

OPERATOR'S MANUAL

DC0450L5XXXXXXX

INCLUDING: OPERATION, INSTALLATION AND MAINTENANCE.

RELEASED: 2-15-10
(REV. 01)

INCLUDE MANUALS: AF0450XXXXXX-XX-X Pump (97999- 1052), & S-632 General Information (pn 97999-624).

4 1/4" AIR MOTOR
50:1 RATIO
4 STROKE

DC0450L5XXXXXXX BASIC GREASE PUMP PACKAGE



**READ THIS MANUAL CAREFULLY BEFORE INSTALLING,
OPERATING OR SERVICING THIS EQUIPMENT.**

It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.

SERVICE KITS

- Use only genuine ARO® replacement parts to assure compatible pressure rating and longest service life.
- **637489** for repair of air motor section.
- **637485** for packing.

MODEL DESCRIPTION CHART

DC 04 50 L 5 XXXXX XX X	
Package DC - Drum Cover	
Air Motor Size 4 - 4 1/4"	
Pump Ratio 50 - 50:1	
Check Type / Wetted Materials L - Primer Piston (inlet) / Ball (outlet), Carbon Steel, for Grease Pump	
Container Suitability 55 Gallon (400 lbs)	
Lower Pump End Options Refer to pump model operator's manual	
Follower Assembly 00 - None	
Package Option 0 - None 1 - Integrated ball valve regulator on pump	

GENERAL DESCRIPTION

This model is designed for chassis lubrication. The model covered by this manual includes an outlet swivel, material supply hoses and airline lubricator. Material dispensing accessories and supply lines and fittings must be capable of withstanding pressures developed by pump.

The ARO 50:1 ratio basic pump assembly consists of a 4 1/4" air motor, and ball-check lower pump end.

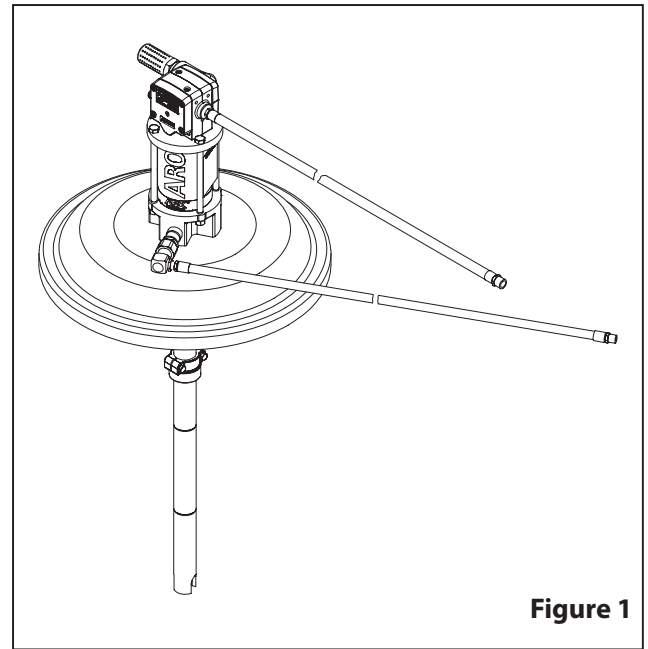


Figure 1

AIR AND LUBE REQUIREMENTS

WARNING DO NOT EXCEED MAXIMUM INLET AIR PRESSURE OF 150 PSI (10 BAR). OPERATING PUMP AT HIGHER PRESSURE MAY CAUSE PUMP DAMAGE AND/OR PERSONAL INJURY AND/OR PROPERTY DAMAGE.

- Excessive air pressure will shorten the life of the pump.
- For maximum operating efficiency. The following air supply specification should be maintained to this pump.
- AIR PRESSURE — up to 150 PS.I (10 bar)
- AIR FILTRATION — 50 mlcron
- LUBRICATED AIR SUPPLY
- AIR INLET SIZE — 1/2" NPTF
- Filtered and oiled air will allow the pump to operate more efficiently and yield a longer life to operating parts and mechanisms.
- Lack of or an excessive amount of lubrication will affect the performance and life of this pump. Use only recommended lubricants.
- DAILY Fill air line lubricator reservoir with a good grade of S.A.E. NO. 90W non-detergent gear oil, adjust to 1 to 2 drops per minute.

- It pump is to be inoperative for more man a few hours at a time, disconnect air supply and relieve all pressure from the system.

It is recommended that an oiler be installed in the air line as close as possible to the pump. This increases the service life of the pump by reducing wear of the air motor's internal parts.

OPERATING INSTRUCTIONS

Be sure material hose, lines and other components are able to withstand pressure developed by pumps.

1. When a pump is installed and ready to operate: Connect air supply to air motor inlet. Regulate air pressure from p.s.i.g (2.07 bar) to 50 p.s.i.g (3.4 bar). Allow pump to cycle slowly to prime with material and bleed all air from system.

MAINTENANCE

If the pump is to be inoperative for a lengthy period of time (a few hours), disconnect air and relieve all pressure from system. Periodically flush pump with a solvent that is compatible with material being pumped.

Disassembly should be done on a clean work bench with clean cloths to keep parts clean.

If replacement parts are necessary, consult drawings containing parts for identification.

Before reassembling, lubricate parts where required. When assembling "O" rings or parts adjacent to "O" rings, care must be exercised to prevent damage to "O" rings and "O" ring groove surfaces.

INSTALLATION

Remove pump from packaging material and install and secure pump to cover, bung or other mounting accessory as ordered. See figure 2 for view of complete assembly.

1. Before connecting pump, first blow out material line with air.
2. After the system is hooked up, pump a small amount of material through the line. This material should be discarded. (Do this to clear any foreign material out of lines).

TROUBLE-SHOOTING

Should pump operate, but dispense little or no material, check for:

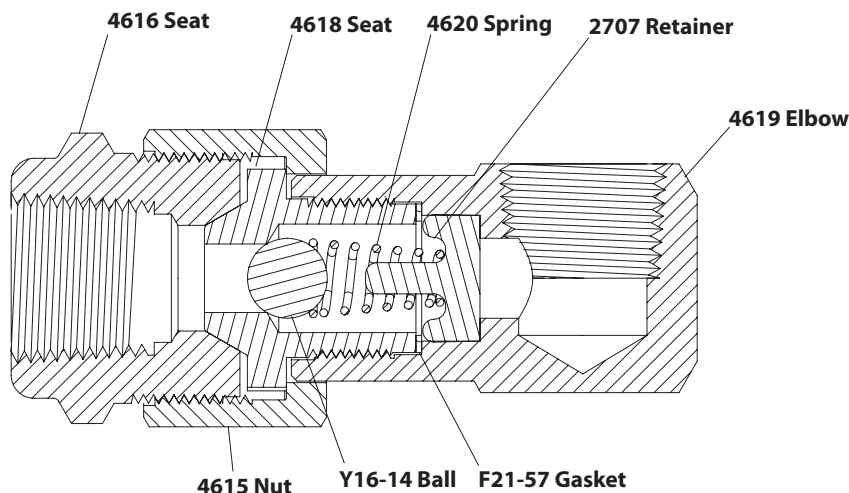
- Inadequate supply of material or possible malfunctioning of 65872 Foot Valve which would prevent material from feeding Into suction tube.
- Improper feeding of lubricant into pump. This condition is known as 'channeling' and is often indicated by light-colored frothy grease coming from control handle. Also, grease in container will not be level, but will cling to side of container and slope down to suction tube inlet. It usually occurs at cool temperatures and can be corrected by using follower plate.
- Dirt or foreign matter in 65872 Foot Valve or other cause which may be preventing it from closing on downstroke of piston.

If unit should fail to operate, the following procedure will be helpful in determining the cause:

- Check air pressure at pump to insure air line is not obstructed and air is being supplied to pump.
- Insufficient air is not the trouble, disconnect 310 Speed Coupler at pump and then detach Hose and Gun at 2453 Check Valve, **REMOVE SLOWLY AS PRESSURE MAY BE BUILT UP IN PUMP.** Hold rag at this point and apply air to pump. If pump now operates, there is obstruction in material line, reel, or control handle. It, however, pump will still not operate, consult local dealer.

Refer to AF0450LXXXXX-XX-X (pn 97999-1052) for pump details.

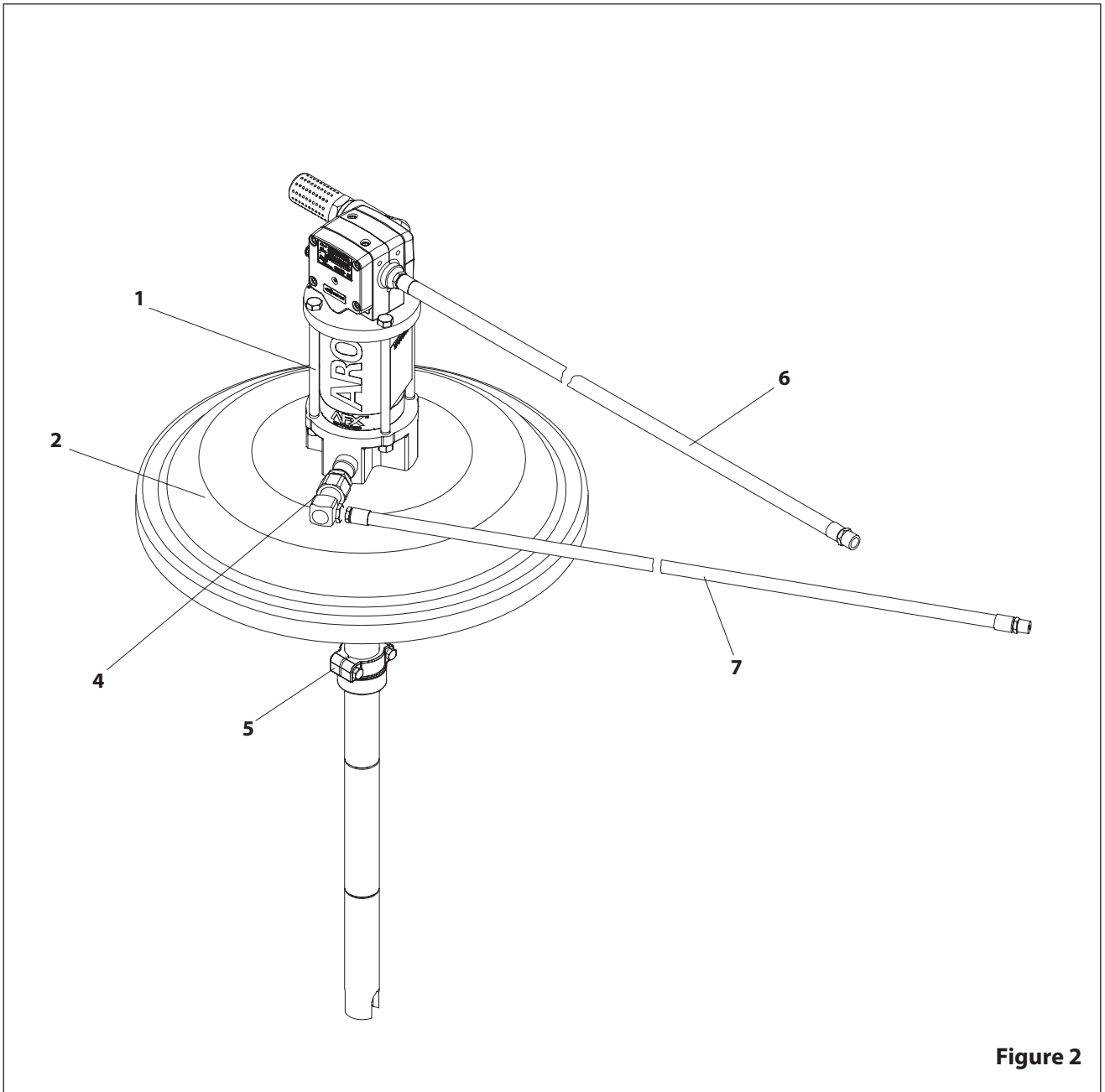
2453 CHECK VALVE PART LIST



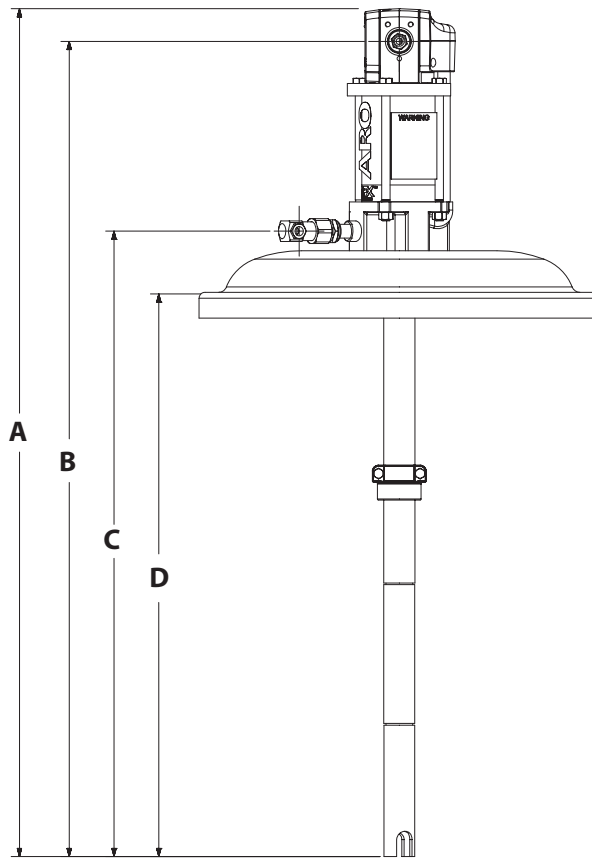
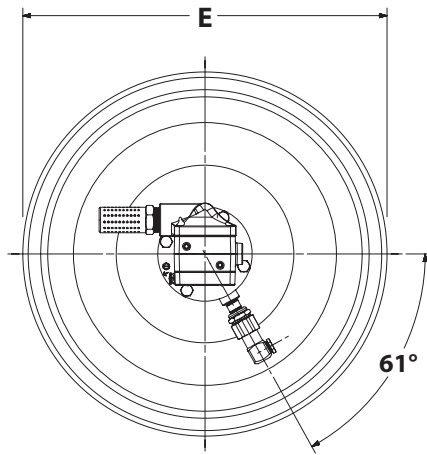
PARTS LIST / DC0450L5XXXXXX

Item	Description	Part no
1	Pump Assembly	AF0450L5XXXXX-X
2	Drum Cover Assembly	60898
3	Kit Assembly (includes 4, 5, 6 & 7)	61789
4	Union & Check Valve	2453

Item	Description	Part no
5	Bung Adapter	4148
6	Air Hose Assembly (1/2" i.d.)	621501-5
7	Material Hose Assembly (3/8" i.d.)	624401-08



DIMENSIONS



- A = 51.019 "
- B = 49.050 "
- C = 37.632 "
- D = 33.851 "
- E = 24.084 "
- (23.875" i.d.)

Figure 3