

Taco 006-ST4

Taco 006-ST4 Stainless Steel Circulating Pump User Manual

Model: 006-ST4 | Brand: Taco

1. INTRODUCTION

The Taco 006-ST4 Stainless Steel Circulating Pump is engineered for efficient circulation of hot or chilled fresh water in various open or closed loop systems. Its robust stainless steel construction ensures durability and corrosion resistance, making it suitable for a wide range of applications.

Typical applications include hydronic heating, domestic hot water recirculation, hydro-air heating/cooling systems, heat recovery units, water source heat pumps, drain-down open loop solar systems, and potable water applications. The pump features a unique, replaceable cartridge design, simplifying maintenance by allowing service of moving parts without replacing the entire circulator. Its compact design and low power consumption contribute to high operational efficiency.

2. SAFETY INFORMATION

Read all instructions carefully before installation and operation. Failure to follow these instructions may result in serious injury, property damage, or death.

- **Electrical Safety:** Ensure all electrical connections are made by a qualified electrician and comply with local codes. Disconnect power before servicing.
- **Hot Surfaces:** The pump and connected piping can become hot during operation. Allow to cool before handling.
- **Pressure:** This pump operates under pressure. Relieve system pressure before opening any connections.
- **Water Damage:** Install the pump in an area where potential leaks will not cause damage.
- **Intended Use:** Use this pump only for circulating fresh water as specified. Do not use with flammable or corrosive liquids.

3. PACKAGE CONTENTS

Verify that all components are present before beginning installation.

- Taco 006-ST4 Stainless Steel Circulating Pump

- Installation and Operation Manual (this document)
- Gaskets (if included with specific model variant)
- Flanges (if included with specific model variant)

4. SPECIFICATIONS



Image 1: Taco 006-ST4 Stainless Steel Circulating Pump. This image displays the compact design of the pump, highlighting its stainless steel housing and connection points.

| Parameter | Value |
|---------------------------|---|
| Model | 006-ST4 |
| Material | Stainless Steel |
| Horsepower (HP) | 1/40 HP |
| Flow Range | 0-10 GPM (Gallons Per Minute) |
| Head Range | 0-9 Feet |
| Minimum Fluid Temperature | 40°F (4°C) |
| Maximum Fluid Temperature | 220°F (104°C) |
| Maximum Working Pressure | 125 PSI |
| Connection Sizes | 3/4", 1", 1-1/4", 1-1/2" CI Flanged or 1/2" Swt, 3/4" Swt, 3/4" NPT, or Union |
| Item Weight | 5 pounds |
| Package Dimensions | 6 x 6 x 4 inches |

5. INSTALLATION AND SETUP

5.1 Mounting

- Mount the pump in an accessible location for future maintenance.
- Ensure the motor is positioned horizontally to prevent premature bearing wear.
- Use appropriate mounting hardware to secure the pump firmly to a stable surface.

5.2 Plumbing Connections

- Connect the pump to the system piping using the appropriate connection sizes (3/4", 1", 1-1/4", 1-1/2" CI Flanged or 1/2" Swt, 3/4" Swt, 3/4" NPT, or Union).
- Ensure all connections are watertight to prevent leaks. Use thread sealant or Teflon tape as required.
- Install isolation valves on both sides of the pump to facilitate future servicing without draining the entire system.
- For optimal performance, ensure the system is properly purged of air after filling.

5.3 Electrical Connections

- All electrical wiring must be performed by a qualified electrician in accordance with national and local electrical codes.
- Verify the power supply voltage matches the pump's requirements.
- Ensure the pump is properly grounded.
- Install an accessible disconnect switch near the pump.

6. OPERATION

6.1 Initial Start-up

1. Ensure the system is filled with water and properly vented to remove all air.
2. Open all isolation valves to allow water flow through the pump.
3. Restore electrical power to the pump.
4. Observe the pump for proper operation and check for any leaks.

6.2 Normal Operation

The Taco 006-ST4 is designed for continuous circulation. Once started, it will operate silently and efficiently. Monitor system pressure and temperature as needed for your specific application.

7. MAINTENANCE

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

7.1 Cartridge Replacement

The unique replaceable cartridge contains all the moving parts of the pump. If the pump experiences reduced performance or becomes noisy, the cartridge may need replacement.

1. **Disconnect Power:** Always turn off and disconnect electrical power to the pump before any maintenance.
2. **Isolate Pump:** Close the isolation valves on both sides of the pump.
3. **Drain:** Drain the water from the pump section.
4. **Remove Fasteners:** Loosen and remove the bolts securing the motor housing to the pump volute.
5. **Extract Cartridge:** Carefully pull the motor and old cartridge assembly out of the volute.
6. **Install New Cartridge:** Insert the new cartridge into the volute, ensuring it seats correctly.
7. **Reassemble:** Reattach the motor housing and tighten the bolts evenly.
8. **Restore Operation:** Open isolation valves, refill and vent the system, then restore power.

7.2 General Inspection

- Periodically check for leaks around connections.

- Listen for unusual noises during operation.
- Ensure the pump area is clean and free from debris.

8. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|---------------------------|--|---|
| Pump does not start | No power; Motor seized; Wiring error | Check power supply and circuit breaker; Inspect wiring; Replace cartridge if motor is seized. |
| Reduced flow or no flow | Air in system; Closed valves; Clogged impeller/cartridge | Vent system to remove air; Open all isolation valves; Inspect and clean/replace cartridge. |
| Excessive noise/vibration | Air in system; Worn cartridge; Improper mounting | Vent system; Replace cartridge; Ensure pump is securely mounted. |
| Leaks at connections | Loose connections; Damaged gaskets/sealant | Tighten connections; Replace gaskets or reapply thread sealant. |

If troubleshooting steps do not resolve the issue, contact a qualified service technician or Taco customer support.

9. WARRANTY AND SUPPORT

For specific warranty information, please refer to the warranty card included with your product or visit the official Taco website. Keep your proof of purchase for warranty claims.

For technical assistance, replacement parts, or further inquiries, please contact Taco customer support.

- **Taco Official Website:** www.tacocomfort.com
- Refer to the website for contact numbers and service center locations.