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Pentair 460742

Pentair MasterTemp 250 Propane to Natural Gas Conversion Kit Instruction Manual

INTRODUCTION

This manual provides detailed instructions for converting a Pentair MasterTemp 250 pool heater from Liquid Propane (LP) to Natural Gas (NG) operation using the Pentair 460742 Conversion Kit. It is essential to read and understand all instructions thoroughly before beginning the conversion process to ensure safe and correct installation.

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. This conversion kit must be installed by a qualified service technician in accordance with all local codes and ordinances.

- Ensure the heater is completely shut off and disconnected from all power and gas sources before beginning any work.
- Always wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Check for gas leaks after conversion using a non-corrosive leak detection solution.
- Do not attempt this conversion if you are not a qualified professional or lack the necessary tools and expertise.

PACKAGE CONTENTS

Verify that all components are present in your Pentair 460742 Conversion Kit:

- Natural Gas Orifice
- Conversion Label
- Gaskets and Seals (as required for specific heater model)
- Instruction Sheet (this document)



Image showing the components typically included in the Pentair 460742 Propane to Natural Gas Conversion Kit, which facilitates the conversion of a MasterTemp 250 heater from LP to Natural Gas.

SETUP AND INSTALLATION

This section outlines the general steps for converting your Pentair MasterTemp 250 heater. Refer to the specific heater model's service manual for detailed diagrams and safety procedures, as these instructions are supplementary.

1. Preparation:

- Turn off the main gas supply to the heater at the source.
- Disconnect electrical power to the heater at the circuit breaker.
- Allow the heater to cool completely if it has been in operation.

2. Accessing the Burner Tray:

- Remove the heater's top and front panels to gain access to the burner assembly.
- Carefully disconnect any wiring or sensors that obstruct access to the burner tray, noting their original positions.

3. Replacing the Orifice:

- Locate the existing LP gas orifice on the manifold.
- Using appropriate tools, carefully remove the LP orifice.
- Install the new Natural Gas orifice from the conversion kit. Ensure it is securely tightened to prevent leaks.

4. Adjusting the Gas Valve (if applicable):

- Some gas valves require adjustment for Natural Gas pressure. Consult the heater's service manual for specific instructions on adjusting the gas valve regulator.
- Typically, this involves removing a cap and turning an adjustment screw to set the correct manifold

pressure for Natural Gas.

5. Reassembly:

- Reinstall any removed wiring or sensors, ensuring all connections are secure.
- Replace the front and top panels of the heater, ensuring they are properly seated and secured.
- Affix the new "Natural Gas" conversion label from the kit in a prominent location on the heater, covering the old "Liquid Propane" label. This is crucial for safety and future servicing.

6. Leak Testing:

- Turn on the main gas supply to the heater.
- Apply a non-corrosive leak detection solution (e.g., soapy water) to all gas connections made or disturbed during the conversion.
- Look for bubbles, which indicate a leak. If a leak is detected, immediately shut off the gas supply and tighten connections until no leaks are present. Repeat the test.

7. Final Checks:

- Restore electrical power to the heater.
- Initiate a test fire of the heater to ensure proper operation and flame characteristics.
- Verify that the heater is operating efficiently and safely on Natural Gas.

OPERATING AFTER CONVERSION

Once the conversion is complete and verified by a qualified technician, operate your Pentair MasterTemp 250 heater according to its original operating manual, now configured for Natural Gas. Ensure the gas type setting on the heater's control panel, if adjustable, is correctly set to "Natural Gas."

MAINTENANCE

Regular maintenance of your converted heater is crucial for its longevity and safe operation. This includes:

- Annual inspection by a qualified technician to check gas connections, burner operation, and overall heater performance.
- Keeping the heater area clear of debris and obstructions to ensure proper ventilation.
- Periodically checking for any signs of gas leaks around connections, especially after any service.

TROUBLESHOOTING

If you encounter issues after converting your heater, consider the following:

- **Heater not igniting:** Verify gas supply is on, electrical power is connected, and the gas valve is correctly adjusted for Natural Gas. Check for proper orifice installation and ensure no air is trapped in the gas line.
- **Poor flame quality:** This could indicate incorrect gas pressure or an improperly installed orifice. Re-check gas valve adjustments and orifice seating. A qualified technician should verify gas pressure.
- **Gas odor:** Immediately shut off the gas supply at the main valve and contact a qualified technician or your gas provider. Do not attempt to operate the heater or troubleshoot further if a gas odor is present.

For persistent issues, consult the Pentair MasterTemp 250 heater's service manual or contact a qualified service professional.

SPECIFICATIONS

- **Product Model:** Pentair 460742
- **Conversion Type:** Liquid Propane (LP) to Natural Gas (NG)
- **Compatible Heater:** Pentair MasterTemp 250
- **Package Dimensions:** 9 x 7 x 6 inches
- **Manufacturer:** Pentair
- **ASIN:** B004YLJOR6

WARRANTY AND SUPPORT

For warranty information regarding the Pentair 460742 Conversion Kit, please refer to the documentation included with your original Pentair MasterTemp 250 heater or visit the official Pentair website. For technical support, contact Pentair customer service or a certified Pentair service provider.

Pentair Official Website: www.pentair.com