

### PUMP INSTALLATION

#### MOUNTING

Flojet 2135 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. Pump head may be rotated in 90° increments to simplify plumbing.

#### PLUMBING

For best performance, flexible 3/8-inch minimum hose is recommended instead of rigid piping at the pump. *Use plastic fittings at the pump port. Brass fittings will break pump housing if over tightened.* Do not install pump such that plumbing causes excessive stress on either port.

It is essential that a 20 mesh 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 1720/1740 Series 40 or 20 mesh strainer is available with various connections to fit most installations. For more information, request Form #F100-072. The use of check valves in the plumbing system may interfere with the priming ability of the pump. Check valves, if used, must have a cracking (opening) pressure of no more than 2 psi.

PRODUCT WARRANTY IS VOID IF INSTALLATION  
INSTRUCTIONS ARE NOT FOLLOWED.

#### 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 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. To maintain a smooth flow and constant operating pressure, the smallest size spray nozzles that may be used are as follows:

MODEL	MINIMUM NOZZLE SIZE	
	Equiv. Orifice Diam.	Last 2 Digits*
2100-030	.062"	06
2100-031	.052"	04
2100-032	.062"	06
2100-034	.036"	02
2100-130	.072"	08
2100-131	.062"	06
2100-132	.072"	08
2100-134	.052"	04

\*Ref. Spraying Systems Catalog

### TROUBLESHOOTING

#### Failure to Prime-

##### Motor operates, but no pump discharge

- Restricted intake or discharge line. Open all line valves, check for "jammed" check valve poppets and clean clogged lines.
- Air leak in intake line.
- Punctured pump diaphragm.
- Defective pump check valve.
- Crack in pump housing.
- Debris in check valves.

##### Motor Fails to Turn On

- Pump or equipment not plugged in electrically. Loose wiring connection.
- Defective motor or rectifier.
- Frozen cam/bearing.

#### 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.
- Debris in check valves.

#### 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
- Insufficient voltage to pump.

#### Pulsating Flow- Pump Cycles on and off

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