

Tempstar 1013801

Tempstar OEM Furnace Replacement Air Pressure Switch

Model: 1013801

INTRODUCTION

This user manual provides essential information for the safe and effective installation, operation, and maintenance of the Tempstar OEM Furnace Replacement Air Pressure Switch, Model 1013801. This component is critical for ensuring the proper and safe functioning of your furnace by monitoring air pressure within the system. Please read this manual thoroughly before attempting any installation or maintenance.

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 furnace before servicing to prevent electrical shock.
- Ensure the furnace is cool before handling components to avoid burns.
- Only qualified service personnel should install or service HVAC components.
- Wear appropriate personal protective equipment (PPE), such as gloves and eye protection.
- Verify that the replacement part matches the original specifications for your furnace model.

PRODUCT OVERVIEW



A close-up view of the Tempstar OEM Furnace Replacement Air Pressure Switch, showing its black circular body, gray mounting bracket, and a blue dot on its surface. The label displays part numbers and manufacturing details, including '1192930', '9375VS-0468', and 'Costa Rica 33/23 556720/00181'.

The air pressure switch is a safety device in your furnace that detects proper airflow through the heat exchanger and venting system. If the pressure is not within the specified range, the switch will prevent the furnace from operating, ensuring safe combustion and preventing the release of harmful gases.

SETUP AND INSTALLATION

1. **Power Disconnection:** Turn off the power to the furnace at the thermostat and the main electrical panel. Verify power is off using a voltage tester.
2. **Locate Old Switch:** Identify the existing air pressure switch. It is typically a small, round component with one or more rubber hoses connected to it and electrical wires.
3. **Disconnect Hoses and Wires:** Carefully remove the rubber hoses from the ports on the old switch. Note their positions if there are multiple. Disconnect the electrical wires.
4. **Remove Old Switch:** Unscrew or unclip the old pressure switch from its mounting bracket.
5. **Install New Switch:** Mount the new Tempstar 1013801 pressure switch in the same location and orientation as the old one. Secure it with the appropriate screws or clips.

6. **Connect Hoses and Wires:** Reconnect the rubber hoses to the correct ports on the new switch. Reattach the electrical wires. Ensure all connections are secure.
7. **Restore Power:** Turn the power back on at the main electrical panel and the thermostat.
8. **Test Operation:** Initiate a heating cycle on your furnace and observe its operation. The furnace should start normally. Listen for any unusual noises or error codes.

If the furnace does not operate correctly after installation, refer to the Troubleshooting section.

OPERATING PRINCIPLE

The Tempstar 1013801 air pressure switch operates by sensing the negative pressure (vacuum) created by the inducer motor during the furnace's start-up sequence. When the inducer motor begins to pull air through the heat exchanger and exhaust vent, a specific negative pressure is generated. The pressure switch is calibrated to close an electrical circuit when this pressure is achieved, signaling the furnace control board that it is safe to proceed with ignition. If the pressure is insufficient (e.g., due to a blocked vent, faulty inducer, or cracked heat exchanger), the switch remains open, preventing the furnace from igniting and ensuring safety.

MAINTENANCE

The Tempstar 1013801 air pressure switch itself typically requires no direct maintenance. However, its proper function depends on the cleanliness and integrity of the components it monitors:

- **Hoses:** Periodically inspect the rubber hoses connected to the pressure switch for cracks, blockages, or deterioration. Replace them if necessary.
- **Ports:** Ensure the ports on the pressure switch and the inducer motor are clear of debris or condensation.
- **Vent System:** Ensure the furnace's exhaust vent system is clear of obstructions (e.g., bird nests, ice, leaves) that could affect airflow and pressure.
- **Inducer Motor:** Ensure the inducer motor operates freely and quietly. A failing inducer motor can lead to insufficient pressure.

It is recommended to have your furnace professionally inspected annually to ensure all components, including the pressure switch, are functioning correctly.

TROUBLESHOOTING

If your furnace is not operating and you suspect an issue with the pressure switch, consider the following:

Symptom	Possible Cause	Solution
Furnace cycles on and off rapidly (short cycling)	Intermittent pressure switch activation, partially blocked vent, or faulty inducer motor.	Check vent for obstructions. Inspect hoses for cracks. Consult a professional if the inducer motor is suspected.
Furnace inducer motor runs, but burner does not ignite	Pressure switch not closing, blocked pressure switch port, or faulty pressure switch.	Ensure hoses are clear and connected. Check for debris in switch ports. If issues persist, the switch may need replacement.
Error code related to pressure switch (refer to furnace manual)	Pressure switch failure, wiring issue, or problem with the furnace control board.	Verify wiring connections. Test the pressure switch with a multimeter (if qualified). If faulty, replace the switch.

Note: Many furnace issues can mimic a pressure switch problem. Always consult your furnace's specific diagnostic codes and consider professional assistance for complex issues.

SPECIFICATIONS

- **Model:** 1013801
- **Brand:** Tempstar
- **Type:** OEM Furnace Replacement Air Pressure Switch
- **Item Weight:** 9 ounces
- **Manufacturer:** Tempstar
- **Country of Origin:** USA
- **ASIN:** B00FJCDTUM
- **First Available:** September 30, 2013

WARRANTY AND SUPPORT

For specific warranty information regarding the Tempstar OEM Furnace Replacement Air Pressure Switch, Model 1013801, please refer to the documentation provided with your purchase or contact Tempstar customer support directly. Warranty terms typically cover manufacturing defects.

For technical support, installation assistance, or to locate authorized service providers, please visit the official Tempstar website or contact their customer service department. When contacting support, please have your product model number (1013801) and any relevant purchase details ready.