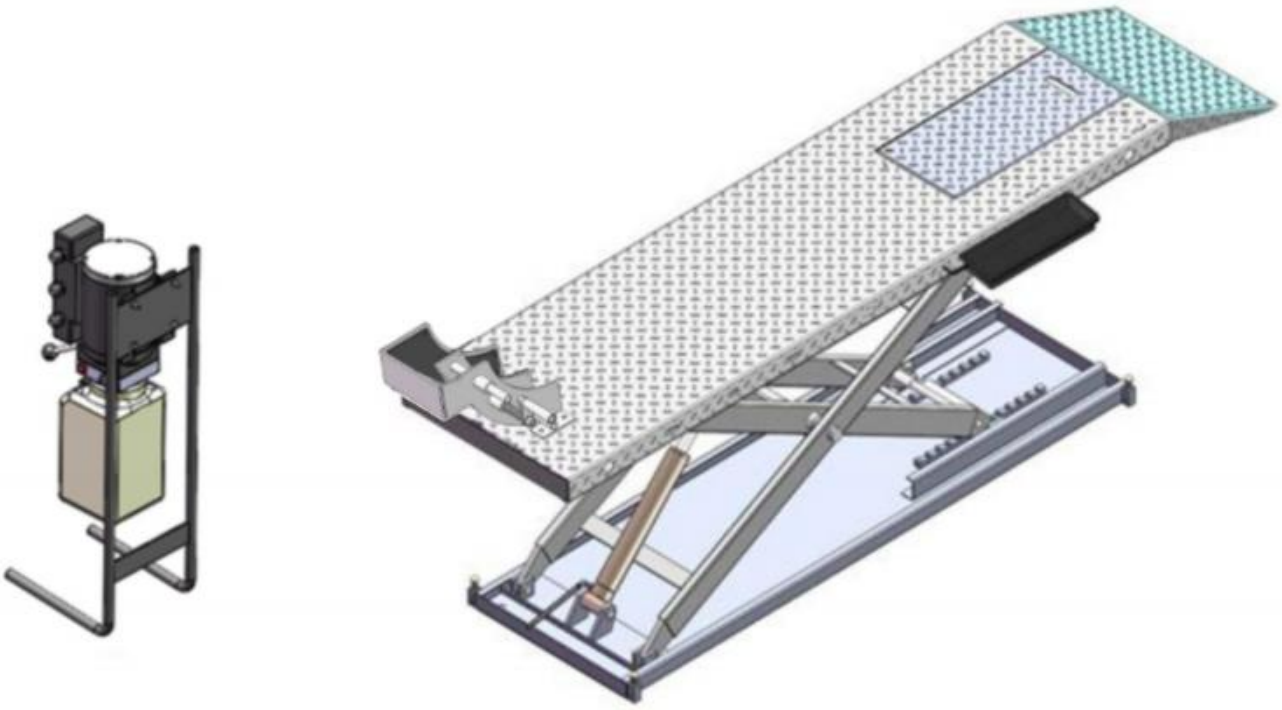
AMGO® Hydraulics

Installation And Service Manual

Original



Motorcycle lift

MC-1200

CONTENTS

I .PRODUCT FEATURES AND SPECIFICATIONS
Motorcycle lift MC-1200：

- Hydraulic direct-drive cylinders, designed and made on high standard, utilizing oil seal in cylinder
- Self-lubricating UHMW Polyethylene sliders and bronze bush
- Non-skid diamond platforms
- Automatic safety release system
- Optional: Width extension kit and length extension kit

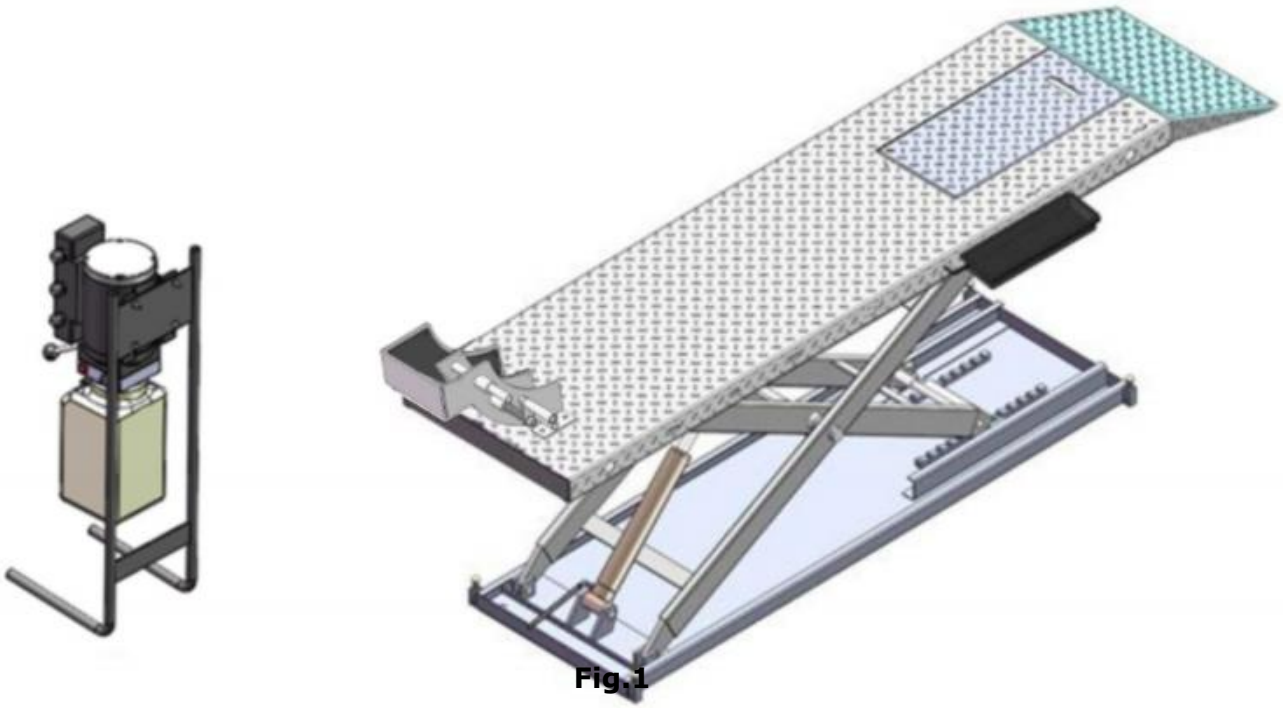


Fig.1

MODEL MC-1200 SPECIFICATION

Model	Capacity	Lifting Height	Lifting Time	Overall Length	Overall Width	Minimum Height	Motor
MC-1200	1200LBS	43”	23s	106-1/4”	29-1/2”	6”	0.75HP

II . INSTALLATION REQUIREMENT

A. TOOLS REQUIRED

✓Rotary Hammer Drill (Φ19)

✓Ratchet Spanner with Socket：(28#)

✓Screw

✓Grease gun

✓English Spanner (12")

✓Hook Spanner(40~42mm)

✓Wrench Set：(13#、15#、17#、19#)

✓Pliers

Fig.2

B. SPECIFICATIONS OF CONCRETE

Specifications of concrete must be adhere to the specifications as following. Failure to do so may result in lift and/or vehicle falling.

1. Concrete must be thickness 150mm minimum and without reinforcing steel bars, and must be dried completely before lift installation.
2. Concrete must be of test strength 210kg/cm^2 minimum.

C. POWER SUPPLY

The power capacity must be more than 0.75, the power cable size must be no less than 0.003875sq.in and in good condition of connecting to the floor.

III.STEPS OF INSTALLATION

A. Check the parts before assembly to make sure all the parts are completed.

1. Packaged cargo (lift, drive-in ramp, parts box, power unit stand, wheel vise). Move the parts aside, open the outer packing and check the parts according to the shipment parts list. **(See Fig.3)**

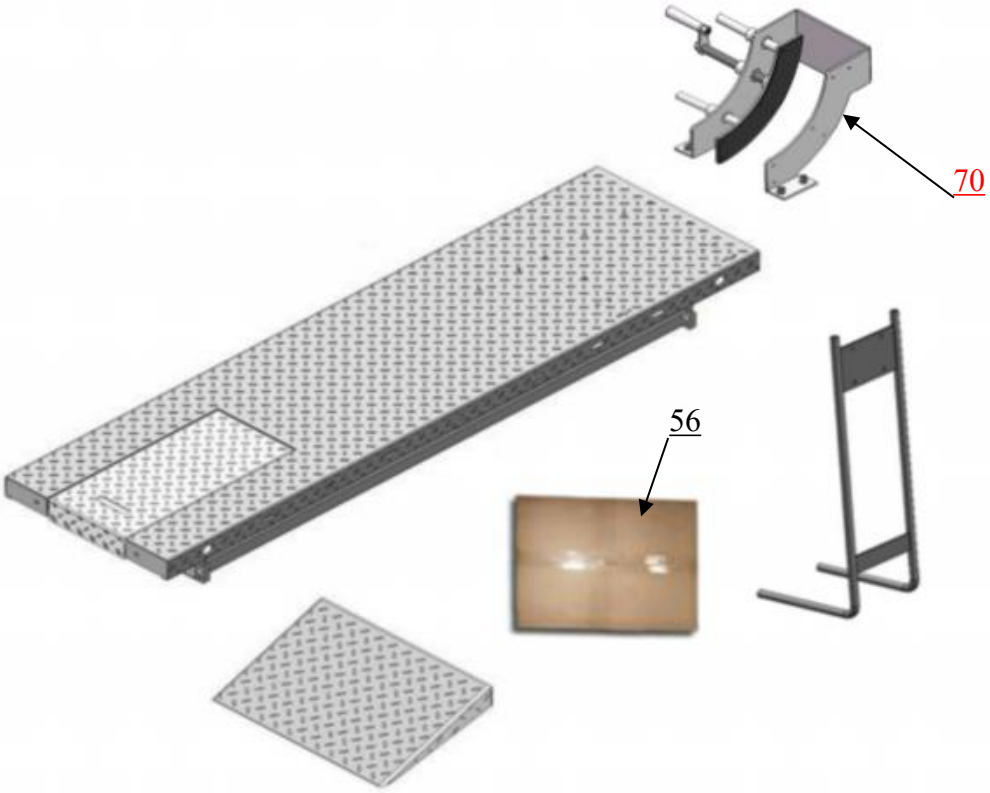


Fig.3

2. Open the parts box, check the parts according to the parts list **(See Fig. 4)**.

Fig.4

3. Open the parts bag, check the parts according to the parts list **(See Fig. 5)**.

Fig.5

B. Put the lift and control cabinet in good order and connect the oil hose, see Fig.6

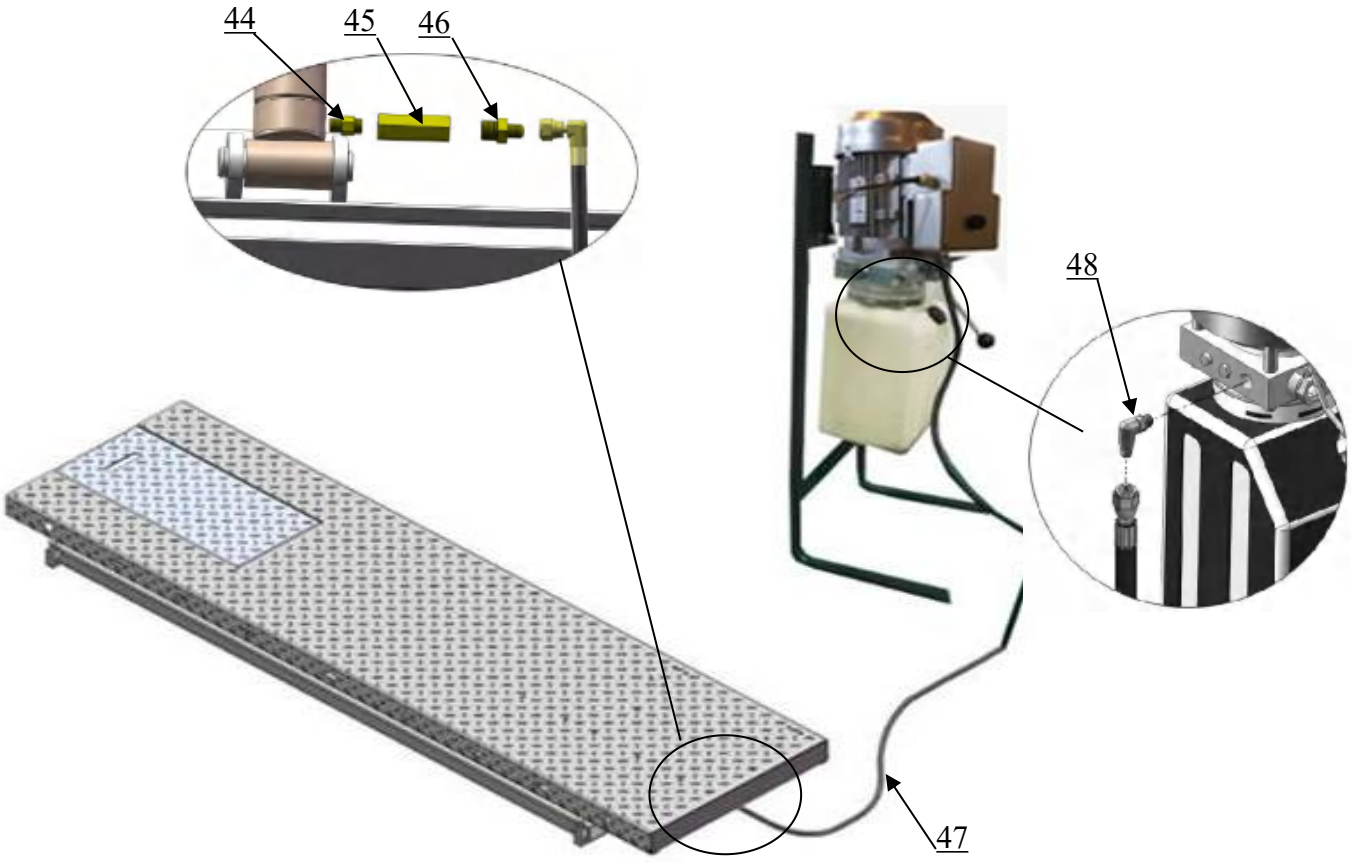


Fig.6

2.1 Step of power unit stand installation

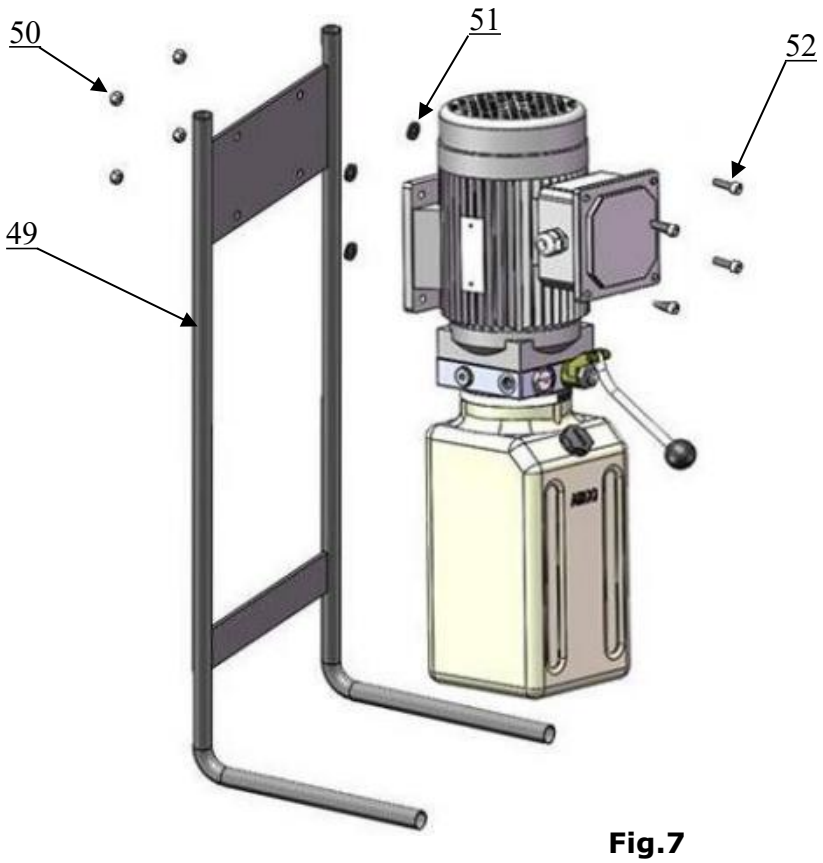


Fig.7

C. Install Electrical System

1. Connect the wire according to below diagram. (Fig.8)

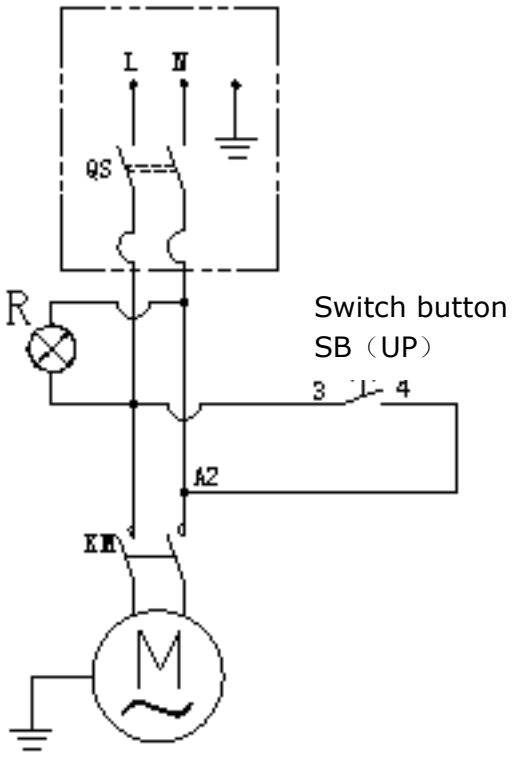


Fig.8 Single phase

D. Tighten all the oil hose fittings, fill the power unit with right amount hydraulic oil (In order to ensure the service life of the hydraulic system and keep the lift in best performance, please fill No.46 high-quality anti-wear hydraulic oil.)

E. Install adjustable wheel vise and tool tray. (See Fig 9)

1. After connected the circuit wire, lifting the motorcycle lift to a suitable height, install the wheel vise and tool tray as to below photos**;**
2. The wheel vise can be chosen to install in different installed position of the platform.

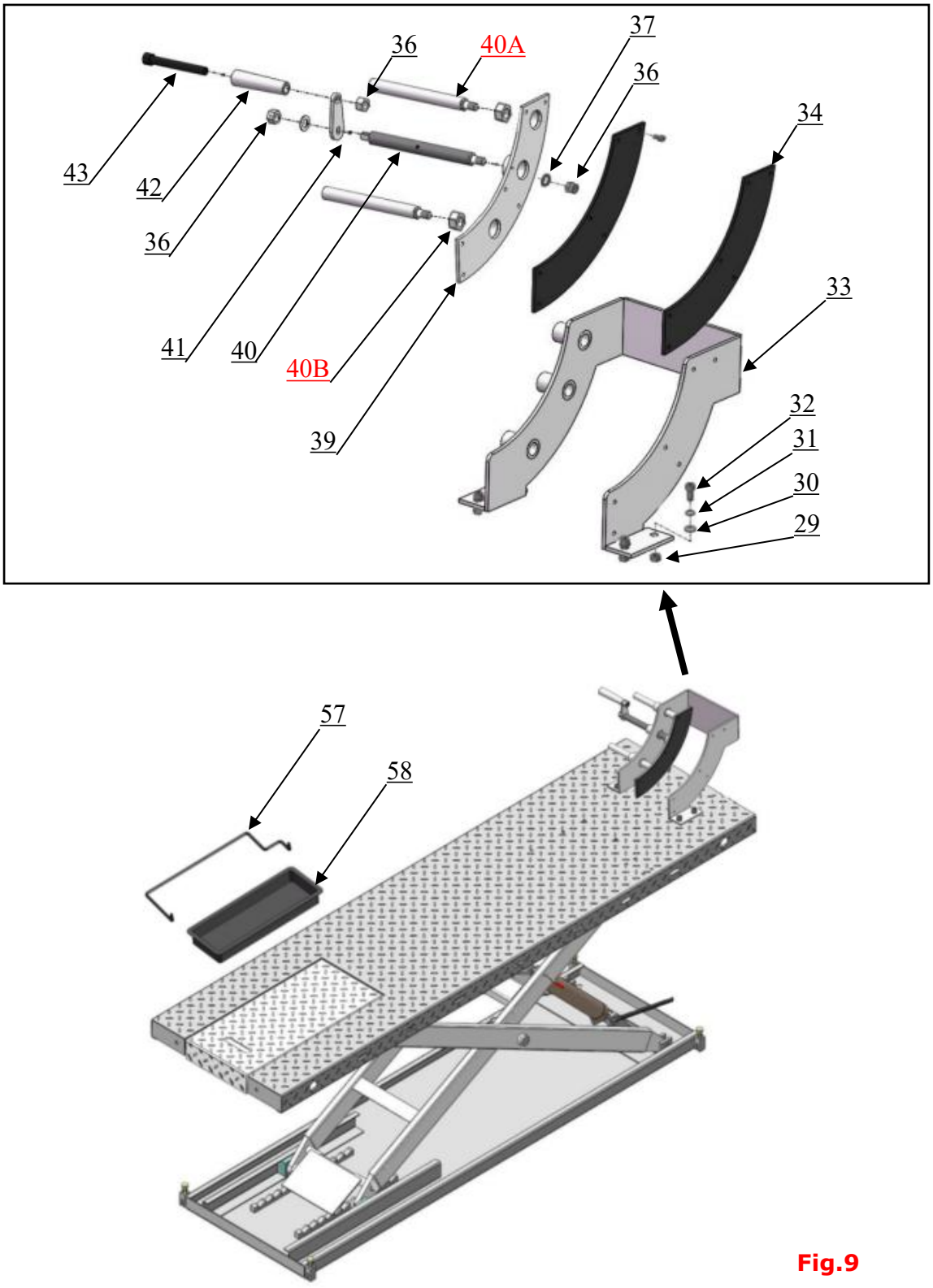


Fig.9

F. Install optional width extension kit(MC001). See Fig 10

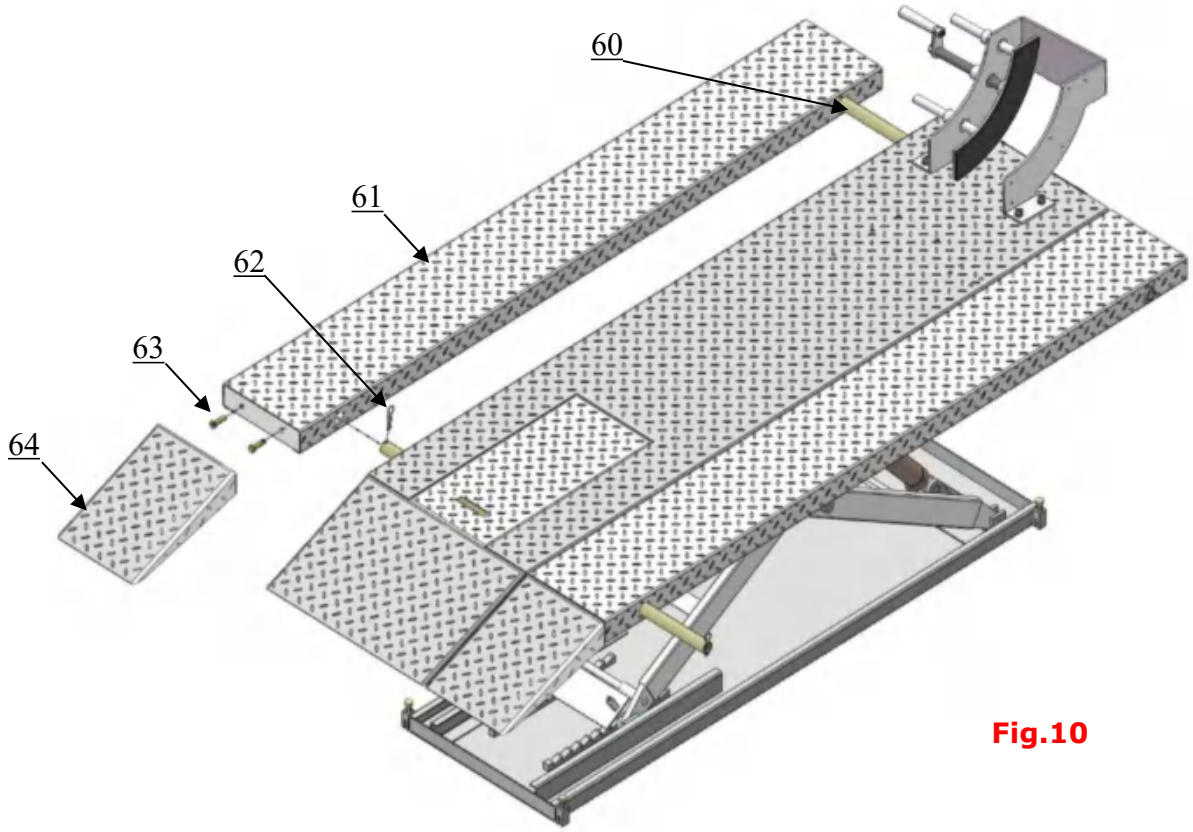


Fig.10

G. Install optional Length extension kit(MC002). See Fig 11

Note: Connect the holes on platform extension kit and the platform. Install the adjustable fixing device on the platform extension kit.

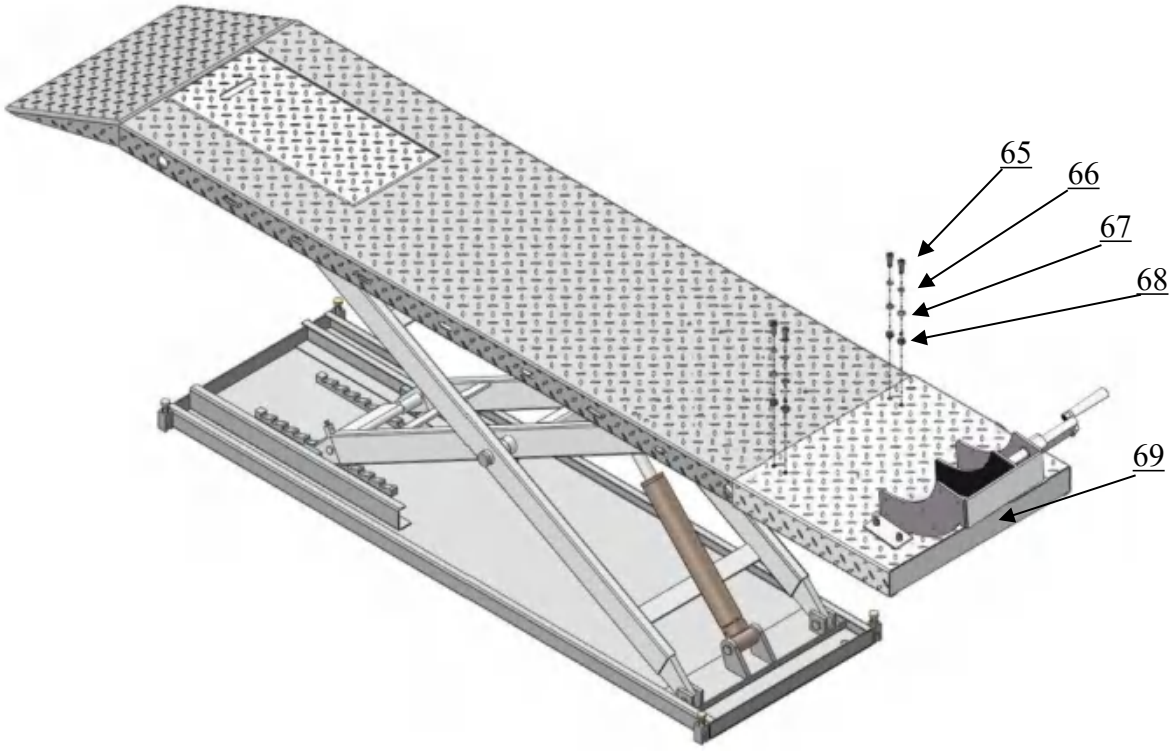


Fig.11

IV. EXPLODED VIEW

MODEL：MC-1200

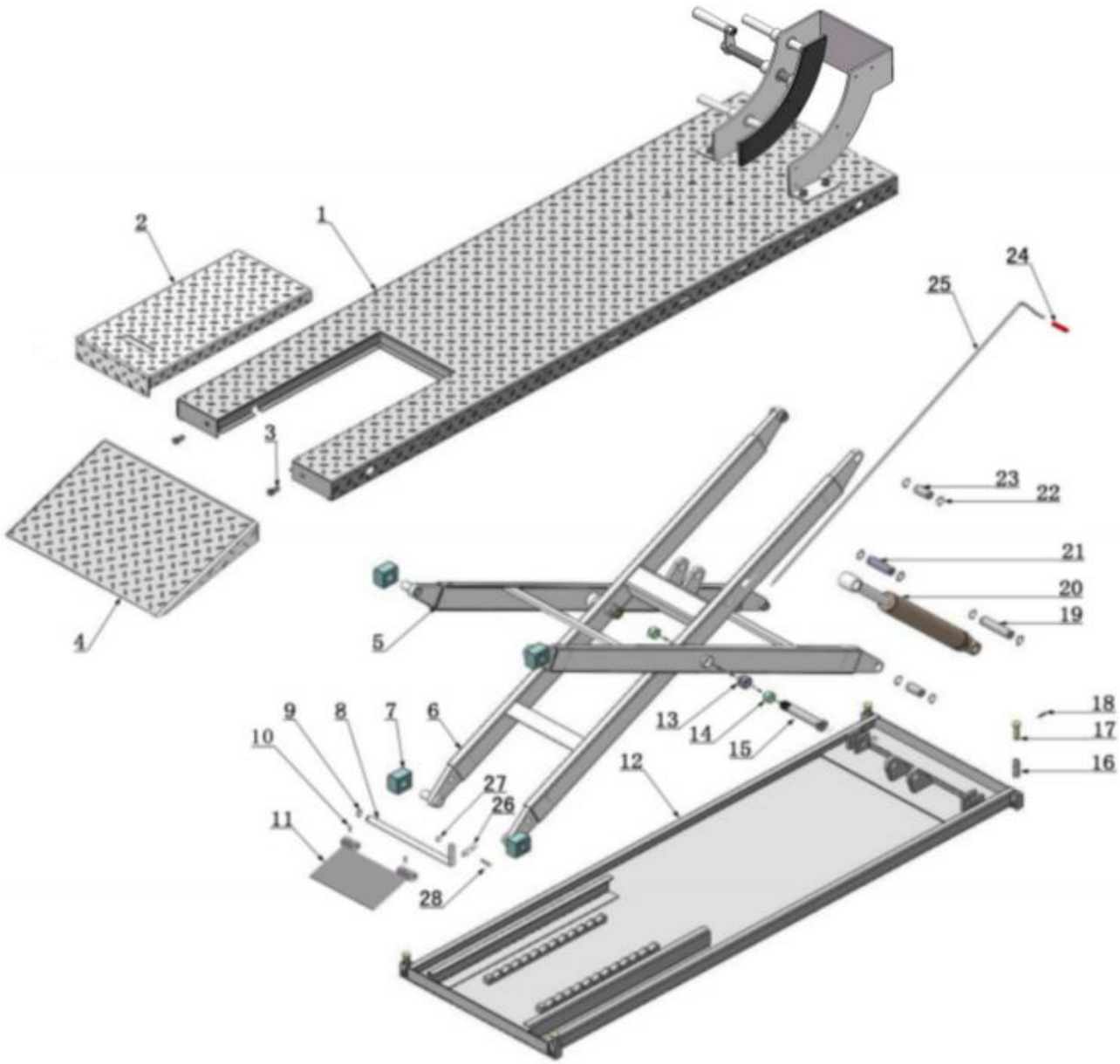


Fig.12

Parts list of Lift

Item	Part#	Description	QTY.	Note
1	11720020	Platform	1	
2	11720723	Cover plate of Platform	1	
3	10217069	Hex bolt	2	
4	11720022	Drive-in ramp	1	
5	11720023	Outer scissor	1	
6	11720024	Inner scissor	1	
7	10610023	Slider	4	
8	11720122	Pin for safety device	1	
9	10206019	Snap ring	2	
10	10640050	Socket bolt	2	
11	11720026	Safety device	1	
12	11720027	Base	1	
13	10620022	Self-locking nut	2	
14	10203004A	Bronze bush	4	
15	11720007	Pin for Scissor	2	
16	10720003	Spring	5	
17	11720012	Pin for Spring	4	
18	10209025	Hair Pin	6	
19	11640006A	Cylinder Base Pin φ25	1	
20	10640007	Cylinder	1	
21	11640057	Pin for Cylinder Connecting	1	
22	10206032	Snap ring	12	
23	11720009	Connecting pin	4	
24	10620136	Rubber tube	1	
25	11720111	Safety Device connecting bar	1	
26	11720110	Connecting sleeve	1	
27	10420018	Self Locking Nut	1	
28	10720102	Socket Bolt	1	
29	10209021	Hex Nut	4	
30	10209022	Washer	4	
31	10209039	Lock Washer	4	
32	10720002	Socket Bolt	4	
33	1103083015	Wheel vise fixing seat	1	
34	1103083011	Support plate (Left)	1	
35	10690013	Flat Head Bolt	12	
36	10206023	Self Locking Nut	3	
37	10206006	Washer	6	
38	1103083010	Support plate (Right)	1	
39	1103083016	Wheel vise moving board	1	
40	1103083012	Adjusting Pin	1	

Item	Part#	Description	QTY.	Note
40A	1103083009W	Guide Pillar	2	
40B	10209066	Hex Nut	2	
41	1103083007	Handle Connecting plate	1	
42	1103083017	Control Handle	1	
43	10410040	Socket Bolt	1	
44	10420245	Straight fitting	1	
45	10420244	Straight fitting	1	
46	10420119	Straight fitting	1	
47	10440042	Oil Hose	1	
48	10209060	90^0 Fitting	1	
49	11720131	Power Unit Stand	1	
50	10209005	Self Locking Nut	4	
51	10209004	Rubber Ring	4	
52	10209003	Hex Bolt M8*25	4	
53	10209059	Anchor Bolt 3/4*5-1/2	4	
54	10720013	Safety Cable L=1120mm	1	
55	10720014	Securing belt（Optional）	1	
56	10720500	Part Box	1	
57	11720100	Tool Tray bracket	1	
58	10206156	Tool Tray	1	
59	81513024	Power unit	1	
70		Wheel vise assy.	1	
Optional: Width extension kits (MC001)				
60	10720036	Connecting pin	2	
61	10720035	Width extension platform	2	
62	11209012	Hair pin	4	
63	10217069	Hex bolt	4	
64	11720034	Width extension drive-in ramp	2	
Optional: Length Extension kits (MC002)				
65	10209126	Hex bolt	4	
66	10209039	Lock Washer	4	
67	10209022	Washer	4	
68	10209021	Hex nut	4	
69	11720062	Extension platform	1	

4.1 Cylinder (10640007)

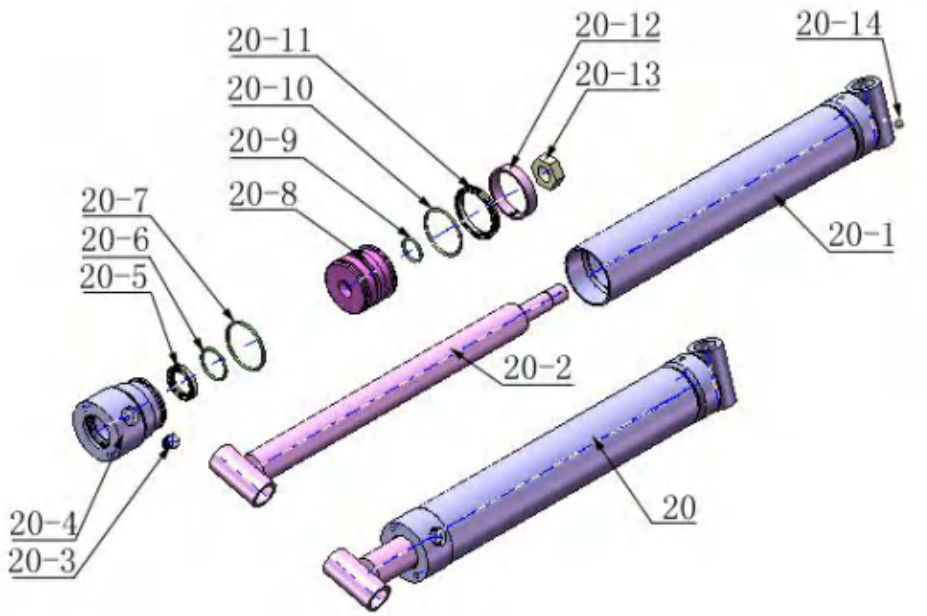


Fig.13

Parts for cylinder

Item	Part#	Description	QTY.	Note
20-1	11640030A	Bore Weldment	1	
20-2	11640031A	Piston Rod	1	
20-3	10201034	Bleeding Plug	1	
20-4	11201033	Head Cup	1	
20-5	10209078	Dust seal	1	
20-6	10201032	O Ring	1	
20-7	10201035	O Ring	1	
20-8	11201028	Piston	1	
20-9	10206069	O Ring	1	
20-10	10201031	O Ring	1	
20-11	10201030	Y Ring	1	
20-12	10201029	Support Ring	1	
20-13	10206071	Nut	1	
20-14	10620064	Oil nozzle	2	

4.2 Power unit

Single phase 220V 60Hz

Manual power unit

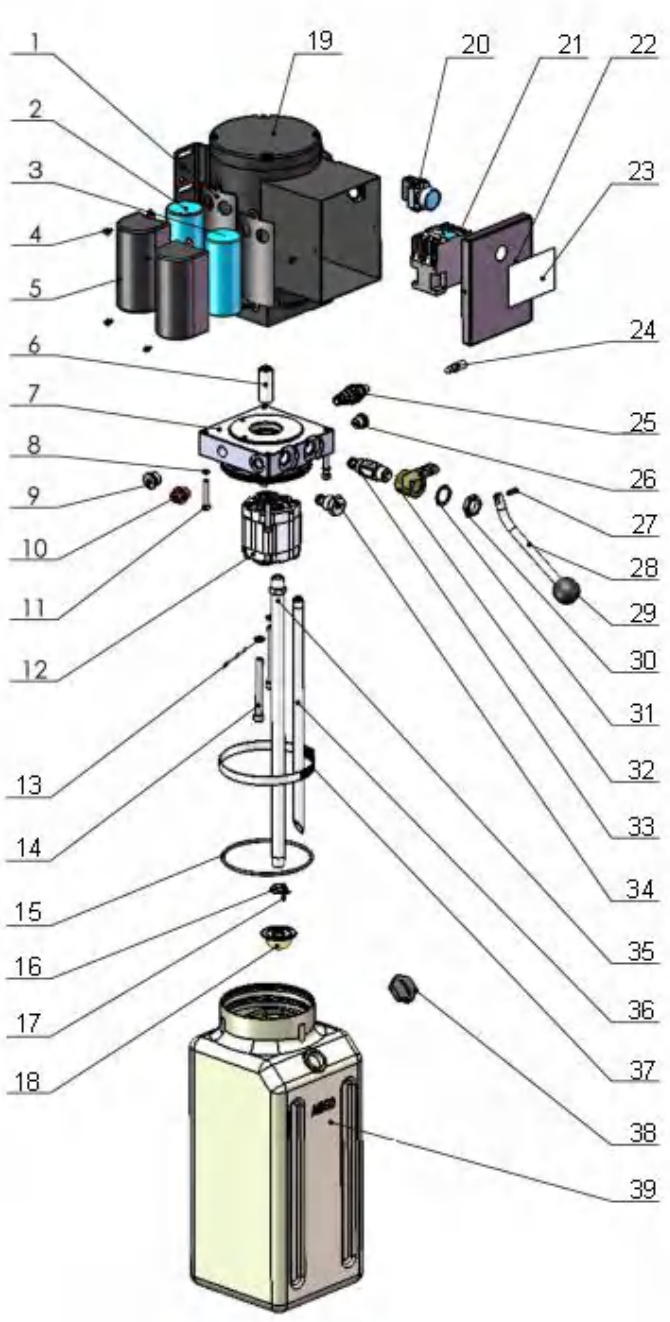


Fig.14

Parts for Manual power unit

Item	Part#	Description	QTY.	Note
1	81400180	Rubber pad	2	
2	81400130	Start capacitor	1	
3	81400088	Run capacitor	1	
4	10420148	Cup head bolt with washer	4	
5	81400066	Cover for capacitor	2	
6	81400363	Motor connecting shaft	1	
7	81400362	Manifold block	1	
8	10209149	Lock washer	4	
9	81400276	Iron plug	1	
10	81400259	Red rubber plug	1	
11	85090142	Socket bolt	4	
12	81400312	Gear pump	1	
13	10209034	Washer	2	
14	81400295	Socket bolt	2	
15	81400365	O-ring	1	
16	10209152	Belt	1	
17	85090167	Magnet	1	
18	81400290	Filter mesh	1	
19	81400412	Motor	1	
20	10420070	Button switch	1	
21	41030055	AC contactor	1	
22	81400287	Cover of motor terminal box	1	
23	71111182	AMGO label	1	
24	81400560	Throttle valve	1	
25	81400266	Release valve	1	
26	81400284	Iron plug	1	
27	81400452	Hair pin	1	
28	81400451	Handle for release valve	1	
29	10209020	Plastic ball for handle	1	
30	81400421	Release valve nut	1	
31	81400422	Release valve shim	1	
32	81400449	Valve seat(Low)	1	
33	81400443	Release valve	1	
34	81400267	Check valve	1	
35	81400375	Oil inlet pipe	1	
36	81400376	Oil return pipe	1	
37	81400364	Hose clamp(stainless steel)	1	
38	81400263	Oil tank cover	1	
39	81400320	Oil tank	1	

Illustration of hydraulic valve for power unit

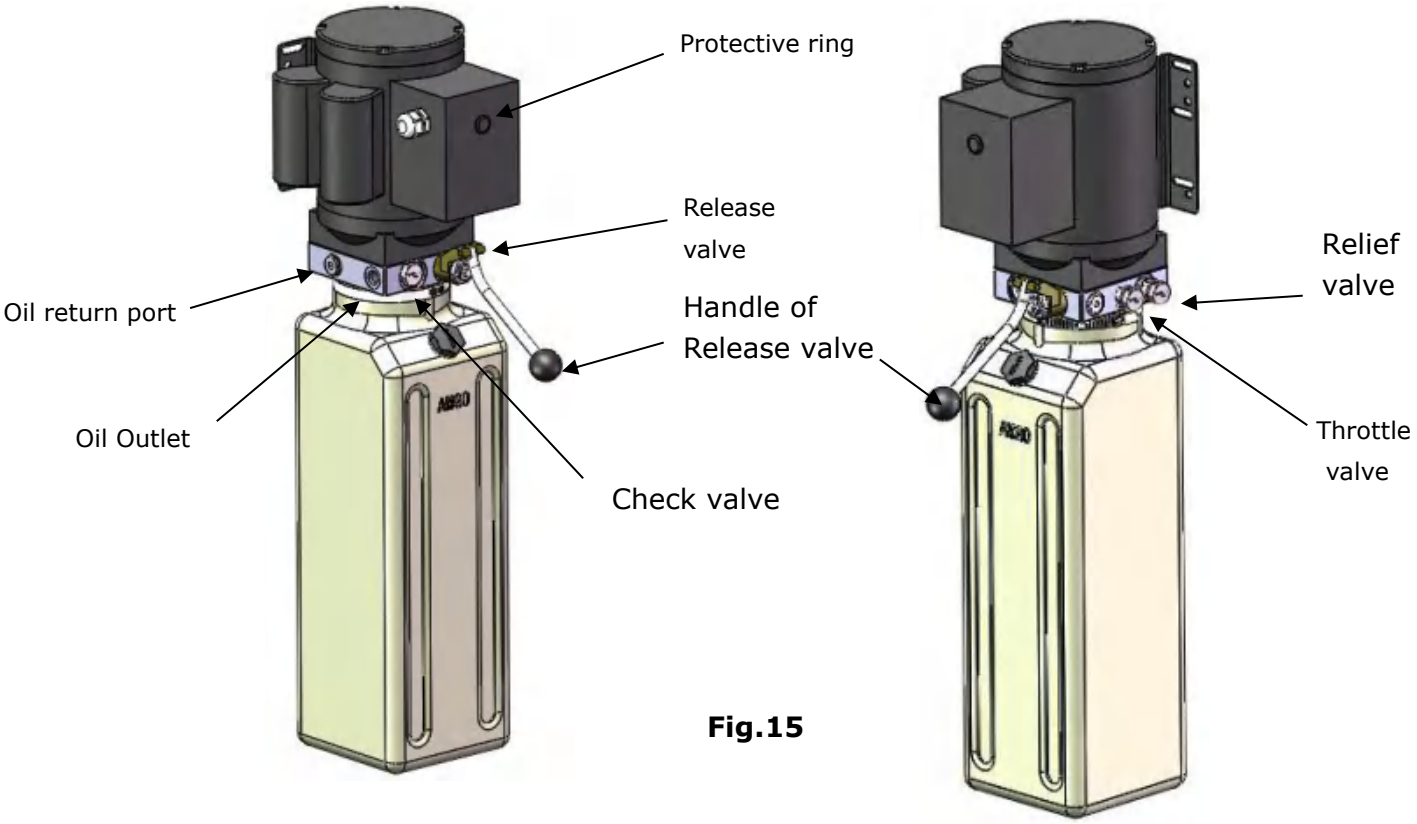


Fig.15

V. TEST RUN

1. Install anchor bolts. see Fig.16

Install the anchor bolts to fix the machine after installing.

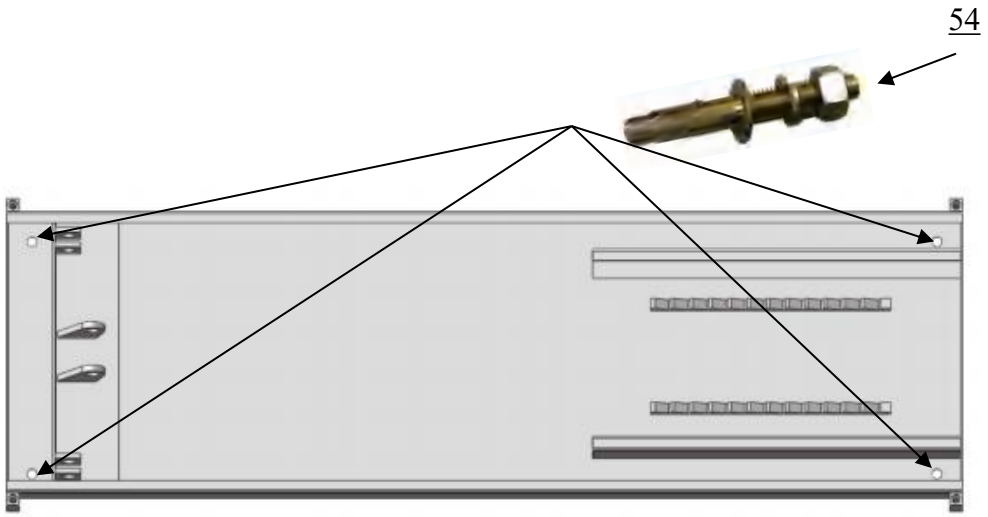


Fig.16

Steps:

Note: Twisting force is 150N.m for fixing the anchor bolt, knock the anchor bolt into the ground at least 90mm.

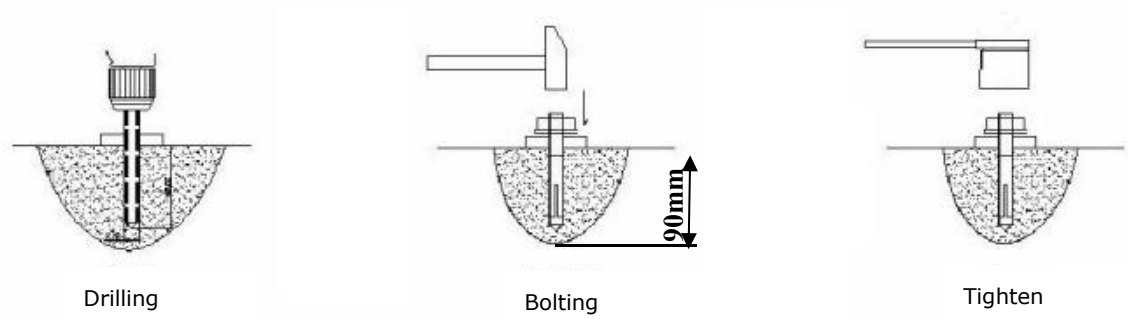


Fig.17

2. Adjust safety cable

Rise the lift to the highest position **(See Fig.18)**, rotating the safety lock handle as the direction of arrow. Loosen the screw of the safety cable by spanner, lift up the safety lock plate from the rack about 1/2''~3/4" **(See Fig.19)**, then tighten the safety cable by spanner.

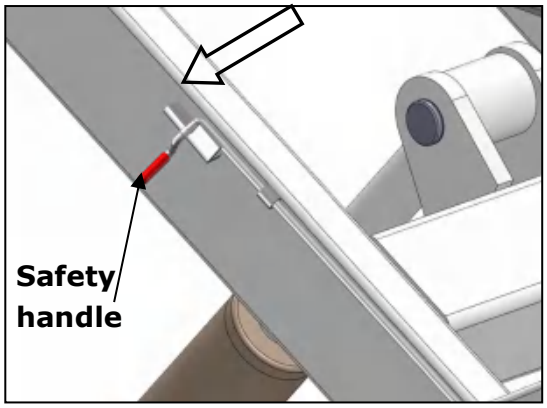


Fig.18

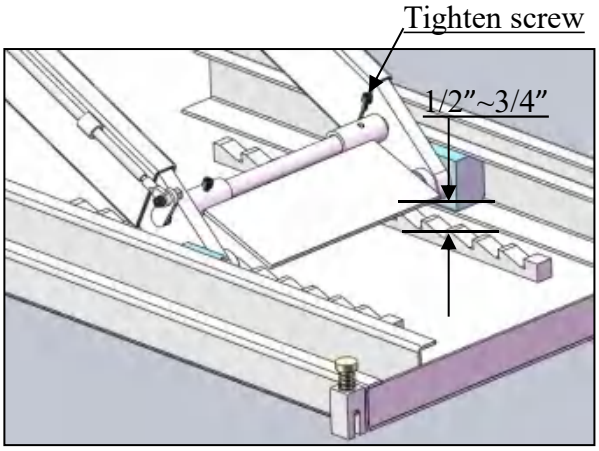


Fig.19

VI. OPERATION INSTRUCTIONS

1. Install well the oil hose between cylinder and power unit, connected the wire, the motorcycle lift can be operated.

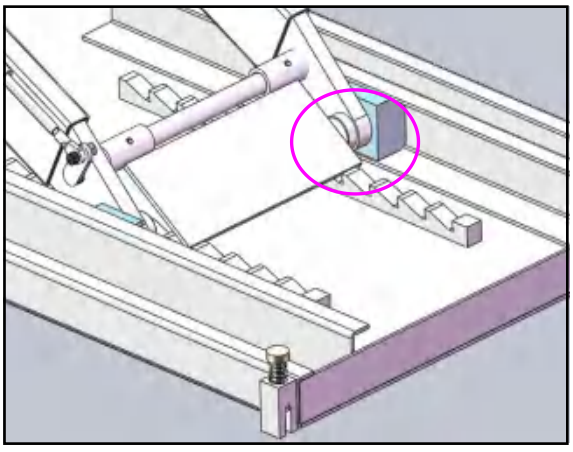
2. Rise up the lift without motorcycle for testing.

3. To lift motorcycle

Lower the lift to the lowest position, loosen the wheel vise. Move the motorcycle to the platform, put the front wheel into the wheel vise, set well the motorcycle. Put up the foot stool of the motorcycle. Rotated handle to clamp the wheel. Tighten the securing belt. Make sure the wheel is tightened and the securing belt is fixed before using. **(See Fig.20)**

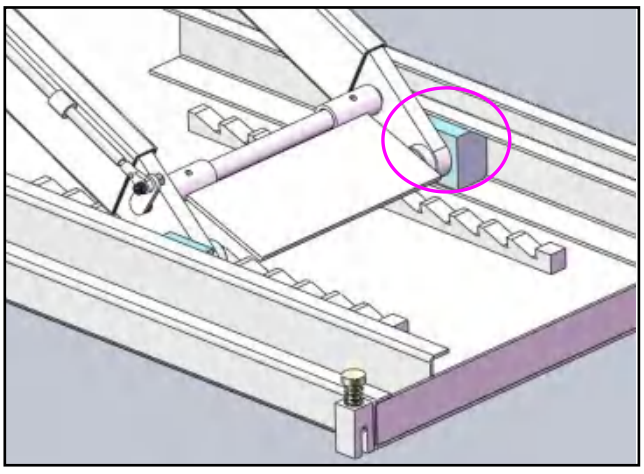
Fig.20

4. To lower the lift: Rise the lift for several seconds. Rotate the safety lock handle downward **(see Fig.21)** to release the safety device. After the safety device is released **(see Fig.22)**, press the release handle in the power unit, the lift would be lowered.



Safety device is locked

Fig.21



Safety device is released

Fig.22

VII. MAINTENANCE SCHEDULE

Monthly maintenance:

1. Lubricate all moving parts with lubricant.

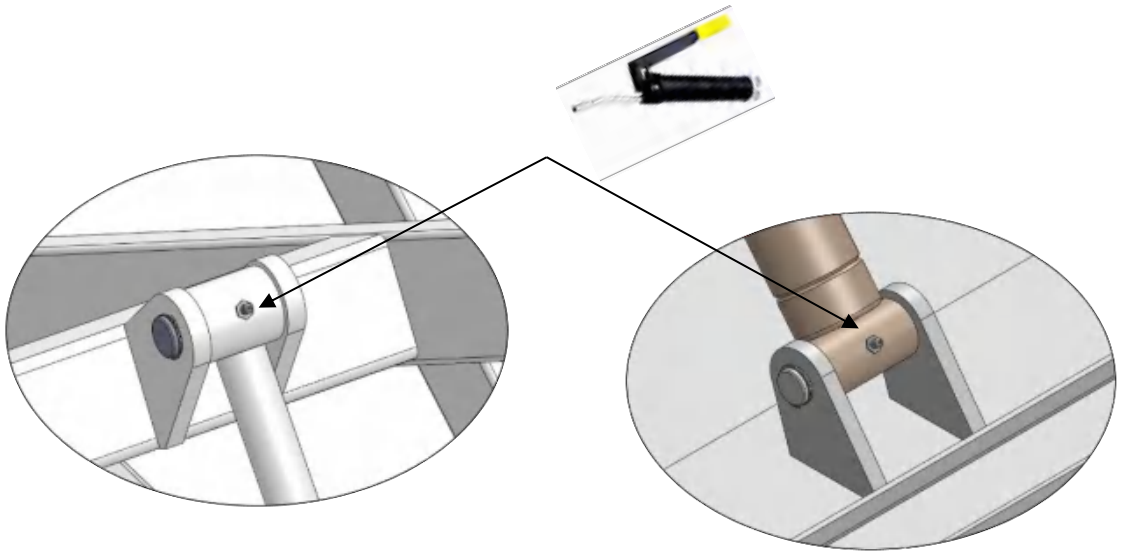


Fig.23

2. Check all connectors, bolts and pins to insure proper mounting.
3. Make a visual inspection of all hydraulic hoses/lines for possible wear or leakage

Every six months:

1. Make a visual inspection of all moving parts for possible wear, interference or damage.
2. Check all fasteners and re-torque

VIII.TROUBLE SHOOTING

NO	TROUBLE	CAUSE	REMEDY
1	Motor does not run	1. Button does not work 2. Wiring connections are not in good condition 3. Motor burned out 4. AC contactor burned out	1. Replace button 2. Repair all wiring connections 3. Repair or replace motor 4. Replace AC Contactor
2	Motor runs but the lift is not raised	1. Motor runs in reverse rotation 2. Release Valve in damage 3. Gear Pump out of operation 4. Relief Valve or Check Valve in damage 5. Low oil level 6. Overload lifting or low pressure	1.Reverse two power wire 2. Repair or replace 3. Repair or replace 4. Repair or replace 5. Fill tank 6.Check load or adjust the pressure
3	Lift does not stay up	1. Release Valve out of work 2. Relief Valve or Check Valve leakage 3. Cylinder or Fittings leaks	Repair or replace Repair or replace Replace fitting and oil seal
4	Lift rises 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
5	Lift cannot lower	1. Safety device are not in activated 2. Release Valve in damage 3. Oil system is jammed	1. Release the safety device 2. Repair or replace 3. Clean the oil system

IX. Lift disposal.

When the car lift cannot meet the requirements for normal use and needs to be disposed, it should follow local laws and regulations.

AMGO® Hydraulics

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