



Model Series 41-15956 Two Ball Pump 400 Series Stainless Steel

SPECIFICATIONS, SERVICE KITS, GENERAL INFORMATION, TROUBLESHOOTING
INCLUDE MANUALS 77-2878 Lower Pump End (pn 41-15955), 842007 Air Motor (pn 876083)
& General Information Manual (pn 876018)

12" AIR MOTOR 23:1 RATIO
6" STROKE



**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 Binks replacement parts to assure compatible pressure rating and longest service life.
- **861086** for repair of air motor section.
- **41-15957** for repair of lower pump section. Refer to the chart on page 2 for description of the options.

SPECIFICATIONS:

Model Series (refer to option chart).....	41-15956
Type	Air operated, Two ball Double Acting Pump
Ratio	23:1
Air Motor	842007
Motor Repair Kit	861086
Motor Diameter	12" (30.5 cm)
Stroke	6" (15.2 cm)
Air Inlet (female)	3/4 - 14 N.P.T.F. -1
Air Exhaust (female)	1-1/4 - 11-1/2 N.P.S.M.
Lower Pump End Series	41-15955
Lower Pump Repair Kit	41-15957
Motor Diameter	12" (30.5 cm)
Stroke	6" (15.2 cm)
Material Inlet (male).....	2 - 11-1/2 N.P.T.F. -1
Material Outlet (female).....	1-1/4 - 11-1/2 N.P.T.F. - 1
Weight	140 lbs. (63.5 kg)

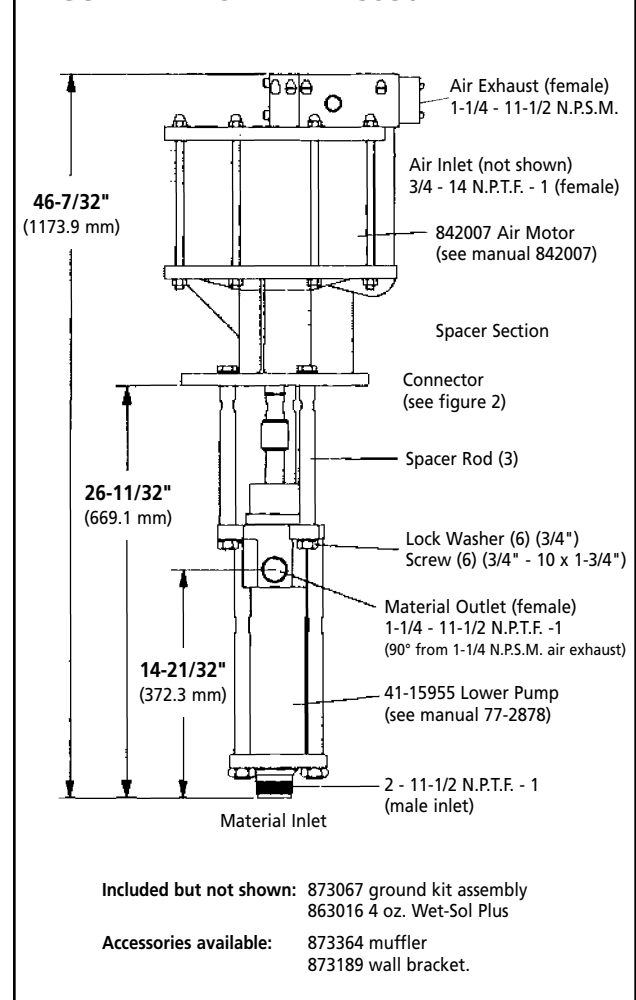
PERFORMANCE:

Air Inlet Pressure Range	30-90 psi (2.1-6.2 bar)
Fluid Pressure Range	690-2070 psi (47.6-142.8 bar)
Maximum Rec'd Cycles/Min.	70
Displacement In³ Per cycle	59.8
Volume/Cycle	33.1 oz. (979.6 ml)
Cycles Per Gallon	3.9
Flow @ 70 Cycles/Minute	18.1 gpm (68.6 lpm)
Noise Level @ 60 psi - 40 cpm ...	89.8 db(A)*

*The pump sound pressure level has been updated to an Equivalent Continuous Sound Level (L_{eq}) to meet the intent of ANSI S1.13-1971, CAGI-PNEUROP S5.1 using four microphone locations.

PUMP DATA:

FIGURE 1 MODEL 41-15956



NOTE

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

- 77-2879 Model Operator's Manual (pn 41-15956)
- General Information - Piston Pumps (pn 876018)
- 77-2878 Lower Pump End Operator's Manual (pn 41-15955)
- 842007 Air Motor Operator's Manual (pn 876083)

GENERAL DESCRIPTION:

⚠ WARNING

HAZARDOUS PRESSURE.

Do not exceed maximum operating pressure of 2070 psi (142.8 bar) at 90 psi (6.2 bar) inlet pressure.

$$\text{PUMP RATIO X} \quad \text{MAXIMUM PUMP} \\ \text{INLET PRESSURE TO PUMP MOTOR} \quad = \quad \text{FLUID PRESSURE}$$

Pump ratio is an expression of the relationship between the pump motor area and the lower pump end area.

EXAMPLE: When 90 psi (6.2 bar) inlet pressure is supplied to the motor of a 5:1 ratio pump it will develop a maximum of 450 psi (31.0 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.

- The Two-Ball pumps are primarily designed for the high volume transfer of light and medium viscosity fluids. Stainless steel construction offers compatibility with a wide range of fluids. The lower pump is designed for easy priming and the double acting feature is standard in all Binks 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.

TROUBLESHOOTING:

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.

If the 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 troubleshooting if the pump does not cycle and/or air leaks from the air motor.

If the pump cycles but does not deliver material:

- Refer to the lower pump end manual for further troubleshooting.

WARRANTY

This product is covered by Binks' 1 Year Limited Warranty.

Binks Worldwide Sales and Service Listing: www.binks.com

ITW Industrial Finishing

Binks has authorized distributors throughout the world. For technical assistance or the distributor nearest you, see listing below.

U.S./Canada Technical Service Office:

195 Internationale Blvd., Glendale Heights, IL 60139
Toll-Free Telephone: 1-888-992-4657 (U.S.A. and Canada only)
Toll-Free Fax: 1-888-246-5732



An Illinois Tool Works Company

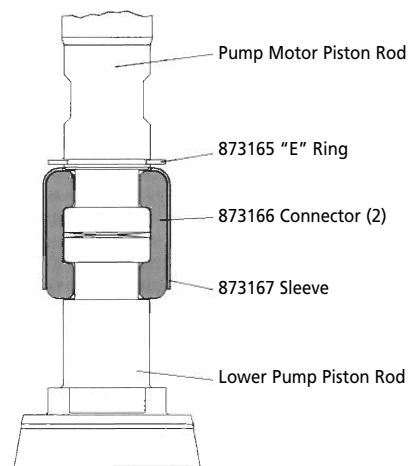
PUMP CONNECTION – UPPER/LOWER:

NOTE

All threads are right hand.

1. Lay the pump assembly on a workbench.
2. Remove the three nuts from the three spacer rods (figure 1).
3. Pull the air motor from the lower pump end until motor piston rod is in the "down" position and lower pump end rod is in "up" position.
4. Remove the three spacer rods by unscrewing the three cap screws.
5. Using e-ring pliers, slide the "e" ring up far enough to allow the sleeve to move upward and release the two connectors (figure 2).

FIGURE 2 PUMP CONNECTOR DETAIL



REASSEMBLY:

1. Align the pump motor with the lower pump end. Position the air inlet of the motor 180° from the material outlet.
2. Install the two connectors and retain with the sleeve; slide the "e" ring back into position.
3. Assemble the three spacer rods to the lower pump and secure using three cap screws.
4. Reinstall the spacer rods to the pump motor.
5. Bring the motor and lower pump together and retain with the three nuts.