



TEXAS EQUIPMENT

Mobile Scissor Lift OPERATION MANUAL

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Model 33806

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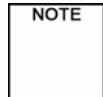
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1. Safety Information

1.1 Note, Caution and Warning

This document uses the following conventions—Note, Caution and Warning – to alert you to special instructions, tips, or hazards for a given procedure. Please familiarize yourself with the conventions described below.



Indicates important information that requires special attention, such as a procedure for a specific vehicle, or tips on operating the equipment.



Indicates the potential for damage to equipment, accessories, or the vehicle unless you follow the instructions or procedure exactly.



Indicates the potential for property damage, personal injury, or death due to hazards associated with the equipment, vehicle, or environment. Do not perform any procedure until you have read and understood the warning instructions.

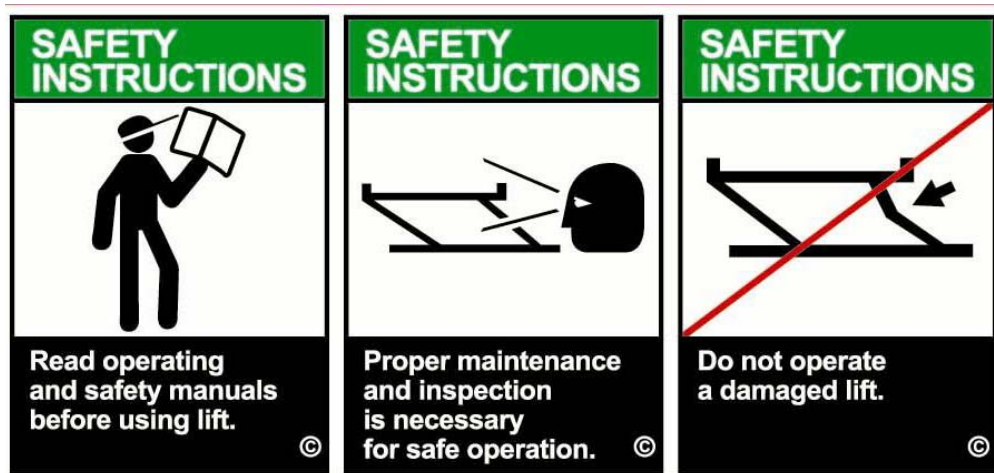
1.2 Important Information

1. Read this manual thoroughly before installing, operating, or maintaining this lift.
2. This lift is designed for indoor use only, and should not be installed in a pit or depression.
3. The lifts have specific electrical requirements as described in the Installation Instructions section of this manual.
4. This lift has a minimum ceiling height requirement as described in the Installation Instructions section of this manual.
5. Failure by the owner to provide the **recommended shelter, mounting surface, electrical supply, and ceiling height** could result in unsatisfactory lift performance, property damage, or personal injury.
6. The operation of the lift is permitted by authorized person only.

1.3 Safety Instructions

1. **Do not** raise a vehicle on the lift until the initialization is completed as described in this manual.
2. Technicians should be trained to use and care for the lift by familiarizing themselves with the publications listed above. The lift should **never be operated by an untrained person**.
3. Always position the pads properly out of the way before pulling the vehicle into, or out of the bay. Failure to do so could damage the vehicle and/or the lift.
4. **Do not overload the lift.** The capacity of the lift is shown on cover of this document and on the lift's serial number tag
5. Positioning the vehicle is very important. Only trained technicians should position the vehicle on the lift. **Never allow anyone to stand in the path of the vehicle as it is being positioned and never raise vehicle with passengers inside.**
6. Position the pads to the vehicle manufacturer's recommended pickup points. Raise the lift until contact is made with the vehicle. Make sure that the pads and the ramps have properly engaged the vehicle before raising the lift to a working height.
7. Keep everyone clear of the lift when the lift is moving, the locking mechanism is disengaged, or the vehicle is in danger of falling.
8. Unauthorized personnel should never be in the shop area when the lift is in use.
9. Inspect the lift daily. **The lift should never be operated if it has damaged components, or is malfunctioning.** Only qualified technicians should service the lift. **Replace damaged components with manufacturer's parts, or equivalent.**
10. **Keep the area around the lift clear of obstacles.**
11. **Never override the self-returning lift controls.**
12. Avoid excessive rocking of the vehicle when it is on the lift.
13. To reduce the risk of personal injury, keep hair, loose clothing, fingers, and all body parts away from moving parts.
14. To reduce the risk of electric shock, **do not** use the lift when wet, do not expose the lift to rain.
15. To reduce the risk of fire, **do not** operate equipment in the vicinity of open containers of flammable liquids (gasoline).
16. Use the lift only as described in this manual, **use only manufacturer's recommended attachments.**
17. **Unusual vehicles, such as limousines, RV's, and long wheelbase vehicles, may not be suitable for lifting on this equipment.** If necessary, consult with the manufacturer or the manufacturer's representative.

18. The maintenance procedures described in this manual can be done by the lift's owner/employer. Any other procedure should only be performed by trained lift service personnel. **These restricted procedures include, but are not limited to, the following: cylinder replacement, platform and safety latch replacement, motor replacement, control board replacement.**
19. Anyone who will be in the vicinity of the lift when it is in use should familiarize themselves with following Caution, Warning, and Safety related decals supplied with this lift, and replace them if they are illegible or missing.



Disclaimers

The information contained in this manual was considered accurate at the time of printing and is subject to change without notification. Any corrections should be directed to Texas Equipment.

2. Technical Manual

2.1 Product Description

The KERNEL hydraulic mobile scissor lift is a manually mobile, frame contact lift incorporating the latest safety technologies. Designed and manufactured for a lifting capacity of 2,500kg, is fully capable for lifting vehicles, vans and safely holding them in an elevated position.

The KERNEL hydraulic mobile scissor lift consists of a fixed structural scissor lift, the mobile unit (wheels and trolley), the hydraulic power control system and safety devices.

2.2 Technical Data

Capacity	2,500 kg
Lifting Height, Max	995 mm
Height, Min	110 mm
Width Overall	1,950 mm
Platform Length, Max	1,966 mm
Platform Width	460 mm
Width between platforms.	845 mm
Power Unit	400V, 50Hz, 6A, 2.2KW
Ambient Air Temperature	+5°C ~ +40°C
Ambient Air Humidity	30% ~ 95%
Altitude	below 1,000 m above sea level
Storage Temperature	-25°C ~ +55°C



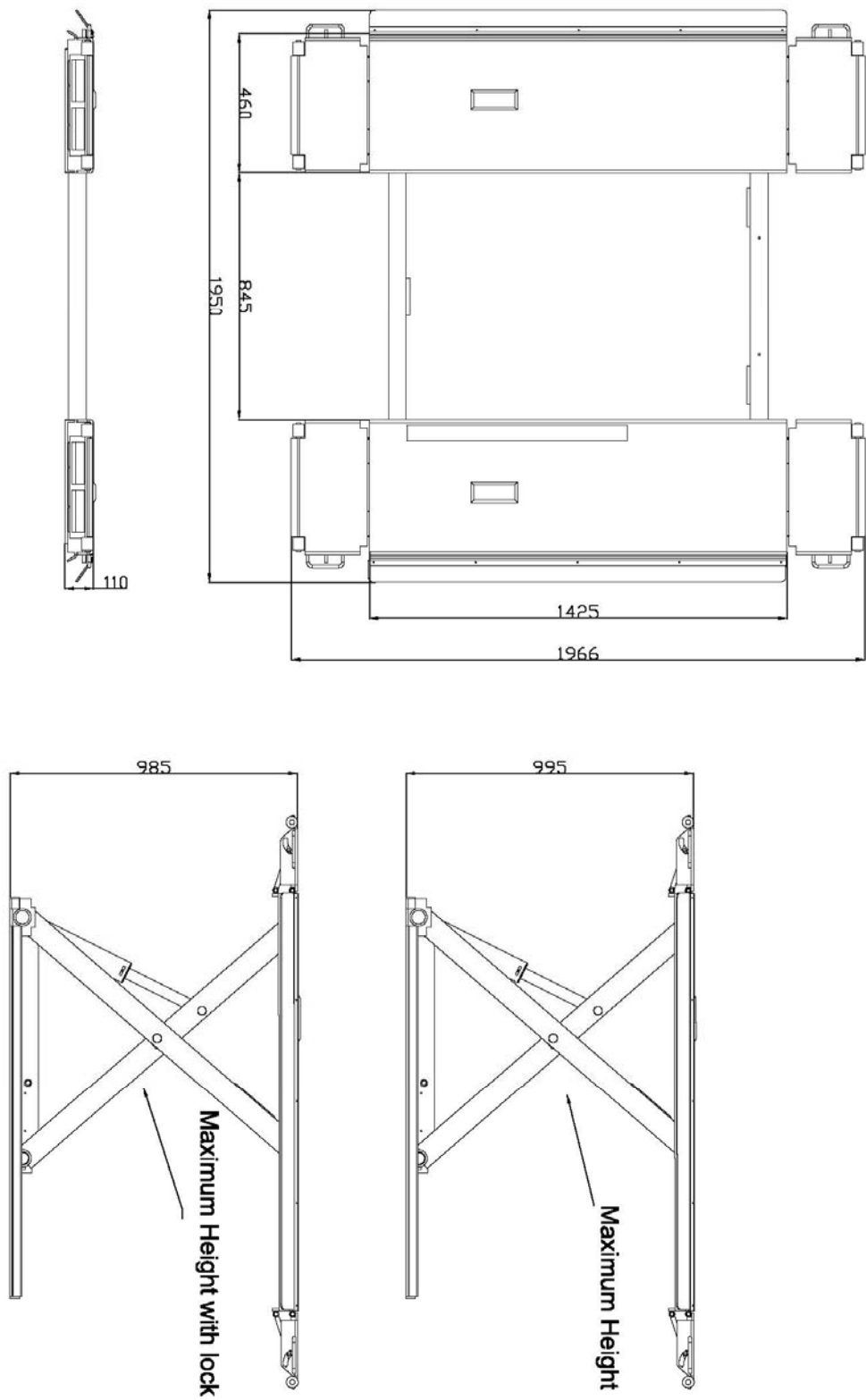
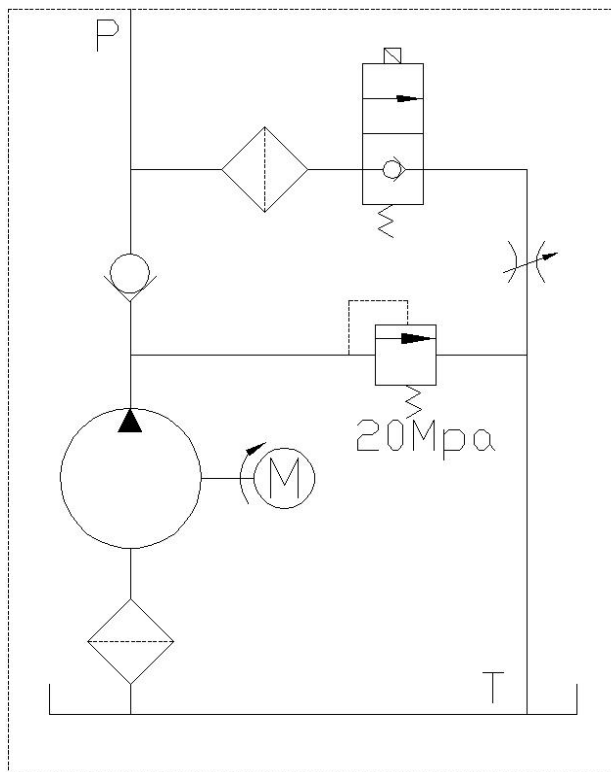
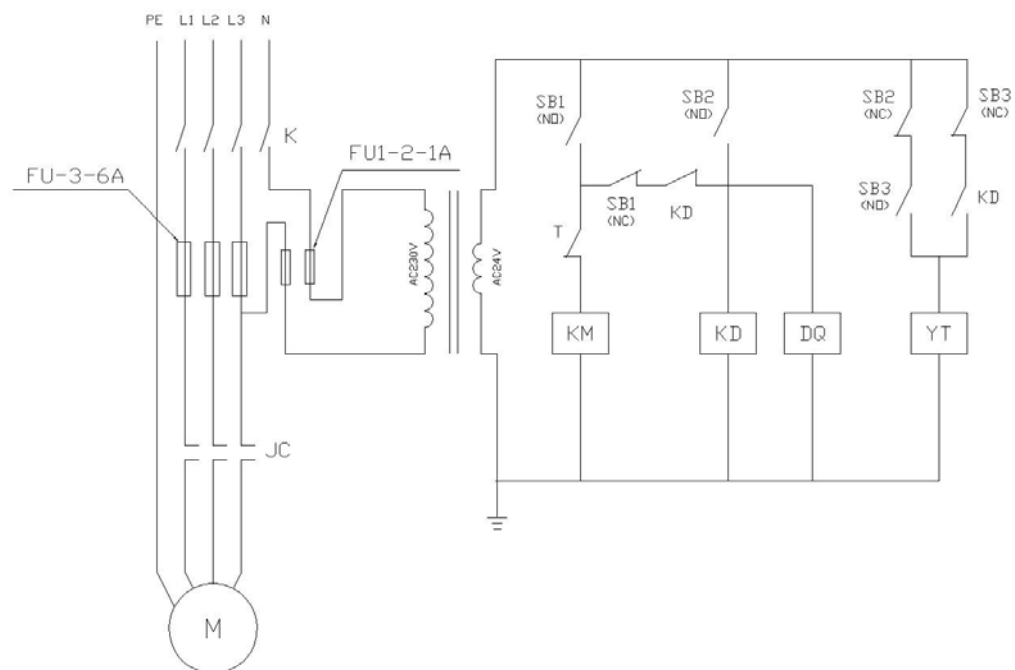


Figure 1 – General View

2.3 Hydraulic Scheme



2.4 Circuit Diagram



JC: AC Contactor	KM: Coil	KD: Time relay	DQ: Air Valve
YT: Relief valve	SB1: UP button (green)	SB2: DOWN button (blue)	SB 3: LOCK button (black)

3. Before Using

3.1.Site Selection

The hydraulic mobile scissor lift is designed only for indoor use. Application in a room with explosion hazard is not permitted. Setting in a wet place, a car wash center for instance, is forbidden.

3.2.Surface Condition

The hydraulic mobile scissor lift should be installed on level ground.



Failure in accomplishing the foundation requirement may cause the lift instability or personal injury. Installing on asphalt, soft clay floor or near the expansion gap is prohibited.

3.3.Installation Instruction

1. Install the ramps.

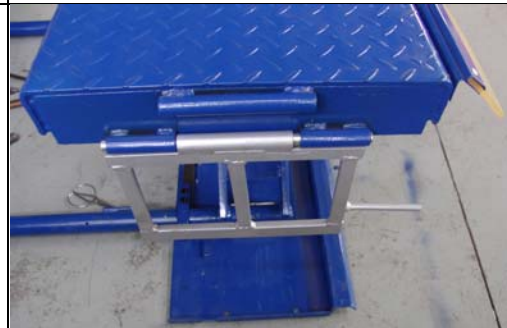
A. Install the Locking device

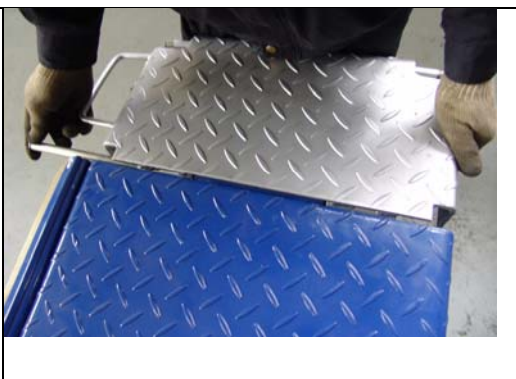
Insert the pin through the slot



B. Mount the spring nut

Clamp the spring nut on both end of the pin.



C. Mount the ramp Insert the pin through the slot and clamp the Spring nut	
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2. Connect with control unit

A. Open the control unit Loosen the central screw and take out the enclosure of the control unit according to the instruction in the picture.	 
B. Connect Oil pipe Connect both oil pipe with the connector on the valve block	

C. Connect the air tube Connect the air tube (6mm) to the connector (indicated with arrow)	
D. Connect the power supply and air compressor Connect the power cable (indicated with arrow) with power supply and the air tube (8mm) with the air valve.	

3. **Lubricate the sliding pieces with heavy duty bearing grease.**
4. **Final Adjustment.**
 - A. If any problems are encountered, **do not** proceed with subsequent steps. Instead, resolve the problem before proceeding by referencing the troubleshooting portion of the Owner's Manual section of this manual.
 - B. Raise the lift to full height. Lower the lift onto the safety latches. Raise the platforms, pull out both latch pull rods, and lower the lift to the ground.
 - C. Raise the lift empty to the top of its travel and lower it to the floor three (3) times to remove the remaining air from the hydraulic system.
 - D. **The latches should click together as the lift is being raised.**
 - E. When the platforms are lowered onto the locks, **neither pull rod should be capable of being pulled out.**
 - F. **The first time a vehicle is placed on the lift, raise it no higher than 500 mm.** Lower the vehicle onto the safety latches. Raise the lift a few higher (about 200 mm) and open both latch pull rods then lower the vehicle to the floor.
 - G. Raise the vehicle to full height and lower the platforms onto the safety latches. Lower the vehicle to the floor.
 - H. After cycling the lift **ten times** with a vehicle on it, **recheck the tightness of the screws in the basement.**

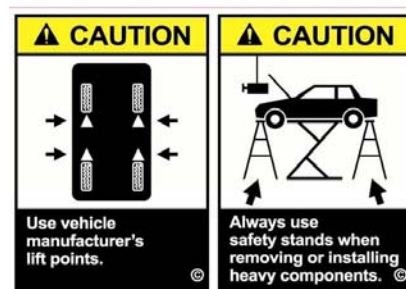
3.4. Preparation for Starting up

- 3.5.1. The latch is **engaged** when was installed in the column.
- 3.5.2. The hydraulic oil should be ISO-22.
- 3.5.3. Have a certificate electrician establish 400V/50HZ/6A power supply to motor and overheated switch. A protection against indirect contact (RCCB) need to be provided by the user
- 3.5.4. Air Evacuation. There may remain little air in the hose or cylinder during installation. Operating the lift up and down in the working height several times without load.

4. Operation Manual

Be sure to read and familiarize yourself with the Safety Instructions at the beginning of this manual. Failure to follow Safety Instructions may result in property damage, personal injury or death.

4.1 Caution and Warning Label



4.2 Operating Instructions



Be sure to read and familiarize yourself with the Safety Instructions at the beginning of this manual. Failure to follow Safety Instructions may result in proper damage, personal injury or death.



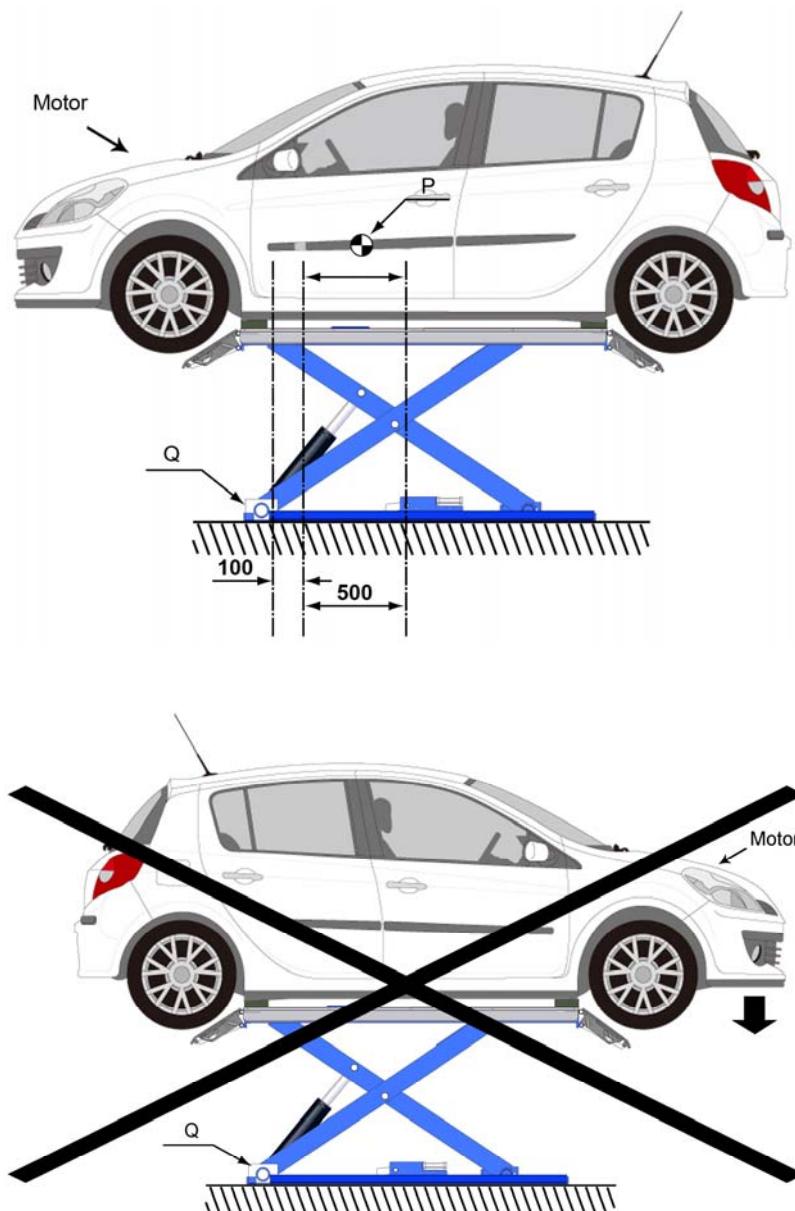
To avoid personal injury and/or property damage, permit only trained personnel to operate lift. After reviewing these instructions, get familiar with lift controls by running the lift through a few cycles before loading vehicle on the lift.

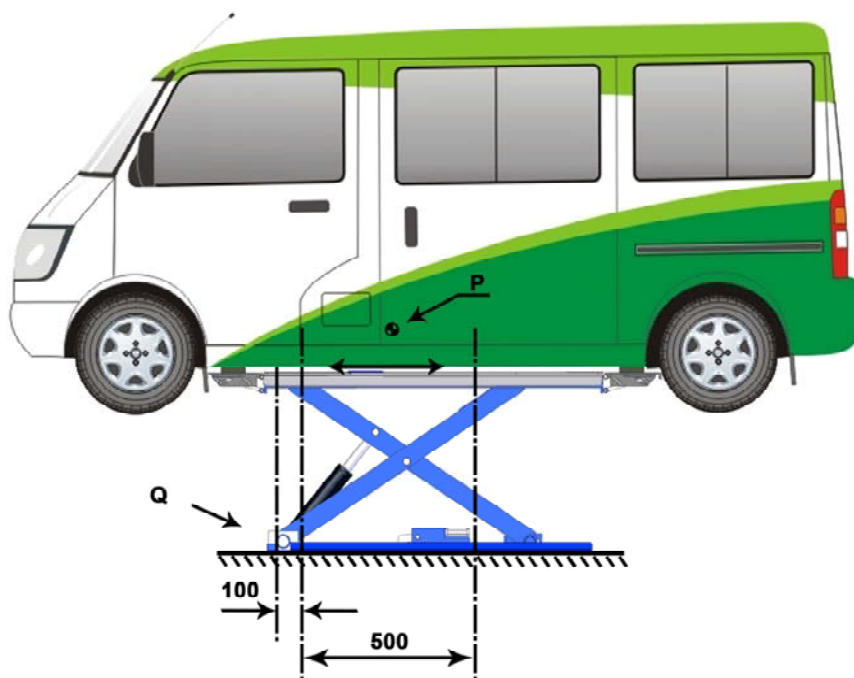
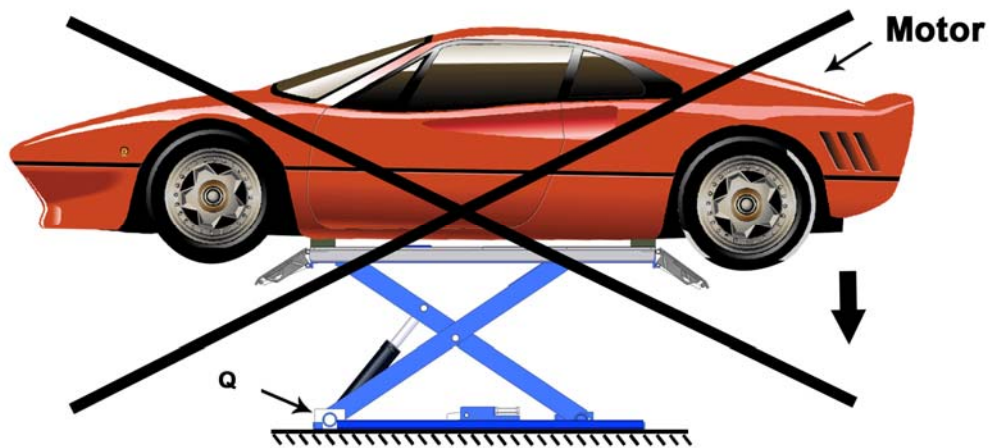
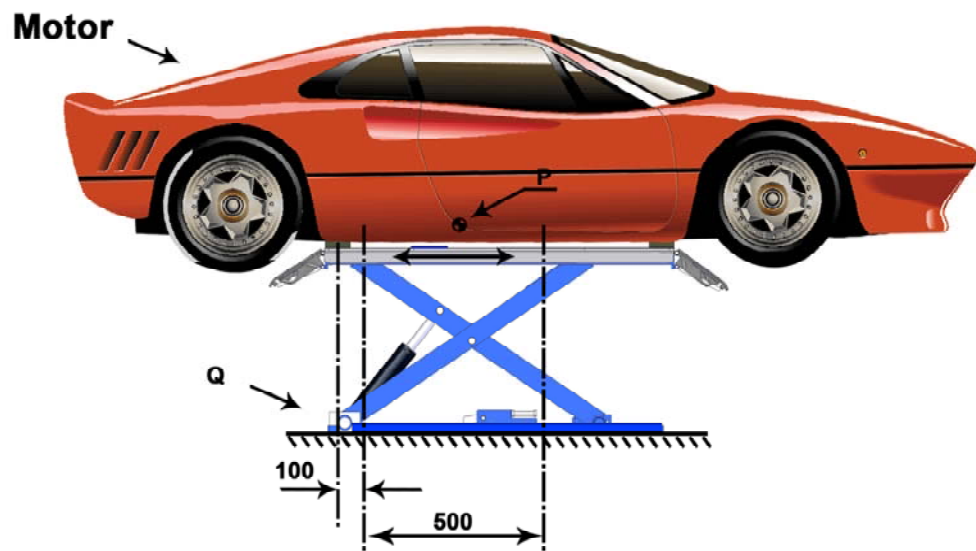


Always lift the vehicle using all four adapters. **NEVER** raise just one end, one corner, or one side of vehicle.



The heavy end of the vehicle **MUST** put on the side as shown in the figure.





4.2.1 Lift Preparation:

Lift must be fully lowered and fields clear of all personnel before the vehicles brought on lift.

4.2.2 Loading Lift:

Position the adapter at vehicle manufacturer's recommended lift points. Use intermediate, high step, or optional adapters for under body clearance when required.



Typical Lifting Points. Some Vehicle may have the manufa cturer's Service Garage Lift Point locations identified by triangle shape marks on it's underplatform. Also, there may be a label located on the right front door lock face showing specific vehicle lift points. If the specific vehicle lift points are not identified, refer to the vehicle operation manual or consult the vehicle agent. ALWAYS follow the operating instructions supplied with the lift.

4.2.3 To Raise Lift

- a. For all lifts. Push green button (UP) on control panel
- b. Raise vehicle until the clear the floor, then release the UP button.
- c. Check support adapters for secure contact at vehicle manufacturer's recommended lift points.
- d. Continue to raise to desired height only if vehicle is secure on lift
- e. Repeat complete spotting, loading and raising procedures if required.
- f. Push the black button LOCK to lower the vehicle to the locki ng position if locki ng latches are not engaged.



DO NOT go under vehicle if locking latches are not engaged.



Before attempting to lift pickup trucks or other truck frame vehicles, be sure that:

- **Vehicle frame is strong enough to support it's weight and has not been weakened by modification or corrosion.**
- **Vehicle individual axle weight does not exceed one-half lift capacity.**
- **Adapters are in secure contact with frame at vehicle manufacturers recommended lift point.**
- **Vehicle is stable on lift**

4.2.4 To Lower Lift

- a. Check all danger points of the lift and be sure that there are no objects or people in the working area (danger area) around the lift or on the lift.

- b. Lower the lift to the required working height or to its lowest (or fully collapsed) position.
Push blue button DOWN on control panel
- c. Observe the complete lowering process.
- d. When the lift is in its lowest position, remove the polymer supports.
- e. Drive the vehicle out of the lift if the lift is in the lowest position.
- f. Remove adapters from under vehicle before moving vehicle



Remain clear of lift when lowering vehicle. Observe pinch point warning decals. If lift is not operating properly, DO NOT use until adjustment or repairs are made by qualified lift service personnel.

4.2.5 Change the installation place

- a. Lower the lift in the lowest position.
- b. Drive the vehicle from the lift.
- c. Raise the lift on a height of approx. 500mm.
- d. Use the mobile set. Put in the steering roller and the fixed roller.
- e. Lower the lift into the lowest position. Simultaneously, the base-plates lift themselves.
- f. Now the automotive-lift is movable.
- g. Remove the steering rod , if the lift is on the new place.
- h. Remove the mobile set.

4.3 Maintenance Instructions

Contact your service provider for instruction before starting up if you are not completely familiar with automotive lift maintenance procedures. Only qualified personnel can perform maintenance on this equipment. Any failure in operation may cause personal injury or death.

- ✓ Always keep bolts tight. Check periodically.
- ✓ Always keep lift components clean.
- ✓ Always if oil leakage is observed, contact your service provider.

- ✓ Check cables and sheaves for wear everyday. Replace worn or broken parts with lift manufacturer's parts, or their equivalent.

Every Month

- ✓ Lubricate locking latch shafts. Push latch handle several times for oil to penetrate joints.
- ✓ Lubricate the four inside corners of the legs with heavy duty bearing grease.
- ✓ With lift lowered check the hydraulic fluid level. If necessary add oil as described in the Installation Instruction section of this manual
- ✓ Check platform latch synching: Latches should click at the same time. If necessary adjust equalization cables as described in the Installation Instruction section of this manual.
- ✓ Check tightness of all bolts.
- ✓ Check the nuts for tightness every week for the first month, and every month afterwards.

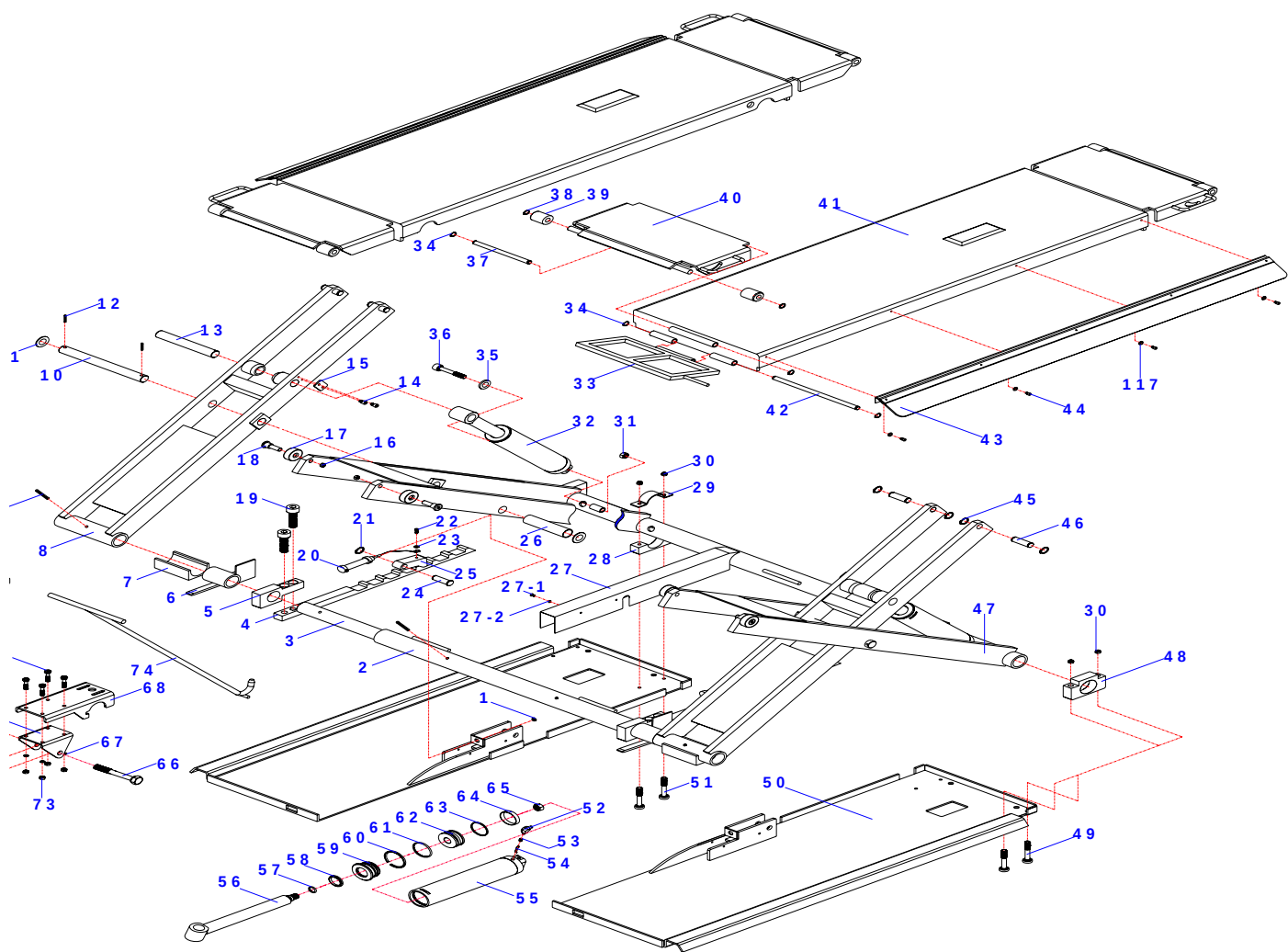
Every 3 Months

- ✓ Check and clean the oil filter

Every 6 Months

- ✓ Check fluid level of lift power unit and refill if required.
- ✓ If Lift stops short of full rise or chatters, contact your service provider.
- ✓ Replace all caution, warning or safety related decals on the lift If unable to read or missing. Reorder labels from service provider.

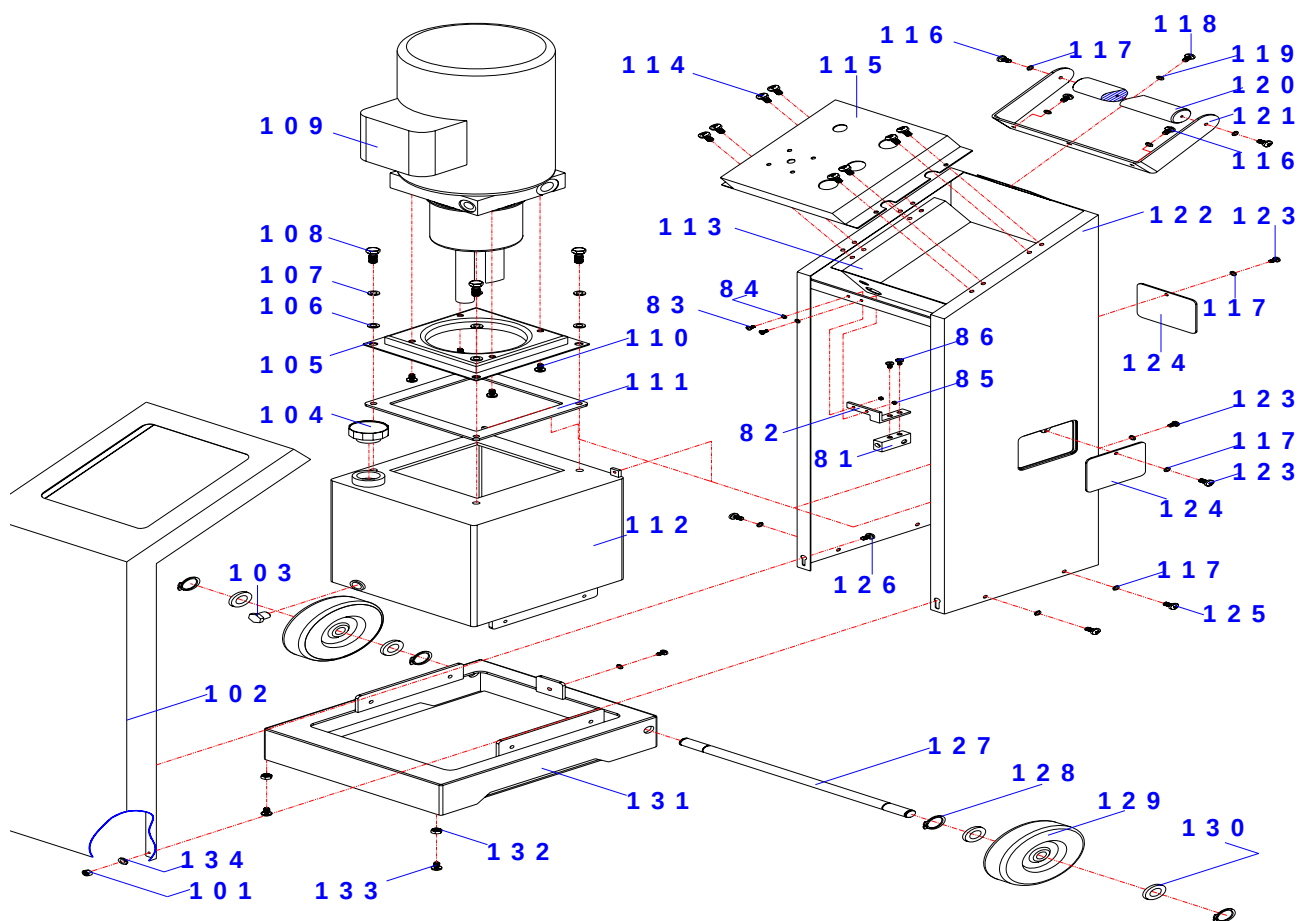
5. Parts List



NO.	Part Number	Name	Quantity
1	JP16-25006-000	Flat nut	4
2	JP16-18000-000	Connection pipe jointing	1
3	JP16-00010-000	Spindle	1
4	JP16-00008-000	Safety rack	2
5	JP16-00009-000	Spindle spacer	2
6	JP16-08000-000	Safety limit assy	2
7	JP16-00011-000	Half moon block	2
8	JP16-03000-000	Inner scissor frame	2
9	5402-08060-000	Elastic pin	4
10	JP16-00006-000	Spindle	2
11	5301-00030-000	Washer	4
12	5402-06040-000	Elastic pin	4
13	JP16-00005-000	Position plate	2
14	5105-05006-000	Hex screw	4
15	JP16-00014-000	Position plate	2
16	5201-00014-000	Hex nut	4

17	JP16-00017-000	Upper block	4
18	5105-14040-000	Hex bolt	4
19	5105-16050-000	Hex screw	4
20	JP16-25400-000	Air cylinder	2
21	5304-00018-000	Elastic washer	2
22	5101-08012-000	Hex bolt	2
23	5301-00008-000	Flat washer	2
24	JP16-00013-000	Spindle	2
25	JP16-00012-000	Safty hook	2
26	JP16-00007-000	Spindle spacer	2
27	JP16-00004-000	Safty cover	2
27--1	5110-05010-000	Cross bolt	4
27--2	5301-00005-000	Flat washer	4
28	JP16-00003-000	Support bracket	2
29	JP16-00002-000	Fixed plate	2
30	5201-00008-000	Hex nut	8
31	5206-00008-000	Nylon nut	2
32	JP16-06000-000	Cylinder assy	2
33	JP16-14000-000	Ramp support assy	4
34	5304-00014-000	Elastic washer	16
35	5301-00008-000	Washer	2
36	5105-08080-000	Hex screw	2
37	JP16-00016-000	Ramp connection spindle	4
38	5304-00017-000	Elastic washer	8
39	JP16-12008-000	Idler wheel	8
40	JP16-13000-000	Ramp assy	4
41	JP16-16000-000	Platform assy	2
42	JP16-00015-000	Connection spindle assy	4
43	JP16-16009-000	Protection plate	2
44	5105-05015-000	Hex bolt	8
45	5304-00020-000	Elastic washer	8
46	JP16-00018-000	Position pin	4
47	JP16-01000-000	Outer scissor frame	1
48	JP16-00001-000	Position spindle assy	2
49	5107-08035-000	Cross bolt	4
50	JP16-11000-000	Underframe assy	2
51	5107-08050-000	Cross bolt	4
52	JP16-06007-000	Union	2
53	JP16-06006-000	Throttling washer	2
54	QY02-02101-000	Spring	2
55	JP16-06100-000	Cylinder jointing	2

56	JP16-06200-000	Piston rod jointing	2
57	5901-00200-000	O-ring	2
58	5906-00380-000	Dust-ring	2
59	JP16-06004-000	Cylinder cover	2
60	JP16-06005-000	Washer	2
61	5901-00600-000	O-ring	2
62	JP16-06001-000	Piston	2
63	5901-00550-000	Seal ring	2
64	JP16-06002-000	Guide ring	2
65	5201-00020-000	Hex nut	2
66	5101-08064-000	Hex bolt	3
67	5301-00008-000	Flat washer	12
68	JP16-05001-000	Dragging position plate	3
69	5109-08020-000	Hex bolt	12
70	JP16-05002-000	Fixed plate for wheel	3
71	5201-00008-000	Hex nut	3
72	JP16-05003-000	Idler wheel	3
73	5206-00008-000	Nylon nut	12
74	JP16-04000-000	Dragging handle assy	1
75	JP16-00019-000	Rubber washer	4
76	JP16-25100-000	Direct union	2
77	JP16-25001-000	Air hose(1)	1
78	JP16-25002-000	Air hose(2)	1
79	JP16-25200-000	Air solenoid valve	1
80	DK04-08003-000	Plug	1



81	DK04-08006-000	Direct union	1
82	JP16-25003-000	Fixed plate for solenoid valve	1
83	5116-04014-000	Hex bolt	2
84	5108-00004-000	Washer	2
85	5201-00004-000	Hex nut	2
86	5110-04010-000	Cross bolt	2
87	DK04-08004-000	Direct union	2
88	JP16-25004-000	Air hose(3)	1
89	JP16-25300-000	Air union	1
90	JP16-25005-000	Air hose(4)	1
91	JP16-25007-000	Adjustable nut	2
92	JP16-25008-000	Steel cable	2
93	JP16-25009-000	Loop	2
94	JP16-23000-000	Short oil hose assy	1
95	JP16-24001-000	Direct union	2
96	DK04-09200-000	T union	1
97		Valve block	1
98	5901-00118-000	O-ring	1

99	DK04-09002-000	Direct union	1
100	JP16-22000-000	Long oil hose assy	1
101	5201-00003-000	Hex nut	2
102	JP16-21200-000	Front cover assy	1
103	DK04-03010-000	Outlet oil hose plug	1
104	BZ01-02200-000		1
105	DK04-04000-000	Cover jointing	1
106	5101-00008-000	Flat washer	4
107	5306-00008-000	Elastic washer	4
108	5102-08030-000	Hex bolt	4
109	JP16-20000-000	Hydraulic pump assy	1
110	5105-06012-000	Hex bolt	4
111	DK04-00005-000	Rubber washer	1
112	JP16-21300-000	Oil tank assy	1
113	JP16-21003-000	Nether cover	1
114	5114-04010-000	Hex bolt	4
115	JP16-21002-000	Upper cover	1
116	5115-05015-000	Hex bolt	4
117	5308-00005-000	Washer	13
118	5115-06020-000	Hex bolt	1
119	5308-00006-000	Washer	1
120	JP16-21204-000	Drag handle	1
121	JP16-21205-000	Drag handle frame	1
122	JP16-21005-000	Box cover	1
123	5115-05010-000	Hex bolt	5
124	JP16-21001-000	Aggregate door	2
125	5115-05025-000	Hex bolt	4
126	JP16-21201-000	Hex bolt	2
127	JP16-21103-000	Wheel spindle	1
128	5304-00012-000	Elastic washer	4
129	JP16-21110-000		2
130	5101-00016-000	Flat washer	4
131	JP16-21100-000	Oil tank underfram assy	1
132	5201-00005-000	Hex nut	2
133	5105-05015-000	Hex bolt	2
134	5306-00003-000	Elastic washer	2