

OPERATOR'S MANUAL DX0475L5XXXXXXXXX-X

INCLUDING: OPERATION, INSTALLATION AND MAINTENANCE

INCLUDE MANUAL: AF0475L5XXXXXX-XX-X pump (pn 97999-1759), AF046X-XX Air Motor Operator's Manual (pn 97999-1466), 640015-X Follower plate (97999-87), and S-636 General Information (pn 97999-636).

RELEASED: 9-14-18

REVISED: 9-24-21

(REV: B)

4 1/4" AIR MOTOR

75:1 RATIO

0-7500 PSI RANGE

DX0475L5XXXXXXXXX-X

PUMP ASSEMBLY



**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.
- **637512** for lower kit.
- **637489** for air motor service only.

SPECIFICATIONS

Model Series DX0475L5XXXXXXXXX-X
Type Air Operated Grease Pump
Ratio 75:1
Air Motor Diameter 4-1/4" (10.8 cm)
Stroke 6" (15.2 cm)
Air Inlet (female) 1/2-14 NPTF-1
Material Outlet (female) 1/2 - 14 NPTF-1
Dimensional Data See page 2

PERFORMANCE

Air Inlet Pressure Range 0 - 100 psig (0 - 6.9 bar)
Fluid Pressure Range 0 - 7500 psig (0 - 517 bar)
Flowrate @ 75 Cycles / Min 5.5 lbs/min (2.5 kg)

OPERATING AND SAFETY PRECAUTIONS

⚠ WARNING READ THE GENERAL INFORMATION MANUAL INCLUDED FOR ADDITIONAL OPERATING AND SAFETY PRECAUTIONS AND OTHER IMPORTANT INFORMATION.

⚠ WARNING EXCESSIVE INLET PRESSURE. Can cause explosion resulting in severe injury or death. Do not exceed maximum operating pressure of 7500 p.s.i.g (517 bar) at 100 p.s.i.g (6.9 bar) inlet air pressure. Do not run pump without using a regulator to limit air supply pressure to the pump.

⚠ WARNING EXCESSIVE MATERIAL PRESSURE. Can cause equipment failure resulting in severe injury or property damage. Do not exceed the maximum material pressure of any component in the system.

NOTICE Thermal expansion can occur when the fluid in the material lines is exposed to elevated temperatures. Example: Material lines located in a non-insulated roof area can warm due to sunlight. Install a pressure relief valve in the pumping system.

DX0475L5XXXXXXXXX-X Pump Package

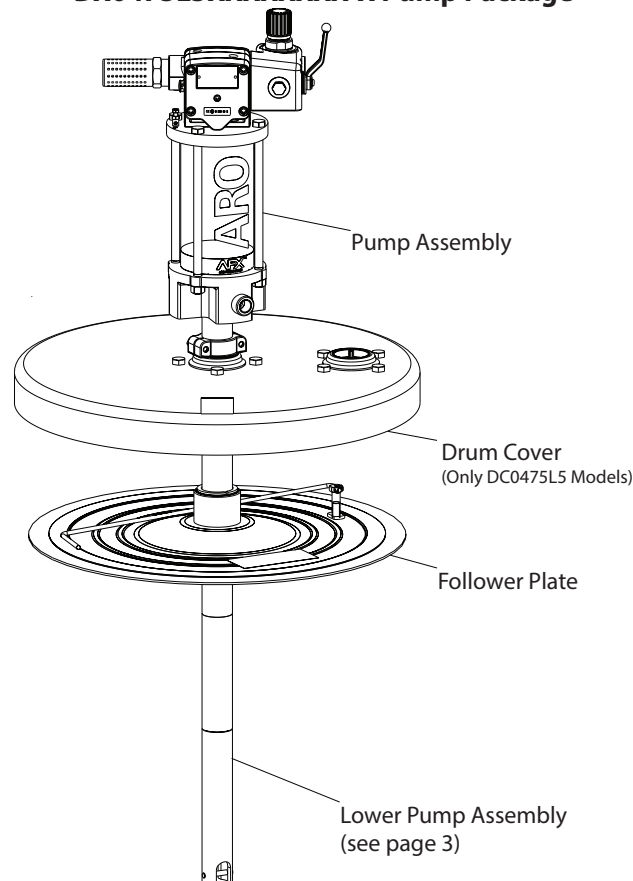


Figure 1

IMPORTANT: This is one of five documents which support the pump.

Replacement copies of these forms are available upon request.

- ☒ DX0475L5XXXXXXXXX-X Model Operator's Manual (pn 97999-1827)
- ☐ S-636 General Information Air Operated Pumping Systems (pn 97999-636)
- ☐ AF046X-XX Air Motor Operator's Manual (pn 97999-1466)
- ☐ AF0475L5XXXXXX-XX-X Model Operator's Manual (pn 97999-1759)
- ☐ 640015-X Follower Plate Operator's Manual (pn 97999-87)

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MODEL DESCRIPTION

DX 04 75 L 5 XXXXX XX X - X

Package Type

DC - Drum Cover
DM - Drum Mount

Air Motor Size

04 - 4 1/4"

Pump Ratio

75 - 75:1

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

640015-2

Package Option

0 - None
1 - Integrated ball valve regulator on pump

DIMENSIONS

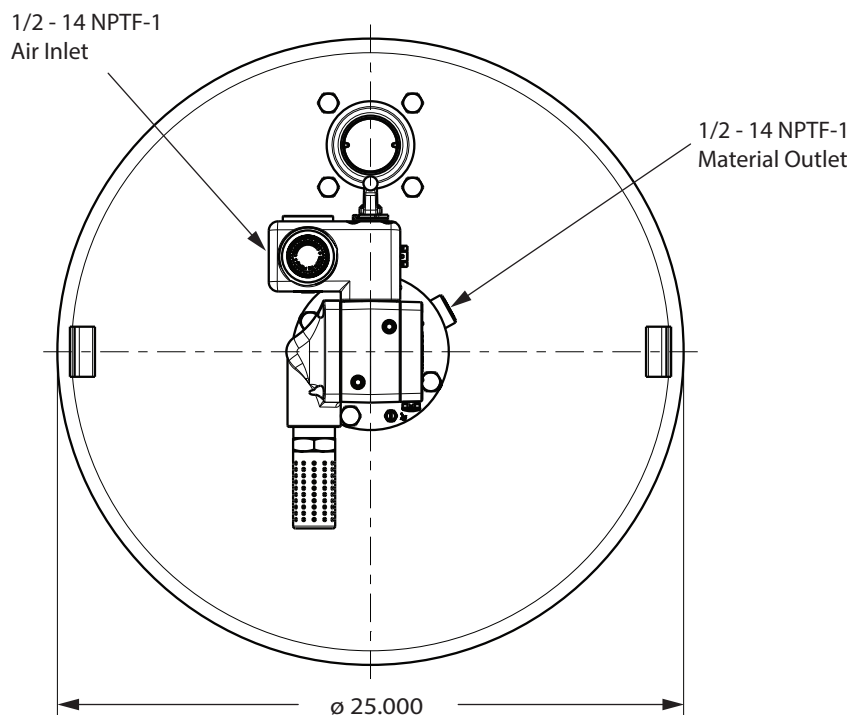


Figure 2

PARTS LIST / LOWER PUMP END

Item	Description (size in inches)	Qty	Part No.	[Mtl]
1	Connecting Rod			
	models AF0475L53PBL1-X	(1)	97358-1	[C]
2	Extension Tube			
	models AF0475L53PBL1-X	(1)	97354-1	[C]
	Piston and Tube Ass'y (includes 3-7)	(1)	97365	
3	Plunger	(1)		[C]
4	Lower Tube	(1)		[C]
5	Ball Stop	(1)		[C]
6	Ball (9/32" dia.)	(1)		[C]
7	Primer Rod	(1)		[C]
8	Primer Tube	(1)	97357	[C]
9	Primer	(1)	97373	[C]
✓10	Retaining Ring	(1)	94397	[C]
✓11	Guide Washer	(1)	97369	[Co]
12	Spacer Sleeve	(1)	97372	[C]
✓13	Gasket	(1)	97375	[Co]
14	Valve Seat	(1)	97362	[C]
✓15	Truarc Ring	(1)	76243-1	[C]
✓16	"U" Cup (1/8" x 13/16" OD)	(1)	Y186-54	[B]
✓17	Guide	(1)	95132	[T]
18	Valve Body	(1)	97363	[SH]
✓19	Gasket	(1)	97460	[C]
✓	Parts in Lower Repair Kit		637512	

INSTALLATION

Remove pump from packaging material. Install and secure the pump to cover, bung or other mounting accessory as ordered. See figure 4 for view of complete assembly.

- Before connecting pump, first blow out material line with air.
- 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).

OPERATING INSTRUCTIONS

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

- When a pump is installed and ready to operate: Connect air supply to air motor inlet. Regulate air pressure from psig (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.

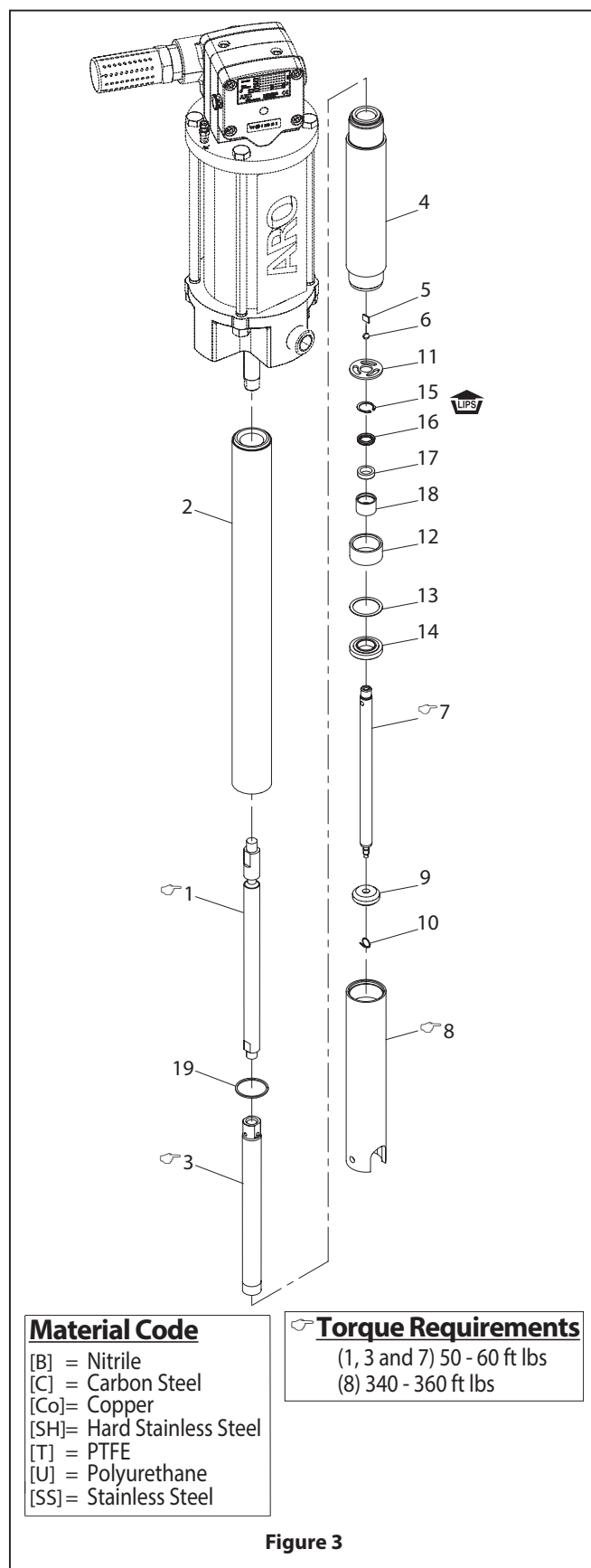


Figure 3

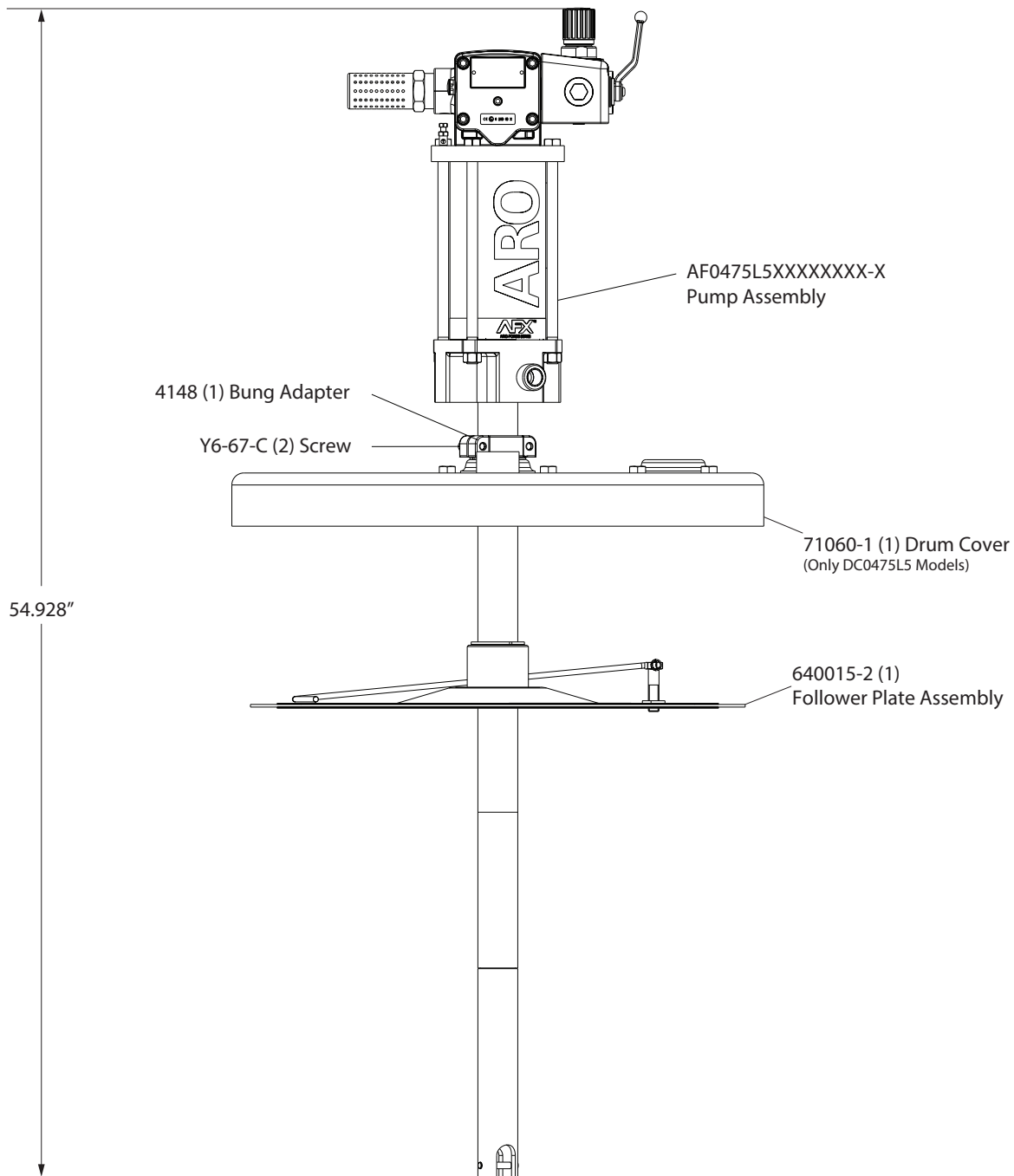


Figure 4

TROUBLE SHOOTING

No material at outlet. (Pump continuously cycles).

- Empty material supply. Disconnect the air, replenish the material supply.
- Foreign matter is holding foot valve seats open in lower pump tube assembly. Remove lower pump tube assembly and clean valve seats.

Pump operates sluggishly, tends to stick when air is applied or control is opened.

- Air motor is dirty or lacks lubrication. Clean air motor.
- Insufficient air pressure or volume of air. Check air supply.

Air bypasses through exhaust port.

- Foreign matter is holding air valve open or lacks lubrication. Consult factory for nearest Service Center.

Motor stalls.

- Foreign matter in pump, hose, control valve or spray tip obstructing material flow. Check material supply hose and control valve or tip.
- Air not getting to pump. Check air supply.