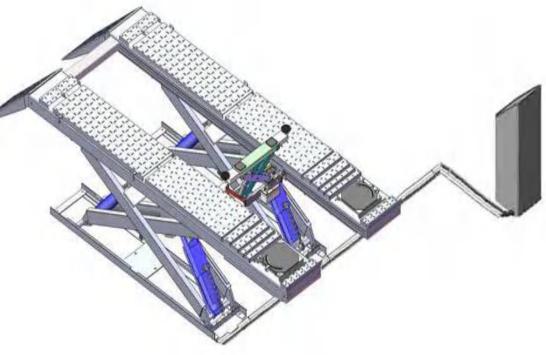


Installation And Service Manual



SCISSORS LIFT

Model: 30-SS120A, 30-SS120S

1

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I. PRODUCT FEATRUES AND SPECIFICATIONS

Professional Alignment Scissors Lift

Model AX-12A

- · Electric- air control system, safety self-lock mechanism
- · 2-Dual synchronous cylinders are applied to assure the lifting level on both platforms
- · Non-skid diamond runway
- · Integrated rear slip-plates
- · Heavy duty design, fit for a wide range of vehicle car to van and light truck.
- · Optional Jack (with hand pump/air-operated hydraulic pump)
- · Optional Turnplate

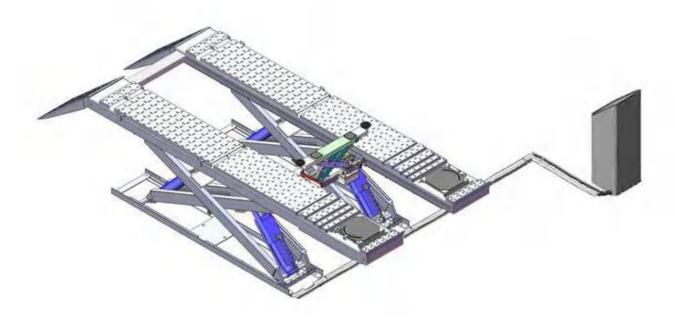


Fig. 1

MODEL AX-12A SPECIFICATIONS

| Model | Lifting Capacity | Lifting Height | Min. Height | Lifting Time | Overall Length (Inc. Ramps) | Overall Width | Runway Width | Distance Between Runway | Motor |
|--------|---------------------|-------------------|----------------|-----------------|--------------------------------|------------------|-----------------|-------------------------------|-------|
| SS120A | 12000lbs | 73 5/8" | 11-3/4" | 74S | 258" | 90-1/8" | 24-5/8" | 37-5/8" | 2.0HP |

Professional non-alignment Scissors Lift Model AX-12

- · Electric- air control system, safety self-lock mechanism
- · Dual synchronous cylinders are applied to assure the lifting level on both platforms
- · Non-skid diamond runway; supper wide platform
- · Heavy duty design, fit for a wide range of vehicle car to van and truck
- · Optional Jack (with hand pump/air-operated hydraulic pump)

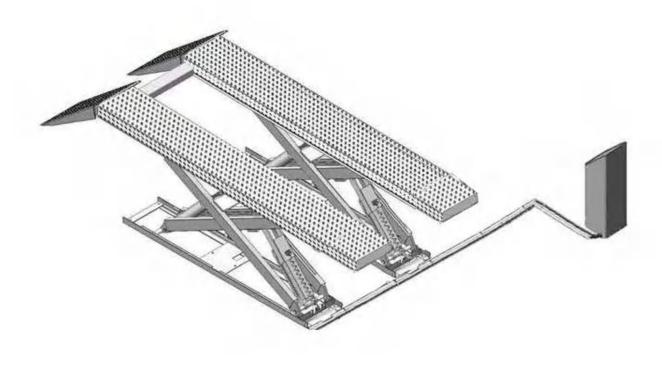


Fig. 2

MODEL AX-12 SPECIFICATIONS

| M | lodel | Lifting Capacity | Lifting Height | Min. Height | Lifting Time | Overall Length (Inc. Ramps) | Overall Width | Runway Width | Distance Between Runway | Motor |
|---|-------|---------------------|-------------------|----------------|-----------------|--------------------------------------|------------------|-----------------|-------------------------------|-------|
| S | S120S | 12000 lbs | 73-5/8" | 11-3/4" | 74S | 267" | 90-1/8" | 24-5/8" | 37-5/8" | 2.0HP |

II. INSTALLATION REQUIREMENT

A. TOOLS REQUIRED

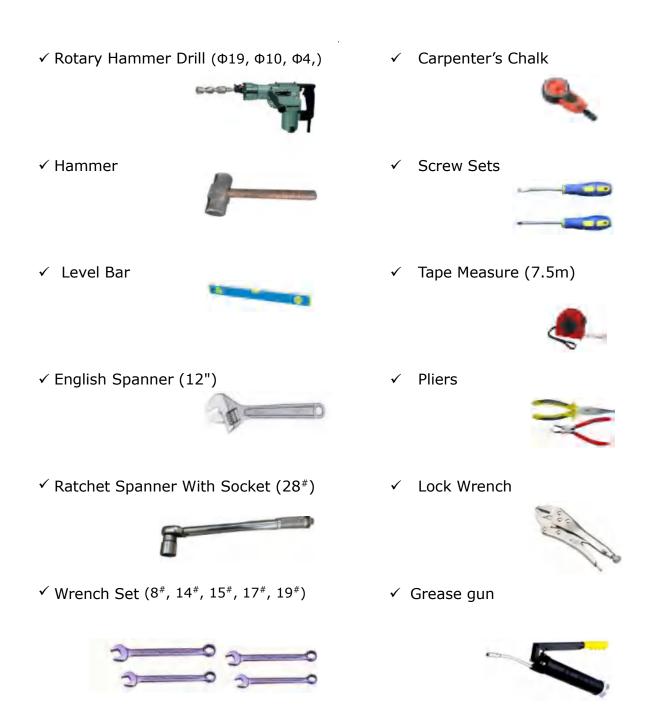


Fig. 3

B. Equipment storage and installation requirements.

The equipment should be stored or installed in a shady, normal temperature, ventilated and dry place.

C. SPECIFICATIONS OF CONCRETE

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

- 1. Concrete must be thickness 7-7/8" minimum and without reinforcing steel bars, and must be dried completely before the installation.
- 2. Concrete must be in good condition and must be of test strength 3,000psi (210kg/cm²) minimum.
- 3. Floors must be level and no cracks.

D. POWER SUPPLY

The electrical source must be 2.0HP minimum. The source cable size must be 2.5mm² and in good condition of contacting with floor.

III. STEPS OF INSTALLATION

A. Location of Installation

Check and insure the installation location (concrete, layout, space size etc.) is suitable for lift installation.

1. For Standard Installation: On surface installation

1.1 AX-12/AX-12A On surface installation foundation (See Fig. 4)

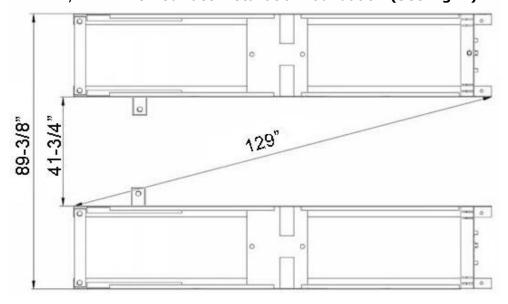
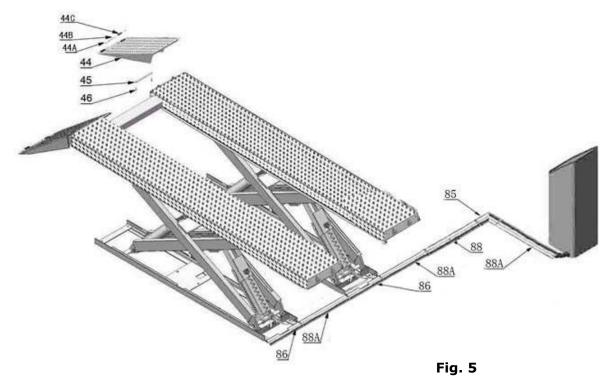


Fig. 4

1.2 Illustration of scissors lift AX-12 on surface installation (See Fig.5).



1.3 Illustration of scissors lift **AX-12A** on surface installation (See Fig.6).

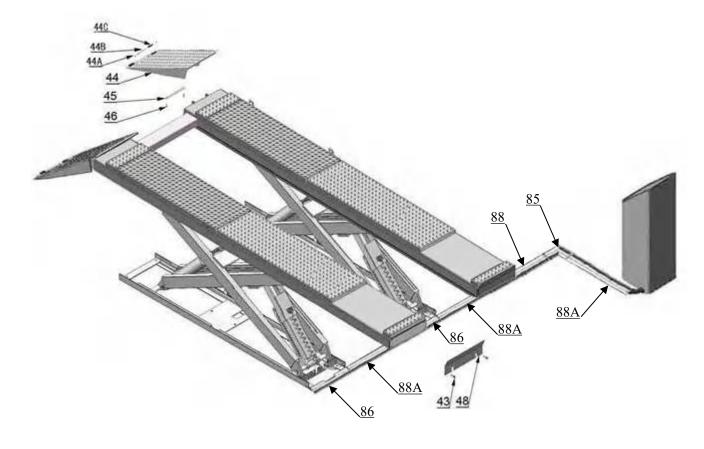
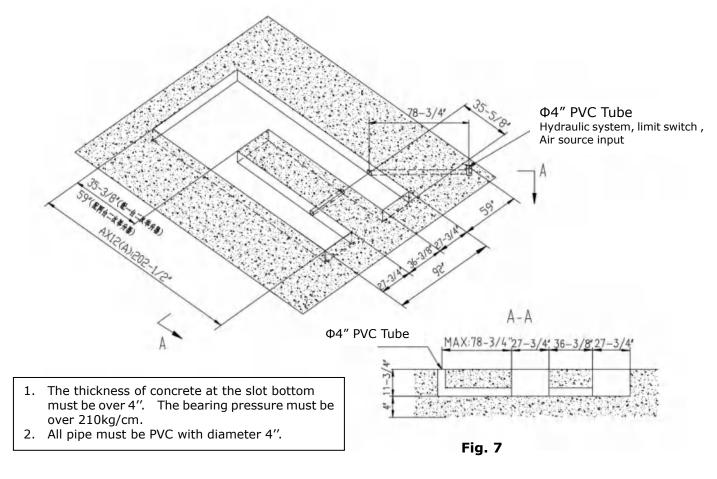


Fig. 6

2. For Optional Installation: Flush mount installation

2.1 Flush mount installation foundation (Fig.7).



2.2 Illustration of scissors lift AX-12 with flush mount installation (Fig.8).

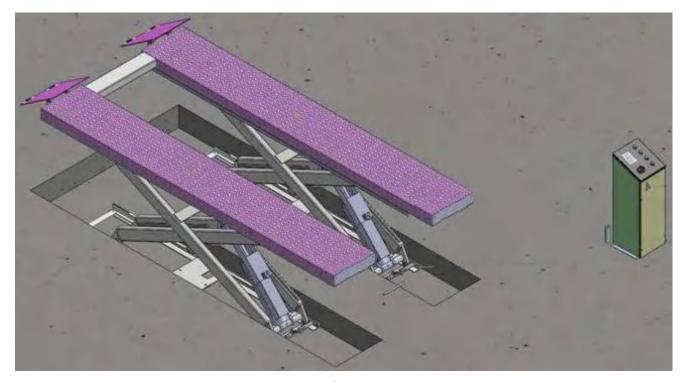


Fig. 8

2.3 Illustration of scissors lift **AX-12A** with flush mount installation (Fig.9).

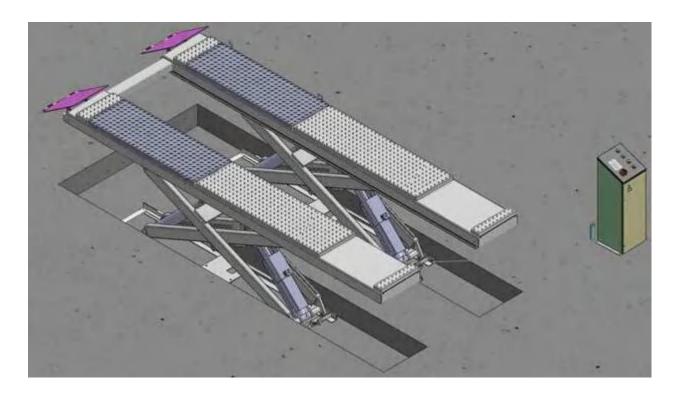


Fig. 9

B. Check the parts before assembly.

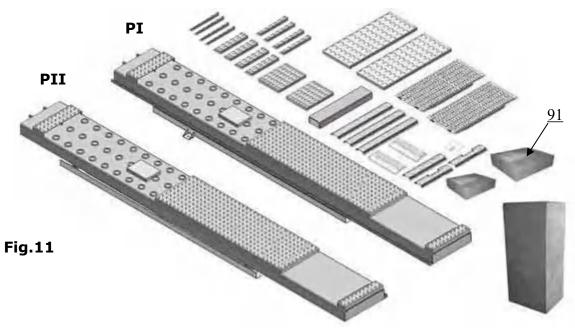
1. Received Packaged lift, Parts box, Control cabinet, Guide ramp .etc. (See Fig. 10).



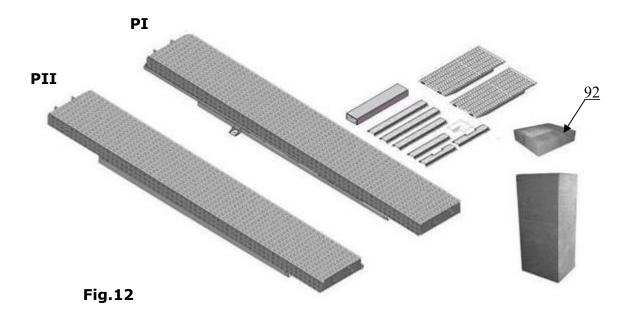
Fig. 10

- 2. Move aside the lift with fork lift or hoist, and open the outer packing carefully.
- 2.1 Parts for on surface installation (See Fig.11, Fig.12)

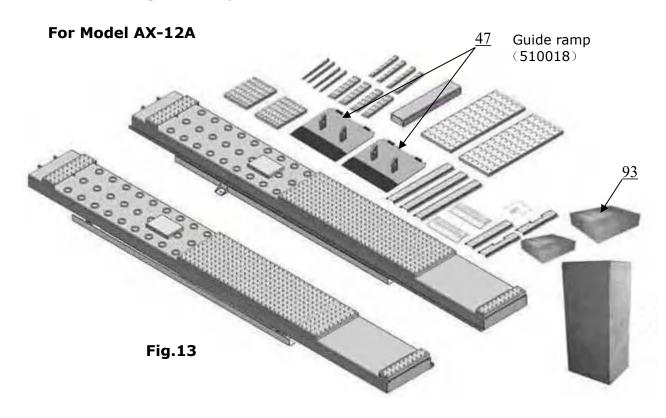
For Model AX-12A



For Model AX-12



2.2 Parts for flush mount installation (See Fig.13, Fig.14) Noted: Need guide ramp for flush mount installation



For Model AX-12

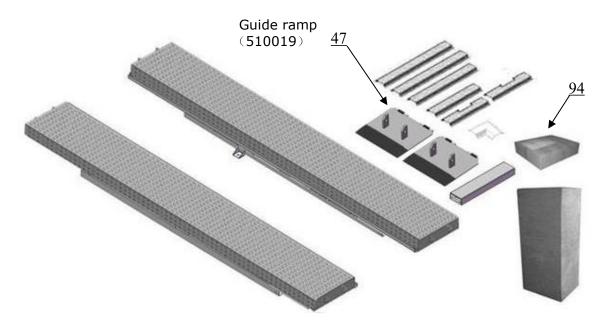


Fig.14

3. Open the parts box, check the parts according to the part list (See Fig.15, Fig.16).





Fig. 16

For AX-12

- 4. Check the parts of the parts bag according to the parts bag list.
- 4.1 Parts bag for on surface installation (See Fig.17, Fig.18)



Fig.17

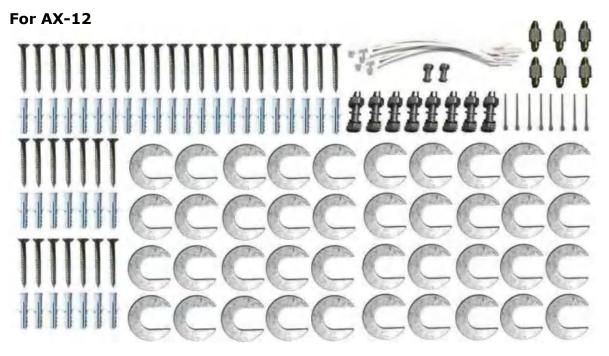


Fig. 18

4.2 Parts bag for flush mount installation (See Fig.19, Fig.20)

For AX-12A



Fig. 19

For AX-12



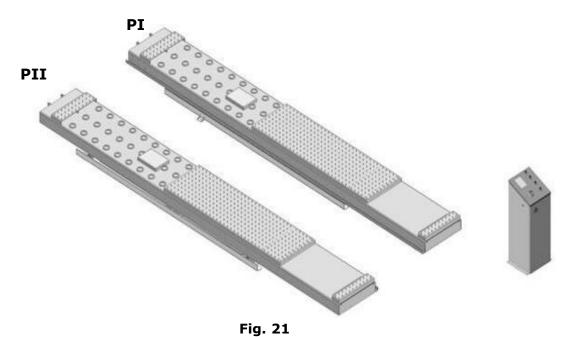
Fig. 20

C. Layout the machine and install oil system and air line system.

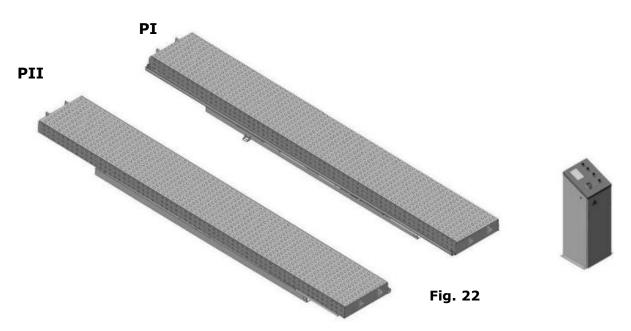
1. Select a location and layout the equipment according to steps **A** (See Fig. 21-22).

The control cabinet can be installed on the left or right according to the site.

For Model AX-12A

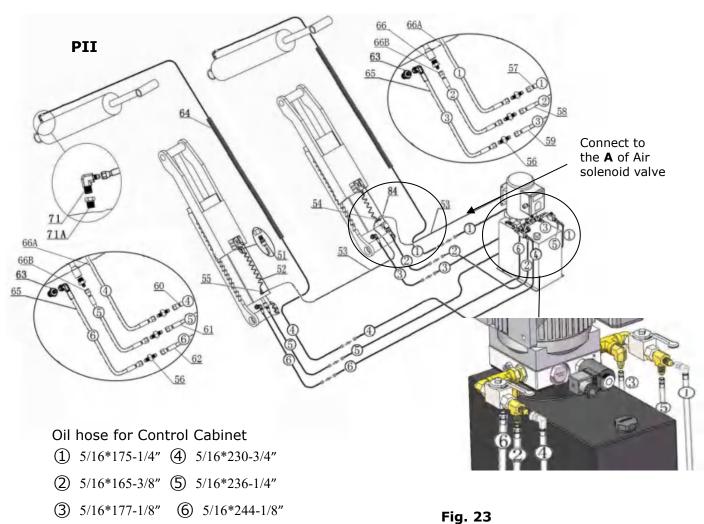


For Model AX-12

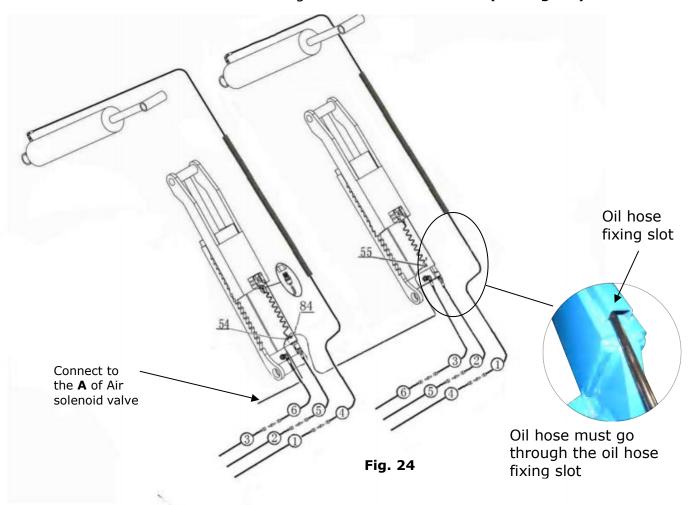


- 2. Connecting the oil hose and air line.
- 2.1 Control cabinet installed in the left of the car in direction (See Fig. 23).

PΙ



2.2 Control cabinet installed in the right of the car in direction (See Fig. 24).



3. Install the oil-water separator (See Fig. 25).

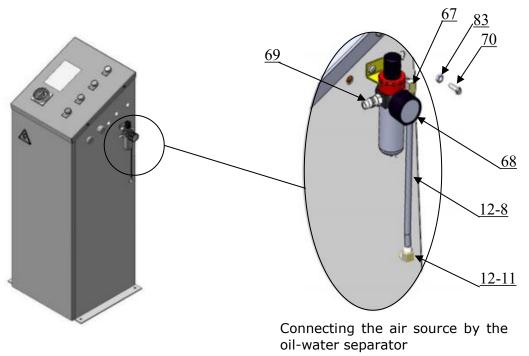


Fig. 25

4. Connect the air source (air pressure 5kg/cm²-8kg/cm²), Adjust the air pressure to 0.8MPa (See Fig. 26).



Clockwise to increase the air pressure Counter-clockwise to reduce the air pressure Adjust the air pressure to 0.8MPa

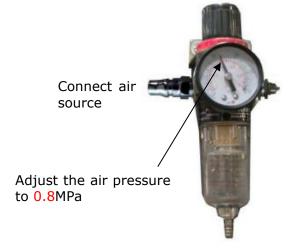


Fig. 26

D. Install electric system

- 1. Wire connection for hydraulic power unit (220V)
- 1.1 Connect the power wire and limit switch wire according to the Wiring diagram (See Fig. 27)

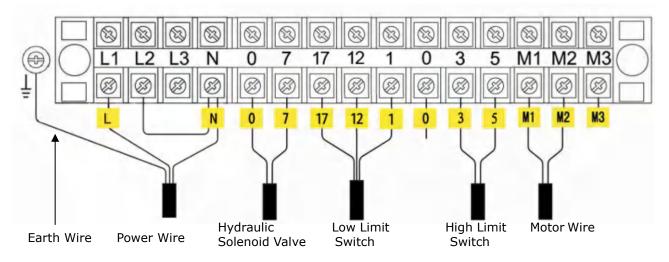
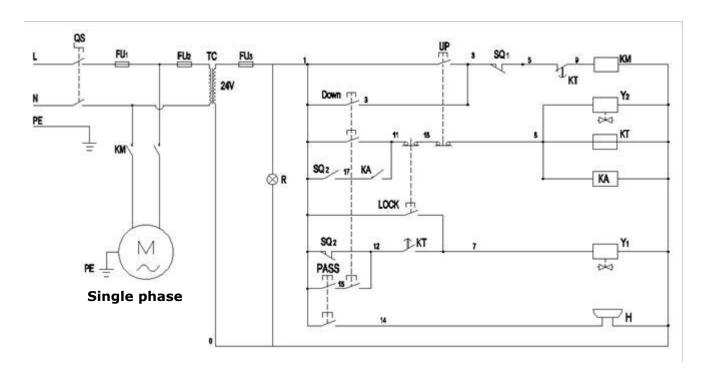


Fig. 27

1.2 Circuit Diagram (See Fig. 28).



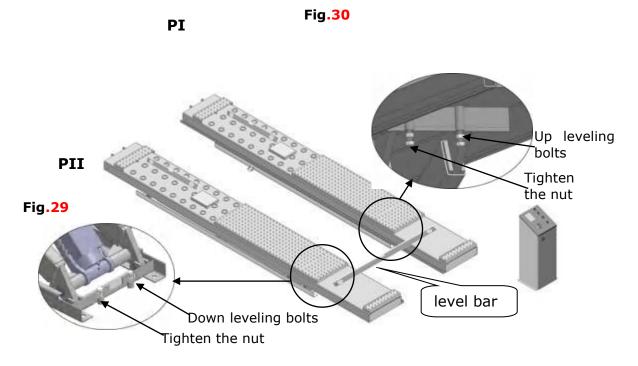
Electric Component

Fig. 28

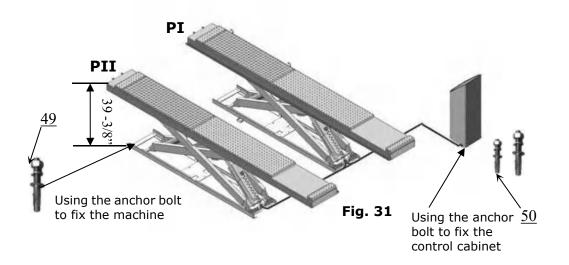
| Item | Name | Code | Specification | Item | Name | Code | Specification |
|------|-----------------------------|-----------------|---------------|------|--------------------|------|---------------|
| 1 | Power switch | QS | 220V AC | 11 | Push button | UP | Duplex |
| 2 | Breaker | FU₁ | 2P | 12 | Push button | LOCK | Duplex |
| 3 | Breaker | FU_2 | 1P | 13 | Push button | Down | Triple |
| 4 | Breaker | FU₃ | 1P | 14 | Lower alarm button | Pass | Duplex |
| 5 | AC contactor | KM | 24V AC | 16 | Buzzer | Н | 24VAC |
| 6 | Time relay | KT | 24V AC | 17 | Transformer | TC | 24VAC |
| 7 | Lower Limit Switch | SQ ₁ | 10A | 18 | Intermediate relay | KA | 24VAC |
| 8 | Higher Limit Switch | SQ ₂ | 10A | 19 | Power indicator | R | 24VAC |
| 9 | Hydraulic solenoid valve | Y1 | 24V AC | | | | |
| 10 | Air solenoid valve | Y2 | AC 24V | | | | |

E. Level two platforms and install anchor bolts.

1. Check by level bar, adjust the down leveling bolts(**see fig.29**) and add the shim until two platforms are in the same level, lowering the lift to the lowest position and adjust the up leveling bolts (**see fig.30**) until contacting the down leveling bolts, tighten the nut with wrench.



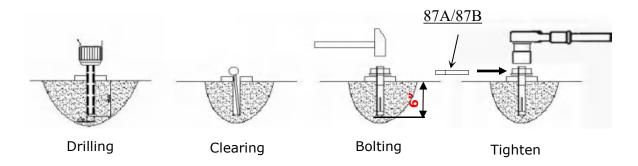
- 2. Install anchor bolts.
- 2.1 Raise the lift to 39-3/8" then drill holes to install the anchor bolts (**See Fig.31**).



2.2 Fix the anchor bolts.

Drilling the hole for the anchor bolt with the rotary hammer drill, type the anchor bolt into the ground, use shim to adjust it to level and then fasten it with ratchet spanner (See Fig. 32).

Note: The twisting force of anchor bolt is 150N.m, the length inside ground of anchor bolt must be over 6".



For the lifts: use $\Phi 3/4''$ driller to drill hole

For the control cabinet: use $\Phi 3/8''$ driller to drill hole

Fig. 32

F. Install runway connecting bar (See Fig. 33).

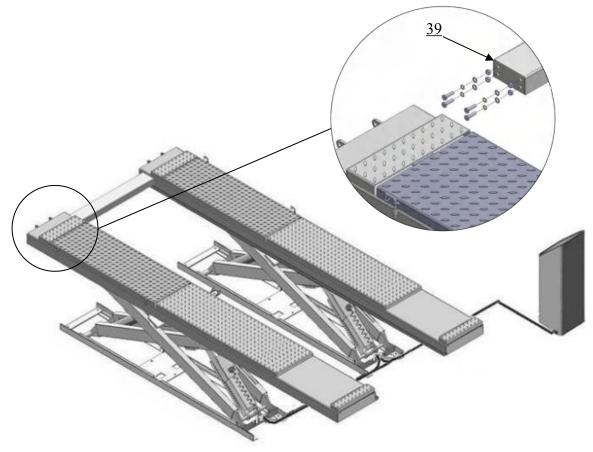
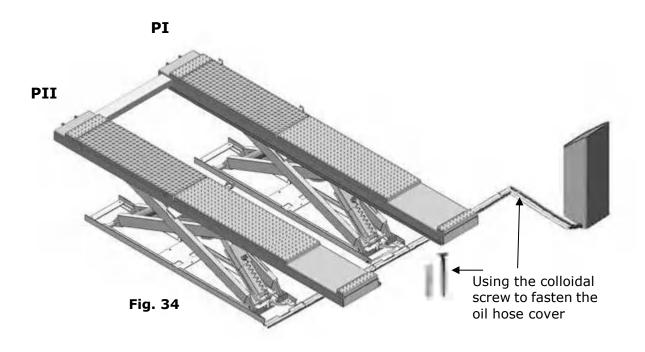


Fig. 33

G. Install oil hose cover for on surface installation.

1. Tidy up the oil hose and air line, cover the oil hose cover (See Fig. 34).



2. Install the oil hose cover (See Fig. 35).

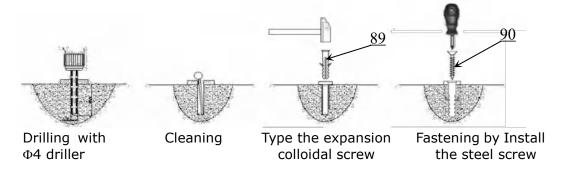


Fig. 35

H. Illustration of installing the AX-12/AX-12A optional air line kits(Fig.36)

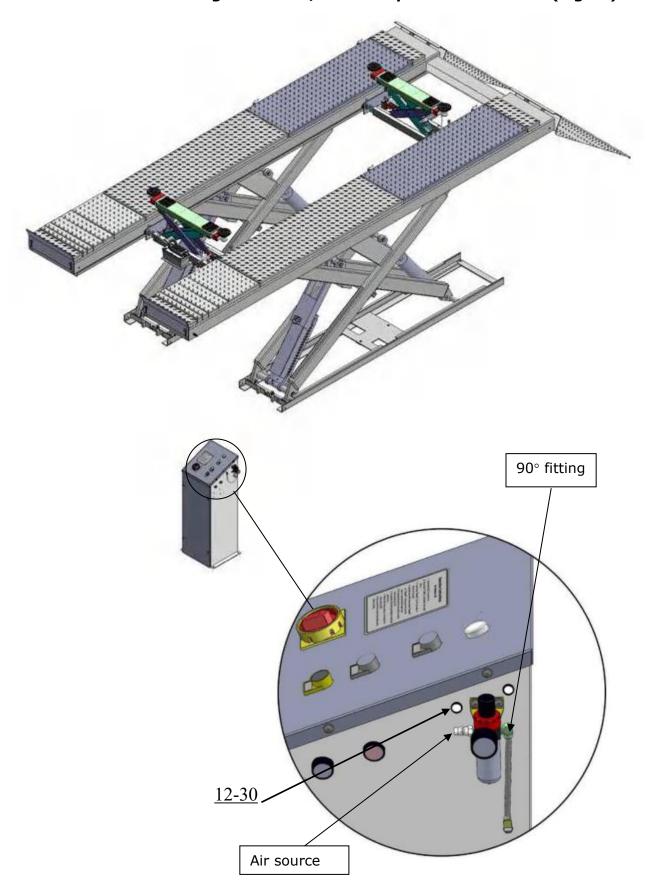
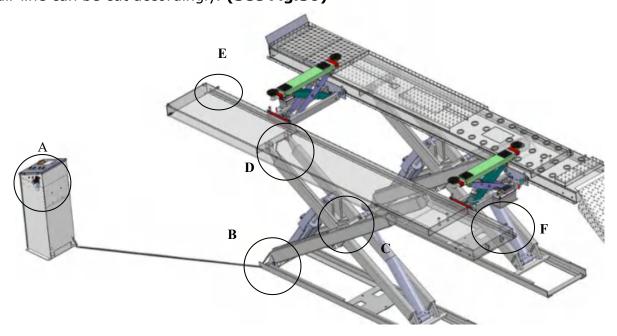
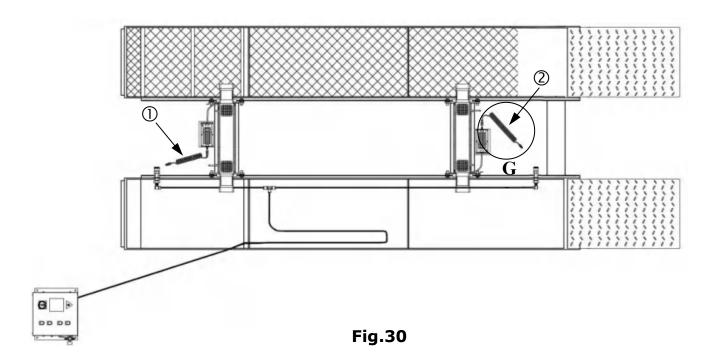


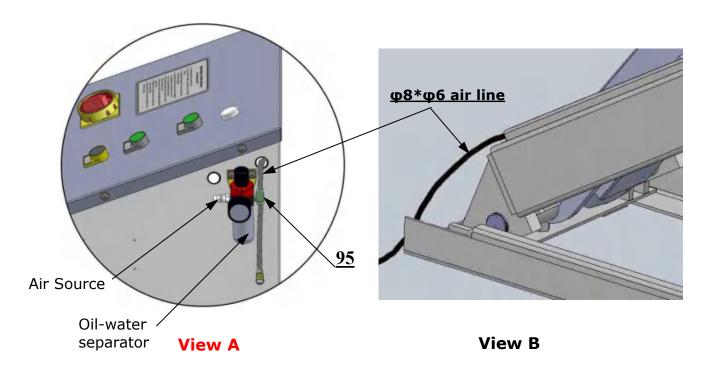
Fig. 36

1. Install air line kit

1.1 Connect the air line fittings with $\phi 8*\phi 6$ black air line as following fig. The length of air line can be cut accordingly. (See Fig.30)

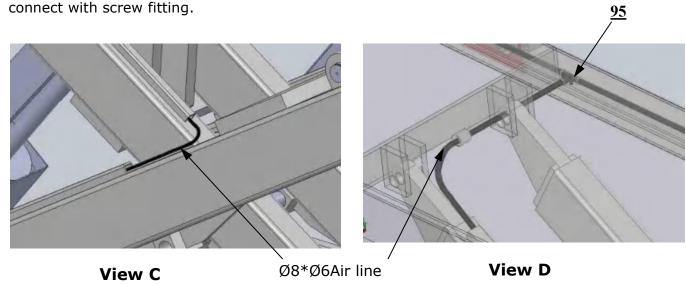


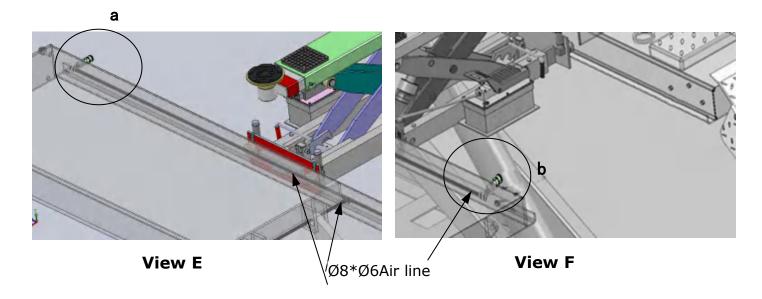




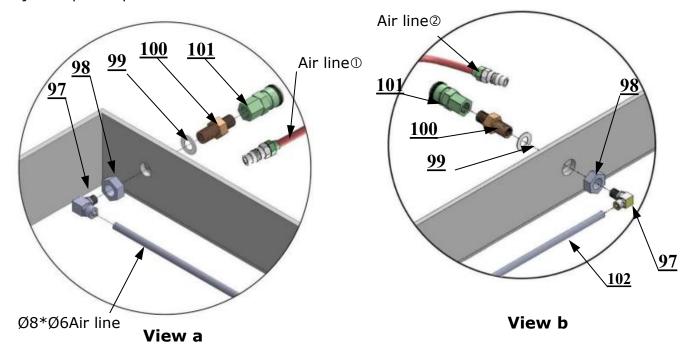
1.2 Replace 90° air hose fitting to three ways fitting from oil-water separator, then through black air hose($\phi 8*\phi 6$) to control cabinet and connect with screw fitting.

1.3 Through black air hose($\phi 8*\phi 6$) to the hole of the base and fixing slot of outer scissor



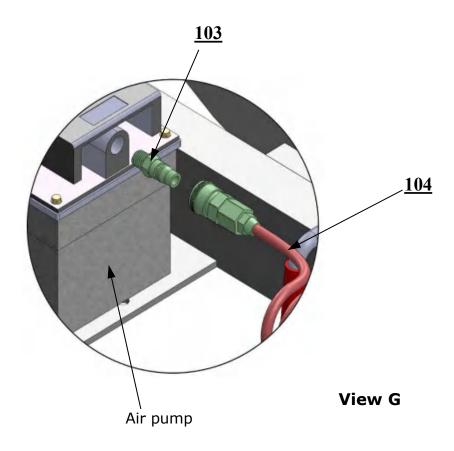


1.4 Air source divide into two ways by passing three ways fitting and connect with rolling jack separately



1.5 Install quick female fitting, then connect it with male air line $\ensuremath{\mathbb{O}}$

1.6 Install quick female fitting, then connect it with male air line②



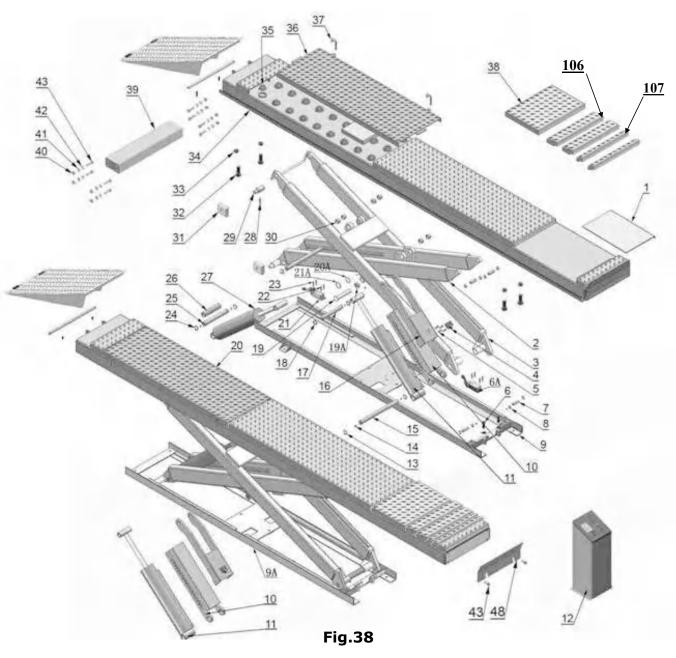
1.7 Connect female airlines of $\ensuremath{\mathbb{O}}$ and $\ensuremath{\mathbb{O}}$ to quick male fitting on two operate jack

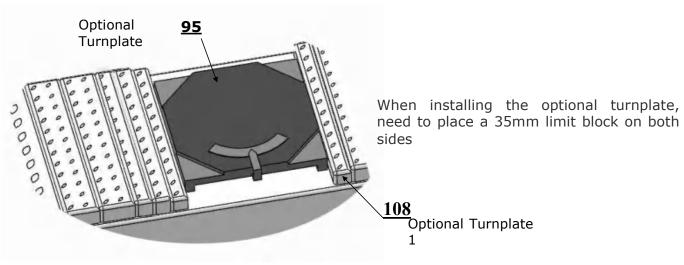
Part list for Optional Airline Kits:

| Item | Part# | Description | QTY |
|------|-----------|--|-----|
| 95 | 10420213 | T2 screw fitting | 1 |
| 96 | 10540007 | Quick T fitting | 1 |
| 97 | 1061K094 | 90°bend fitting | 2 |
| 98 | 1061K092 | Hex nut M14 | 2 |
| 99 | 10430010 | φ14 Washer | 2 |
| 100 | 1061K091 | Air line fitting | 2 |
| 101 | 1061K090 | C shape Quick female fitting | 2 |
| 102 | 10800025 | φ8*φ6*12200mm Air line | 1 |
| 103 | 10420146 | Quick Male fitting | 2 |
| 104 | 10520065A | Spring air line(Include male and female fitting) | 2 |

IV. EXPLODED VIEW

MODEL AX-12A





MODEL AX-12

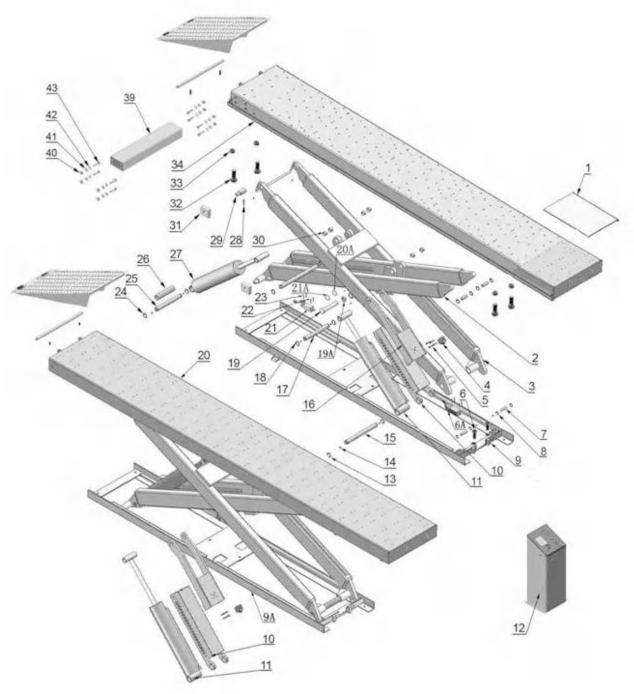


Fig.39

PARTS LIST For Model AX-12A, AX-12

| 1 2 3 4 5 6 6 6 A 7 8 8 | Part# 11520003 11530002A 11530003A 10520011 10420153 10510034 10510040 11520013 10206032 | Shelf assy. Inner Scissors Outer Scissors Air Cylinder Cup Head Bolt Hex Bolt Limit switch assy. | 2 2 2 2 2 2 8 4 | 2 2 2 2 2 2 2 8 | |
|---------------------------------------|---|--|--------------------------------------|--------------------------------------|---|
| 2 3 4 5 6 6A 7 8 | 11530002A 11530003A 10520011 10420153 10510034 10510040 11520013 | Inner Scissors Outer Scissors Air Cylinder Cup Head Bolt Hex Bolt | 2 2 2 2 8 | 2 2 2 | |
| 3 4 5 6 6A 7 8 | 11530003A 10520011 10420153 10510034 10510040 11520013 | Outer Scissors Air Cylinder Cup Head Bolt Hex Bolt | 2 2 8 | 2 2 | |
| 4 5 6 6A 7 8 | 10520011 10420153 10510034 10510040 11520013 | Air Cylinder Cup Head Bolt Hex Bolt | 2 8 | 2 | _ |
| 5 6 6A 7 8 | 10420153 10510034 10510040 11520013 | Cup Head Bolt Hex Bolt | 8 | | |
| 6 6A 7 8 | 10510034 10510040 11520013 | Hex Bolt | | 8 | |
| 6A 7 8 | 10510040 11520013 | | 4 | | |
| 7 8 | 11520013 | Limit switch assy. | | 4 | |
| 8 | | | 1 | 1 | |
| | 10206022 | Connecting Pin | 8 | 8 | |
| | 10200032 | Snap Ring | 16 | 16 | |
| 9 | 11520015C | Base frame | 1 | 1 | |
| 9A | 11520015D | Base frame | 1 | 1 | |
| 10 | 11520016A | Main Safety Lock Tube | 2 | 2 | |
| 11 | 10530029 | Main Cylinder | 2 | 2 | |
| 12 | 10520102B | Control Cabinet | 1 | 1 | |
| 13 | 10520020 | Snap Ring | 4 | 4 | |
| 14 | 10620064 | Grease Fitting | 32 | 32 | |
| 15 | 11520018A | Connecting Shaft For Main Cylinder | 2 | 2 | |
| 16 | 11520021A | Safety Lock | 2 | 2 | |
| 17 | 11610005A | Connecting pin for Main Cylinder | 4 | 4 | |
| 18 | 10610098 | Snap Ring | 8 | 8 | |
| 19 | 11520024 | Connecting Pin For Scissors | 4 | 4 | |
| 19A | 10610019 | Self locking nut | 4 | 4 | |
| | 11540004D | - | 1 | 0 | |
| 20 | 11530041 | Offside Platform | 0 | 1 | |
| 20A | 10610108 | Washer | 4 | 4 | |
| 21 | 10510041 | Limit Switch Assy. | 1 | 1 | |
| 21A | 10530023 | Washer Ø44*Ø35.5*2 | 4 | 4 | |
| 22 | 10620109 | Cup Head Bolt M4*18 | 4 | 4 | |
| 23 | 10420164 | Cup Head Bolt M4*30 | 4 | 4 | |
| 24 | 10520023 | Snap Ring Φ38 | 4 | 4 | |
| 25 | 11560026A | Connecting Shaft For Secondly Cylinder | 2 | 2 | |
| 26 | 11560027 | Piston Connecting Tube | 2 | 2 | |
| 27 | 10530030 | Secondly Cylinder | 2 | 2 | |
| 28 | 10520108 | Socket Set- screw M8*10 | 4 | 4 | |
| 29 | 11520024A | Pin For Pulley | 4 | 4 | |
| 30 | 10530042 | Bronze Bush Φ41.3*Φ35.1*28 | 8 | 8 | |
| 31 | 10530012 | Slider | 8 | 8 | |
| | 10520103 | Hex Bolt M20*90 | 8 | 0 | |
| 32 | 10510016 | Hex Bolt M20*140 | 0 | 8 | |
| 33 | 10420175A | Hex Nut M20 | 12 | 12 | |
| | 11540005D | TICA INUL PIZU | 1 | 0 | |
| 34 | 11540005D | Power-side Platform | 0 | 1 | |

| _ | | | Qt | ٧. | |
|------|-----------|---|--------|-------|------|
| Item | Part# | Description | AX-12A | AX-12 | Note |
| 35 | 10420157 | Steel Ball | 58 | 0 | |
| 36 | 11570003 | Rear Slip Plate | 2 | 0 | |
| 37 | 11520037 | Pin for Rear Slip Plate | 4 | 0 | |
| 38 | 11560003 | Plate for Adjustable Turnplate | 2 | 0 | |
| 39 | 11530001B | Runway Connecting Bar | 1 | 1 | |
| 40 | 10206023B | Hex Nut M12 | 8 | 8 | |
| 41 | 10420026 | Lock Washer Φ12 | 8 | 8 | |
| 42 | 10206006 | Washer Φ12 | 8 | 8 | |
| 43 | 10420136 | Hex Bolt M12*45 | 12 | 8 | |
| | 11520005A | | 2/0 | 0 | |
| 44 | 11510004A | Drive-in Ramp(On surface/Flush mount) | 0 | 2/0 | |
| 44A | 10209010 | Snap Ring Ø10 | 8 | 12 | |
| 44B | 11620043 | Pin for Drive-in Ramp roller | 4 | 4 | |
| 44C | 10620063 | Drive-in Ramp roller | 4 | 4 | |
| 45 | 11510006 | Pin For Drive-in Ramp | 2 | 2 | |
| 46 | 10201005 | Split Pin | 4 | 4 | |
| 10 | 11510018 | Spire i iii | 0/2 | 0 | |
| 47 | 11510019 | Guild Ramp (On surface/Flush mount) | 0 | 2/4 | |
| 48 | 11520004A | Tire Stop Plate | 2 | 0 | |
| 49 | 10209059 | Anchor Bolt 3/4*5-1/2 | 14 | 14 | |
| 50 | 10209039 | Anchor Bolt | 4 | 4 | |
| | | | 2 | 2 | |
| 51 | 10420047 | Quick Fitting for Air Cylinder | | | |
| 52 | 10520065 | Spring Air Line | 2 | 2 | |
| 53 | 10510036 | Air Line (Black) | 1 | 1 | |
| 54 | 10420124 | T-fitting | 1 | 1 | |
| 55 | 10520069 | 90° Quick fitting for air line | 1 | 1 | |
| 56 | 10620079 | Straight Fitting 1/4JIC(M) *1/4JIC(M) | 6 | 6 | |
| 57 | 10203119 | Oil Hose No.① 5/16*4450mm | 1 | 1 | |
| 58 | 10540020 | Oil Hose No. 2 5/16*4200mm | 1 | 1 | |
| 59 | 10540019 | Oil Hose No. 3 5/16*4500mm | 1 | 1 | |
| 60 | 10540022 | Oil Hose No4 5/16*5860mm | 1 | 1 | |
| 61 | 10540018 | Oil Hose No. 5 5/16*6000mm | 1 | 1 | |
| 62 | 10540017 | Oil Hose No. 6 5/16*6200mm | 1 | 1 | |
| 63 | 10510023 | Straight Fitting G3/8-19(M)*1/4JIC(M) | 2 | 2 | |
| 64 | 10520101 | Protective Plastic Hose | 2 | 2 | |
| 65 | 10540023 | Oil hose 5/16*600mm | 2 | 2 | |
| 66 | 10420119 | Straight Fitting for cylinder 3/8NPT(M)*1/4JIC(M) | 2 | 2 | |
| 66A | 10540021 | Oil hose 5/16-3600mm | 2 | 2 | |
| 66B | 10540030 | Oil hose 5/16*600mm | 2 | 2 | |
| 67 | 10420076 | 90° Fitting For Air Line | 1 | 1 | |
| 68 | 10420145 | Oil-water Separator | 1 | 1 | |

| Item Part# | | | Qt | у. | |
|------------|----------|---|--------|-------|------|
| Item | Part# | Description | AX-12A | AX-12 | NOTE |
| 69 | 10420146 | Straight Fitting for air line | 1 | 1 | |
| 70 | 10680005 | Cup Head Bolt M6*10 | 4 | 4 | |
| 71 | 10420097 | 90° Fitting 1/4NPT(M)*1/4JIC(M) | 4 | 4 | |
| 71A | 10510024 | Fitting G3/8-19(M)*1/4NPT(F) | 2 | 2 | |
| 72 | 81523011 | Power Unit | 1 | 1 | |
| 73 | 10440009 | Straight Fitting for power unit 3/8SEA ^{O/R} (M)*1/4NPT(M) | 1 | 1 | |
| 74 | 10206062 | Straight Fitting | 2 | 2 | |
| 75 | 10630103 | Fitting | 2 | 2 | |
| 76 | 1061K107 | T-Fitting 1/4NPT(F)*1/4NPT(F) | 3 | 3 | |
| 77 | 1061K050 | Hex Nut M8*30 | 4 | 4 | |
| 78 | 10209033 | Washer φ8 | 8 | 8 | |
| 79 | 10209005 | Self locking Nut M8 | 4 | 4 | |
| 80 | 10209062 | T-Fitting 1/4NPT(M)*1/4JIC(M)*1/4JIC(M) | 2 | 2 | |
| 81 | 1061K101 | Shutoff Valve 1/4NPT(F)*1/4NPT(F) | 2 | 2 | |
| 82 | 10680072 | 90° Fitting 1/4NPT(M)*1/4NPT(M) | 2 | 2 | |
| 83 | 10420018 | Self locking Nut M6 | 2 | 2 | |
| 84 | 10510039 | Cup Head Bolt M3*16 | 3 | 3 | |
| 85 | 11540029 | Oil hose cover | 1 | 1 | |
| 86 | 11540024 | Oil hose cover(L=605m) | 2 | 2 | |
| 87A | 10620065 | Shim(2mm) | 20 | 20 | |
| 87B | 10201090 | Shim(1mm) | 20 | 20 | |
| 88 | 11540025 | Oil Hose Cover (L=750) | 1 | 1 | |
| 88A | 11540027 | Oil Hose Cover(L=1060mm) | 3 | 3 | |
| 89 | 10620070 | Colloidal screw | 36 | 36 | |
| 90 | 10620069 | Wood Screw M4*30 | 36 | 36 | |
| 91 | 10540500 | Parts box (On surface installation) | 1 | 0 | |
| 92 | 10530500 | Parts box (On surface installation) | 0 | 1 | |
| 93 | 10540501 | Parts box (Flush mount installation) | 1 | 0 | |
| 94 | 10530501 | Parts box (Flush mount installation) | 0 | 1 | |
| 95 | 11420158 | Turplate (optional) | 2 | 0 | |
| 106 | 11580090 | Adjusting Block for Turnplate | 4 | 0 | |
| 107 | 11580097 | Adjusting Block for Turnplate 1 | 4 | 0 | |
| 108 | 11520116 | Adjusting Block for Turnplate 2 | 4 | 0 | |

CYLINDERS

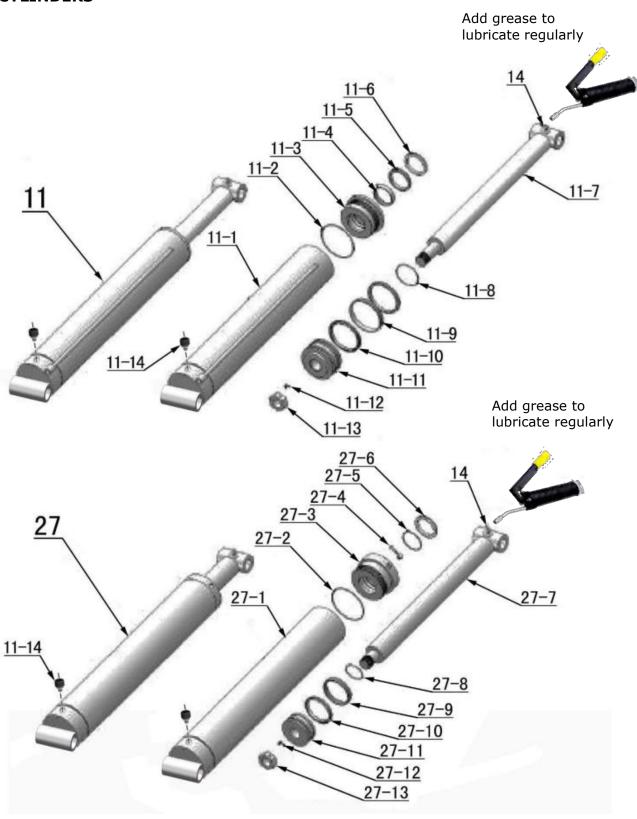


Fig. 40

Parts list for Cylinder

| Item | Part# | Description | QTY | Note |
|-------|-----------|--------------------------|-----|------|
| 11-1 | 11530032 | Main Cylinder | 1 | |
| 11-2 | 10530025 | O- Ring (φ98*5.3) | 1 | |
| 11-3 | 11530033 | Head Cap (Main) | 1 | |
| 11-4 | 10530028 | Support Ring φ60*φ66*15 | 1 | |
| 11-5 | 10530024 | Y- Ring φ60*φ70*6 | 1 | |
| 11-6 | 10530026 | Dust Ring φ60*φ68 | 1 | |
| 11-7 | 11530034 | Piston Rod (Main) | 1 | |
| 11-8 | 10520054 | O- Ring | 1 | |
| 11-9 | 10530027 | Support Ring φ94*φ100*15 | 1 | |
| 11-10 | 10520063 | Y- Ring φ85*φ100*9 | 2 | |
| 11-11 | 11530035 | Piston (Main) | 1 | |
| 11-12 | 10520049 | Set Screw M8*10 | 1 | |
| 11-13 | 10520047 | Hex Nut M36 (main) | 1 | |
| 11-14 | 10530009 | Burst valve G3/8 | 4 | |
| 27-1 | 11530036 | Secondly Cylinder | 1 | |
| 27-2 | 10420062 | O- Ring φ82.5*3.5 | 1 | |
| 27-3 | 11530037 | Head Cap (Secondly) | 1 | |
| 27-4 | 10201034 | Bleeding Plug | 2 | |
| 27-5 | 10520058 | O- Ring φ45*3.55 | 1 | |
| 27-6 | 10217078 | Dust Ring | 1 | |
| 27-7 | 11510011B | Piston Rod (Secondly) | 1 | |
| 27-8 | 10520061 | O- Ring φ45*3.55 | 1 | |
| 27-9 | 10420066 | Support Ring φ74*φ80*15 | 1 | |
| 27-10 | 10420067 | Y- Ring φ70*φ80*6 | 1 | |
| 27-11 | 11530039 | Piston (Secondly) | 1 | |
| 27-12 | 10520049 | Set Screw M8*10 | 1 | |
| 27-13 | 10420014 | Hex Nut M27 (Secondly) | 1 | |

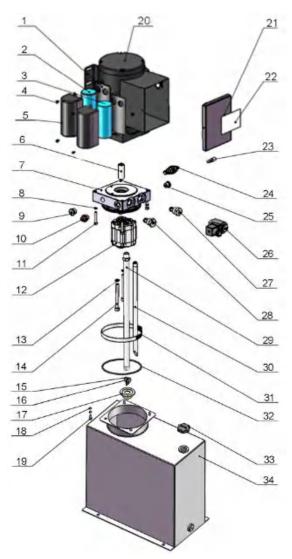
CONTROL CABINET 12-1 12-19 12-24 12-2 12-23 12-3 12-20 12-4 12-27 12-26 12-28 12-22 12-6 12-21 12-7 12-12, 12-17 12-15 12-16 12-13 12-25 A 12-14 <u>76</u>

Fig.41

Parts list for Control Cabinet

| Item | Part# | Description | QTY |
|-------|-----------|----------------------------------|-----|
| 12-1 | 10201094 | Power indicator | 1 |
| 12-2 | 10420071 | Button UP | 1 |
| 12-3 | 10420071 | Button LOCK | 1 |
| 12-4 | 10420072 | Button DOWN | 1 |
| 12-5 | 1152K001C | Control Panel | 1 |
| 12-6 | 10420074 | Power Switch (QS) | 1 |
| 12-7 | 1152K007D | Cabinet Body | 1 |
| 12-8 | 10420167C | Air line | 2 |
| 12-9 | 1061K110 | Straight Fitting | 1 |
| 12-10 | 10209145 | Cup Head Bolt | 4 |
| 12-11 | 10420076 | 90° Fitting | 2 |
| 12-12 | 10420143 | Buzzer | 1 |
| 12-13 | 1052K056 | Cup Head Bolt | 4 |
| 12-14 | 1152K022 | Cabinet Door | 1 |
| 12-15 | 1152K006A | Install panel | 1 |
| 12-16 | 10620082 | Terminal | 1 |
| 12-17 | 10202046 | Breaker 2P only for Single phase | 1 |
| 12-18 | 10202049 | Breaker 1P | 2 |
| 12-19 | 10580114 | Transformer (TC) | 1 |
| 12-20 | 1061K052 | Cup head bolt | 19 |
| 12-21 | 10420135 | Timer Relay Base 36 | 2 |
| 12-22 | 10420141 | Intermediate Relay(KA) | 1 |
| 12-23 | 10420083 | Timer Relay(KT) | 1 |
| 12-24 | 10420084A | AC Contactor (KM) | 1 |
| 12-25 | 10420142 | Lowering Alarm Button (k) | 1 |
| 12-26 | 10420166 | 90° Fitting | 1 |
| 12-27 | 10420077 | Air Solenoid Valve(Y2) | 1 |
| 12-28 | 10201034 | Bleeding plug | 1 |

POWER UNIT



Single Phase 220V/60HZ/ Electric Power Unit

Fig. 42

Parts list for Electric Power Unit 220V/60Hz/1 Phase

| Item | Part# | Description | QTY |
|------|----------|------------------------|-----|
| 1 | 81400180 | Rubber pad | 2 |
| 2 | 81400130 | Start capacitor | 1 |
| 3 | 81400088 | Run capacitor | 1 |
| 4 | 10420148 | Cup head bolt | 6 |
| 5 | 81400066 | Capacitor cap | 2 |
| 6 | 81400363 | Motor Connecting Shaft | 1 |
| 7 | 80101014 | Manifold block | 1 |
| 8 | 10209149 | Spring washer | 4 |
| 9 | 81400276 | Iron plug | 1 |
| 10 | 81400259 | Red rubber plug | 1 |
| 11 | 85090142 | Socket bolt | 4 |
| 12 | 81400292 | Gear Pump | 1 |
| 13 | 10209034 | Spring washer | 2 |
| 14 | 81400295 | Socket bolt | 2 |
| 15 | 10209152 | Ties | 1 |
| 16 | 85090167 | Magnet | 1 |
| 17 | 81400290 | Filter | 1 |

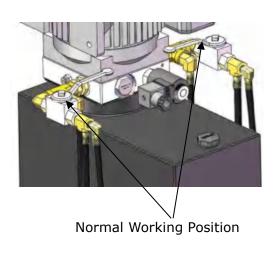
| Item | Part# | Description | QTY |
|------|----------|-----------------------------|-----|
| 18 | 10420152 | Washer | 4 |
| 19 | 81400438 | Hex Bolt | 4 |
| 20 | 81400413 | Motor | 1 |
| 21 | 81400287 | Cover of Motor Terminal Box | 1 |
| 22 | 71111230 | Sticker for AMGO Power unit | 1 |
| 23 | 81400560 | Throttle valve | 1 |
| 24 | 81400266 | Relief valve | 1 |
| 25 | 81400284 | Iron plug | 1 |
| 26 | 81400420 | Solenoid valve winding | 1 |
| 27 | 81400423 | Electric release valve | 1 |
| 28 | 81400566 | Check Valve | 1 |
| 29 | 81400380 | Oil suction pipe | 1 |
| 30 | 81400376 | Oil Return Pipe | 1 |
| 31 | 81400364 | Clamp | 1 |
| 32 | 81400365 | O-ring | 1 |
| 33 | 81400263 | Oil tank cap | 1 |
| 34 | 81400327 | Oil tank | 1 |

V. TEST RUN

- 1. Preparation before Synchronous adjustment
- a. Fill the reservoir with hydraulic oil. In consideration of power unit's durability and keep the equipment running in the perfect condition, **please use Hydraulic Oil** 46#.
- b. Turn on the power after connecting oil system correctly. Press the button **Up**, and check the rotated direction of the motor (This is right if lift is upward, otherwise, it is wrong direction of the motor). Shut off power and exchange the phase connection if the direction is wrong.
- c. Lower the platforms to the lowest position.

2. Synchronous adjustment

- a. Turn the handles of the shutoff valves to the position as **Fig. 45** (Normal working position), push **UP** button to start filling oil in the cylinder, until the machine starts to lift. at this time push **Down** and **Pass** button about 5 seconds while hearing the buzzer sound and the sounds of inside air coming out from oil tank. Repeat the above steps 2-3 times until the inside air are all come out.
- b. Tap **UP** button, until the platform just be lifted up.
- c, Turn the handle of shutoff valves to the position as **Fig.46.** push **UP** button, check If PI ,PII platform at the same time means the machine is synchronization. If still not, repeat b steps until the both side of platform are synchronization.
- d, After PI,PI platform are synchronization, operating the lift up and down.



Fia. 45

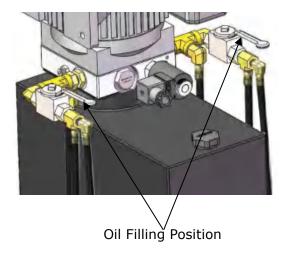


Fig. 46

3. Test run

Check and adjust the limit switch, the hose and fitting connection, and do test run. The lift must be tested run and checked carefully before in use.

VI. OPERATION INSTRUCTIONS

To lift vehicle

- 1. Keep clean of site near the lift, and down the lift to the lowest position.
- 2. Drive vehicle on the platforms and pull the brake.
- Turn on the power and push the button "Up", raise the lift to the working position.
 Note: make sure the vehicle is steady when the lift is rising
- 4. Push the button **"Lock"**, lock the lift in the safety device. Make sure the safety device is locked in the same height.

To lower vehicle

- 1. Be sure clear of around and under the lift, only leaving operator in lift area.
- Push the button "Down", the lift is lowered continually and stopped at the height 23-5/8" from ground. Keep feet clear off lift, push button "DOWN" while push the Lowering Alarm Button(black) at the side of control cabinet, the lift is lowered to ground with alarm tone;
- 3. Drive away the vehicle when the lift is lowered to the lowest position.
- 4. Turn off the power.

Lowering Alarm Button

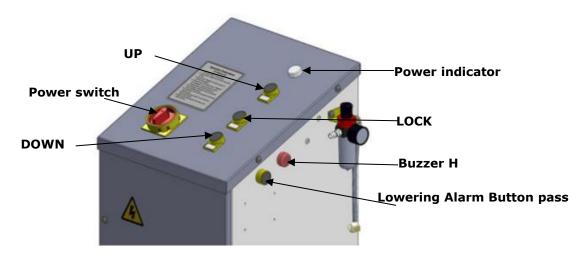


Fig. 48

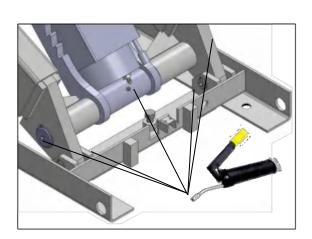
VII. MAINTENANCE SCHEDULE

Monthly:

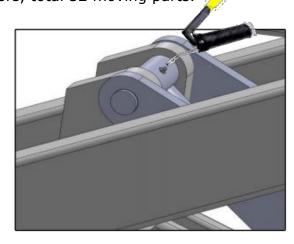
- 1. Re-torque the anchor bolts to 150 Nm.
- 2. Check all fittings, bolts and pins to insure proper mounting.

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.

- 3. Make a visual inspection of all hydraulic hoses/lines for possible wear or leakage.
- 4. Adjusting the lifting level on both platforms.
- Lubricate all moving parts with lubricant (Sea Fig. 49-54).
 there are 16 moving parts for each scissors, total 32 moving parts.

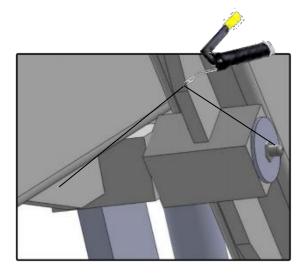


For Main Cylinder (5 moving parts) Fig.47



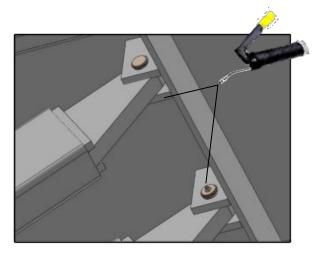
For shaft of piston rod of Main cylinder(1 moving parts)

Fig.48



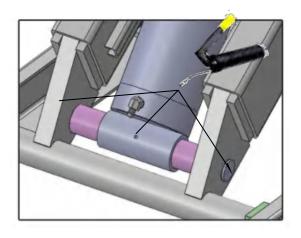
For pins of connecting platforms and scissors (4 moving parts)

Fig. 49

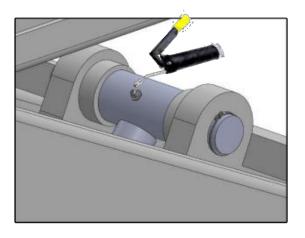


For pins of connecting platforms and scissors (2 moving parts)

Fig. 50



For Secondly Cylinder
(3 moving parts)
Fig.51



For shaft of piston rod of Secondly cylinder (1 moving parts) Fig.52

Every six months:

- 1. Make a visual inspection of all moving parts for possible wear, interference or damage.
- 2. Check and adjust the platform as necessary to insure level lifting.
- 3. Check all fastener and re-torque.

VIII.TROUBLE SHOOTING

| TROUBLE | CAUSE | REMEDY |
|---------------------------------------|--|---------------------------------|
| Motor does not run | 1.Start Button does not work | 1. Replace start button |
| | 2.Wiring connections are not in good | 2. Repair all wiring connection |
| | condition | |
| | 3. AC contactor burned out | 3. Replace AC contactor |
| | 4. Motor burned out | 4. Repair or replace motor |
| | | |
| Motor runs but the lift is not raised | 1. Motor runs in reverse rotation | 1. Reverse two power wire |
| | 2. Low oil level | 2. Fill tank |
| | 3. The Gear Pump out of operation | 3. Repair or replace |
| | 4. Relief valve or check valve in | 4. Repair or replace |
| | damage | |
| | 5. Hydraulic Solenoid valve out of | 5. Repair or Replace |
| | operation | |
| Lift does not stay up | 1. Hydraulic Solenoid valve out of | |
| | operation | |
| | 2. Relief valve or check valve leakage | Repair or replace |
| | 3. Cylinder or fittings leaks | |
| | | |
| Lift raised slowly | 1. Oil line is jammed | 1. Clean the oil line |
| | 2. Gear Pump leaks | 2. Repair or Replace |
| | 3. Overload lifting | 3. Check load |
| | 4. Power Voltage low | 4. Check electrical system |
| | 5. Oil mixed with air | 5. Fill tank and bleeding air |
| Lift cannot lower | 1. Hydraulic Solenoid valve out of | 1. Repair or replace the Valve |
| | operation | |
| | 2. Air Solenoid Valve out of | 2. Repair or replace the Valve |
| | operation | |
| | 3. Air cylinder in damage | 3. Repair or replace |
| | 4.Low Air pressure | 4. Check the air line |
| | | |

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.



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