

Please read this manual before operation

**Auto Lift User Manual** 



# **W-9SD Installation & Operation Manual**

9000 lb. Capacity Overhead Super-Symmetric Two Post Lift



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#### READ MANUAL ENTIRELY BEFORE INSTALLING OR OPERATING LIFT

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# I. PRODUCT FEATURES AND SPECIFICATIONS

### **CLEAR-FLOOR DIRECT-DRIVE MODEL FEATURES**

#### Weaver Lift Model W-9SD (See Fig. 1)

- · Direct-drive design minimizes wear parts and repairs.
- Dual hydraulic cylinders designed and made on ANSI standards, utilizing NOK oil seal for cylinder.
- · Self-lubricating UHMW Polyethylene sliders and bronze bushings.
- · Single-point safety release and dual safety design.
- . Clear-floor design provides for unobstructed floor space.
- . Overhead safety shut-off device prevents vehicle damage.
- · Super-asymmetric arms arms design.
- . Standard adjustable heights (2) accommodate varying ceiling heights.



Fig. 1

#### MODEL Weaver W-9SD SPECIFICATIONS

| Model | Style         | Lifting<br>Capacity | Lifting<br>Time | Lifting Height  | Overall Height     | Overall<br>Width | Width<br>Between<br>Columns | Minimum<br>Pad Height | Motor      |
|-------|---------------|---------------------|-----------------|-----------------|--------------------|------------------|-----------------------------|-----------------------|------------|
|       | Clear-floor   | 4.0T                | Fac             | 1815-2044mm     | 3621/3821mm        | 3428mm           | 2850mm                      | 90mm                  | 2 0/3 0 HP |
| W-9SD | Direct-drived | 9,000 lbs           | 525             | 71 1/2″-80 1/2″ | 142 1/2"/ 150 1/2" | 135″             | 112 1/4″                    | 3 1/2″                | 2.0, 0.0   |





Fig. 2

# ${\rm I\hspace{-1.5mm}I}. \textbf{ INSTALLATION REQUIREMENT}$

# A. TOOLS REQUIRED

✓ Rotary Hammer Drill (Φ19)



✓ Hammer



✓ Level Bar



✓ English Spanner (12")



✓ Ratchet Spanner With Socket (28<sup>#</sup>)

i -

Wrench set (8<sup>#</sup>, 10<sup>#</sup>, 13<sup>#</sup>, 14<sup>#</sup>, 17<sup>#</sup>, 19<sup>#</sup>, 24<sup>#</sup>)



✓ Carpenter's Chalk



✓ Screw Sets



✓ Tape Measure (7.5m)



✓ Pliers



✓ Socket Head Wrench (3<sup>#</sup>, 5<sup>#</sup>, 8<sup>#</sup>)



✓ Lock Wrench



# **B. SPECIFICATIONS OF CONCRETE**

# Failure to adhere to the specifications of concrete may result in Lift Failure.

# **FOUNDATION and ANCHORING REQUIREMENTS**

- Concrete shall have compression strength of at least 3,000 PSI and a minimum thickness of 4" in order to achieve a minimum anchor embedment of 3 1/4". NOTE: When using the standard supplied 3/4" x 5 1/2 long anchors, if the top of the anchor exceeds 2 1/4" above the floor grade, you DO NOT have enough embedment.
- 2. Maintain a 6" minimum distance from any slab edge or seam. Hole to hole spacing should be a minimum 61/2" in any direction. Hole depth should be a minimum of 4". Drilling through the slab is recommended in case an anchor

needs to be replaced it can be driven down through the slab. O

- 3. <u>DO NOT</u> install on asphalt or other similar unstable surface. Columns are supported only by anchoring to floor.
- 4. Using the shims provided, shim each column base as required until each column is plumb. If one column has to be elevated to match the plane of the other column, full size base shim plates should be used. Torque anchors to 100 ft-lbs. Shim thickness MUST NOT exceed 1/2" when using the 5 1/2" long anchors provided with the lift. Adjust the column extensions plumb.

**5.** If anchors do not tighten to 100 ft-lbs. installation torque, replace the concrete under each column base with a  $4' \times 4' \times 6''$  thick 3,000 PSI minimum concrete pad keyed under and flush with the top of existing floor. Allow concrete to cure before installing lifts and anchors (typically 2 to 3 weeks).

# C. POWER SUPPLY

The power requirement is 220 Volt 1 phase power with a 30 amp circuit breaker. Use a minimum of 10 gauge wiring.

# **III. STEPS OF INSTALLATION**

### A. Location of Installation

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

# B. Use a carpenter's chalk line to establish installation layout of base plate (See Fig.



Overall Width 135"

Fig. 4

### C. Check the Parts Before Assembly.

1. Packaged lift and Hydraulic Power Unit (See Fig. 5).





2. Move aside the lift with fork lift or hoist, and open the outer packing carefully

(See Fig. 6).





3. Take off the lifting arms and parts box from upper and inside the column, then move them to location nearby installation site. Loosen the screws of the upper package stand, take off the upper column and remove the package stand **(See Fig. 7)**.





4. Check the parts according to the shipment parts list (See Fig. 8).





5. Open the carton of parts and check the parts according to parts box list (See Fig. 9).



Fig. 9

5. Check the parts of the parts bag 1 & 2 according to parts bag list (See Fig. 10 & Fig. 11).



Bag 1

Fig. 10







Fig. 11

#### D. Install parts of extension columns (See Fig. 12).

#### **E.** Position Power side Post

Lay down two posts on the installation site parallel to each other. Position the Power side Post according to the actual installation bay. It is suggested to install the Power side Post on the passenger side from which vehicles are driven into the lift. This lift is designed with 2-Section columns. Adjust the height according to the ceiling height when connecting the inner and outer columns. To use the low setting (142.5") the ceiling height should be at least 144" minimum. Connect the outer columns using the upper holes



(See Fig.13); To use the high setting (150.5") we recommend to connect the outer columns with the lower holes to make the post higher (See Fig.14).





Fig. 14 High Setting

# F. Position posts (See Fig. 15)

Position the columns on the installation layout of base plate, shown in **step B**.



Install the anchor bolts by drilling through the base plate of one column. Level the column plumb with a level and adjust with the shims as needed and tighten. The other column will be drilled and shimmed after the assembly of the overhead beam and verifying the base plates are square to the proper width dimension.

# G. Install Overhead Top Beam

 With help of the hook of top beam, put one side of top beam on top of the extension column and connecting the top beam to extension column by bolts, tighten the bolts. Then assemble the connecting bracket (See Fig. 16).



2. Assemble overhead top beam, tighten all beam bolts. Square and check overall width of columns and adjust unanchored post as needed. Drill, level and anchor the other post. Torque the Anchor Bolts to 100 foot lbs. **(See Fig. 17)**.





H. Installing the Control Bar and Limit Switch (See Fig. 18).



# I. Install Safety Device (See Fig. 19 & Fig. 20).







Fig. 20 Offside Safety Device

J. Lift the carriages up to about three feet high (use sufficient lifting means) and set them in the locked position at the same level (See Fig. 21).



Fig. 21

# K. Install Cables

There are two ways of connecting the cables called low setting and high setting connection.

a. For the low setting cable connection (See Fig. 22).



- b. For the high setting cable connection (see Fig. 23).
- 1. Cable passes through from the bottom of the carriages and can be pulled out from the access hole in front of carriages, then screw the two Cable Nuts (See Fig. 23).



**Cable Connecting direction** 

Fig. 23



2. Connecting Cable for high setting (See Fig. 24).

# L. Install Hydraulic Power Unit and Oil Hose Assy. (See Fig. 25).

Tighten all the hydraulic fittings, and fill the Reservoir with Hydraulic Oil (AW 32, 46 or equal non detergent SAE 10 hydraulic oil).

![](_page_18_Figure_4.jpeg)

# M. Install Safety Cable (See Fig. 26)

![](_page_19_Figure_1.jpeg)

Fig. 26

# **N. Assembly Cable Retainer**

1. Install Oil Hose.

Note: Don't cross the oil hose and safety cable together (See Fig. 27 & Fig. 28).

![](_page_20_Picture_3.jpeg)

Fig. 27

Offside Safety Device Fig. 28

2. Install Safety Cable and Oil Hose. (See Fig.29 & Fig. 30 & Fig. 31)

**Note:** Install the protective cover on the outer column with M6\*35 cup head bolt, Install the protective cover on the inner column with M6\*40 cup head bolt.

![](_page_20_Figure_8.jpeg)

![](_page_20_Picture_9.jpeg)

# **O. Install Lifting Arms And Adjust The Arm Locks.**

1. Install the Lifting Arms (See Fig. 32).

2. Lower the carriages down to the lowest position and then use the 8<sup>#</sup> Socket Head Wrench to loosen the Socket Bolt (See Fig. 33).

![](_page_21_Picture_3.jpeg)

3. Adjust the arm locks as shown by arrow direction (See Fig. 34)

![](_page_21_Figure_5.jpeg)

4. Adjust the Teeth of Arm Locks assy. So it meshes with the Gear of the Lifting Arm. Tighten the Socket Bolts of Arm Lock assy... (See Fig. 35).

# P. Install Electrical System

Connect the power source as guided on the data plate of Power Unit.

Note: 1. For the safety of operators, the power wiring must be properly grounded.

#### Single phase motor (See Fig. 36).

- 1. Connecting the two power supply wires (active wire **L** and neutral wire **N**) to terminals of AC contactor marked L1, L2 respectively.
- 2. Connecting the two motor wires to terminals of AC contactor marked **T1**, **T2**.
- 3. Connecting **A2** to **L2** of AC contactor.
- Terminal 4# of control button is connected with terminals A1of AC contactor;
   Terminal 3# of control button is connected with terminals L1of AC contactor.

![](_page_22_Figure_8.jpeg)

Fig. 36

# **IV. EXPLODED VIEW**

![](_page_23_Figure_1.jpeg)

# Model Weaver Model W-9SD

Fig.37

# Cylinders 30-330-430-5ÓÓÓÓÓÓ <u>30-6</u> <u>30-7</u> 30-2 30-30-8 <u>30-7</u> 30-9 30-13 $\frac{30-12}{30-11}$ <sup>20</sup>,0,0 30

Fig. 38

![](_page_24_Figure_2.jpeg)

![](_page_24_Figure_3.jpeg)

Fig. 39

# V. TEST RUN

#### 1. Adjust Synchronous Cable (See Fig. 43)

Use Vise Grips to hold the cable fitting while using a wrench to tighten the cable nut. Make sure the two cables have the same tension so the two carriage locks engage synchronously. Install the plastic cover onto the carriage.

![](_page_25_Figure_3.jpeg)

#### If the carriages do not Synchronize when lifting, adjust

#### As follows: (See Fig. 41 & Fig. 42)

- a. Press **UP** button to lift the carriages to the first safety lock. Make sure both have cleared the first safety lock and lower the lift completely so both carriages rest in the locked position.
- b. Loosen the cable by adjusting the lock nuts, release the safety lock of the side that the carriage is in higher position. The other side safety lock is in engaged. Then lower the lift, the side with carriage in lower position would be locked, and the other side is unlocked. Continue to lower down the lift till both carriages are at the same level.
- c. Tightening the cable nut of the synchronize cables, and tightening the safety cable with the lock nuts, try to lift again, adjust the cables if needed.

![](_page_25_Figure_9.jpeg)

Fig. 41

![](_page_26_Figure_0.jpeg)

#### 2. Adjust Safety Cable

Lifting the carriage and lock at the same height, strain the Safety Cable and then release a little, and then tighten the cable nuts. Make sure the Safety Device can always be worked properly.

#### 3. Test with load

After finishing the above adjustment, perform a test run of the lift with a load. Run the lift in low positions the first few cycles, making sure the lift can rise and lower synchronously. The Safety Device should lock and release synchronously. Test run the lift to the top completely. If there is anything improper or out of adjustment, repeat the above adjustments until correct.

NOTE: The Lift may vibrate during the first lifting cycles. Use the Lift with a load for several times and the air will bleed out through the power unit return line and the vibration should go away. Hold the down lever several seconds after reaches the ground level to release air.

![](_page_27_Figure_0.jpeg)

Fig. 43 Hydraulic System

# **VI. OPERATION INSTRUCTIONS**

# Please read the safety tips carefully before operating the lift

# To lift vehicle

- 1. Keep the Lift bay work area clean
- 2. Position lift arms to the lowest position
- 3. Shorten the lift arms
- 4. Open lift arms
- 5. Position vehicle between columns
- Move arms to the vehicle's lifting point as guided by the vehicle manufacturer.
   Note: The four lift arms must contact the vehicle's lifting points where manufacturer recommends at the same time.
- 7. Press the **UP** button until the lift pads contact underside of vehicle. Recheck to make sure vehicle is secure.
- Continue to raise the lift slowly to the desired working height, ensuring the balance of vehicle;

9. Push lowering handle to lower lift onto the nearest safety locked position. The vehicle is ready to repair.

#### To lower vehicle

- 1. Be sure area under and near the lift is clear, only leaving operator in lift area;
- 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 the vehicle away.
- 5. Turn off the power.

# VII.MAINTENANCE SCHEDULE

#### Monthly:

- 1. Re-torque the anchor bolts to 100 foot lbs.
- 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 and adjust as necessary, equalize tension of the cables to insure level lifting.
- 3. Check columns for plumb and level.
- 4. Check Rubber Pads and replace as necessary.
- 5. Check Safety device and make sure proper condition.

# **WII. TROUBLE SHOOTING**

| TROUBLE                                     | CAUSE   | REMEDY   |
|---|---|--|
| Matan daga pat                              | <ol> <li>Button does not work</li> <li>Wiring connections are not in good<br/>condition</li> </ol>  | <ol> <li>Replace button</li> <li>Repair all wiring connections</li> </ol>  |
| run   | <ol> <li>Motor burned out</li> <li>Height Limit Switch is damaged</li> <li>AC contactor burned out</li> </ol>   | <ol> <li>Repair or replace motor</li> <li>Replace the Limit Switch</li> <li>Replace AC Contactor</li> </ol>                                    |
| Motor runs but<br>the lift is not<br>raised | <ol> <li>Motor runs in reverse rotation</li> <li>Gear Pump out of operation</li> <li>Release Valve in damage</li> <li>Relief Valve or Check Valve in damage</li> <li>Low oil level</li> </ol> | <ol> <li>Reverse two power wire</li> <li>Repair or replace</li> <li>Repair or replace</li> <li>Repair or replace</li> <li>Fill tank</li> </ol> |
| Lift does not<br>stay up                    | <ol> <li>Release Valve out of work</li> <li>Relief Valve or Check Valve leakage</li> <li>Cylinder or Fittings leaks</li> </ol>  | Repair or replace  |
| Lift raises<br>slowly                       | <ol> <li>Oil line is jammed</li> <li>Motor running on low voltage</li> <li>Oil mixed with air</li> <li>Gear Pump leaks</li> <li>Overload lifting</li> </ol>                                   | <ol> <li>Clean the oil line</li> <li>Check Electrical System</li> <li>Fill tank</li> <li>Replace Pump</li> <li>Check load</li> </ol>           |
| Lift can not lower                          | <ol> <li>Safety device are in activated</li> <li>Release Valve in damage</li> <li>Safety cable broken</li> <li>Oil system is jammed</li> </ol>  | <ol> <li>Release the safeties</li> <li>Repair or replace</li> <li>Replace</li> <li>Clean the oil system</li> </ol>                             |

| Item | Part#   | Description                           | Qty.<br>W-9SD | Note |
|------|---------|---------------------------------------|---------------|------|
| 1    | 206019  | Snap Ring                             | 4             |      |
| 2    | 206156  | Tool tray                             | 2             |      |
| 3    | 209128  | Washer φ19                            | 4             |      |
| 4    | 209057B | Bronze Bush For Pulley                | 6             |      |
| 5    | 206020  | Pulley                                | 6             |      |
| 6    | 206001C | Power-side Inner Column assembly      | 1             |      |
| 201  | 209002  | Manual Power Unit                     | 1             |      |
| 7    | 209003  | Hex Bolt                              | 8             |      |
| 8    | 209004  | Rubber Ring                           | 4             |      |
| 9    | 209005  | Self locking Nut                      | 8             |      |
| 10   | 206002  | Safety Pin                            | 2             |      |
| 11   | 209007A | Safety Spring                         | 2             |      |
| 12   | 206003A | Handle Protective Plastic cushion     | 1             |      |
| 13   | 206004  | Power-side Safety Lock assembly       | 1             |      |
| 14   | 209012  | Hair Pinφ3.2                          | 4             |      |
| 15   | 206006  | Washer                                | 22            |      |
| 16   | 206023A | Hex Nut                               | 2             |      |
| 17   | 209009  | Cup Head Bolt                         | 10            |      |
| 18   | 206004A | Safety Pulley Bracket with 2 assembly | 1             |      |
| 19   | 206081  | Safety Cover assembly                 | 2             |      |
| 20   | 209126  | Hex Bolt                              | 24            |      |
| 21   | 209022  | Washer                                | 52            |      |
| 22   | 209021  | Hex Nut                               | 20            |      |
| 23   | 206010  | Safety Pulley Bracket assembly        | 1             |      |
| 24   | 206009  | Plastic Pulley                        | 5             |      |
| 25   | 209010  | Snap Ring                             | 5             |      |
| 26   | 209033  | Washer                                | 16            |      |
| 27   | 206151  | Extension Column                      | 2             |      |
| 28   | 206137  | Wire Cable                            | 1             |      |
| 29   | 209111  | Protective Ring For Cylinder          | 2             |      |
| 30   | 217056  | Hydraulic Cylinder                    | 2             |      |
| 31   | 209015  | Slider Block                          | 16            |      |
| 32   | 206046A | Arm Lock Bar (left)                   | 2             |      |
| 33   | 206050A | Spring                                | 4             |      |
| 34   | 217044  | Arm Lock                              | 4             |      |
| 35   | 206032  | Snap Ring φ25                         | 4             |      |

# IX. Parts List For Weaver Lift Model W-9SD

| Item         Part#         Description         w-9SD           36         206036         Hair Pin φ6*40         4           37         209016         Carriage Plastic Cover         2           38         206046B         Arm Lock Bar (right)         2           39         206136         Arm Pin assembly         4           40         206048         Socket Bolt         12           41         206049         Moon Gear         4 |
|--|
| 36       206036       Hair Pin φ6*40       4         37       209016       Carriage Plastic Cover       2         38       206046B       Arm Lock Bar (right)       2         39       206136       Arm Pin assembly       4         39A       520023       Snap Ring       4         40       206048       Socket Bolt       12         41       206049       Moon Gear       4   |
| 37       209016       Carriage Plastic Cover       2         38       206046B       Arm Lock Bar (right)       2         39       206136       Arm Pin assembly       4         39A       520023       Snap Ring       4         40       206048       Socket Bolt       12         41       206049       Moon Gear       4  |
| 38         206046B         Arm Lock Bar (right)         2           39         206136         Arm Pin assembly         4           39A         520023         Snap Ring         4           40         206048         Socket Bolt         12           41         206049         Moon Gear         4   |
| 39       206136       Arm Pin assembly       4         39A       520023       Snap Ring       4         40       206048       Socket Bolt       12         41       206049       Moon Gear       4   |
| 39A         520023         Snap Ring         4           40         206048         Socket Bolt         12           41         206049         Moon Gear         4  |
| 40         206048         Socket Bolt         12           41         206049         Moon Gear         4   |
| 41 206049 Moon Gear 4  |
|  |
| 42 209019 Screw 12   |
| 43209018Protective Rubber2   |
| 44 206111A Carriage 2  |
| 45206183Outer Arm - Front right (drop-in)1   |
| 45A 201048 Middle Arm – Front right assembly 1   |
| 45B 201049A Inner Arm - Front right assembly 1   |
| 46206182Outer Arm - Front left (drop-in)1  |
| 46A     201048     Middle Arm – Front left assembly     1  |
| 46B 201049A Inner Arm - Front left assembly 1  |
| 47 206168 Lifting Arm - Rear (Drop-in) 2   |
| 47A 206162 Outer Arm - Rear 2  |
| 47B 203047A Inner Arm - Rear 2   |
| 48 209039 Lock washer 32   |
| 49         201046A         Rubber Pad Assy.         4  |
| 49A         420138         Socket bolt         4   |
| 49B 209134 Rubber Pad 4  |
| 49C680030CRubber Pad Frame4  |
| 50         209034         Lock washer         12   |
| 51 201002 Hex Bolt 8   |
| 52 206025A Foam Cushion with handle 1  |
| 53         201005         Split Pin         2  |
| 54 206129 Control Bar 1  |
| 55 206025C Connecting Pin for Control Bar 2  |
| 56         206013         Limit Switch         1   |
| 57         206011         Cup Head Bolt         2  |
| 58   206042   Control Bar Support Bracket   2  |
| 59         206041         Hex Bolt         4   |
| 60         206023         Self locking Nut         12  |
| 61 209056 Self locking Nut 10  |
| 62 206016 Connecting Bracket 1   |

| Item | Part#   | Description                    | Qty.<br>W-9SD | Note |
|------|---------|--------------------------------|---------------|------|
| 63   | 206018B | Top Beam assembly              | 2             |      |
| 64   | 206028  | Cup Head Bolt                  | 4             |      |
| 65   | 206029  | Retainer                       | 2             |      |
| 66   | 206021  | Pin For Pulley                 | 2             |      |
| 67   | 206022  | Top Pulley Tube                | 2             |      |
| 68   | 206024  | Hex Bolt                       | 8             |      |
| 69   | 206010A | Safety Pulley Bracket assembly | 1             |      |
| 70   | 206085  | Protective Cover               | 2             |      |
| 71   | 206084  | Protective Cover               | 2             |      |
| 72   | 206083  | Protective Cover               | 2             |      |
| 73   | 640050  | Socket bolt                    | 4             |      |
| 74   | 206008C | Safety Pulley Bracket assembly | 1             |      |
| 75   | 206026A | Offside Safety Lock assembly   | 1             |      |
| 76   | 206080  | Protective Cover(L=1565mm)     | 2             |      |
| 77   | 206079  | Cup Head Bolt                  | 14            |      |
| 77A  | 206110  | Cup Head Bolt                  | 6             |      |
| 78   | 206030C | Offside Inner column assembly  | 1             |      |
| 79   | 209051B | Stackable Adapter (1.5")       | 4             |      |
| 80   | 209052B | Stackable Adapter (2.5")       | 4             |      |
| 81   | 209053B | Stackable Adapter assembly(5") | 4             |      |
| 82   | 209059  | Anchor Bolt                    | 10            |      |
| 83   | 217048  | Retainer                       | 2             |      |
| 84   | 209066  | Hex Nut                        | 8             |      |

|            |                |                          | 01            |      |
|------------|----------------|--------------------------|---------------|------|
| Item       | Part#          | Description              | Qty.<br>W-9SD | Note |
| 85         | 206064A        | Cable                    | 2             |      |
| 86         | 206073         | T fitting for power unit | 1             |      |
| 87         | 206074A        | Oil hose                 | 1             |      |
| 88         | 209064         | Straight Fitting         | 2             |      |
| 89         | 206062         | Straight Fitting         | 2             |      |
| 90         | 233009         | Pipe Fitting             | 2             |      |
| 91         | 206061C        | Oil Hose                 | 1             |      |
| 92         | 260149         | Safety cable L=7450mm    | 1             |      |
| 93         | 420045         | Washer φ6                | 14            |      |
| 94         | 209149         | Lock washer φ6           | 4             |      |
| 95         | 206504         | Parts box                | 1             |      |
| 96         | 620065         | Shim (2mm)               | 10            |      |
| 97         | 201090         | Shim (1mm)               | 10            |      |
| 98         | 206154         | Toe guard- Rear          | 2             |      |
| arts for l | hydraulic cyli | nder                     | 1             | 1    |
| 30-1       | 209069         | O-Ring                   | 2             |      |
| 30-2       | 209070         | Bleeding Plug            | 2             |      |
| 30-3       | 209071         | Support Ring             | 2             |      |
| 30-4       | 209072         | Y-Ring                   | 2             |      |
| 30-5       | 209073         | O-Ring                   | 2             |      |
| 30-6       | 209074         | Piston                   | 2             |      |
| 30-7       | 209075         | O-Ring                   | 2             |      |
| 30-8       | 217076         | Piston Rod               | 2             |      |
| 30-9       | 209077         | Piston Rod Fitting       | 2             |      |
| 30-10      | 209078         | Dust Ring                | 2             |      |
| 30-11      | 209079         | Head Cap                 | 2             |      |
| 30-12      | 209080         | O-Ring                   | 2             |      |
| 30-13      | 209081A        | Bore Weldment            | 2             |      |

#### **Parts For Power Unit**

| Item | Part#     |                               | QTY   | NOTE |
|------|-----------|-------------------------------|-------|------|
|      |           | Description                   | W-9SD |      |
| 1    | 71150019  | AMGO Label                    | 1     |      |
| 2    | 81400300  | Cross half round head screw   | 2     |      |
| 3    | 81400363  | Motor connecting shaft        | 1     |      |
| 4    | 81400362  | Manifold block                | 1     |      |
| 5    | 10209149  | Washer φ6                     | 4     |      |
| 6    | 81400276  | Inner hexagon iron plug       | 1     |      |
| 7    | 81400259  | Red plastic plug              | 1     |      |
| 8    | 85090142  | Hex bolt                      | 4     |      |
| 9    | 81400292  | Gear pump                     | 1     |      |
| 10   | 81400294  | Release valve                 | 1     |      |
| 11   | 10209034  | Washer φ8                     | 2     |      |
| 12   | 814000295 | Hex bolt                      | 2     |      |
| 13   | 81400365  | O-ring                        | 1     |      |
| 14   | 10209152  | belt                          | 1     |      |
| 15   | 85090167  | Magnet                        | 1     |      |
| 16   | 81400290  | Filter net                    | 2     |      |
| 17   | 81400453  | Aluminum alloy motor          | 1     |      |
| 18   | 41030055  | AC contractor                 | 1     |      |
| 19   | 81400088  | Running capacitance           | 2     |      |
| 20   | 81400130  | Starting capacitance          | 2     |      |
| 21   | 420148    | Cup Head Bolt With Washer     | 6     |      |
| 22   | 81400208  | Cover of Motor Terminal Box   | 1     |      |
| 23   | 10420070  | Push Button                   | 1     |      |
| 24   | 81400296  | Screw nut                     | 1     |      |
| 25   | 81400459  | Throttle valve core           | 1     |      |
| 26   | 10209069  | O-rings                       | 1     |      |
| 27   | 81400266  | Relief valve                  | 1     |      |
| 28   | 81400284  | Inner hexagon iron plug       | 1     |      |
| 29   | 81400452  | Elastic shaft pin             | 1     |      |
| 30   | 81400451  | Relief handle                 | 1     |      |
| 31   | 10209020  | Plastic ball with rack handle | 1     |      |
| 32   | 81400125  | Relief screw nut              | 1     |      |
| 33   | 81400124  | Relief valve spacer           | 1     |      |
| 34   | 81400450  | Valve seat( high)             | 1     |      |
| 35   | 81400443  | Relief valve                  | 1     |      |
| 36   | 81400267  | Checking valve                | 1     |      |
| 37   | 81400288  | Oil suction hose              | 1     |      |
| 38   | 81400289  | Oil return hose               | 1     |      |
| 39   | 81400364  | Hose clamp(stainless steel)   | 1     |      |
| 40   | 81400364  | Oil tank cover                | 1     |      |
| 41   | 81400275  | Oil tank                      | 1     |      |