

LLPParts 6004

LLPParts Furnace Air Pressure Switch 1170927 User Manual

Model: 6004 | Replaces Part # 1170927

1. INTRODUCTION

This manual provides essential information for the installation, operation, maintenance, and troubleshooting of your LLPParts Furnace Air Pressure Switch, Model 6004 (Part # 1170927). This component is designed to monitor the air pressure within your furnace system, ensuring safe and efficient operation. It is a direct replacement for ICP OEM part # 1170927, and also replaces older part numbers 1008818 and HQ1008818TR.

2. SAFETY INFORMATION

WARNING: Installation and servicing of HVAC components should only be performed by qualified and experienced technicians. Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life.

- Always disconnect power to the furnace before performing any installation or maintenance.
- Ensure all wiring connections are secure and comply with local electrical codes.
- Verify proper operation after installation before restoring full power.
- Wear appropriate personal protective equipment (PPE) during installation and servicing.

3. PRODUCT OVERVIEW

The LLPParts Furnace Air Pressure Switch is a critical safety device in your furnace. It monitors the vacuum created by the inducer motor, ensuring that the exhaust gases are properly vented before the main burner ignites. This particular switch is rated at 0.50" W/C (Water Column).



Figure 1: LLPParts Furnace Air Pressure Switch. This image displays the LLPParts Furnace Air Pressure Switch. It features a circular black body with two brass wiring terminals on the top side and a single hose port on the bottom side. A yellow circular sticker is visible on the top surface, along with a barcode and other identification markings. Gray rubber-like feet are visible around the perimeter of the base.

The switch features two wiring terminals for electrical connection and one hose port for connecting to the furnace's pressure sensing tube.

4. SETUP AND INSTALLATION

This section outlines the general steps for replacing a furnace air pressure switch. Always refer to your specific furnace manufacturer's service manual for detailed instructions and safety precautions.

1. **Power Disconnection:** Turn off all electrical power to the furnace at the main service panel.
2. **Locate Old Switch:** Identify the existing pressure switch in your furnace. It is typically a small, round component with one or two rubber hoses connected to it and two electrical wires.
3. **Disconnect Hoses and Wires:** Carefully remove the rubber hose(s) from the old switch. Note their positions if there are multiple. Disconnect the electrical wires, noting which wire connects to which terminal. Taking a photograph before disconnection can be helpful.
4. **Remove Old Switch:** Unscrew or unclip the old pressure switch from its mounting bracket.
5. **Install New Switch:** Mount the new LLPParts pressure switch in the same location and orientation as the old one.
6. **Reconnect Hoses and Wires:** Reconnect the rubber hose(s) to the single hose port on the new switch. Reconnect the electrical wires to the two terminals. Ensure connections are snug.
7. **Verify Compatibility:** This switch is compatible with various ICP OEM units. A partial list of compatible units includes: FBF075B12A1, FBF075B12A2, FBF075F16A1, FBF075F16A2, FBF100F14A1, FBF100F14A2, FBF100F20A1, FBF100F20A2, GDJ075M12C2, GDJ075M16C2, GNJ100N12C1, GNJ100N12D1, GNJ100N12D2, GNJ100N16C1, GNJ100N16D1, GNJ100N16D2, GNJ100N20C1, GNJ100N20D1, GNJ100N20D2, NDN5075BFC2, NDN5075BHC2, NTC5100BFC1, NTC5100BFD1, NTC5100BFE1, NTC5100BFE2, NTC5100BJC1, NTC5100BJE1, NTC5100BJE2, TC5100BKD1, NTC5100BKE1, NTC5100BKE2, NTG3075FBA1, NTG3075FBA2, NTG3075HFA1, NTG3075HFA2, NTG3100GFA1, NTG3100GFA2, NTG3100KFA1, NTG3100KFA2, GNJ100N12A1, GNJ100N16A1, GNJ100N20A1, GNJ100N20B1, NCC5100BHA1, NCC5100BHB1, NCC5100BHB2, NCC5125BKA1, NCC5125BKB1, NCC5125BKB2,

NNAC100BHA1, NNAC100BHB1, NNAC125BKA1, NNAC125BKB1, NNAC150BKB1, NNAU100BFA1, NNAU100BFB1, NNAU100BHA1, NNAU100BHB1, NNAU100BKB1, NTC5100BFC1, NTC5100BKC1, NUG5100BFB1, NUG5100BFB2, NUG5100BHA1, NUG5100BHA2, NUG5100BHB1, NUG5100BHB2, NUG5100BKB1, NUG5100BKB2, NUH5100BFB1, NUH5100BFB2.

8. **Restore Power and Test:** Restore power to the furnace and initiate a heating cycle to confirm proper operation of the new pressure switch.

5. OPERATING PRINCIPLES

The furnace air pressure switch operates based on differential air pressure. When the inducer motor starts, it creates a negative pressure (vacuum) in the combustion chamber and exhaust vent. The pressure switch senses this vacuum through the connected hose. If the vacuum reaches the specified threshold (0.50" W/C for this model), the switch closes, signaling the furnace control board that it is safe to proceed with ignition. If the required vacuum is not achieved, the switch remains open, preventing the furnace from igniting, thus acting as a crucial safety interlock.

6. MAINTENANCE

The pressure switch itself typically requires no routine maintenance. However, it is important to ensure the following:

- **Hose Condition:** Periodically inspect the rubber hose connecting the pressure switch to the inducer motor or flue pipe for cracks, blockages, or loose connections. A compromised hose can lead to incorrect pressure readings.
- **Vent System:** Ensure the furnace's exhaust vent and intake (if applicable) are clear of obstructions (e.g., bird nests, debris, ice). Blockages can prevent the inducer motor from creating sufficient vacuum, leading to pressure switch errors.
- **Inducer Motor:** Verify the inducer motor is operating correctly and producing adequate suction.

7. TROUBLESHOOTING

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

- **Furnace Not Igniting:** If the inducer motor runs but the main burner does not ignite, the pressure switch may not be closing. Check for blockages in the flue, condensate drain, or pressure switch hose.
- **Error Codes:** Consult your furnace's diagnostic codes. Many furnaces will display a specific code indicating a pressure switch fault.
- **Visual Inspection:** Look for any obvious damage to the switch or its connections.
- **Testing (Advanced):** A qualified technician can use a manometer to measure the actual pressure at the switch port and a multimeter to check for continuity across the switch terminals when the inducer motor is running. **Do not attempt this without proper training and equipment.**

If troubleshooting steps do not resolve the issue, it is recommended to contact a certified HVAC technician for diagnosis and repair.

8. SPECIFICATIONS

Part Number	1170927 (Replaces 1008818, HQ1008818TR)
Model Number	6004
Pressure Rating	0.50" W/C (Water Column)
Terminals	Two wiring terminals
Ports	One hose port

Manufacturer	LLPParts
Product Dimensions	1 x 1 x 1 inches (approximate)
Item Weight	1 pound (approximate)
UPC	761759759273

9. WARRANTY AND SUPPORT

This LLPParts Furnace Air Pressure Switch comes with a **one-year product warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

For technical support, warranty claims, or further assistance, please refer to the contact information provided with your purchase or visit the official LLPParts website. When contacting support, please have your product model number (6004) and part number (1170927) available.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question