OPERATOR'S MANUAL 6712X-XXX

INCLUDING: SPECIFICATIONS, SERVICE KITS, GENERAL INFORMATION, TROUBLESHOOTING.
INCLUDE MANUALS: 6544X-X Air Motor (pn 97999-64), 6710X-XXX Lower Pump End (pn 97999-600) & S-632 General Information Manual (pn 97999-624).

RELEASED: 2-9-95
REVISED: 6-2-10
(REV. H)

4-1/4" AIR MOTOR
43.6:1 RATIO
4" STROKE

EXTRUSION PUMP

67120-P4X (Carbon Steel) | **67121-P4X (Stainless Steel)** | **67124-P4X (Carbon Steel)** | **67125-P4X (Stainless Steel)**

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.
- **61268** for repair of air motor section.
- **63729X-P4X** for repair of lower pump end. Refer to the chart on page 2 for description of -P4X options.

SPECIFICATIONS

Model Series (refer to option chart)	6712X-P4X
Pump Type	Air Operated, Extrusion Double Acting Pump
Ratio	43.6:1
Air Motor	65440
Motor Repair Kit	61268
Motor Diameter	4-1/4" (10.8 cm)
Stroke (double acting)	4" (10.2 cm)
Air Inlet (female)	1/2 - 14 N.P.T.F. - 1
Air Exhaust (female)	1-1/4 - 11-1/2 N.P.T.F. - 1
Lower Pump End Series	
models 67120-P4X	67100-P4X
models 67121-P4X	67101-P4X
models 67124-P4X	67100-P4X
models 67125-P4X	67101-P4X
Lower Pump Repair Kit	63729X-P4X
Material Outlet (female)	1/2 - 14 N.P.T.F. - 1

PUMP PERFORMANCE

Air Inlet Pressure Range	0 - 150 p.s.i.g. (0 - 10.3 bar)
Fluid Pressure Range	0 - 6549 p.s.i.g. (0 - 451.7 bar)
Maximum Rec'd Cycles / Minute	60
Displacement In.^{3} Per Cycle	2.85
Volume / Cycle	1.6 oz. (46.7 ml)
Cycles Per Gallon	81
Flow @ 60 Cycles / Minute	0.74 g.p.m. (2.8 l.p.m.)
Noise Level @ 60 p.s.i. - 40 c.p.m.①	80.0 db(A)②
Accessories Available	66101 Wall Mount Bracket 67187-1 Mounting Post 91790 Silencer

① Tested with 91790 silencer installed.
② The pump sound pressure level has been updated to an Equivalent Continuous Sound Level (LAeq) to meet the intent of ANSI S1.13-1971, CAGI-PNEUROP S5.1 using four microphone locations.

PUMP DATA

MODEL 6712X-XXX

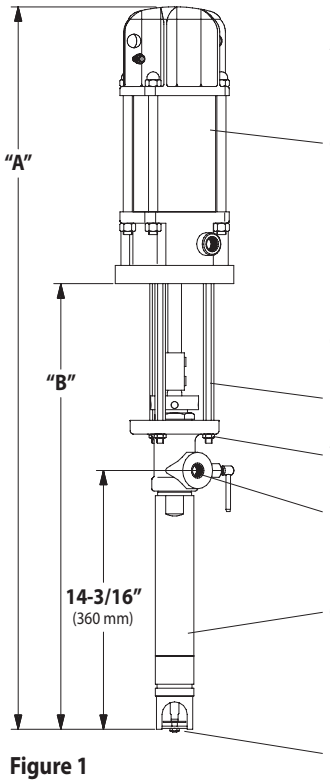

Figure 1

Model	"A" (mm)	"B" (mm)	"C"
67120-P4X	39-5/8" (1006.6)	24-7/16" (620.8)	93962
67121-P4X	39-5/8" (1006.6)	24-7/16" (620.8)	93962
67124-P4X	48-17/32" (1232.7)	33-11/32" (846.9)	93962-2
67125-P4X	48-17/32" (1232.7)	33-11/32" (846.9)	93962-2

IMPORTANT

This is one of four documents which support the pump. Replacement copies of these forms are available upon request.

- ☒ **6712X-XXX** Model Operator's Manual (pn 97999-602)
- ☐ **S-632** General Information - Industrial Piston Pumps (pn 97999-624)
- ☐ **6710X-XXX** Lower Pump End Operator's Manual (pn 97999-600)
- ☐ **6544X-X** Air Motor Operator's Manual (pn 97999-64)

INGERSOLL RAND COMPANY LTD
209 NORTH MAIN STREET – BRYAN, OHIO 43506
(800) 495-0276 • FAX (800) 892-6276
www.ingersollrandproducts.com

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ARO

Ingersoll Rand
Industrial Technologies

PUMP OPTION DESCRIPTION CHART

6712X- P 4 X

Packing Material
Spring Arrangement
Plunger Type

PACKING MATERIAL (Packings are upper and lower unless noted)
P - UHMW-PE / Glass filled PTFE staggered (upper)
UHMW-PE (lower)

SPRING ARRANGEMENT
4 - Multiple wave spring

PLUNGER TYPE
3 - Hardened stainless steel with hard chrome plating
8 - Hardened stainless steel with alternate piston

GENERAL DESCRIPTION

The chop-check pumps are primarily designed for the pumping of heavy viscous material with or without fibrous content. The models can be used with a gravity feed single post lift as a topper type assembly or with a two post lift as a force feed type assembly. The lower pump is designed for easy priming and the double acting feature is standard in all ARO industrial pumps. Material is delivered to the pump discharge outlet on both the up and down stroke.
The motor is connected to the lower pump end by a spacer section. This allows for lubrication of the upper packing gland and prevents motor contamination because of normal wear and eventual leakage through the material packing gland. Be sure the solvent cup is adequately filled with lubricant to protect the upper packings and insure longest service life.

⚠WARNING HAZARDOUS PRESSURE. Do not exceed maximum operating pressure of 6549 p.s.i. (451.7 bar) at 150 p.s.i. (10.3 bar) inlet air pressure.

Pump Ratio X Inlet Pressure to Pump Motor	=	Maximum Pump Fluid Pressure

Pump ratio is an expression of the relationship between the pump motor area and the lower pump end area. EXAMPLE: When 150 p.s.i. (10.3 bar) inlet pressure is supplied to the motor of a 4:1 ratio pump, it will develop a maximum of 600 p.s.i. (41.4 bar) fluid pressure (at no flow) - as the fluid control is opened, the flow rate will increase as the motor cycle rate increases to keep up with the demand.

⚠WARNING Refer to general information sheet for additional safety precautions and important information.

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.
Replacement warning label (pn 92325) is available upon request.

TROUBLE SHOOTING

Pump problems can occur in either the air motor section or the lower pump end section. Use these basic guidelines to help determine which section is affected.

Pump will not cycle.
- Be certain to first check for non-pump problems including kinked, restrictive or plugged inlet / outlet hose or dispensing device. Depressurize the pump system and clean out any obstructions in the inlet / outlet material lines.
- Refer to the motor manual for trouble shooting if the pump does not cycle and / or air leaks from the air motor.
- Damaged motor. Service the motor.

Pump cycles but does not deliver material.
- Refer to the lower pump end manual for further trouble shooting.

PUMP CONNECTION - UPPER / LOWER

NOTE: All threads are right hand.
1. Lay the pump assembly on a work bench.
2. Remove the three (Y12-6-C) nuts from the three spacer rods (see figure 1).
3. Pull the air motor from the lower pump end until the motor piston rod is in the "down" position and the lower pump end rod is in the "up" position.
4. Unscrew the three "C" spacer rods from the air motor assembly.
5. Remove the two Y15-22-S cotter pins and remove the two (93985) pins. Remove the 93960-( ) connector (see figure 2).

PUMP CONNECTION DETAIL

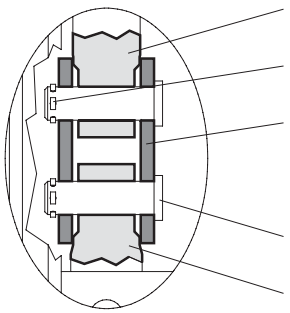

Figure 2

REASSEMBLY

1. Align the lower pump end plunger with the air motor piston rod. Position the air inlet of the motor 87° from the material outlet.
2. Position the 93960-( ) connector in place and insert the two (93985) pins into the connector. Use the two (Y15-22-S) cotter pins to retain the pins.
3. Screw the three "C" spacer rods into the air motor base.
4. Align the holes in the lower pump body with the three "C" spacer rods and slide into the holes. Retain using the three (Y12-6-C) nuts.