

OPERATOR'S MANUAL

INCLUDING: OPERATION, INSTALLATION & MAINTENANCE

612805

RELEASED:10-17-68
REVISED: 8-24-10
(REV.D) IPP/PSE

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

CHASSIS GREASE PUMP
400 LB. DRUM

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

SERVICE KITS

- 61268 for repair of Air Motor section.
- 61052 for repair of entire pump
- 65130 for repair of Base Packing
- Use ARO® replacement parts to assure compatible pressure rating.

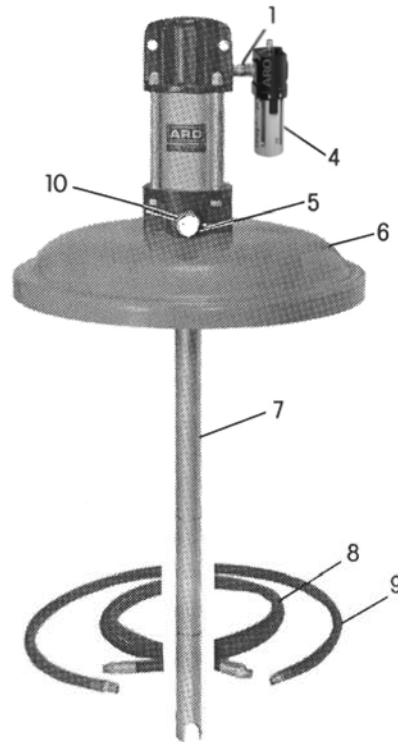
GENERAL DESCRIPTION

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 4 1/4" air motor, and ball-check lower pump end.

RATIO x REGULATED AIR PRESSURE TO AIR MOTOR = MAXIMUM FLUID PRESSURE

- The 50:1 ratio is an expression of the relationship between the air motor area and the lower pump end area. When 150 PSI (10 Bar) air pressure is supplied to the air motor, the lower pump end will develop a maximum of 7500 PSI (517 Bar) fluid pressure (at no flow)—as the fluid control is opened, the flow rate will increase as the air motor cycle rate increases to keep up with the demand.



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 P.S.I. (10 bar)
 - AIR FILTRATION — 50 micron
 - LUBRICATED AIR SUPPLY
 - AIR INLET SIZE — 1/2" NPTF

ACCESSORIES LIST

| REF. | DESCRIPTION | (SIZE) | PART NO. |
|------|--------------------------|--------|------------|
| 1 | Nipple..... | | Y27-154-C |
| 4 | Lubricator..... | | L36341-110 |
| 5 | Union & Check Valve..... | | 2453 |
| 6 | Drum Cover..... | | 60898 |
| 7 | Basic Pump★..... | | 662400-C |
| 8 | Material Hose..... | | 622401-8 |
| 9 | Air Hose..... | | 621501-5 |
| 10 | Nipple..... | | Y27-154-C |

Not Shown

| | | |
|----|---|------------|
| 11 | Bushing(Connects Check to Mat'l Hose) ... | Y45-306-C |
| 12 | Bung Adapter | 4148 |
| 13 | Screw | Y6-67-C(2) |
| 14 | Screw (Fastens Drum Cover to Pump)..... | Y6-63-C(4) |
| 15 | Washer | Y14-616(4) |

★SEE OPERATOR'S MANUAL

airpumping.co.uk

Unit 16, Upminster Trading Park, Warley St., Upminster, Essex, RM14 3PI, ENGLAND

ARO

IR Ingersoll Rand
Industrial Technologies

- 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.
- If pump is to be Inoperative for more than 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.

TROUBLE-SHOOTING

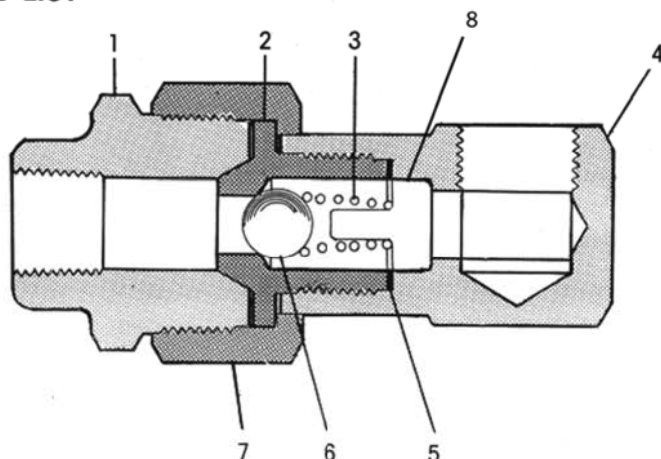
Should pump operate, but dispense little or no material, check for:

- ___ 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.
- ___ If 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. If, however, pump will still not operate, consult local dealer.

2453 CHECK VALVE PARTS LIST



| REF. | DESCRIPTION | (SIZE) | PART NO. |
|------|----------------|--------|----------|
| 1 | Seat | | 4616 |
| 2 | Seat | | 4618 |
| 3 | Spring | | 4620 |
| 4 | Elbow | | 4619 |
| 5 | Gasket | | F21-57 |
| 6 | Ball | | Y16-14 |
| 7 | Nut | | 4615 |
| 8 | Retainer | | 2707 |