



OP 115 D25K/2
OP 115 D30K/2

20 030
20 031



! WARNING

Prior to operating this pump, be sure to read this operation manual for safety. After reading the manual, please keep it at hand for your quick reference.

OPERATION MANUAL

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1.

1. Safety instructions



Please observe: This operation manual contains all necessary information. Please read carefully to avoid damages and faults. All Rapid pieces of equipment are checked carefully before delivery for their perfect composition and function. In case of improper use all rights to claim under guarantee are void.



Make sure that only skilled staff is working with this device in order to prevent damages and accidents caused by improper use.



Environmental conditions i.e. humidity, low temperatures, sunlight and contamination may damage device.



Before using the device make sure that it is not contaminated to prevent any injury. Avoid any contamination of device as well as of environment. In case of any contamination during operation of device take care that it is immediately and professionally removed.



Always wear safety cloths respecting the applicable regulations for accident prevention



Only use this device conforming to its purpose and function. Improper use can cause severe injuries.



Caution – moving parts, sharp edges, hot machine parts or exhausting steam can cause severe injuries.



Before use always check the device for damages and leaks. In case of any damage or leak make sure that it is repaired professionally before use. Operation of defect device may cause severe injuries.



In case of any sign of damage or malfunction during operation of device stop device immediately to prevent injuries. Before next use make sure that the device professionally repaired.



Take care that in case of an accident all emergency measures are on hand

2. General advice

For Safe Use of Machine

WARNING

In order to use the machine safely, the following alert marks are used to give you cautions. Be sure to observe the cautions to prevent injuries and damages on properties.

This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

WARNING

This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

2.1 EQUIPMENT MISUSE HAZARD

- 2.1.1 Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.
- 2.1.2 This equipment is for professional use only.
- 2.1.3 Read all instruction manuals, tags, and labels before you operate this equipment.
- 2.1.4 Use the equipment only for its intended purpose. If you are not sure, call your distributor.
- 2.1.5 Do not modify this equipment.
- 2.1.6 Check equipment daily. Repair or replace worn or damaged parts immediately.
- 2.1.7 Do not exceed the maximum working pressure of the lowest rated component in your system.
This equipment has a 650 psi (4.5 MPa, 45 bar, 45 Kg/Cm2) maximum working pressure at 130 psi (0.9 MPa, 9 bar, 9 Kg/Cm2) maximum incoming air pressure.
- 2.1.8 Handle hoses carefully. Do not pull on hoses to move equipment.
- 2.1.9 Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces.
- 2.1.10 Do not move or lift pressurized equipment.
- 2.1.11 Comply with all applicable local, state, and national fire, electrical, and safety regulations.

2.2 INJECTION HAZARD

- 2.2.1 Fluid from the dispensing valve, leaks, or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation.
Fluid splashed in the eyes or on the skin can also cause serious injury.
- 2.2.2 Fluid injected into the skin might look like just a cut, but it is a serious injury. Get immediate medical attention.
- 2.2.3 Do not point the dispensing valve at anyone or at any part of the body.
- 2.2.4 Do not put your head or fingers over the end of the dispensing valve.
- 2.2.5 Do not stop or deflect leaks with your hand, body, glove or rag.
- 2.2.6 Use only extensions and no-drip tips which are designed for use with your dispensing valve.
- 2.2.7 Do not use low pressure flexible nozzle with this equipment.
- 2.2.8 Follow the Pressure Relief Procedure on page 7 if the grease fitting coupler clogs and before you clean or service this equipment.
- 2.2.9 Tighten all fluid connections before you operate this equipment.
- 2.2.10 Check the hoses, tubes, and couplings daily. Replace worn or damaged parts immediately. Do not repair high pressure couplings; you must replace the entire hose.

2.3 MOVING PARTS HAZARD

- 2.3.1 Moving parts, such as air motor piston, can pinch or amputate your fingers.
- 2.3.2 Do not operate the pump with the air motor plates removed.
- 2.3.3 Keep clear of all moving parts when you start or operate the pump.
- 2.3.4 Before you service this equipment, follow the Pressure Relief Procedure on page 5 to prevent the equipment from starting unexpectedly.

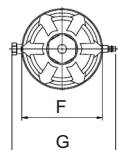
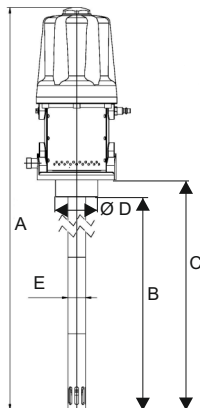
- 2.4 After the end of daily work, at night, and on holidays, be sure to shut off the supply air to this equipment to release the gun so as to bleed the internal pressure.

Any secondary accident such as pollution of installation, due to pump operation driven by worn-away packing or hose without shutting off the supply air, shall be attributable to the user's responsibility.

- 2.5 When replacing any part at maintenance, be sure to stop the air supply to the equipment to avoid having fingers nipped because of a malfunction.

3. Technical data

Maximum working pressure	45kg/cm ² (650 psi, 4,5MPa, 45 bar)
Ratio	5:1
Air operating range	4-9 kg/cm ² (60-130 psi, 0,4-0,9 Mpa, 4-9 bar)
Air consumption	0,638 m ³ /min (22,8 cfm) bei 0,95 l/min (0,25 gpm), bei 7kg/cm ² (0,7 Mpa, 7bar)
Max. recommended pump speed	76 Upm bei 0,561 m ³ /min (0,82 liter/min)
Wetted parts	Stahl, Messing, Aluminium, NBR, PU
Sound pressure level (At distance of 1m)	77,8 dB(A)
Sound pressure level (acc. with ISO 9614-2)	85,6 dB(A)



Pump	OP 115 D25/K	OP 115 D30/K
Art.No.	20 030	20 031
A	611	611
B	940	270
C	971	301
D	76	76
E	54	54
F	145	145
G	190	190

4. Description

-Contents of package-

The main devices and the accessories are packed in same case.

Open the case and check if the devices are not damaged and if accessories are all contained in the package.

3. APPLICATION

This machine is a portable type lubricator that is indispensable for oil lubrication for machines and vehicles. This lubricator cannot be used for grease lubrication.

The applicable oil is limited to a type of ISO NO.140 or less in the normal operating conditions.

5. Assembling / Installation

5.1 PREPARATIONS BEFORE OPERATION

5.1.1 Use the anchors to fix the wall mount base on the wall , then use the additional screw to fix the machine on the wall mount base.(Fig. 1)

5.1.2 Connect the oil hose and the oil gun to the discharge port of the pump.

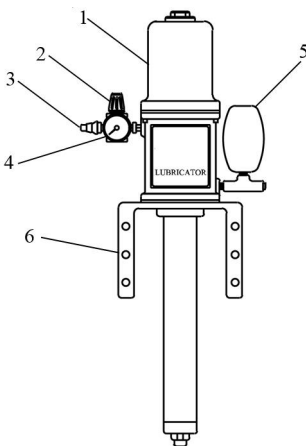
5.1.3 When the air coupler is connected to the pump, the pump will be operated for a while, and the pump and hose will be filled with oil. After that, the pump operation will stop.

The first applied oil includes the internal air of the pump. This is not a good condition. Obtain a perfect condition by the next operation. First press the trigger on the oil gun for several times and operate the pump until oil output smooth.

At this time, use the small can to catch the flowed out oil, and dispose of the discharged oil (Fig. 2)

The oil in which air is mixed is cloudy in white.

6. Spare parts and accessories



No.	Part No.	Descriptions	Q'ty
1	JL-9405-Pump	Pump Ass'y	1
2	P-001	Air Regulator With Gauge	1
*3	AG-31	Air Coupler	1
*4	AG-30	Gauge	1
5	AO-33	Oil Stabilizer	1
6	JL-9405-BASE	Wall Mount Base	

*No.3 & No.4 are including in No.2.

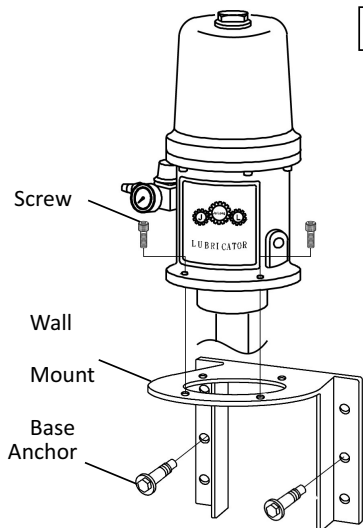


Fig.1



Fig.2

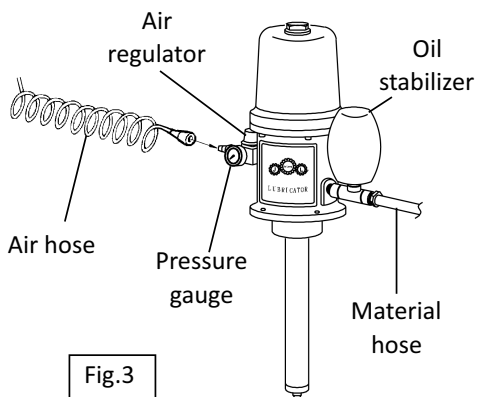


Fig.3

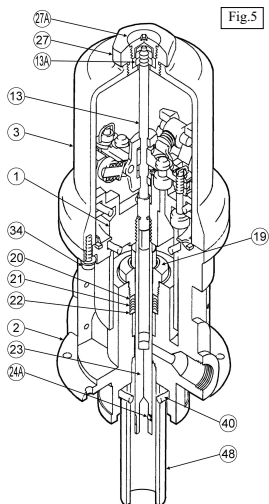


Fig.5

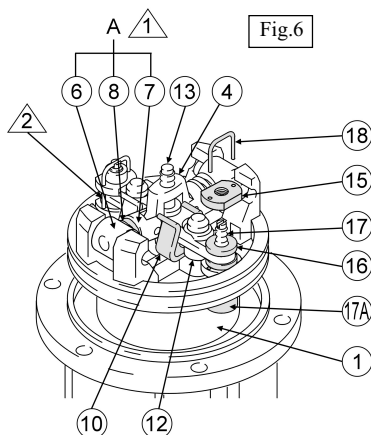
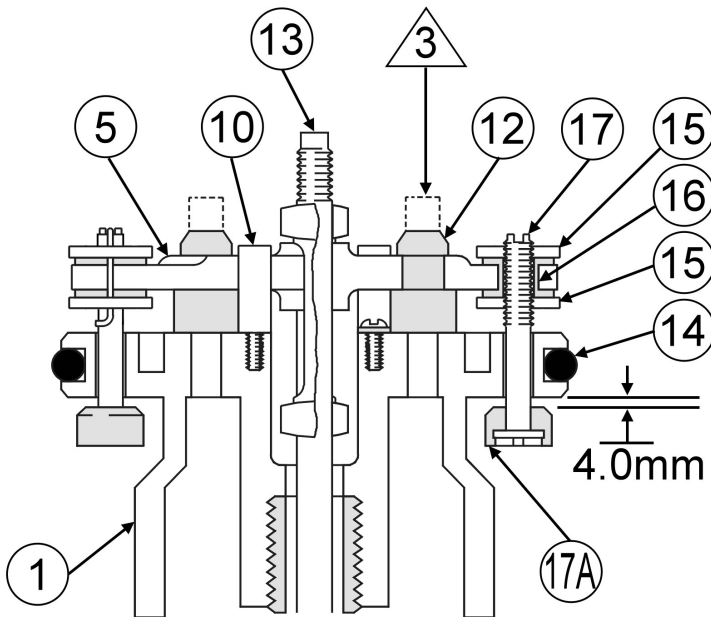


Fig.6

- 1 Push Toggle (A) in and then up.
- 2 Turn Wires up.

Fig.7



Cutaway View

△ 3 Cut off tops of rubber valve as indicated by dotted lines.

* The replacements for these parts are available in Air Motor Repair Kit . Purchase the kit separately.

◆ The replacements for these parts are available in Lower Pump Repair Kit . Purchase the kit separately.



Air motor				Air motor			
Ref.No.	Part No.	Description	Q'ty	Ref.No.	Part No.	Description	Q'ty
1	AG-01	Piston	1	34	SCR262	Bolt	6
2	AO-02	Air motor base	1	34A	SCR261	Bolt	4
2A	AG-02A	Warning paper	2	35	SCR856	Bolt	12
2B	AG-02B	Silencer	1	57A	AG-57A	Nameplate	2
3	AG-03	Cylinder	1	Lower pump			
4	AG-04	Shuttle	1	36	WAS341	Roll pin	2
5	AG-05	Air valve bar	1	37	AO-20L-37	Coupling	1
6	AG-06	Rocker arm	2	◇38	SB-02	Steel ball	1
7	AG-07	Toggle arm	2	39	AO-20L-39	Valve seat	1
8	AG-08	Spring	2	39A	AG-48A	Gasket (only use in ratio 5:1 pump)	1
9	AG-09	Toggle pin	2	◇40	AO-20L-40	O-Ring	1
10	AG-10	Spring clip	2	41	AO-20L-41	Piston	1
11	WAS200	Washer	2	42	AO-20L-42	Guide	2
11A	SCR546	Screw	2	◇43	AO-20L-43	Packing	1
*12	AG-12	Rubber valve	2	44	AO-20L-44	Roll pin	1
13	AG-13	Trip rod	1	45	AO-20L-45	One-way valve	1
13A	NUT120	Nut	2	46	SB-02	Steel ball	1
*14	AG-14	O-Ring	1	47	AO-20L-47	Valve seat	1
*15	AG-15	Adjusting nut	4	47A	AO-20L-47A	O-Ring (only use in ratio 16:1 pump)	1
*16	AG-16	Robber grommet	2	48	AO-20L-48	Valve fixer	1
*17	AG-17	Stem valve	2	49	JL-808L-049	Cylinder tube	1
*17A	AG-17A	Valve seal	2				
*18	AG-18	Lock wire	2				
19	AG-19	Throat packing nut	1				
20	AG-20	Bearing	1				
*21	AG-21	Packing	4				
22	AG-22	Guide	1				
23	AG-23	Air piston tube	1				
23A	AG-23A	Copper gasket	1				
24	AO-20L-24	Connecting rod	1				
24A	WAS340	Roll pin	1				
25	AG-25	O-Ring	1				
*26	AG-26	O-Ring	1				
27	AG-27	Cylinder cap nut	1				
27A	AG-27A	O-Ring	1				
27B	AG-27B	Nut	1				
27C	AG-27C	O-Ring	1				
28	AG-28	Coupler	1				
29	AG-29	Air regulator	1				
30	AG-30	Air pressure gauge	1				
31	AG-31	Quick coupler	1				
32	AO-20L-32	Coupler	2				
32A	AO-20L-32A	Coupler	1				
32B	AO-20L-32B	Tee way coupler	1				
33	AO-20L-33	Oil stabilizer	1				

7. Operation

7.1 Warning

7.1.1 After the end of daily work, at night, and on holidays, be sure to shut off the supply air to this equipment to release the gun so as to bleed the internal pressure.

Any secondary accident such as pollution of installation, due to pump operation driven by worn-away packing or hose without shutting off the supply air, shall be attributable to the user's responsibility.

7.1.2 When replacing any part at maintenance, be sure to stop the air supply to the equipment to avoid having fingers nipped because of a malfunction.

7.1.3 MOVING PARTS HAZARD

Moving parts, such as air motor piston, can pinch or amputate your fingers.

Do not operate the pump with the air motor plates removed.

Keep clear of all moving parts when you start or operate the pump.

Before you service this equipment, follow the Pressure Relief Procedure on page 5 to prevent the equipment from starting unexpectedly.

7.2 HOW TO OPERATE THE EQUIPMENT

An air regulator permits adjusting the supply air pressure to the pump and reducing unnecessary pump motion, thereby improving the work efficiency and extending the life of the pump.(Fig. 3)

When the knob of the air regulator is turned clockwise, the air pressure will be increased (the indicator of the pressure gauge gradually goes from " 0" to a larger number). When the knob is turned counterclockwise, the air pressure will be reduce (the indicator of the pressure gauge goes back to " 0").

Thread the air line into Air coupler.

If use Air Pressure Regulator, set air pressure within 4-9 kg/cm² (60-130 psi) and will get 20-45 kg/cm² (300-650 psi) fluid output pressure.

Press the oil gun trigger to supply oil to the oil tank.

The pump will stop automatically when the resultant force at two terminals of pump is in equilibrium.

If your air line system doesn't set oilier for lubricating air. For daily, manual lubrication, disconnect the quick air coupler, place about 15 drops of light machine oil in the air inlet, reconnect the hose and turn on the air supply to blow oil into the motor.

Always shut off the supply air of the pump and release all pressure in system before disconnecting or servicing any parts of system. At reassemble, be sure to tighten all threaded connections securely.

8. Maintenance and trouble shooting

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the Pressure Relief Procedure MOVING PARTS HAZARD

Never operate the pump with the warning plate or the identification plate removed. These plates protect your fingers from pinching or amputation by moving parts in the air motor.

Relieve pressure before you check or service any system equipment.

Gasoline is a high-volatility material. Do not use any gasoline to clean the pump in any case, otherwise it may cause ignition or explosion.

8.1 Lower Pump Service

8.1.1 Relieve the pressure before you proceed.

8.1.2 Be sure you have all necessary parts on hand before you start. If using a repair kit, use all the parts in the kit for the best results.

- 8.1.3 Lower Pump Repair Kit is available. Parts include in the kit are marked with a diamond in the parts drawing and list.
- 8.1.4 Disconnect the air connection hose, material hose, etc. Remove the pump from its mounting.
- 8.1.5 Fix the air motor base (02) in a vise.
- 8.1.6 Use pipe wrench to screw oil tube (49) off of air motor base.
- 8.1.7 Use a hammer and punch to remove roll pin (24A) from air piston tube (23) then screw connecting (24) out of air piston tube (23).
- 8.1.8 Use wrench screw piston (41) out of coupling (37) and remove guide (42), valve seat (39) and steel ball (38).
- 8.1.9 Clean all parts and inspect them for wear or damage. Replace parts as necessary.
- 8.1.10 Lubricate all parts with light, water-resistant grease and reassemble the pump.

8.2. Air Motor Service

Disassembly

- 8.2.1 Be sure you have all necessary parts on hand before you start. If using a repair kit, use all the parts in the kit for the best results.
- 8.2.2 Air Motor Repair Kit is available. Parts include in the kit are marked with a star in the parts drawing and list.
- 8.2.3 Clamp air motor base (2) in a vise. Unscrew cylinder cap nut (27) and remove nut (27A).
- 8.2.4 Pull trip rod (13) up, grip trip rod (13) with padded pliers and screw nut (13A) out of rod. Remove cylinder cap nut (27) and use a nut (5/16"-18UNC) screw in trip rod (13).
- 8.2.5 Remove Screw (34) holding cylinder (3) to the base and carefully pull cylinder (3) straight up off piston (1). See Fig. 5.
- 8.2.6 Press trip rod (13) push down on shuttle (4) to snap the toggle arm (7) down.
- 8.2.7 Move lock wire (18) from adjusting nut (15), screw the top nuts of adjusting nut (15) off and screw stem valve (17) off rubber grommets (16) and bottom nuts of adjusting nut (15).
- 8.2.8 Press trip rod (13) and put a screwdriver under the toggle arm (7), lever it up slowly and carefully.
- 8.2.9 Pull piston (1) up out of air motor base (2), remove throat packing nut (19) and take out the bearing (20), packing (21) and guide (22).
- 8.2.10 Clean all the parts carefully in a compatible solvent, and inspect for wear or damage. Use all the repair kit parts during reassembly, and replace other parts as necessary.
- 8.2.11 Check the polished surfaces of the piston (1), air piston tube (23), and cylinder (3) wall for scratches or wear. A scored rod causes premature throat seal wear and leaking.

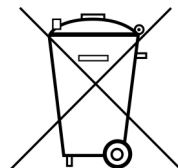
8.3 Reassembly

- 8.3.1 Lubricate all parts with light, water-resistant grease.
- 8.3.2 Install the new throat seal, Lips facing down. Screw the throat packing nut (19) in to the base.
- 8.3.3 Slide the air piston tube down through the throat, and lower the piston in to the base. Be sure the O-rings are in place.
- 8.3.4 Pull the rubber valve (12) into the air valve bar (5), and clip off the top parts shown with dotted lines in Fig. 9.
- 8.3.5 Install the transfer valve rubber grommets (16), and reassemble the valve mechanism. When you install the lock wires (18) in the adjusting nuts (15), to adjust the transfer valve so there is 4.0 mm clearance between the valve seal (17A) and seat when it is open. See Fig 6. Snap the toggles arm (7) to the up position.
- 8.3.6 Reassemble the air motor, and assemble to the lower pump. Torque the cylinder tube to the base. Before you install the air motor plate, tighten the throat packing nut (19) snugly; do not over tighten it.
- 8.3.7 Before you remount the pump, connect an air hose, and run the pump slowly, at about 40 psi (276 kPa, 2.8 bar), to see that it operates smoothly.

Pr o b l e m	C a u s e	S o l u t i o n
Pump fails to operate	Inadequate air supply pressure or restricted air lines.	Increase air supply and/or clear restriction.
	Closed or clogged pump valves.	Open and/or clean.
	Clogged fluid line, hose, valve, or other accessory.	Relief Pressure. Clean obstruction.
	Damaged air motor.	Assess damage, and service air motor.
The pump is operated but no fluid comes out	Exhausted fluid supply.	Refill fluid.
Continuous air exhaust	Worn or damaged air motor gasket or seal.	Assess damage, and service air motor.
Erratic pump operation	Exhausted fluid supply.	Refill fluid.
	Worn pump seals.	Replace.

9. Disposal

- 9.1 Completely empty all parts of the equipment (hoses, pumps , tanks , etc) and given case blown out with air .
- 9.2 Dangerous parts of the appliance must be made unusable f.e. perforate pressure vessel , deform hose reels , etc.
- 9.3 Rubber , metals, glass ect. must be separated .
Dispose material fractions according to the local laws and regulations .



YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

The pertinent regulations for the registration, setting up and operation of equipment for dealing with materials hazardous to water must always be complied with by the user.

10. Warranty

- 10.1 In case of insufficient maintenance, faults on operation, use of not adequate spare parts or attachments all liabilities and rights of claim under guarantee are void.
- 10.2 The manufacturer is not liable for improper use of the container or ignoring the safety instructions.
- 10.3 Technical modifications are subject to change without announcement.