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› LLPParts MC-601-BK Water Heater Controller Instruction Manual

LLPParts MC-601-BK

LLPParts MC-601-BK Water Heater Controller

INSTRUCTION MANUAL

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your LLPParts MC-601-BK Water Heater Controller. This unit is designed as a genuine replacement for RINNAI OEM parts. Please read this manual thoroughly before attempting any installation or operation to ensure proper function and to prevent damage or injury.

2. Safety Information

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, injury, or death. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

Always disconnect power to the water heater before installing or servicing the controller. Only qualified personnel should perform installation and service. Failure to follow these instructions could result in electric shock, fire, or other hazards.

3. Product Overview

The LLPParts MC-601-BK is a genuine replacement water heater controller designed to manage the functions of compatible water heaters. It provides user interface for temperature settings, operational status, and error code display.



Image showing the front view of the LLPParts MC-601-BK Water Heater Controller.

4. Setup and Installation

This section outlines the general steps for replacing an existing water heater controller with the LLPParts MC-601-BK. It is highly recommended that installation be performed by a certified technician.

4.1 Tools Required

- Screwdriver (Phillips or flathead, depending on existing fasteners)
- Wire strippers (if wiring connections need modification)
- Multimeter (for verifying power disconnection)
- Safety gloves and eye protection

4.2 Installation Steps

1. **Power Disconnection:** Locate the circuit breaker or power switch for your water heater and turn off the power completely. Verify power is off using a multimeter.
2. **Access Existing Controller:** Carefully open the access panel on your water heater to expose the existing

controller.

3. **Disconnect Wiring:** Note the wiring connections of the old controller. Take photos if necessary for reference. Disconnect all wires from the old controller.
4. **Remove Old Controller:** Unscrew or unclip the old controller from its mounting location.
5. **Mount New Controller:** Position the LLPParts MC-601-BK controller in the same location as the old unit. Secure it using the appropriate screws or clips.
6. **Connect Wiring:** Reconnect the wiring to the new MC-601-BK controller, ensuring each wire is connected to its corresponding terminal as noted in step 3. Ensure all connections are secure.
7. **Close Access Panel:** Carefully close and secure the water heater's access panel.
8. **Restore Power:** Turn the power back on at the circuit breaker or power switch.
9. **Test Operation:** Follow the operating instructions to test the new controller's functionality.

5. Operating Instructions

Once installed and powered, the MC-601-BK controller allows you to manage your water heater settings.

5.1 Basic Functions

- **Power On/Off:** The controller typically powers on automatically when the water heater receives power. Some models may have a dedicated power button.
- **Temperature Adjustment:** Use the up/down arrows or rotary dial (if present) to set the desired water temperature. The display will show the current setting.
- **Status Display:** The display will show the current operational status, such as heating, standby, or error codes.
- **Error Codes:** If an issue occurs, the controller may display an error code. Refer to the water heater's main manual for specific error code meanings.

6. Maintenance

The LLPParts MC-601-BK Water Heater Controller requires minimal maintenance. Regular inspection is recommended to ensure continued optimal performance.

- **Cleaning:** Periodically wipe the controller's surface with a soft, dry cloth to remove dust. Do not use abrasive cleaners or solvents.
- **Visual Inspection:** Annually inspect the controller and its wiring for any signs of wear, damage, or loose connections.
- **Environmental Conditions:** Ensure the controller is not exposed to excessive moisture or extreme temperatures beyond the water heater's operating environment.

7. Troubleshooting

If you encounter issues with your MC-601-BK controller, refer to the following common troubleshooting steps. For complex issues, contact a qualified technician.

7.1 Common Issues and Solutions

- **Controller Not Powering On:**
 - Check if the water heater's main power supply is on.
 - Verify all wiring connections to the controller are secure.

- Inspect for tripped circuit breakers.
- **Incorrect Temperature Display:**
 - Ensure the temperature setting is correct.
 - If the issue persists, there might be a sensor problem within the water heater itself, not the controller.
- **Error Code Displayed:**
 - Note the specific error code.
 - Consult your water heater's main instruction manual for the meaning of the error code and recommended solutions.
 - If the error code points to a controller malfunction, contact customer support.

8. Specifications

Specification	Detail
Brand	LLPParts
Model	MC-601-BK
Model Name	OEM
Material	Cotton <i>(Note: This material specification may refer to packaging or internal components, not the primary housing.)</i>
Manufacturer	LLPParts
UPC	761759760361
GTIN	761759760361

9. Warranty Information

The LLPParts MC-601-BK Water Heater Controller comes with a **one-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. To claim warranty service, please retain your proof of purchase and contact LLPParts customer support. The warranty does not cover damage caused by improper installation, misuse, accident, or unauthorized repairs.

10. Customer Support

For technical assistance, warranty claims, or any questions regarding your LLPParts MC-601-BK Water Heater Controller, please contact LLPParts customer support through the retailer where the product was purchased or refer to the contact information provided with your product packaging. When contacting support, please have your product model number (MC-601-BK) and proof of purchase readily available.