

Sears 0SL, 823050

Sears Craftsman 15A Thermal Overload Circuit Breaker Instruction Manual

Models: 0SL, 823050

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your Sears Craftsman 15 Amp Thermal Overload Circuit Breaker. This component is designed to protect power tools, such as table saws and jointers, from electrical overload by automatically interrupting the circuit when excessive current is detected. It serves as a direct replacement for original Sears thermal overload switches, including models 0SL and 823050.

Please read this manual thoroughly before installation or use to ensure proper function and safety.

2. SAFETY INFORMATION

WARNING: Electrical work can be hazardous. Always follow these safety precautions:

- **Disconnect Power:** Before attempting any installation, maintenance, or repair, ensure that the power supply to the tool or circuit is completely disconnected at the main breaker or power source. Verify with a voltage tester.
- **Qualified Personnel:** Installation and wiring should only be performed by a qualified electrician or technician familiar with electrical systems and safety practices.
- **Proper Rating:** Ensure the circuit breaker's 15 Amp rating matches the requirements of your power tool and electrical circuit. Using an incorrectly rated breaker can lead to damage or fire.
- **Inspect for Damage:** Before installation, inspect the circuit breaker for any signs of physical damage. Do not install a damaged unit.
- **Environmental Conditions:** Install the breaker in a dry environment, away from moisture, dust, and corrosive substances.

3. PRODUCT OVERVIEW

The Sears Craftsman 15A Thermal Overload Circuit Breaker is a compact, push-button reset device designed for panel mounting. It features a robust construction suitable for demanding power tool applications.



Figure 3.1: Overall view of the 15A Thermal Overload Circuit Breaker. This image displays the black plastic body, the silver threaded mounting post, and the two flat spade terminals for electrical connections. The reset button is visible on the front.



Figure 3.2: Front view of the circuit breaker. The white push-button reset mechanism is clearly visible, marked with the number "15" in red, indicating its 15 Amp rating.



Figure 3.3: Side profile of the circuit breaker. This view emphasizes the compact dimensions of the unit and the threaded portion of the mounting post.



Figure 3.4: Angled front view of the circuit breaker. This perspective shows the white reset button with the "15" marking, the silver threaded mounting post, and the knurled mounting nut.

Key Features:

- **Current Rating:** 15 Amps
- **Mounting Type:** Panel Mount
- **Circuit Breaker Type:** Thermal Overload, Standard
- **Number of Poles:** 1
- **Dimensions:** Switch body is approximately 29.2mm x 22.6mm x 14.6mm. The post diameter is approximately 10.8mm.
- **Compatibility:** Suitable for many Craftsman 137.xxxxx & 113.xxxxx series tools, and other power tools requiring a 15A thermal overload switch.

4. SETUP AND INSTALLATION

This section outlines the general procedure for installing the thermal overload circuit breaker. Specific wiring diagrams for your power tool should be consulted for precise connections.

1. **Power Disconnection:** Ensure the power tool is unplugged from its power source or the main circuit breaker for the outlet is turned off. This is a critical safety step.
2. **Access the Switch Location:** Locate the existing thermal overload switch or the designated mounting point on your power tool. This may require removing a cover panel.
3. **Remove Old Switch (if applicable):** If replacing an existing switch, carefully disconnect the wires from the old switch, noting their positions. Unscrew the mounting nut and remove the old switch.
4. **Prepare Mounting Hole:** The circuit breaker requires a panel mounting hole with a diameter of approximately 10.8mm for the threaded post. Ensure the hole is clean and free of burrs.
5. **Insert New Switch:** Insert the threaded post of the new 15A thermal overload circuit breaker through the mounting hole from the front of the panel.
6. **Secure with Nut:** Thread the included mounting nut onto the post from the back of the panel and tighten it securely by hand, then gently with a wrench if necessary, to hold the breaker firmly in place. Do not overtighten.
7. **Wire Connections:** Connect the electrical wires to the spade terminals on the back of the circuit breaker. Typically, one terminal connects to the incoming power line, and the other connects to the tool's motor circuit. Refer to your tool's wiring diagram for correct polarity and connections. Ensure connections are secure and insulated.

8. **Reassemble:** Replace any covers or panels removed during installation.
9. **Test:** Restore power to the tool. Press the white reset button on the circuit breaker to ensure it is engaged. Test the tool's operation.

Note: This circuit breaker is a replacement for discontinued Sears thermal overload switches. Its dimensions and specifications are designed for direct compatibility with many Craftsman 137.xxxxx and 113.xxxxx series tools.

5. OPERATION

The 15A Thermal Overload Circuit Breaker operates automatically to protect your power tool from excessive current draw, which can occur due to motor overload, short circuits, or other electrical faults.

- **Normal Operation:** When the circuit breaker is engaged (reset button pushed in), power flows through it to the tool.
- **Overload Protection:** If the current drawn by the tool exceeds 15 Amps for a sustained period, the thermal element within the breaker will heat up and trip, automatically disconnecting power to the tool. The white reset button will pop out, indicating a tripped condition.
- **Resetting the Breaker:** To restore power after a trip, first identify and resolve the cause of the overload (e.g., clear a jammed blade, reduce load). Once the issue is resolved, wait a few moments for the breaker to cool down, then firmly press the white reset button back in until it clicks and stays engaged. If the breaker immediately trips again, do not force it; investigate further for a persistent electrical fault.

6. MAINTENANCE

The Sears Craftsman 15A Thermal Overload Circuit Breaker is designed for minimal maintenance. However, periodic inspection is recommended to ensure continued reliable operation.

- **Visual Inspection:** Regularly inspect the breaker for any signs of physical damage, such as cracks, discoloration, or loose connections.
- **Cleanliness:** Keep the area around the breaker clean and free of dust, sawdust, and debris, which can impede its function or cause overheating. Use a dry cloth or compressed air for cleaning.
- **Connection Check:** Periodically, with power disconnected, check that the electrical connections to the spade terminals are secure.

Do not attempt to disassemble or repair the circuit breaker. If it is damaged or consistently malfunctions, it should be replaced.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Breaker trips immediately after reset.	Persistent overload or short circuit in the tool or wiring.	Ensure the tool is not overloaded (e.g., cutting too deep, dull blade). Inspect the tool's power cord and internal wiring for damage or short circuits. Consult a qualified technician for tool repair if the issue persists.

Problem	Possible Cause	Solution
Breaker trips frequently during normal use.	Tool is consistently drawing close to or slightly above 15 Amps. Breaker is faulty or weakened. Inadequate ventilation around the breaker causing it to overheat.	Reduce the load on the tool or use it for tasks within its capacity. Ensure proper airflow around the breaker. Consider replacing the breaker if it's old or suspected to be faulty.
Breaker does not reset.	Breaker is still hot from a recent trip. Internal mechanical failure of the breaker.	Allow sufficient time (5-10 minutes) for the breaker to cool down. If it still doesn't reset after cooling, the breaker is likely faulty and needs replacement.

8. SPECIFICATIONS

- **Brand:** Sears
- **Model Numbers:** 0LSL, 823050
- **Current Rating:** 15 Amps
- **Circuit Breaker Type:** Standard Thermal Overload
- **Mounting Type:** Panel Mount
- **Number of Poles:** 1
- **Body Dimensions (approx.):** 29.2mm (L) x 22.6mm (W) x 14.6mm (H)
- **Post Diameter (approx.):** 10.8mm

9. WARRANTY AND SUPPORT

Specific warranty information for this replacement part may vary depending on the seller and purchase date. Please refer to your purchase documentation or contact the retailer from whom you purchased the circuit breaker for details regarding warranty coverage.

For technical support or further assistance, it is recommended to contact the seller or a qualified electrical technician.