ground and emits an intermittent sound. To continue the downstroke movement, release the button being pressed and press it again so that the runways can complete their downstroke until the lift completely closes.



WARNING

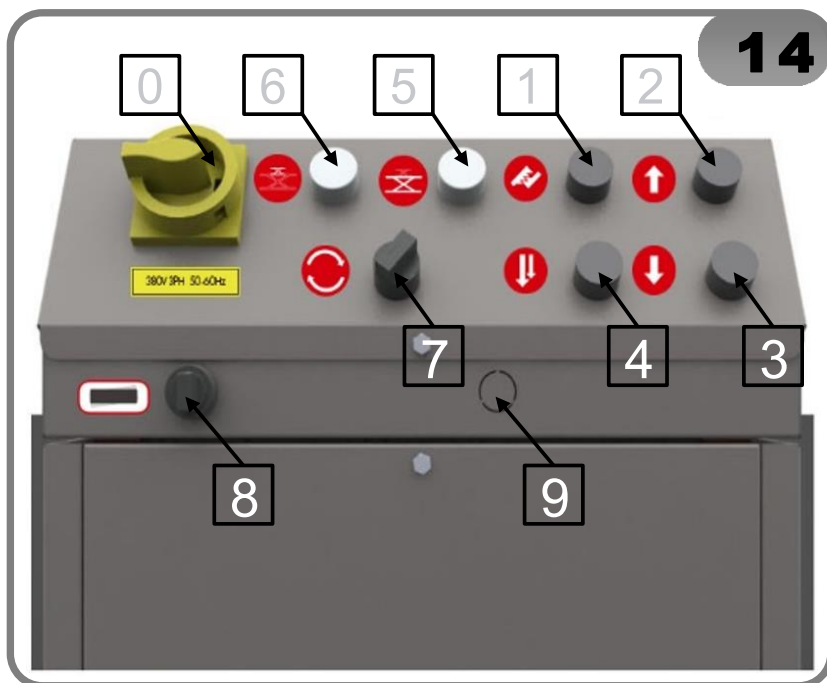
No safety devices must ever be tampered with, disabled, moved or removed, as this might put the operator at risk. The manufacturer declines all liability deriving from failure to comply with the above rule.

OPERATING PROCEDURES

Lift controls:

The individual functions of each control on the panel are describes below.

- 0. Main Switch - Simply turn the main switch clockwise to switch on the control unit (from 0 to 1). The switch may be padlocked in position "0" to prevent unauthorized use of the lift.
- 1. Main Lift Safe Parking Button - If the button is pressed directly, the lift begins to descend but without raising the pawls of the mechanical safety devices, and the built-in lift table will remain held on the mechanical safety devices;
- 2. Main Lift Up Button - By pressing this button, the lift starts its upstroke.
- 3. Main Lift Down Button - By pressing this button, the lift starts its down stroke.
- 4. End Of Travel Button - If pressed before safety height (500 mm) is detected, it activates the buzzer, while if pressed after safety height is detected, it activates the buzzer and, after a few seconds, it opens the down stroke solenoid valve for the final stroke.
- 5. Power On LED Indicator And Main Lift Selection - The indicator lights up to indicate that the control board is receiving power and that the main lift is being controlled.
- 6. Power On LED Indicator And Lift Table Selection - The indicator lights up to indicate that the control board is receiving power and that the lift table is being controlled.
- 7. Main Lift/LT Selection Switch - It allows the selection of Main Lift or Lift Table
- 8. Slip Plate Locking Selection Switch - It allows locking or unlocking slip plates.
- 9. Service LED light Selector Button - It allows turning on/off the lights of service light system



COMMISSIONING



WARNING

The lift must be commissioned by specially trained staff capable of ensuring that the lift and all its mechanical and electrical safety systems are operating correctly.

The instructions to be followed are provided at the end of this manual, in a section for the use of authorized commissioning staff only.

No persons other than the personnel of the Manufacturer's Support Service or of third-party companies authorized to perform technical maintenance work must be allowed to perform any of the procedures described.



WARNING

Any damage deriving from failure to follow the instructions given above cannot be charged to the manufacturer and may cause the warranty to become null and void.

ROUTINE MAINTENANCE



WARNING

The "Spare parts" handbook does not authorize the user to carry out work on the machine with the exception of those operations explicitly described in the operator's manual, but enables the user to provide the technical assistance service with precise information, in order to reduce delay.



WARNING

The Manufacturer declines all liability for problems and/or damages deriving from the use of non-original spare parts or accessories.



WARNING

It is forbidden to change any operating pressure calibration value for the maximum-pressure valves or the pressure limiter.

The manufacturer declines all liability for damage caused by tampering with these valves.



WARNING

Before proceeding with any adjustment or maintenance work, disconnect the machine from pneumatic and electric power supply, and check that all the moving parts are locked in place.



WARNING

Do not remove or modify any part of this machine.



WARNING

Keep the working area clean.

Never use compressed air, water jets or aggressive chemical substances to remove dirt or residues from the machine.

When cleaning, try as far as possible to avoid generating or raising dust.

Maintenance by unauthorized staff is strictly forbidden.

MAINTENANCE

3 Months	Hydraulic circuit	Check oil tank level; refill if needed. Check the circuit for oil leakage. Check seals for proper conditions and replace them, if necessary.
	Foundations bolts	Check bolts for proper tightening and tighten with a torque wrench.
	Hydraulic pump	Verify that no noise changes take place in the pump of the hydraulic control unit when running and check fixing bolts for proper tightening.
	Safety system	Check safety devices for proper operation.
6 Months	Oil	Check oil for contamination or ageing. Contaminated oil is the main reason for failure of valves and shorter life of gear pumps.
12 Months	General check	Check all framework components and check mechanisms to verify the absence of any faults and malfunctions.
	Electrical system	A check of the electrical system to verify that control unit motor, limit switches and control panel operate properly must be carried out by skilled electricians.
24 Months	Oil + oil filter	Change oil + hydraulic pump filter.
10 Years	Complete check	New hoses, pins removed, bushes replaced/ inspected, Hydraulic cylinder seals replaced as well as oil.

MAKE	HYDRAULIC CONTROLS	GREASE LUBRICATION
API	46	PIGREASE LT-S
MOBIL OIL	DTE24	MOBIL PLEX 46
SHELL	TELLUS	ALVANIA Ep 1

LIFT USAGE

The lift must be used by authorized personnel only. Remember that any use by staff not familiar with the procedures specified in this manual might cause dangers. Machine operation is as follows:

MAIN LIFT

Positioning the vehicle: after positioning the vehicle on the runway of the lift be sure that the wheels are as centered as possible on the center line of the runways, then block the parking brake of the vehicle to avoid dangerous movements.

If the lift table is used, you must introduce the spacing pads between the lift and the vehicle. position them on the proper supports designed by the vehicle manufacturer and as lined up as possible with the center line of the runway.

Lifting the vehicle: turn on the main switch and press the Up button (2). Once the desired working height is reached, release the button. Lowering the lift: switch on the machine; press the Down button (3) The lift will move up for approximately 1.5 seconds to release the pawl of the mechanical safety device from the rack (should they have been voluntarily engaged) and then begin to move down.

Safe parking: switch on the machine; press the Safe parking button(1).

The lift starts to move down immediately, keeping the mechanical safety devices lowered; keep the button pressed until the safety devices of both runways are firmly engaged with the teeth underneath.

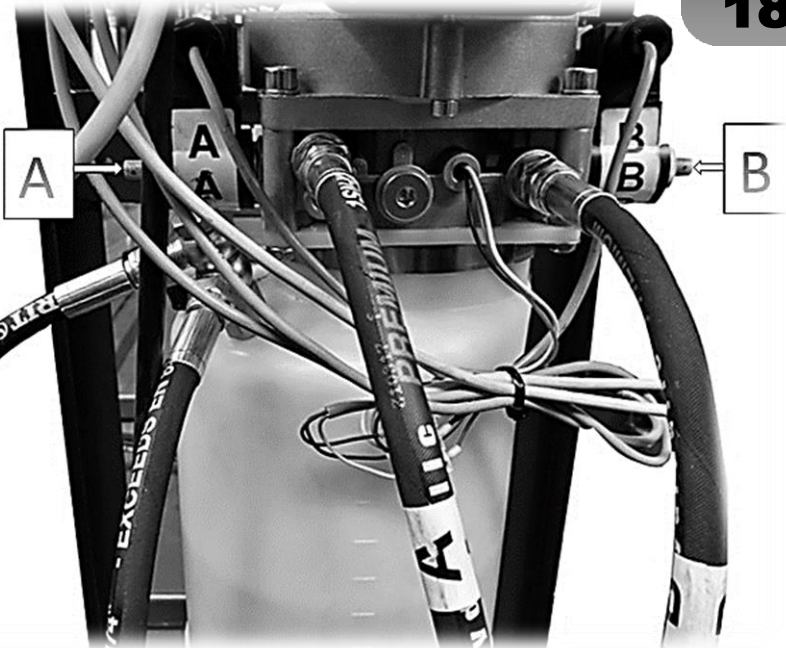
MANUAL EMERGENCY MOVEMENT

1. Turn off the main switch
2. Open the control unit door
3. Remove any obstacles under the lift
4. Open the pawls relative to the solenoid valves A and B at the same time taking care to lower the runways with small movements.
5. Carry out the point [4] several times making sure that the lift moves down smoothly and with the runways aligned until they rest on the ground.
6. Remove the vehicle.
7. Restore the conditions of use.

After the vehicle has been lowered from the lift and the problem that caused the misalignment has been resolved and the machine has been brought back into working condition, always carry out a complete unloading upstroke and downstroke to verify the correct functioning of the lift and its safety devices.



After manual lowering, restore lift to normal operating conditions.

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STORAGE

If the lift is to be out of use for a long period, disconnect the energy supplies, empty the tank(s) containing operating fluids and protect any parts which might be damaged by dust.

SCRAPPING

If the lift is to be decommissioned, it must be made inoperative by removing the power unit (the hydraulic pump and electric motor) from the control unit.

All parts that might be sources of danger must be made harmless. Assess the lift's category in relation to waste disposal.

Scrap as metal and electronic waste, consigning the various parts of the lift to the appropriate collection centers.

If the lift is classified as special waste, dismantle it and subdivide its parts by type, then dispose of them as required by law.

Environmental information

This product can contain substances that can be hazardous for the environment and for human health if not disposed of appropriately

Therefore, follow the instructions below to avoid releasing these substances and to improve the use of natural resources.

Electrical and electronic equipment must not be disposed of together with the normal urban waste. On the contrary, they must be sent to the selective waste collection for their correct treatment.

The crossed-out bin symbol, placed on the product and on this page, reminds the user that the product must be disposed of properly at the end of its life. This prevents the inappropriate disposal of the substances contained by this product, or the improper use of some of them, from having hazardous consequences for the environment and human health. Furthermore, this helps to recover, recycle and reuse many of the materials contained in these products.

For this purpose, producers and distributors of electrical and electronic equipment organize adequate collection and disposal systems for the equipment itself.

At the end of the product life, contact your distributor for further information on the collection procedures.

When purchasing the product, your distributor will inform you about the possibility to hand in an old machine at the end of its life cycle free of charge, provided it belongs to an equivalent type and that it had the same functions as the purchased one.

A product disposal not complying with what described above will be subject to the sanctions provided for by the law in force in the country where the disposal takes place. Moreover, we recommend you to adopt other environment-friendly precautions: recycle the inner and outer packaging with which the product is supplied and dispose of old batteries appropriately (only if contained in the product).

With your co-operation, we can reduce the quantity of natural resources used for the production of electrical and electronic equipment, minimize the use of landfill for the disposal of materials and improve the quality of life by avoiding the release of potentially dangerous substances into the environment.

RECOMMENDED FIRE EXTINGUISHING EQUIPMENT

For guidance on the most suitable type of ex-tinguisher, refer to the table below:

	Dry materials	Inflammable liquids	Electrical equipment
Water	YES	NO	NO
Foam	YES	YES	NO
Powder	YES	YES	YES
CO ₂	YES	YES	YES

YES* Can be used if more suitable equipment is not available, or for small fires.



WARNING - This table contains general instructions to be used as guidelines for the users. All the applications of each type of extinguisher must be obtained from the relevant manufacturer.

INFORMATION AND WARNINGS ABOUT OIL

Disposal of waste oil

Do not dispose of waste oil in sewers, storm drains, rivers or streams; collect it and consign it to an authorized disposal company.

Oil leaks or spills

Contain the spilt product from spreading using soil, sand or any other absorbent material. The contaminated zone must be degreased with solvents, taking care not to allow vapors to form or stagnate, and the residual material from the cleaning process must be disposed of as envisaged by law.

Precautions for the use of oil

- Avoid contact with the skin.
- Avoid the formation or spreading of oil mists in the atmosphere.
- The following fundamental health precautions must therefore be adopted: Avoid spatters (suitable clothing, protective shields on machines).
- Wash frequently using water and soap; do not use irritants or solvents that remove the skin's protective sebum coating.
- Do not dry your hands using soiled or greasy rags.
- Change your clothes if soaked or, in any case, at the end of the work shift.
- Do not smoke or eat with greasy hands.
- Also adopt the following preventive and protective measures:
- Mineral oil resistant gloves with plush lining.
- Goggles, in case of spatters.
- Mineral oil resistant aprons.
- Protective shields, in case of spatters
- Mineral oil: first aid procedures
- Ingestion: seek medical attention immediately and provide all characteristics of the type of oil ingested.
- Inhalation: for exposure to high concentrations of fumes or oil mist, move the affected person to the open air and seek medical attention immediately.
- Eyes: rinse with plenty of running water and seek medical attention immediately. Skin: wash with soap and water

TROUBLESHOOTING

Trouble:	Possible cause:	Solution:
The lift does not work	The main switch is not turned on	Turn the switch on.
	There is no power	Restore voltage.
	Electrical cables are interrupted	Replace.
	Fuses are blown	Replace.
The lift does not move up	The motor direction of rotation is not correct	Exchange two phases.
	The oil in the tank is not sufficient	Add hydraulic oil.
	The UP button is faulty	Check UP button and its connection. Replace, if needed.
	Lowering valve stays open	Check and clean if dirty. Replace if faulty.
	The suction pump filter is dirty	Check and clean if necessary
	The pump is faulty	Check the pump and replace if needed.
The lifting capacity is not sufficient	Oil leakages in hydraulic unit	Check the maximum pressure and the drain solenoid valve.
The lift does not lower when the DOWN button is	The down solenoid does not work correctly	Verify if it is powered and check its magnet for damage (replace if disconnected or blown)
Pressed (without load)	The DOWN button is faulty	Replace the button
	The lowering and locking solenoid valves stay opened	Verify that solenoid valve sliders are not blocked
Platforms do not stop in parking position	Leakage in at least two hydraulic pipelines	Check connections for proper tightening and tubes for damage (replace if damaged).
The lift does not lower smoothly (jerky motion)	At least two hydraulic cylinders are faulty	Check and replace if necessary.
	Air in the hydraulic system	Bleed the hydraulic system.

COMMISSIONING

The machine must be commissioned by specially trained personnel, in order to assure the correct operation of the lift and all its mechanical and electrical safety systems.

The commissioning procedures for the electrical, hydraulic and safety systems and the accessories are described in the following paragraphs.

Carry out the steps of the commissioning procedure in the order given below, to avoid malfunctions that may damage the machine and put the safety of personnel at risk.



WARNING

The manufacturer declines liability for any damages resulting from failure to follow the above instructions, which may invalidate the warranty.

Electrical system

Switch on the control panel with the main switch and check that the pilot light (white) illuminates. Then press and hold the start button for a few seconds and check that the motor turns in the correct direction; if the motor starts but the lift does not move up, swap two of the phases of the power cable. Then check operation again.

Hydraulic and pneumatic system

When commissioning the hydraulic system carry out the following operations:

Power the control panel.

- a) Carry out some up/down complete cycles. Check that no oil leakage from pipe fittings, or air ones from the pneumatic system are present. Tighten fittings if leakage is present.
- b) Stay for a few seconds in travel end position with the lift table to bleed air from pipes and cylinders
- c) For LT models, provide for the lift table adjustment procedure following the operating directions reported in paragraph "ROUTINE MAINTENANCE".
- d) Check the oil level in the tank is correct when the lift is completely lowered.

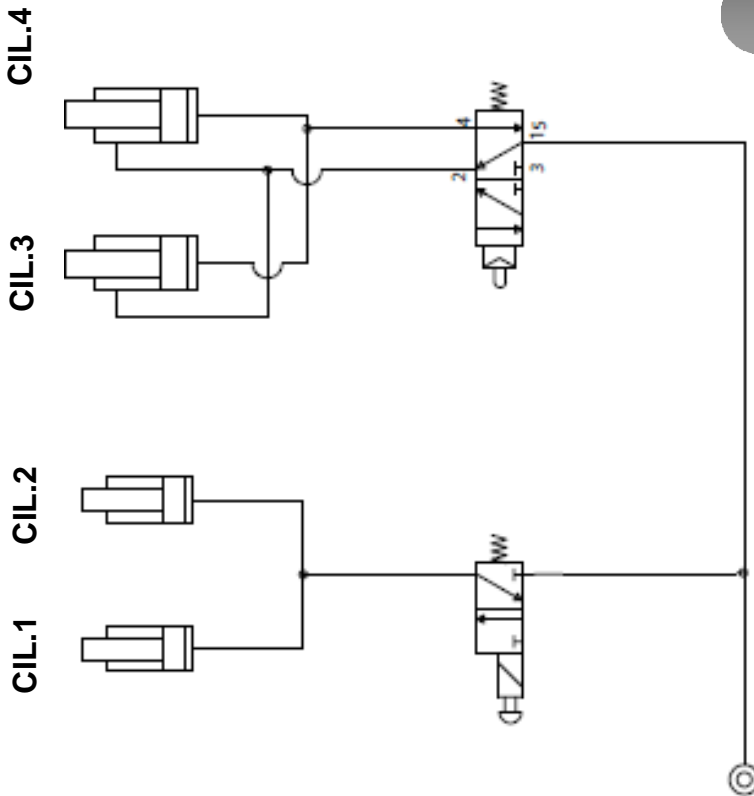
PNEUMATIC SYSTEM DIAGRAM FOR CT LT

Fig. 19

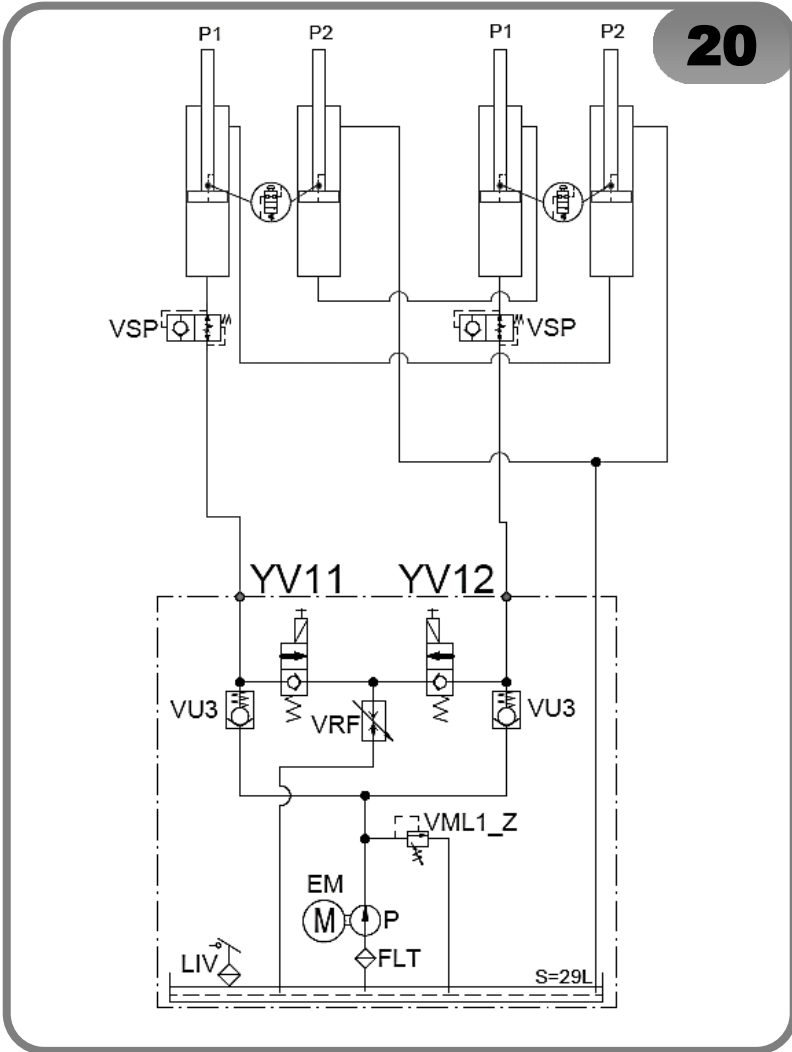
- VM MANUAL SLIP PLATE LOCKING VALVE
 YV2 MECHANICAL SAFETY DEVICE SOLENOID VALVE
 CIL.1 CYLINDER OF LH MECHANICAL SAFETY DEVICE FOR MAIN LIFT
 CIL.2 CYLINDER OF RH MECHANICAL SAFETY DEVICE FOR MAIN LIFT
 CIL.3 CYLINDER OF LH MECHANICAL SAFETY DEVICE FOR LIFT TABLE
 CIL.4 CYLINDER OF RH MECHANICAL SAFETY DEVICE FOR LIFT TABLE

LIFT TABLE IS NOT AVAILABLE IN AUSTRALIAN MARKET

19



HYDRAULIC CIRCUIT DIAGRAM FOR MAIN LIFT



VSP	Parachute Valve (safety)
YV11	Down Valve
YV12	Down Valve
VRF	Oil flow-Control 8 l/min
VU3	Check valve
VML	Maximum Pressure Valve (Pmax 290 bar)
LIV	Floating level switch

P1	Master cylinder
P2	Slave cylinder
EM	Electric motor 3kW
P	Pump (4,8cc for 3ph - 3,0cc for 1ph)
FLT	Filter
S	Oil tank 18 L

WIRING DIAGRAM

Fig. 21 - 22

FU	FUSE Gg-500 10.3x38 16A	SB3	Drop button LA22C
FU1	FUSE Gg-500 5x20 1A	SB4	Drop button LA22C
FU2	FUSE Gg-500 5x20 4A	TC1	Transformer 200W 400V/24V(110W) 24V(90W)
HA1	BUZER AD16-22SM	YV11	Drop solenoid valve
HA2	BUZER AD16-22SM	YV12	Drop solenoid valve
KM1	AC contactor CJX2-1801 24ACV	YV2	Pneumatic solenoid valve
KM2	AC contactor CJX2-1801 24ACV	SW	Switch LC22C
M1	Motor 3kW	T1	Time Relay ET-41
M2	Motor 3kW	YVT1	Drop solenoid valve
QS1	Switch 32A	YVT2	Drop solenoid valve
SQ1	Float switch	HL1	White indicator light ND16-22DS/4(2)
SB1	Safe drop button LA22C	HL2	White indicator light ND16-22DS/4(2)
SB2	Rising button LA22C		

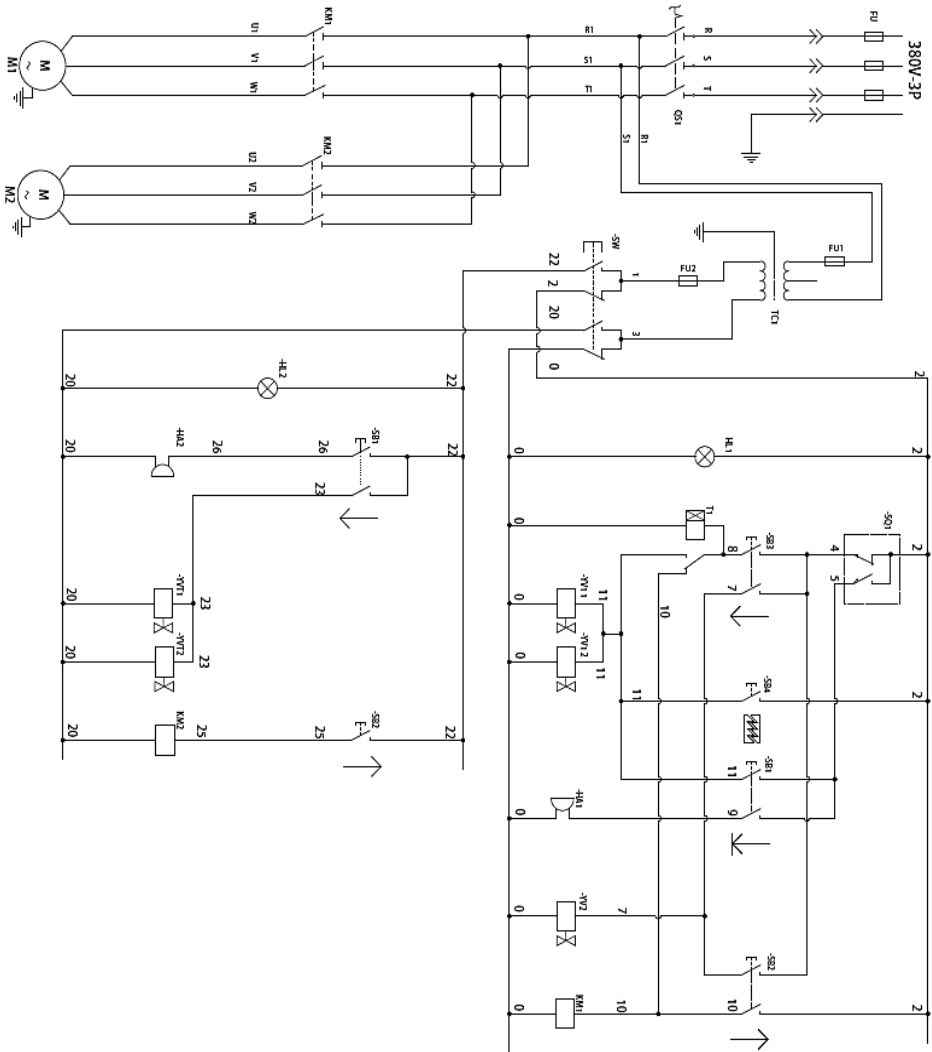
Fig. 23

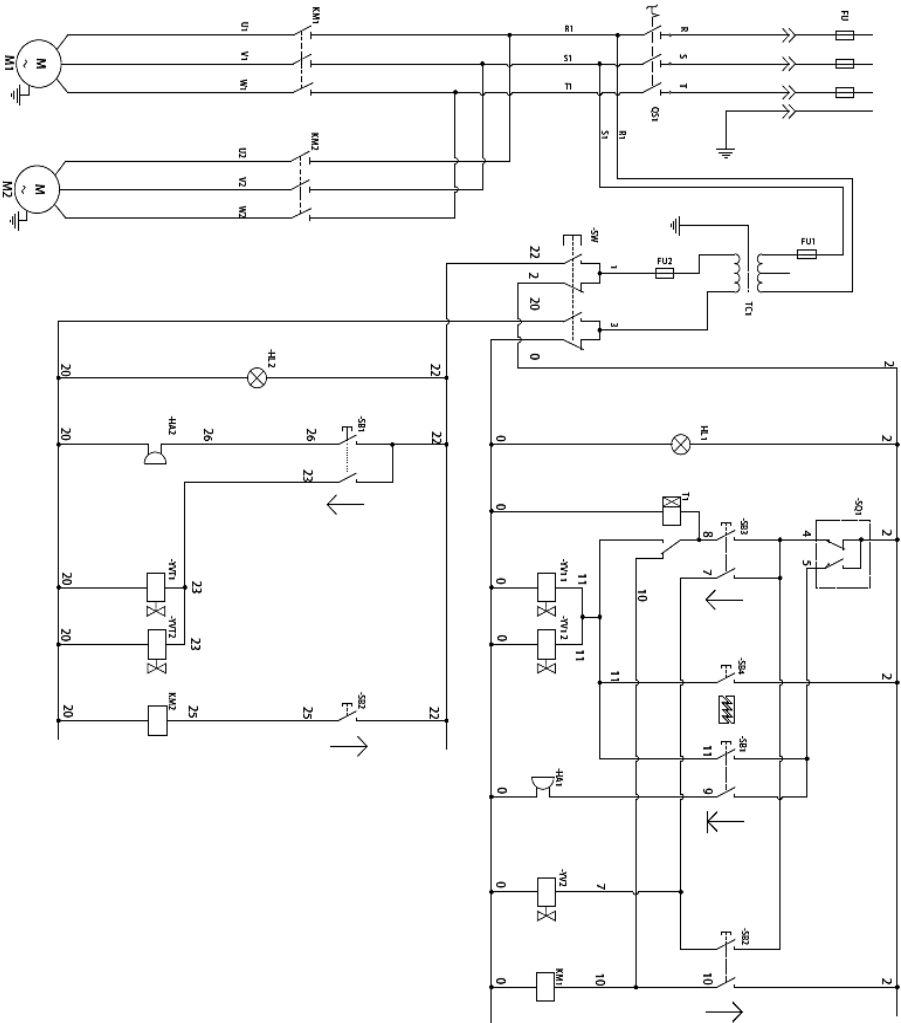
FU	FUSE Gg-500 10.3x38 32A	SB3	Drop button LA22C
FU1	FUSE Gg-500 5x20 1A	SB4	Drop button LA22C
FU2	FUSE Gg-500 5x20 4A	TC1	Transformer 200W 400V/24V(110W) 24V(90W)
HA1	BUZER AD16-22SM	YV11	Drop solenoid valve
HA2	BUZER AD16-22SM	YV12	Drop solenoid valve
KM1	AC contactor CJX2-1801 24ACV	YV2	Pneumatic solenoid valve
KM2	AC contactor CJX2-1801 24ACV	SW	Switch LC22C
M1	Motor 3kW	T1	Time Relay ET-41
M2	Motor 3kW	YVT1	Drop solenoid valve
QS1	Switch 32A	YVT2	Drop solenoid valve
SQ1	Float switch	HL1	White indicator light ND16-22DS/4(2)
SB1	Safe drop button LA22C	HL2	White indicator light ND16-22DS/4(2)
SB2	Rising button LA22C		

Version 400V - 3PH

WIRING DIAGRAM

21

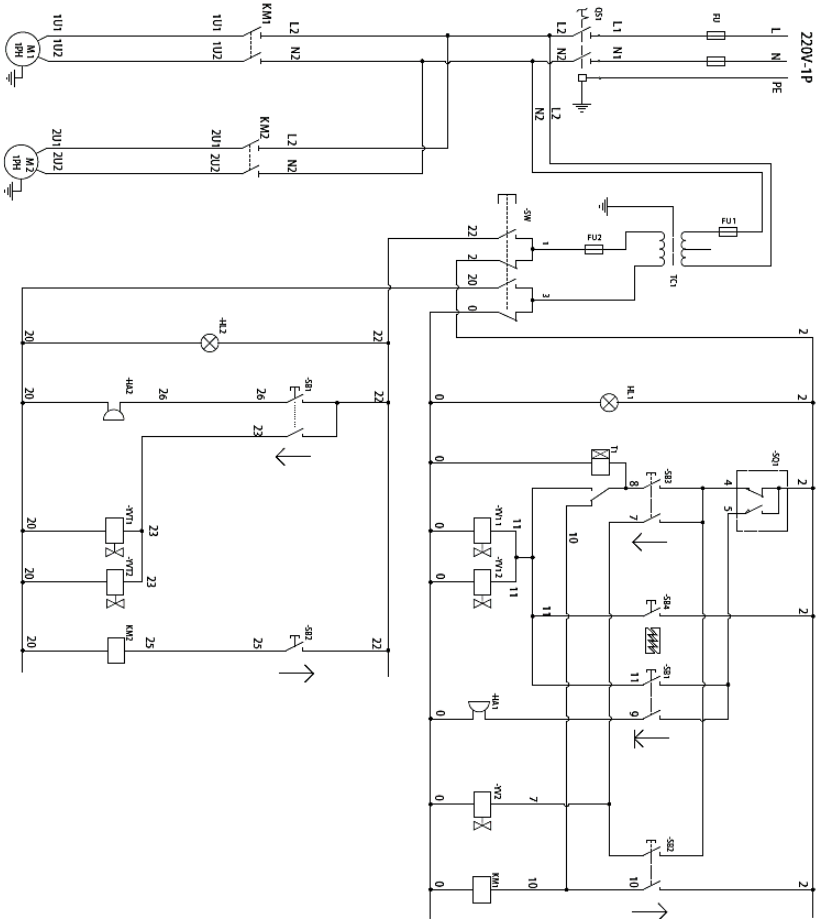




Version 230V - 1PH

WIRING DIAGRAM

23

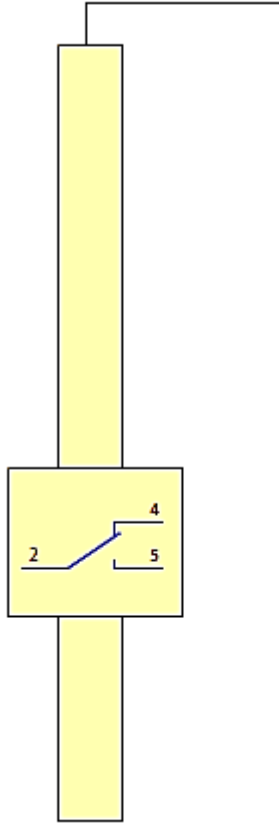


Main Lift

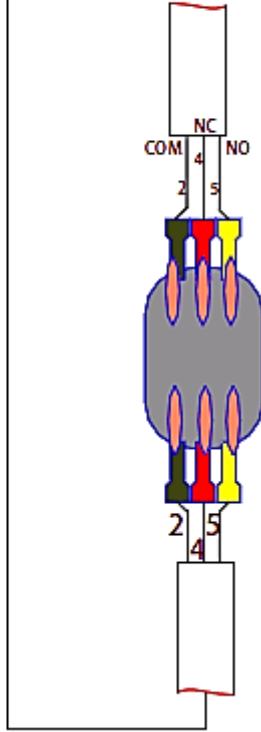
LEVEL SWITCH CONNECTION

24

-SQ1



- 2 BLACK
- 4 RED
- 5 YEL LOW



Design Registrations
CM5500-A - WSV-0150526975
CM5500-AL - WSV-0150536800

Installer Checklist

Installer must complete (tick) the following list after installing this Molnar hoist:

- Legal clearances around hoist
- Floor is suitable and within manufactures specifications
- Wire ropes, pulleys and/or hoses are free of any damage
- Safety devices, limit switches and controls have been checked for correct operation
- Check the side and top arm stop bolts are installed, tightened and functioning by extending and testing both stages of all arms
- Hydraulic system checked and leak free at time of installation
- Hoist tested without and with load as per manufactures specifications
- Hoist has been lubricated and adjusted as per manufactures specifications
- Log book use has been explained to owner/operator and initial details completed
- The client representative has been shown and instructed in the correct operation and maintenance of the hoist

Distributor (vendor)

Company

Branch

Hoist

Installation Date

Model Number

Serial Number

Hoist Owner

Business

Name

Position

Signature

Installer Details

Name

Company

Signature

These records should be retained for administrative and warranty assistance.

Log books are available from Molnar Services or Molnar Hoists distributors. Part Number: **8209001 - Hoist Log Book Kit**