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› CrestWave 110V Water Pressure Booster Pump F51-204-070-A User Manual

CRESTWAVE F51-204-070-A

CrestWave 110V Water Pressure Booster Pump F51-204-070-A User Manual

INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your CrestWave 110V Water Pressure Booster Pump, Model F51-204-070-A. This pump features an advanced 5-chamber design, delivering a consistent 7 GPM flow rate and up to 70 PSI pressure. It is designed for various applications including RVs, domestic water systems, irrigation, and marine use.

SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating the pump. Failure to follow these instructions may result in electric shock, fire, serious injury, or property damage.

- **Electrical Safety:** Ensure the power supply is 110V AC. Always disconnect power before performing any maintenance or installation. Do not operate the pump with damaged cords or plugs.
- **Water Temperature:** The pump is designed for water temperatures between 5-60°C (41-140°F). Do not use with liquids outside this range.
- **Operating Environment:** The pump should be operated in environments with temperatures between 5-40°C (41-104°F).
- **Pressure:** The pump operates up to 70 PSI. Ensure all connected plumbing can withstand this pressure.
- **Protection:** The pump includes thermal protection, overpressure protection, and dry-run protection. Do not bypass these safety features.
- **Installation:** Install the pump in a dry, well-ventilated area, protected from freezing temperatures and direct sunlight.

PACKAGE CONTENTS

Verify that all items are present in the package:

- CrestWave 110V Water Pressure Booster Pump (Model F51-204-070-A)

- 2 x Straight Hosebarb Fittings
- 2 x Thread Connectors
- 1 x 50 Mesh Strainer

SPECIFICATIONS

Feature	Specification
Brand	CRESTWAVE
Model Number	F51-204-070-A
Voltage	110 Volts
Maximum Flow Rate	7 Gallons Per Minute (26.5 Liters Per Minute)
Maximum Pressure	70 PSI (4.8 BAR)
Maximum Lifting Height	10 Feet (Self-Priming Vertically), 155 Feet (Horizontally)
Power Source	Corded Electric
Material	Plastic, Alloys
Product Dimensions (L x W x H)	9.05" x 5.91" x 5.12"
Noise Level	≤65dB
Waterproof Rating	IP68
Certifications	CE Certified

The pump features an updated 5-chamber design for improved performance and reduced vibration compared to older 3-chamber models.



Updated 5-Chamber Design



Easily Adjust High Water Pressure & Flow



Boast a Reflux Function



Minimize Vibration & Noise

CRESTWAVE



3-chamber Design
Cannot withstand high water pressure & flow
no reflux function
Caused Vibration & Loud Noise



Figure 1: Comparison of 5-Chamber vs. 3-Chamber Diaphragm Designs.

Product Size



Figure 2: Product Dimensions and Included Fittings.

SETUP AND INSTALLATION

Proper installation is crucial for the pump's performance and longevity. Follow these steps carefully:

- 1. Mounting:** Securely mount the pump in a stable, dry location. Ensure it is protected from weather elements and freezing temperatures. The pump can self-prime up to 10 feet vertically and 155 feet horizontally.
- 2. Inlet Connection:** Connect the included 50 mesh strainer to the inlet port of the pump. This prevents debris from entering and damaging the pump. Then, connect your water source hose to the strainer using the quick-connect ports.
- 3. Outlet Connection:** Connect your output hose to the outlet port of the pump using the quick-connect ports. Ensure all connections are secure and leak-free.
- 4. Quick Connect Procedure:**
 - Push out the clicks on the quick-connect fitting.
 - Push the connector firmly into the pump's port.
 - Push firmly until the clicks lock into place.

5. **Electrical Connection:** Plug the pump into a standard 110V AC power outlet. Ensure the outlet is properly grounded.



Figure 3: Quick Connect Installation Steps.



Figure 4: Example Domestic Water System Installation.

OPERATING INSTRUCTIONS

Once installed, operating your CrestWave pump is straightforward:

1. **Initial Start-up:** Ensure all connections are tight and the water source is open. Plug in the pump. The pump will begin to prime itself.
2. **Automatic Operation:** The pump features an automatic ON/OFF pressure switch. It will turn on when water demand is detected (e.g., opening a faucet) and turn off when the demand stops and system pressure reaches the set point.
3. **Pressure Adjustment:** The pump's pressure switch is adjustable from 20-70 PSI. To adjust the pressure:
 - Locate the pressure adjustment screw on the pump.
 - Use a screwdriver to rotate the screw.
 - Rotate clockwise to increase pressure.
 - Rotate counter-clockwise to decrease pressure.
4. **Quiet Operation:** The pump is designed to operate at a noise level of $\leq 65\text{dB}$, providing a comfortable user

experience.



Figure 5: Automatic ON/OFF Function for Energy Savings.



Figure 6: Pressure Adjustment (20-70 PSI Adjustable).

MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your pump.

- **Strainer Cleaning:** Periodically inspect and clean the 50 mesh strainer to prevent blockages and maintain flow rate. Disconnect power before cleaning.
- **Leak Checks:** Regularly check all connections for leaks. Tighten fittings as necessary. The pump features enhanced seal technology to reduce leakage risks.
- **Winterization:** If the pump is used in an area subject to freezing temperatures, it must be drained completely to prevent damage. Disconnect the inlet and outlet hoses and allow all water to exit the pump. Store in a warm, dry place if possible.
- **General Inspection:** Inspect the power cord for any damage. Ensure the pump is free from dirt and debris.

TROUBLESHOOTING

Refer to this section for common issues and their solutions.

Problem	Possible Cause	Solution
Pump does not turn on	No power; tripped circuit breaker; faulty wiring; pump in dry-run protection mode.	Check power connection and circuit breaker. Inspect wiring. Ensure water supply is available and prime the pump if necessary.
Low flow or pressure	Clogged strainer; air in the system; kinked hoses; incorrect pressure setting.	Clean the strainer. Bleed air from the system. Straighten hoses. Adjust pressure setting (refer to Operating Instructions).
Pump runs continuously	Leak in the system; faulty pressure switch; insufficient water supply.	Check all plumbing for leaks and repair. Ensure adequate water supply. If issue persists, contact support.
Water leaks from pump	Loose connections; damaged seals.	Tighten all quick-connect fittings and hose clamps. If seals are damaged, contact support for replacement parts.
Excessive noise	Air in the system; pump not securely mounted; debris in pump.	Bleed air from the system. Ensure pump is securely mounted on a stable surface. Check for and remove any debris.

WARRANTY AND SUPPORT

CrestWave products are manufactured to high-quality standards and are backed by a manufacturer's warranty against defects in materials and workmanship. For specific warranty details, please refer to the documentation included with your purchase or contact CrestWave customer support.

For technical assistance, troubleshooting not covered in this manual, or to inquire about replacement parts, please contact CrestWave customer support through the official website or your retailer.

Contact Information: Please refer to the contact details provided on the product packaging or the official CrestWave website.