Depco Home

JABSCO®

Model BA020-0000

AIR DRIVEN DRUM PUMP

FEATURES

- High prime with low flow rate
- High discharge head
- Can run dry without damage
- Chemically resistant materials
- Built-in air pressure regulator and on/off valve
- Lightweight ergonomic design
- Bung adapter and wall bracket included
- **Accessory: Adjustable trigger nozzle**

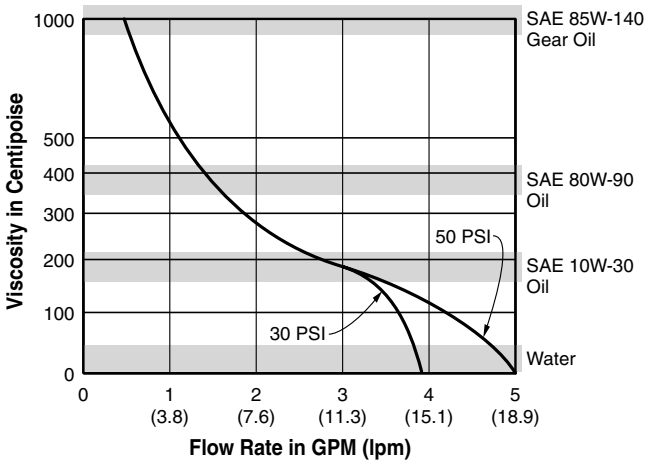
Model BA020-0000

BT000-3350 pump tube is sold separately.

PRODUCT SPECIFICATIONS

Pump Design . . . Air Driven Double Diaphragm Type
Wetted Parts . . . . . Polypropylene, Viton, Hastelloy
Port Fitting . . . . . 1/2" ID Barb Type
Minimum Liquid Temperature . . . . . 40°F (5°C)
Maximum Liquid Temperature . . . . . 120°F (48°C)
Priming Wet with Water . . . . . 20 feet (6m) nominal
Priming Dry with Water . . . . . 15 feet (4m) nominal
Flow Rate at 25 psi with Water 3 gpm (11 lpm) nominal
Flow Rate at 50 psi with Water 5 gpm (19 lpm) nominal
Gas Supply Pressure 90 psi maximum, clean and dry
Noise Level Maximum 87db

Viscosity vs. Flow Rate



GENERAL INFORMATION

The low cost BA020 drum pump and BT000-3350 pump tube are economical enough to provide a dedicated pump to each drum or chemical when occasional transfer to smaller containers is desired. This positive displacement pump can prime at low flow rates when small containers are being filled. And unlike more expensive centrifugal pumps, this compact pump can discharge product more than 60 vertical feet and accommodate viscous fluids. Flow rates from zero to 5 gpm can be achieved by proper adjustment of the inlet pressure regulator and selection of an appropriate discharge nozzle.

The BA020-0000 air pump includes an on/off air supply valve with quick disconnect fitting, a user adjustable air pressure regulator, a splash guard enclosure with ergonomic pistol grip handle for ease of use, and a wall mount storage fixture. **BT000-3350 pump tube is sold separately.**

The BA020 can be used with fluids compatible with the materials of construction; polypropylene body, Viton

TO AVOID SERIOUS OR FATAL PERSONAL INJURY OR MAJOR PROPERTY DAMAGE, READ AND FOLLOW ALL SAFETY INSTRUCTIONS IN MANUAL AND ON PUMP.

⚠ DANGER Warns of hazards that WILL cause serious personal injury, death of major property damage.

⚠ WARNING Warns of hazards that CAN cause serious personal injury, death or major property damage.

⚠ CAUTION Warns of hazards that CAN cause personal injury or property damage.

Notice: Indicates special instructions which are very important and must be followed.

THIS MANUAL MUST BE KEPT WITH THE PUMP. MAINTAIN SAFETY LABELS.

elastomers, and Hastelloy springs. Consult the chemical supplier or the Jabsco website at www.jabsco.com for additional chemical compatibility information.

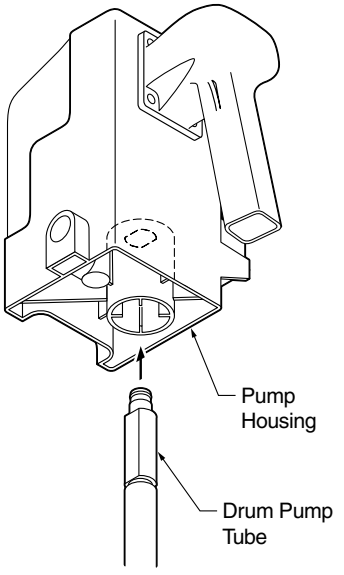
Jabsco does not warranty this pump against chemical attack. It is the responsibility of the operator to insure that the chemical, concentration, temperature, and cleaning, flushing, and neutralizing procedures are compatible with the materials and design of this pump.

FLUID COMPATIBILITY CHART

Compatible with Viton	Not Compatible with Viton
Oils, solvents, D-limonene, aromatic and halogenated hydrocarbons, acids	Ketones, acetones, automotive brake fluid, ammonia, ethanol, flammables

⚠ CAUTION Air and liquid moving through the pump during operation can generate a static electric charge and spark. Never pump flammable liquids or use where flammable vapors are present. A grounding strap to the body of the pump will **NOT** prevent static electric buildup.

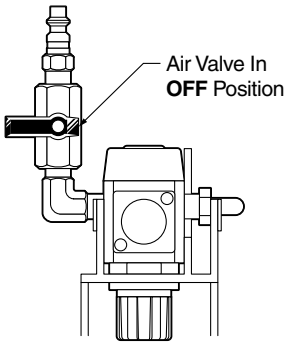
ASSEMBLY Install 1/2" barb port connector supplied using Teflon tape on threads. Secure discharge hose to barb port and to trigger nozzle with stainless steel clamps. Discharge hose should be rated to 150 psi minimum. Check all fittings and connections for tightness. With trigger nozzle closed, apply compressed air to pump and check all fittings for leaks. Tighten and adjust if necessary.



Thread the bung adapter in the drum to be pumped. Insert the BT000 drum pump tube into the bung adapter as shown. Position the BA020 drum pump over the pump tube until flat surface on tube and pump body are aligned. Apply modest insertion force to insert pump tube firmly into the air pump suction port. Once inserted, rotate tube 1/4 turn to secure in place.

Notice: tube alternately engages and disengages from pump each 1/2 turn. Turn only 1/4 turn to secure.

PRE-OPERATION CHECKS Insure pump assembly has been checked for leaks and that outlet hose and nozzle are rated for 150 psi. Set ON/OFF air inlet valve and trigger nozzle to OFF as shown.



Compressed air source should be 90 psi maximum.

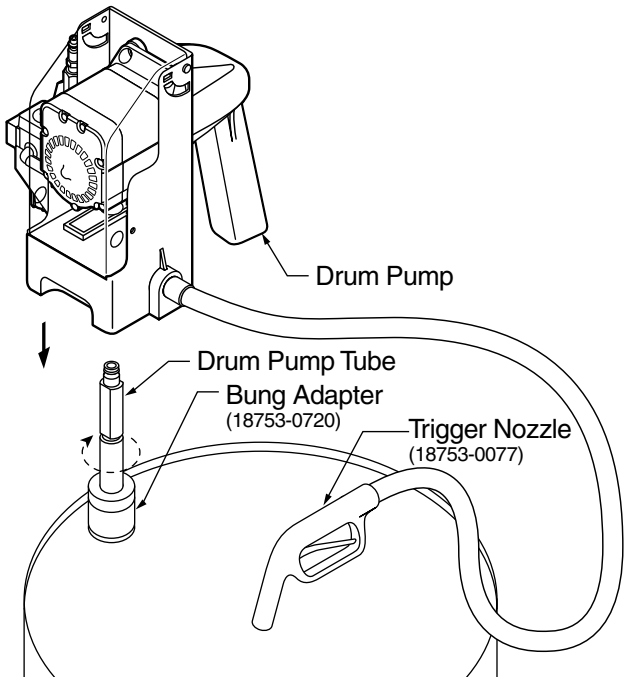
Compressors must have dryers or a water separator in system to prevent liquid condensate build up in compressed air lines. The cooling effect of expanding air at the pump exhaust port can reduce the port temperature to 32°F or less. Liquid in the compressed air lines may freeze at the exhaust port, causing the pump to stop and may cause permanent damage to the shuttle valve assembly.

⚠ WARNING Pump will start as soon as air pressure is connected unless on/off valve is placed in the off position. Air supply valve and trigger nozzle should be closed before air supply is connected.

⚠ CAUTION Compressed air source should not exceed 90 psi and must be free of moisture and oil. Use of Flojet compact extractor/dryer 520B is highly recommended.

OPERATION

Pump should be vertical and secure in drum. With ON/OFF air inlet valve and trigger nozzle OFF, connect pump to the compressed air source. Place trigger nozzle securely into receiving container. Turn air supply valve ON. Pump will start immediately when air valve is



opened. Pump will prime when trigger nozzle is opened. Pump will stop shortly after trigger nozzle is closed.

Important: pump will operate according to air supply pressure. Flow and pressure can be adjusted by increasing or decreasing air pressure to accommodate varying product viscosity. Maximum pump life is achieved using 25 psi supply air pressure. Higher supply air pressure will not pump more viscous fluids faster. Consult Flow Rate versus Viscosity table. Maximum recommended viscosity is 1000 centipoise.

Start and stop flow with the trigger nozzle. When transfer is compete, turn air supply valve OFF and remove compressed air supply. Store pump and tube using wall mount bracket supplied. Keep pump and tube clean.

SERVICE AND MAINTENANCE

Flushing pump with water or neutralizing liquid after chemical use is recommended. Do not allow liquid in pump to freeze as pump will be damaged and warranty will be void.

GENERAL SAFETY INFORMATION

Protect yourself and others by observing all safety information. Follow all safety codes and the Occupational Safety and Health Act (OSHA).

⚠ WARNING DO NOT PUMP GASOLINE OR FLAMMABLE LIQUIDS, OR WHERE FLAMMABLE VAPORS ARE PRESENT.

⚠ WARNING DO NOT SERVICE IF SYSTEM IS PRESSURIZED

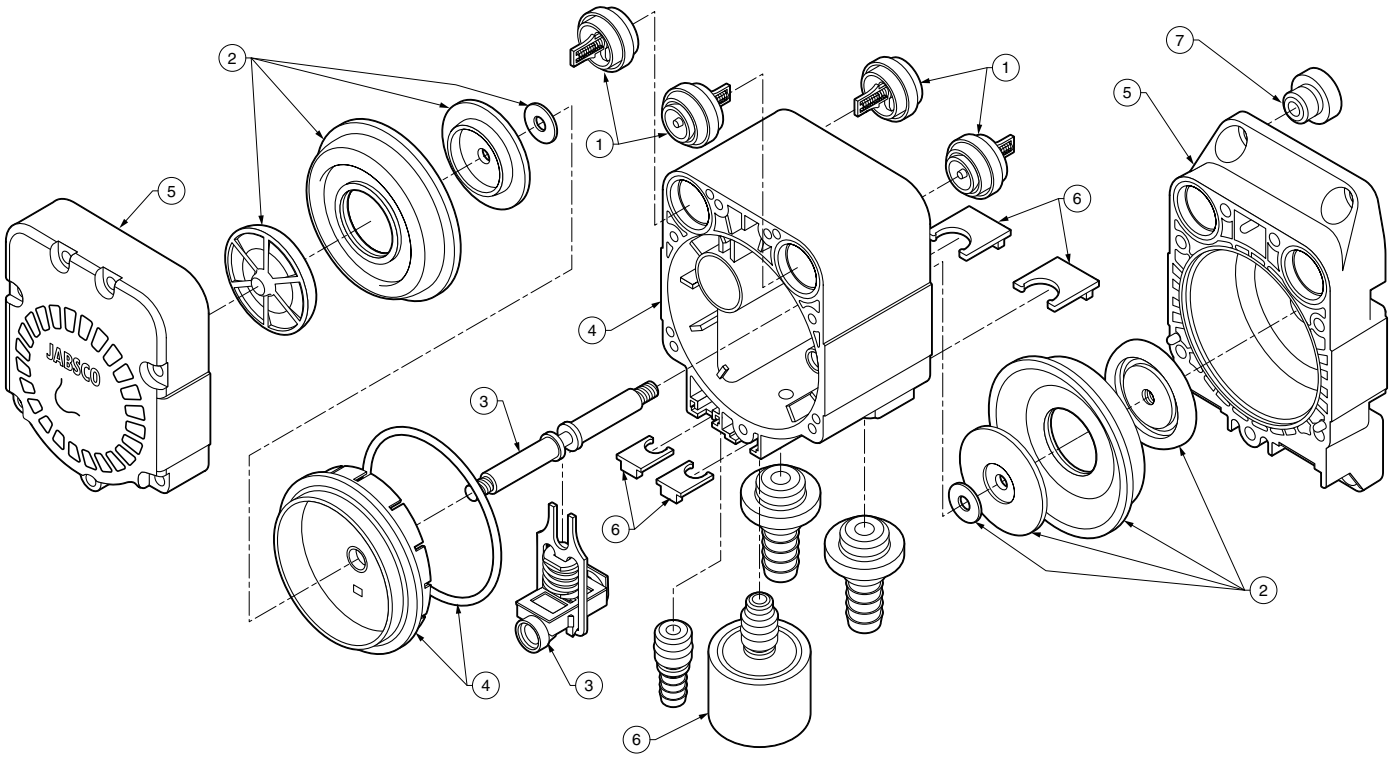
⚠ WARNING ADEQUATLEY VENTILATE AREA IF CO2 OR N2 COMPRESSED GAS SOURCE IS USED

⚠ CAUTION ALWAYS WEAR SAFETY GLASSES

⚠ CAUTION WEAR PROTECTIVE CLOTHING, GLOVES AND FACE SHIELD WHEN CHEMICALS ARE PRESENT

⚠ CAUTION FOLLOW ALL CHEMICAL MANUFACTURER'S SAFETY AND USAGE INSTRUCTIONS

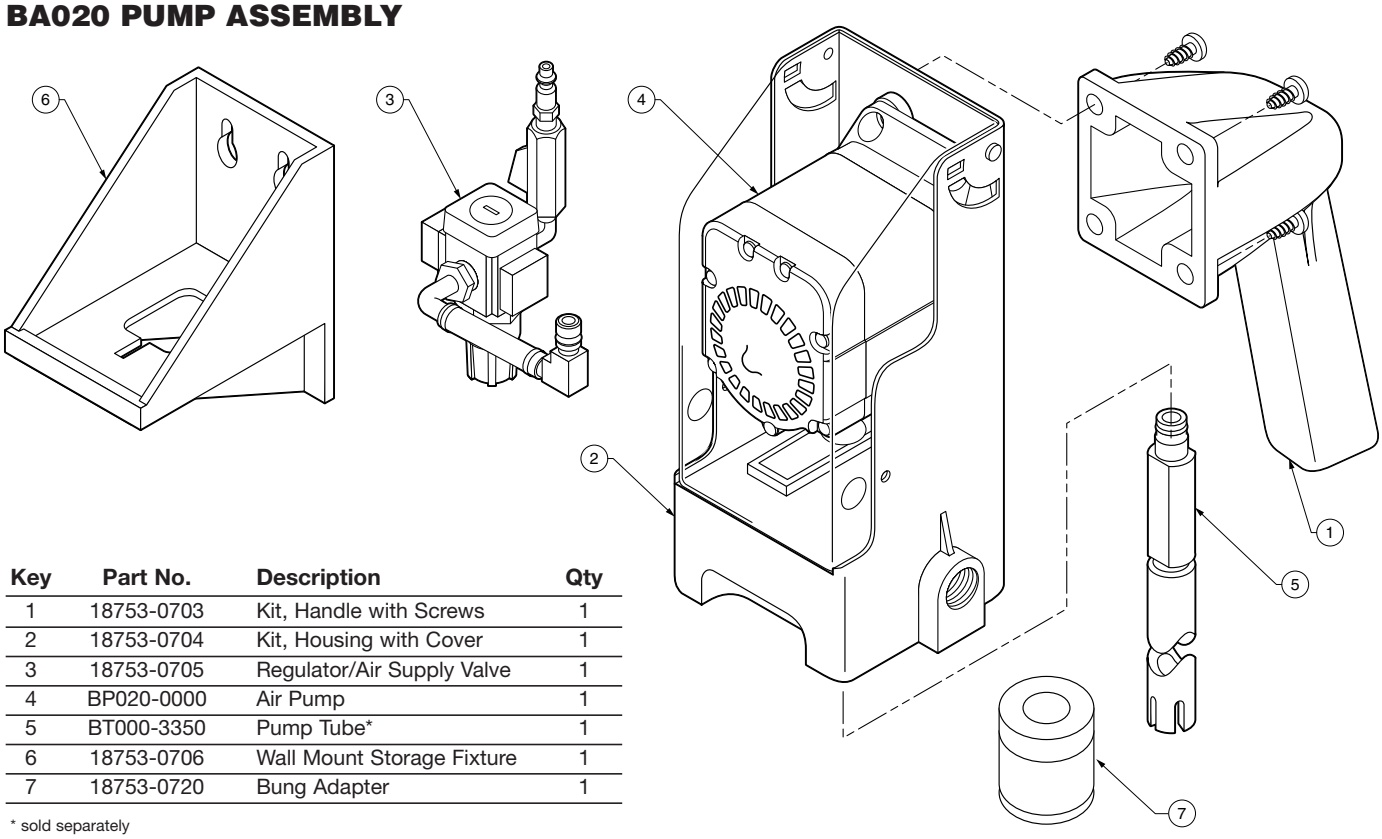
MODEL BA020-0000 SERIES EXPLODED VIEW



Key	Part No.	Description	Qty
1	18753-0707	Kit, Check Valve. Assy., Viton ®, Hastelloy	4
2	18753-0708	Kit, Diaphragm, Viton ®	2
3	18753-0709	Kit, Shaft & Slide Valve Assy. (Viton ®)	2
4	18753-0710	Kit, Flange & Housing Assy. w/"O" Ring	2
5	18753-0711	Kit End Caps	2

Key	Part No.	Description	Qty
6	18753-0712	Kit Hardware - Includes	
		Retainer Clip Small	2
		Retainer Clip Large	2
		Exhaust Port	1
		Exhaust Muffler	1
7	18753-0713	Kit, Grommets	2

BA020 PUMP ASSEMBLY



Key	Part No.	Description	Qty
1	18753-0703	Kit, Handle with Screws	1
2	18753-0704	Kit, Housing with Cover	1
3	18753-0705	Regulator/Air Supply Valve	1
4	BP020-0000	Air Pump	1
5	BT000-3350	Pump Tube*	1
6	18753-0706	Wall Mount Storage Fixture	1
7	18753-0720	Bung Adapter	1

* sold separately

TROUBLESHOOTING CHART

Symptom	Possible Cause(s)	Corrective Action
Pump will not start (stalls)	1. Inadequate air supply (20 PSI Min.)	1. Increase air inlet pressure
	2. Contaminated air supply	2. An air dryer might be required
	3. Ruptured diaphragm	3. Replace diaphragm
	4. Check shuttle valve for wear	4. Replace shuttle valve if necessary
Pump runs, but does not pump	1. A leak or break in the product inlet line	1. Replace product line
	2. A leak or break in the product discharge line	2. Replace product line
Pump leaks through exhaust port	1. Leak at upper exhaust port o-ring	1. Replace exhaust port
	2. Shaft seal o-rings damaged or worn	2. Replace shaft seal o-rings
	3. Inadequate slide lubrication	3. Replace with shuttle valve kit
Flow rate is low	1. Tubing or hose is damaged or blocked	1. Clean or replace
	2. Check viscosity of medium being pumped	2. Reduce viscosity of medium, increase hose diameter or contact factory for recommendation
	3. Check valves not seated correctly	3. Reinstall check valves
Pump leaks	1. Ruptured or worn out diaphragm	1. Replace diaphragm
	2. Pump housing screws not torqued adequately	2. Torque screws to 20 in lb

Jabsco

ITT Industries
Engineered for life

THE PRODUCTS DESCRIBED HEREIN ARE SUBJECT TO THE JABSCO ONE YEAR LIMITED WARRANTY, WHICH IS AVAILABLE FOR YOUR INSPECTION UPON REQUEST.

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