

### INSTALLATION & SERVICE INFORMATION

#### MOUNTING

Flojet 4300 is a self-priming pump. It may be located several feet from the tank, above or below the liquid level (it is not a submersible pump). For vertical pump mounting be sure that the motor is located on top. This will prevent water from entering the motor chamber in event of a leak.

#### PLUMBING

For best performance, flexible hose is recommended instead of rigid piping at the pump. Flojet 4000 Series ports are a push in type retained by a “C” clip. To install the 4000 ports move “C” clips to rear of pump. Push the port until snug. Slide “C” clip forward to front of pump. Do not install pump such that plumbing causes excessive stress on either port.

It is essential that a 20 mesh (min.) strainer or filter be installed in the tank or in the pump inlet line to keep large foreign particles out of the system. The Flojet 1600 Series 40 or 20 mesh strainer is available with various connections to fit most installations. For more information, request Form No. 81000-072. The use of check valves in the plumbing system may interfere with the priming ability of the pump. Check valves, if used, must have cracking (opening) pressure of no more than 2 psi.

#### ELECTRICAL

On 115 Volt AC pumps, the black wire lead is common, the white is neutral and green/yellow is ground. On 230 Volt AC pumps, the brown wire lead is common, the blue is neutral and the green/yellow is ground. Never connect the green (or green/yellow) wire to a live terminal. On 12 and 24 Volt DC pumps, match red (+) and black (-) power leads with red and black leads on motor or switch.

#### OPERATION

Allow pump to prime with discharge line (or spray valve) open, to avoid airlock. Built-in pressure switch will shut off pump automatically when discharge valve is closed and will restart pump when valve is opened. When pump runs out of liquid, it will continue to operate. Running dry will not damage the pump. Turn off manually.

#### SPRAY TIP

In spraying applications the pressure generated by the pump is generally dependent upon the size of the spray nozzle. An undersized spray nozzle will cause the pump pressure switch to cycle on and off and create a pulsating flow from the pump.

Improper duty cycle and/or rapid start/stop conditions caused by undersized spray nozzles will cause the internal thermal breaker (if equipped) to trip, or can cause premature motor failure due to excessive heat.

**PRODUCT WARRANTY IS VOID  
IF INSTALLATION INSTRUCTIONS  
ARE NOT FOLLOWED**



**WARNING**



#### Risk of an electrical shock!

When wiring electrically driven pumps, follow all electrical and safety codes, as well as the most recent National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

Make certain the power source conforms to the pump voltage. Be sure all power is disconnected before installation.

The pump should be wired into an individual (dedicated) circuit, controlled with an UL/C-UL certified double pole switch rated at or above the fuse ampere indicated on the pump motor label.



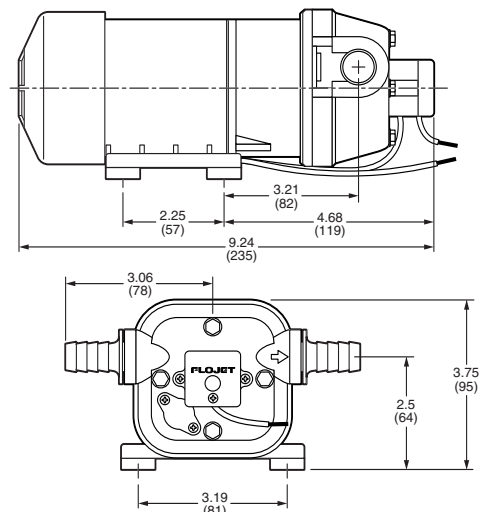
**WARNING**



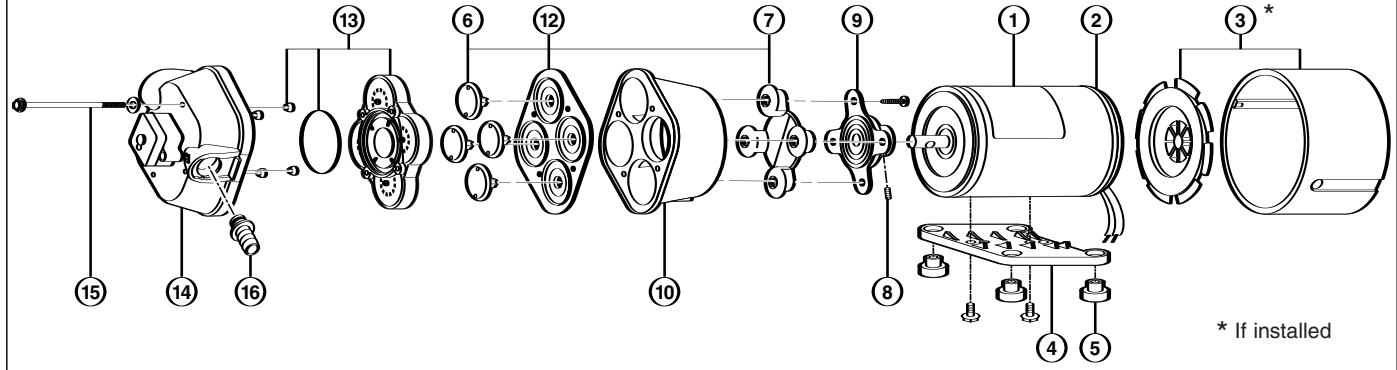
**DO NOT USE TO PUMP FLAMMABLE FLUIDS, GASOLINE,  
KEROSENE FUEL OIL, ETC. DO NOT USE PUMP  
IN A EXPLOSIVE ENVIRONMENT.**

#### DIMENSIONAL DRAWING

Dimensions in inches (millimeters)



## PARTS LIST MODEL 4300 SERIES



KEY	DESCRIPTION
1	Motor Assembly
2	Brush Endbell/Rect. Assy.
3	Fan/Shroud (if installed)
4	Plastic Baseplate Assy.
5	Grommet
6	Piston, Inner
7	Piston, Outer
8	Cam/Bearing Set Screw
9	Cam/Bearing w/Set Screw
10	Bearing Cover

KEY	DESCRIPTION	
12	Diaphragm w/Pistons & Screws	
13	Check Valve, Ferrules & O-Ring	
14	Upper Housing Assy	
15	Pump Screw	
16	1/2" Port Kit EPOM, (Set of 2)	Part No. 20381-002
	1/2" Port Kit Viton®, (Set of 2)	Part No. 20381-015
	3/4" Port Kit EPOM, (Set of 2)	Part No. 20381-006
	3/4" Port Kit Viton®, (Set of 2)	Part No. 20381-014

NOTE: Consult the 4300 service parts kits list (F100-024) for specific part numbers.

### SERVICE TIPS

**DISASSEMBLY** Remove four pump head screws (15). Rotate bearing cover (10) so drain notch is aligned with cam/bearing assembly set screw (8). Loosen set screw with 1/8" allen wrench and slide pump head off shaft. *Always* use complete FLOJET repair kits upon reassembly.

**ASSEMBLY** Install new single-piece outer piston (7) into bearing cover (10) with piston tops pointing away from motor. Slightly bend outer piston (7) along premolded crease to aid assembly. Place diaphragm in bearing cover (10) with the molded o-ring seals facing away from motor. Insert each inner piston (6) through diaphragm into outer piston. Turn each piston until fully seated. Align cam/bearing assembly (9) with outer piston (7). Secure with cam/piston screws using 18 inch pounds of torque. Reassemble lower housing (9, 10, 12) to motor. Set screw **MUST** be positioned over shaft indentation and secured tightly.

Reassemble pump upper housing (13-16). Check that ferrules are installed in upper housing and O-ring is properly seated before inserting check valve assembly (13) into upper housing (14). Align pump assembly to motor and tighten pump head screws evenly with 25 inch pounds of torque.

### TROUBLESHOOTING

#### Motor Operates, But No Pump Discharge (Failure to Prime)

- Restricted intake or discharge line. Open all line valves.
- Check for debris in check valves.
- Check for clogged inlet filter.
- Air leak in intake line.
- Punctured pump diaphragm.
- Defective pump check valve.
- Crack in pump housing.

#### Motor Fails to Turn On

- Pump or equipment not plugged in electrically.
- Loose wiring connection.
- Defective motor or rectifier.

#### Pump Fails to Turn Off after Discharge Valves are Closed

- Depletion of available liquid supply.
- Punctured pump diaphragm.
- Discharge line leak.

- Defective pressure switch.
- Insufficient voltage to pump.

#### Low Flow and Pressure

- Air leak at pump intake.
- Accumulation of debris inside pump and plumbing.
- Worn pump bearing (excessive noise).
- Punctured pump diaphragm.
- Defective rectifier or motor.

#### Pulsating Flow – Pump Cycles On and Off

- Restricted pump delivery. Check discharge lines, fittings, valves and spray nozzles for clogging or undersizing.

### SERVICE KITS

Kits are readily available to repair standard 4300 series pumps. To insure that the correct kits are received the model number and all name plate data must be included with the order. Contact a FLOJET distributor to order the necessary repair kits.

### PRODUCT WARRANTY

Flojet warrants this product to be free of defects in material and/or workmanship for a period of one year after purchase by the customer from Flojet. During this one year warranty period, Flojet will at its option, at no charge to the customer, repair or replace this product if found defective, with a new or reconditioned product, but not to include costs of removal or installation. No product will be accepted for return without a return material authorization number. All return goods must be shipped with transportation charges prepaid. This is only a summary of our Limited Warranty. For a copy of our complete warranty, please request Form No. 100-101.

### RETURN PROCEDURE

Prior to returning any product to Flojet, call customer service for an authorization number. This number must be written on the outside of the shipping package. Place a note inside the package with an explanation regarding the reason for return as well as the authorization number. Include your name, address and phone number.

Flojet

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