

HR6K-70

6600 lb Capacity High-Rise Scissor Lift

Operation Manual



**6,600 LB.
HIGH RISE
SCISSORS LIFT**

*Easy loading drive-on style scissors lift.
Double scissors design with four synchronized cylinders
for a low profile and a full 70" lifting height.*

HR6K-70
High rise
Scissors lift



SPECIFICATIONS:	HR6K-70
Lifting capacity	6,600 lbs.
Width overall	86 1/8"
Length overall	82 7/16"
Height	4 9/16" - 70 7/8"
Power pack	2.5 hp / 220v / 1 ph
Shipping weight	1914 lbs.

Features:

- ◆ 6,600 lb. lifting capacity
- ◆ Two 23 5/8" wide tracks ideal for tire and wheel work, inspections, brake and body work, as well as general service
- ◆ Pneumatic safety lock system
- ◆ Low drive-over height for approach of low vehicles
- ◆ Double scissor structure with four hydraulic cylinders
- ◆ No special foundation required

TUXEDO DISTRIBUTORS LIMITED WARRANTY

Structural Warranty:

The following parts and structural components carry a five year warranty:

Columns	Top Rail Beam	Uprights	Arms Swivel Pins
Legs	Carriages	Tracks Overhead Beam	Cross Rails

Limited One-Year Warranty:

Tuxedo Distributors, LLC ("Tuxedo") offers a limited one-year warranty to the original purchaser of Tuxedo lifts and Wheel Service in the United States and Canada. Tuxedo will replace, without charge, any part found defective in materials or workmanship under normal use, for a period of one year after purchase. The purchaser is responsible for all shipping charges. This warranty does not apply to equipment that has been improperly installed or altered or that has not been operated or maintained according to specifications.

Other Limitations:

This warranty does not cover:

1. Parts needed for normal maintenance
2. Wear parts, including but not limited to cables, slider blocks, chains, rubber pads and pulleys
3. Replacement of lift and tire changer cylinders after the first 30 days. A seal kit and installation instructions will be sent for repairs thereafter.
4. On-site labor

Upon receipt, the customer must visually inspect the equipment for any potential freight damage before signing clear on the shipping receipt. Freight damage is not considered a warranty issue and therefore must be noted for any potential recovery with the shipping company.

The customer is required to notify Tuxedo of any missing parts within 72 hours. Timely notification must be received to be covered under warranty.

Tuxedo will replace any defective part under warranty at no charge as soon as such parts become available from the manufacturer. No guarantee is given as to the immediate availability of replacement parts.

Tuxedo reserves the right to make improvements and/or design changes to its lifts without any obligation to previously sold, assembled or fabricated equipment.

There is no other express warranty on the Tuxedo lifts and this warranty is exclusive of and in lieu of all other warranties, expressed or implied, including all warranties of merchantability and fitness for a particular purpose.

To the fullest extent allowed by law, Tuxedo shall not be liable for loss of use, cost of cover, lost profits, inconvenience, lost time, commercial loss or other incidental or consequential damages.


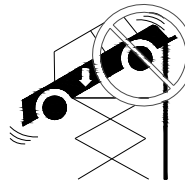
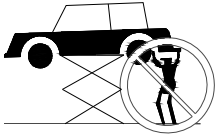
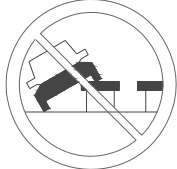


This Limited Warranty is granted to the original purchaser only and is not transferable or assignable.

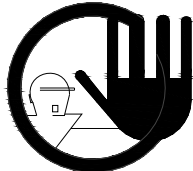
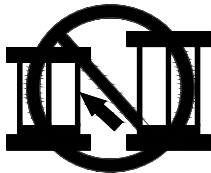

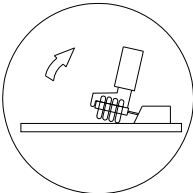
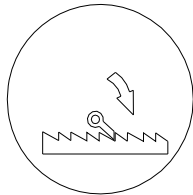

Some states do not allow exclusion or limitation of consequential damages or how long an implied warranty lasts, so the above limitations and exclusions may not apply. This warranty gives you specific legal rights and you may have other rights, which may vary from state to state.

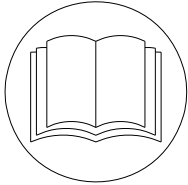
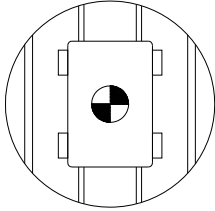
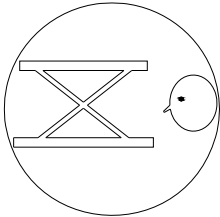
The product specifications in this manual are subject to change for quality improvement of modified design without any pre-notice.

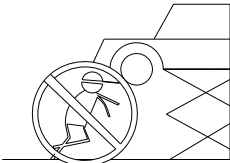
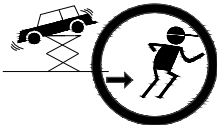
Safety Instructions

1. Read all instructions.
2. Inspect lift daily. Do not operate if it malfunctions or problems have been encountered.
3. Never attempt to overload the lift. Do not override the operating controls.
4. Only trained and authorized personnel should operate the lift. Do not allow customers or bystanders to operate the lift or be within the working area.
5. Use the lift support pads to support the vehicle at manufacturer's recommended lifting points. Raise the lift until the pads contact with the vehicle body. Check pads for secure contact, then raise the lift to the desired working height.
6. Note that removal or installation of some vehicle parts may cause a critical load shift in the center of gravity and may cause the vehicle to become unstable on the lift. Refer to the vehicle manufacturer's recommended procedures.
7. Always keep the lift working area free of obstructions and debris. Grease and oil spills should always be cleaned up immediately.
8. Never raise vehicle with passengers inside.
9. Before lowering the vehicle, always check working area for any obstructions,.
10. Do not operate equipment with a damaged cord if the equipment has been dropped or damaged until a qualified serviceman has examined it.
11. Do not let cord hang over the table, bench or counter or come in contact with hot manifolds or moving fan blades.
12. If an extension cord is necessary, a cord with a current rating of two times or more than that of the equipment should be used. Cords rated for less current than the equipment may overheat.
13. Always unplug the equipment from electrical outlet when not in use. Never pull the cord but grasp the plug body to disconnect.
14. Adequate ventilation should be provided when the vehicle's engine is running
15. Keep hair, loose clothing, fingers, and all parts of body away from moving parts.
16. To reduce the risk of electric shock, do not use on wet surfaces or expose to rain.
17. Always wear safety glasses for protection.

ATTENTION	
	Only trained personnel may operate this lift.
	Clear the floor under the vehicle when you are lowering the vehicle. (The vehicle may fall off.)
	Do not shake the vehicle on the lift too heavily. (The vehicle may fall off.)
	Do not tilt the lift raising a vehicle. (Make it balanced when lifting. The vehicle could fall off or damage to the lift could occur.)
	Never change or modify the safety device. (When the safety device does not work, serious accident may occur.)
	While lowering the lift, be careful to not put your foot under a table. Serious injury could occur.

CAUTION	
	Only a trained person should operate the lift.
	Do not operate a damaged lift.
	Only authorized personnel should be in the working area.
	Make sure the hand brake has been applied after the vehicle is on the lift. Do not operate the lift until the driver is clear of the vehicle.
	When the lift is raised in the air, work with safety device engaged.
	High voltage! Beware of electric shock when you open the power line or control unit. Serious injury or death could occur.

CAUTION	
	Read this manual carefully before you operate the lift.
	Drive the car onto the lift and center the vehicle weight. The center of gravity may change when you put on or take off heavy parts.
	Proper maintenance and inspection is necessary for safe operation.

DANGER	
	Stand clear of the vehicle while the lift is being operated.
	Move to a safe place if the vehicle starts to fall. An accident could cost you your life or serious injury.

Warning Guidance

Operate the lift only after carefully reading the instruction manual and understanding the contents for safe and proper usage of this lift.

● Preparation

1. This lift designed for car repairs. Do not use for any other purpose.
2. Do not operate the lift whenever any safety device is not functioning.
3. Drive on or off the lift smooth and gently.
4. Be careful driving on lift when tires are wet.

● Raising and lowering

1. During raising or lowering the lift, make sure vehicle is stable.
2. Do not raise a vehicle when weight exceeds the rated capacity of the lift.
3. Do not raise a vehicle with people inside.
4. Stop at a low height to check the car to make sure it is properly positioned.
5. Stop raising the lift when height limited is reached.
6. Don't shake the car during raising or lowering of the lift.
7. If the lift does not lower, press up button to raise it a little then press the down switch again.
8. Only when the lift is completely lowered, is the vehicle to be driven on or off.
9. When the lift is in operation, no unauthorized person is permitted within the working area of the lift.
10. Do not operate the lift if any tool or component is obstructing its movement.
11. Before lowering, clean the working area.

- **During repairing the car**

1. Check the safety lock device to see if it is properly engaged.
2. Keep any unauthorized persons away from working area of the lift.

- **Others**

1. Do not change or modify the lift without permission from the manufacturer. Unauthorized modification or changing of the lift may destroy the safety or function of the lift. Serious accident may occur.
2. If any fault is found during operating or inspection, stop operation immediately. Call your sales agent for service or maintenance. Do not use the lift until it has been repaired.
3. Please note that this lift is not designed for water-proof usage. Do not use the lift in a hot environment, carwash, or outdoors.

- **Specifications of HR6K-70**

Capacity	6600 lbs	
Overall Max Height	1,800 mm (70-7/8")	
Min Height	110 mm (4-5/16")	
Lifting Time	Approx. 40-60 sec	
Lowering Time	Approx. 20-90 sec	
Standard Motor	Single Phase	2.5Hp, 220V/60Hz
Net weight	1915 lb	

Preparation

Required Tools

1. Fork Lift to unload lift on delivery
2. Fork Lift and/or engine hoist for moving pieces and positioning lift. You will also need a ten-foot length of 3/8" chain
3. 1 and 5/16" wrench and socket with ratchet
4. 1 and 1/8" socket and extension
5. 1/2" wrench
6. 11/16" wrench
7. Adjustable wrench
8. Rotary Hammer Drill with 3/4" Masonry Drill Bit. Core Drill ReBar Cutter recommended
9. Chalk line and 12' Tape Measure, Transit and a 4' Level
10. Small crowbar or large screwdriver for aligning bolt holes
11. Pliers
12. Flat blade screwdriver

FLOOR REQUIREMENT

- 1) The lift should be installed on a solid concrete floor. Its strength should be at least 3000 PSI or stronger.

SPACE REQUIREMENT

1. Keep the lift about 1 meter or more away from the wall. It is for sufficient work space. (Fig.1 & 2)
2. Do not change the specifications (lifting or lowering speed, and pressure that have been pre-set at the factory).
3. Do not install the lift outdoors. If the lift has to be installed outdoors, shield the control unit and the cable connections.

HYDRAULIC OIL

AW 32 or 46 Non-Detergent Non-Foaming Anti-Wear Hydraulic Oil SAE-10 (about 10-12 liters)

SIZE DATA

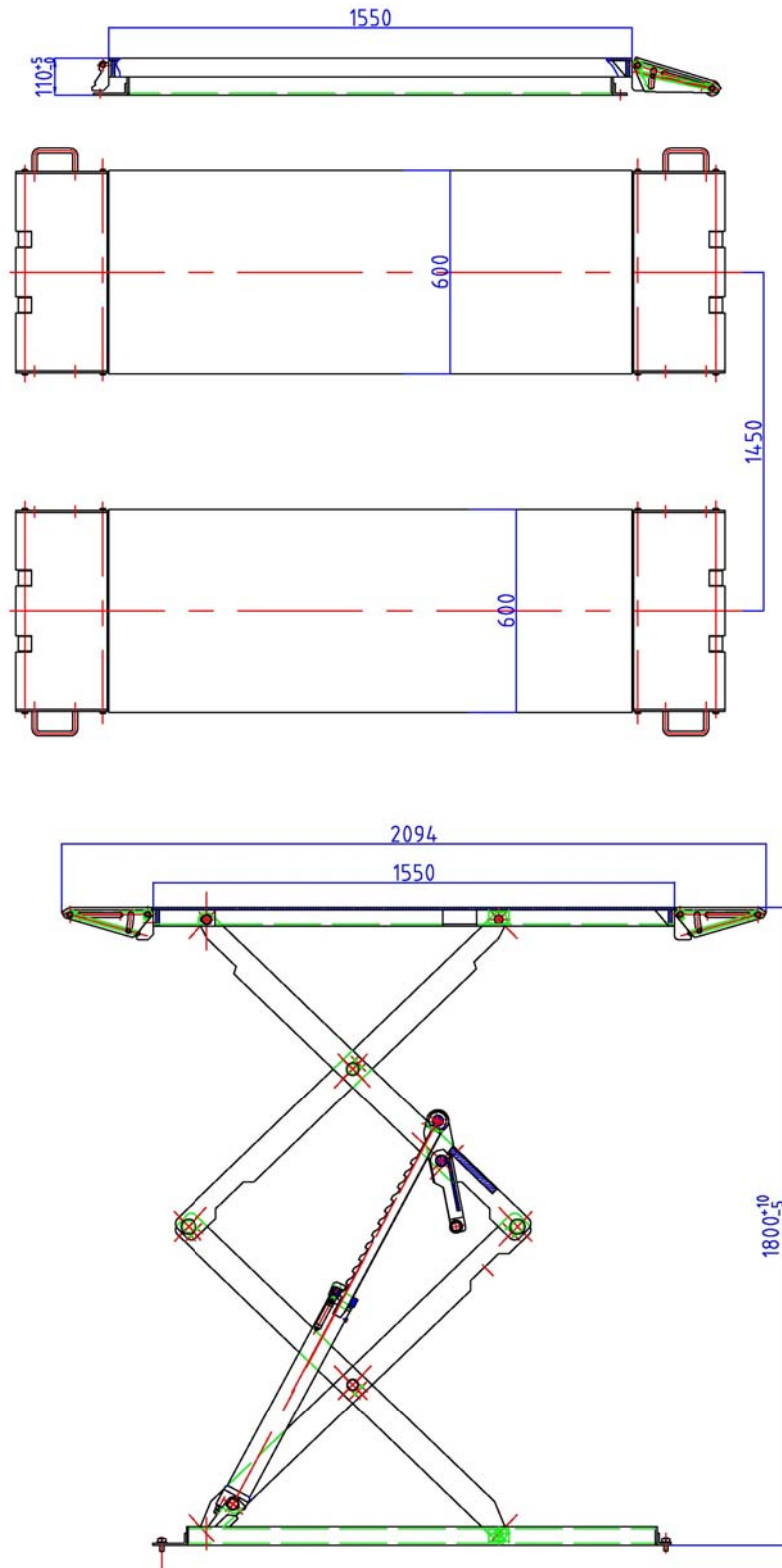


Fig. 1

SAFE DISTANCE TO WALL

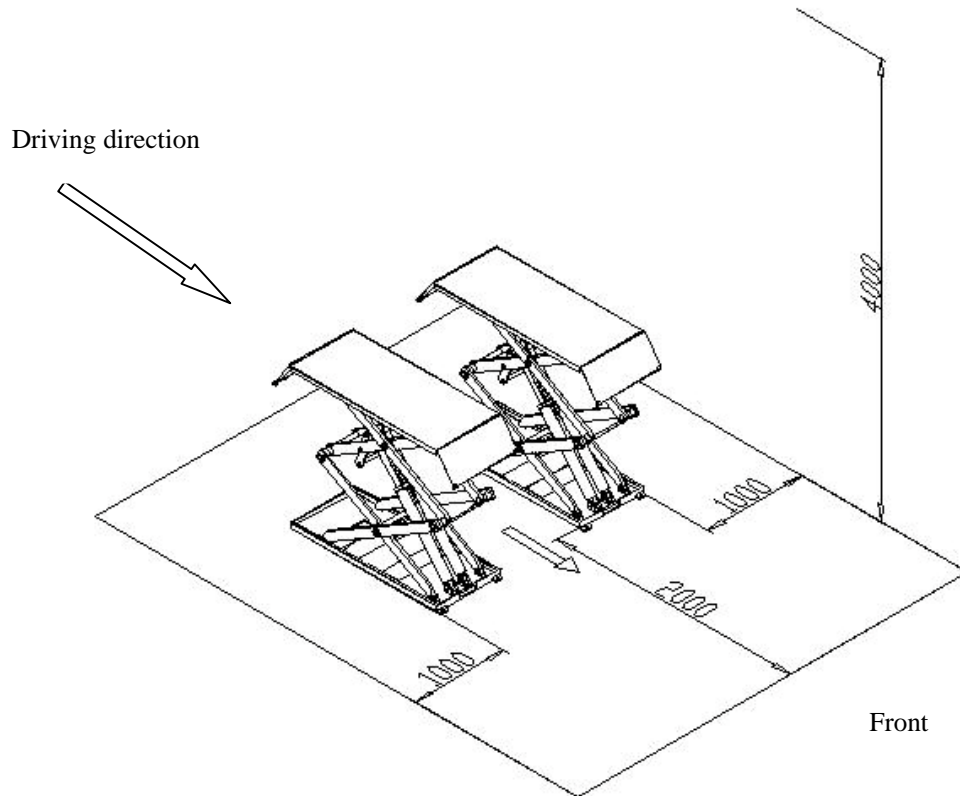


Fig. 2

Note:

1. The vehicle enters the lift at the rear end. The front end houses the cylinders.
2. If the front end is facing a wall, the minim distance is 2.0 meter for safety.
3. If the side is along a wall, keep a distance of 1 meter for walking and safety.
4. The ceiling height of the working area is normally 4.0 meter at least.

Installation

STEP 1 UNPACKING

1. Use a forklift and chain to move the lift to desired location (Fig. 3).
2. Unpack the package. Check the accessories and spare parts.
3. Position the platforms according to the data in Fig1 (Fig. 4).



Fig. 3

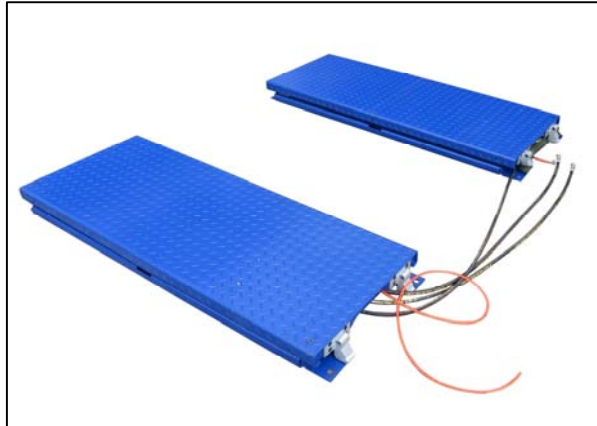


Fig. 4

STEP 2 PUMP SETTING UP

1. Remove the control box and stand from its package.
2. To open the control unit cover, push the left part of the lock to left, the lever will pop-up. (Fig.5)
3. Turn the lever 90 degree clockwise to open the lock. (Fig.5)
4. Mount the box on the stand (Fig. 6).
5. Screw on the valve kit (Fig.7).
6. Mount the motor pump on the stand. (Fig.8)

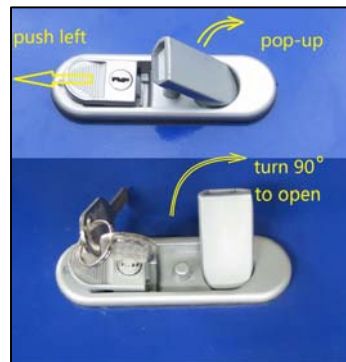


Fig. 5



Fig. 6

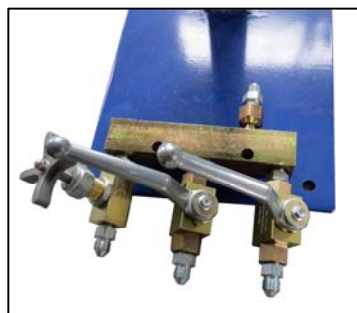


Fig. 7



Fig. 8

STEP 3 HOSE CONNECTING

1. Take off the plastic cover of the hose connector first. Then using the forklift to lift up the platforms about one foot high.
Note: While lifting up, some oil may come out from the hoses.
2. Connect the oil hoses according to Fig. 9 .

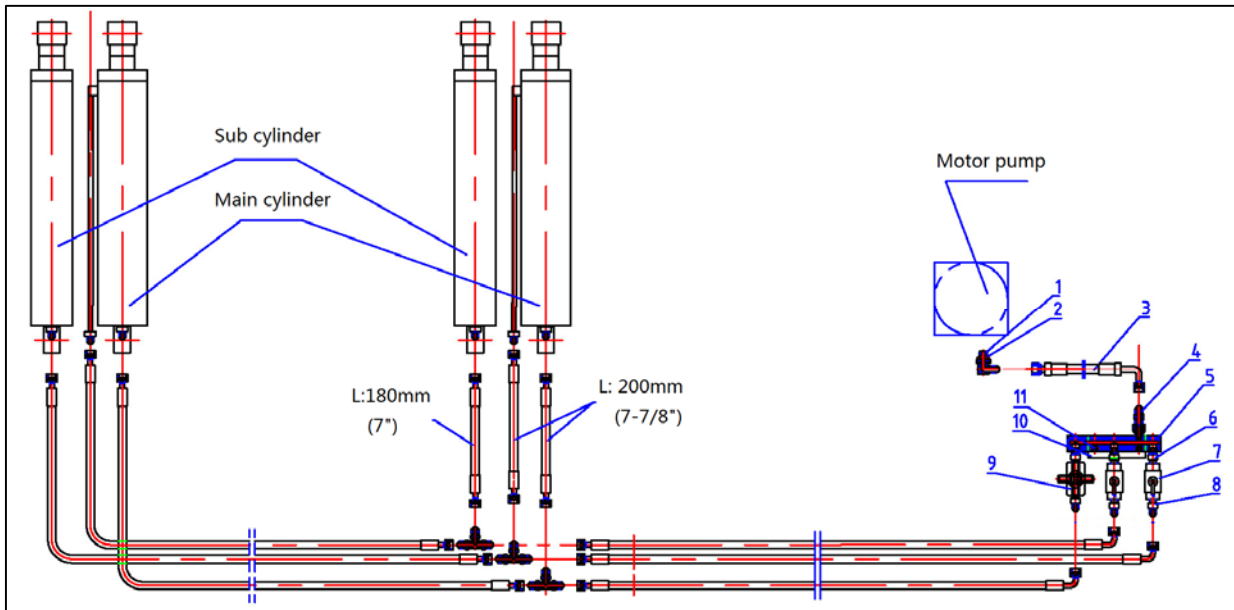


Fig. 9

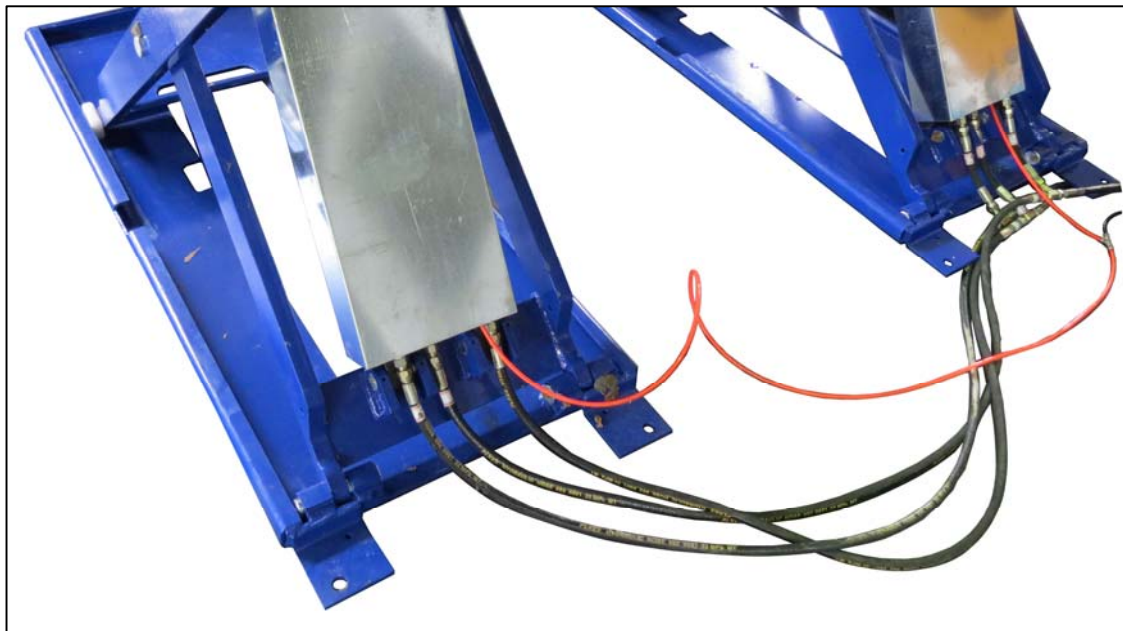


Fig.10



Fig.11

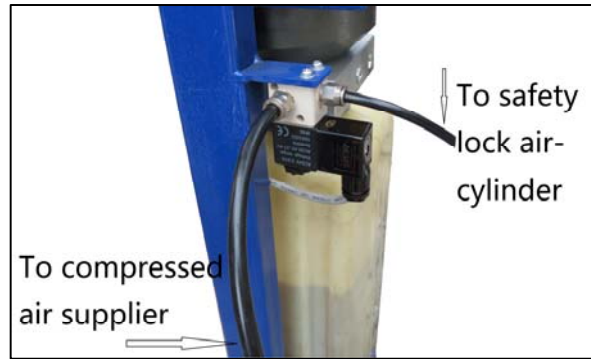


Fig. 12

3. Connecting the air hoses from platforms to air valve on the control unit (Fig 10 & 12).

STEP 4 ANCHORING.

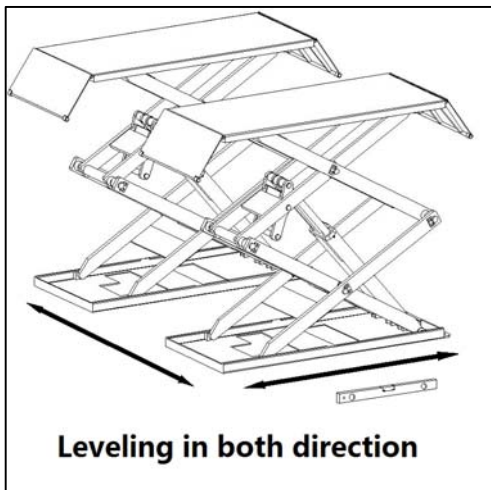


Fig.12

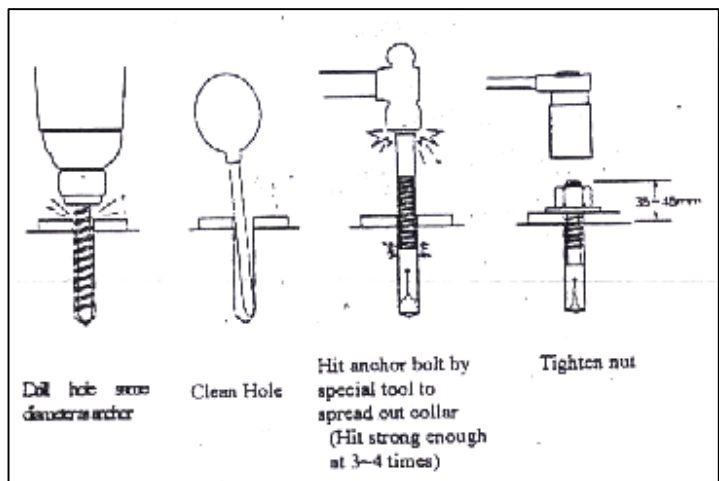


Fig. 13

1. Using the base plate as a guide, drill each anchor hole in the concrete approximately $5\frac{1}{2}$ " deep using a rotary hammer drill and $\frac{3}{4}$ " concrete drill-bit. To assure full holding power, do not ream the hole or allow the drill to wobble.
2. After drilling, remove dust thoroughly from each hole using compressed air and/or wire brush. Make certain that the lift remains aligned with the chalk line during this process.
3. Assemble the washers and nuts on the anchors then tap into each hole with a block of wood or rubber hammer until the washer rests against the base plate. Be sure that if shimming is required that enough threads are left exposed.
4. Again using a leveler, check base plate leveling for both directions.(See Fig.12) If shimming is required, use $\frac{3}{4}$ " washers or shim stock, placing shims as close as possible to the hole

locations. This will prevent bending the column base plate

5. With the shims and anchor bolts in place, tighten by securing the nut to the base then turning 2-3 full turns clockwise. DO NOT use an impact wrench for this procedure.
6. If there is more than enough space under the base plate after anchoring, fill up the space with mortar.

STEP 5 WIRING & OIL FILLING

1. Connect the cables according to the diagram. (Fig.14) and photo (Fig. 15).

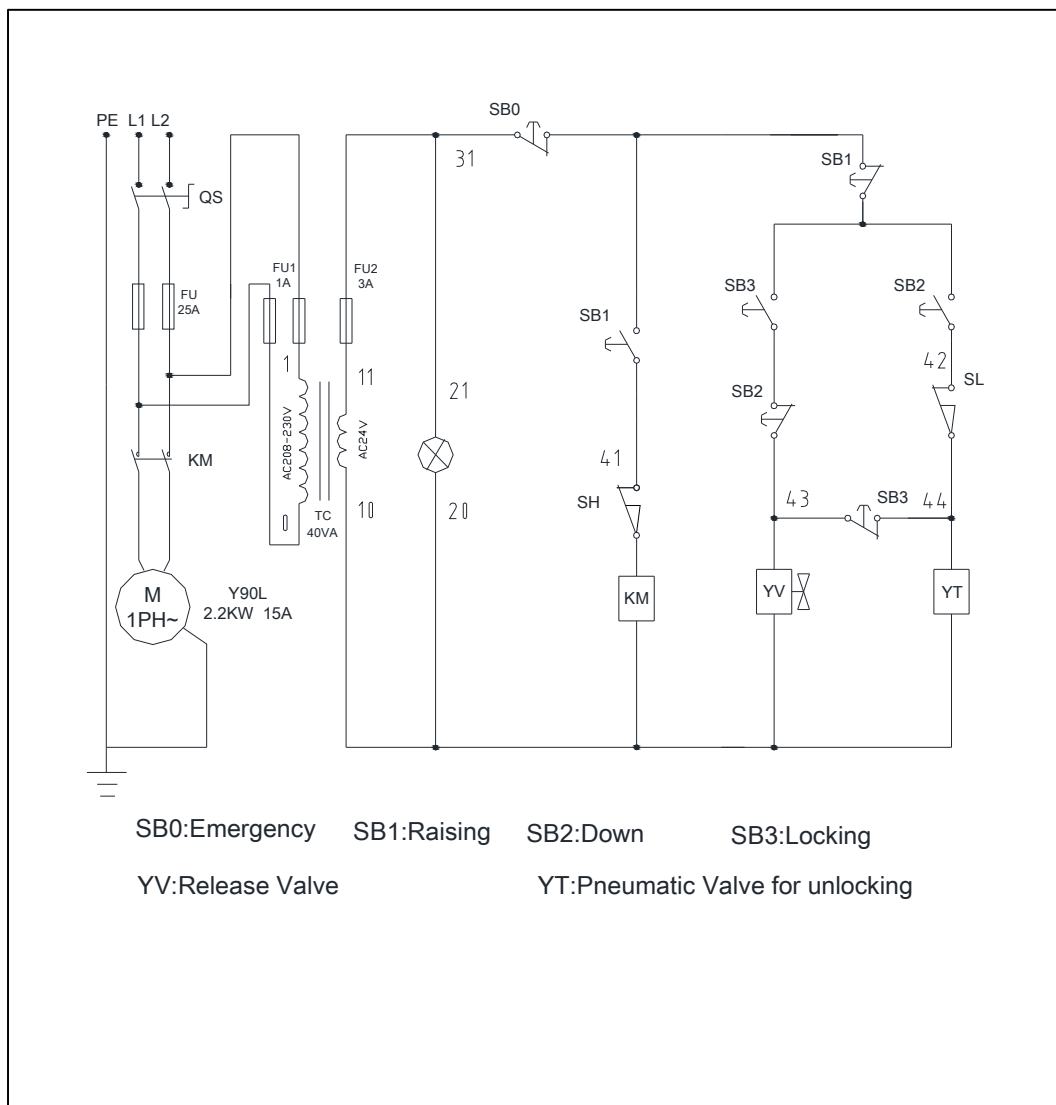


Fig. 14

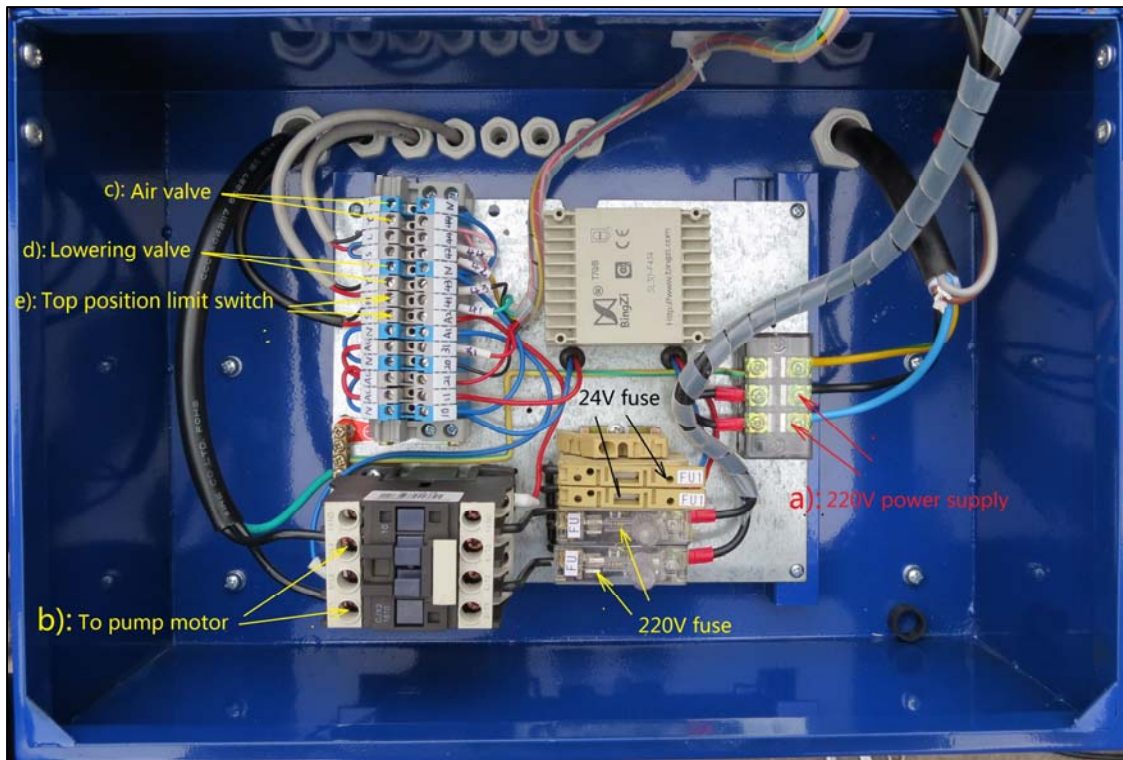


Fig. 15

- a) 220V single phase power supply cable.
- b) Pump motor cable
- c) Air valve cable (Fig. 16)
- d) Electro-magnetic lowering valve cable (Fig. 17)
- e) Top position limit switch cable (Fig. 18)

NOTE: The cable shall go through a hole on the edge of base plate of left platform (Fig. 19) and be fixed by the cable ties as in Fig. 20 under the edge.



Fig.16



Fig. 17



Fig. 18



Fig. 19



Fig. 20

2. Fill the pump tank with hydraulic oil about half tank. (AW 32, or 46 Non-Detergent Non-Foaming Anti-Wear Hydraulic Oil SAE-10). Make sure the funnel used to fill is clean.
NOTE: Not fill up the tank at this moment.

STEP 6 ACCESSORY MOUNTING

1. Insert the pin then assemble the access ramp. (Fig. 21,22)
2. Put on the protection cover on the linking shaft.



Fig. 21



Fig. 22

STEP 7 POWER CONNECTING

1. Have a certified electrician to run the 220V/60Hz single phase power supply to the control box (Fig.15). Be sure to size the wire for a 25 amp circuit.
2. Connect the compressed air (8 bar) to the inlet of the air-valve. (Fig. 12)

STEP 8 TESTING

1. Do not place any vehicle on the lift at this moment! Turn on the power switch.
2. Open all three manual valves on the control unit. (Fig. 23)
3. Press UP button to raise up the platforms totally. (Fig. 24)

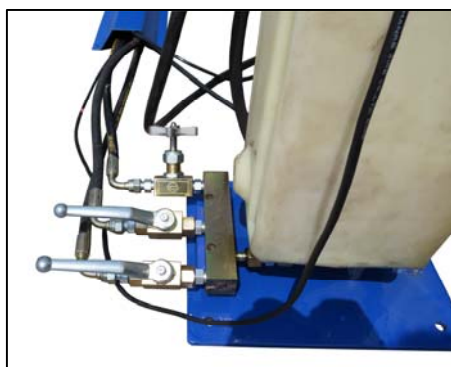


Fig.23



Fig. 24

4. Press DOWN button to lower down the platforms.
5. Cycle the lift up and down several times by press the UP and DOWN buttons. (Each cycle shall be with a break interval of about 1 minute.) If the oil in tank is not enough, add at

times.

To insure that latch clicks all the way while rising up and all air is removed from the cylinder / hydraulic system.

6. Turn off the two angle valve on the control unit. (Fig. 25)



Fig. 25



Fig. 26

7. Cycle the lift up and down several times by press the UP and DOWN buttons again to check the platforms are in level. (Each cycle shall be with a break interval of about 1 minute.) If not, repeat above 2—5 procedures.
8. Screw on the top position limit switch under the edge of the base plate of left platform (Fig. 26).
9. Line up the hoses and cables. Put on the hose fixing plate and cover to protect them (Fig.27). Position the control unit. Anchored these covers and control unit.

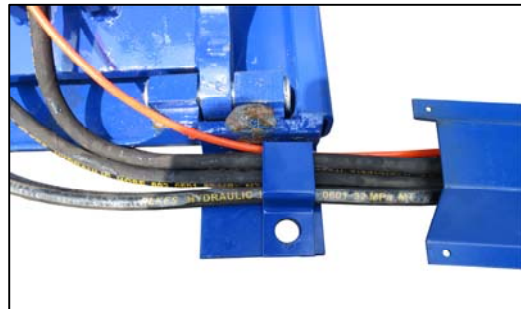


Fig.27



Now the lift is ready for operation.

Operation

STEP 1 PARKING THE CAR

1. Drive the car on the platforms.
2. Pull on the hand brake.
3. If necessary, pull up the ramp to extend the length of the platform.
4. Insert the rubber blocks between the platform and the car body. (Fig. 23)

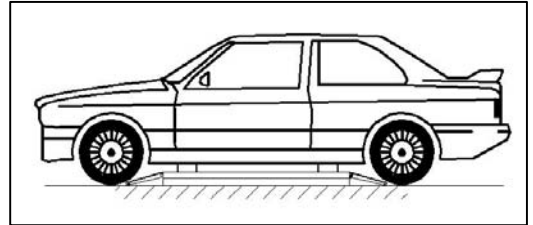


Fig. 32

STEP 2 RISE UP

1. Turn on the main switch on the control unit.
2. Press the UP button till the rubber blocks touch the car body.
3. Check all the blocks are firm.
4. Press UP button again till the car reach the desired height.
5. Press the IN LOCK button to lower down the lift a little. The lock will be engaged.

STEP 3 LOWER DOWN

1. Check and clear off any obstacles under the lift within working area.
2. Press LOWER DOWN button. The lift will go up a little to open the lock then lower down.
3. Until the platform totally touching the ground, release the button.

STEP 4 DRIVE AWAY THE CAR

1. Take away the rubber blocks.
2. Release down the ramps.
3. Drive off the car.
4. Turn off the main power switch.

Maintenance

The following periodic maintenance is the suggested minimum requirements and minimum intervals; accumulated hours or monthly period, which ever comes sooner. If you hear a noise or see any indication of impending failure - **cease operation immediately** – inspect, correct and / or replace parts as required.

WARNING OSHA REQUIRES USERS TO INSPECT LIFTING EQUIPMENT AT THE START OF EVERY SHIFT. THESE AND OTHER PERIODIC INSPECTIONS ARE THE RESPONSIBILITY OF THE USER.

IMPORTANT!

1. Keep maintenance area clear.
2. During maintenance, always turn off the main power switch before enter the working area.

● DAILY PRE-OPERATION CHECK

The user should perform daily check.

ATTENTION! Daily check of safety latch system is very important. The discovery of device failure before it happens could save you from expensive property damage, lost production time, serious personal injury and even death.

- Check safety lock audibly and visually while in operation
- Check safety latches for free movement and full engagement with rack.
- Check hydraulic connections, and hoses for leakage.
- Check connections, bends, cracks ,and looseness
- Check snap rings at all rollers and sheaves.
- Check bolts, nut, and screws and tighten.
- Check wiring & switches for damage.
- Keep base plate free of dirt, grease or any other corrosive substances.

- MONTHLY

- Check hydraulic fluid level, and replenish as necessary.
- Check the functionality of the mechanical safety locks.
- Examine the lifting system for fluid leaks and signs of damaged or worn parts.
- Examine the electrical cables and connectors for signs of damage.
- Grease every turning part and oil the dry piston shaft.
- Grease the platform tracks and rubber block with multipurpose grease.
- Check anchor bolts torque to 150 ft-lbs for the 3/4 " anchor bolts
- Check floor for stress cracks near anchor bolts

- EVERY TWO YEARS

- Change the hydraulic oil.
 - (1) Lower the lift completely to floor.
 - (2) Remove the cover of the power unit.
 - (3) Remove the oil from the tank.
 - (4) Refill with approximately 10 Liters of hydraulic oil: AW 32 or 46 Non-Detergent Non-Foaming Anti-Wear Hydraulic Oil, SAE-10
 - (5) Check the oil level in tank and add if necessary.

- STORAGE & UNDER COLD WEATHER

- Lower the lift to the ground.
- The storage temperature should be above -20°C
- After a long time in storage, check the oil quality and level, then check the lift as first time installed.
- In the winter season, operate the lift 3 to 5 times without load when temperature between 5°C ~ -20. Do not use the lift if the temperature is below -20°C.

Trouble shooting

Symptoms		CAUSE	REMEDY
Hydraulic Cylinder & system	Motor is noisy.	<ol style="list-style-type: none"> 1. Rated capacity is exceeded. 2. Limit pressure is low. 3. Short of hydraulic oil. 	<ol style="list-style-type: none"> 1. Operate within rated capacity. 2. Set the limit pressure to 2.7 ton. 3. Fill up the tank when lift is on ground.
	Hydraulic oil is leaking	<ol style="list-style-type: none"> 1. Defect in hydraulic hoses. 2. Leaking at connecting parts. 3. Bad cylinder sealing. 	<ol style="list-style-type: none"> 1. Replace the hydraulic hose. 2. Tighten the connection. 3. Request service.
	Oil is contaminated.	Water or other substance in the oil.	Change hydraulic oil (32CST /12 L)
	The lift does not rise up.	Leakage or valve blocked in the hydraulic pump.	Clean the valve or pump. If necessary, change it.
	The lift is not lowering.	The release valve is blocked.	Clean the valve.
	Rotating parts are rusted.	Not properly lubricated.	Lubricate.
Electric devices	Motor is not running or abnormally noisy.	<ol style="list-style-type: none"> 1. The motor is damaged. 2. The fuse is blown. 3. The push button is damaged. 4. The upper limit switch is engaged. 5. Wiring or cable size is not correct. 6. Power supply is lower than 220V. 	<ol style="list-style-type: none"> 1. Replace the motor. 2. Replace the fuse. 3. Replace the push button. 4. Try again after lowering the lift. 5. Rewire or change the cable with over 3.5mm² diameter. 6. Increase the power supply.
	Fuse is blown.	<ol style="list-style-type: none"> 1. The magnetic contactor is broken. 2. The capacity of fuse is too small. 3. Wiring is damaged. 	<ol style="list-style-type: none"> 1. Replace with a new contactor. 2. Replace with a new fuse. 3. Replace after checking.
	Motor is running but lift does not move up.	<ol style="list-style-type: none"> 1. The motor rotates in the wrong direction (3-phase power supply). 2. Hydraulic cylinder seal is damaged. 	<ol style="list-style-type: none"> 1. Re-operate after changing the phase connection (three phase motor). 2. Check then change the cylinder seals.

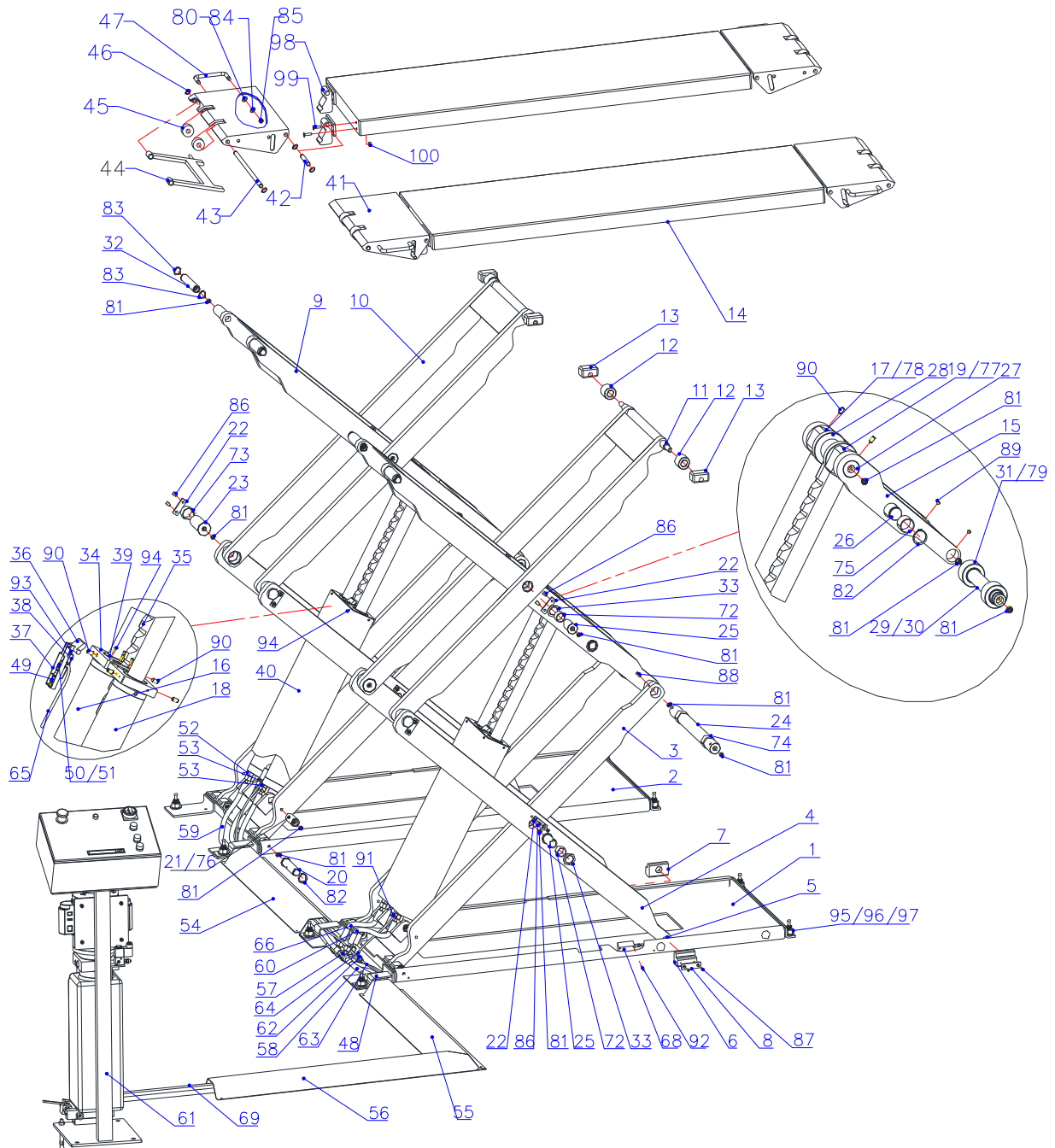
FRAME PARTS LIST

ITEM	CODE	DESCRIPTION	QTY	NOTE
1	161203A*01-001	left base plate	1	
2	161203A*01-002	right base plate	1	
3	161203A*01-003	down inner frame	2	
4	161203A*01-004	down out frame	2	
5	161203A*01-005	connecting part	2	
6	161203A*01-006	base slider A	1	
7	161203A*01-007	base slider B	3	
8	161203A*01-008	plate under switch	1	
9	161203A*01-009	up inner frame	2	
10	161203A*01-010	up out frame	2	
11	161203A*01-011	upper shaft	2	
12	161203A*01-012	platform roller	4	
13	161203A*01-013	platform slider	4	
14	161203A*01-014	platform	2	
15	161203A*01-015	assistant frame	2	
16	161203A*01-016	main cylinder	2	
17	161203A*01-017	main cylinder fitting	2	
18	161203A*01-018	sub cylinder	2	
19	161203A*01-019	sub cylinder fitting	2	
20	161203A*01-020	down shaft	4	
21	161203A*01-021	cylinder shaft	4	
22	161203A*01-022	fixing plate	12	
23	161203A*01-023	out frame shaft	4	
24	161203A*01-024	inner frame shaft	2	
25	161203A*01-025	in/out frame shaft	8	
26	161203A*01-026	assistant/frame shaft	2	
27	161203A*01-027	assistant/cylinder shaft	2	
28	161203A*01-028	spacer	4	
29	161203A*01-029	assistant axle	2	
30	161203A*01-030	assistant axle sleeve	2	
31	161203A*01-031	assistant roller	4	
32	161203A*01-032	platform shaft	4	

ITEM	CODE	DESCRIPTION	QTY	NOTE
33	161203A*01-033	frame washer	8	
34	161203A*01-034	guide plate	2	
35	161203A*01-035	support plate	2	
36	161203A*01-036	lock tongue	2	
37	161203A*01-037	fixing frame	2	
37	161203A*01-038	fixing plate	2	
38	161203A*01-039	limit board	4	
39	161203A*01-040	cover	2	
40	161203A*01-041	ramp board	4	
41	161203A*01-042	ramp shaft	8	
42	161203A*01-043	ramp axle	4	
43	161203A*01-044	ramp support	4	
44	161203A*01-045	roller	8	
45	161203A*01-046	Circlip	24	
46	161203A*01-047	handle	4	
47	161203A*01-048	hose fixing plate	3	
48	161203A*01-049	air cylinder	2	
49	161203A*01-050	seal	2	
50	161203A*01-051	air angle fitting	2	
51	161203A*01-052	limit valve	2	
52	161203A*01-053	hydraulic angle fitting	4	
53	161203A*01-054	hose cover 1#	1	
54	161203A*01-055	hose cover 2#	1	
55	161203A*01-056	hose cover 3#	1	
56	161203A*01-057	T fitting	3	
57	161203A*01-058	long hose	3	

ITEM	CODE	DESCRIPTION	QTY	NOTE
58	161203A*01-058	long hose	3	
59	161203A*01-059	middle hose	3	
60	161203A*01-060	short hose	2	
61	161203A*01-061	control box	1	
62	161203A*01-062	air T-fitting	1	
63	161203A*01-063	air hose 1#	1	
64	161203A*01-064	air hose 2#	1	
65	161203A*01-065	air hose 3#	1	
66	161203A*01-066	extension hose	1	
68	161203A*01-067	limit switch	1	
69	161203A*01-068	cable	1	
72	161203A*01-072	bearing	8	
73	161203A*01-073	bearing	4	
74	161203A*01-074	bearing	4	
75	161203A*01-075	bearing	4	
76	161203A*01-076	bearing	4	
77	161203A*01-077	bearing	2	
78	161203A*01-078	bearing	2	
79	161203A*01-079	bearing	4	
80	161203A*01-080	flat washer	8	
81	161203A*01-081	grease nipple	36	
82	161203A*01-082	Circlip	8	
83	161203A*01-083	Circlip	8	
84	161203A*01-084	spring washer	8	
85	161203A*01-085	nut	8	
86	161203A*01-086	screw	24	

PARTS DRAWING (FRAME)



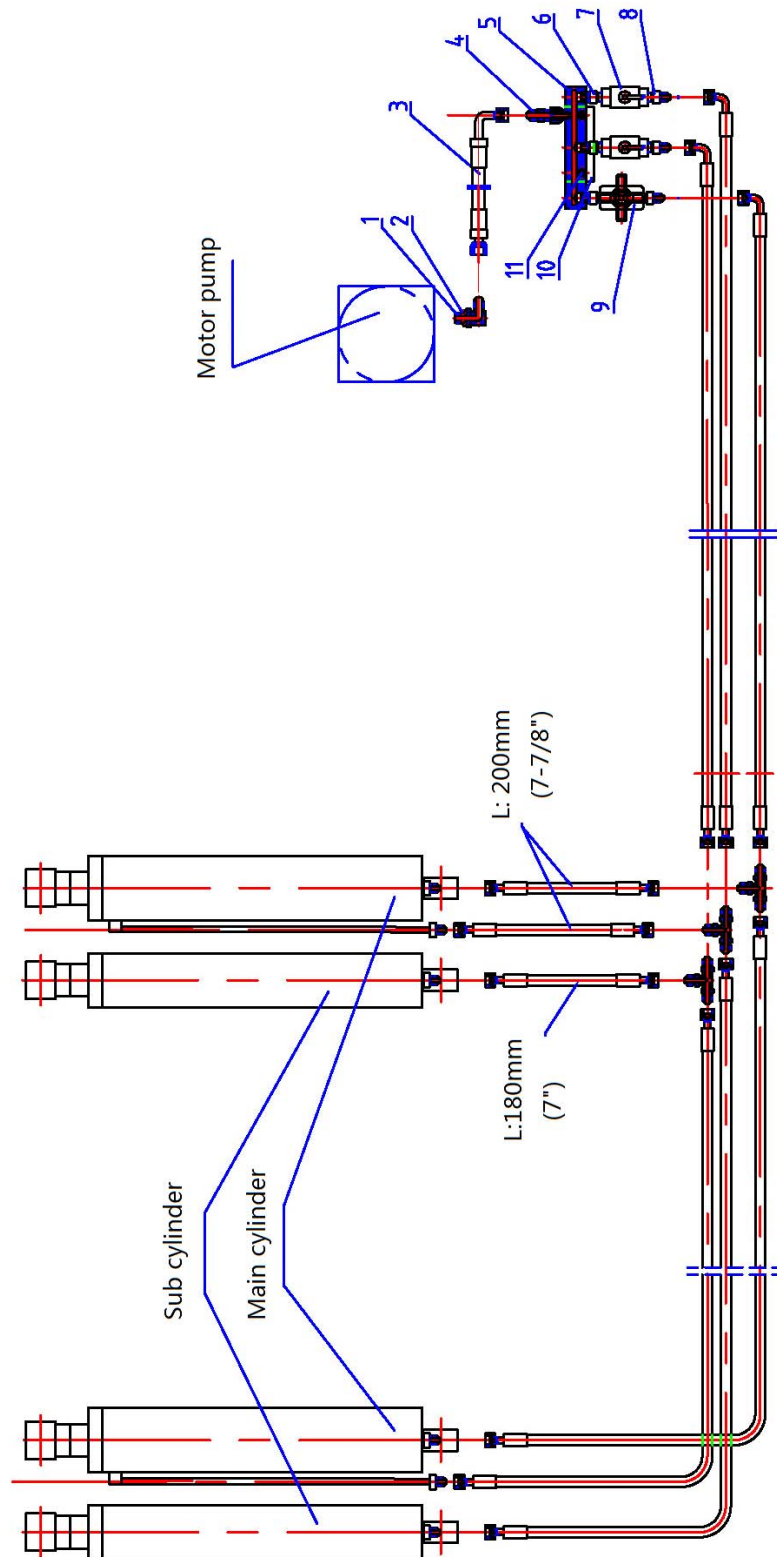
CONTROL UNIT PARTS LIST

ITEM	CODE	DESCRIPTION	QTY	NOTE
1	161203A*02-001	cover lock	1	
2	161203A*02-002	box cover	1	
3	161203A*02-003	rubber washer	1	
4	161203A*02-004	emergency button	1	LA125
5	161203A*02-005	lamp	1	
6	161203A*02-006	power switch	1	
7	161203A*02-007	button	3	green/blue/black
8	161203A*02-008	nut	4	M8
9	161203A*02-009	spring washer	4	Φ8
10	161203A*02-010	falt washer	8	Φ8
11	161203A*02-011	spring washer	8	Φ5
12	161203A*02-012	screw	4	M5*10
13	161203A*02-013	screw	10	M4*10
14	161203A*02-014	hinge left	1	
14-1	161203A*02-014-1	hinge right	1	
15	161203A*02-015	falt washer	6	Φ4
16	161203A*02-016	spring washer	4	Φ4
17	161203A*02-017	nut	8	M4
18	161203A*02-018	box	1	
19	161203A*02-019	cable nut	6	
20	161203A*02-020	cable nut	2	
21	161203A*02-021	motor pump	1	ABZ01S
22	161203A*02-022	bolt	4	M8*25
23	161203A*02-023	air hose	1	
24	161203A*02-024	stright fitting 2#	1	1/8-28(Φ6)
25	161203A*02-025	air valve	1	

ITEM	CODE	DESCRIPTION	QTY	NOTE
26	161203A*02-026	air hose	1	Φ8*4000
27	161203A*02-027	straight fitting 3#	1	1/8-28(Φ8)
28	161203A*02-028	closer	1	
29	161203A*02-029	anchor	4	M10*100
30	161203A*02-030	frame	1	
31	161203A*02-031	fuse seat	1	FS-103
32	161203A*02-032	fuse/25A	2	Φ6*30
33	161203A*02-033	fuse/1A	2	Φ5*20
34	161203A*02-034	fuse seat fixing	1	35*7.5*65
35	161203A*02-035	tapping screw	4	M3.5*6.5
36	161203A*02-036	contactor	1	CJX2-1810-24AV
37	161203A*02-037	tapping screw	2	M3.5*12
38	161203A*02-038	screw	2	M4*4
39	161203A*02-039	earthen terminal	1	
40	161203A*02-040	earthen flag	1	
41	161203A*02-041	terminals	14	WUK2.5B
42	161203A*02-042	terminal fixing	1	35*7.5*105
43	161203A*02-043	cable protector	2	GM-0603
44	161203A*02-044	transformer	1	SL40/28V
45	161203A*02-045	plate	1	
46	161203A*02-046	tapping screw	6	M3.5*9.5
47	161203A*02-047	terminals	1	TB2503
48	161203A*02-048	fixing block	1	EW-35
49	161203A*02-049	transformer seat	2	WASKI EN
50	161203A*02-050	O-ring	1	Φ11.8*Φ1.8
51	161203A*02-051	angle fitting	1	

This diagram illustrates the assembly of a robotic arm system, showing the relationship between various components. The components are numbered 1 through 60, and their assembly sequence is indicated by red dashed lines. The assembly starts with the base (1) and moves upwards through the arm structure (2-10), the motor (10-22), and the gripper mechanism (23-30). The gripper is connected to a motor (31) and a control unit (32-40). The control unit is connected to a power source (41) and a sensor (42). The sensor is connected to a display (43) and a control panel (44). The control panel is connected to a power source (45) and a sensor (46). The sensor is connected to a display (47) and a control panel (48). The control panel is connected to a power source (49) and a sensor (50). The sensor is connected to a display (51) and a control panel (52). The control panel is connected to a power source (53) and a sensor (54). The sensor is connected to a display (55) and a control panel (56). The control panel is connected to a power source (57) and a sensor (58). The sensor is connected to a display (59) and a control panel (60).

HYDRAULIC HOSE CONNECTING DIAGRAM

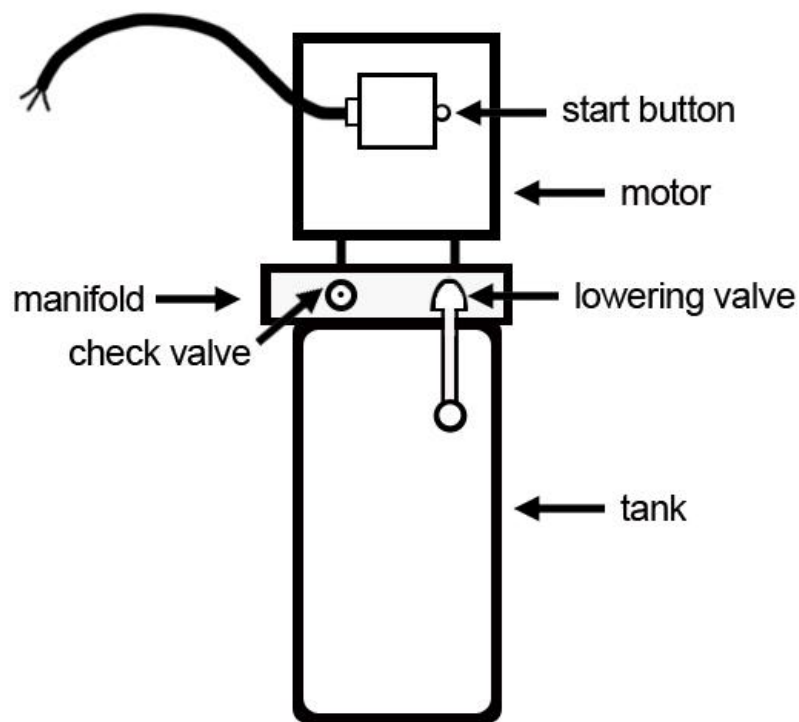


IMPORTANT

POWER UNIT PRIMING PROCEDURE

THE PROBLEM: Power unit runs fine but will not pump any fluid.

Step 1 – Locate the check valve, the flush plug to the left of the lowering valve.
(See drawing below.)



Step 2 – Using an Allen wrench and shop towel – with shop towel in place to catch fluid – loosen the check valve plug 2 ½ turns to allow it to leak.

Step 3 – Push the START button for one second, then release for three seconds.
Repeat these steps until unit starts pumping fluid.

Step 4 – Tighten the check valve plug.

YOUR POWER UNIT SHOULD BE PRIMED