INSTALLATION & OPERATION MANUAL

Atlas BP12000

12,000 lb. Capacity Two-Post Baseplate Lift

Atlas Automotive Equipment
www.atlasautoequipment.com
(866) 898-2604

Read this entire manual before operation begins.

Record below the following information which is located on the serial number data plate.

Serial No. _____
Model No. _____
Date of Installation _____

Contents

Specifications 4
Installation Requirement 6
Steps Of Installation 8
Exploded View 24
Test Run 27
Operation Instructions 29
Maintenance Schedule 30
Trouble Shooting 31
Parts List 32
Warranty 37

Specifications

BP12000 Floorplate Chain-Drive Model Features (See Fig. 1)

- Dual hydraulic direct-drive cylinders, designed and made on ANSI standards, utilizing NOK oil seal in cylinder
- Self- lubricating UHMW Polyethylene sliders and bronze bushings
- Single-point safety release, and dual lock safety design
- Symmetric arm design with 3-stage front and rear arms
- Convenient width adjustment: Distance between columns 10’ 3 1/2” (123 1/2”) and 9’ 10 1/8” (118 1/8”)
- Rubber lift pads with 1.5”, 2.5” and 5” stackable extension adaptors

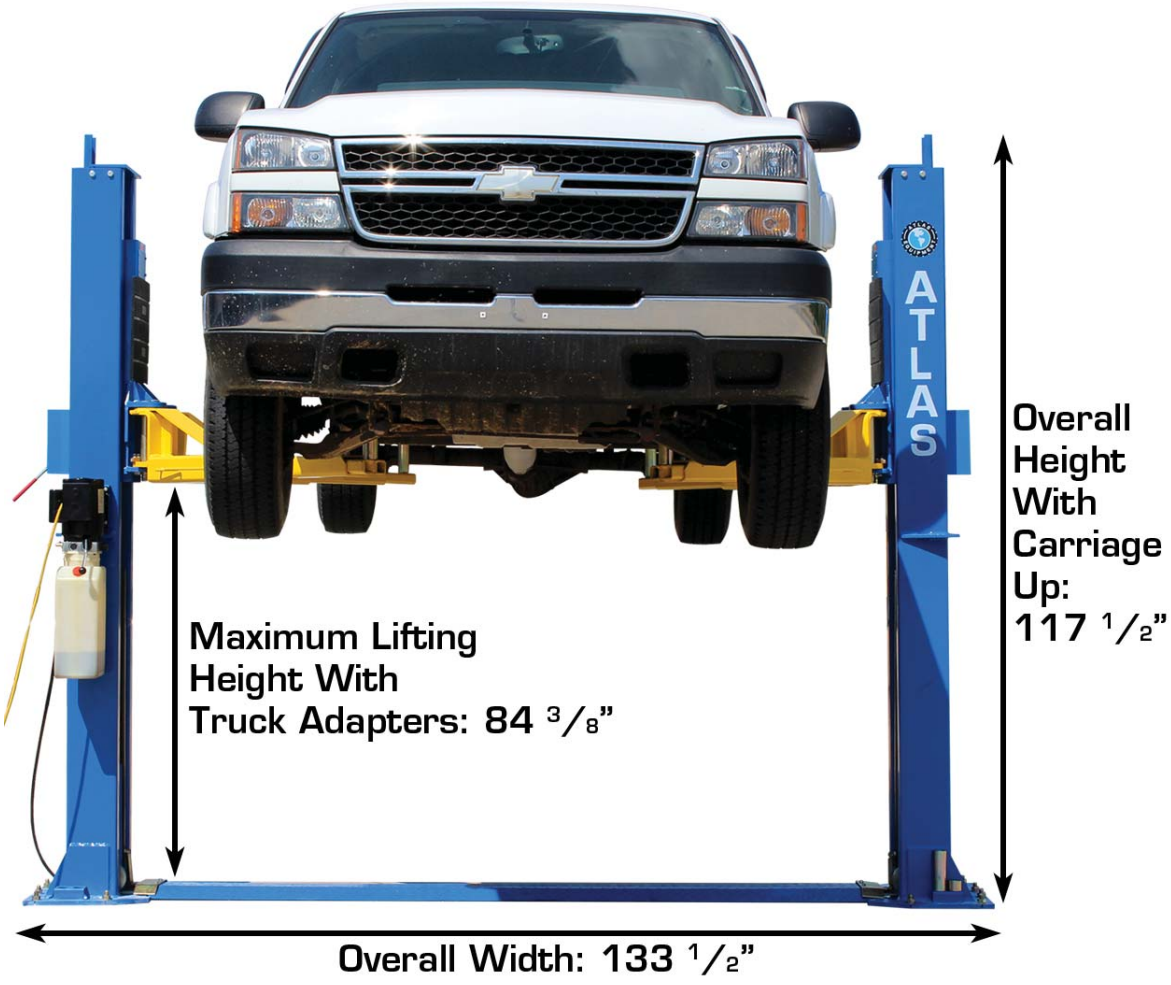


Fig. 1

Model BP12000 Specification

Model	Style	Lifting Capacity	Lifting Time	Lifting Height	Overall Height	Overall Width	Width Between Columns	Minimum Pad Height	Gross Weight	Motor
BP12000	Base plate Chain-drive	12,000lbs	55S	73 1/4″ – 82 1/4″	122 1/2″	145 3/8″- 150 3/4″	118 1/8″- 123 1/2″	4 3/4″	2,156lbs	2.0 HP

Arm Swing View

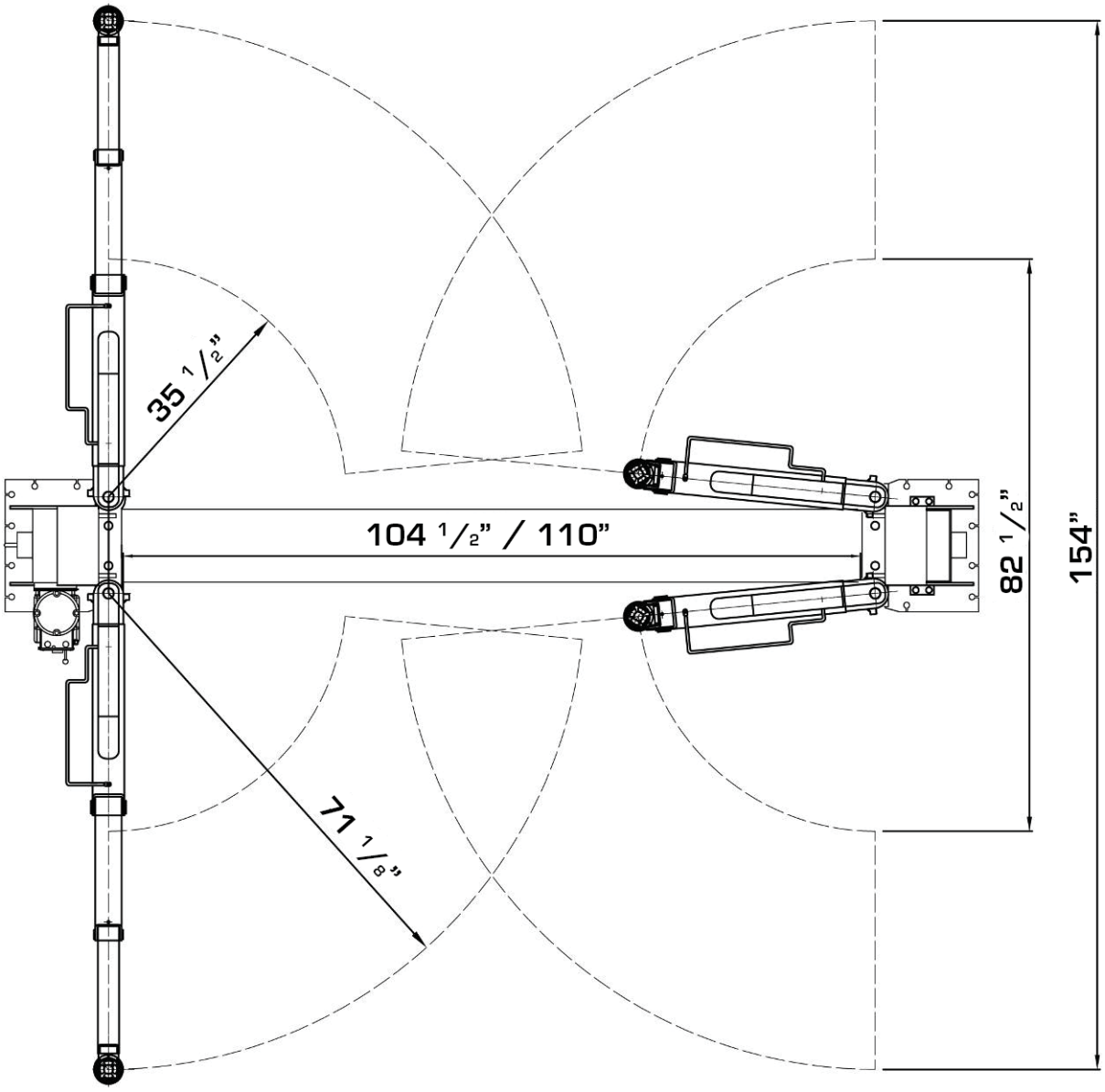


Fig. 2

Installation Requirement

Tools Required

Rotary Hammer Drill (3/4”)

Carpenter’s Chalk

Hammer

Screw Drivers

Level Bar

Tape Measure (25ft)

Crescent Wrench (12”)

Pliers

Ratchet Spanner With Socket (28#)

Allen Head Wrench (6#)

Wrench set (mm)
(10#, 13#, 14#, 15#, 17#, 19#, 24#, 27#)

Vise Grips

Fig. 3

Specifications Of Concrete (See Fig. 4)

Concrete specifications must be adhered to.

Failure to do so may result in lift and / or vehicle falling.

1. Concrete must have a minimum thickness of 6 inches. Concrete must be cured before the installation.
2. Concrete must be in good condition and must be of test strength 3,000psi minimum.
3. Floors must be level with no cracks.

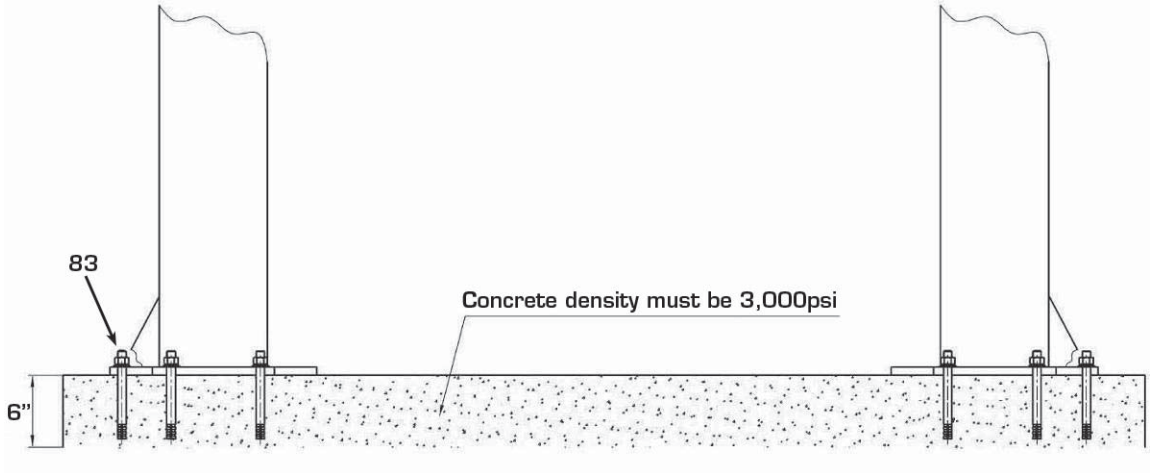


Fig. 4

Power Supply

220 volt single phase 30 amp breaker with minimum of 10 gauge wire

Steps Of Installation

A. Location Of Installation

Make sure the location of the lift (concrete, layout, space size etc.) is suitable for installation.

B. Use A Carpenter's Chalk Line To Establish Installation Layout Of The Base Plate (See Fig. 5)

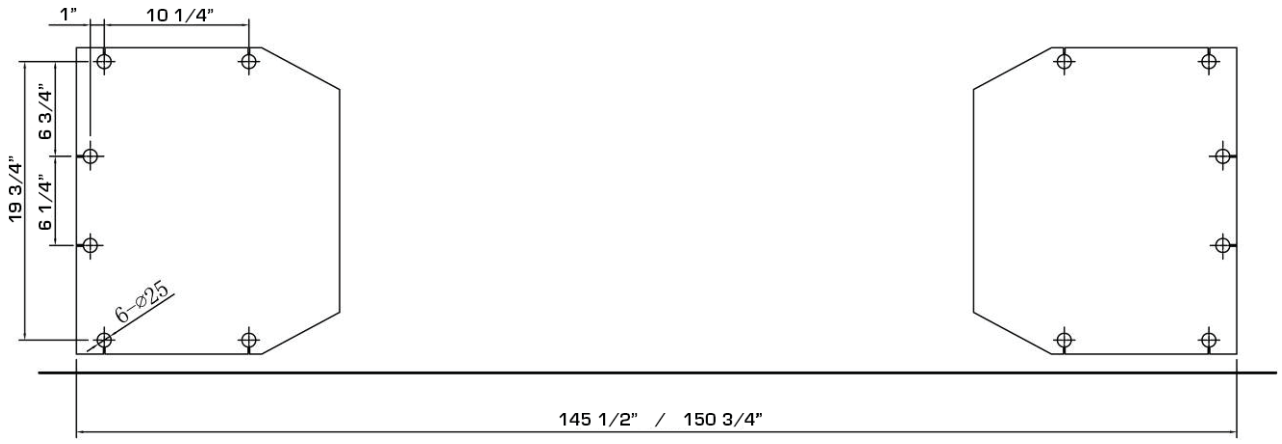


Fig. 5

C. Check The Parts Before Assembly

1. Packaged lift and hydraulic power unit **(See Fig. 6).**

Fig. 6

2. Move the lift aside with fork lift or hoist, and open the outer packing carefully **(See Fig. 7).**

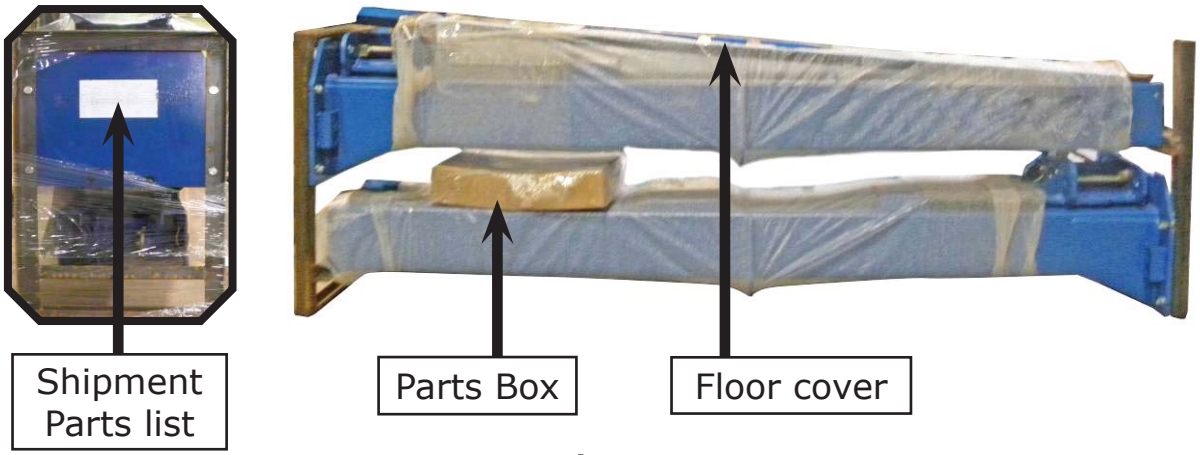


Fig. 7

3. Remove the parts from the upper and inside of the column. Remove the parts box, and check the parts according to the shipment parts list **(See Fig. 8).**

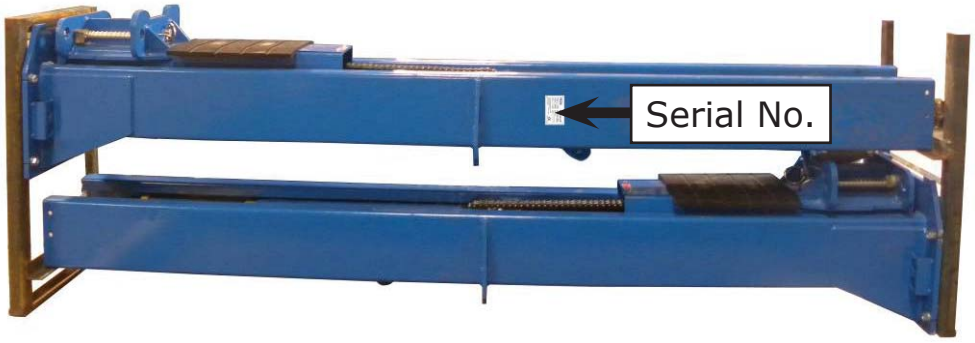
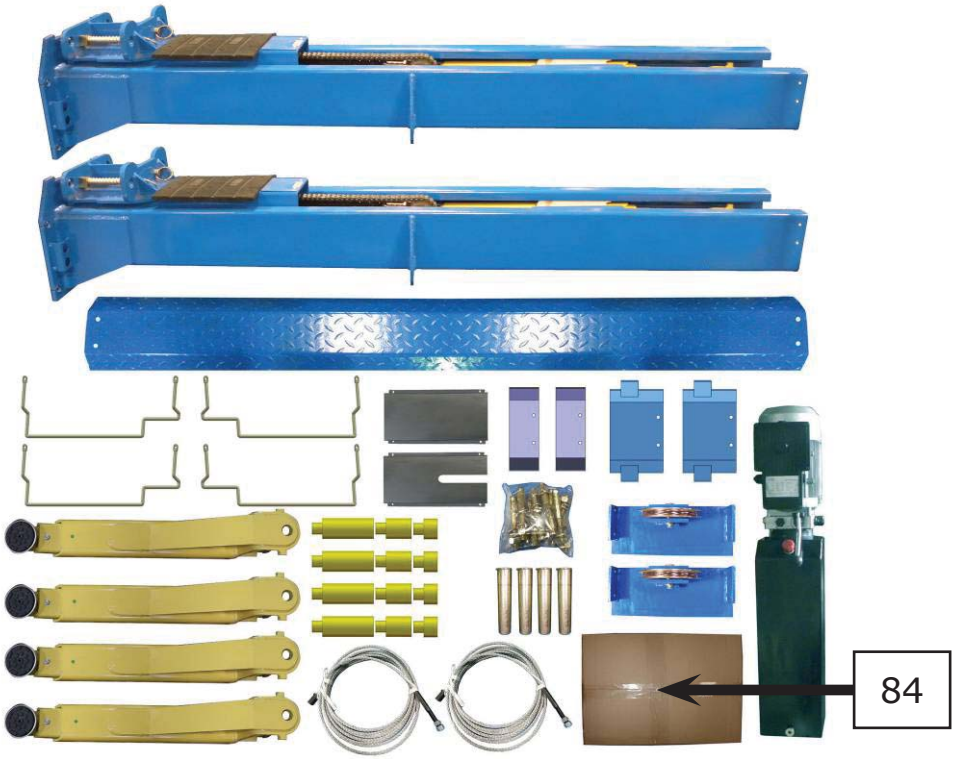


Fig. 8

4. Loosen the bolts of the upper package stand, take off the upper column and remove the package stand**.**

5. Move aside the parts and check the parts according to the shipment parts list **(See Fig. 9, 10).**



Parts in the shipment parts list

Fig. 9

Parts in the parts box (84)

Fig. 10

6. Open the parts bag and check the parts according to parts bag list (**See Fig. 11).**

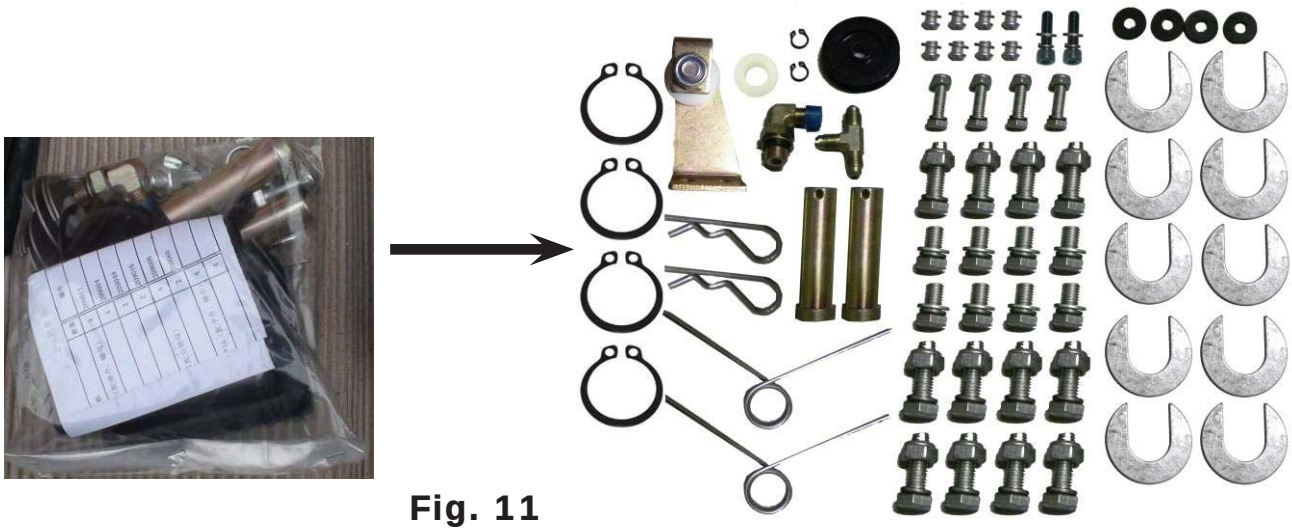


Fig. 11

D. Position Power Side Columns

Lay down two columns on the installation site parallel, position the power side column according to the actual installation site. Usually, it is suggested to install power side column on the right side. Install the top plates **(See Fig.12).**

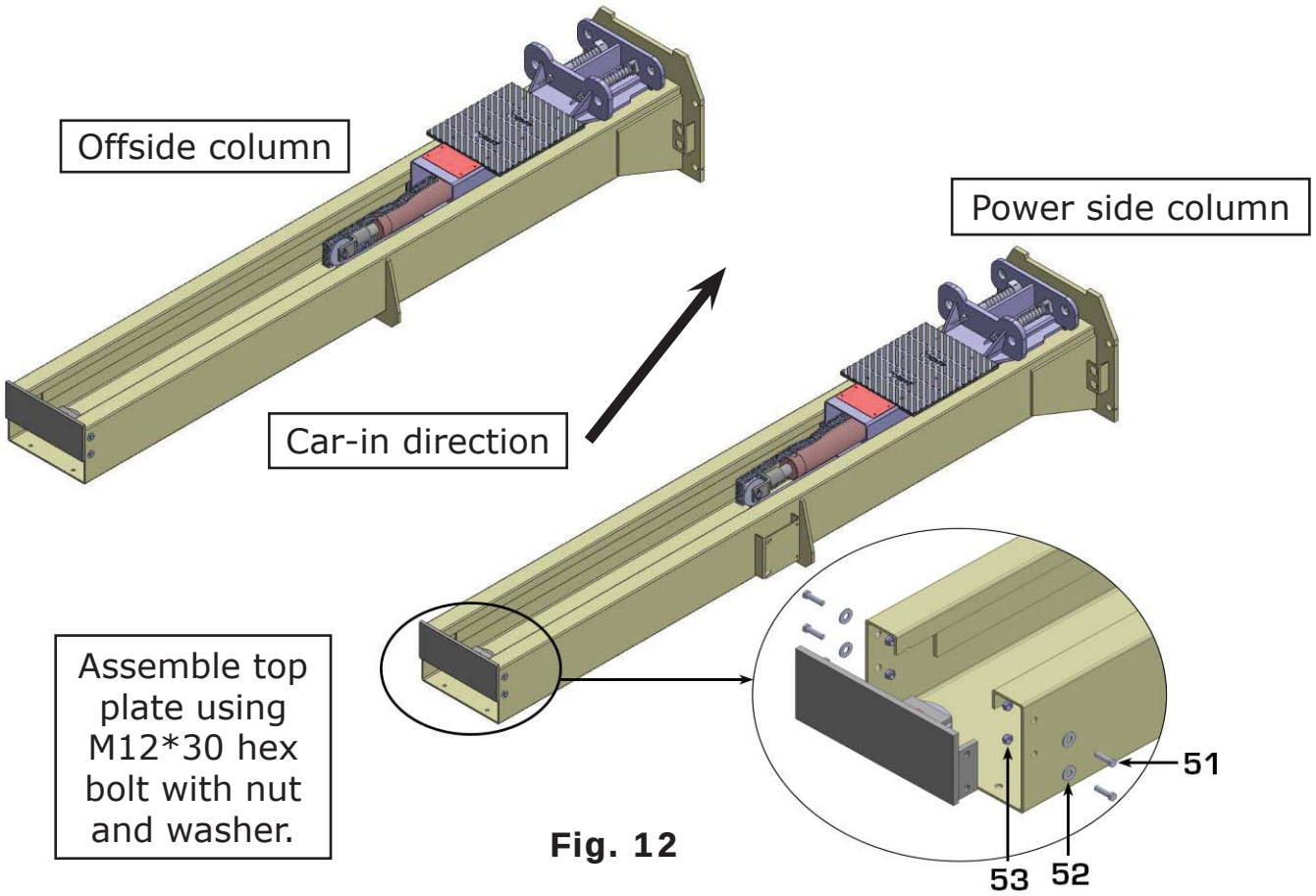


Fig. 12

E. Position The Columns Check The Columns For Plumb With A Level Bar, And Adjust With The Shims If The Columns Are Not True (See Fig. 13)

Note: Set the width to 145 3/8" or 150 ¾"

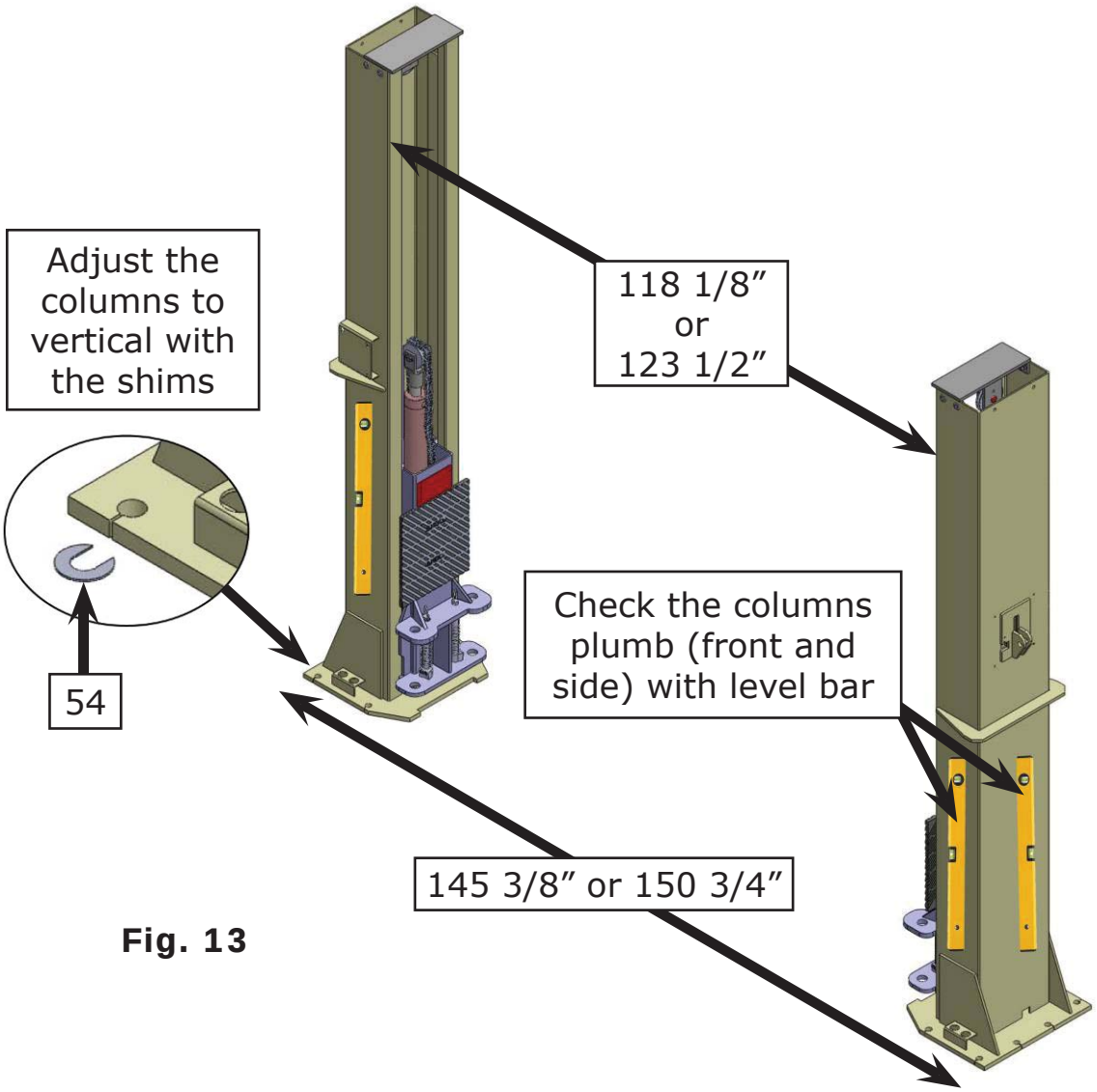


Fig. 13

F. Fix Anchor Bolts

1. Prepare anchor bolts **(See Fig. 14)**.

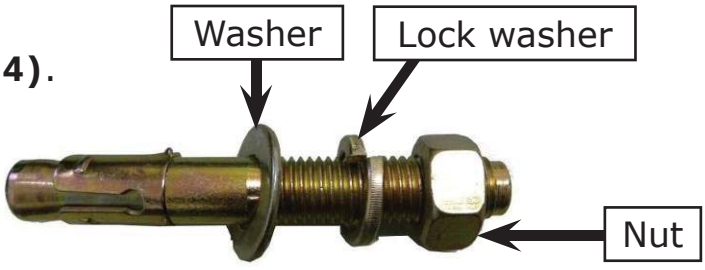


Fig. 14

2. Use a rotary hammer drill and ¾” masonry bit. Drill all the anchor holes and install the anchor bolts. Tighten the anchor bolts between 60 and 86 foot pounds.

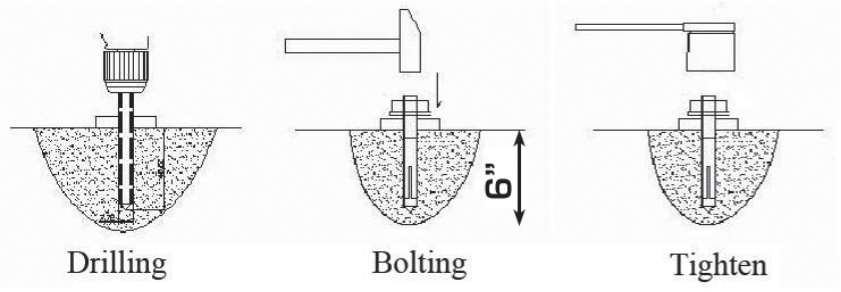
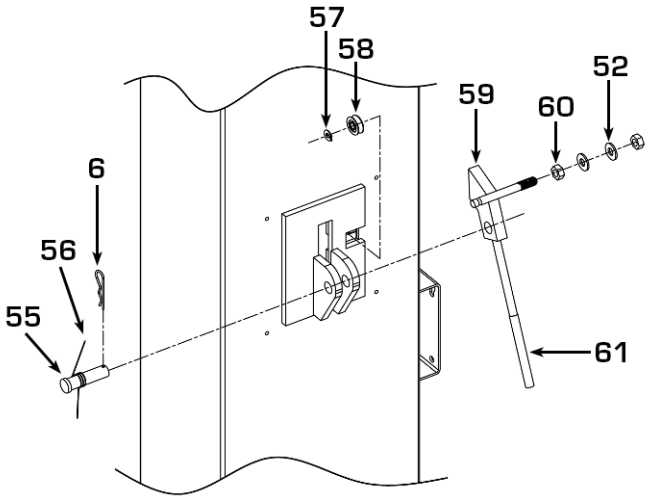


Fig. 15

G. Install Safety Locks (See Fig. 16 & 17)



Power side safety device

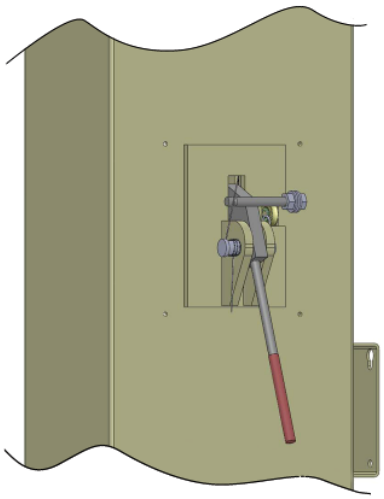
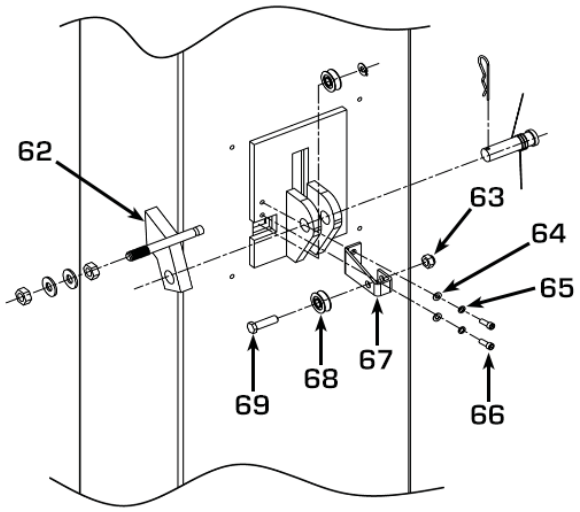


Fig. 16



Offside safety device

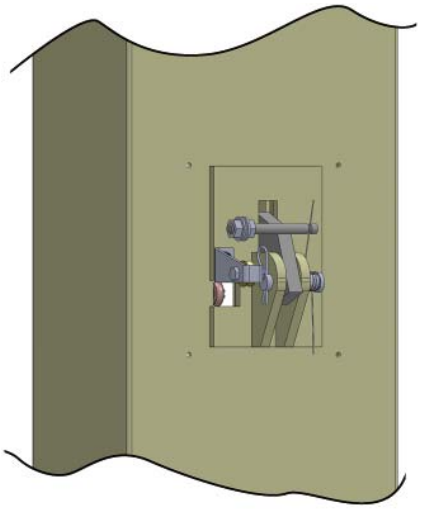


Fig. 17

H. Lift The Carriages Up By Hand And Lock Them At The Same Level (See Fig. 18)

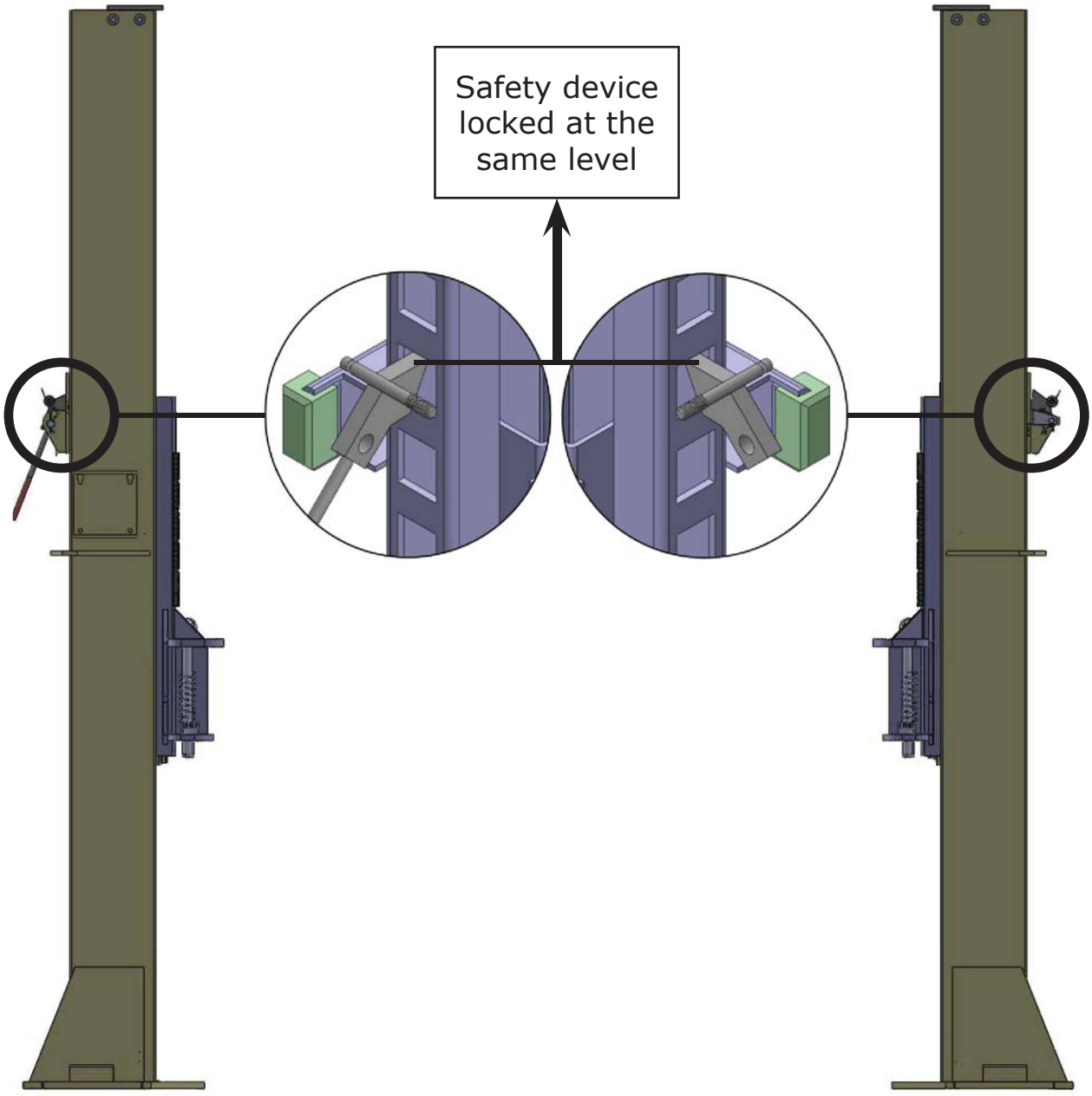


Fig. 18

I. Install Cable

According to step **E (Width Setting)** choose the width distance of your lift **(See Fig.13)**.

Note: Follow cable routing diagram below

1. For width distance with 150 3/4" **(See Fig.19).**

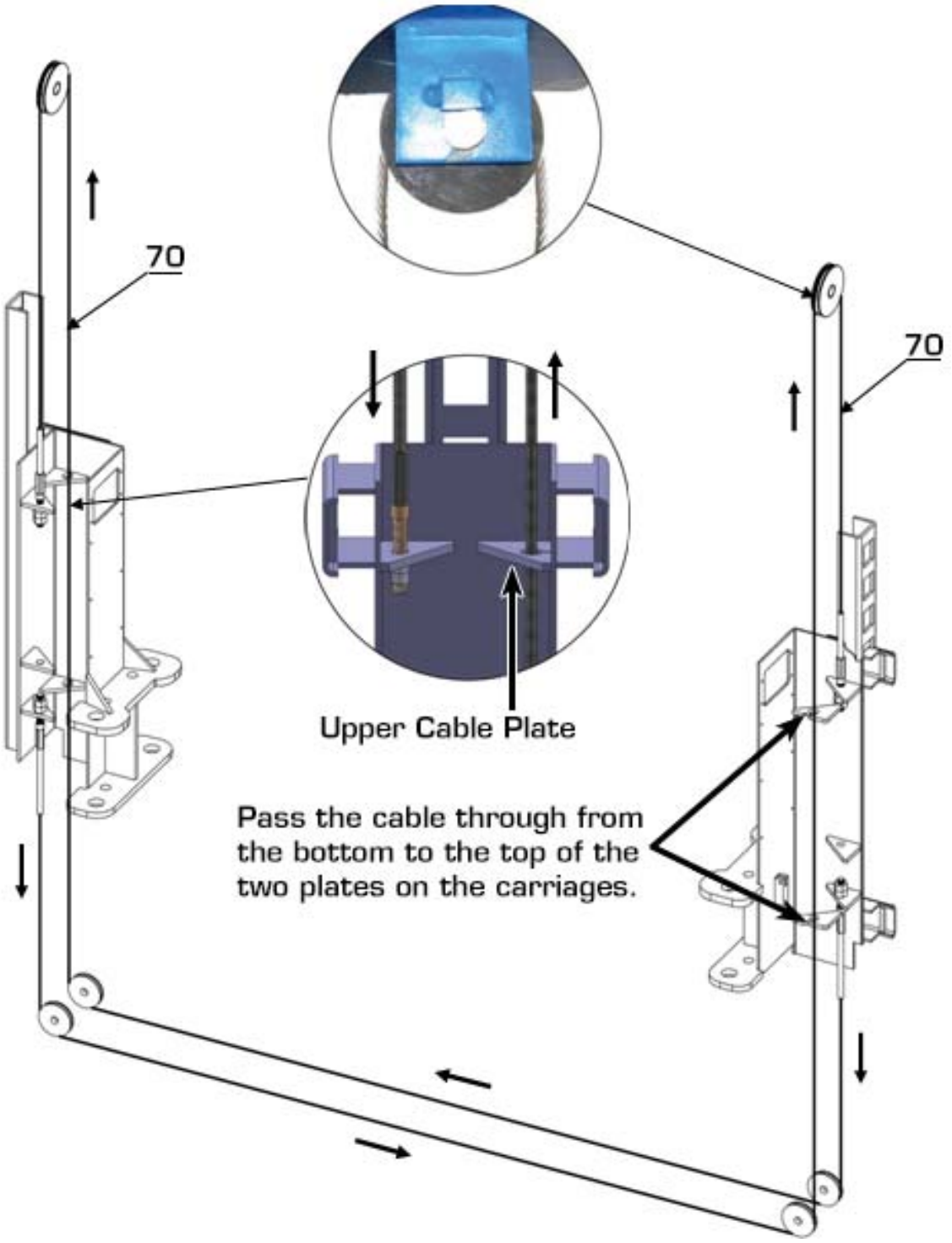


Fig. 19

2. For width distance with 145 1/2”

2.1. Pass the cable through from the bottom to the top of the carriage. The cable passes through the hole of the carriages and is screwed with two cable nuts. **(See Fig. 20).**

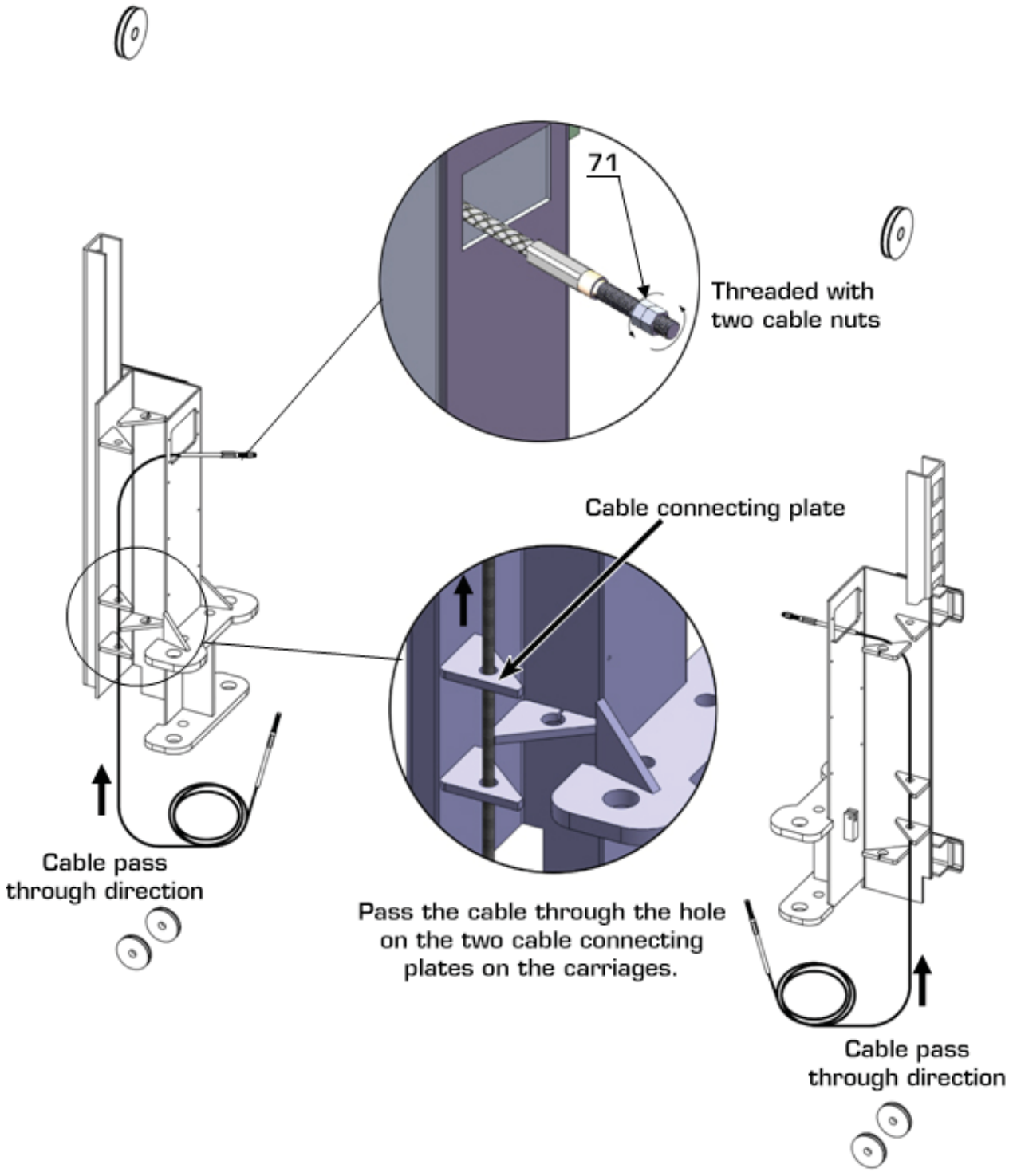


Fig. 20

2.2. Pass the cable through as shown below **(See Fig. 21)**.

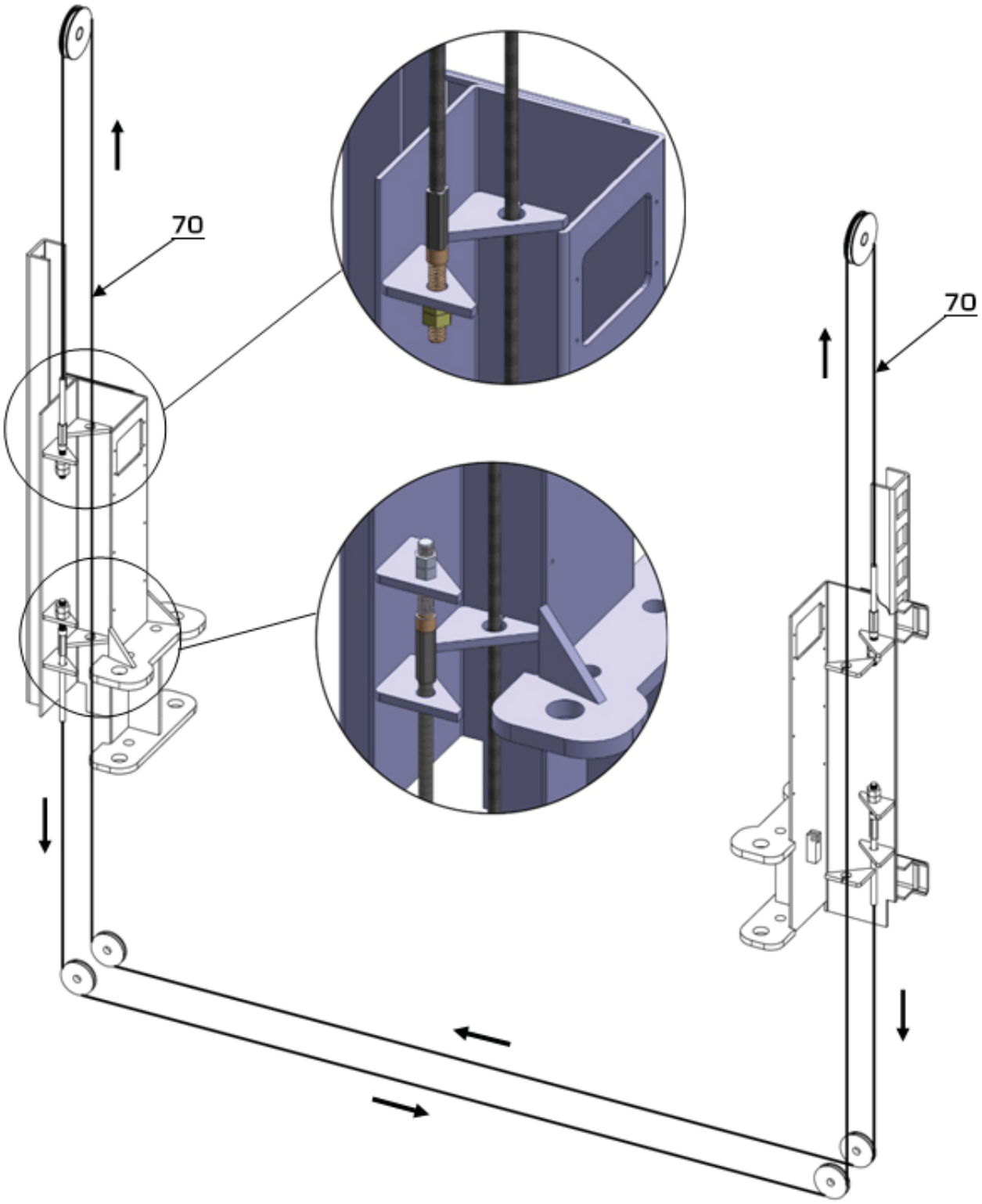


Fig. 21

J. Install The Cable On The Safety Locks (See Fig. 22)

Note: Install the safety cable from the offside safety first. Pay attention to the pass through direction.

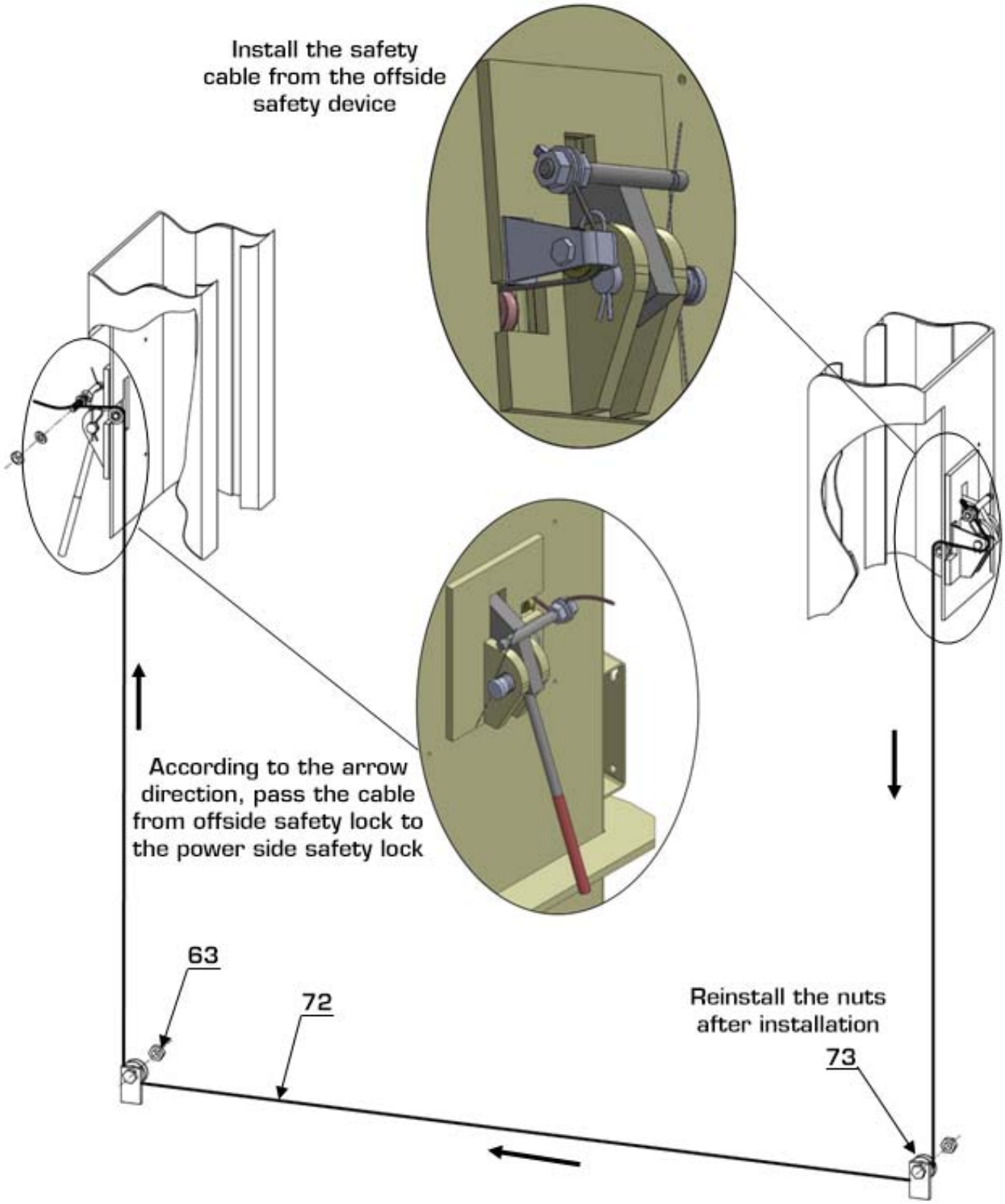


Fig. 22

K. Install Hydraulic Power Unit And Oil Hose Assembly (See Fig. 23)

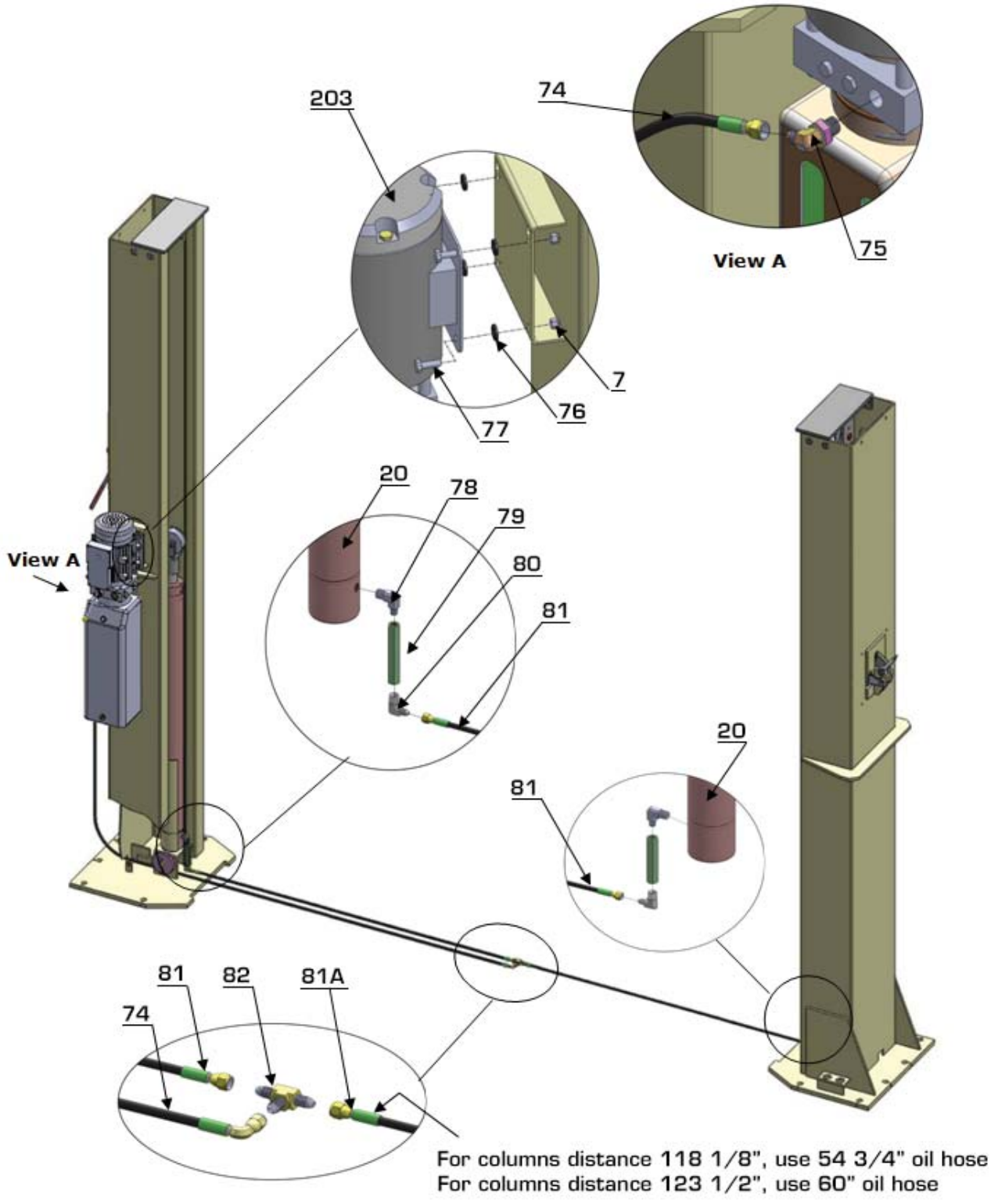


Fig. 23

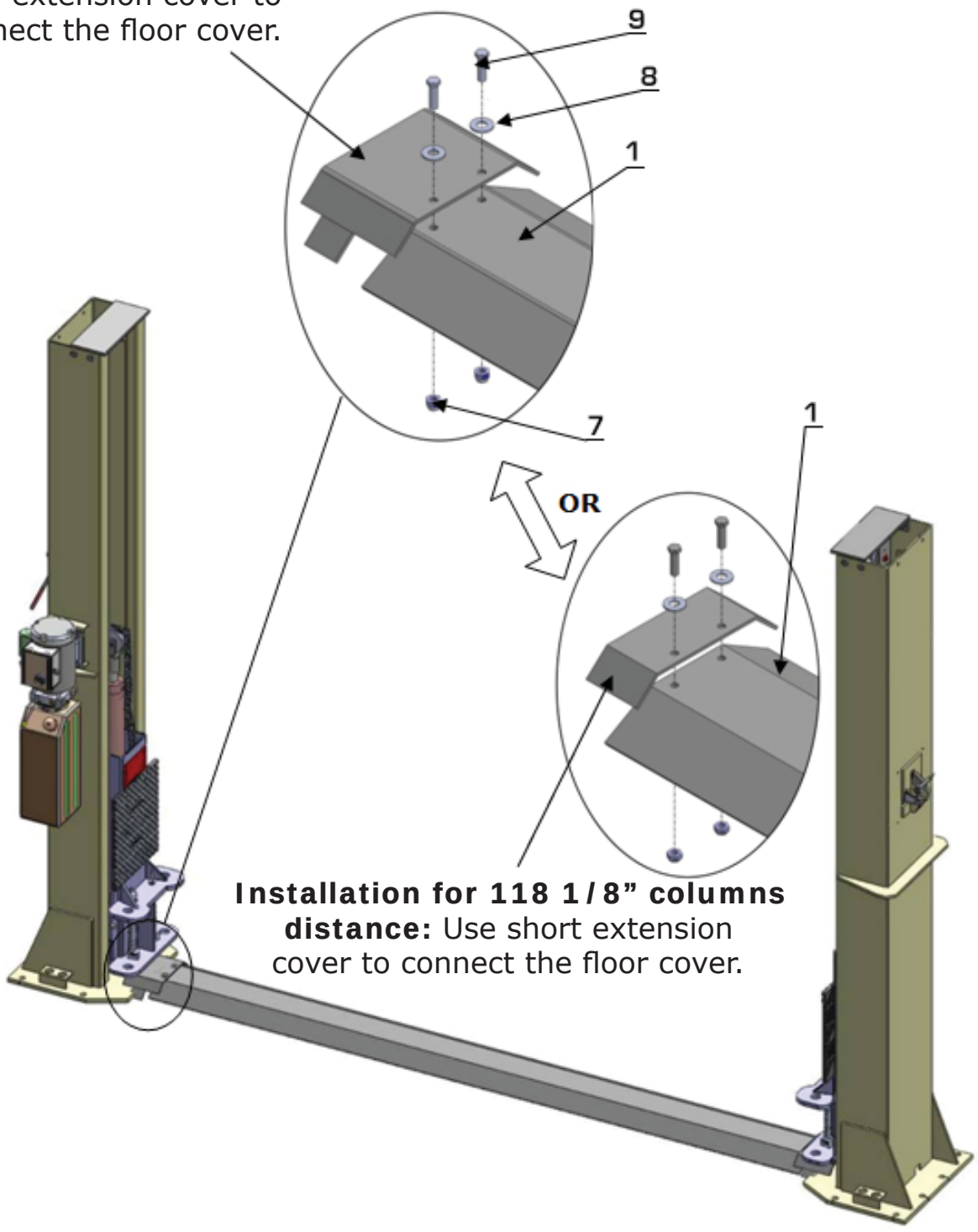
Tighten all the hydraulic fittings, and fill the reservoir with hydraulic oil.

Note: Use hydraulic oil AW46.

L. Install Floor Cover (See Fig. 24)

Note: Choose different extension cover according to the columns distance.

Installation for 123 1/2” columns distance: Use long extension cover to connect the floor cover.



Installation for 118 1/8” columns distance: Use short extension cover to connect the floor cover.

Fig. 24

M. Install Lifting Arms And Adjust The Arm Locks

1. Install the lifting arms **(See Fig. 25).**
2. Lower the carriages down to the lowest position, then use the 8mm allen wrench to loosen the nut of arm lock **(See Fig. 26).**
3. Adjust the arm lock as arrow direction **(See Fig. 27).**
4. Adjust the moon gear and arm lock so they mesh together, then tighten the bolts on the arm lock. **(See Fig. 27).**

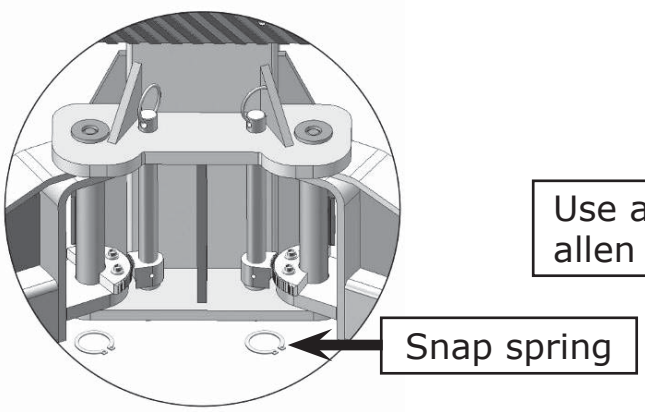


Fig. 25

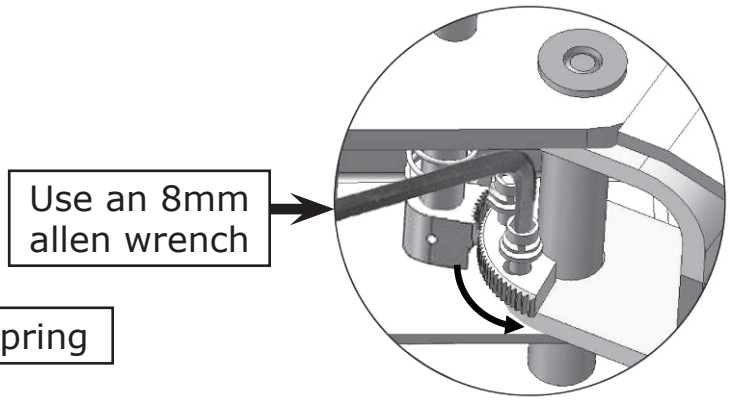


Fig. 26

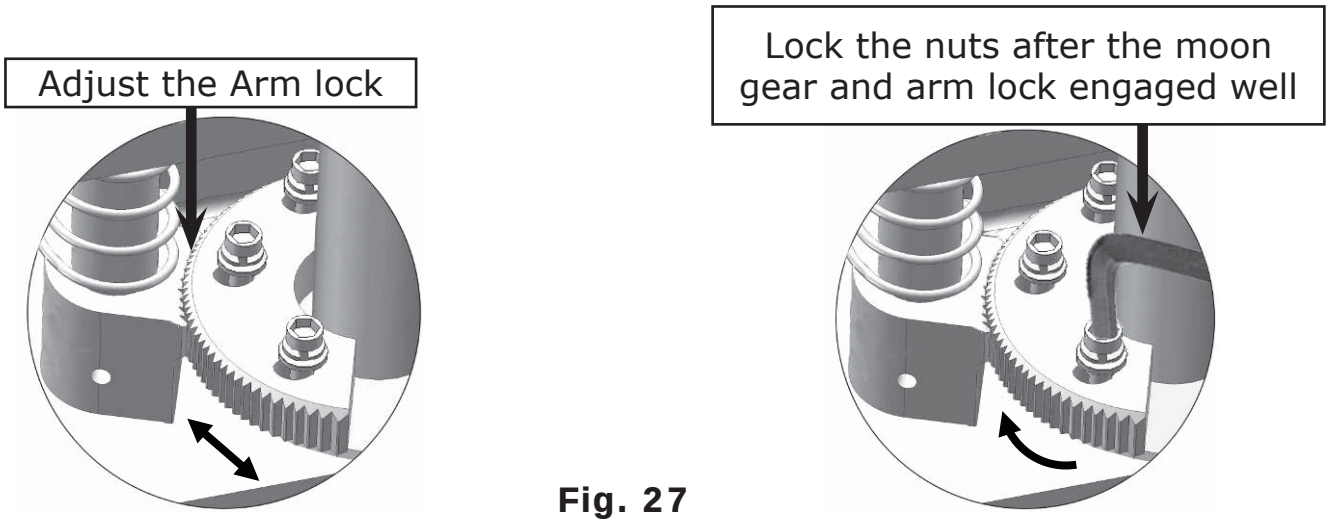


Fig. 27

2. Install toe guard.

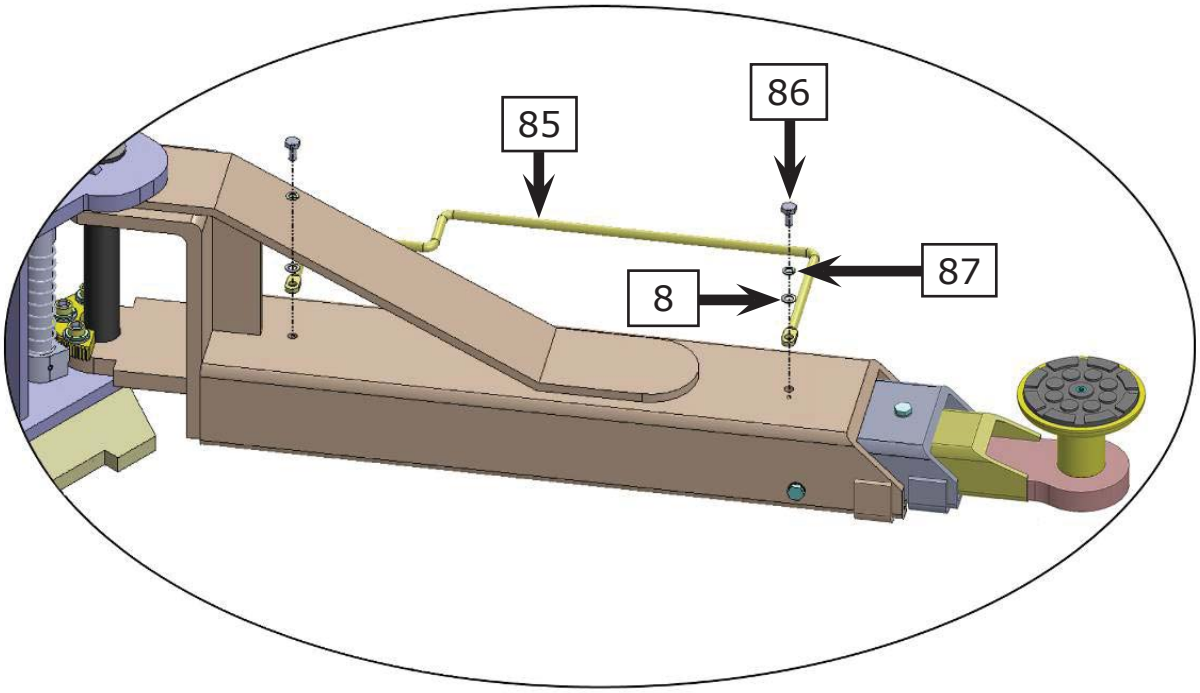


Fig. 28

N. Install Electrical System

1. **220V single phase motor**

   1.1. Circuit diagram **(See Fig. 29).**

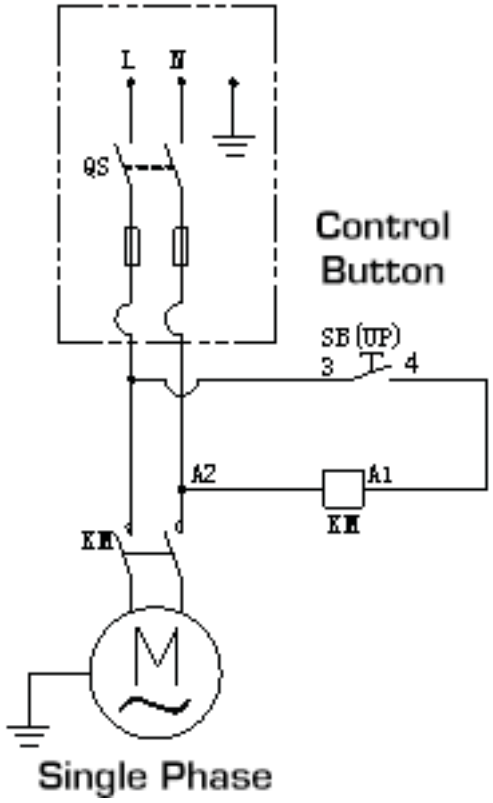


Fig. 29

1.2. Connection step **(See Fig. 30)**

a. Connect the two power supply lines (fire wire **L** and zero wire **N**) to the terminals on the AC contactor marked **L1, L2**.

b. Terminal **3#** of control button is connected with terminals **L1** of AC contactor; Terminal **4#** of control button is connected with terminals **A1** of AC contactor.

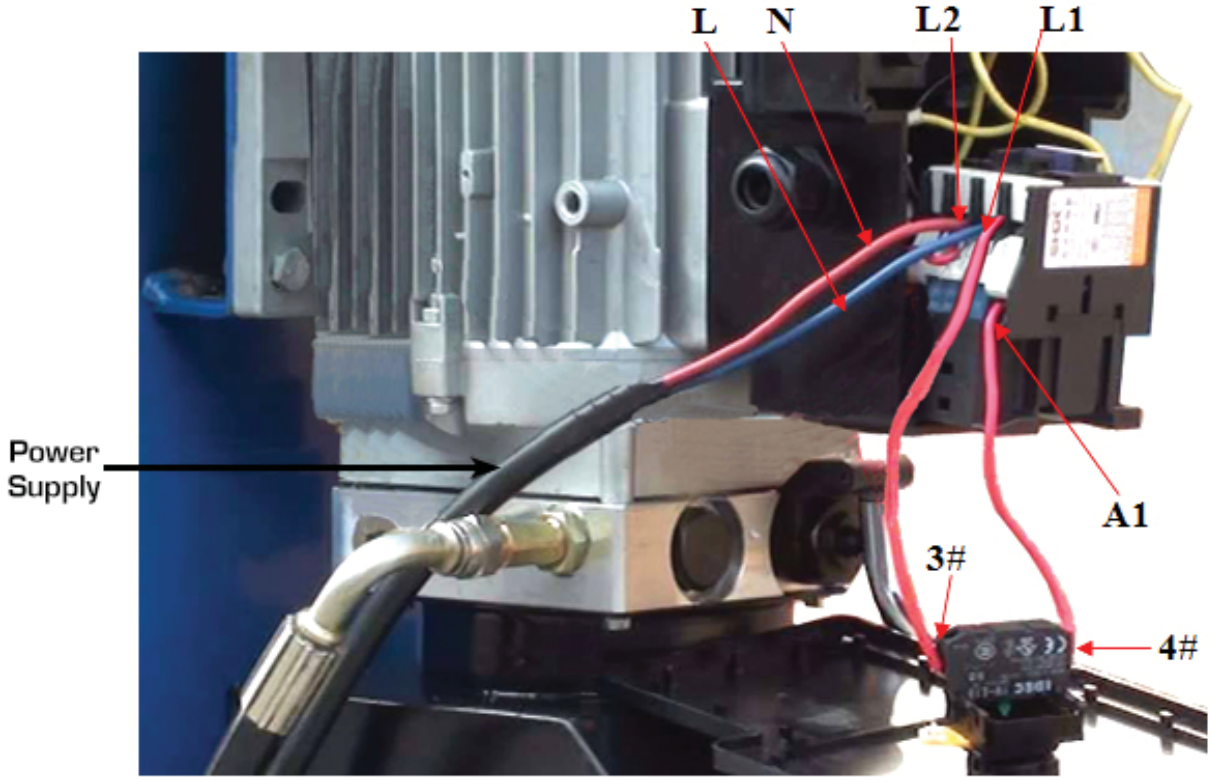


Fig. 30

1.3. Connection diagram **(See Fig. 31)**.

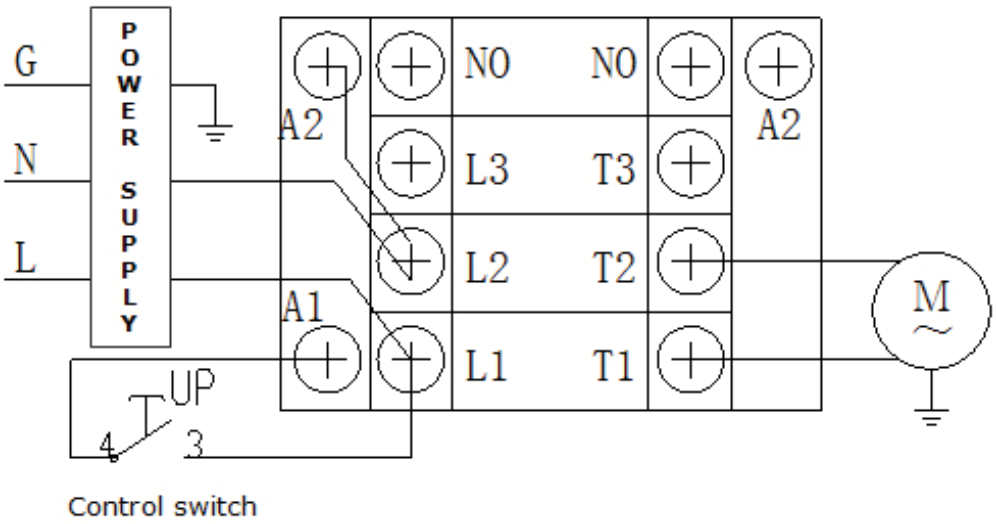


Fig. 31

Exploded View

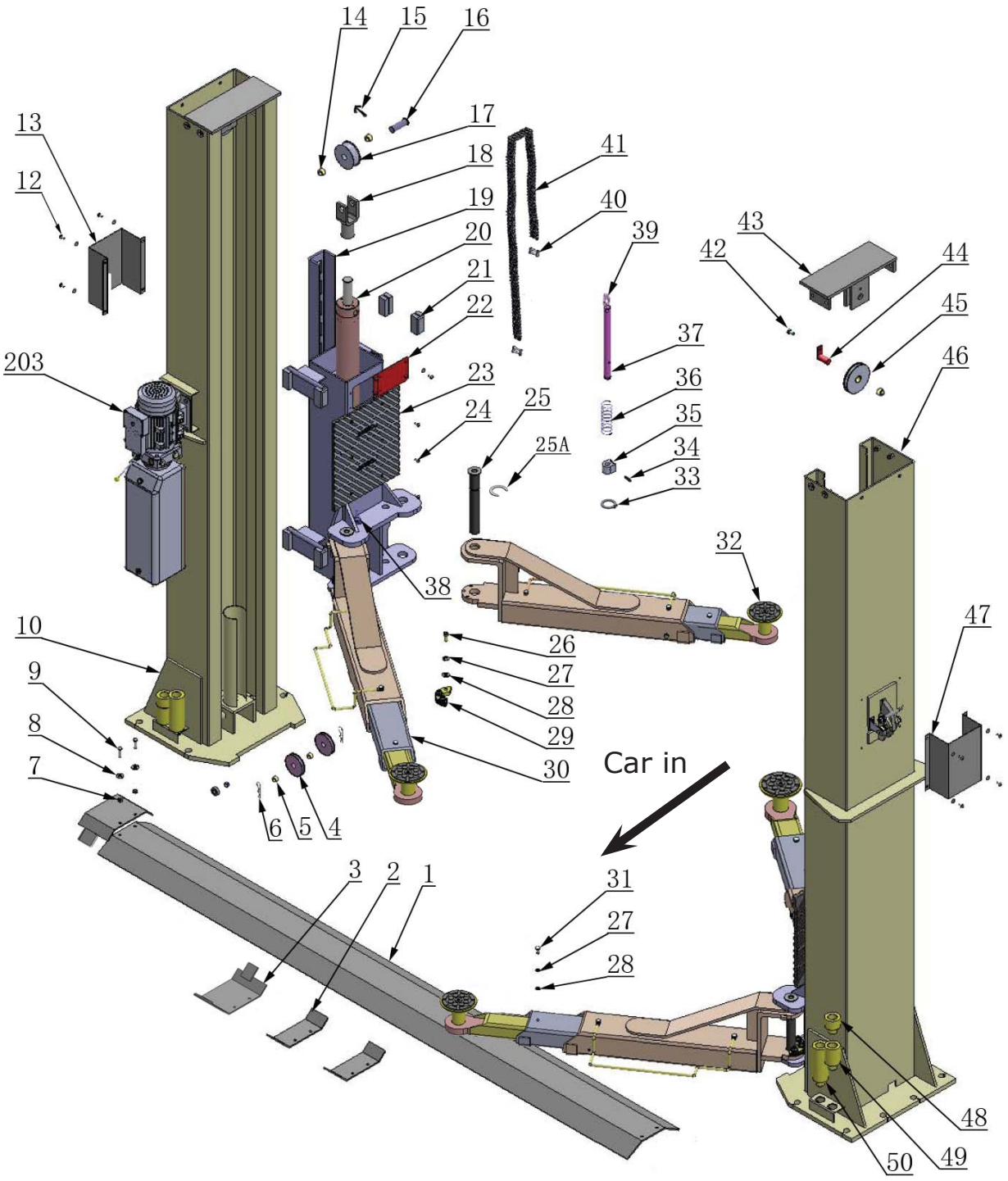


Fig. 32

Cylinder

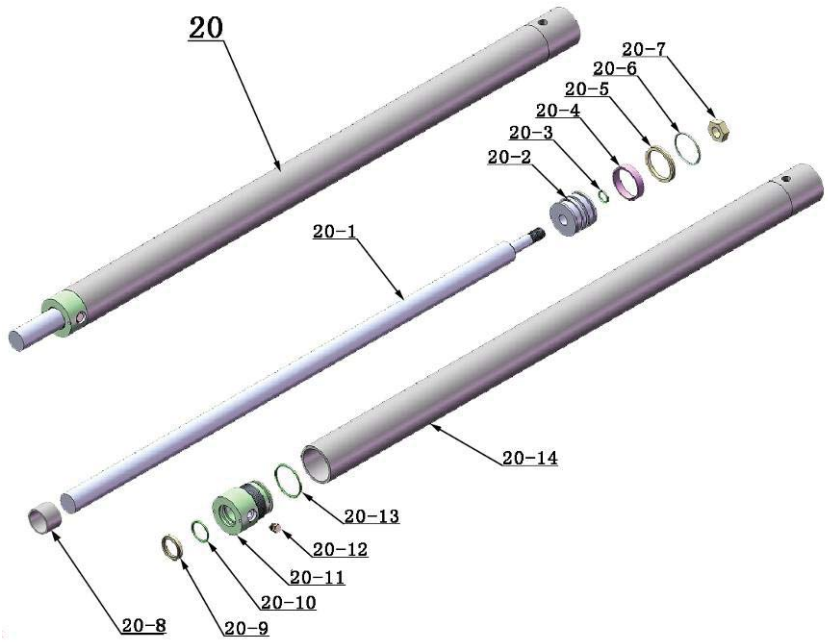
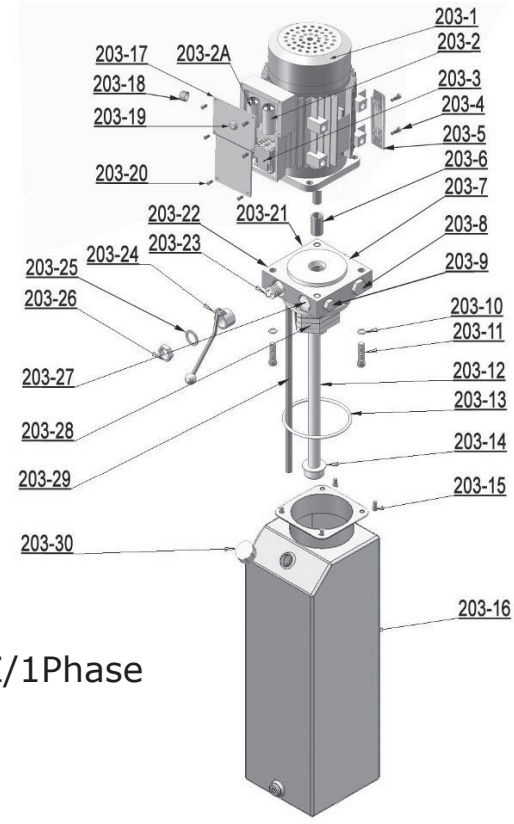


Fig. 33

Atlas Hydraulic Power Unit



220V/60HZ/1Phase

Fig. 34

Illustration Of Hydraulic Valve For Atlas Hydraulic Power Unit

Atlas hydraulic power unit, 220V/60HZ, Single phase (See Fig. 35)

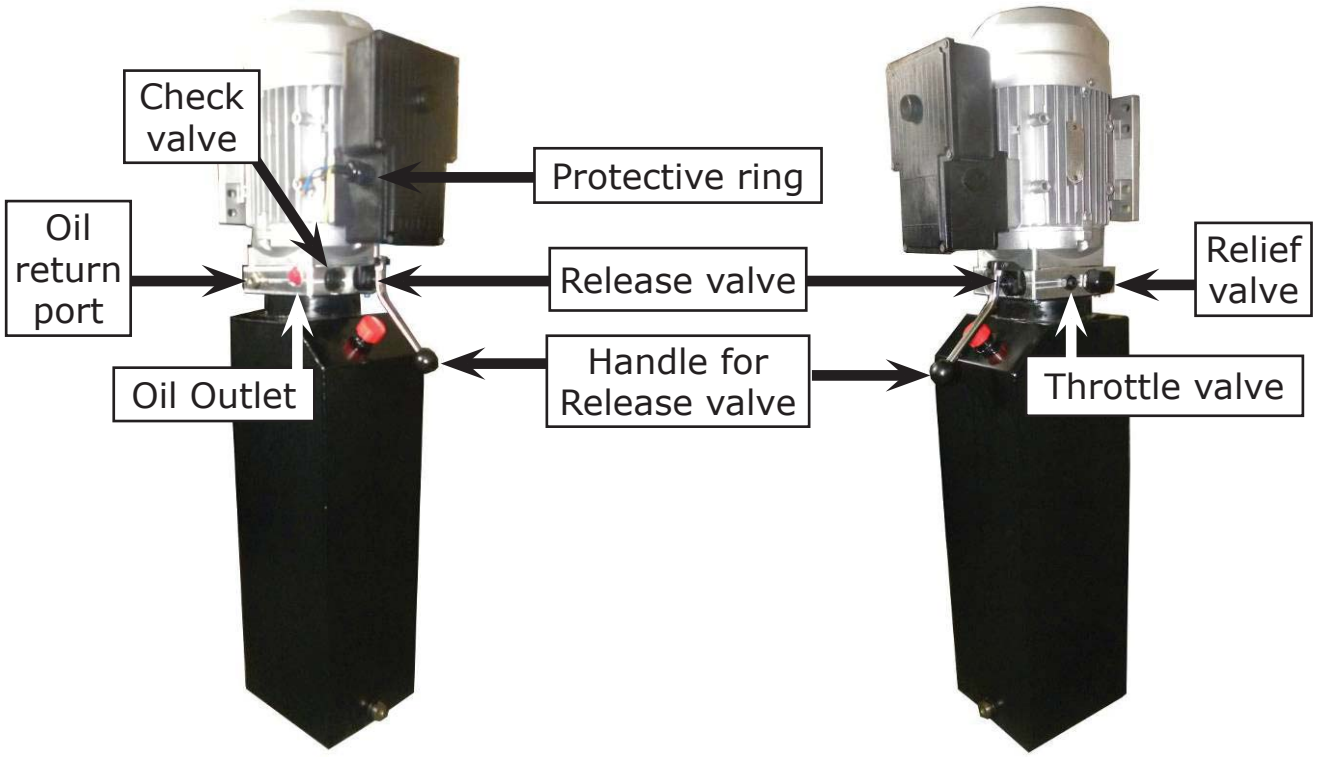


Fig. 35

Test Run

1. **Adjust synchronizing cable**

Use a wrench to hold the cable fitting, and use another wrench to tighten the cable nut. Make sure the two cables have the same tension.

If the carriage does not synchronize when lifting, please tighten the cable nut of the lower side carriage. (See Fig. 36)

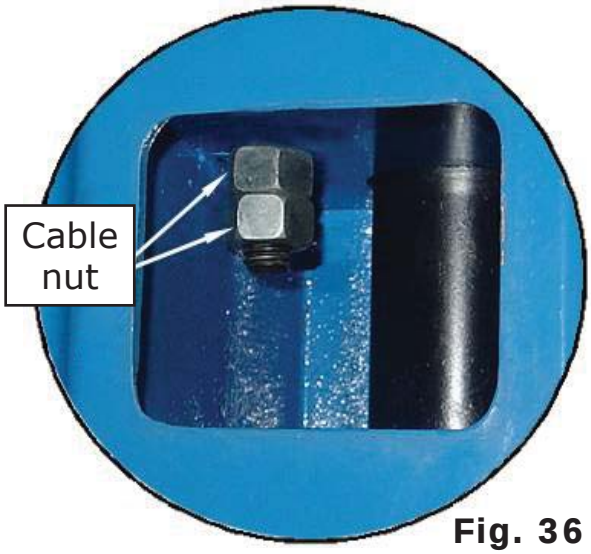


Fig. 36

2. **Adjust safety cable**

Lift the carriage and lock at the same height. Strain the safety cable, release a little, and then tighten the cable nuts. Make sure the safety locks can always work properly.

3. **Adjust the lower speed (Only for Atlas power unit)**

You can adjust the lower speed of the lift if needing: Loosen the Fixing Nut of the throttle valve, and then turn the throttle valve clockwise to decrease the lower speed, or counterclockwise to increase the lower speed. Do not forget to tighten the fixing nut after the lower speed adjustment has been done.

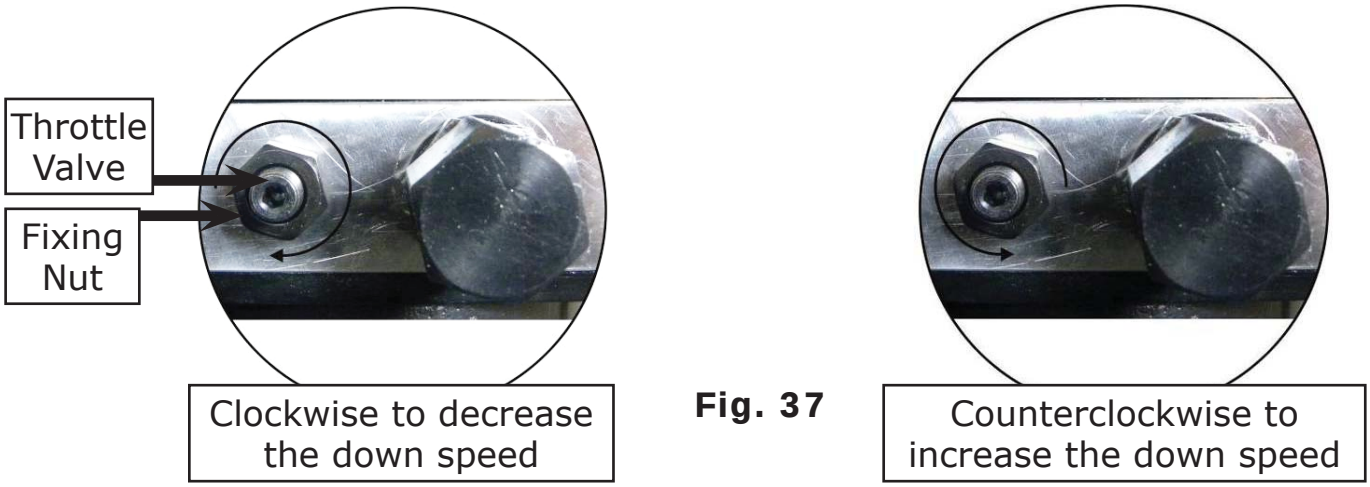


Fig. 37

4. **Test with load**

After finishing the above adjustment, test run the lift with a load. Run the lift in low position several times first, make sure the lift can rise and lower at the same time, the safety device can lock and release at the same time. Test run the lift to the top completely. If there is anything improper, repeat the above adjustment.

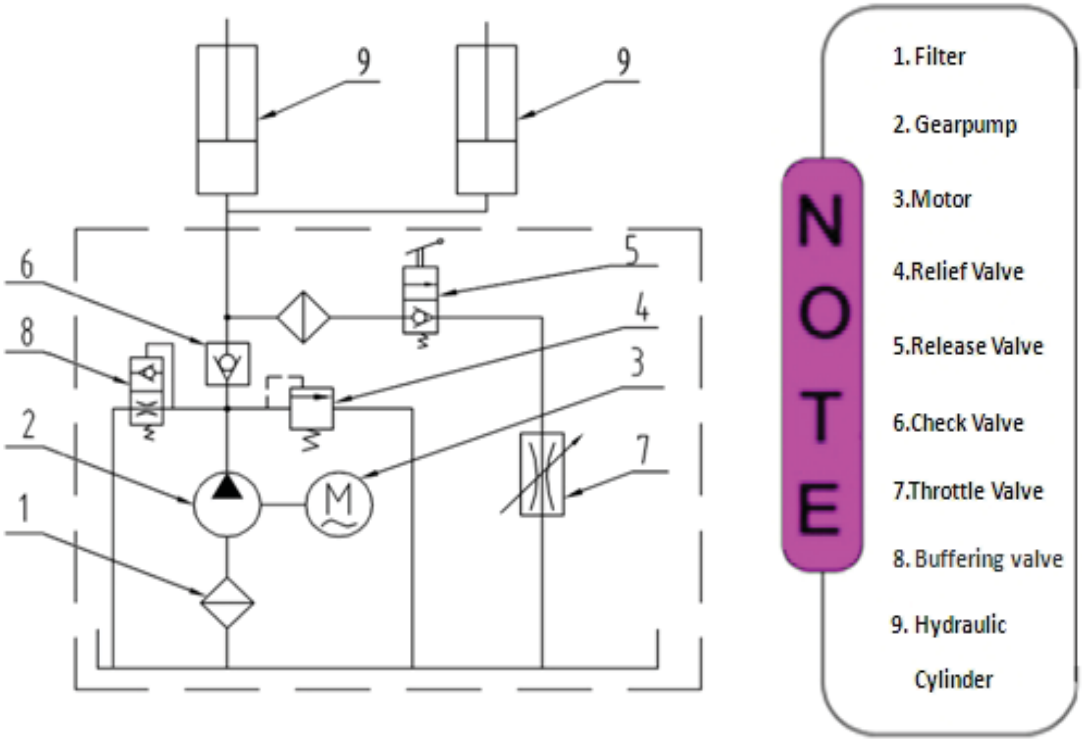


Fig. 38 Hydraulic System

Operation Instructions

Please read the safety tips carefully before operating the lift

To lift vehicle

1. Keep work area free of clutter;
2. Position lift arms to the lowest position;
3. Open lift arms;
4. Position vehicle between columns;
5. Move arms to the vehicle's lifting points;

   Note: The four lift arms must at the same time contact the vehicle's lifting points where manufacturers recommended

6. Press the **UP** button until the lift pads contact underside of vehicle totally. Recheck to make sure vehicle is secure;
7. Continue to raise the lift slowly to the desired working height, ensuring the balance of vehicle;
8. Push lowering handle to lower lift onto the nearest safety. The vehicle is ready to repair.

To lower vehicle

1. Keep work area free of clutter;
2. Press the button of **UP** to raise the vehicle slightly, and then release the safety device, lower vehicle by pushing lowering handle.
3. Open the arms and position them to the shortest length;
4. Drive away the vehicle.

Maintenance Schedule

Monthly:

1. Re-torque the anchor bolts between 60 and 86 foot pounds;
2. Check all connectors, bolts and pins to insure proper mounting;
3. Lubricate cable with lubricant;
4. Make a visual inspection of all hydraulic hoses/lines for possible wear or leakage;
5. Check Safety device and make sure proper condition;
6. Lubricate all Rollers and Pins with 90wt. Gear oil or equivalent;

   Note: All anchor bolts should take full torque. If any of the bolts does not function for any reason, DO NOT use the lift until the bolt has been replaced.

Every six months:

1. Make a visual inspection of all moving parts for possible wear, interference or damage.
2. Check equal tension of the cables and adjust as necessary to insure level lifting.
3. Check columns are plumb.
4. Check Rubber Pads and replace as necessary.
5. Check safety locks and make sure they are in proper condition.

Trouble Shooting

TROUBLE	CAUSE	REMEDY
Motor does not run	1. Button does not work 2. Wiring connections are not in good condition 3. Motor burned out 4. AC contactor in damage	1. Replace button 2.Repair all wiring connections 3. Repair or replace motor 4. Repair or replace
Motor runs but the lift is not raised	1. Motor runs in reverse rotation 2. Gear pump out of operation 3. Release valve in damage 4. Relief valve or check valve in damage 5. Low oil level	1.Reverse two power wire 2.Repair or replace 3. Repair or replace 4.Repair or replace 5.Fill reservoir
Lift does not stay up	1. Release valve out of work 2. Relief valve or check valve leakage 3. Cylinder or fittings leakage	Repair or replace
Lift raises slowly	1. Oil line is jammed 2. Motor running on low voltage 3. Oil mixed with air 4. Gear Pump leaks 5. Overload lifting	1. Clean the oil line 2. Check electrical system 3. Fill tank 4. Repair or replace 5. Check load
Lift cannot lower	1. Safety device are locking. 2. Release valve in damage 3. Safety cable broken 4. Oil system is jammed	1. Release the safeties 2. Repair or replace 3. Replace 4. Clean the oil system

Parts List

Item	Part#	Description	Qty.	Note
(See Fig. 32, Fig.12-13, Fig.16-17, 19-23)				
1	207001	Floor cover	1	
2	207002	Short extension cover	2	
3	207003	Long extension cover	2	
4	217019	Top pulley	4	
5	217020	Bronze bush for pulley	6	
6	209012	Hair pin	6	
7	209005	Self locking nut	8	
8	209033	Washer	16	
9	209043	Hex bolt	4	
10	207004A	Power side column	1	
203	440035	Power unit	1	
12	209009	Cup head bolt	12	
13	207005	Powerside lock cover	1	
14	420132A	Bronze bush for chain pulley	4	
15	201005	Split Pin	2	
16	207006	Pin for Chain pulley	2	
17	207007	Chain pulley	2	
18	207008	Chain pulley bracket assembly	2	
19	207009	Carriage	2	
20	207010	Cylinder	2	
21	209015	Slider block	16	
22	207047	Carriage plastic cover	2	
23	217053	Protective Rubber	2	
24	209019	Bolt	12	
25	217047B	Arm pin	4	
25A	520023	Snap spring	4	
26	206048	Socket bolt	12	
27	209039	Lock washer	22	

Item	Part#	Description	Qty.	Note
28	209022	Washer	22	
29	206049	Moon gear	4	
30	207011A	Lifting arm	4	
30A	207012A	Outer lifting arm	4	
30B	207013A	Middle lifting arm	4	
30C	207014A	Inner lifting arm	4	
31	206017	Hex bolt	8	
32	217114A	Rubber pad assembly	4	
32A	420138	Socket bolt	4	
32B	209134	Rubber Pad	4	
32C	680030B	Rubber Pad frame support assembly	4	
33	206032	Snap Ring	4	
34	206036	Hair Pin	4	
35	217044	Arm lock	4	
36	217045A	Spring	4	
37	217046B	Left arm lock bar	2	
38	217046C	Right arm lock bar	2	
39	209153	Arm lock bar ring	4	
40	201010A	Chain connector	4	
41	207015	Chain	2	
42	209038	Hex bolt	2	
43	207016	Top plate assembly	2	
44	217037	Pin for bottom pulley	2	
45	217036	Big Pulley	2	
46	207017A	Offside column	1	
47	207018	Offside safety cover	1	
48	209051B	Adapter 1.5”	4	
49	209052B	Adapter 2.5”	4	
50	209053B	Adapter 5”	4	
51	217069	Hex bolt	8	
52	206006	Washer	12	
53	206023	Self locking nut	8	
54	620065	Shim	10	
55	206002	Pin for safety lock	2	

Item	Part#	Description	Qty.	Note
56	209007A	Safety Spring	2	
57	209010	Snap ring	2	
58	209011	Plastic small pulley	2	
59	207019	Power side safety lock	1	
60	206023A	Hex nut	4	
61	206003	Handle Protective Plastic cushion	2	
62	207020	Offside safety lock	1	
63	209056	Self locking nut	3	
64	420045	Washer	14	
65	209149	Lock washer	2	
66	207021	Socket bolt	1	
67	217029	Pulley bracket	1	
68	206009	Plastic small pulley	1	
69	209046	Hex bolt	1	
70	207022	Cable	2	
71	209066	Cable nut	8	
72	206065	Safety cable	1	
73	209049	Plastic small pulley	2	
74	207023	Oil hose	1	
75	209060	900 Fitting for power unit	1	
76	209004	Rubber ring	4	
77	209003	Hex bolt	4	
78	207024	900 fitting	2	
79	207035	Extend straight fitting	2	
80	420097	900 fitting	2	
81	207026	Oil hose	2	
81A	207034	Oil hose	1	
82	211016	T fitting	1	
83	209059A	Anchor Bolt	12	
84	207500A	Parts box	1	
85	207033	Toe guard	4	
86	201002	Bolt	8	
87	209034	Lock Washer	8	

Item	Part#	Description	Qty.	Note
Parts For Hydraulic Cylinder (See Fig. 33)				
20-1	207027	Piston rod	2	
20-2	207028	Piston	2	
20-3	206069	O-Ring	2	
20-4	620053	Support Ring	2	
20-5	620054	Y-Ring	2	
20-6	630027	O-Ring	2	
20-7	206071	Hex nut	2	
20-8	207029	Adjustment tube	2	
20-9	217078	Dust ring	2	
20-10	520058	O-Ring	2	
20-11	207030	Head cap	2	
20-12	201034	Bleeding Plug	2	
20-13	207031	O-Ring	2	
20-14	207032	Bore weldment	2	
Parts For Atlas Manual Power Unit, 220V/60Hz, 1 phase (See Fig. 34)				
203-1	440014	Motor	1	
203-2	440015	Start capacitor	1	
203-2A	440016	Run capacitor	1	
203-3	209112	AC contactor	1	
203-4	440017	Allen bolt	4	
203-5	440018	Motor fix frame	2	
203-6	209083A	Motor connecting shaft	1	
203-7	440019	Valve body	1	
203-8	209085A	Relief valve	1	
203-9	209113	Throttle valve	1	
203-10	209086A	Lock washer	4	
203-11	209087A	Allen bolt	4	
203-12	440020	Inlet pipe	1	
203-13	209089A	O-Ring	1	
203-14	209090A	Filter	1	
203-15	440021	bolt	4	

Item	Part#	Description	Qty.	Note
203-16	440022	Reservoir	1	
203-17	440023	Cover of motor terminal box	1	
203-18	209109	Protective ring	1	
203-19	209099A	Push button	1	
203-20	440024	Screw	6	
203-21	209110A	Oil return port	1	
203-22	209100A	Oil outlet	1	
203-23	209101A	Release valve	1	
203-24	209102A	Handle for release valve	1	
203-25	209103A	Washer	1	
203-26	209104A	Nut	1	
203-27	209105A	Check valve	1	
203-28	440025	Gear pump	1	
203-29	440026	Oil return pipe	1	
203-30	440027	Filler cap	1	

Warranty

This item is warranted for five (5) years on structural components, two (2) years on hydraulic cylinders, and one (1) year on electric or air / hydraulic power units from invoice date. Wear items are covered by a 90 day warranty.

This LIMITED warranty policy does **not include a labor** warranty.

NOTE: ALL WARRANTY CLAIMS MUST BE PRE-APPROVED BY THE MANUFACTURER TO BE VALID.

The Manufacturer shall repair or replace at their option for this period those parts returned to the factory freight prepaid, which prove after inspection to be defective. This warranty will not apply unless the product is installed, used and maintained in accordance with the Manufacturers installation, operation and maintenance instructions.

This warranty applies to the ORIGINAL purchaser only, and is non-transferable. The warranty covers the products to be free of defects in material and workmanship but, does not cover normal maintenance or adjustments, damage or malfunction caused by: improper handling, installation, abuse, misuse, negligence, carelessness of operation or normal wear and tear. In addition, this warranty does not cover equipment when repairs or alterations have been made or attempted to the Manufacturer's products.

THIS WARRANTY IS EXCLUSIVE AND IS LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY OR ANY IMPLIED WARRANTY OF FITNESS FROM A PARTICULAR PURPOSE, AND ALL SUCH IMPLIED WARRANTIES ARE EXPRESSLY EXCLUDED.

THE REMEDIES DESCRIBED ARE EXCLUSIVE AND IN NO EVENT SHALL THE MANUFACTURER, NOR ANY SALES AGENT OR OTHER COMPANY AFFILIATED WITH IT OR THEM, BE LIABLE FOR SPECIAL CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OF OR DELAY IN PERFORMANCE OF THIS WARRANTY. THIS INCLUDES, BUT IS NOT LIMITED TO, LOSS OF PROFIT, RENTAL OR SUBSTITUTE EQUIPMENT OR OTHER COMMERCIAL LOSS.

PRICES: Prices and specifications are subject to change without notice. All orders will be invoiced at prices prevailing at time of shipment. Prices do not include any local, state or federal taxes.

RETURNS: Products may not be returned without prior written approval from the Manufacturer.

DUE TO THE COMPETITIVENESS OF THE SELLING PRICE OF THESE LIFTS, THIS WARRANTY POLICY WILL BE STRICTLY ADMINISTERED AND ADHERED TO.