

OPERATOR'S MANUAL

612721

INCLUDING: OPERATION, INSTALLATION & MAINTENANCE

ALSO INCLUDE MANUALS: 662400-C BASIC PUMP MANUAL, FORM 3637-2

RELEASED:10-17-68

REVISED:9-25-91

(REV.C) 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.

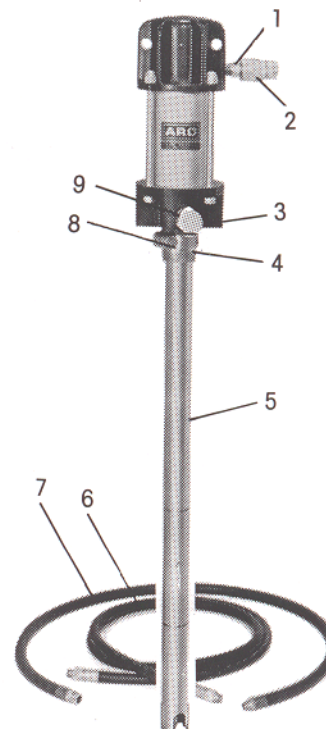
GENERAL DESCRIPTION

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	Connector		76561
2	Speed Coupler ★		310
3	Union & Check Valve		2453
4	Bung Adapter		4148
5	Basic Pump ★		662400-C
6	Material Hose		624401-08
7	Air Hose		622504-05
8	Screw		Y6-67-C(2)
9	Nipple		Y27-154-C

Not Shown

10 Bushing(Connects Check to Matl Hose) ... Y45-306-C

★ SEE OPERATOR'S MANUAL

THE ARO CORPORATION • ONE ARO CENTER • BRYAN, OHIO 43506-0151
PH: (419) 636-4242 • FAX (419) 636-2115

©1991 THE ARO CORPORATION • PRINTED IN U.S.A.



Part of worldwide Ingersoll-Rand

- 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.

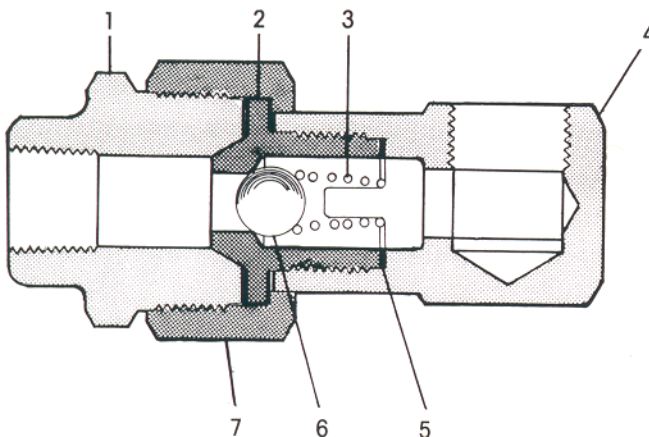
TROUBLE SHOOTING

- 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 Assembly		2479
5	Gasket		F21-57
6	Ball		Y16-14
7	Nut		4615



Part of worldwide Ingersoll-Rand

PN 97999-311