



THIS MANUAL COVERS:

662023-D SUPPLY PUMP 3" AIR MOTOR 50:1 RATIO 2 1/4" STROKE 400 LB. DRUM

**SERVICE KITS AVAILABLE
637021 (FOR LOWER PUMP END)
637066-B (FOR 66410 AIR MOTOR)**

GENERAL DESCRIPTION

These models are designed for high pressure delivery of high viscosity fluids such as chassis grease. The model covered by this manual includes a bung adapter, coupler, oiler, outlet swivel and material and air supply hoses. Material dispensing accessories and supply lines and fittings must be capable of withstanding pressure developed by pump.



WARNING: HIGH PRESSURE DEVICE

IMPROPER USAGE OF EQUIPMENT COULD RESULT IN SERIOUS INJURY. THE POSSIBILITY OF INJECTION INTO THE FLESH IS A POTENTIAL HAZARD. NEVER ALLOW ANY PART OF THE HUMAN BODY TO COME IN FRONT OF OR IN DIRECT CONTACT WITH THE MATERIAL OUTLET.

AN INJECTION INJURY CAN BE SERIOUS! IF INJECTION SHOULD OCCUR, CONTACT A QUALIFIED PHYSICIAN FOR IMMEDIATE TREATMENT OF SUCH INJURIES.

DO NOT EXCEED MAXIMUM WORKING PRESSURE OF 7,500 PSI (517 BAR) AT 150 (10 BAR) AIR INLET PRESSURE.

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



LOWER PUMP END

The 50:1 ratio is an expression of the relationship between the effective air motor area and the effective lower pump end area. When 150 P.S.I. (10 bar) of air pressure

is supplied to the air motor, the lower pump end will develop a maximum of 7,500 P.S.I. (517 bar) of 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.

SAFETY INSTRUCTIONS

Use ARO replacement parts to assure compatible pressure rating. Read All Warnings and Safety Instructions carefully before operation of this unit.

HEED ALL WARNINGS.

WARNING

1. **Components Rupture** — This unit is capable of producing high fluid pressure as stated on the pump model plate. To avoid component rupture and possible injury **do not exceed 75 cycles per minute or operate at an air inlet pressure greater than 150 P.S.I. (10 bar).**
2. **Servicing** — Before servicing, cleaning or removing any component, always disconnect or shut-off power source and carefully relieve all fluid pressure from the system.

CAUTION: When pumping, flushing or recirculating volatile solvent, the area must be adequately ventilated.

CAUTION: Materials and solvent being pumped must be compatible with the parts of the pump that become wetted when in contact with material or solvent. Wetted parts consist of the following: Carbon Steel and Thiokol Leather.

CAUTION: Keep solvents away from heat, sparks and open flames, keep containers closed when not in use.

WARNING:

PREVENT STATIC SPARKING if static sparking occurs, fire or explosion could result. Pump, dispensing valve, and containers must be grounded when handling flammable fluids such as solvents, paints, lacquers, etc. and wherever discharge of static electricity is a hazard.

Use grounded hoses (static wire) and be sure the object being serviced is grounded, if it can produce a static charge.

AIR AND LUBE REQUIREMENTS

Excessive air pressure will shorten the life of the pump. Failure to observe warnings may cause personal injury and damage to the pump. If necessary, an air regulator should be installed to maintain the desired pressure when pump is in operation.

Filtered and oiled air will allow the pump to operate more efficiently and yield a longer life to operating parts and mechanisms. Fill lubricator daily with a good grade of non-detergent 90 W oil.

INSTALLATION

1. Place the pump and bung adapter into bung or drum mounting bracket. Position pump in the desired position and tighten the bung adapter into the bung or drum mounting bracket and then turn thumb screw to tighten the bung adapter to the pump.
2. Connect fluid hose to pump material outlet.
3. Be sure the lower pump end material inlet is immersed into material being pumped. If using an in-line pump, connect the hose or pipe connection from the material source, to the material inlet of the pump.

In remote installations, do not connect reel or control handle until the following has been accomplished.

1. Before connecting pump, blow out material line with air.
2. Now connect pump and pump a large amount of material thorough line. This material should be discarded.

The above procedure will clear any foreign material out of lines and insure that line is not obstructed.

OPERATING INSTRUCTIONS

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

1. When pump is installed and ready to operate: connect air supply to air motor inlet. Regulate air pressure from 30 P.S.I. (2 bar) to 50 P.S.I. (3 bar). Allow

pump to cycle slowly to prime with material and bleed all air from system.

NOTE: Be certain that air supply does not exceed recommended maximum air pressure of 150 P.S.I. (10 bar).

MAINTENANCE

CAUTION: Always disconnect air supply and relieve material pressure before attempting to service.

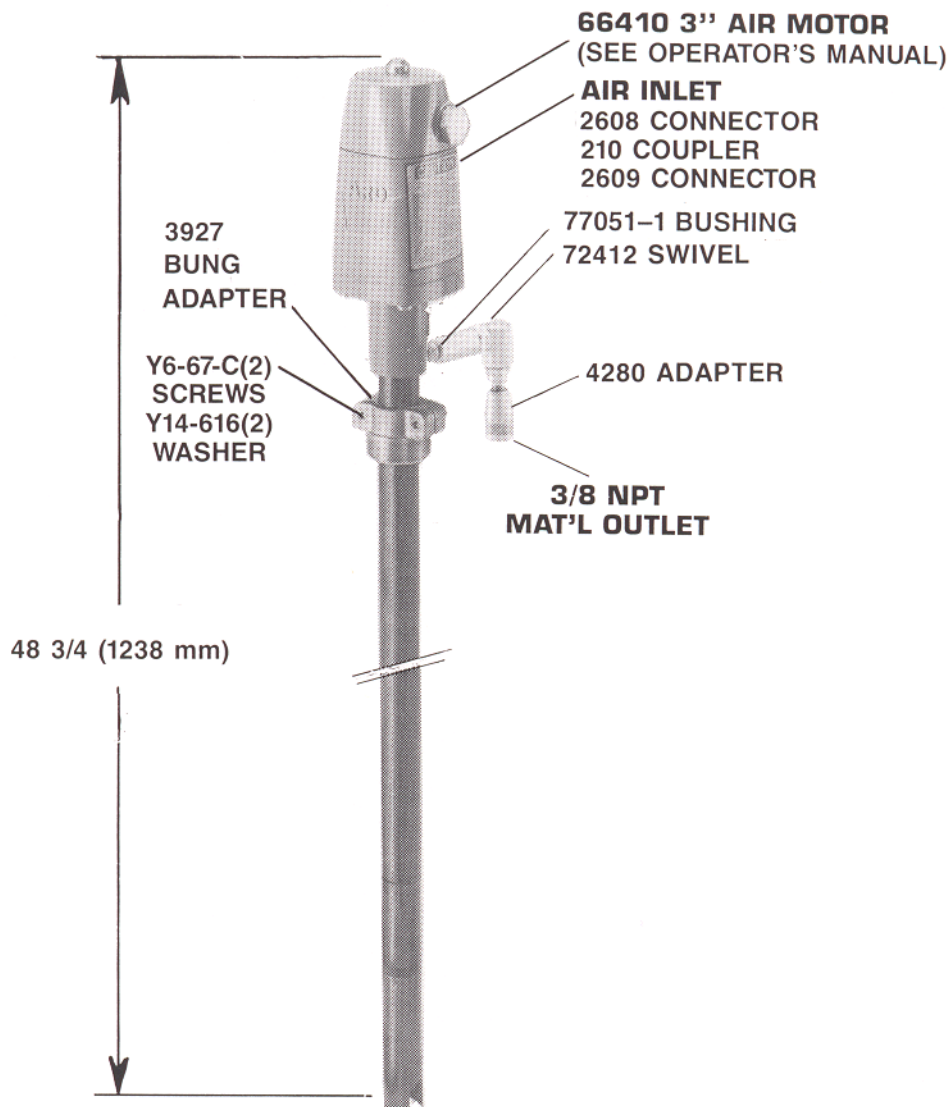
If the pump is to be inoperative for a lengthy period of time (a few hours) disconnect air and relieve all pressure from system.

Periodically flush pump with a solvent that is compatible with material being pumped.

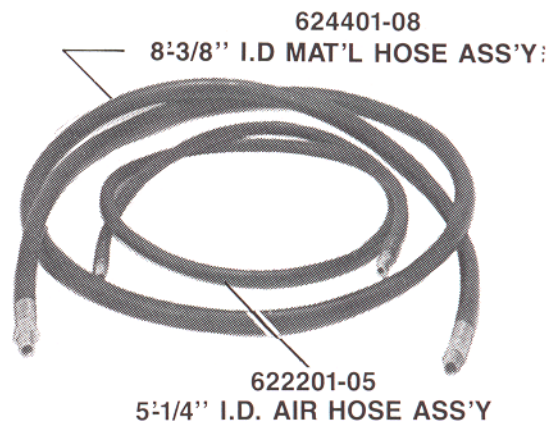
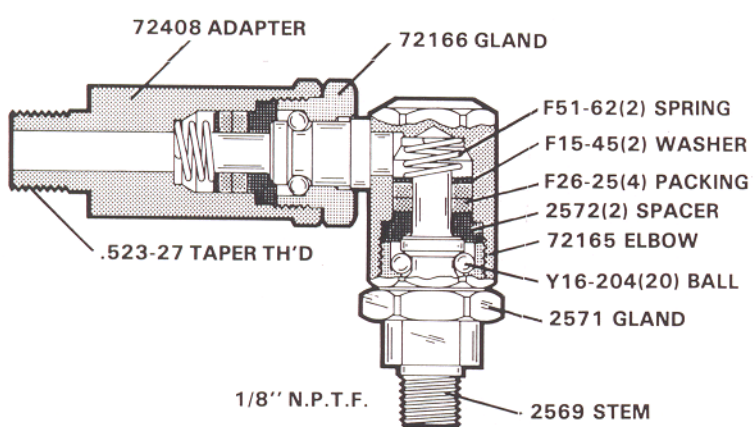
Disassembly should be done on a clean work bench with clean cloths to keep parts clean.

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.



72412 SWIVEL



TROUBLE SHOOTING

Should pump operate but dispense little or not material, check for:

1. Inadequate supply of material, or foreign matter between the **19** steel ball and **20** valve seat.
2. Worn **15** Cup.

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

1. Check air pressure at pump to insure airline is not obstructed and air is being supplied to the pump.

2. If insufficient air is not the trouble disconnect 210 speed coupler and then detach 72412 swivel valve assembly by loosening the 6818 union nut. **REMOVE SLOWLY, AS PRESSURE MAY BE BUILT UP IN PUMP.** Hold rag at this point and supply air to pump. If pump now operates, there is an obstruction in material line, reel, or control handle. If, however, pump will still not operate, consult your local dealer.

LOWER PUMP END PARTS LIST

