# **FP14K & FP14KA**

# 14,000 lb Capacity Four Post Lifts

Installation and Operation Manual



# 14,000 LB. Four Post Lifts

These heavy duty chain driven lifts are designed for many years of trouble free service. Our four post lifts are constructed with heavy gauge "C" channel.





Specifications:	FP14K	FP14KA
Lifting capacity	14,000 lbs.	14,000 lbs.
Overall length	208"	208"
Overall width	123"	123"
Lifting height	65 ¼ <b>"</b>	67"
Maximum wheel base (2 wheel)	192"	167"
Maximum wheel base (4 wheel)	NA	152"
Runway width	21 ½"	21 ½"
Width between posts	108"	108"
Power pack 2 hp 220/230 vac 20 amps		20 amps

#### **Features:**

- ◆ 14,000 lb. lifting capacity
- Chain driven
- Single point pneumatic safety release mechanism
- 20" runways
- Non-skid diamond plate runways
- C-channel construction
- Hydraulic operation for minimum maintenance
- FREE mounting hardware
- Powder-coated paint finish

#### **Features:**

- 14,000 lb. lifting capacity
- Chain driven
- Single point pneumatic safety release mechanism
- 20" runways
- Non-skid diamond plate runways
- Three turntable positions
- Rear slip-plates mounted on roller bearings
- Fully adjustable stop locks for easy leveling
- C-channel construction
- FREE mounting hardware
- Powder-coated paint finish

# **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.

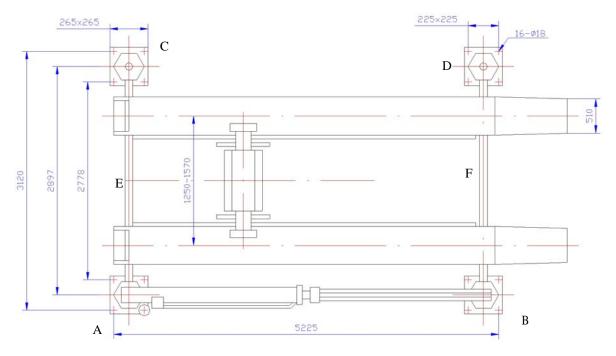
This Limited Warranty is granted to the original purchaser only and is not transferable or assignable.

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.

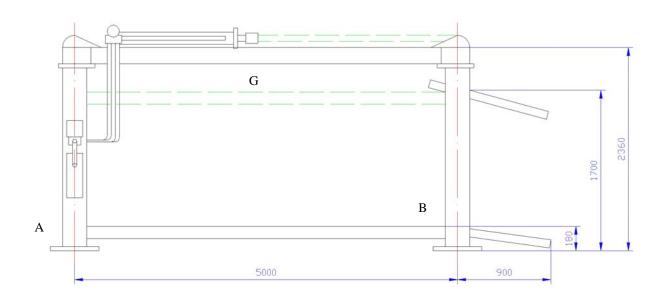
# Specifications

Capacity: 14,000 lbs Motor power: 1.5 Kw

Power supply: 220V / 60 Htz / 1 Ph



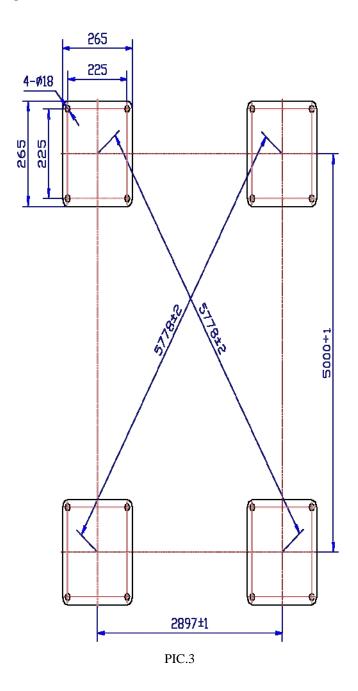
PIC.1



PIC.2

### Step1

1. Select a right place for the new lift installation.



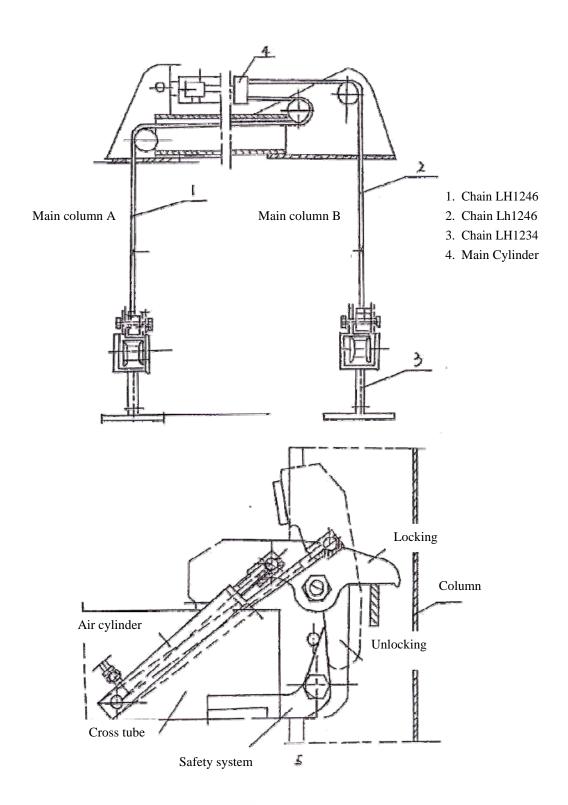
- 2. This lift must be installed on a solid level concrete floor with no more than 0.15 degree of slope. Or, the four points under the posts should be in level within 10mm.
- 3. The thickness of the concrete should be at least 4". The intensity of the concrete should be 3,000 PSI.
- 4. Draw a chalk line layout.

#### Step2

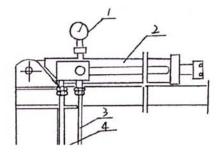
- 1. Locate the main pump column A and main column B on their positions.
- 2. Anchor the main pump column A. If shimming is required, insert the shims as necessary to plumb the column.
- 3. Locate the other two columns C and D on their positions.
- 4. Insert the front and rear cross tubes E and F into the columns. Raise them up to approximately 18" and place on safety locks.
- 5. Connect the balancing chain LH1234 inside the main column A and column C.
- 6. Connect another balancing chain LH1234 inside the main column B and column C.
- 7. Raise up the top cylinder beam G, put it on the main columns A and B. Use M12\*50 bolts to fix the beam to the columns.
- 8. Pull out the piston of the main cylinder for 1750mm. Connect the two chains LH1246 to the cross tubes.
- 9. Check the positions of the unfixed 3 columns. Adjust the gaps between the tube and column. Then anchor them. Use shims to plumb the columns.
- 10. Put the runways onto the cross tubes. Fix them by bolts. Take care to place the rolling jack rails toward the middle of the lift.
- 11. Put on all the accessories such as front wheel stops and ramps.
- 12. Adjust all the chains enough to level the runways.

#### Step3

- 1. Put the electro-hydraulic pump onto the main pump column.
- 2. Connect all the pipes to pump and cylinders.
- 3. Connect the wires for the pump motor.
- 4. Connect the air pipe for the safety locks. (Pic.5)
- 5. Fill up the pump tank with hydraulic oil for 2/3 capacity.
- 6. Press the start button for first time raise. Check all the bolts, moving parts, etc.
- 7. Run up and down several times to see if the lift is OK.
- 8. Adjust the nuts on the chain ends to level the runways again.
- 9. Adjust the height of the safety bar inside the column to ensure crosstubes lock properly.

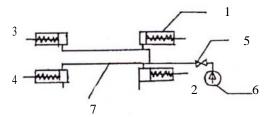


PIC. 4

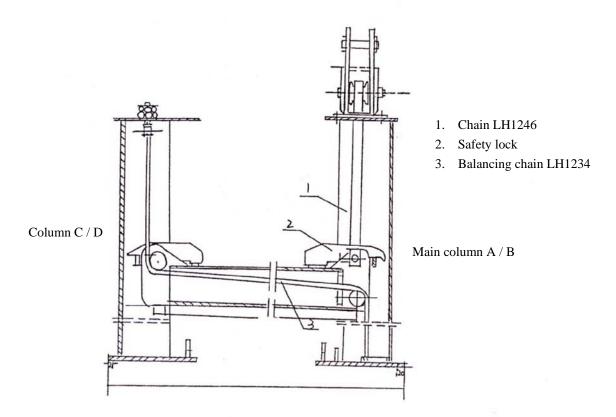


- 1. pressure gauge
- 2. Main cylinder
- 3. Inlet oil pipe
- 4. Outlet oil pipe

- 1. Air cylinder on column B
- 2. Air cylinder on column A
- 3. Air cylinder on column D
- 4. Air cylinder on column C
- 5. Switch
- 6. Air supply
- 7. Air pipe



Main column side



PIC. 5

#### Operation

- 1. Position vehicle wheels in the center of each runway.
- 2. Set parking brake or use wheel chock to hold vehicle in position.
- 3. Before raising vehicle, be sure all personnel are clear of the lift and surrounding area. Pay careful attention to overhead clearances.
- 4. Raise the lift to the desired height by pressing the push button on the power unit.
- 5. After vehicle is raised to the desired height, lower the lift on the nearest safety lock.
- 6. Check to make sure all four safeties are engaged BEFORE ENTERING work area.
- 7. To lower the lift, raise the lift off the safety locks approximately 2" by pressing the start button on the pump.
- 8. Press the push button on the air safety valve to the open position.
- 9. Push the LOWING HANDLE on the pump until the lift has descended completely.

#### Weekly maintenance

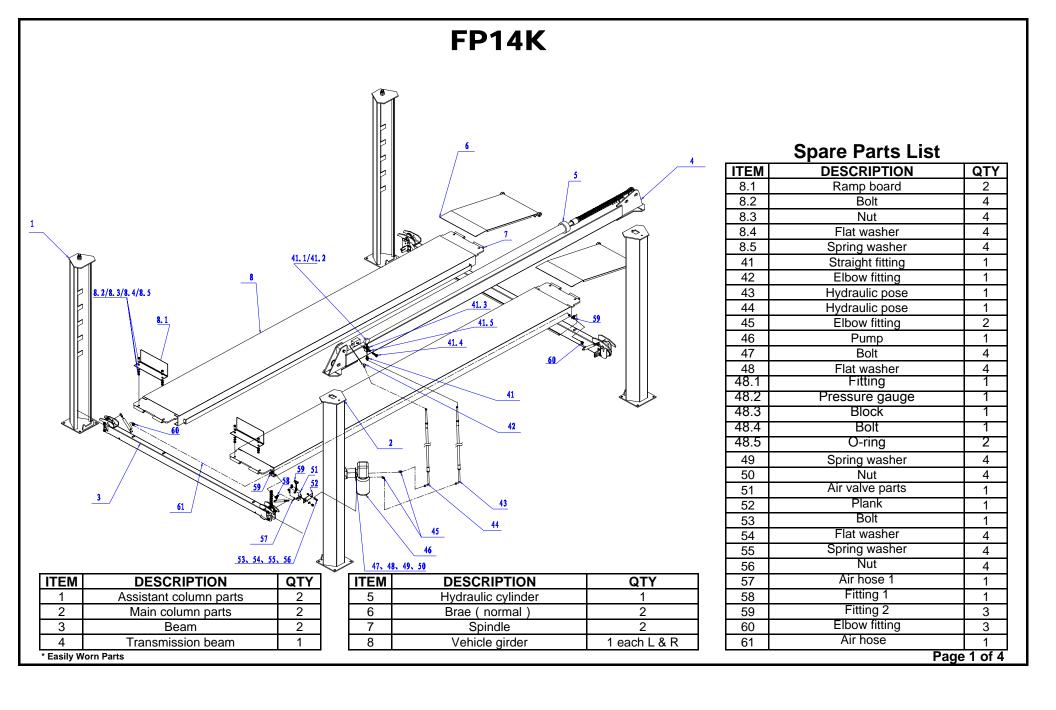
- 1. Lubricate all rollers with general purpose oil.
- 2. Check all chain connections, bolts and pins to insure proper mounting.
- 3. Lubricate safety lock pivot points with general purpose oil.

#### Monthly maintenance

- 1. Check safety locks to insure they are in good operating condition.
- 2. Check all cables for excessive signs of wear.
- 3. Make a visual inspection of ALL MOVING PARTS and check for excessive signs of wear
- 4. Replace ALL FAULTY PARTS before lift is put back in service.

#### Trouble shooting

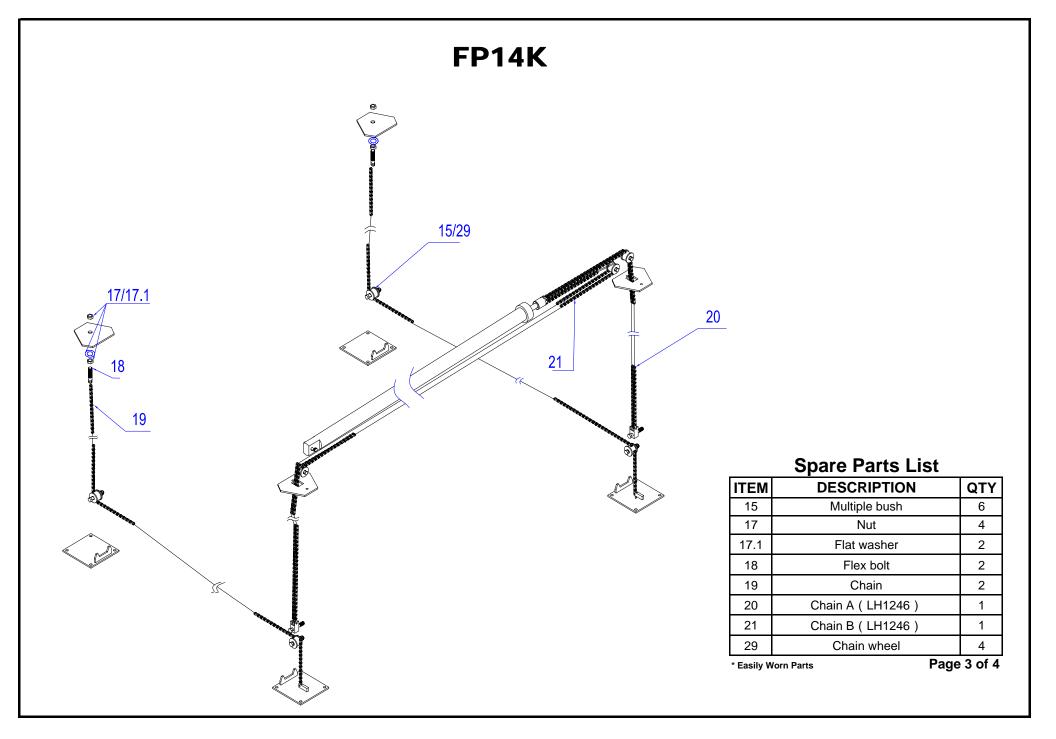
Symptoms	Possible cause	Remedy
1. Lift will not raise or will not stay up.	1. Over load.	The load should be with in the capacity.
	2. The pump is not working properly	Check the power supply, oil quantity, valves and filters.
	3. The cylinder leaks.	Check all connections of the oil pip. Change the main cylinder.
2. Lift will not lower down.	The Safety lock may be engaged.	Check the air supply pressure.  Before lower down, raise the lift up approximately 2" in order to open the safety locks.
	2. The release valve clogged	Check and clean the valve.



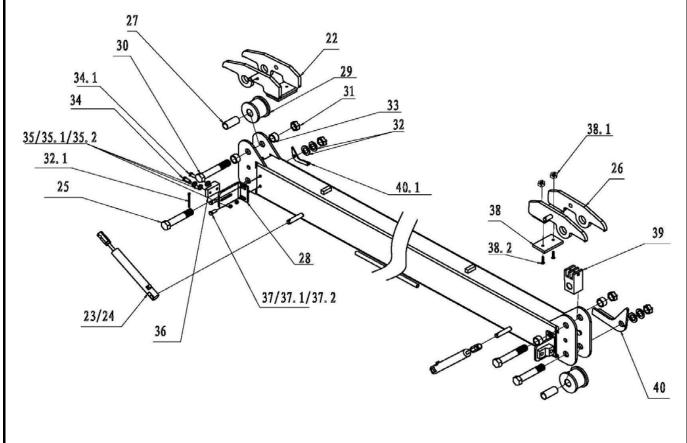
# Added parts list for FP14KA

Added parts #No.	Description	Qty	
41.1	Fitting for pressure gauge	1	
41.2	Pressure gauge	1	
41.3	Bronze body	1	
41.4	Bolt	1	
41.5	O-ring	2	

#### FP14K 16 15 **Spare Parts List** ITEM **DESCRIPTION** QTY Transmission beam 1 12 Spindle 1 12.1 Snap ring 2 12.2 Flat washer 2 12/12.1/12.2 Spindle 13 3 13.1 Snap ring 3 13.2 Galvanized flat washer 3 13/13.1/13.2 Chain wheel 14 3 15 Multiple bush 6 16 Chain seat Page 2 of 4 \* Easily Worn Parts



# FP14K



# **Spare Parts List**

ITEM         DESCRIPTION         QTY           22         Top bracket ( B )         2           23         Small cylinder         4           24         Snap ring         8           25         Bolt         4           26         Top bracket ( A )         2           27         Multiple bush         8           28         Orientation board         4           29         Chain wheel         4           30         Bolt         4           31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           35.1         Galvanized nut         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37.1         Spring washer         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4	Spare i arts List				
23         Small cylinder         4           24         Snap ring         8           25         Bolt         4           26         Top bracket ( A )         2           27         Multiple bush         8           28         Orientation board         4           29         Chain wheel         4           30         Bolt         4           31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35.1         Galvanized nut         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut	ITEM	DESCRIPTION	QTY		
24         Snap ring         8           25         Bolt         4           26         Top bracket (A)         2           27         Multiple bush         8           28         Orientation board         4           29         Chain wheel         4           30         Bolt         4           31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35.1         Galvanized nut         8           35.1         Galvanized nut         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut	22	Top bracket ( B )	2		
25         Bolt         4           26         Top bracket ( A )         2           27         Multiple bush         8           28         Orientation board         4           29         Chain wheel         4           30         Bolt         4           31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35.1         Galvanized nut         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat	23	Small cylinder	4		
26         Top bracket ( A )         2           27         Multiple bush         8           28         Orientation board         4           29         Chain wheel         4           30         Bolt         4           31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp	24	Snap ring	8		
27         Multiple bush         8           28         Orientation board         4           29         Chain wheel         4           30         Bolt         4           31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	25	Bolt	4		
28         Orientation board         4           29         Chain wheel         4           30         Bolt         4           31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	26		2		
29         Chain wheel         4           30         Bolt         4           31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	27	Multiple bush	8		
30         Bolt         4           31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	28	Orientation board	4		
31         Galvanized nut         8           32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	29	Chain wheel	4		
32         Galvanized flat washer         8           32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2		Bolt	4		
32.1         Cotter pin         8           33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	31	Galvanized nut	8		
33         Cover         8           34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2		Galvanized flat washer	8		
34         Inner haxangular screw         4           34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	32.1	Cotter pin	8		
34.1         Inner haxangular screw         4           35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	33	Cover	8		
35         Spring washer         8           35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	34	Inner haxangular screw	4		
35.1         Galvanized nut         8           35.2         Flat washer         8           36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2		Inner haxangular screw	4		
35.2       Flat washer       8         36       Orientation block       4         37       Inner haxangular screw       8         37.1       Spring washer       8         37.2       Flat washer       8         38       Washer       4         38.1       Haxangular nut       8         38.2       Cross screw       8         39       Chain seat       2         40       Right clasp       2	35	Spring washer	8		
36         Orientation block         4           37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2		Galvanized nut	8		
37         Inner haxangular screw         8           37.1         Spring washer         8           37.2         Flat washer         8           38         Washer         4           38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	35.2	Flat washer	8		
37.1       Spring washer       8         37.2       Flat washer       8         38       Washer       4         38.1       Haxangular nut       8         38.2       Cross screw       8         39       Chain seat       2         40       Right clasp       2	36	Orientation block	4		
37.2       Flat washer       8         38       Washer       4         38.1       Haxangular nut       8         38.2       Cross screw       8         39       Chain seat       2         40       Right clasp       2	37	Inner haxangular screw	8		
38       Washer       4         38.1       Haxangular nut       8         38.2       Cross screw       8         39       Chain seat       2         40       Right clasp       2		Spring washer	8		
38.1         Haxangular nut         8           38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	37.2	Flat washer	8		
38.2         Cross screw         8           39         Chain seat         2           40         Right clasp         2	38	Washer	4		
39         Chain seat         2           40         Right clasp         2	38.1	Haxangular nut	8		
40 Right clasp 2	38.2	Cross screw	_		
9	39	Chain seat			
40.1 Left clasp 2					
	40.1	Left clasp	2		

\* Easily Worn Parts

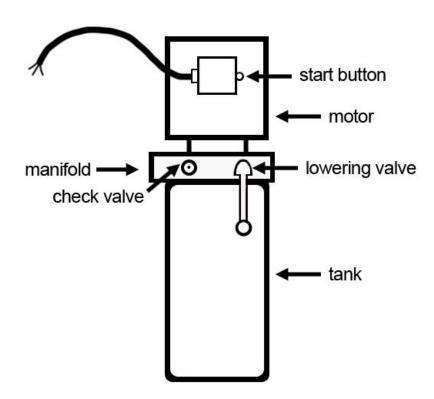
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# **IMPORTANT**

#### 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