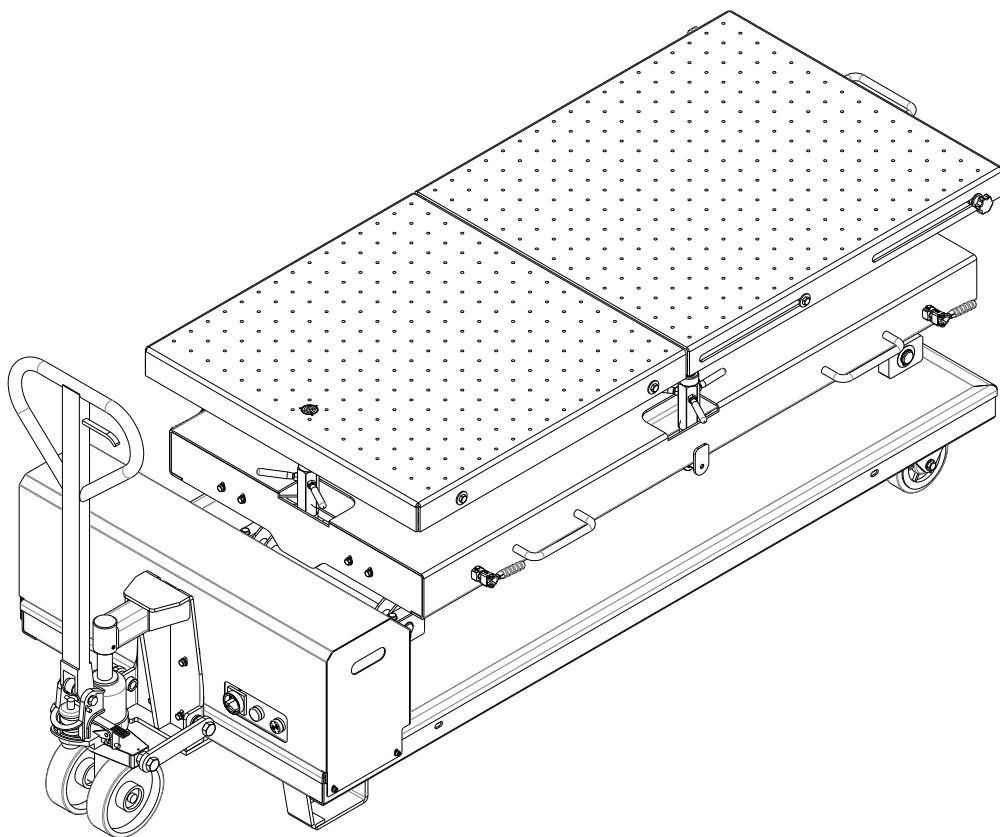
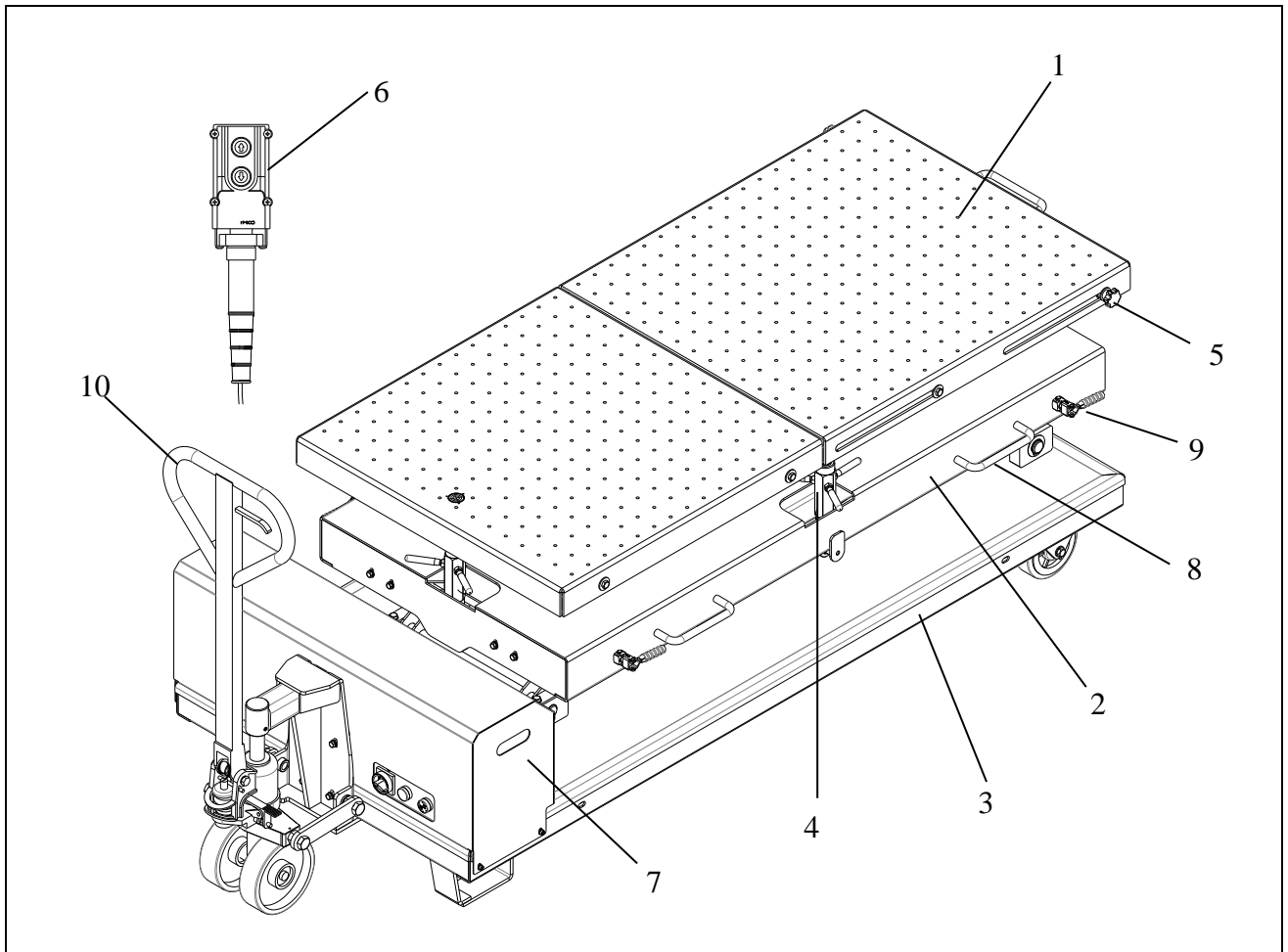


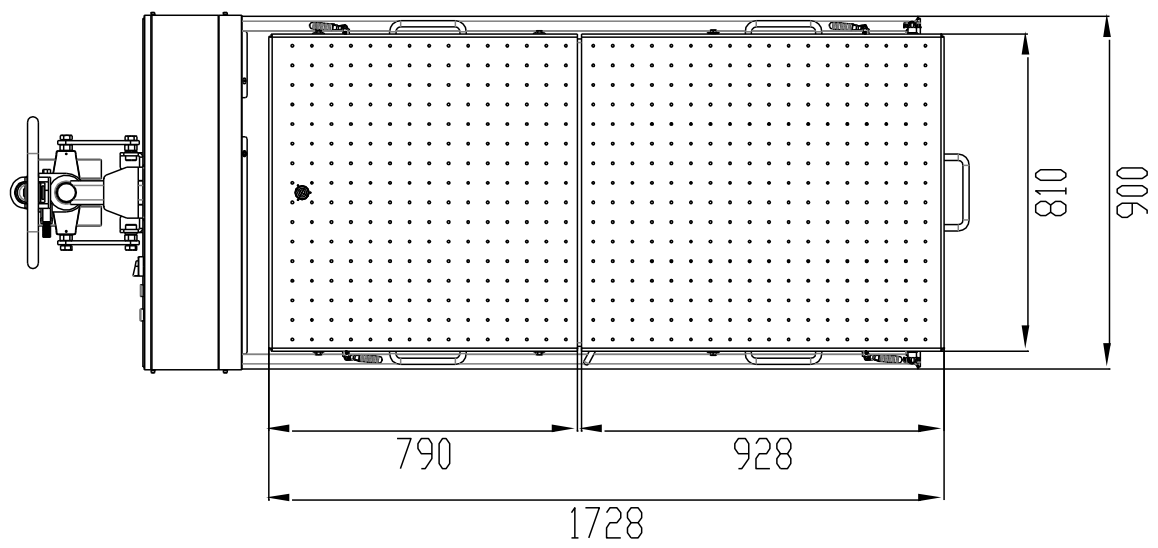
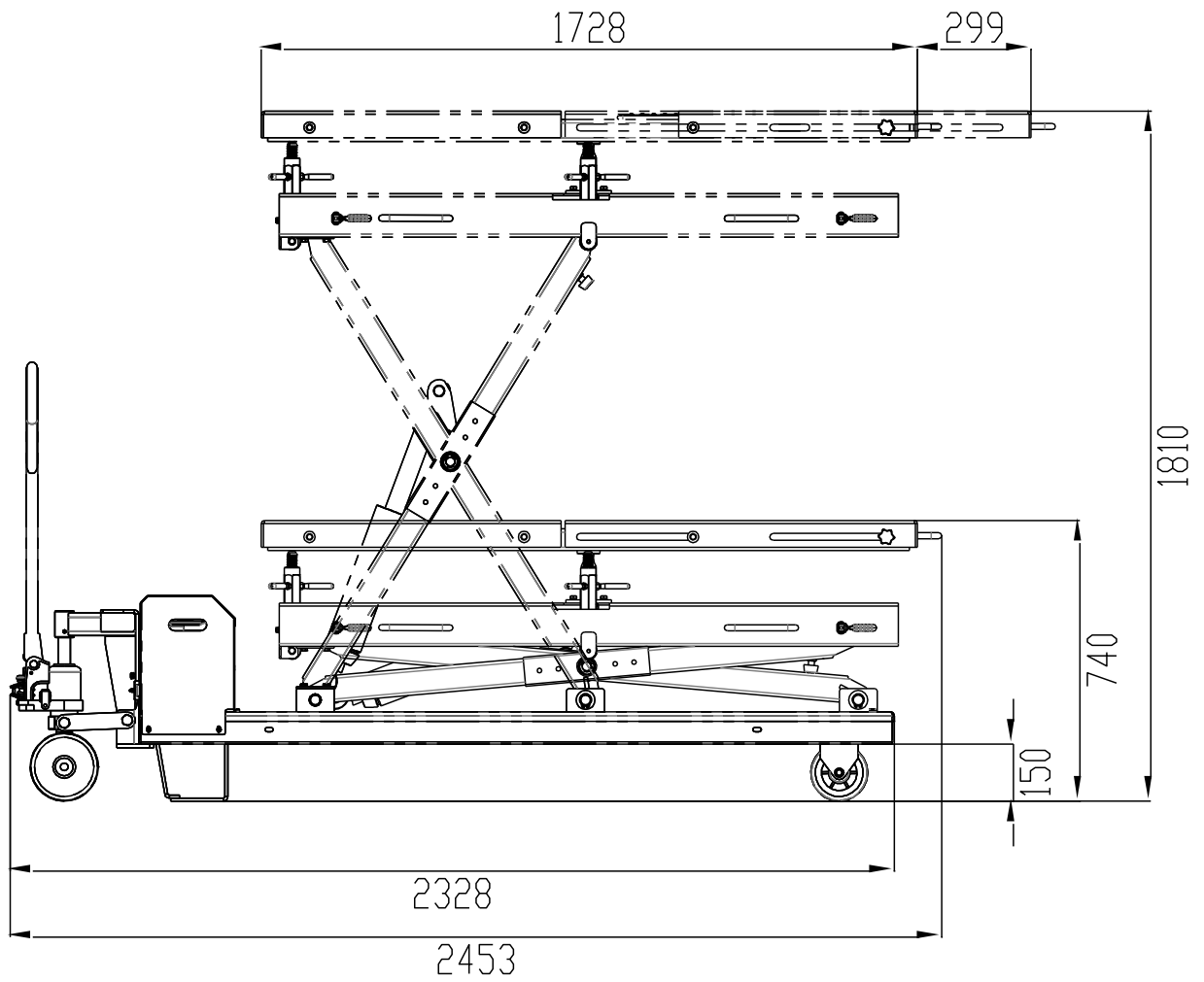
**USE
AND
MAINTENANCE
MANUAL
ELT-3300
ELECTRIC/HYDRAULIC
PORTABLE LIFT**

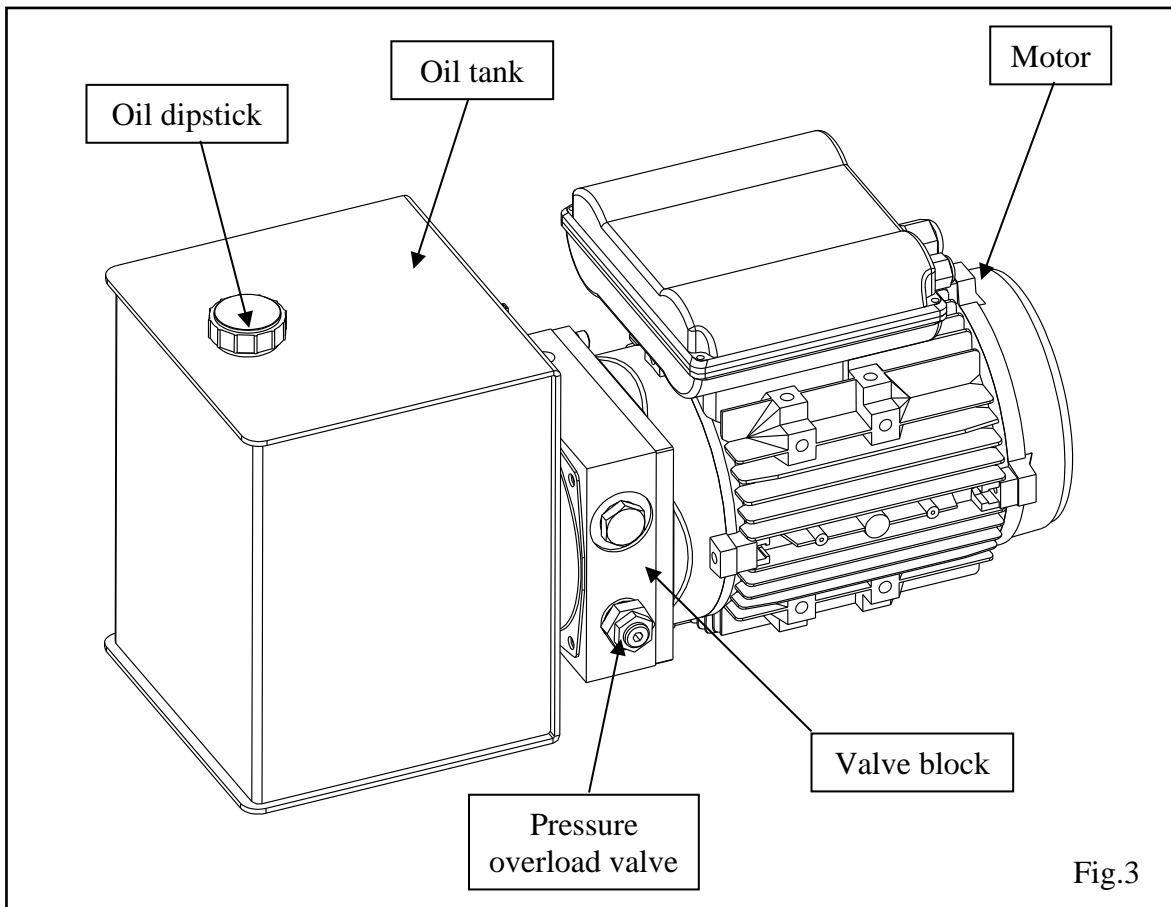





5.3 PUMP

Type	Gear
Flow rate	2.1 cm ³ /g
Continuous working pressure	190 bar





	<p>The manufacturer is not liable for possible damages to people, vehicles or objects resulting from an improper or unauthorized use of the lift.</p> <p>AW-32 Oil recommended</p> <p>3300 lbs. Maximum lifting capacity</p>
---	---

For operator and people safety, a safety area at least 3 feet away from the lift must be vacated during lifting and lowering. The lift must be operated only from the operator's control site in this safety area.

--	--


6.1 GENERAL WARNINGS

- neither remove nor disconnect hydraulic, electric or other safety devices;
- carefully follow the safety indications applied on the machine and included in the manual;
- observe the safety area during lifting
- be sure the motor of the vehicle is off, the gear engaged and the parking brake put on;
- Verify that no one is on the platforms during lifting.

6.2 RISKS DURING VEHICLE LIFTING

To avoid overloading and possible breaking, the following safety devices have been used:

- a maximum pressure valve placed inside the hydraulic unit to prevent excessive weight.
- A special design of the hydraulic system, in case of pipeline failure, to prevent sudden lift lowering..

	The maximum pressure valve has been preset by the manufacturer to a proper pressure. DO NOT try to adjust it to overrun the rated lifting capacity.
---	--

During lowering the lift, personnel must not be within the area covered by the lowering trajectory. The operator must be sure no one is in danger before operating the lift.



Fig. 7a



Fig. 7b

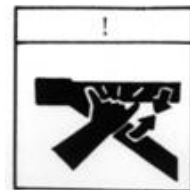


Fig. 7c

6.5 BUMPING RISK

When the lift is stopped at relatively low height for working, the risk of bumping against projecting parts occurs.



Fig. 8

6.6 RISK OF THE OBJECT FALLING FROM THE LIFT

Object falling from the lift can be caused when the vehicle is improperly placed on platforms, and when its dimensions are incompatible with the lift or by excessive movement of the vehicle. In this case, keep immediately away from the working area.



Fig. 9a



Fig. 9b

6.7 SLIPPING RISKS

Slipping can be caused by oil or dirt on the floor near the lift.

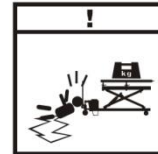



Fig. 10

	<p>Keep the area under and around the lift clean. Remove all oil spills.</p>
---	---

6.8 ELECTROCUTION RISKS

Avoid use of water, steam, and solvent, varnish jets in the lift area where electric cables are placed and, in particular, next to the electric panel.

6.10 RISKS OF BREAKING COMPONENT DURING OPERATION

Materials and procedures, suitable for the designed parameters of the lift, have been used by the manufacturer to build a safe and reliable product. Operate the lift only for the use it has been designed for and follow the maintenance schedule shown in the chapter “Maintenance”.



Fig. 11

6.11 RISKS FOR UNAUTHORIZED USES

The presence of unauthorized persons next to the lift and on the table is strictly forbidden during lifting as well as when the load has been already lifted

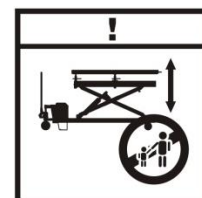



Fig. 12

	<p>Any use of the lift other than that herein specified can cause serious accidents to people in close proximity of the machine.</p>
---	---



Only skilled technicians, appointed by the 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.

7.1 CHECKING FOR PLACE SUITABILITY

The lift has been designed to be used in covered and sheltered places free of overhead obstructions. The working place must not be next to washing areas, painting workbenches, solvent or varnish deposits. 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. All areas next to the lift must be well and uniformly lit.

7.2 CONCRETE SURFACE

The lift must be placed on the concrete surface sufficiently resistant. The surface must be suitable for bearing maximum stress values, also in unfavorable working conditions. The surface must be perfectly leveled.

7.5 START



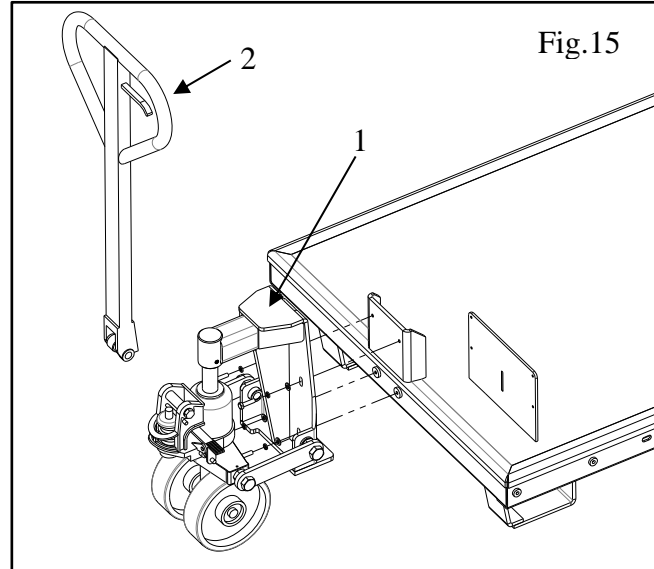
During this procedure, DO NOT attempt to raise the lift with any load.

- Make sure all pins and bolts are secure. Lift has 110-volt motor
- Make sure no leakage in hydraulic line
- Make sure the working area is free from people and objects


- Pour oil in the tank (*about 6 liters more than one time*)
- Verify that the control unit is powered
- **IF MOTOR GETS HOT OR SOUNDS PECULIAR, STOP IMMEDIATELY AND RECHECK THE ELECTRIC CONNECTIONS**
- Raising the lift slowly by pressing the lifting button until cylinders bottom out and the lift stops. **DO NOT** continue pressing button after lift reaches full height. Damage to motor can occur if continued.
- Repeat raise and lower the lift completely at least 3 times to remove the air from the hydraulic system completely.

7.7 INSTALLATION OF MOBILE JACK

- Use the supplied M8X30 screws and D.8 washers to fix the main jack (Fig.15-1) to the support welded on the base frame according to Fig.15.
- Install the jack handle (Fig.15-2) on the main jack by the supplied shaft and cotter pin.




7.8 CHECK WITHOUT LOAD

	During this procedure, observe all operating components and check for proper installation and adjustment. DO NOT attempt to raise lift until a thorough operation check has been completed.
---	--


Complete two or three complete cycles of lowering and lifting and check:

- the safety devices for proper operation
- proper oil level in the tank
- no leakage and blow-by in hydraulic line
- cylinder for proper operation
- the horn/signaling light for proper operation during the lowering travel

7.9 CHECK WITH LOAD

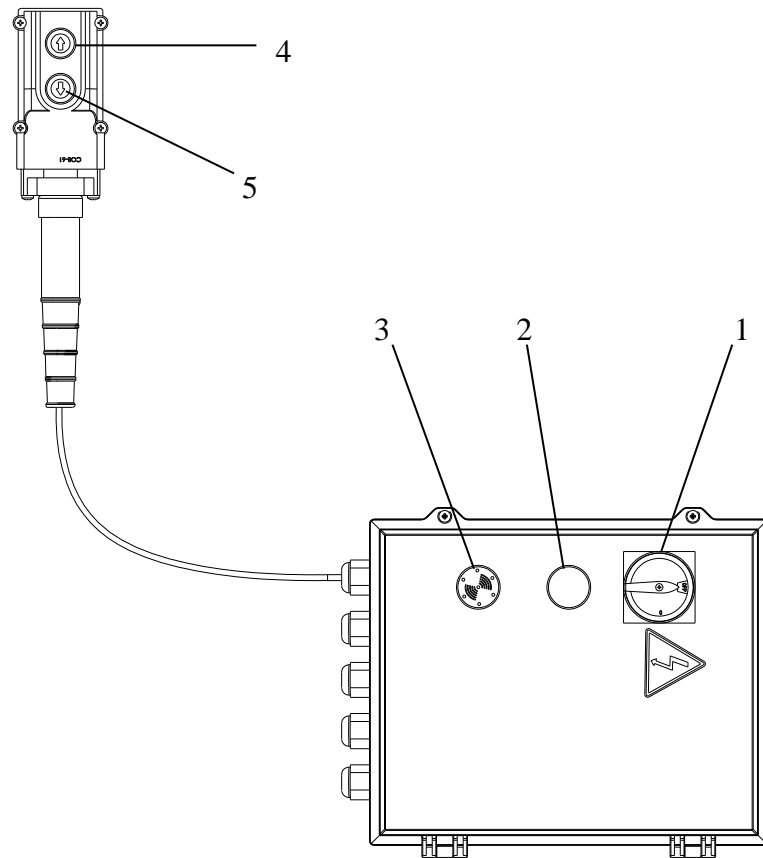
	WARNING: The lift is not to be raised with the load before the rollers of movable jack leave from the floor. Lift table must be in the lowered position when moving the lift table.
---	--

CHAPTER 8 - OPERATION AND USE

	Never operate the lift with any person or equipment underneath. Never exceed the rate lifting capacity. Do not permit the electric control unit to get wet!
---	--

8.1 CONTROLS

CONTROL PANEL (Figure 16)



SWITCH (1)

The switch can be set in two positions:

- **0 position:** the lift electric circuit is not powered; the switch can be padlocked to prevent the use of the lift.
- **1 position:** the main electric circuit is powered.

PILOT LAMP (2)

BEEPER (3)

LIFTING BUTTON (4)

- When pressed, the electric circuit for the lift operates the motor and hydraulic circuit to raise the lift.

LOWERING BUTTON (5) WHEN pressed, the lift begins to descend under its weight and the load lifted, in the meantime the beeper is activated and the sound can be heard.

8.2 TO RAISE THE LIFT



It is extremely forbidden to load the battery when the mobile jack wheels still support the base frame. Failure to do so can cause the danger

- Position the lift just under the battery.
- Press the lifting button to raise the top platform until it almost touches the battery, then adjust the screws (Fig.1-4) manually so that the battery could be placed on the platform horizontally.
- Press the lifting button until the battery could be supported by the top platform completely.
- If the battery has been demounted from the car, check to be sure the battery is secured tightly on the top platform.



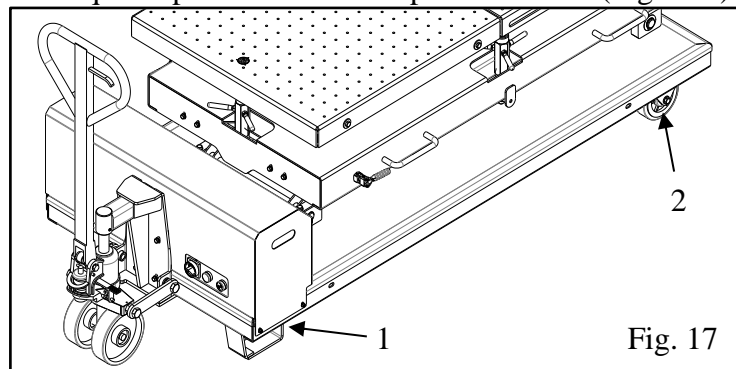
Failure to do so could make the battery slip out of the top platform to cause serious damage.

8.3 TO LOWER THE LIFT

- Be sure the safety area is free of people and objects;
- Press the lowering button to lower the lift;

8.4 TO MOVE THE LIFT

- ***Make sure to lower the lift completely before moving the lift.***
- Check to be sure the mobile jack is connected to the lift tightly;
- Before moving, check to make sure to provide an accessible exit.
- Raise the lift by mobile jack until the base support (Fig.17-1) leaves from the floor.
- Move the lift to the required place under the help of the rollers (Fig.17-2) fixed on the base frame.



To move the lift with the raised load could cause serious damage and injury.

CHAPTER 9 - MAINTENANCE


	Only trained personnel must be allowed to service the lift.
--	--

To service properly the lift, the following has to be carried out:

- use only genuine spare parts
- follow the scheduled maintenance and check periods shown in the manual

Refer to documents supplied by the dealer to carry out maintenance:

- functional drawing of the electric and hydraulic equipment
- exploded views with all data necessary for spare parts ordering
- list of possible faults and relevant solutions.

	Before carrying out any maintenance or repair on the lift, disconnect the power supply.
---	--

9.1 ORDINARY MAINTENANCE

The lift has to be properly cleaned at least once a month using self-cleaning clothes. Lubricate all pivot pins at least once a week.

--	--

Be sure the rod of the hydraulic cylinders is always clean and not damaged since this may result in leakage from seals and, as a consequence, in possible malfunctions.

9.2 PERIODIC MAINTENANCE

Every 3 months	Hydraulic circuit	<ul style="list-style-type: none"> ▪ check oil tank level; refill with oil, if needed; ▪ check the circuit for oil leakage. ▪ check seals for proper conditions and replace them, if necessary;
	Hydraulic pump	<ul style="list-style-type: none"> ▪ verify that no noise changes take place in the pump when running. Check bolts for proper tightening
	Safety system	<ul style="list-style-type: none"> ▪ check safety devices for proper operation
Every 6 months	Oil AW-32	<ul style="list-style-type: none"> ▪ check oil for contamination or ageing. Contaminated oil is the main reason for failure of valves and shorter life of gear pumps.
Every 12 months	General check	<ul style="list-style-type: none"> ▪ verify that all components and mechanisms are not damaged
	Electrical system	<ul style="list-style-type: none"> ▪ a check of the electrical system to verify that motor and control panel operate properly must be carried out by skilled electricians
	Oil	<ul style="list-style-type: none"> ▪ empty the oil tank and change the hydraulic oil if needed.

CHAPTER 10 – 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	Check Power on to restore if necessary
	The electrical wires are disconnected	Reconnect
	Fuses are blown	Replace
The lift does not raise		
	The oil in the hydraulic unit is not sufficient.	Add hydraulic oil
	Presences of air in the hydraulic circuit	Bleed the hydraulic system
	The UP button is faulty.	Check UP button and connection for proper operation. Replace, if needed
	The maximum pressure valve is faulty	Check and clean if dirty or replace if needed
	The lowering solenoid valve does not close.	Check and clean if dirty or replace if faulty
	The pump filter is dirty.	Check and clean if needed.
	The pump suction is blown	Check the seal and replace if needed
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).
	The DOWN button is faulty	Check and replace if needed
The lift does not lift or lower smoothly	Leakages or presences of air into hydraulic circuit	Bleed the hydraulic system
	The pump filter is dirty.	Check and clean if needed.
	The pump suction is blown	Check the seal and replace if needed