



K2pumps.com

POOL PUMPS

Troubleshooting Guide

Variable Speed Models: PPV10001SPK, PPV15001SPK

Two Speed Models: PPI10001SPK, PPI15001SPK

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Questions, problems, missing parts?

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

844.242.2475

www.K2pumps.com

SAFETY INSTRUCTIONS

All electrical work and work on the pump motor should be performed by a licensed electrician.

WARNING: Risk of electrical shock. Disconnect power before working on pump or motor.

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 and operating instructions on the pump label and in the owner's manual, before doing any work on the pump!

Contact a professional pool installer if you are unsure how to determine the cause(s) or perform the corrective actions in this Troubleshooting Guide.

Problem 1: Pump will not prime	
Possible Causes	Corrective Action
1. Pump has not been primed correctly	1. Repeat the steps in the "Priming Pump" section of the owner's manual
2. There are leaks in the suction side of the pump installation	2. Check for air leaks in the suction pipe, valves, strainer lid, O-rings, unions, and pipe connections
3. Water level in the pool is too low	3. Raise the water level until it is halfway up the skimmer intake located on the inside of the pool wall
4. Water level of the pool is more than 10 ft vertical distance below the pump	4. The pump must be installed at 10 ft or less to the pool water
5. Suction pipe size is too narrow	5. Make sure suction pipe is at least 1-1/2 in. (38 mm) in diameter
6. Water level is low in the pump's Strainer Basket	6. Remove the trap cover on the pump. Add water to the Strainer basket, reseal the cover
7. Clogged strainer basket	7. Remove the trap cover on the pump. Remove the strainer basket and clean out any debris.
8. Pump operating speed (RPM) is too low to prime the pump	8. Variable Speed and Two Speed pumps should be started at High Speed to ensure proper priming

Problem 2: Pumps little or no water

1. Pump will not prime	1. Refer to all potential causes and corrective actions in Problem 1
2. Dirty pool filter	2. Clean the pool filter according to the manufacturer's instructions, or replace
3. Suction pipe is obstructed	3. Check the suction pipe and clean out any debris
4. Skimmer basket is obstructed	4. Clean out the skimmer basket according to the manufacturer's instructions
5. Impeller is obstructed	5. Check the impeller for debris. Refer to the "Care and Cleaning" section in your owner's manual
6. Impeller and/or diffuser may be worn out	4. Check impeller and diffuser for wear or cracks. If worn or cracked, order replacement parts by calling Customer Service.
7. Pump is not sized correctly for this installation	7. Call Customer Service or check with a professional pool installer

Problem 3: Pump is running too slow

1. Pump is wired incorrectly	1. Check for loose wiring connections and refer to the wiring instructions in your manual
2. Incorrect line voltage	2. Check line voltage; if less than 90% or more than 110% of rated voltage, consult a licensed electrician
2. Pump loses prime during operation	3. Refer to all potential causes and corrective actions in Problem 1
4. Pump is not sized correctly for this installation	4. Call Customer Service or check with a professional pool installer

Problem 4: Pump suddenly stops working

1. The circuit breaker has tripped	1. Reset the circuit breaker by switching the breaker to the "ON" position
2. Pump may be running hot due to incorrect line voltage	2. Check line voltage; if less than 90% or more than 110% of rated voltage, consult a licensed electrician
3. Wiring connections are loose	3. Tighten any loose connections. Refer to the "Electrical" section of your owner's manual
4. Pump may be running hot from lack of ventilation	4. Increase ventilation by keeping a clear space of at least two feet around the pump and making sure the air vents are clean
5. Pump may be running hot from excessive air temperature	5. Pump should be properly ventilated and protected from direct sun

Problem 5: Pump is noisy and experiencing mechanical troubles

1. The pipe assembly is incorrect	1. Adequately support the suction and discharge piping. Refer to the "Installation" section in your owner's manual.
2. The pump is mounted incorrectly	2. Securely mount the pump on a concrete platform. Do not mount on a wooden platform.
3. Cavitation, due to undersized suction piping or oversized pump motor	3. Try the following: <ul style="list-style-type: none">- Lowering the RPM in a Variable Speed Pool pump until the noise subsides- Raise the water level until it is halfway up the skimmer intake- Check with a professional pool installer
4. Bad motor bearings	4. Replace the bearings or the entire motor. Check with a professional pool installer.
5. Debris in the pump housing	5. Check the pump housing and impeller for debris. Refer to the "Care and Cleaning" section in your owner's manual.