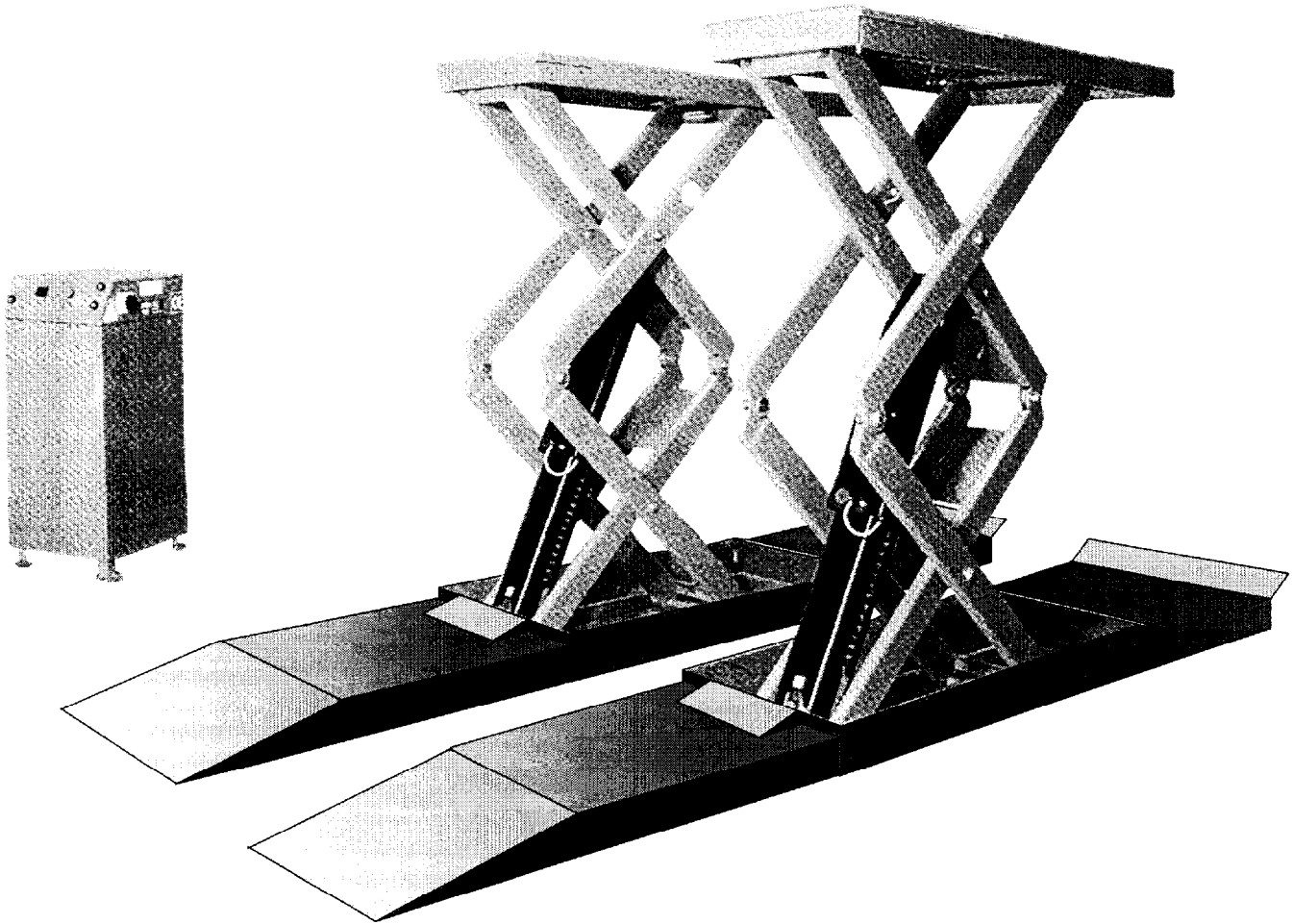




INSTALLATION AND OPERATION MANUAL

COBRA



7000 lb. (3175 kg.)

Capacity



309 EXCHANGE AVENUE, CONWAY, ARKANSAS, 720
TEL: 501-450-1500 FAX: 501-450-1585

Model JBC35196

6-1869 SEPT. 1998

TABLE OF CONTENTS	PAGE
1. SAFETY AND OPERATING INSTRUCTIONS	2
2. SPECIFICATIONS	3
3. CONTENTS	4
4. TOOLS REQUIRED FOR INSTALLATION	5
5. INSTALLATION INSTRUCTIONS	5
5.1 Bay Layout	5
5.2 Positioning of the Runways	6
5.3 Hydraulic Installation	7
5.4 Electrical Installation	8
5.5 Bleeding the Hydraulic System	10
5.6 Pneumatic Line Installation	11
5.7 Leveling and Anchoring Procedure	13
5.8 Checking Limit Switches	14
6. OPERATION OF THE LIFT	15
6.1 Initial Operation	15
6.2 Behaviour and Use During Operation	17
6.3 Lifting and Lowering	18
7. RESITING	18
8. MAINTANANCE	19
9. TROUBLESHOOTING	20
9.1 Problems, Causes, & Remedies	20
9.2 Emergency Lowering	21
10. TECHNICAL DATA	22
11. INDEX	
1. Hydraulic Schematic	23
2. Electrical Schematic	24
12. PARTS MANUAL	25
1. Lift Assembly Diagram	26
2. Hydraulic/Air Diagram	27
3. Parts List	28

1. IMPORTANT SAFETY INSTRUCTIONS

When using this lift, basic safety precautions should always be followed, including the following:

1. Read all instructions.
2. Care must be taken as burns can occur from touching hot parts.
3. Do not operate the lift with a damaged cord or if the lift has been damaged - until it has been examined by a qualified service person.
4. Never allow the cord to be positioned under the lift or in an area where it could get crushed or come in contact with hot or moving parts.
5. If an extension cord is necessary, a cord with a current rating equal to or more than that of the lift should be used. Cords rated for less amperage than the lift may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
6. Never unplug the lift from the electrical outlet during operation. Always disconnect power when not in use. Never yank the cord to pull plug from outlet. Grasp plug and pull to disconnect.
7. To protect against the risk of fire, do not operate lift in the vicinity of open containers of flammable liquids.
8. Adequate ventilation should be provided when working on internal combustion engines.

SAVE THESE INSTRUCTIONS

2. SPECIFICATIONS

Capacity:
 Overall Length (W/ Ramps):
 Overall Width:
 Width Between Runways:
 Platform Length:
 Max. Raised Height:
 Collapsed Height:
 Shipping Weight:
 Power Requirements (Standard):
 Lifting Time:

7000 lb.	3175 kg
183"	4650 mm
76 ½"	1940 mm
31 ½"	800 mm
60" (83" Extended)	1530 mm (2110 mm Extended)
80 ½"	2045 mm
11 ¾"	300 mm
1760 lb.	800 kg
230V, 3Ph. 60Hz.	
45 Seconds	

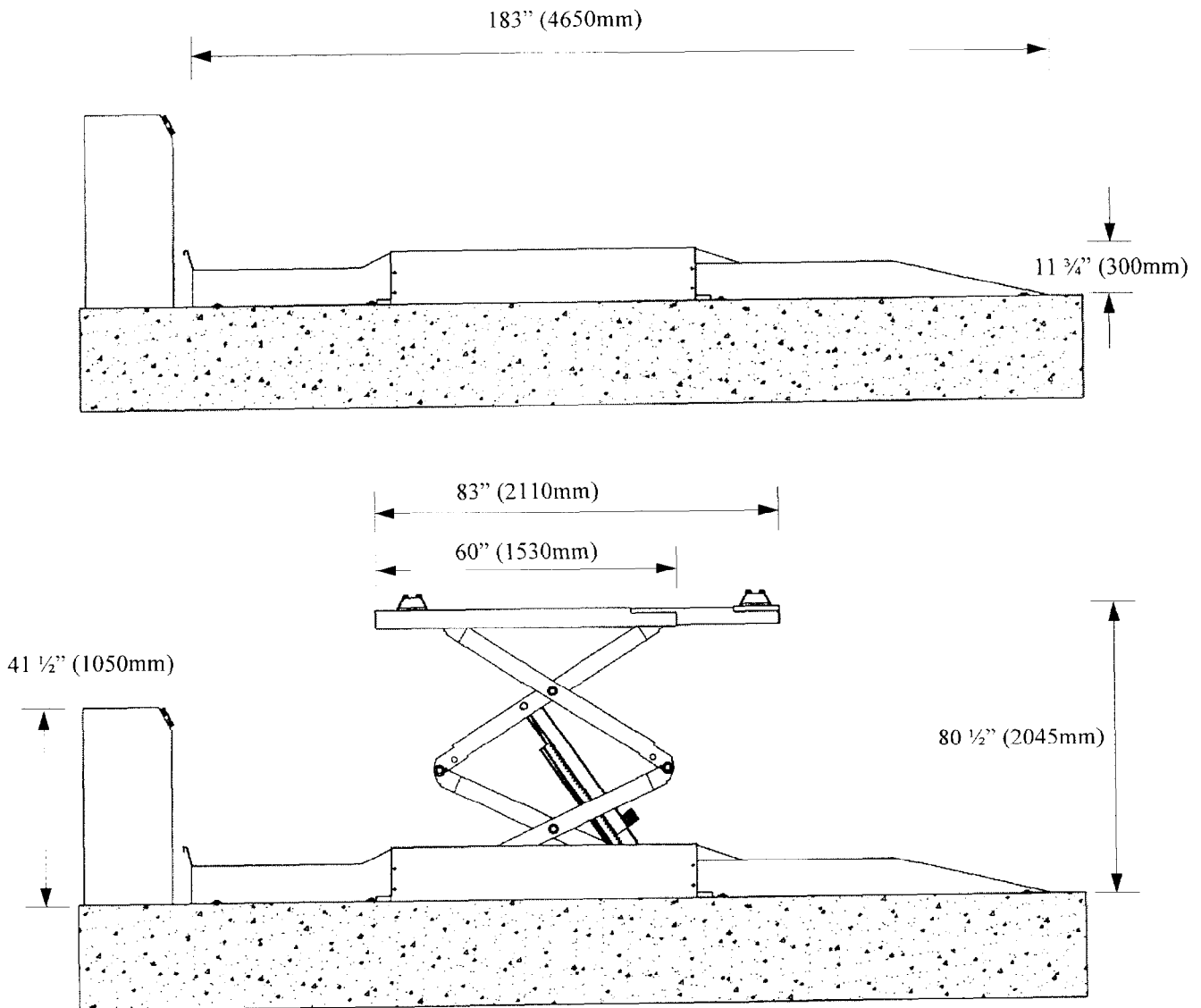


Figure 1: Lift Dimensions

CHECK CONTENTS OF ACCESSORY BOX WITH PACKING LIST ENCLOSED IN BOX.

3. CONTENTS

The complete lift is contained in two (2) packages:

1. The **main structural components** are pre-assembled and packaged one on top of the other.
2. The **4 ramps** are delivered separately.
3. The remaining parts are packed separately in **2 boxes**.

Main Structural Components include:

- 1pc. - Left Side Main Frame Assembly; Runway, Double Scissors and Base Frame
- 1pc. - Right Side Main Frame Assembly; Runway, Double Scissors and Base Frame

Ramps:

- 2pcs. - Approach Ramps
- 2pcs. - Front Wheel Stops

Box 1 Contents:

- 1pc. - Control Desk

Box 2 Contents (Accessories):

- 1pc. - Center Line Cover
- 1pc. - Hydraulic Hose (Labelled "A")
- 1pc. - Hydraulic Hose (Labelled "B")
- 1pc. - Hydraulic Hose (Labelled "C")
- 1pc. - Hydraulic Hose (Labelled "E")
- 1pc. - Pneumatic Line
- 4pcs. - Rubber Pads
- 4pcs. - Shim Plate, 1/16"thk.
- 4pcs. - Shim Plate, 1/8"thk.
- 4pcs. - Shim Plate, 1/4"thk.
- 1pc. - Hardware Kit (comes with separate packing list)

- 1pc. - Owners Manual
- 1pc. - ALI manual "Lifting It Right"
- 1pc. - Automotive Lift Safety Tips
- 1pc. - Automotive Lift, Operation, Inspection, and Maintenance manual

4. TOOLS REQUIRED FOR INSTALLATION:

- * Rotary Hammer Drill or Similar, ½” Concrete Drill Bits
- * 4' Level
- * Metric Wrenches and Sockets
- * Hammer (for anchor installation)
- * Pry Bar (for shim installation)
- * Chalk Line (for lift location)
- * Tape Measure
- * Side Cutters (to cut shipping straps)
- * Screw Drivers
- * Hydraulic Fluid ISO 32 (10 weight hydraulic oil) - (20 liters / 5.3Gal.)

5. INSTALLATION INSTRUCTIONS

When the lift arrives on site, please read the owner’s manual completely. Check the contents to make sure no parts are missing before starting installation. Gather all the tools listed and make sure the installation instructions are fully understood before commencing with the installation.

Only when the hydraulic system has been filled with oil, bled, and the runways have been raised to the final top position, is it possible to connect the pneumatic lines.

IMPORTANT: Lifts should only be installed on level concrete floors with a minimum floor thickness of five (5) inches. Concrete must have a minimum strength of 4,000 psi, and should be aged thirty (30) days prior to installation.

5.1 BAY LAYOUT

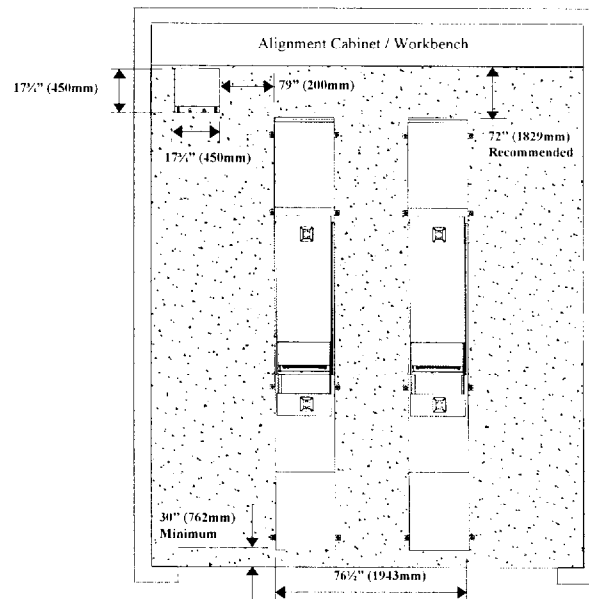


Figure 2: Typical Bay Layout

5.2 POSITIONING OF THE RUNWAYS

1. When transporting the runways to the site, always use suitable means of sufficient load capacity. The same applies for the slinging means used (ropes, chains, etc.). The runways must be lifted according to its center of gravity, to prevent them from slipping or dropping during transport. Always pick up the runways on the underside of the base frame.
2. At the site, position both base frames with the runways on the foundation according to the drive-on direction of the lift (**Fig. 2**).

P1 Primary cylinder (Left Side)

P2 Secondary cylinder (Right Side)

1. Align the runways parallel to each other and in the drive-on direction (**Fig. 8**).
2. Position the control desk at a suitable place provided.

The standard hydraulic and pneumatic lines are designed such that the control desk can be installed approx. 79"(2000mm) from the lift (approx. 70"(1800mm) in case of floor-level installation).
--

5.3 HYDRAULIC INSTALLATION

Before laying the hydraulic lines, the coupling should be sealed (with adhesive tape, textiles, plastic, etc.), to prevent dirt or other objects from entering the lines during installation (see **Fig. 3**)

Connection of the lines

1. Remove the front panel of the control desk.
2. Connect the pre-assembled hoses as shown in the hydraulic diagram (**Fig. 3**).
 - Attach hydraulic hose "A" to cylinder P1 (left side).
 - Attach hydraulic hose "B" to cylinder P2 (right side).
 - Attach hydraulic hose "C" to the branch T fitting located at cylinder P1 (left side).
 - Attach one end of hydraulic hose "E" to cylinder P2 (right side), and the other side to the branch T fitting located at cylinder P1 (left side).
 - Attach the other ends of hydraulic hoses "A", "B", and "C" to the control desk at the corresponding marked connectors, and tighten well.

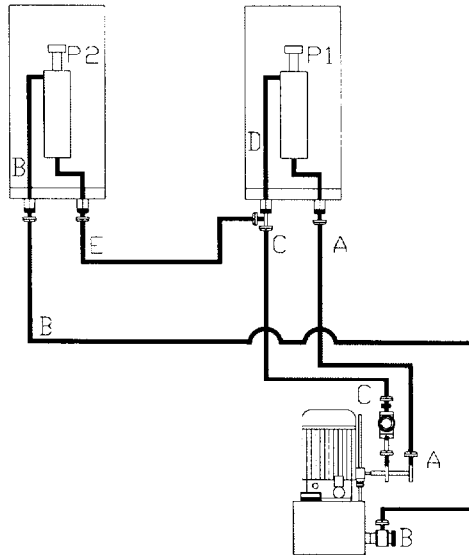


Fig. 3: Hydraulic Schematic. Reference letters for the hydraulic lines and points of connection shown in the figure are the same as those found on the hoses.

NOTE: A detailed hydraulic schematic is included in the Index (**Section 1**)

Hydraulic connections

- A Pressure line, raising of the runways
- B Bleeding and oil return, cylinder P2
- C Oil discharge, runway P1
- D Oil return, runway P1 (automatic leveling)
- E Pressure line, runway P2

The copper seals used with the connectors can only be used once.

5.4 ELECTRICAL INSTALLATION

IMPORTANT: ALL FINAL ELECTRICAL CONNECTIONS SHOULD BE MADE BY A QUALIFIED ELECTRICIAN

- Connect a power cord to the control desk as shown in **Fig. 4**, the electrical diagram.
- Connect control lines (pre-fitted to the lift) to the control desk as shown in the electrical diagram.

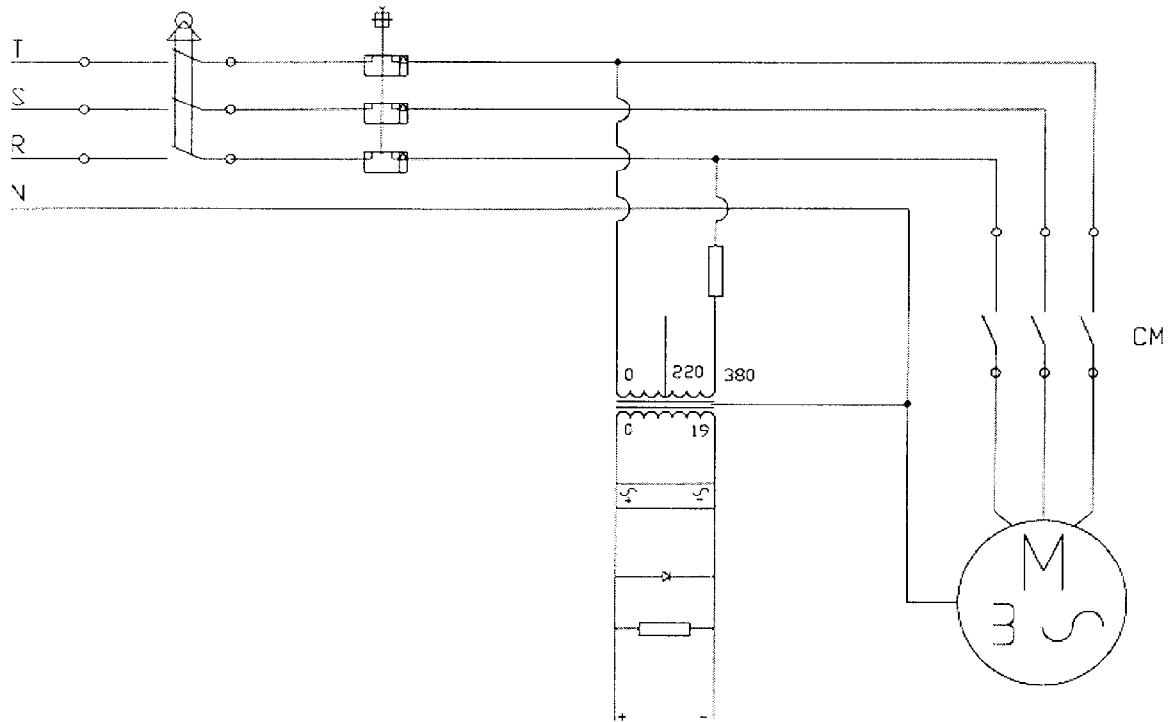


Fig. 4: Electrical Diagram

NOTE: A detailed electrical schematic is included in the Index (**Section 2**)

When all the lines are connected, turn on the main switch (**Fig 5, Item 1**). Set the SELECTION switch to the required position, and check the correct direction of rotation (counterclockwise) of the motor of the hydraulic unit by pressing the UP key (**Fig 5, Item 5**). If the direction of rotation is not correct, interchange the two phases of the main switch.

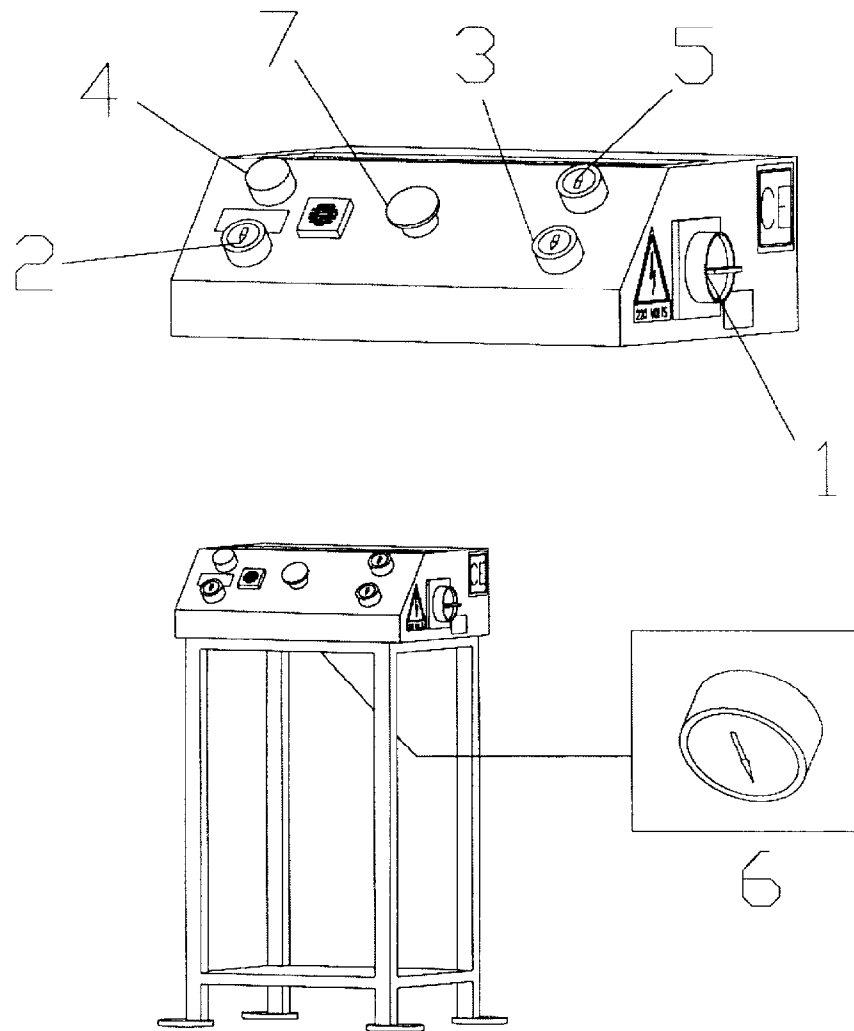


Fig. 5 Power unit and related controls

1. Main Switch
2. Key with double function: for engaging the gear racks, lowering below 15 ¾" (400mm)
3. DOWN key
4. Power Supply LED - ON/OFF
5. UP key
6. RELEASE key: TOP POSITION, PHOTOCELL
7. Emergency key

5.5 BLEEDING THE HYDRAULIC SYSTEM

1. Fill the hydraulic unit with approx. 10 litres (2.7Gal.) of hydraulic fluid ISO 32.
2. Turn on the main switch.
3. Press the UP key and raise the runway P1 (primary cylinder) until it reaches the final top position.
4. Now fill the unit with 5 more litres (1.35Gal.) of hydraulic fluid.
5. To raise the runway P1 to the final top position, press the UP key (**Fig. 5, Item 5**) and the RELEASE key simultaneously (**Fig. 5, Item 6** - having removed the front panel of the control desk). Hold it pressed until runway P1 and P2 are fully raised at the final top position. On reaching the final top position, keep the keys pressed for a further 10 - 20 seconds to bleed the hydraulic system.
6. Connect the hydraulic system now to disengage the gear stick.
7. To completely bleed the system repeat the procedure a total of 3 times.

5.6 PNEUMATIC LINE INSTALLATION

The disengagement of the gear rack and the locking of the slip plates are carried out pneumatically. The pneumatic supply site (to which the pneumatic system of the lift is connected), must be equipped with a servicing unit composed of water separator, oiler and pressure reducer.

1. Raise the lift to the final top position.
2. Connect the pneumatic lines pre-assembled on the runways to the control desk according to the colour markings (**Fig. 6**).

NOTE: Use the ¼” Polytube Adapter (6) to join the supply line (L2) to L4 (12” (300mm) piece sliced from L3 - Accessory Box).

3. Connect the pneumatic system of the lift to a pneumatic supply on site.
4. Check the pneumatic control operations for proper performance. By pressing the DOWN key (**Fig. 5, Item 3**), the gear racks are disengaged.

Fig. 6 Diagram of the pneumatic connections

1. Compressed air supply
2. Servicing unit placed on side of the control desk (optional)
3. Pneumatic solenoid valve
4. Connector to base frames
5. Cylinder for disengaging the upper gear racks
6. ¼” Polytube Adapter

Pneumatic lines

- L1 Pneumatic line to servicing unit (optional)
- L2 Pneumatic line to control the valve in the control desk
- L3 Pneumatic line of the pneumatic cylinders on the gear racks
- L4 Pneumatic line to control the valve in the control desk

5. Press the DOWN key (**Fig 5, Item 3**), and lower the runways completely.
6. Carry out the bleeding once more.

After bleeding, the hydraulic system is ready for operation.

7. Replace the cover of the control desk.

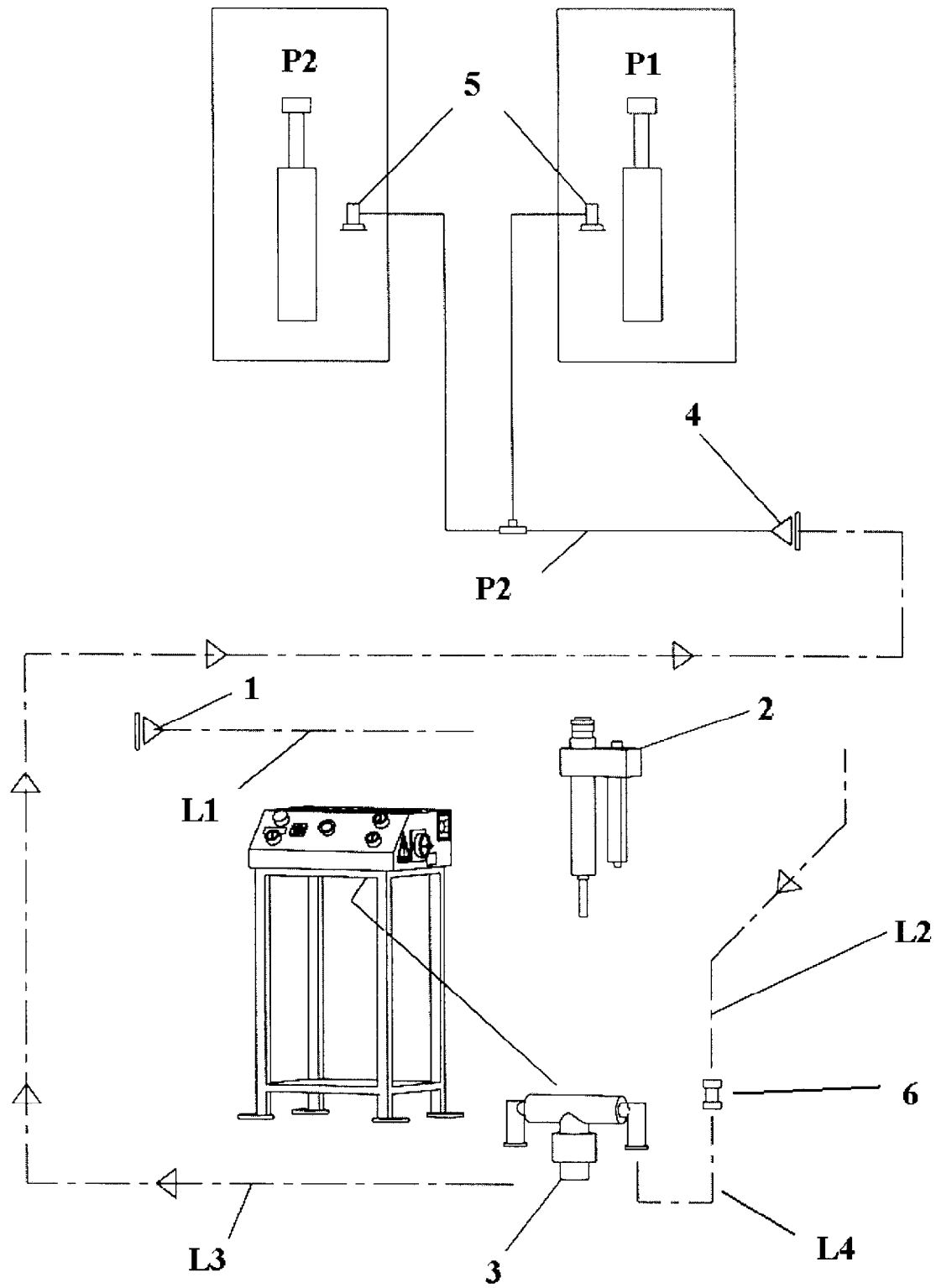


Fig. 6: Pneumatic Line Installation

5.7 LEVELING AND ANCHORING PROCEDURE

When the supply lines are connected, shim and anchor the lift as described below.

NOTE: This is a very important procedure and time must be taken to do it correctly.

1. Raise the lift to a height of approx. 63" (1600mm) and settle on the gear racks.
2. Check the front-to-rear and runway-to runway level of the unit using a 4' level. Locate the highest point on the lift, and if leveling is required, level the unit to the highest point using proper shims.
3. Level each individual runway side-to-side and front-to-rear.
 - Level the unit to within 1/8" (3.2mm) front-to-rear over the entire length of the runways.
 - Level each individual runway to zero side-to-side.
4. Check the runway-to-runway level of the unit using a 4' level. Level the unit to zero deviation, runway-to-runway.
5. Tighten all mounting bolts securely on the baseframe. Lower runways onto the mounting bolts, and adjust bolts making sure the runways are leveled as described above.
6. After proper level is attained, use a rotary hammer drill and a 1/2" concrete drill bit to drill through the floor in the four (4) anchor bolt location holes on each of the base frames. Make sure that the 1/2" concrete drill is in good condition. Refer to **Fig. 7**.
7. Insert the 1/2" x 4 1/2" long wedge anchor bolts supplied, place a flat washer and nut on each anchor. Add shims to fill the space between the floor and the bases. Shim across that base frame from side to side, and front to rear. Tighten securely.

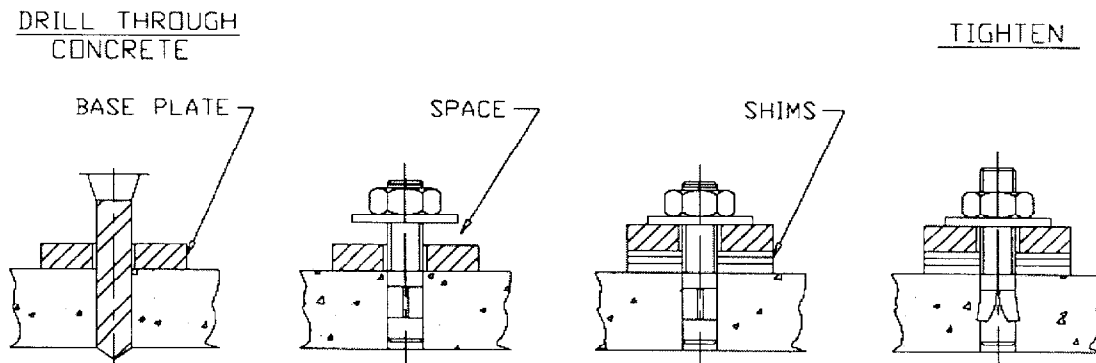


Fig. 7: Anchor Installation

8. Torque all anchor bolts to 150 ft. lbs.
9. With all anchor bolts torqued as specified, operate the lift checking its full operation.

5.8 CHECKING LIMIT SWITCHES

The lift comes equipped with various preset limit switches for monitoring the safety functions or final positions. The control functions of the limit switches is described below. **Fig. 8** shows the location and description of the limit switches on the lift. The connection diagram for the control and safety switches is illustrated in the Index (**Section 2**).

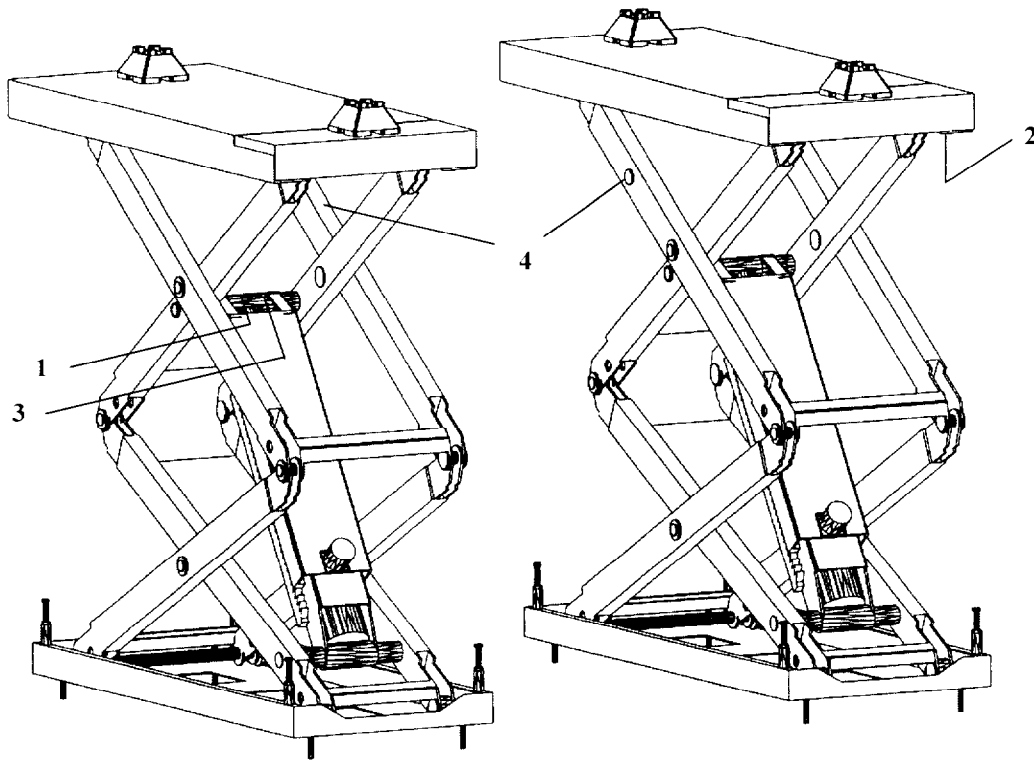


Fig. 8: Designation of the limit switches

1. Final bottom position switch. It controls the vertical leveling of the runways when lowering, since the photocell is not active over the last 15 ¾" (400mm) because the light beam is interrupted by the scissors.
2. Switch for autoleveling of the runways when lowering.
3. Final top position switch.
4. Photocell with refracting mirror to control the leveling of the runways

Procedure for checking the limit switches

When the supply and control lines are connected and the anchor bolts are fitted, check the limit switches for proper performance.

1. To check the limit switches, move the lift to the corresponding control positions of the limit switches in order to check their correct response.
2. If the switch settings are incorrect, the limit switches should be re-adjusted accordingly.

6. OPERATION OF THE LIFT

6.1 INITIAL OPERATION

- **Initial operation may only be carried out by an expert.**
- Check the electrical connections and control leads for proper installation.
 - Visual inspection
- Ensure that the base frames are properly fixed to the ground.
- Lubricate the tracks of the scissors supporting rollers in the pad plates and in the base frames with commercial lubricating grease.
- Check parallelism and the vertical level of the runways.
- Check that all the hydraulic connections are properly positioned and there is no leakage.
 - Visual inspection
- Raise the lift. Check that the hydraulic system has been bled correctly, and if necessary repeat.
- The lift has to raise and lower smoothly and free from jerking over the entire travel.
- Check the controls for proper allocation and performance.
- Check the gear racks for proper engagement. To do so, raise the runways and settle the gear racks at several levels.
- Check the photocell monitoring device for correct performance (**Fig. 5, Item 7**). To do so, obtain a sheet of cardboard or paper having a size of approx. 4" x 4" (100 x 100mm) (**Fig. 9, Item 8**), with a hole of approx. 1" (25mm) in diameter (**Fig. 9, Item 9**). Raise the lift until the photocell and the opposite reflector are no longer concealed by the lifting scissors. In this position, place the hole of the sheet of cardboard or paper in the centre of the reflector (**Fig. 9, Item 11**).
 - Now press the UP key. The lift must travel up. If this is not the case, the light beam transmitted by the photocell does not coincide with the free zone of the reflector.
 - Correct the alignment of the lift accordingly, so that the light beam coincides with the reflector.
 - Repeat this check in the middle of the travel range (approximately) and in the final top position.

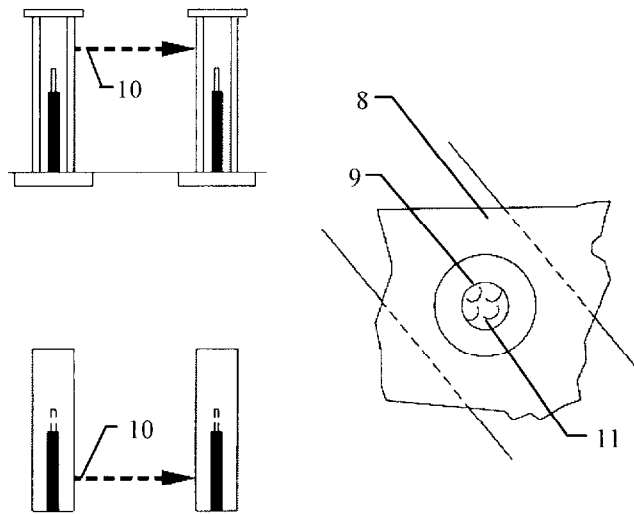


Fig 9: Photocell Test

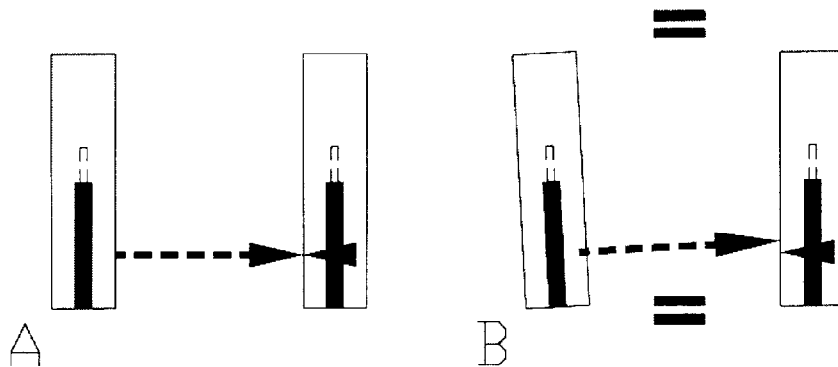
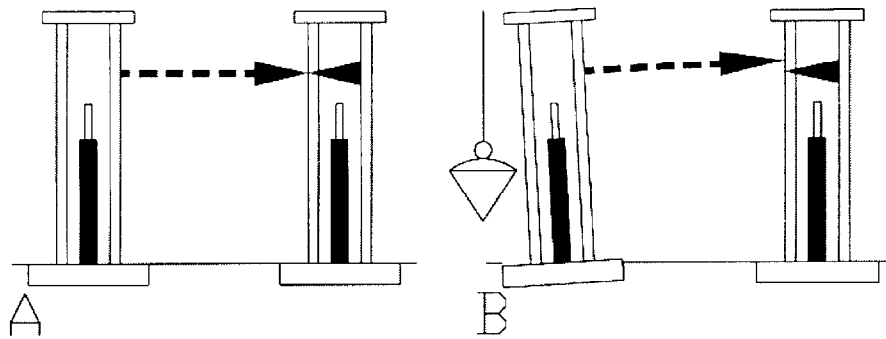


Fig. 10 Function check of the photocell monitoring device - examples of incorrect positioning of the runways. **A** - Correct alignment. **B** - Examples of misalignment where correction is necessary

- Bleed the manual pump for emergency lowering: open the vent screw (Fig22, Item 9) and press the UP key until the hydraulic oil emerges at the vent screw. Now close the vent screw.
- Position and adjust the covers for the lines and secure.
- Check whether the cover panels of the control desk is correctly fitted (Visual inspection)

The lift is now operative.

Note

During the initial phase, disturbing noises may occur. These are usually due to the fact that the sealing of the hydraulic cylinders is still new. These are to allow air in the hydraulic system at the various bearing points of the axle bearings or roller tracks. If these noises do not disappear after a certain time, check their cause and remedy accordingly.

6.2 BEHAVIOUR AND USE DURING OPERATION

- The safety devices must not be manipulated, made inoperative or removed.
- Only properly trained and authorized operators should be allowed to operate the lift.
- The rated load capacity of 7700lbs. (3500 kg) on the lift must never be exceeded (take into account any additional load in or on the vehicle to be lifted).
- It is obligatory that the operator observe both the runways and the vehicle when lifting or lowering.
- While lifting or lowering, it is dangerous to stay under the runways (working area).
- Climbing the raised vehicle or the runways is strictly forbidden.
- The operator should avoid to keep scattered objects on the ground that might prevent the runways from traveling to the final bottom position when lowered.
- In case of trouble, press the EMERGENCY key. Inspection and the resetting of the lift into operation must always be carried out by an expert.
- Before carrying out any maintenance on the lift, disconnect the power supply, and close the main switch in order to prevent unauthorized persons from switching the power on.

6.3 LIFTING AND LOWERING

- Before driving a vehicle on or off the lift, ensure that the lift is at the final bottom position.
- Drive the vehicle slowly onto the runways until all wheels are fully accommodated on the runways.
- Prevent vehicles from rolling off the runways. All safety chocks have to be provided and perfectly working.
- Press the UP key (**Fig. 5 Item 5**), to lift the vehicle to the required level.
- At this level, check that the vehicle is correctly accommodated.
- Now raise the vehicle to the required working height.
- Press the safety key with the double function to settle the gear rack (**Fig. 5 Item 2**).
- Press the DOWN key to lower the runways. Upon operation of the DOWN key, the runways first move upwards to disengage from the gear racks. The lowering motion first stops at a height of 15 ¾" (400mm) above the bottom position. Then the operator has to make sure that neither persons nor objects are within the working area. If so, it is possible to press the safety key (**Fig. 5 Item 2**) and lower the lift to the final bottom position. When the safety key is pressed, a beep sound can be heard over the entire travel.
- Before driving the vehicle out of the lift area, remove the rubber pads.

7. RESITING

To resite the lift, demount and re-install it on the new site as described in this manual.

Initial operation and safety inspection of the resited lift has to be carried out by an expert.

8. MAINTENANCE

Regular maintenance in line with the specifications is the basis for proper and reliable performance of the lift. Failure to carry out maintenance may impair the performance and reliability of the lift which represents a risk to both personnel and the vehicle.

- Before carrying out any maintenance on the lift, disconnect the power supply and close the main switch to prevent unauthorized persons from switching it on.
- The lift has to be cleaned at least once a month. Do not use hoses, steam jets or harsh detergents.

Note: Immediately wipe away any spilt brake fluid as it will attack and damage the protective coating of the lift.

- It is particularly important to insure that the piston rods of the hydraulic cylinders are always clean and not mechanically damaged. This might result in leakage of the seals and consequent malfunction of the lift. The piston rods are wear-resistant. Therefore, damage to their surface is always due to use of force or improper maintenance.

The following steps have to be performed at regular intervals, depending on the frequency of use of the lift:

- Check the hydraulic lines and unions for leakage and mechanical damage. The hydraulic lines have to be replaced at the prescribed intervals.
- Likewise, check the pneumatic lines and unions for leakage and mechanical damage.
- Lubricate the tracks of the scissors supporting rollers on the runway using a commercial lubricating grease.
- Change the hydraulic fluid every 5 years. Used oil must be disposed of in accordance with local regulations.
- Check all the safety devices for proper performance.

Defective parts must be replaced by an expert only

If this advise is not followed and the user replaces any parts or assemblies that are important for the safety of the lift, vehicle and/or personnel, the user must make sure that the lift is approved and reset into operation by an expert.

9. TROUBLESHOOTING

Before carrying out any maintenance on the lift, disconnect the power supply, and close the main switch in order to prevent unauthorized persons from switching on.

9.1 Problems, Causes and Remedies

A list of possible troubles and remedies is given below.

PROBLEM	CAUSE	REMEDY
The lift does not work.	<ul style="list-style-type: none"> -The main switch is not turned on. -Power failure. -The safety device is defective. -The electrical lines are interrupted. 	Check all the associated components.
The lift does not raise	<ul style="list-style-type: none"> -The direction of rotation of the motor is not correct. -The oil in the hydraulic unit is insufficient. -The UP key is defective. -The micro device is defective. -The lowering valve does not close. -The filter of the suction pump is dirty. 	<ul style="list-style-type: none"> -Interchange the two phases on the main switch. -Add some hydraulic oil. -Check the UP key and the relative line. -Check the micro device and the relative line. -Check the lowering valve. -Check the filter and clean it if necessary.
The lifting capacity is insufficient.	<ul style="list-style-type: none"> -The pressure valve is not set correctly. -The pump is defective. 	<ul style="list-style-type: none"> -Adjust the pressure valve -Check the pump and replace it if necessary
The runway does not lower completely.	<ul style="list-style-type: none"> -The micro device is not set correctly or is defective. -The lowering valve is defective. 	<ul style="list-style-type: none"> -Check the micro device and bleed the hydraulic system. -Lower lift manually (see Emergency lowering).
The runways lower on their own.	<ul style="list-style-type: none"> -The synchronizing valve does not work properly. -Leakage in the hydraulic system. 	<ul style="list-style-type: none"> -Check the valve. -Check the hydraulic system.
The lift does not lower when the DOWN is pressed.	<ul style="list-style-type: none"> -The photocell does not work properly. -The micro devices on the gear racks do not work properly. 	<ul style="list-style-type: none"> -Check all the associated components and replace them if necessary.
The lift does not lower smoothly.	<ul style="list-style-type: none"> -Air in the hydraulic system -The lowering valve is defective. 	<ul style="list-style-type: none"> -Bleed the hydraulic system.
The gear racks do not engage or disengage.	<ul style="list-style-type: none"> -No compressed air. -No oil. 	<ul style="list-style-type: none"> -Check the pneumatic system. -Check the relative components. -Check the SAFETY - DOWN key.

9.2 Emergency lowering of the lift after disengaging the rear racks

Manual lowering of the lift

- Open the front panel of the control desk, and press the valve A upwards using a thin screwdriver or a pin punch. At the same time pumping with the manual pump (**Fig. 11, Item 1**), until the lift is raised slightly (for bleeding of the manual pump, see Section 5.1), and the gear racks become disengaged.
- Fold back the upper gear rack from the lower rack and prevent them from re-engaging using a for example a strip of wood.
- Unscrew the cap nut (**Fig. 11, Item 7**) on the valve (**Fig 11, Item 6**). Release the lock nut from the adjusting screw from underneath and drive the screw in completely using a suitable socket screw wrench (hex. socket 3mm), the pad plates lower to the final bottom position.
- Unscrew the adjusting screw again, and then drive it in again until a slight resistance can be felt. Lock the adjusting screw with the lock nut and replace the cap nut.

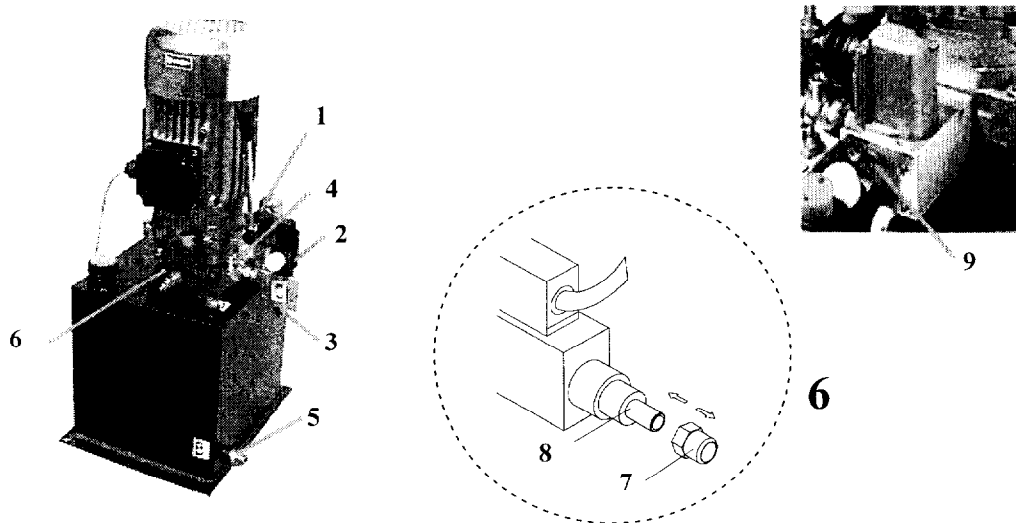


Fig. 11 Hydraulic unit with manual pump and lowering valves. To lower the lift in the event of a malfunction

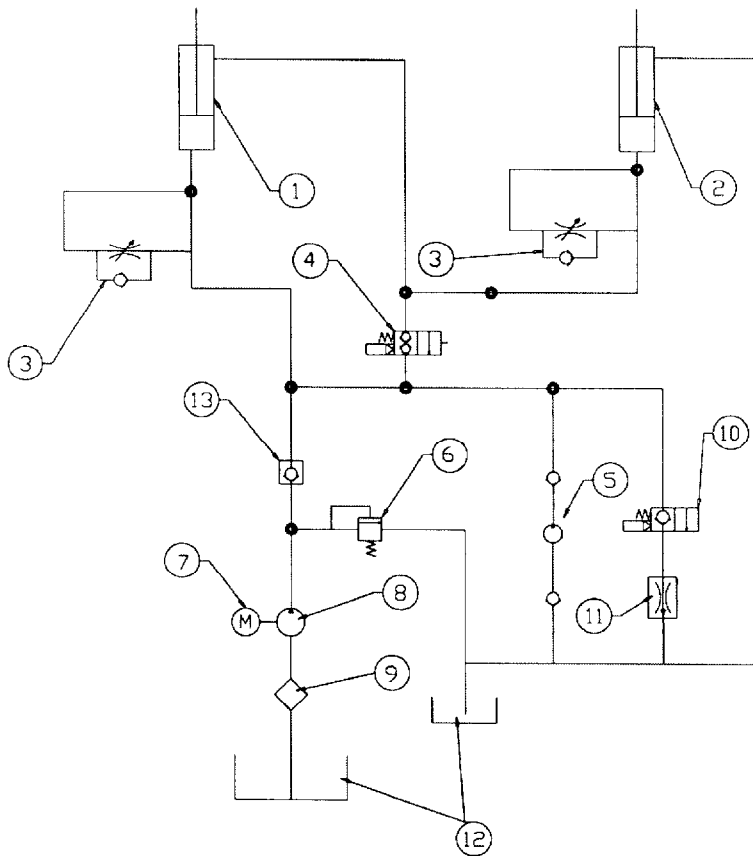
1. Manual pump
2. Valve for level
3. Connection of hydraulic line C
4. Connection of hydraulic line A
5. Connection of hydraulic line B
6. Control valve
7. View 6, cap nut
8. View 6, adjusting screw for emergency lowering of pad plates
9. Vent screw (hexagon socket screw) for emergency lowering pump (Item 1).

10. TECHNICAL DATA

Capacity:	7700 lbs.	3500 kg
Overall Length (w/ramps):	183"	4650 mm
Length of Runways:	60" (83" Extended)	1530 mm (2100mm Extended)
Overall Width:	75"	1900 mm
Width of Runways:	21 ¼"	540 mm
Dimension of Control Desk: Width x Depth x Height	17 ¾" x 17 ¾" x 41 ½"	450 x 450 x 1050 mm
Maximum Raised Height:	79"	2000 mm
Collapsed Height:	11 ¾"	300 mm
Shipping Weight:	1762 lbs.	800 kg
Motor	3.0 kW	
Power supply	220 V/3 Ph./60 Hz.	
Control Voltage	24 V	
Fuses:		
Main fusing	10 A	
Protection class	IP 55	
Hydraulic oil	ISO 32 (10 weight hydraulic oil)	
Hydraulic oil - quantity	5.3 Gal.	20 L
Max. service pressure	24 MPa	240 bar
Safety valve responds at	24 MPa	240 bar
Pneumatic line pressure	0.6 MPa - 1 MPa	6 - 10 bar
Lifting time of lift approx.	45 sec.	
Lowering time of lift approx.	45 sec.	
Noise level	70 dB (A)	

11. INDEX

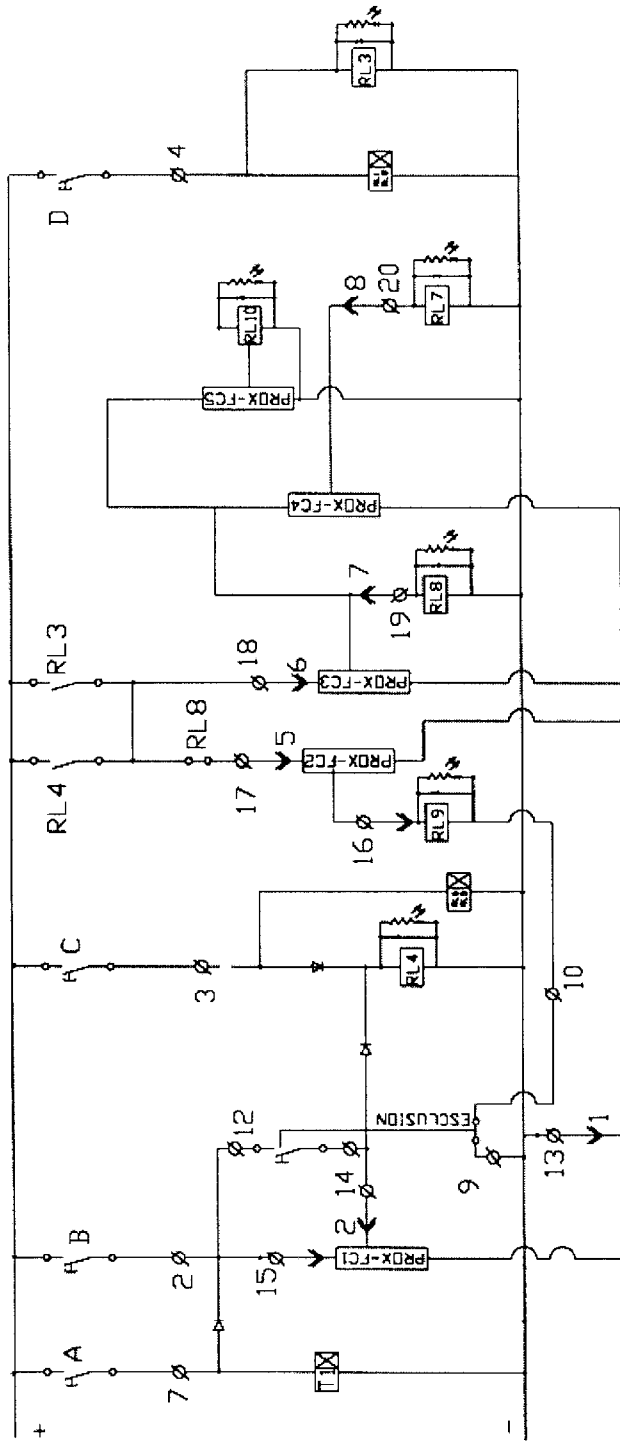
SCHEMATIC I - HYDRAULIC SCHEMATIC



1. Cylinder, Runway P1
2. Cylinder, Runway P2
3. Safety Valve
(lowering)
4. Levelling Valve
5. Manual Pump
6. Pressure Relief Valve
7. Electric Motor
8. Hydraulic Pump
9. Filter
10. Solenoid Valve
DOWN
11. Control Valve DOWN
12. Oil Tank
13. One Way Valve

SCHEMATIC II - ELECTRICAL SCHEMATIC

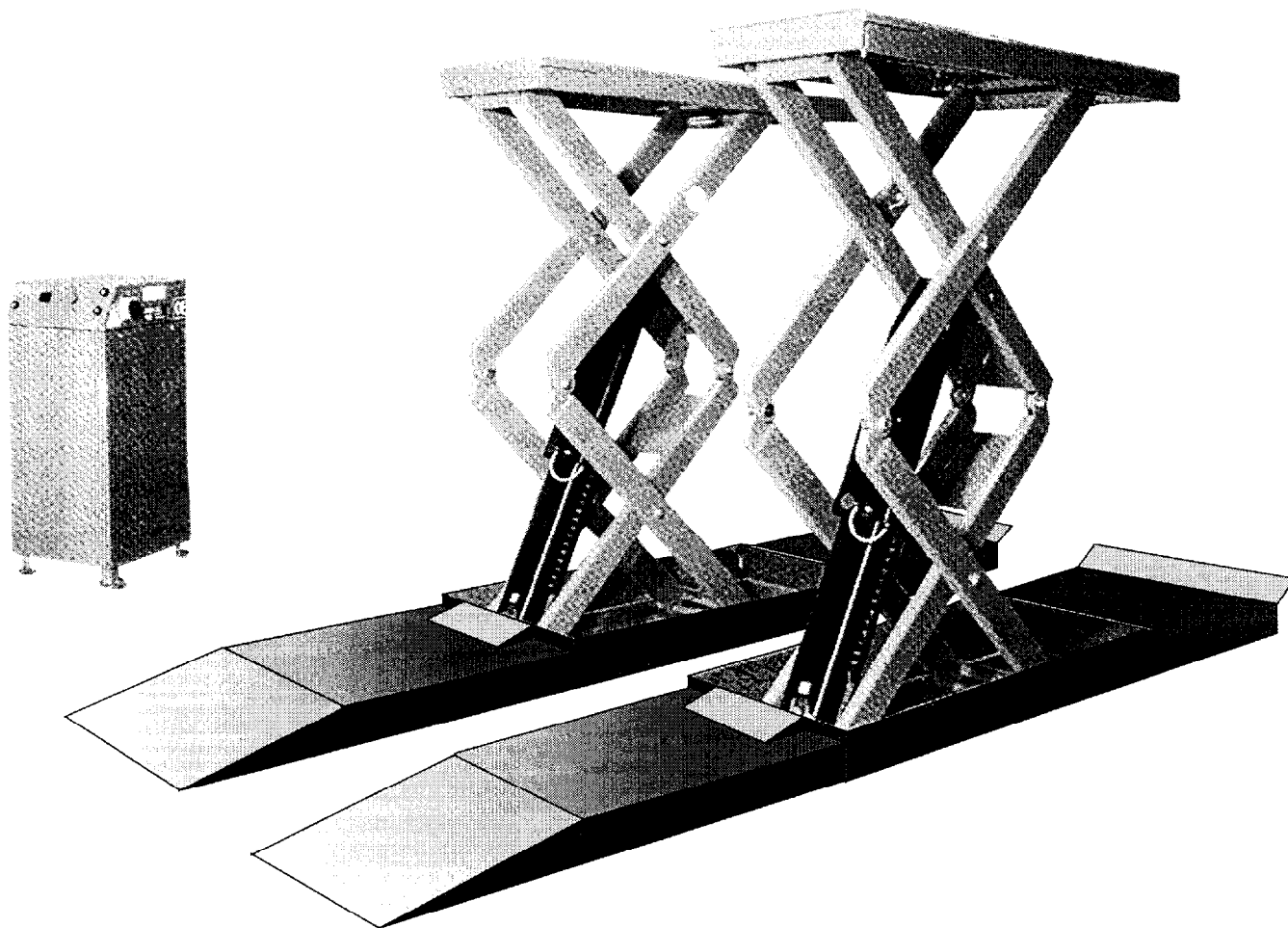
- A: Emergency
- B: UP
- C: DOWN 1
- D: DOWN 2
- FC1: L.S. Max.Height
- FC2: L.S. Photocell
- FC3: L.S. Level





EXPLODED VIEW AND
PARTS LISTS

COBRA



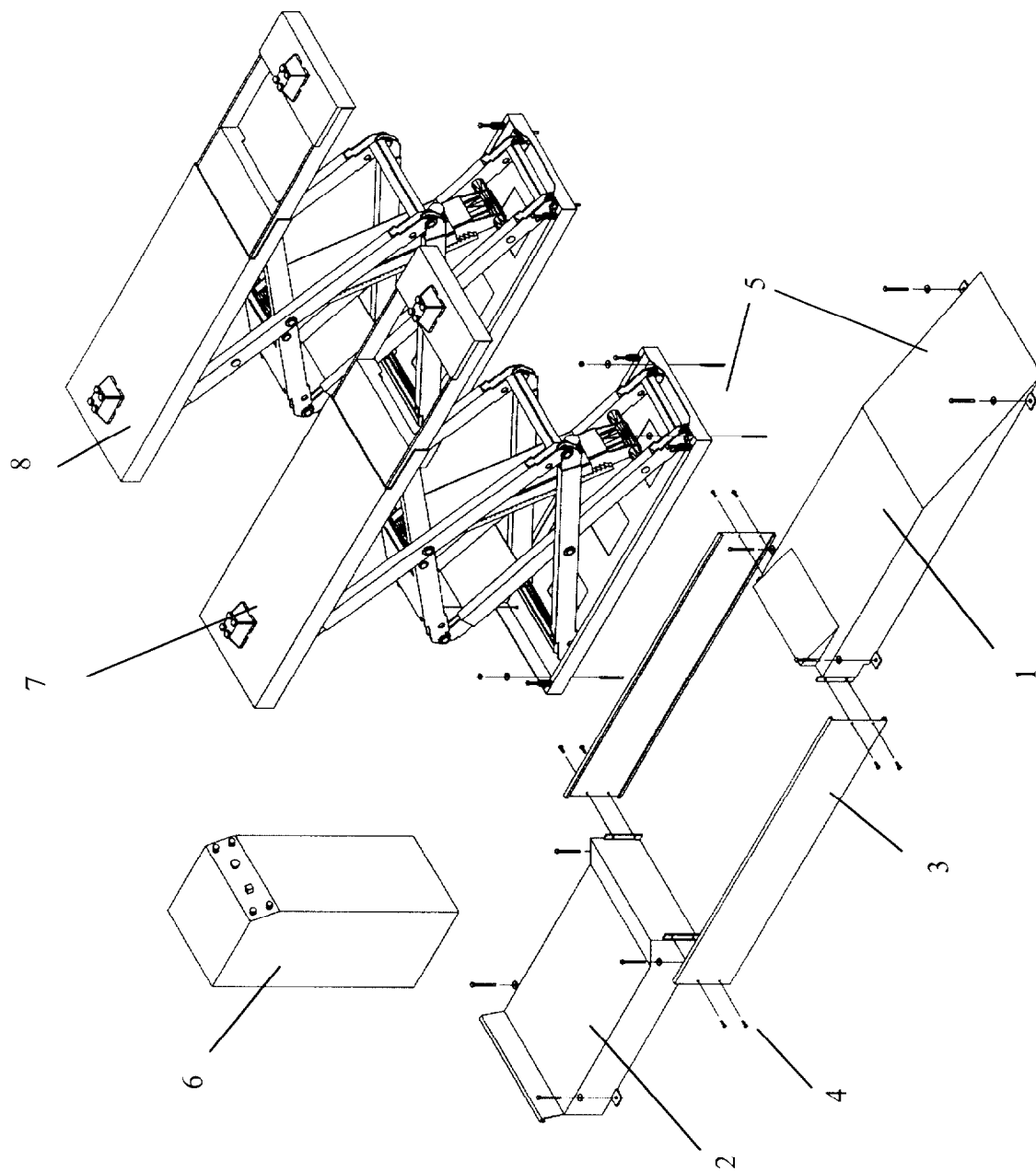
7000 lb. (3175 kg.)
Capacity



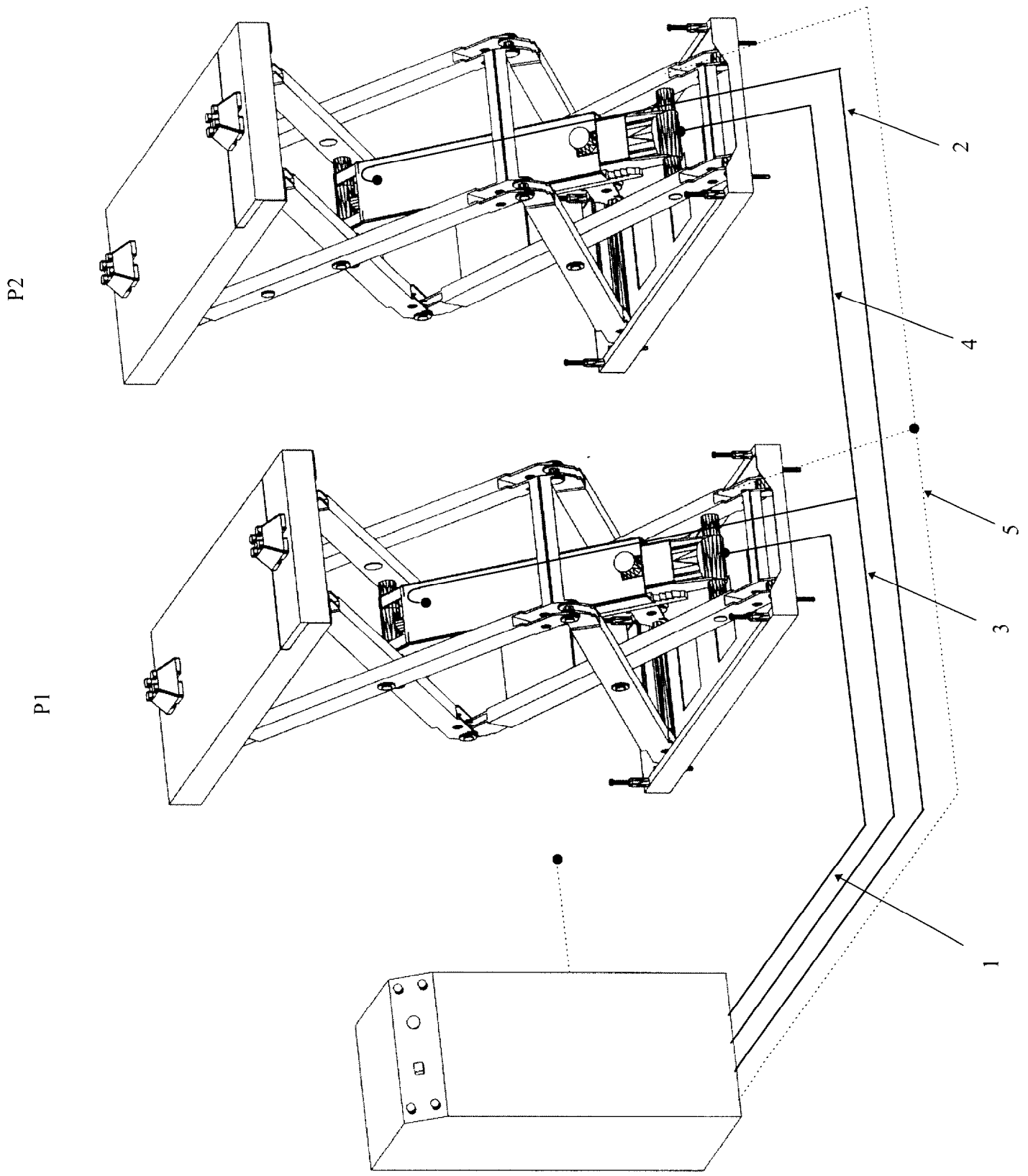
309 EXCHANGE AVENUE, CONWAY, ARKANSAS, 720
TEL: 501-450-1500 FAX: 501-450-1585

Model JBC35196

6-1869 SEPT. 1998



Lift Assembly Parts List



Hydraulic/Air Parts List

PARTS LIST

Item #	Qty.	Description	Part #
1	2	Approach Ramps	2-1260
2	2	Front Wheel Stops	2-1261
3	4	Side Panel	2-1262
4	16	Socket Hd. Cap Screw M6 x 1 L=20mm	6-1564
5	28	Wedge Anchor, 1/2" x 4 1/2" (c/w nuts & washers)	6-0140
6	1	Control Desk	4-0608
7	1	Left Side Deck Ass'y	4-0606
8	1	Right Side Deck Ass'y	4-0607

HYDRAULIC/AIR PARTS LIST

Item #	Qty.	Description	Part #
1	1	Hydraulic Hose "A"	2-1264
2	1	Hydraulic Hose "B"	2-1265
3	1	Hydraulic Hose "C"	2-1266
4	1	Hydraulic Hose "E"	2-1267
5	1	Pneumatic Line	6-1569