

ClimaTek 632571

ClimaTek Furnace Vent Air Pressure Switch Model 632571 User Manual

For use with Tappen Part # 632571 compatible systems

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your ClimaTek Furnace Vent Air Pressure Switch, Model 632571. This component is designed to ensure the proper and safe functioning of your furnace's venting system by monitoring air pressure.

2. SAFETY INFORMATION

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

- Always disconnect electrical power to the furnace before performing any installation or maintenance.
- Turn off the gas supply to the furnace before beginning work.
- Wear appropriate personal protective equipment (PPE), such as gloves and eye protection.
- Installation and service should be performed by a qualified HVAC technician.
- Ensure all connections are secure and free from leaks after installation.

3. PRODUCT OVERVIEW

The ClimaTek Furnace Vent Air Pressure Switch (Model 632571) is a critical safety device in your furnace. It monitors the negative pressure (vacuum) created by the inducer motor in the furnace's vent system. If sufficient airflow is not established, the switch prevents the furnace from igniting, thereby preventing the accumulation of dangerous combustion gases.



Figure 3.1: Front view of the ClimaTek Furnace Vent Air Pressure Switch, Model 632571. This image shows the main body of the switch, electrical terminals, and the pressure port. The label indicates 'ENDURA PLASTICS ES2256-1004 REV B 1.30" WC PF CLIMATEK ASX99 711 REF: 632671R MOUNT DIAPHRAGM VERTICAL'.

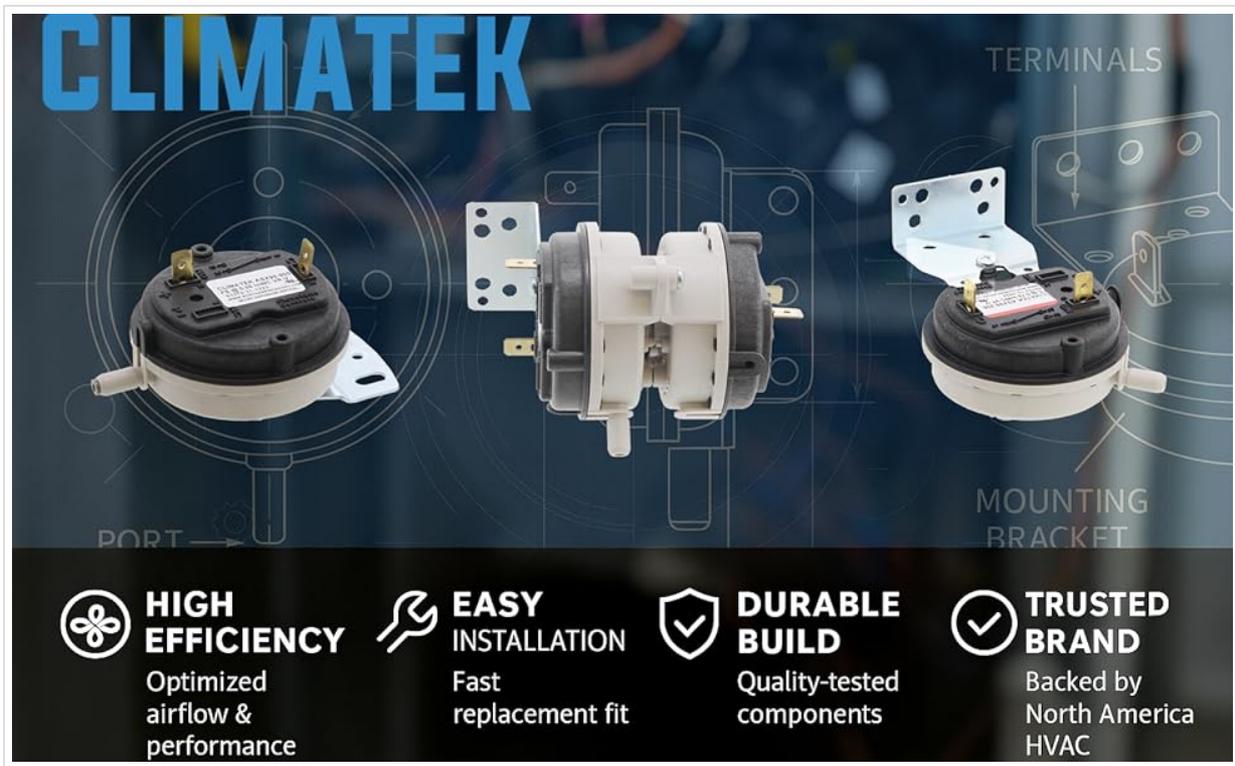


Figure 3.2: Overview of ClimaTek pressure switches, highlighting key features such as high efficiency, easy installation, durable build, and the trusted brand. The image displays multiple angles of the switch, showing terminals, ports, and mounting brackets.

4. SETUP AND INSTALLATION

This section outlines the general procedure for replacing a furnace pressure switch. Always refer to your furnace manufacturer's specific instructions and diagrams.

1. **Power Disconnection:** Locate your furnace's circuit breaker and turn off the power. Additionally, turn off the gas supply to the furnace.
2. **Access the Switch:** Open the furnace access panel to locate the existing pressure switch. It is typically a round or square component with one or two rubber hoses connected to it and two electrical wires.
3. **Document Connections:** Before disconnecting anything, take a photograph or make a drawing of the wiring and hose connections to ensure correct reassembly.
4. **Disconnect Hoses and Wiring:** Carefully remove the rubber hoses from the pressure switch ports. Disconnect the electrical wires from the terminals.
5. **Remove Old Switch:** Unscrew or unclip the old pressure switch from its mounting bracket.
6. **Install New Switch:** Mount the new ClimaTek Model 632571 pressure switch in the same location and orientation as the old one. Ensure it is securely fastened.
7. **Reconnect:** Reconnect the rubber hoses to the correct ports on the new switch. Reconnect the electrical wires to the appropriate terminals. Double-check all connections against your documentation.
8. **Restore Power and Gas:** Close the furnace access panel. Restore power to the furnace at the circuit breaker and turn on the gas supply.
9. **Test Operation:** Initiate a heating cycle on your thermostat. Observe the furnace's startup sequence to ensure it operates correctly and safely.

5. OPERATING INSTRUCTIONS

The ClimaTek Furnace Vent Air Pressure Switch operates automatically as part of your furnace's safety system. When the thermostat calls for heat:

- The inducer motor starts, creating a vacuum in the combustion chamber and vent system.
- This vacuum pulls on the diaphragm within the pressure switch.
- If the vacuum reaches the specified level (indicating proper venting), the switch closes, sending a signal to the furnace control board.
- The control board then allows the igniter to activate and the gas valve to open, initiating the heating cycle.
- If the vacuum is insufficient (due to a blocked vent, faulty inducer, etc.), the switch remains open, preventing the furnace from igniting, thus ensuring safety.

6. MAINTENANCE

The ClimaTek pressure switch itself requires minimal maintenance. However, regular inspection of related components is recommended:

- **Hose Inspection:** Periodically check the rubber hoses connected to the pressure switch for cracks, kinks, or blockages. Replace any damaged hoses.
- **Pressure Port:** Ensure the pressure port on the furnace (where the hose connects) is clear of debris or condensation.
- **Vent System:** Ensure the furnace's vent system is clear of obstructions (e.g., bird nests, ice, leaves) that could impede airflow.

7. TROUBLESHOOTING

If your furnace is experiencing issues, a faulty pressure switch could be a contributing factor. Consult a qualified technician for diagnosis and repair.

- **Furnace Not Starting:** If the inducer motor runs but the igniter does not glow and the gas valve does not open, the pressure switch may not be closing. This could indicate a faulty switch, a blocked vent, or an issue with the inducer motor.
- **Furnace Cycling On/Off:** If the furnace starts, runs for a short period, and then shuts off repeatedly, the pressure switch might be opening prematurely due to intermittent airflow issues or a failing switch.
- **Error Codes:** Many modern furnaces display error codes related to pressure switch failures. Consult your furnace manual for specific codes and their meanings.

8. SPECIFICATIONS

Feature	Detail
Brand	ClimaTek
Model Number	632571
Compatibility	Replaces Tappen Part # 632571
Product Dimensions (L x W x H)	3 x 6 x 3 inches
Item Weight	2.08 ounces

Feature	Detail
Unit Count	1.0 Count
Manufacturer	Replacement for Tappen (by ClimaTek)

9. WARRANTY AND SUPPORT

For warranty information or technical support regarding your ClimaTek Furnace Vent Air Pressure Switch, please refer to the documentation provided with your purchase or contact ClimaTek customer service. It is recommended to have a qualified HVAC technician perform any diagnostic or repair work.