

Taco 008-F6

Taco 008-F6 Cast Iron Pump User Manual

Model: 008-F6

PRODUCT OVERVIEW

The Taco Model 008 Cartridge Circulator is engineered for a broad spectrum of residential and light commercial applications requiring higher head water circulation. Its design incorporates a unique, replaceable cartridge that houses all moving parts, simplifying maintenance and eliminating the need to replace the entire unit. This compact, direct-drive circulator features low power consumption, making it an efficient choice for various systems.



Figure 1: Taco 008-F6 Cast Iron Pump. This image shows the green cast iron pump unit with its motor housing and flange connections. Two black O-rings are visible in the foreground, likely for sealing connections.

KEY FEATURES

- Standard High Capacity Output with Compact Design: Ensures quiet and efficient operation.
- Unique Replaceable Cartridge Design: Allows for field serviceability, simplifying maintenance.
- Direct Drive with Low Power Consumption: Contributes to energy efficiency.
- Self-Lubricating: Eliminates the need for mechanical seals, enhancing reliability and reducing maintenance.
- Universal Flange-to-Flange Dimensions: Facilitates easy installation and replacement.
- Constructed from Cast Iron: Provides durability and longevity.
- Motor: Equipped with a 0.025 (1/40) horsepower motor.

SETUP AND INSTALLATION

Proper installation is crucial for the optimal performance and longevity of your Taco 008-F6 pump. Always ensure the

power supply is disconnected before beginning any installation work.

Pre-Installation Checklist:

- Verify that the pump's specifications match your system requirements (e.g., voltage, flow rate, head pressure).
- Ensure the installation area provides adequate space for the pump and future maintenance.
- Confirm that all necessary plumbing fittings and tools are available.
- Inspect the pump for any visible damage from shipping.

Installation Steps:

1. **System Preparation:** Drain the system completely and ensure all valves are closed to prevent water flow during installation.
2. **Mounting:** Position the pump in the desired location, ensuring it is securely mounted to a stable surface. The universal flange-to-flange dimensions facilitate direct replacement in many existing systems.
3. **Plumbing Connections:** Connect the pump to the system piping using appropriate fittings. Ensure all connections are tight and leak-free. Use the provided O-rings for a proper seal.
4. **Electrical Wiring:** Connect the pump to the electrical supply according to local codes and the pump's wiring diagram. The pump operates on 115V AC/DC power. Ensure proper grounding.
5. **System Refill:** Once plumbing and electrical connections are complete, slowly refill the system, bleeding air as necessary to prevent airlocks.
6. **Final Check:** Double-check all connections for leaks and ensure the pump is properly wired before restoring power.

Note: For detailed wiring diagrams and specific plumbing configurations, refer to the separate installation guide provided with the product packaging.

OPERATING INSTRUCTIONS

The Taco 008-F6 pump is designed for straightforward operation once properly installed.

Starting the Pump:

1. Ensure the system is fully filled with fluid and all air has been purged.
2. Restore electrical power to the pump. The pump should begin operating quietly.
3. Monitor the system for the first few minutes of operation to ensure proper flow and no unusual noises or leaks.

Normal Operation:

The 008-F6 circulator is designed for continuous, quiet operation. It is self-lubricating and requires no external lubrication. The pump will circulate water within your system as required by your thermostat or control system.

Shutting Down the Pump:

To shut down the pump, simply disconnect the electrical power supply. For extended periods of non-use, it is recommended to drain the system to prevent freezing or stagnation, especially in unheated areas.

MAINTENANCE

The Taco 008-F6 circulator is designed for minimal maintenance due to its self-lubricating and cartridge-based design. However, periodic checks can help ensure its long-term reliability.

Routine Checks:

- **Annually:** Inspect the pump for any signs of leaks around the flanges.
- **Periodically:** Listen for any unusual noises during operation, which could indicate a problem.
- **System Water Quality:** Ensure the system water quality is maintained to prevent corrosion or scale buildup, which can affect pump performance.

Cartridge Replacement:

One of the key features of the 008-F6 is its replaceable cartridge, which contains all the moving parts. If the pump experiences issues related to the motor or impeller, the cartridge can be replaced without replacing the entire pump body.

1. **Disconnect Power:** Always disconnect electrical power to the pump before attempting any service.
2. **Isolate and Drain:** Close isolation valves on either side of the pump and drain the section of the system containing the pump.
3. **Remove Fasteners:** Loosen and remove the bolts securing the motor housing to the pump volute.
4. **Extract Cartridge:** Carefully pull the motor and cartridge assembly away from the pump body. The cartridge will come out with the motor.
5. **Install New Cartridge:** Install a new, genuine Taco replacement cartridge onto the motor shaft.
6. **Reassemble:** Reinsert the motor and new cartridge assembly into the pump volute, ensuring the O-ring is properly seated. Tighten the fasteners evenly.
7. **Refill and Test:** Refill the system, bleed air, and restore power to test the pump.

Consult a qualified technician if you are unsure about any maintenance procedures.

TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your Taco 008-F6 pump. Always disconnect power before performing any inspection or repair.

Problem	Possible Cause	Solution
Pump does not start	No electrical power Motor seized Wiring error	Check power supply and circuit breaker. Attempt to free the impeller (if accessible and safe). Consider cartridge replacement. Verify wiring against diagram.
Pump runs but no flow	Airlock in system Closed valves Impeller obstruction	Bleed air from the system. Open all necessary isolation valves. Inspect and clear any obstructions in the impeller area (after disconnecting power).
Noisy operation	Air in system Worn bearings (cartridge) Cavitation	Bleed air from the system. Replace the cartridge assembly. Ensure adequate system pressure and flow.

Problem	Possible Cause	Solution
Leaking at connections	Loose fittings Damaged O-rings/gaskets	Tighten connections. Replace O-rings or gaskets.

If the problem persists after attempting these solutions, contact a qualified plumbing or HVAC professional.

SPECIFICATIONS

Attribute	Detail
Manufacturer	Taco
Model Number	008-F6
Part Number	008-F6
Item Weight	7 pounds
Product Dimensions	8 x 6 x 6 inches
Material	Cast Iron
Power Source	AC/DC
Voltage	115V
Horsepower	0.025 (1/40) HP
Max Water Temperature	110°C (230°F)
Included Components	Taco 008-F6 Cast Iron Cartridge Circulator - 008 Series, 115 V

SUPPORT INFORMATION

For further assistance, technical support, or to inquire about replacement parts, please contact Taco directly. While specific contact details are not provided in this manual, you can typically find up-to-date information on the official Taco website or through authorized distributors.

When contacting support, please have your pump's model number (008-F6) and any relevant purchase information ready.

