



GRINDER PUMP

Troubleshooting Guide

Problem 1: Pump does not start	Page 2
Problem 2: Pump does not start and overload heaters trip	Page 3
Problem 3: Pump runs, but does not turn off	Page 3
Problem 4: Pump runs or hums, but does not pump	Page 3
Problem 5: Pump does not deliver proper capacity	Page 4
Problem 6: Motor stops and then restarts after short period but overload heaters in starter do not trip	Page 4
Problem 7: Pump cycles too frequently	Page 4
Problem 8: Pump runs periodically when fixtures are not in use	Page 5
Problem 9: Pump operates noisily	Page 5
Problem 10: Repeated tripping	Page 5

Questions, problems, missing parts?

Call K2 Pumps Customer Service 8 am - 6 pm, Monday - Friday

844.242.2475

SAFETY INSTRUCTIONS

All electrical work should be performed by a licensed electrician.

WARNING: Risk of electrical shock. Disconnect power before working on pump, motor, pressure switch or wiring.

CAUTION: Motors run hot. Do not touch an operating motor. Before handling the pump, disconnect power and allow the motor to cool down for 20 minutes.

Read and follow all safety instructions on the pump label and in the owner's manual for your pump.

Problem 1: Pump does not start	
Possible Causes	Corrective Action
1. Damaged power or control cord.	1. Replace as needed.
2. Tripped circuit breaker, tripped GFCI, blown fuse, or other interruption of power.	2. Reset tripped circuit breaker, reset GFCI, replace blown fuse with properly sized fuse, check that the unit is securely plugged in, investigate power interruption.
3. Improper voltage.	3. Have an electrician check all wiring for proper connections and adequate voltage and capacity.
4. Low line voltage.	4. a. Check voltage. If under 108 V, check wiring size. b. Remove extension cord or use with heavier gauge.
5. Float switch is unable to move to the Pump ON position due to interference in basin or other obstruction.	5. Position the pump or float switch so that it has adequate clearance for free movement.
6. Insufficient liquid level.	6. Verify the liquid level is allowed to rise enough to activate float switch(es).
7. Obstructed impeller or volute.	7. Remove obstruction.
8. Loose wiring connections.	8. Check and tighten all connections.
9. Thermal overload tripped.	9. Wait for pump to cool to operating temperature.

Problem 2: Pump does not start and overload heaters trip

Possible Causes	Corrective Action
1. Unintentional ground.	1. Turn off power and check motor leads for possible ground.
2. Obstructed impeller or volute.	2. Remove obstruction.

Problem 3: Pump runs, but does not turn off

Possible Causes	Corrective Action
1. Control panel selector switch in Hand position.	1. Set selector switch to Auto position.
2. Float switch unable to move to the Pump OFF position due to interference with the side of basin or other obstruction.	2. Position the pump or float switch so that it has adequate clearance for free movement.
3. Control panel failure.	3. Check control panel.
4. Defective float switch.	4. Replace float switch.

Problem 4: Pump runs or hums, but does not pump

Possible Causes	Corrective Action
1. Discharge is blocked or restricted.	1. Check the discharge line for foreign material, including ice if the discharge line passes through or into cold areas.
2. Check valve is stuck closed or installed backward.	2. Remove check valve(s) and examine for freedom of operation and proper installation.
3. Gate or ball valve is closed.	3. Open gate or ball valve.
4. Total head (lift height) is beyond pump's capability.	4. Route piping to a lower level. If not possible, a larger pump may be required. Consult Liberty Pumps.
5. Obstructed impeller or volute.	5. Remove obstruction.

Problem 5: Pump does not deliver proper capacity

Possible Causes	Corrective Action
1. Discharge valve(s) partially closed or clogged.	1. Check the discharge line for foreign material, including ice if the discharge line passes through or into cold areas.
2. Check valve partially clogged.	2. Raise liquid level up and down to clear; remove check valve to remove obstruction.
3. Total head (lift height) is beyond pump's capability.	3. Route discharge piping to a lower level. If not possible, a larger pump may be required. Consult Liberty Pumps.
4. Low liquid level.	4. Check liquid level.
5. Incorrect motor rotation.	5. Contact factory.
6. Obstruction in pump or piping.	6. Remove obstruction.

Problem 6: Motor stops and then restarts after short period but overload heaters in starter do not trip

Possible Causes	Corrective Action
1. Pump operating on a short cycle due to basin being too small.	1. A larger basin may be required. Consult Liberty Pumps.
2. Water returning to basin due to leaking check valve.	2. Replace check valve.

Problem 7: Pump cycles too frequently

Possible Causes	Corrective Action
1. Improper float switch setting.	1. Adjust float switch setting.
2. Check valve not installed, stuck open, or leaking.	2. Install check valve(s); remove check valve and examine for freedom of operation and proper installation.

Problem 8: Pump runs periodically when fixtures are not in use

Possible Causes	Corrective Action
1. Check valve not installed, stuck open, or leaking.	1. Install check valve(s); remove check valve and examine for freedom of operation and proper installation.
2. Fixtures are leaking.	2. Repair fixtures as required to eliminate leakage.

Problem 9: Pump operates noisily

Possible Causes	Corrective Action
1. Piping attachments to building are too rigid.	1. Replace a portion of the discharge line with rubber hose or connector.
2. Pump is being run below minimum head requirement causing cavitation.	2. A different sized pump or impeller may be required. Consult Liberty Pumps.
3. Incorrect motor rotation.	3. Contact factory.
4. Foreign objects in the impeller cavity.	4. Clean the impeller cavity.

Problem 10: Repeated tripping

Possible Causes	Corrective Action
1. Circuit protection underrated.	1. Check rating and replace with proper size.
2. Other appliance on same circuit.	2. Pump requires separate circuit.
3. Pump is connected to an extension cord or wiring is inadequate or compromised.	3. Have an electrician check for proper wiring.
4. Improper voltage.	4. Have an electrician check all wiring for proper connections and adequate voltage and capacity.
5. Obstruction in pump.	5. Remove obstruction.
6. Incorrect motor rotation.	6. Contact factory.
7. Foreign matter buildup.	7. Clean motor housing.