Pentair 460743

Pentair Air Blower Replacement Kit Instruction Manual

Model: 460743 | **Brand:** Pentair

Introduction

This manual provides comprehensive instructions for the installation, operation, and maintenance of the Pentair 460743 Air Blower Replacement Kit. This kit is specifically designed for the Pentair MasterTemp 250 Pool and Spa Natural Gas Heater. Proper installation and adherence to these guidelines are crucial for the safe and efficient operation of your heater system.

Safety Information

WARNING: Risk of electric shock, fire, or explosion. Installation and servicing must be performed by a qualified professional.

- Always disconnect power to the heater before attempting any installation, maintenance, or repair.
- Ensure the gas supply to the heater is turned off and properly secured before beginning work.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Verify all gas connections are secure and leak-free after installation. Use a leak detection solution, not an open flame.
- This kit is for replacement purposes only. Do not attempt to modify the blower or heater components.
- Refer to the main MasterTemp 250 heater manual for additional safety precautions and operational guidelines.

Package Contents

The Pentair 460743 Air Blower Replacement Kit includes the following components:



Image: All components included in the Pentair 460743 Air Blower Replacement Kit, laid out for inspection. This includes the main blower unit, a new gasket, a gas orifice, various nuts, clear plastic tubing, and clamps, essential for a complete replacement.

- Air Blower Assembly
- Gasket
- Gas Orifice
- Mounting Nuts
- Plastic Tubing
- Clamps
- Miscellaneous hardware (e.g., screws, brass fitting)

Installation Instructions

Follow these steps carefully for the proper replacement of the air blower. It is highly recommended that this procedure be performed by a certified pool technician.

1. Preparation

1. Turn off all power to the MasterTemp 250 heater at the circuit breaker.
2. Close the gas supply valve to the heater.
3. Allow the heater to cool completely if it has been recently operating.
4. Access the heater's internal components by removing the necessary panels as per the main heater manual.

2. Removal of Old Blower

1. Carefully disconnect the electrical wiring from the existing air blower. Note the wire connections for reassembly.
2. Disconnect any tubing or hoses connected to the blower.
3. Unscrew and remove the mounting nuts or bolts securing the old blower to the heater assembly.
4. Gently remove the old air blower and its gasket. Dispose of the old gasket.

3. Installation of New Blower



Image: The Pentair 460743 Air Blower Replacement Kit, fully assembled. This view highlights the robust metal housing and the integrated electric motor, ready for installation into the MasterTemp 250 heater.

1. Ensure the mounting surface is clean and free of debris.
2. Place the new gasket onto the mounting surface or directly onto the new blower.
3. Position the new air blower assembly, ensuring proper alignment with the mounting holes and the heater's intake.
4. Secure the blower using the new mounting nuts provided in the kit. Tighten them evenly to ensure a proper seal.
5. Connect the electrical wiring to the new blower, matching the connections noted during removal. Ensure all connections are secure.
6. Connect the new plastic tubing and secure it with the provided clamps. Ensure the gas orifice is correctly installed if it was part of the original setup.
7. Replace any removed heater panels.
8. Slowly open the gas supply valve and check for any gas leaks using a leak detection solution.
9. Restore power to the heater at the circuit breaker.
10. Test the heater's operation according to the main heater manual to confirm the blower is functioning correctly.

Operation

The air blower is a critical component of the MasterTemp 250 heater's combustion system. It draws in fresh air, mixes it with natural gas, and pushes the mixture into the combustion chamber. This precise air-to-fuel ratio is essential for efficient and clean burning. Once installed, the new air blower will operate automatically as part of the heater's normal ignition and heating cycle, controlled by the heater's internal electronics.

Maintenance

The Pentair 460743 Air Blower is designed for durability and typically requires minimal maintenance. However, periodic inspection can help ensure its longevity and proper function:

- **Annual Inspection:** During routine heater maintenance, visually inspect the blower for any signs of wear, corrosion, or damage.
- **Cleanliness:** Ensure the air intake of the blower is free from debris, dust, or obstructions that could impede airflow.
- **Connections:** Periodically check electrical connections and tubing for tightness and integrity.
- **Noise:** Listen for any unusual noises (e.g., grinding, squealing) during operation, which could indicate a failing motor or impeller.

Troubleshooting

If your MasterTemp 250 heater experiences issues after replacing the air blower, consult the table below. Always ensure power and gas are off before inspecting components.

Problem	Possible Cause	Solution
Heater does not ignite or cycles off quickly.	Incorrect wiring, obstructed air intake, faulty pressure switch, or gas supply issue.	Verify all electrical connections are correct and secure. Check blower intake for obstructions. Consult main heater manual for pressure switch diagnostics. Ensure adequate gas supply.
Blower makes unusual noises (e.g., grinding, squealing).	Bearing wear, impeller obstruction, or motor issue.	Disconnect power and inspect the impeller for foreign objects. If noise persists, the blower may need further professional assessment or replacement.
Error code related to airflow or pressure.	Tubing kinked or disconnected, pressure switch malfunction, or blower not providing sufficient airflow.	Check all tubing connections for kinks or disconnections. Ensure the new blower is properly seated and sealed. Consult the heater's error code guide.

If troubleshooting steps do not resolve the issue, contact a qualified service technician.

Specifications

Feature	Specification
Product Model Number	460743
Compatibility	Pentair MasterTemp 250 Pool and Spa Natural Gas Heater
Product Dimensions	13.8 x 12.8 x 12.6 inches
Item Weight	1 pound
Package Weight	13.05 pounds
Manufacturer	Pentair

Warranty and Support

This Pentair product is covered by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation provided with your original MasterTemp 250 heater or visit the official Pentair website. For technical support, replacement parts, or professional service, please contact Pentair Customer Service or an authorized Pentair dealer.

Pentair Customer Service: Refer to your original product documentation or the Pentair website for current contact information.