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› Armstrong 57W37 R46105-004 L170-30F Insertion Limit Switch User Manual

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Model: 57W37 R46105-004 L170-30F

INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the Armstrong 57W37 R46105-004 L170-30F Insertion Limit Switch. Please read these instructions carefully before proceeding with installation or use to ensure safe and efficient operation.

PRODUCT OVERVIEW

The Armstrong 57W37 R46105-004 L170-30F is an insertion limit switch designed for specific HVAC applications. It features a 3-inch insertion length and a mounting board measuring 1 7/8 x 2 3/4 inches. This component is crucial for monitoring and controlling temperature or airflow within compatible systems.



Figure 1: Armstrong 57W37 R46105-004 L170-30F Insertion Limit Switch. This image shows the green-sleeved wires connected to a circular metallic sensor, mounted on a white rectangular board with two notches at the top.

INSTALLATION INSTRUCTIONS

Safety First: Before beginning any installation, ensure that the power supply to the appliance is completely disconnected. Failure to do so may result in electrical shock or damage to the unit.

- 1. Identify the Location:** Locate the existing limit switch or the designated mounting area within your HVAC system. Refer to your appliance's specific service manual for precise location.
- 2. Remove Old Switch (if applicable):** Carefully disconnect the wiring from the old limit switch. Note the wiring configuration for correct re-connection. Remove any mounting screws or clips holding the old switch in place.
- 3. Prepare New Switch:** The Armstrong 57W37 R46105-004 L170-30F switch has a 3-inch insertion length. Ensure the probe can be fully inserted into the designated opening.
- 4. Mount the Switch:** Position the new limit switch using its 1 7/8 x 2 3/4 inch mounting board. Secure it with appropriate screws or fasteners, ensuring it is firmly in place and the probe is correctly inserted.
- 5. Connect Wiring:** Reconnect the electrical wiring to the new switch terminals. Ensure all connections are secure and match the original configuration. If unsure, consult a qualified technician.
- 6. Verify Installation:** Double-check all connections and mounting. Ensure no wires are pinched or exposed.
- 7. Restore Power:** Once installation is complete and verified, restore power to the appliance.

Compatibility: This limit switch is compatible with various Armstrong, Concord, and Allied Air models. A partial list includes: G2D80AR150D20D-2, G2D80BR150D20D-1, CG90UB050D12B-1, WFCT050B12, G1D91BT050D12B, CG90TB050D12B-1, G2D93AU080D16C-1, WGFDU045B12-1A, WGFDT045B12, G1D80AR150D20D-2, WFCU050B12-1, WGFDU045B12-1, G1D80BR150D20D-1, G2D80CR150D20D-1, G1D91BU050D12B-1, G1D93BU045D12B-1, G2D93BU100D20D-1, CG90UB050D12B-1, WFCT050B12-1, G1D91BT050D12B-1, G1D93BT045D12B-1, CG90TB050D12B-1, WGFALR150D20-1,

RPGE13A24050P-1, RGE13A24050P-1, CG92TB045D12B, CG95TB040D12B. For a complete list, refer to your appliance's documentation or contact Armstrong support.

OPERATING PRINCIPLES

The limit switch functions as a safety device. It monitors the temperature or other conditions within the system. If the monitored condition exceeds a predetermined safe limit, the switch will open its electrical contacts, interrupting the circuit and shutting down the appliance to prevent overheating or other hazardous situations. Once the condition returns to a safe level, the switch will reset, allowing the appliance to resume normal operation.

MAINTENANCE

The Armstrong 57W37 R46105-004 L170-30F Insertion Limit Switch is generally a low-maintenance component. Regular inspection is recommended as part of your overall HVAC system maintenance schedule.

- **Visual Inspection:** Periodically check the switch and its wiring for any signs of physical damage, corrosion, or loose connections.
- **Cleanliness:** Ensure the area around the switch and its probe is free from dust, debris, or obstructions that could affect its operation.
- **Functionality Check:** If your HVAC system has a diagnostic mode or a way to test safety components, follow the manufacturer's instructions to verify the limit switch's proper functioning.

Do not attempt to repair a faulty limit switch. If the switch is suspected to be malfunctioning, it should be replaced with an identical part by a qualified technician.

TROUBLESHOOTING

If your appliance is not operating correctly and you suspect the limit switch, consider the following:

- **Appliance Not Starting/Cycling Off:** If the appliance repeatedly shuts down or fails to start, the limit switch may have tripped due to an overheating condition. Check for blocked airflow, dirty filters, or other issues causing excessive heat.
- **No Power to Appliance:** Verify that the limit switch is properly connected and that its terminals are not corroded or loose. A tripped limit switch will interrupt power to certain components.
- **Continuous Tripping:** If the limit switch trips frequently, it indicates an underlying problem with the appliance, such as poor ventilation, a faulty blower motor, or a restricted exhaust. Address the root cause rather than repeatedly resetting or bypassing the switch.

For complex issues or if you are unsure about diagnosing the problem, it is recommended to contact a certified HVAC technician.

SPECIFICATIONS

Feature	Detail
Model Number	57W37, R46105-004, L170-30F
Type	Insertion Limit Switch

Feature	Detail
Insertion Length	3 inches
Mounting Board Dimensions	1 7/8 x 2 3/4 inches
Manufacturer	Armstrong
Item Weight	0.1 Pounds
Batteries Required	No

WARRANTY AND SUPPORT

For specific warranty information regarding the Armstrong 57W37 R46105-004 L170-30F Insertion Limit Switch, please refer to the documentation provided with your original appliance or contact Armstrong customer support directly. Keep your purchase receipt as proof of purchase.

For technical assistance or further inquiries, please visit the official Armstrong website or contact their customer service department.