

Taco 006-IQBC7-1IFC

Taco SmartPlus Hot Water Recirculation Pump

Model: 006-IQBC7-1IFC | Brand: Taco

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Taco 006-IQBC7-1IFC SmartPlus Hot Water Recirculation Pump. The SmartPlus system is designed to provide instant hot water at fixtures by intelligently monitoring and adapting to your household's hot water usage patterns, or by operating in a continuous pulse mode. Please read this manual thoroughly before installation and operation to ensure proper function and safety.

2. IMPORTANT SAFETY INFORMATION

WARNING: Failure to follow these safety instructions could result in electric shock, fire, serious injury, or death.

- Always disconnect power before servicing the pump.
- Installation must be performed by a qualified plumber or electrician in accordance with all local codes and regulations.
- Do not operate the pump if the power cord is damaged.
- This pump is designed for hot water recirculation only. Do not use for other liquids or applications.
- Ensure the pump is properly grounded.
- Wear appropriate personal protective equipment (PPE) during installation and maintenance.

3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- Taco 006-IQBC7-1IFC SmartPlus Recirculation Pump
- Line Cord (pre-attached)
- Internal Check Valve (pre-installed)
- Instruction Manual

4. INSTALLATION INSTRUCTIONS

4.1 Pre-Installation Checklist

- Ensure the installation location is accessible for maintenance.
- Verify that the power supply matches the pump's requirements (115 Volts, 60 Hz).
- Confirm plumbing connections are ready for 1/2-inch sweat fittings.
- Turn off the main water supply and drain the hot water lines before proceeding.

4.2 Mounting the Pump

The pump should be mounted in an accessible location, typically near the hot water heater or at the furthest fixture from the heater, depending on the system design. Ensure the pump is installed in a horizontal position with the motor above the volute to prevent air pockets.

4.3 Plumbing Connections

1. Prepare the 1/2-inch copper pipes for sweat connections. Clean and flux the pipe ends and the pump's sweat ports.
2. Solder the pump into the hot water recirculation line. Ensure a watertight seal.
3. The pump includes an internal check valve to prevent backflow.
4. After soldering, allow the connections to cool completely before restoring water pressure.

4.4 Electrical Connections

The Taco SmartPlus pump comes with a pre-attached line cord for easy electrical connection.

1. Ensure the power outlet is a standard 115V, 60Hz grounded receptacle.
2. Plug the line cord into the dedicated electrical outlet.
3. Do not use extension cords or adapters.



Figure 1: Taco SmartPlus Hot Water Recirculation Pump

This image displays the Taco SmartPlus hot water recirculation pump. The top section shows the control panel with LED indicators for 'SENSOR', 'MODE', and 'POWER', along with a 'TEMP SENSOR' port and the power cord connection. The main body of the pump features the 'Taco SmartPlus HOT WATER RECIRCULATION' logo and detailed specifications such as HP: 1/40, AMPS: 0.52, HZ: 60, VOLTS: 115, RPM: 3250, MAX PRESS: 125 PSI, MAX WATER TEMP: 104°C / 220°F. It also notes 'IMPEDANCE PROTECTED CONTINUOUS DUTY ENCLOSURE TYPE 2 / BOITIER DE TYPE 2 WATER CIRCULATING PUMP CLASS F' and 'TACO, INC. CRANSTON RI USA'.

5. INITIAL SETUP AND CONFIGURATION

5.1 Powering On

Once the pump is installed and plumbed, restore the main water supply and check for leaks. Then, plug in the pump's line cord to power it on.

5.2 Understanding the LED Indicators

The control panel features three LED indicators:

- **SENSOR LED:** Indicates the status of the temperature sensor.
- **MODE LED:** Indicates the current operating mode (Smart Mode, Pulse Mode, or Vacation Mode).

- **POWER LED:** Indicates that the pump is receiving electrical power.

5.3 Operating Modes

The SmartPlus pump offers different operating modes to suit your needs. The mode can typically be selected via a button on the control panel (refer to specific product labeling if available).

- **Smart Mode:** The default and most energy-efficient mode. The pump learns your hot water usage patterns.
- **Pulse Mode:** Provides continuous hot water by cycling the pump at regular intervals.
- **Vacation Mode:** An energy-saving mode for extended periods of inactivity.

6. OPERATION

6.1 Smart Mode (Adaptive Recirculation)

In Smart Mode, the pump monitors and records your home's hot water usage pattern for the first seven days of operation. During the subsequent seven days, the SmartPlus repeats the preceding week's usage pattern to cycle the pump, ensuring instant hot water at all fixtures only when needed. This learning and repeating process is continuous, adapting every seven days to optimize efficiency and comfort.

6.2 Pulse Mode (Continuous Recirculation)

If selected, Pulse Mode sets the SmartPlus to run for 150 seconds every 10 minutes. This mode maintains hot water at all fixtures on a consistent schedule, regardless of learned usage patterns. This can be useful in situations where immediate hot water is always desired, or during periods of unpredictable demand.

6.3 Vacation Mode

The Vacation Function is designed to save energy during extended periods of absence. After 36 hours of inactivity (no hot water usage detected), the pump will automatically turn off. While in Vacation Mode, the pump will periodically cycle (Exercise Function) to prevent seizing and maintain system readiness. The pump will resume normal operation once hot water usage is detected again.

7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your SmartPlus pump.

- **Annual Inspection:** Annually inspect the pump and plumbing connections for any signs of leaks, corrosion, or wear.
- **Cleaning:** Keep the exterior of the pump clean and free from dust and debris. Do not use harsh chemicals.
- **O-Ring Check:** The casing O-Ring (part number 007-003RP) should be inspected periodically and replaced if signs of wear or damage are present to prevent leaks.
- **Cartridge Assembly:** The cartridge assembly (part number 005-020RP) is a critical component. If the pump experiences reduced performance or unusual noises, consult a qualified technician for inspection or replacement.
- **Winterization:** If the pump is installed in an unheated area subject to freezing temperatures, it must be drained and disconnected for winterization to prevent damage.

8. TROUBLESHOOTING GUIDE

This section provides solutions to common issues you might encounter.

Problem	Possible Cause	Solution
No hot water at fixtures.	Pump not running; air in system; check valve issue; incorrect mode.	Check power connection and LED indicators. Bleed air from the system. Verify pump is in desired operating mode.
Pump not turning on.	No power; faulty wiring; pump malfunction.	Check power outlet and circuit breaker. Ensure power cord is securely plugged in. If POWER LED is off, consult an electrician.
Pump runs continuously in Smart Mode.	Learning phase; sensor issue; constant hot water demand.	Allow 7 days for learning cycle. Check SENSOR LED. Ensure no constant hot water draw.
Pump is noisy.	Air in system; worn bearings; foreign object.	Bleed air from the system. If noise persists, contact technical support.
Leaks at connections.	Improperly soldered joints; worn O-ring.	Turn off water supply, drain, and re-solder connections. Inspect and replace O-ring if necessary.

8.1 LED Indicator Troubleshooting

- If the **POWER LED** is off, check the power supply.
- If the **MODE LED** is not indicating the expected mode, refer to the product's specific mode selection instructions.
- If the **SENSOR LED** indicates an error, ensure the temperature sensor is properly connected and functioning.

9. TECHNICAL SPECIFICATIONS

Specification	Value
Model Number	006-IQBC7-1IFC
Horsepower (HP)	0.025 (1/40)
Amperage (AMPS)	0.52
Voltage (VOLTS)	115
Frequency (HZ)	60
RPM	3250
Max Pressure	125 PSI
Max Water Temperature	104°C / 220°F
Material	Bronze
Connections	1/2-Inch Sweat

Specification	Value
Item Weight	6.24 pounds
Product Dimensions	5 x 4 x 7 inches
Enclosure Type	Type 2
Continuous Duty	Yes
Internal Check Valve	Yes

10. WARRANTY AND SUPPORT

10.1 Warranty Information

The Taco 006-IQBC7-1IFC SmartPlus Hot Water Recirculation Pump is covered by a **3-year limited warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use and service. For full warranty terms and conditions, please refer to the official Taco documentation or contact customer support.

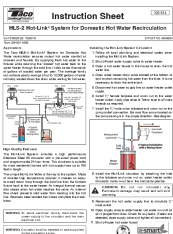
10.2 Technical Support

If you require technical assistance, have questions about installation, operation, or need to report a warranty claim, please contact Taco customer support. Have your model number and purchase date available when contacting support.

For further information, visit the official Taco website or consult your local distributor.

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Related Documents - 006-IQBC7-1IFC



[Taco HLS-2 Hot-Link System for Domestic Hot Water Recirculation - Instruction Sheet](#)

Instruction sheet for the Taco HLS-2 Hot-Link System, a domestic hot water recirculation system designed to provide instant hot water and save water. Includes installation guide, timer settings, troubleshooting, and warranty information.

	<p>Taco Hot-LinkPlus-e ECM Hot Water Recirculation System Instruction Sheet</p> <p>Comprehensive guide for installing and operating the Taco Hot-LinkPlus-e ECM High-Efficiency Hot Water Recirculation System with SmartPlug control, detailing features, installation steps, and troubleshooting tips.</p>
	<p>Taco Hot-LinkPlus-e: High-Efficiency Hot Water Recirculation System Installation & Specs</p> <p>Learn about the Taco Hot-LinkPlus-e system, an ECM high-efficiency hot water recirculation system. Features include instant hot water, water savings, SmartPlug control, and easy installation without a dedicated return line. Includes technical specifications and installation guide.</p>
	<p>Taco Plumb n' Plug "00" Series Cartridge Circulators - Instruction Sheet</p> <p>Comprehensive instructions for installing and operating Taco's Plumb n' Plug (PNP) "00" Series cartridge circulators. This guide details application, pump control options, benefits like water conservation and comfort, sizing guidelines, plumbing installation procedures, and programming instructions for both analog and digital timers. It also includes a limited warranty statement.</p>
	<p>Taco Timer and Aquastat Instruction Sheet</p> <p>Instruction sheet for Taco's Clock Timer and Temperature Aquastat combination, detailing installation, electrical hook-up, and programming for Analog Timer (No. 265-1) and Digital Timer (No. 265-3) models.</p>
	<p>Taco Timer and Aquastat Instruction Sheet - Installation and Operation</p> <p>Detailed instruction sheet for Taco's Timer and Aquastat combination units (models 265-1, 265-3, 563-2). Covers application, installation, electrical hook-up, analog and digital timer programming, and warranty information.</p>