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› [Arcoaire](#) /

› Instruction Manual for Arcoaire Furnace Gas Valve 1172822

Arcoaire 1172822

Instruction Manual

OEM UPGRADED REPLACEMENT FURNACE GAS VALVE

Model: 1172822 (Substitutes: 1172542)

Brand: Arcoaire

1. INTRODUCTION AND SAFETY INFORMATION

This manual provides essential information for the safe and proper installation, operation, and maintenance of the OEM Upgraded Replacement Arcoaire Furnace Gas Valve, Model 1172822. This component is a critical part of your furnace's gas delivery system.

Important Safety Notice: Installation and service of heating equipment, including gas valves, should only be performed by a qualified, experienced installer or service agency. Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Read these instructions thoroughly before proceeding.

- Always turn off the main power supply and gas supply to the furnace before performing any service or installation.
- Verify that the replacement part is compatible with your specific furnace model.
- Check for gas leaks after installation using an approved method (e.g., soap solution).
- Do not attempt to repair a damaged gas valve; replace it with a new, genuine part.

2. PRODUCT OVERVIEW



The Arcoaire Furnace Gas Valve 1172822 is an OEM (Original Equipment Manufacturer) upgraded replacement part designed for specific Arcoaire furnace models. It is a Natural Gas (NG) valve with Hot Surface Ignition (HSI) and a 2-stage operation capability.

Key Features:

- Genuine Original Equipment Manufacturer (OEM) Part
- Designed for Natural Gas (NG) systems
- Compatible with Hot Surface Ignition (HSI) systems
- 2-Stage operation for efficient gas flow control
- Substitutes for part number 1172542

Image Description: An image showing the OEM Upgraded Replacement Arcoaire Furnace Gas Valve 1172822. The valve is a grey metallic unit with various ports, electrical connections, and a control knob labeled 'ON' and 'OFF'. The 'Honeywell' brand name is visible on the main body, indicating the manufacturer of the valve component.

3. SETUP AND INSTALLATION

This gas valve is a critical safety component. Installation must be performed by a qualified HVAC technician in accordance with all local codes and manufacturer's instructions.

3.1. Compatibility

This gas valve (Model 1172822) is an upgraded replacement and substitutes for part number 1172542. It is compatible with various Arcoaire furnace models, including but not limited to:

- C8MPT050B12B1, C8MPT075F14B1, C8MPT100F14B1, C8MPT100J20B1, C8MPT125J20B1
- C8MPV050B12B1, C8MPV050B12C1, C8MPV075F14B1, C8MPV075F14C1, C8MPV100J20B1, C8MPV100J20C1, C8MPV125J20B1, C8MPV125J20C1
- C9MPT050F12C1, C9MPT075F14C1, C9MPT100J16C1, C9MPT125L20C1
- C9MPV050F12C1, C9MPV050F12D1, C9MPV075F12C1, C9MPV075F12D1, C9MPV100J20C1, C9MPV100J20D1, C9MPV125L20C1, C9MPV125L20D1
- C9MVX040F12A1, C9MVX060F12A1, C9MVX080J20A1, C9MVX100L20A1
- H8MPT050B12B1, H8MPT075F14B1, H8MPT100F14B1, H8MPT100J20B1, H8MPT125J20B1
- H8MPV050B12B1, H8MPV050B12C1, H8MPV075F14B1, H8MPV075F14C1, H8MPV100J20B1, H8MPV100J20C1, H8MPV125J20B1, H8MPV125J20C1
- H9MPT050F12C1, H9MPT075F14C1, H9MPT100J16C1, H9MPT125L20C1
- H9MPV050F12C1, H9MPV050F12D1, H9MPV075F12C1, H9MPV075F12D1, H9MPV100J20C1, H9MPV100J20D1, H9MPV125L20C1, H9MPV125L20D1

- H9MVX040F12A1, H9MVX060F12A1, H9MVX080J20A1, H9MVX100L20A1
- T8MPT050B12B1, T8MPT075F14B1, T8MPT100F14B1, T8MPT100J20B1, T8MPT125J20B1
- T8MPV050B12B1, T8MPV050B12C1, T8MPV075F14B1, T8MPV075F14C1, T8MPV100J20B1, T8MPV100J20C1, T8MPV125J20B1, T8MPV125J20C1
- T9MPT050F12C1, T9MPT075F14C1, T9MPT100J16C1, T9MPT125L20C1
- T9MPV050F12C1, T9MPV050F12D1, T9MPV075F12C1, T9MPV075F12D1, T9MPV100J20C1, T9MPV100J20D1, T9MPV125L20C1, T9MPV125L20D1
- T9MVX040F12A1, T9MVX060F12A1, T9MVX080J20A1, T9MVX100L20A1

3.2. Installation Steps (General Guidelines)

1. **Safety First:** Ensure all power and gas supplies to the furnace are completely shut off at their respective main disconnects.
2. **Access:** Carefully open the furnace access panels to expose the existing gas valve.
3. **Disconnect:** Disconnect all electrical wiring and gas piping from the old gas valve. Be prepared for residual gas in the line.
4. **Remove Old Valve:** Unmount and remove the old gas valve.
5. **Install New Valve:** Mount the new Arcoaire 1172822 gas valve in the same position as the old one. Ensure proper alignment.
6. **Reconnect Piping:** Reconnect the gas piping to the new valve. Use appropriate pipe sealant on threaded connections.
7. **Reconnect Wiring:** Reconnect all electrical wiring according to the furnace manufacturer's wiring diagram. Ensure all connections are secure.
8. **Leak Test:** Slowly turn on the main gas supply. Perform a thorough leak test on all gas connections using a non-corrosive leak detection solution. Bubbles indicate a leak. If a leak is detected, shut off gas immediately and tighten connections or reapply sealant.
9. **Restore Power:** Once confident there are no gas leaks, restore electrical power to the furnace.
10. **Test Operation:** Follow the furnace manufacturer's instructions for initial startup and verify proper operation of the furnace and the new gas valve.

4. OPERATING INSTRUCTIONS

The gas valve operates in conjunction with the furnace's control board and thermostat to regulate gas flow to the burners. Its operation is largely automatic once installed correctly.

4.1. Normal Operation

- When the thermostat calls for heat, the furnace control board initiates the ignition sequence.
- The inducer motor starts, proving proper airflow.
- The hot surface igniter (HSI) heats up.
- Once the HSI reaches ignition temperature, the gas valve opens, allowing natural gas to flow to the burners.
- The gas ignites, and the flame sensor confirms the presence of a flame.
- For 2-stage operation, the valve may open to a lower flow rate initially (first stage) and then to a higher flow rate (second stage) if more heat is required.
- When the thermostat is satisfied, the gas valve closes, shutting off the gas supply to the burners.

4.2. Manual Control (If Applicable)

Some gas valves may have a manual ON/OFF knob. Ensure this knob is in the "ON" position for automatic operation. In case of emergency or extended shutdown, this knob can be turned to "OFF" to manually shut off gas flow to the burners.

Always refer to your specific furnace manual for detailed operating instructions.

5. MAINTENANCE

The gas valve itself typically requires minimal maintenance. However, regular professional inspection of your entire furnace system is crucial for safety and efficiency.

5.1. Annual Professional Inspection

It is highly recommended to have your furnace, including the gas valve, inspected annually by a qualified HVAC technician. They will:

- Check for proper gas pressure and manifold pressure.
- Inspect for any signs of gas leaks.
- Verify correct operation of the gas valve and ignition system.
- Clean and inspect other furnace components as needed.

5.2. User Checks

- **Listen:** Pay attention to any unusual sounds coming from the furnace, especially during startup or shutdown.
- **Smell:** If you smell gas, immediately follow emergency procedures: evacuate the premises, do not operate electrical switches, and call your gas utility or fire department from a safe location.
- **Visual Inspection:** Periodically check the area around the gas valve for any visible damage or corrosion.

6. TROUBLESHOOTING

Troubleshooting a gas valve often requires specialized tools and knowledge. The following are general guidelines. If you are unsure, always contact a qualified technician.

Problem	Possible Cause	Action
Furnace not igniting / No gas flow	No power to furnace Gas supply off Thermostat not calling for heat Faulty igniter or flame sensor Gas valve malfunction	Check circuit breaker. Ensure main gas valve is open. Verify thermostat settings. Inspect igniter/sensor (call technician if faulty). <i>Contact a qualified HVAC technician.</i>
Smell of gas near furnace	Gas leak	Immediately evacuate, do not operate electrical switches, call gas utility/fire department.
Furnace cycles on and off rapidly (short cycling)	Restricted airflow Overheating Control board issue	Check/replace air filter. Ensure vents are open. <i>Contact a qualified HVAC technician.</i>

Note: Many furnace issues are not directly related to the gas valve but can manifest as a lack of heat. Always consult a professional for complex diagnostics and repairs.

7. SPECIFICATIONS

Attribute	Value
Product Type	Furnace Gas Valve
Model Number	1172822
Substitutes Part Number	1172542
Brand	Arcoaire (OEM Part manufactured by ICP)
Gas Type	Natural Gas (NG)
Ignition Type	Hot Surface Ignition (HSI)
Stages	2-Stage
Package Dimensions	12 x 8 x 6 inches
Item Weight	2.38 pounds
Operating Temperature	50 Degrees Fahrenheit (5E+1)
ASIN	B00EA13R78

8. WARRANTY AND SUPPORT

As an OEM (Original Equipment Manufacturer) part, this gas valve is designed to meet the specifications and quality standards of Arcoaire. Specific warranty terms are typically provided by the seller or the original equipment manufacturer (ICP). Please retain your proof of purchase for any warranty claims.

For technical support, installation assistance, or warranty inquiries, please contact the authorized dealer or the manufacturer (ICP) directly. It is recommended to have the model and serial number of your furnace, along with the part number of the gas valve, ready when seeking support.

Disclaimer: This manual is for informational purposes only and does not supersede the instructions provided by the furnace manufacturer or local codes. Always prioritize safety and consult with qualified professionals for any installation or service beyond basic user checks.

