

TP11KAC-D3

**11,000 lb Capacity
Two Post Auto Lift**

Operation Manual



REV A-062013

**11,000 LB.
TWO POST
DIRECT DRIVE
CLEAR FLOOR
ASYMMETRIC LIFT**



TP11KAC-D3
Direct Drive
Clear Floor
Asymmetric
Lift

Features:

- ◆ **UNIQUE TRIPLE TELESCOPING ASYMMETRIC ARMS**
- ◆ Dual cylinder direct pull lifting. No chains or roller bearings to wear out
- ◆ Single piece column. Continuous rolled steel column. No sheet metal
- ◆ Extra long carriage (44") puts less stress on slider blocks
- ◆ Automatic electric override with padded cut-off bar.
- ◆ Single point lock release
- ◆ Stackable truck adapters are standard
- ◆ Powder-coated paint finish
- ◆ FREE assembly hardware

SPECIFICATIONS

TP11KAC-D3

Lifting capacity	11,000 lbs.
Height overall	143 ½"
Width overall	137"
Lifting height	4 ¾" - 68 ½"
Long arm extension	33 ½" - 72 ½"
Short arm extension	23 ¼" - 47 ½"



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.

CONTENTS

1. Safety Information

- 1.1 Note, Caution and Warning
- 1.2 Important Information
- 1.3 Safety Instructions

2. Technical Manual

- 2.1 Product Description
- 2.2 Technical Data
- 2.3 Hydraulic Scheme

3. Operation Manual

- 3.1 Caution and Warning Label
- 3.2 Operation Instructions
- 3.3 Emergency Operation Instruction
- 3.4 Maintenance Instructions

4. Parts List

5. Troubleshooting Guide

1. Safety Information

1.1 Note, Caution and Warning

This document uses the following terms—Note, Caution and Warning – to alert you to special instructions, tips, or hazards for a given procedure. Please familiarize yourself with the terms 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 floor on which the lift is to be installed must be **200 mm minimum thickness concrete, with a minimum compressive strength of 3000 psi, and reinforced with steel bar.**
4. The lifts have specific electrical requirements as described in the Installation Instructions section of this manual.
5. This lift has a minimum ceiling height requirement as described in the Installation Instructions section of this manual.
6. 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.
7. 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 installation 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 arms and adapters 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 arms to the vehicle manufacturer's recommended pickup points. Raise the lift until contact is made with the vehicle. Make sure that the arms 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. Use safety stands when removing or installing heavy vehicle components.
13. Avoid excessive rocking of the vehicle when it is on the lift.
14. To reduce the risk of personal injury, keep hair, loose clothing, fingers, and all body parts away from moving parts.
15. To reduce the risk of electric shock, **do not** use the lift when wet, do not expose the lift to rain.
16. To reduce the risk of fire, **do not** operate equipment in the vicinity of open containers of flammable liquids (gasoline).
17. Use the lift only as described in this manual, **use only manufacturer's recommended attachments**.
18. **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.

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19. The troubleshooting and 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, carriage and safety latch replacement, leg replacement, overhead structure replacement.**
20. 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 KERNEL

2. Technical Manual

2.1 Product Description

The TP11KAC-D3 lift is a surface mounted, frame contact lift incorporating the latest safety technologies. Designed and manufactured for a lifting capacity of 11,000 lb, it is fully capable for lifting vehicles, vans and trucks and safely holding them in an elevated position.

The TP11KAC-D3 2-post hydraulic lift consists of a fixed structural unit (base and posts), the mobile unit (carriage and arms), the hydraulic power system and safety devices.

2.2 Technical Data

Capacity	4,990 kg (11,000 lb)
Lifting Height	1,740 mm (68-1/2")
Height Overall	3,648 mm (143-5/8")
Width Overall	3,484 mm (137-1/8")
Front Arm Reach, Max.	850 mm (33-1/2")
Front Arm Reach, Min.	1,840 mm (72-1/2")
Rear Arm Reach, Max.	590 mm (23-1/4")
Rear Arm Reach, Min.	1,208 mm (47-1/2") 400V,
Power Unit	50Hz, 16A, 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

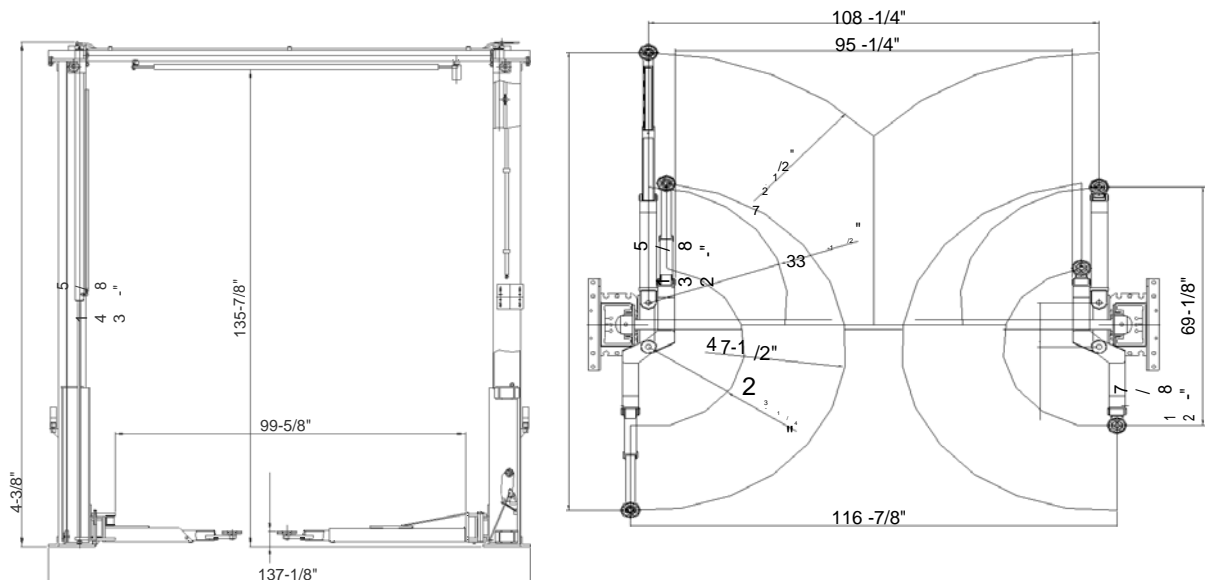
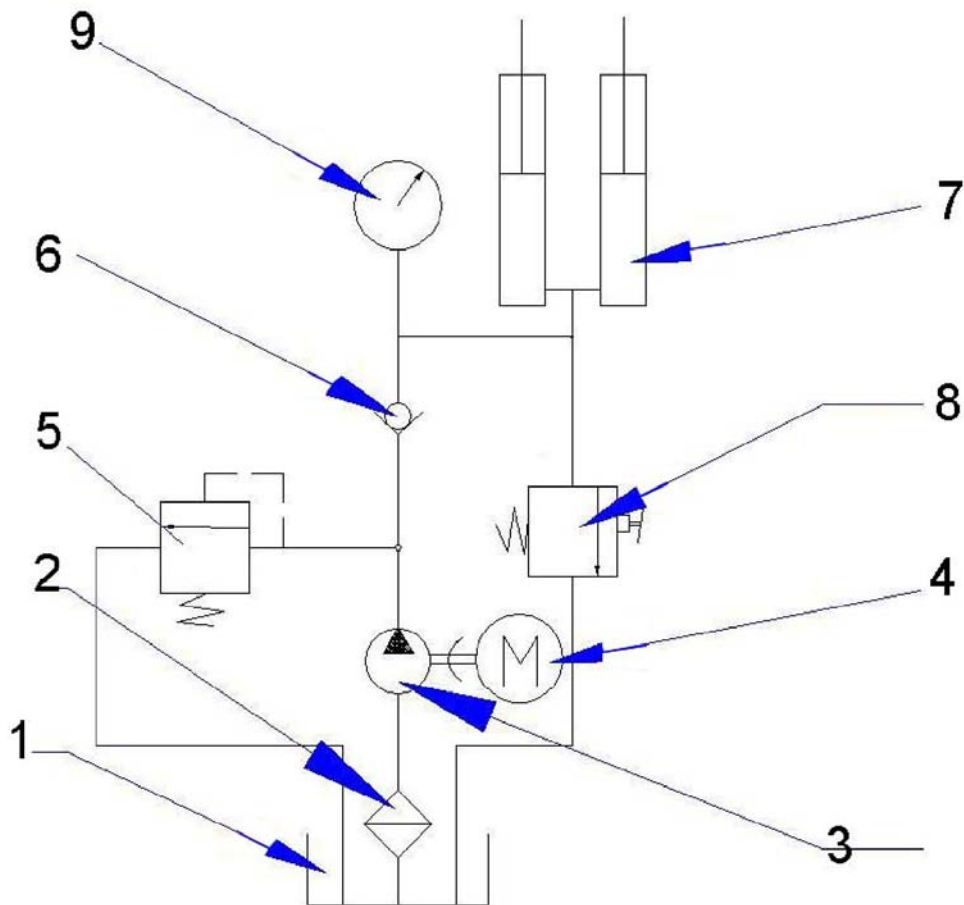


Figure 1 – Front View Specs & Top View Specs

2.3 Hydraulic Scheme



1. Oil Tank	2. Mesh	3. Gear Pump
4. Power Unit	5. Overflow Valve	6. One-way Valve
7. Cylinder	8. Hand Release Valve	
Hydraulic Pump	2.2KW, 2850 rpm	
Setting Pressure	20 Mpa	
Flow rate for the Pump	2.1 ml/round	

3. Operation Manual

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

3.1 Caution and Warning Label



3.2 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 **Rear** arms.

3.2.1 Lift Preparation:

Lift must be fully lowered and service bay clear of all personnel before the vehicles brought on lift. Swing arms out to full drive-thru position

3.2.2 Loading Lift:

Swing arms under vehicle and position adapters 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 manufacturer's Service Garage Lift Point locations identified by triangle shape marks on it's undercarriage. 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.

3.2.3 To Raise Lift

- a. For all lifts. Push UP button on control panel
- b. Stop before making contact with vehicle. Check arm restraint pins for engagement. If required, slightly move arm to allow restraint gear and pawl to mesh. **DO NOT** hammer pin down, as this will damage the restraint gear teeth.
- c. Raise vehicle until the clear the floor, then release the UP button.
- d. Check support adapters for secure contact at vehicle manufacturer's recommended lift points.
- e. Continue to raise to desired height only if vehicle is secure on lift

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- f. DO NOT go under vehicle if all four adapters are not in secure contact at vehicle manufacture's recommended lift point.
 - g. Repeat complete spotting, loading and raising procedures if required.
 - h. Push the GROUND button to lower the vehicle to the locking position if locking 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**
- ⌘ **The overhead switch bar will contact the highest point on the vehicle**

3.2.5 While Using Lift

- a. Avoid excessive rocking of vehicle while on lift.
- b. Always use safety stands as needed or when removing or installing heavy components.
- c. Always wait until the lift is stable while using the lift.

3.2.5 To Lower Lift

- a. Remove all tools or other objects from lift area
- b. Push DOWN button on control panel



Remain clear of lift when lowering vehicle. Observe pinch point warning decals.

3.2.6 Unloading Lift

- a. Push GROUND button on control panel, the lift will lower down onto the ground with beep.
- b. Remove adapters from under vehicle and swing arms to full drive-thru position before moving vehicle

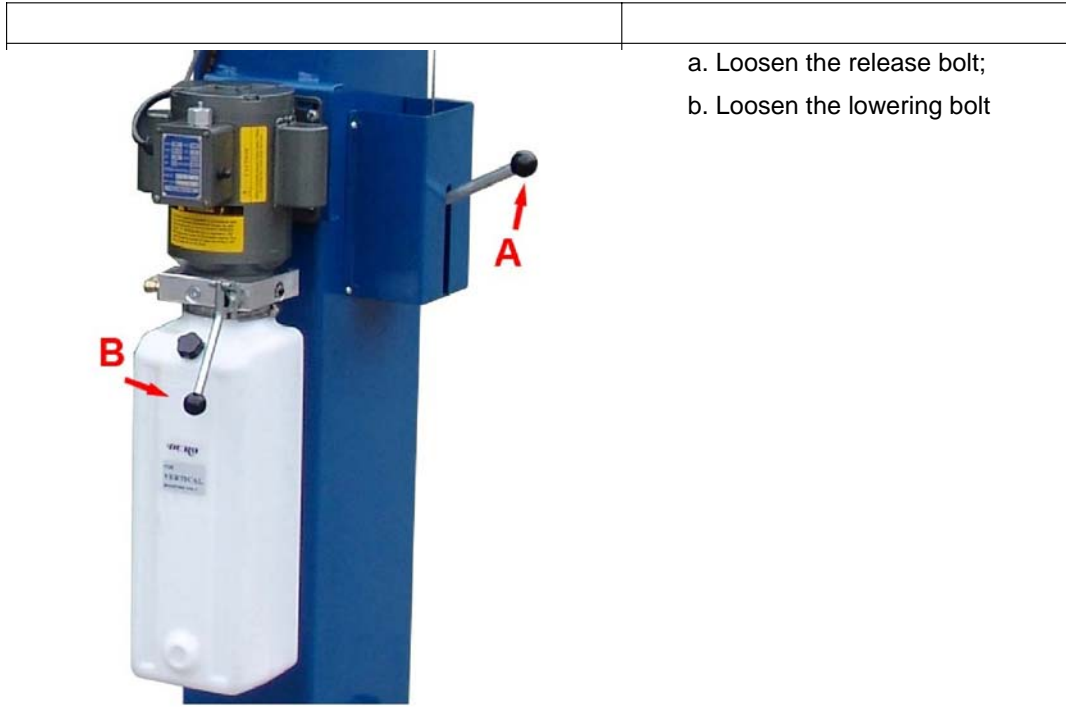


If lift is not operating properly, DO NOT use until adjustment or repairs are made

by qualified lift service personnel.

3.3 Emergency Operation

If meet power failure during while the lift is using, follow the instructions to lower the lift.



3.4 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.

- ④ Always keep bolts tight. Check periodically.
- ④ Always keep lift components clean.
- ④ Always if oil leakage is observed, contact your service provider.
- ④ Check cables and sheaves for wear everyday. Replace worn or broken parts with lift manufacturer's parts, or their equivalent.

Every Month

- ④ Check equalizer cable tension.
- ④ Lubricate locking latch shafts. Push latch handle several times for oil to penetrate joints.
- ④ Lubricate the four inside corners of the legs with heavy duty bearing grease.
- ④ With lift lowered check the hydraulic fluid level. If necessary add oil as described in the Installation Instruction section of this manual
- ④ Check carriage latch synching: Latches should click at the same time. If necessary adjust equalization cables as described in the Installation Instruction section of this manual.
- ④ Check tightness of all bolts.
- ④ Check the nuts for tightness every week for the first month, and every month afterwards.

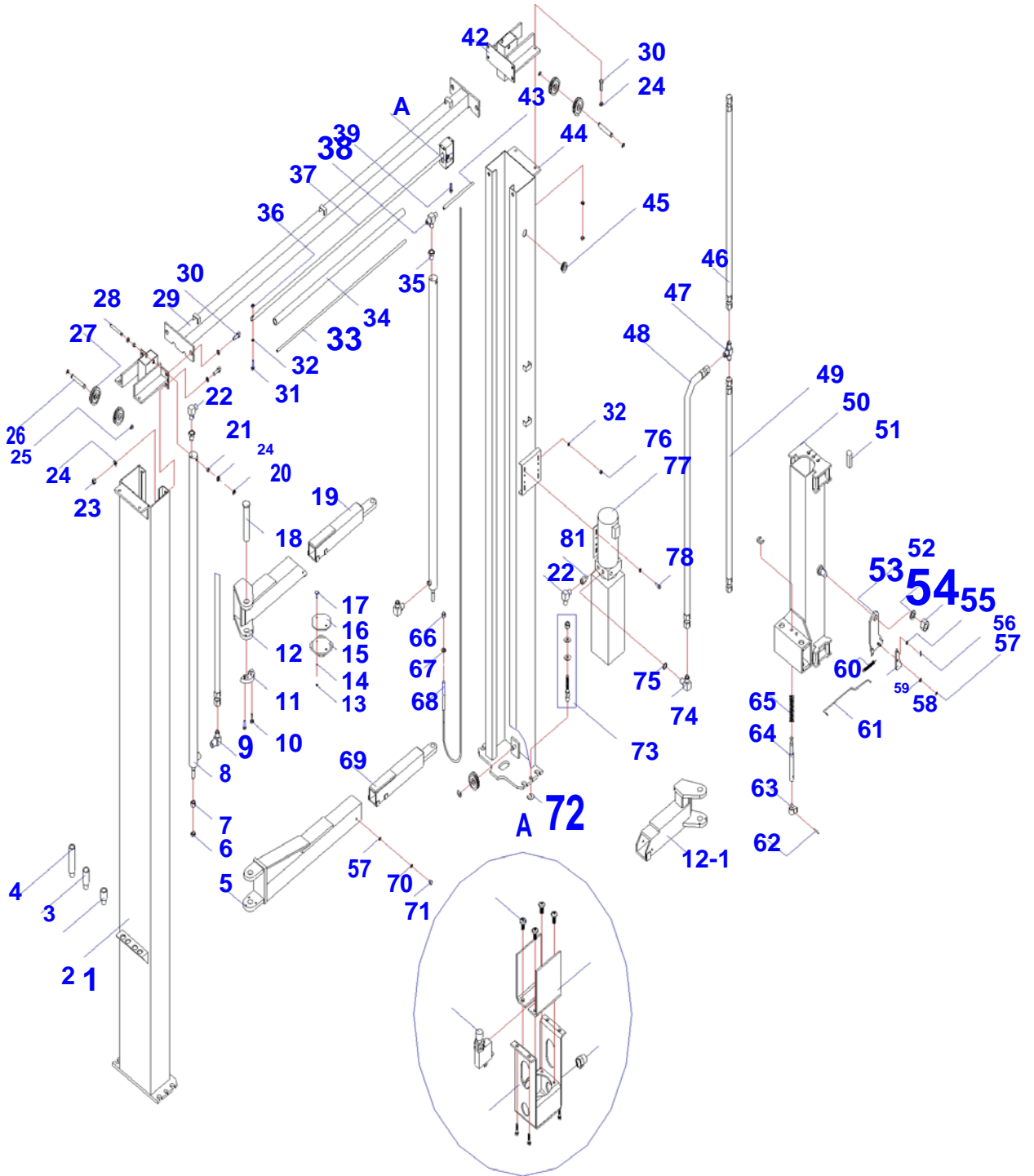
Every 3 Month

- ④ Check anchor bolts for tightness. Anchors should be torque to 122N-m
- ④ Check and clean the oil filter

Every 6 Month

- ④ Check fluid level of lift power unit and refill if required.
- ④ If Lift stops short of full rise or chatters, contact your service provider.
- ④ Replace all caution, warning or safety related decals on the lift If unable to read or missing. Reorder labels from service provider.

4. Parts List



ITEM	DESCRIPTION	QTY
3	Spindle	4
4	Spindle	4
5	Swing arms	2
6	Nut	2
7	Nut	2
8	Hydraulic cylinder	2
9	Elbow fitting	2
10	Haxangular bolt	8
11	Gear	4
12	Swing arms(Left)	1
12-1	Swing arms(Right)	1
13	Self-lock nut	8
14	Flat washer	8
15	Salver jointing	4
16	Rubber washer	4
17	Bolt	8
18	Pin	4
19	Flex arm	2
20	Baffle ring	4
21	Sheath	4
22	Elbow fitting	2
23	Nut	12
24	Flat washer	28
25	Washer	10
27	Pulley	6
28	Pin	2
29	Cross beam parts	1
30	Haxangular bolt	12
31	Haxangular bolt	1
32	Flat washer	9
33	Air tube	1
34	Sponge bush	1
35	Fitting	2
36	Nut	1
37	Pole	1
38	T-fitting	1
39	Bolt	8
40	Sheath	1
41	Switch	1
42	Link arm	2

43	Air tube	1
44	Column jointings	1
45	Sheath	1
46	Hose	1
47	T-fitting	1
48	Hose	1
49	Hose	1
50	Carriage	2
51	Rubber block	16
52	Retropack jointing	2
54	Self-lock nut	2
55	Flat washer	2
56	Pin	2
57	Baffle ring	2
58	Flat washer	6
59	Roof	2
60	Spring	2
61	Pull pole	2
62	Pin	4
63	Gear	4
64	Rack spindle	4
65	Spring	4
66	Self-lock nut	4
67	Flat washer	4
68	Steel cable	2
69	Flex arm	2
71	Haxangular bolt	4
72	Adjust washer	16
73	Upset bolt	12
74	Elbow fitting	1
*75	O-ring	1
76	Self-lock nut	4
77	Pump	1
78	Haxangular bolt	4
79	Plank	1
80	Cap	1
81	Fitting	1

5. Troubleshooting Guide

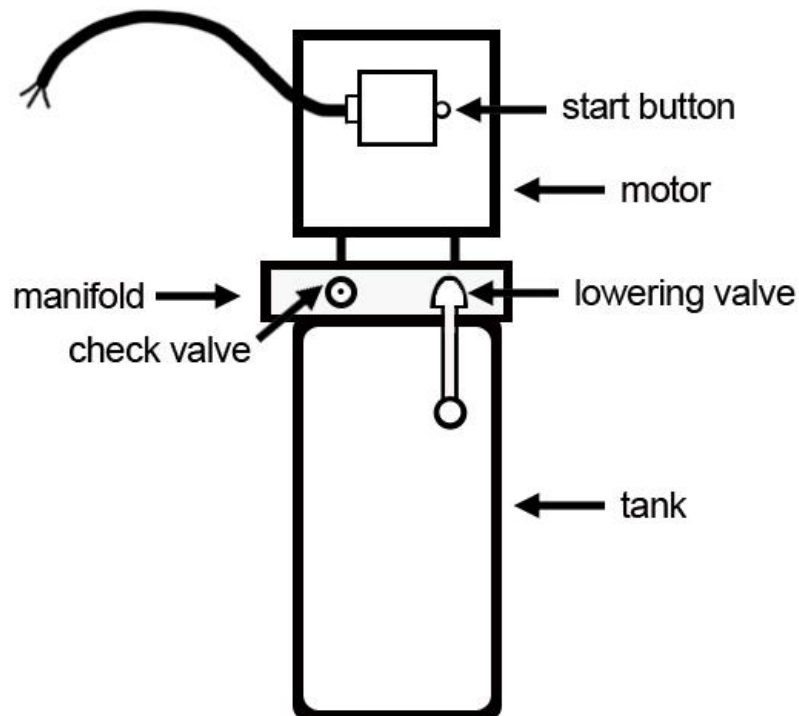
Problem	Cause	Solution
Motor does not run.	<ol style="list-style-type: none"> 1. Blown fuse or circuit breaker 2. Incorrect voltage to motor 3. Bad wiring connections. 4. Motor up switch burned out. 5. Overhead limit switch burned out. 6. Overhead limit switch lost connection 7. Motor windings burned out. 	<ol style="list-style-type: none"> 1. Replace blown fuse or reset circuit breaker. 2. Supply correct voltage to motor. 3. Repair and insulate all connections. 4. Replace switch. 5. Replace switch. 6. Replace motor.
Motor runs but will not raise lift.	<ol style="list-style-type: none"> 1. Open lowering valve. 2. Pump sucking air 3. Suction stub off pump. 4. Low oil level 	<ol style="list-style-type: none"> 1. Repair or replace lowering valve. 2. Tighten all suction line fittings. 3. Replace suction stub. 4. Fill tank with Dexron III ATF
Motor runs-will raises unloaded lift but will not raise vehicle.	<ol style="list-style-type: none"> 1. Motor running on low voltage 2. Debris in lowering valve. 3. Improper relief valve adjustment. 4. Overloading lift 	<ol style="list-style-type: none"> 1. Supply correct voltage to motor. 2. Clean lowering valve. 3. Replace relief valve cartridge. 4. Check vehicle weight and/or balance vehicle weight on lift.
Lift slowly settles down.	<ol style="list-style-type: none"> 1. Debris in check valve seat. 2. Debris in lowering valve seat. 3. External oil leaks 	<ol style="list-style-type: none"> 1. Clean check valve. 2. Clean lowering valve. 3. Repair external leaks.
Slow lifting speed or oil blowing out filler breather cap	<ol style="list-style-type: none"> 1. Air mixed with oil. 2. Air mixed with oil suction. 3. Oil return tube loose 	<ol style="list-style-type: none"> 1. Change oil to Dexron III ATF 2. Tighten all suction line fittings. 3. Reinstall oil return tube.
Lift going up unlevelled.	<ol style="list-style-type: none"> 1. Equalizer cables out of adjustment. 2. Lift installed on unlevelled floor. 	
Anchors will not stay tight.	<ol style="list-style-type: none"> 1. Holes drilled oversize. 2. Concrete floor thickness or holding strength not sufficient 	<ol style="list-style-type: none"> 1. Relocate lift using a new bit to drill holes. 2. Break out old concrete and pour new pads for lift per lift installation instruction.
Locking latches do not engage.	<ol style="list-style-type: none"> 1. Latch shafts rusted. (Usually occurs on outside installation or in high humidity areas such as vehicle wash bays.) 2. Latch spring broken. 3. Latch cable needs adjustment. 	<ol style="list-style-type: none"> 1. Oil latch mechanism. Depress latch release handle several times to allow oil to coat shaft. 2. Replace broken spring. 3. Adjust clamps at cable end per lift installation instruction.

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