

'Low Profile' Mobile Single Column Lift

MSC-6K-LP

Capacity 6,000lbs

INSTALLATION & OPERATING INSTRUCTIONS



2016 June

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PREFACE

Prior to the operation of your lift make sure that you have read the instructions thoroughly. These instructions are found in this manual. Please note that your warranty can be voided if you do not read the manual and understand its content.

If you have any questions, concerning operation, safety or application of your lift, please consult your distributor.

1. GENERAL INFORMATION

1.1 SPECIFICATIONS

Specifications	MSC-6KLP
Capacity	6,000 lbs.
Width Overall	45-3/16"
Height Overall	102-3/8"
Length Overall	101-9/16"
Lift Rise Height	72"
Drive Over Base Ramp Height	3-15/16"
Swivel Pad Height – Min/Max	3-7/16" – 6-5/16"
Main Side Swing Arms - Min/Max	19-11/16" – 26"
Off Side Swing Arms – Min/Max	24-5/8" – 34"
Ship Weight (motor pump included)	1,840 lbs.
Power	110 VAC, 1PH, 20 Amp

1.2 DIMENSIONS (mm / inch)

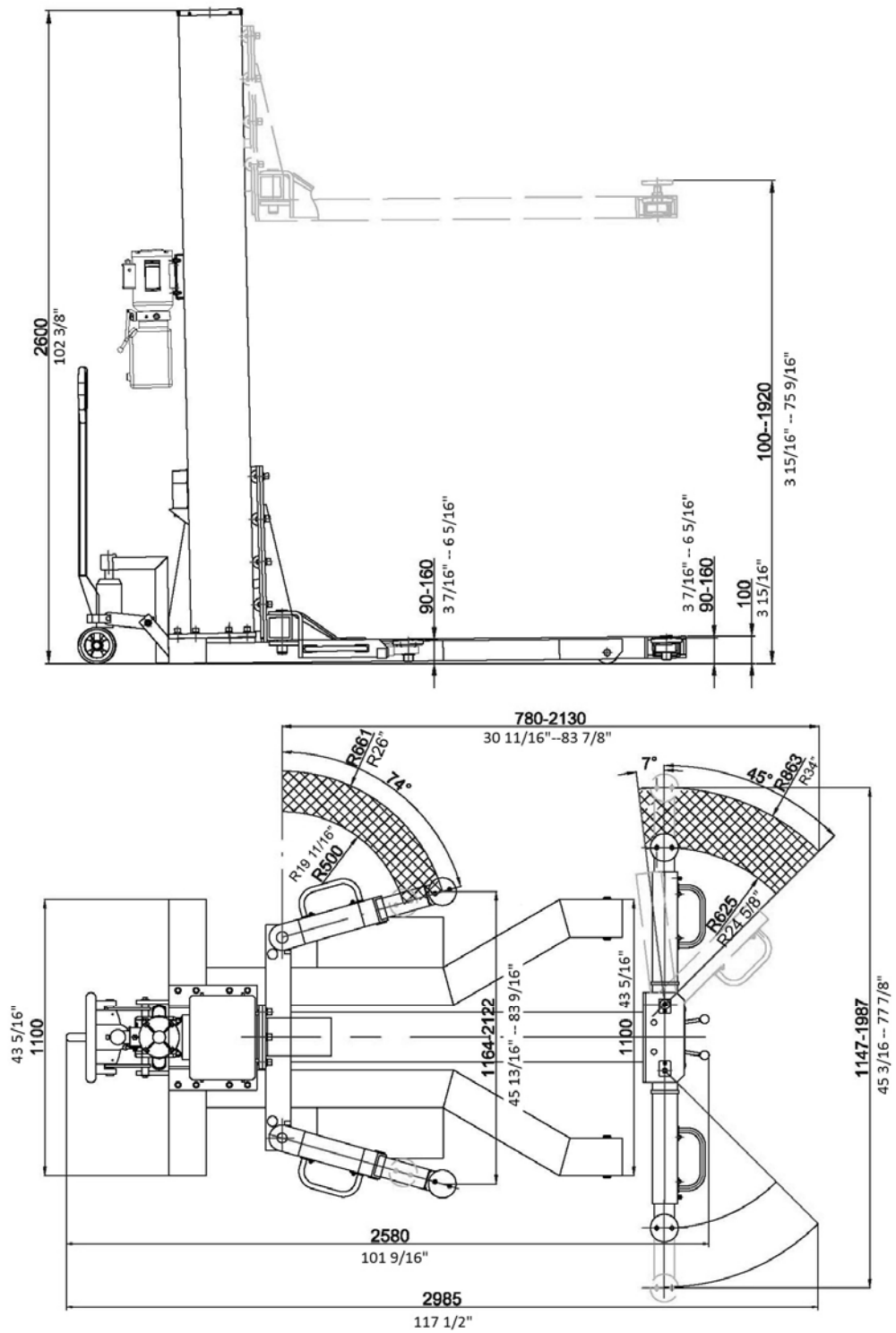


Fig.1

Important!

Be sure to read the operating instructions before operating your lift!

Make sure you have made all necessary measurements to assure that your lift will fit in your shop / garage and accommodate the car you intend to lift with it. Make sure you have enough clearance at the top, and enough width to allow walking around. And make sure he knows what the circuit requirements are (110 volt, single phase, 20 amp).

Make sure you have someone to help you. The pieces to this lift are big, heavy, and cumbersome. The lift column weighs about 320 pounds by itself. Base plate and arms all weigh a couple of hundred pounds apiece. It is possible for two people to install this lift if they have the appropriate lifting and handling equipment, but it is definitely easier and faster if there are several people available to help manhandle the pieces into place. As with any activities involving big heavy materials, safety must be uppermost in your mind. This lift is more difficult to install than some of our other units because of its one-post design, but this very design makes it extremely effective for shop and residential garage use. With proper preparation and installation, you will be very pleased with this lift.

1.3 DESCRIPTION OF THE LIFTING SYSTEM

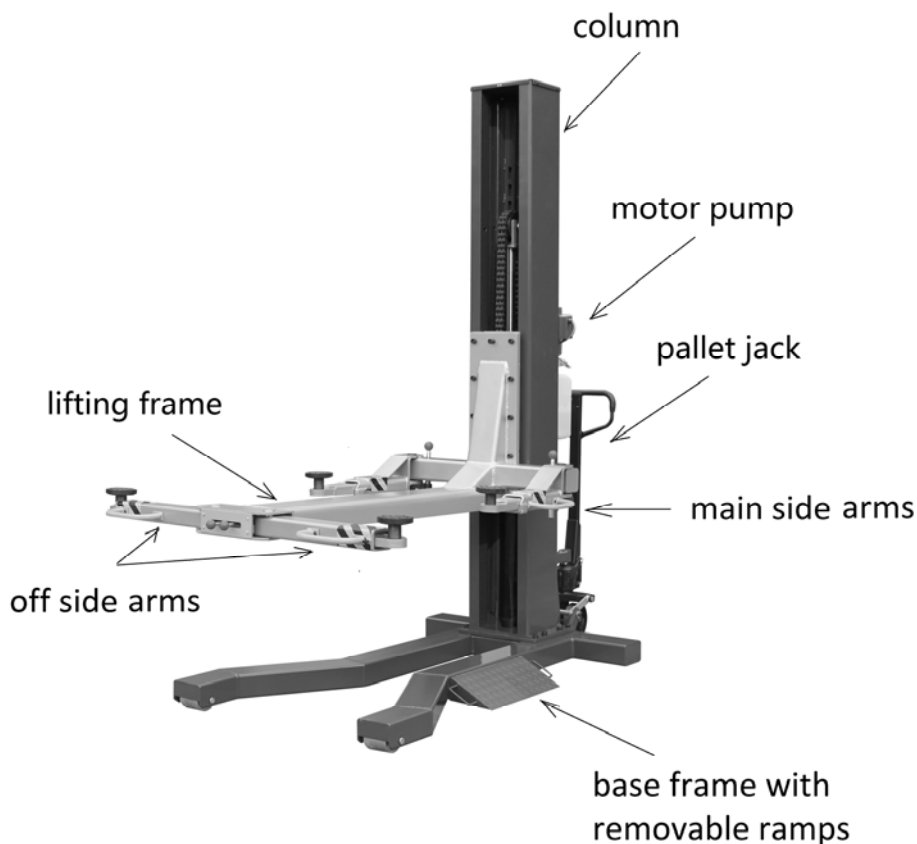


Fig.2

2. Installation

You will need common hand tools that most homeowners have, like a hammer, screwdrivers and pliers, but in addition, you will need some tools that are not common. Each installation is somewhat different, and depends on how much room you have to work around the lift. Here is a chronological sequence of installation steps, with the associated tools.

Required Tools

1. Fork Lift to unload lift on delivery
2. Fork Lift and/or engine hoist for moving pieces and positioning lift column. 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. Small crowbar or large screwdriver for aligning bolt holes
9. Pliers
10. Flat blade screwdriver

IMPORTANT

1 Unloading the lift

You'll need a forklift that can handle about 2000 to 2300 pounds and operate on a smooth surface.

2 Un-banding the lift

The steel bands which secure the lift parts to the pallets are heavy duty. You'll need a pair of metal shears or tin snips to cut the bands. Be very careful when doing this because the bands will tend to fly apart when they are cut, and the heavy lift parts may shift when freed from the bands. Stand to the side of the bands when you cut them, and use gloves when removing the cut bands because they have sharp edges.

3. Moving pieces

You can move the pieces to the garage with the forklift. Some of the smaller pieces can be moved by two or more people carrying them. If you have several people helping, some of the larger pieces can be moved manually.

STEP 1

The first step is to take off the board and bracket for shipping. Please take out every piece. Put the base plate on the ground. (Fig. 3)

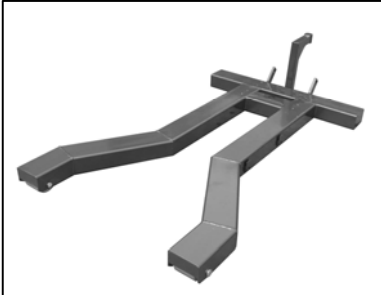


Fig. 3

Fig. 4

STEP 2

Upright the column and then fix it on the base plate with bolts (Fig.4)

STEP3

Put the lifting frame in front of the base plate. Then fix the frame on the carriage with bolts. (Fig. 5)

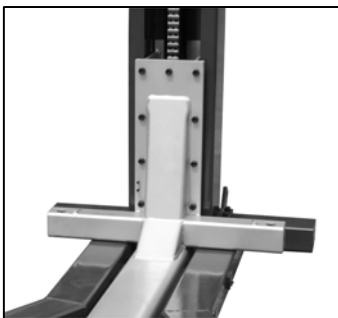


Fig. 5

Fig. 6

STEP4

Mount the hydraulic motor pump on the column with bolts and nuts. (Fig. 6)

Connect the hose fitting and the hose from pump to cylinder. (Fig. 7 & 8)

There is an O-ring between the hose and the connector of the cylinder.(Fig. 9)

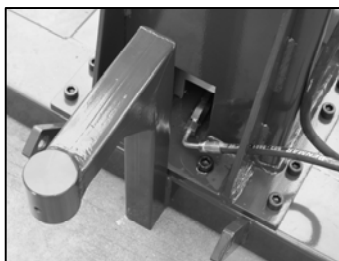
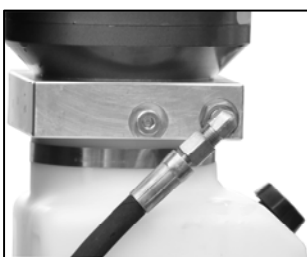


Fig. 7

Fig. 8

Fig.9

STEP5

Take out the lock pin on the pallet jack (Fig. 10). Put the steel ball on the top of the jack ram (Fig.11)

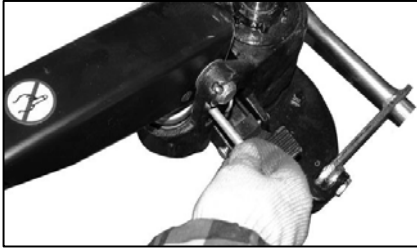


Fig. 10



Fig. 11

Insert the ram into the hole of the base plate (Fig. 12). Lock the ram by threaded pin (Fig.13). Adjust the length of the ram (Fig. 14 & 15).

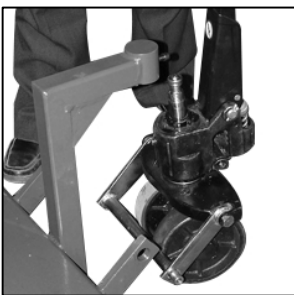


Fig. 12



Fig. 13

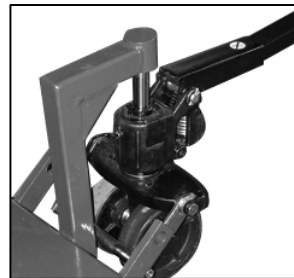


Fig.14

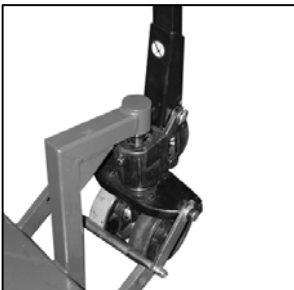


Fig. 15

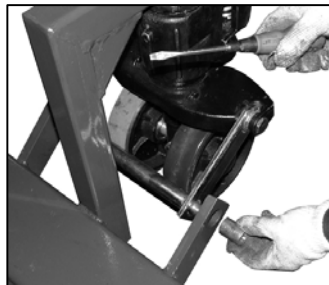


Fig. 16

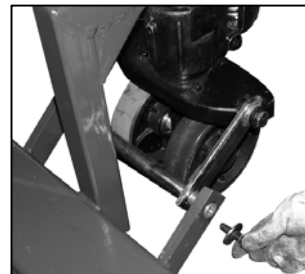


Fig. 17

Put the slot of the bearing into the bracket (Fig. 16) then lock it by bolt (Fig. 17 & 18). Then the base plate with pallet jack is ready.



Fig. 18

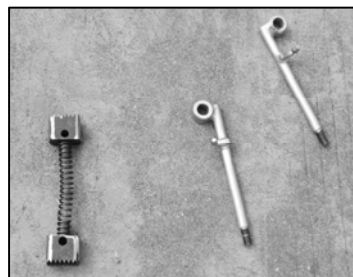


Fig. 19

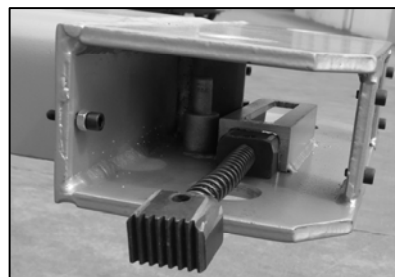


Fig. 20

STEP 6

Find out the right arm lock parts (Fig. 19). Assemble them in the frame end. (Fig. 20-23)

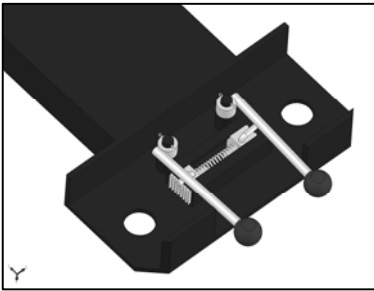


Fig. 21



Fig. 22

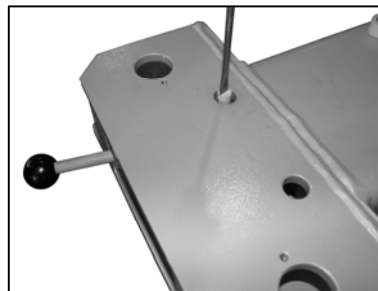


Fig. 23

STEP 7

Assemble the right arms to the frame. (Fig 24,25)

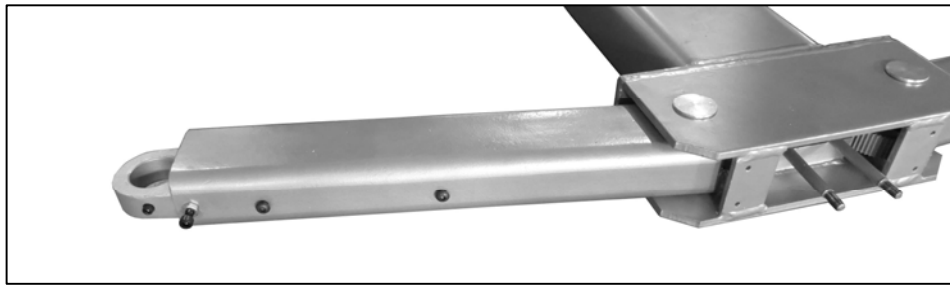


Fig. 24



Fig. 25

STEP 8

Assemble the left arm locks and arms to the frame also. (Fig 26,27)

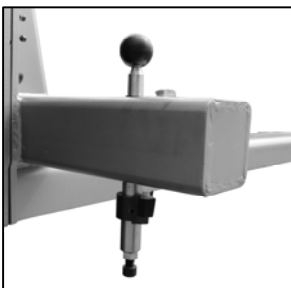


Fig. 26



Fig. 27

STEP9

Put the mechanical-lock cable holder on the carriage.(Fig. 28)



Fig. 28

STEP10

Now you need to get the correct connection for the cable from motor to power supply. Your lift comes with a cord attached to the motor pump. It is short. You may need a long extension cord. But because there are so many receptacle variations, you will need to install the proper plug on the end of the cord to fit the power port. If you are not sure which plug to use, consult your electrician.

Remove the rubber cap from the top of the reservoir. Fill the reservoir with approx 12 quarts of Non-Detergent / Non-Foaming Hydraulic Oil - SAE-10, AW 32 or equivalent.

Now the lift is ready for operation.

3. OPERATING INSTRUCTIONS

The lift is very simple to operate.

Push the power switch button on the motor pump and hold while it turns the electric motor on. The motor operates an internal pump that forces hydraulic oil into the lift piston, which extends the roller chain and raises the lift.

As the lift rises, an internal safety latch will pass over the steel stops (rectangular blocks which protrude from the back, inside of the lift column), and you will hear “clanks” as it does so. This sound is normal, and indicates that the safety latch is passing over the stops properly.

The lift is raised to the desired height by holding the button in while it is rising, and releasing the button when the lift has reached its desired position.

To be safe, it is required to release the hydraulic pressure inside the cylinder. To do this only need to press down the release handle on the motor pump. Then the lifting frame and carriage will sit on the safety lock inside the column.

To lower the lift, first you need to depress the power switch button a few seconds to lift up a little. Then pull the safety lock release cable to open the safety latch (Fig. 29). After that press down the release handle again and hold.

The weight of the vehicle will cause the lift to lower by gravity. No power is required to apply to the motor pump in lowering, but the safety latch must be disengaged to allow the lift to lower past the stops.



Fig. 29

After the installation is complete, raise the lift about two feet high and then lower it down. Repeat this process two or three times, and then top off the hydraulic oil reservoir again, if necessary. This assures that hydraulic oil is distributed everywhere in the system that it needs to be.

NOTE: Only top off the reservoir with the lift in the “down” position. If you fill the reservoir in the “up” position and then lower the lift, there will be too much hydraulic oil in the system, and it will squirt out of the top of the control unit.

RAISING A VEHICLE

Drive the vehicle onto the ramps until it is about centered. Set the parking brake. Move out the arms to make the rubber pad under the support position of the vehicle frame. Depress the “up” button to raise the vehicle a little. Check again all the arms to make sure everything is in safe. Then lift up the vehicle to desired height.

**BE CAREFUL NOT TO RAISE THE VEHICLE SO HIGH THAT IT STRIKES THE CEILING!
MAKE SURE ANTENNAS ARE REMOVED, IF NECESSARY, AND BE AWARE OF
ANYTHING THAT PROTRUDES FROM THE CEILING, LIKE LIGHTBULBS, GARAGE
DOOR OPENERS OR DOOR TRACKS.**

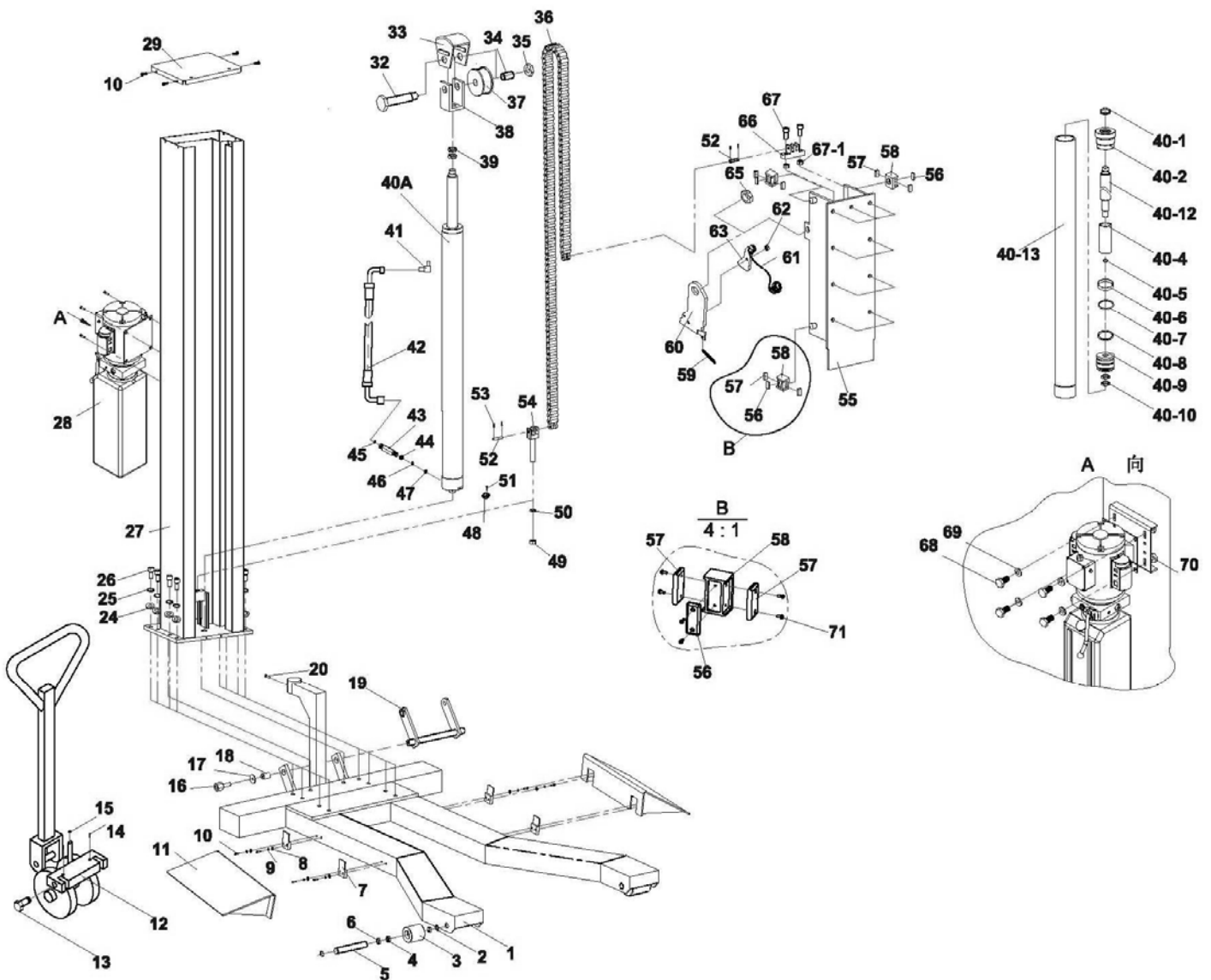
MISCELLANEOUS

The hydraulic oil should be replaced every two years, and the inside corners of the lift arms should be re-greased with a general-purpose axle grease every year, or so, as it becomes obvious that it needs it.

4. PARTS DRAWING AND LIST

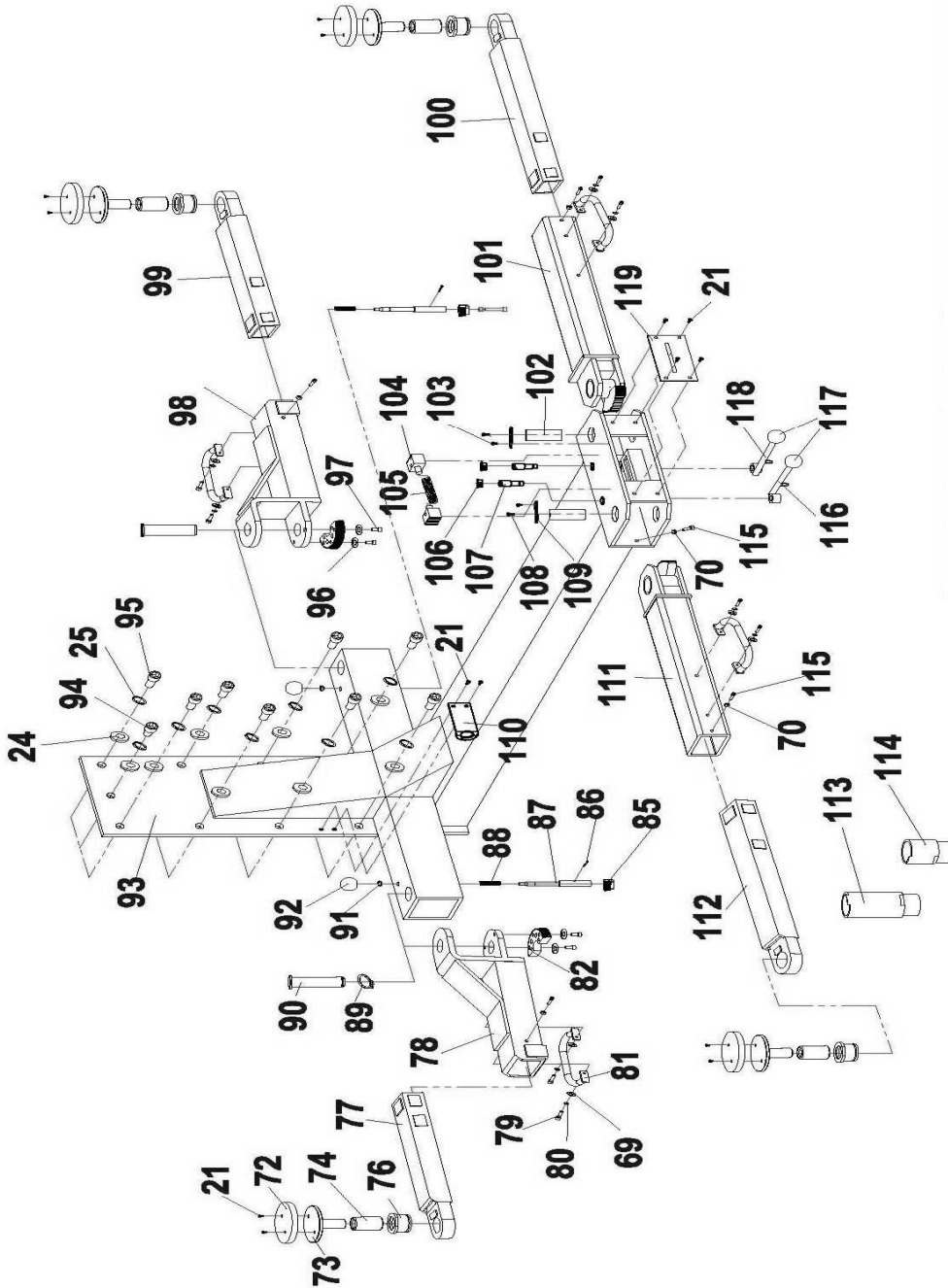
PARTS DRAWING MSC-6K-LP

(BASE PLATE—COLUMN—MOTOR PUMP—PALLET JACK)



PARTS DRAWING MSC-6K-LP

(LIFTING FRAME—ARMS—CYLINDER—ADDAPTOR)



PARTS LIST MSC-6K-LP

ITEM	CODE	DESCRIPTION	QTY	NOTE
1	DJ01-01000-M00	Base	1	
2	5304-00025-000	circlips	4	Φ25
3	DJ01-00010-M00	down roller	2	
4	5602-52025-000	Bearing	4	Φ52*Φ25*15
5	DJ01-00011-M00	down roller pin	2	
6	DJ01-00012-M00	down roller bushing	4	
7	DJ01-00020-M00	hook	4	
8	5301-00006-000	Flat washer	8	Φ6
9	5303-00006-000	spring washer	8	Φ6
10	5105-06025-000	bolt	12	M6*25
11	DJ01-22000-M00	ramp	2	
12	DJ01-15000-000	pallet jack	1	
13	DJ01-00018-M00	Pin	2	
14	5402-05030-000	cotter pin	2	
15	5601-00018-000	Ball	1	
16	5105-12035-000	bolt	2	M12*35
17	DJ01-00006-M00	Flat washer	2	
18	DJ01-00017-M00	sheave	2	
19	DJ01-17000-M00	support frame	1	
20	5105-10025-000	bolt	1	M10*25
21	5110-06012-000	screw	12	M6*12
24	5301-00016-000	Flat washer	19	Φ16
25	5303-00016-000	spring washer	19	Φ16
26	5105-16050-000	Bolt	10	M16*50
27	DJ01-02000-M00	Column	1	
28		motor pump	1	
29	DJ01-00005-M00	upper cover	1	
32	DJ01-00015-M00	Spindle	1	
33	DJ01-19000-M00	roller cover	1	
34	DJ01-00032-M00	bearing	1	Φ30*2
35	5206-00024-000	Nut	1	M24*2
36	DJ01-00007-M00	Chain	1	
37	DJ01-00014-M00	roller	1	
38	DJ01-20000-M00	roller seat	1	
39	DJ01-00013-M00	Nut	2	M27*1.5
40A	DJ01-21000-M00	Hydraulic cylinder	1	
40-1	5906-00045-000	Dust ring	1	Φ30*53*5
40-2	DJ01-21002-M00	Guide ring	1	
40-4	DJ01-21003-M00	Sheath	1	

ITEM	CODE	DESCRIPTION	QTY	NOTE
40-5	5901-00030-000	O-ring	1	Φ30*3.4
40-6	DJ01-21004-M00	Guide ring	1	
40-7	5901-00066-000	O-ring	1	Φ66*Φ5
40-8	5905-00065-000	U ring	1	Φ75*Φ65*6
40-9	DJ01-21005-M00	Piston	1	
40-10	DJ01-21006-M00	Nut	2	
40-12	DJ01-21001-M00	Piston rod	1	
40-13	DJ01-21100-M00	Cylinder body	1	
41	SJ01-12001-000	Angle fitting	1	
42	DJ01-00021-M00	Hose	1	
43	DJ01-00031-M00	straight fitting	1	
44	DJ01-00030-M00	throttle washer	1	
45	5901-00006-000	O-ring	1	Φ6*Φ2
46	5309-00010-000	circlips	1	Φ10
47	5603-00016-000	combined seal	1	Φ16
48	DJ02-00027-000	cylinder board	1	
49	5206-00020-000	lock nut	1	M20
50	5201-00020-000	nut	1	M20
51	5101-08030-000	bolt	1	M8*30
52	DJ01-00004-M00	chain pin	2	
53	5404-03020-000	split pin	4	Φ3*20
54	DJ01-00003-M00	upper chain block	1	
55	DJ01-12000-M00	carriage	1	
56	DJ01-00029-M00	top sliding block	4	
57	DJ01-00028-M00	side sliding Block	8	
58	DJ01-00027-M00	block frame	4	
59	SJ01-07007-000	Spring	1	
60	DJ01-13001-M00	latch	1	
61	DJ01-13003-M00	steel rod	1	
62	5206-00010-000	lock nut	1	M10
63	DJ01-13002-M00	lock board	1	
65	5206-00030-000	lock nut	1	M30
66	DJ01-00001-M00	down chain block	1	
67	5105-16060-000	Bolt	2	M16*60
67-1	5206-00016-000	lock nut	2	M16
68	5101-08025-000	Bolt	4	M8*25
69	5301-00008-000	Flat washer	16	Φ8
70	5201-00008-000	Nut	10	M8
71	5110-04010-000	screw	24	M4*10
72	SJ03-00008-000	Rubber pad	4	

ITEM	CODE	DESCRIPTION	QTY	NOTE
73	SJ12-10100-A00	lifting pad	4	
74	SJ12-10002-A00	long threaded adaptor	4	
76	SJ12-10001-A00	short threaded adaptor	4	
77	DJ01-06000-M00	left-front extension	1	
78	DJ01-04000-M00	left-front arm	1	
79	5118-08012-000	screw	8	M8*12
80	5303-00008-000	spring washer	8	Φ8
81	DJ01-18000-M00	handle	4	
82	SJ01-00025-000	large corn gear	2	
85	SJ01-00023-000	small corn gear	2	
86	5402-06038-000	cotter pin	2	Φ6*38
87	DJ01-00009-M00	small gear pin	2	
88	DJ01-00002-M00	gear pin spring	2	
89	5304-00038-000	circlips	2	Φ38
90	DJ01-00025-M00	pin	2	
91	5304-00018-000	circlips	2	Φ18
92	SJ03-00013-000	handle	2	SR20
93	DJ01-03000-M00	lifting frame	1	
94	5105-16025-000	Bolt	1	M16*25
95	5105-16040-000	Bolt	8	M16*40
96	5301-00010-000	flat washer	4	Φ10
97	5101-10035-000	bolt	4	M10*35
98	DJ01-05000-M00	right-front arm	1	
99	DJ01-07000-M00	right-front extension	1	
100	DJ01-11000-M00	right-rear extension	1	
101	DJ01-09000-M00	right-rear arm	1	
102	DJ01-16002-M00	pin	2	
103	5107-06012-000	screw	2	M6*12
104	DJ01-00024-M00	gear block	2	
105	DJ01-00023-M00	spring	2	
106	DJ01-00036-M00	cover	2	
107	DJ01-00035-M00	fixing pin	2	
108	5107-08020-000	screw	2	M8*20
109	DJ01-16001-M00	pin fixing plate	2	
110	DJ01-00008-M00	cable seat	1	
111	DJ01-08000-M00	left-rear arm	1	
112	DJ01-10000-M00	left-rear extension	1	
113	SJ12-00019-A00	adaptor 2#	4	
114	SJ12-00018-A00	adaptor 1#	4	
115	5105-08025-000	Bolt	6	M8*25

ITEM	CODE	DESCRIPTION	QTY	NOTE
116	DJ01-14000-M00	release handle (left)	1	
117	DJ01-00026-M00	handle ball	2	
118	DJ01-15000-M00	release handle (right)	1	
119	DJ01-00019-M00	cover	1	

LIMITED WARRANTY

Structural Warranty:

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

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

Limited One-Year Warranty:

Tuxedo Distributors, LLC (iDEAL) offers a limited one-year warranty to the original purchaser of Lifts and Wheel Service equipment 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.

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