

## Duke 600178

# DUKE 600178 Oven Thermostat Kit

## INSTRUCTION MANUAL

### Introduction

This manual provides essential information for the proper installation, function, and maintenance of the DUKE 600178 Oven Thermostat Kit. This kit is a genuine OEM replacement part designed for commercial foodservice ovens manufactured by Duke. Adherence to these instructions is crucial for ensuring the safety, reliability, and optimal performance of your oven.

### Important Safety Information

**WARNING: Risk of electric shock and burns. Installation and servicing of this component should only be performed by qualified and authorized service personnel. Disconnect power to the oven before installation or maintenance.**

- Always disconnect the oven from its power source before attempting any installation, repair, or maintenance.
- Wear appropriate personal protective equipment (PPE), including gloves and eye protection.
- Ensure all electrical connections are secure and comply with local electrical codes.
- Verify that the replacement part is compatible with your specific oven model before installation.
- Do not bypass any safety features of the oven or the thermostat kit.

### Product Overview

The DUKE 600178 Oven Thermostat Kit is a critical component for regulating the temperature within your commercial oven. It includes the thermostat body, a temperature sensing bulb (capillary tube), and a control knob. This kit ensures precise temperature control for consistent cooking results.



**Figure 1:** Main view of the DUKE 600178 Oven Thermostat Kit, showing the thermostat body, capillary tube, and control knob.



**Figure 2:** An alternate view of the thermostat kit, highlighting the rear electrical connections and mounting bracket.

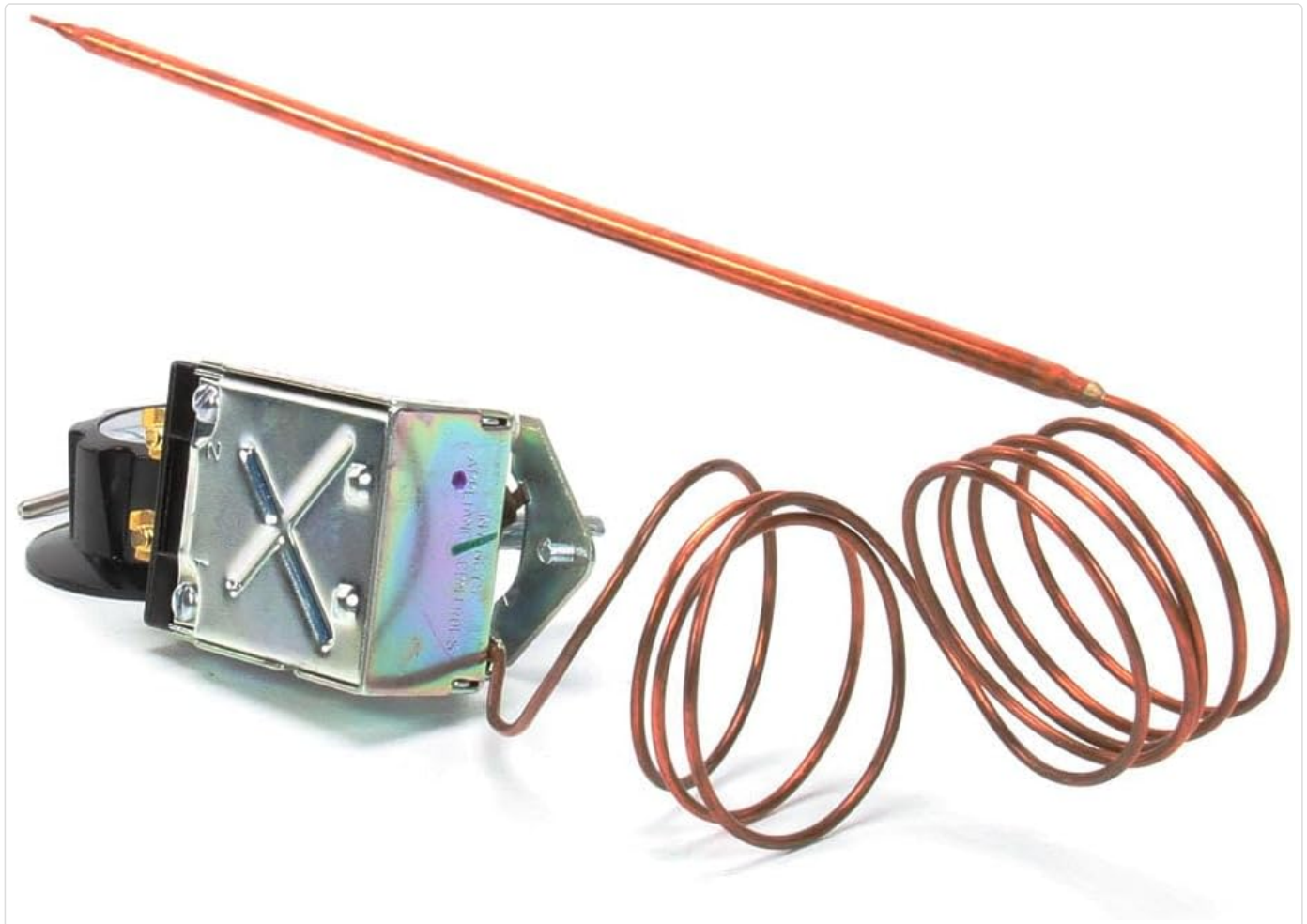
## Setup and Installation

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Installation of the DUKE 600178 Oven Thermostat Kit requires technical expertise. It is recommended that this procedure be carried out by a certified technician.

1. **Preparation:** Ensure the oven is completely disconnected from all power sources. Allow the oven to cool down if it has been in operation.
2. **Access:** Carefully access the existing thermostat within the oven control panel or designated compartment. This may involve removing panels or covers.
3. **Removal of Old Thermostat:** Document or photograph the wiring connections to the old thermostat. Disconnect all wires and carefully remove the old thermostat, including its capillary tube and sensing bulb, from the oven cavity.

4. **Installation of New Thermostat:** Mount the new DUKE 600178 thermostat body in the same location as the old one. Route the new capillary tube and sensing bulb into the oven cavity, ensuring it is positioned correctly according to the oven manufacturer's specifications. Avoid kinking or damaging the capillary tube.
5. **Wiring:** Connect the electrical wires to the new thermostat terminals exactly as they were connected to the old unit. Refer to your oven's wiring diagram if necessary.
6. **Control Knob:** Install the control knob onto the thermostat shaft.
7. **Testing:** Once installation is complete and all panels are securely reinstalled, reconnect power to the oven. Perform a functional test to ensure the thermostat accurately controls the oven temperature across its range.



**Figure 3:** Side view of the thermostat kit, showing the capillary tube coiled and ready for installation.

## Operating

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The DUKE 600178 Oven Thermostat Kit functions as the temperature control mechanism for your oven. Once installed, its operation is integrated into the oven's control system. Users will interact with the oven's control knob to set the desired temperature. The thermostat then monitors the oven's internal temperature via its sensing bulb and activates or deactivates the heating elements to maintain the set temperature.

- Set the desired temperature using the oven's control knob.
- Allow the oven to preheat fully before placing food inside.
- Monitor oven performance to ensure consistent temperature regulation.



**Figure 4:** A view of the thermostat kit components, including the main body, control knob, and mounting screw.

## Maintenance

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The DUKE 600178 Oven Thermostat Kit is designed for durability and reliability. Regular maintenance of the oven itself will contribute to the longevity of the thermostat.

- **Cleaning:** Ensure the area around the thermostat's sensing bulb inside the oven cavity is kept clean and free of food debris or grease buildup, which can affect temperature accuracy.
- **Inspection:** Periodically inspect the capillary tube for any signs of damage, kinks, or corrosion. Ensure electrical connections remain tight and free of corrosion.
- **Professional Check:** It is recommended to have a qualified technician inspect the oven's components, including the thermostat, during routine oven maintenance.

## Troubleshooting

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If your oven is experiencing temperature control issues after thermostat installation, consider the following common troubleshooting steps. Always disconnect power before inspecting internal components.

- **Inaccurate Temperature:**
  - Verify the thermostat sensing bulb is correctly positioned and not obstructed.
  - Check for any damage to the capillary tube.
  - Ensure the control knob is properly aligned and securely attached to the thermostat shaft.
- **Oven Not Heating:**
  - Confirm all electrical connections to the thermostat are secure.
  - Check the oven's circuit breaker or fuse.
  - Inspect heating elements for continuity (requires a multimeter and qualified personnel).
- **Oven Overheating:**
  - This could indicate a faulty thermostat or a stuck relay. Professional diagnosis is required.

For persistent issues, contact a qualified service technician or Duke Manufacturing support.

## Specifications

Attribute	Detail
Brand Name	Duke
Model Number	600178
Part Number	600178
Item Weight	8 ounces
Product Dimensions	5 x 8 x 11 inches
Color	Multi
Batteries Required	No

## Warranty Information


Specific warranty details for the DUKE 600178 Oven Thermostat Kit are typically provided at the point of purchase or with the original oven documentation. As a genuine OEM replacement part, it is generally covered under Duke Manufacturing's standard parts warranty. Please retain your proof of purchase for any warranty claims. For detailed warranty terms, contact Duke Manufacturing directly or consult your product supplier.





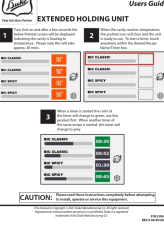
## Support

For technical assistance, replacement parts, or further information regarding the DUKE 600178 Oven Thermostat Kit, please contact Duke Manufacturing customer support or your authorized Duke service provider. When contacting support, please have your oven model and serial number, along with the part number 600178, readily available.

**Duke Manufacturing Contact Information:** (Please refer to the official Duke Manufacturing website or your original product documentation for the most current contact details.)

## Related Documents - 600178

	<p><a href="#">Duke 526840-A Display: Changing Fahrenheit to Celsius Instruction Sheet</a></p> <p>Instruction sheet for the Duke 526840-A Display, detailing how to change temperature units between Fahrenheit and Celsius, and checking set points. Includes parameter table and company contact information.</p>
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 <p><b>Illustrated Parts List</b></p> <p><b>REFRIGERATED BACK BAR</b></p> <p><b>MODEL</b> RUF-48</p> <p><small>The model is a large gas-fired convection oven with a touch screen control panel. It is designed for use in commercial kitchens and is suitable for use in food service environments.</small></p> <p><b>Duke Manufacturing Co.</b> 2018 S. Avenue P.O. Box 153747 Phoenix, AZ 85015-3747 Tel: (602) 998-1234 Fax: (602) 998-1235 www.dukeco.com</p>	<p><a href="#">Duke RUF-48 Refrigerated Back Bar Illustrated Parts List</a></p> <p>Official illustrated parts list for the Duke RUF-48 Refrigerated Back Bar. Includes detailed part numbers, descriptions, and assembly diagrams for main cabinet, door, and refrigeration unit. Also provides instructions for determining the manufacture date from serial numbers.</p>
 <p><b>Illustrated Parts List</b></p> <p><b>X-STREAM WASH</b></p> <p><small>The model is a large gas-fired convection oven with a touch screen control panel. It is designed for use in commercial kitchens and is suitable for use in food service environments.</small></p> <p><b>Duke Manufacturing Co.</b> 2018 S. Avenue P.O. Box 153747 Phoenix, AZ 85015-3747 Tel: (602) 998-1234 Fax: (602) 998-1235 www.dukeco.com</p>	<p><a href="#">Duke X-STREAM WASH Illustrated Parts List and Schematics</a></p> <p>Comprehensive illustrated parts list and electrical schematics for the Duke X-STREAM WASH commercial wash station. Find part numbers, diagrams, and technical specifications for Duke equipment.</p>
 <p><b>INSTALLATION INSTRUCTIONS</b></p> <p><b>6/13 SERIES GAS FIRED CONVECTION OVEN IGNITION RETROFIT KIT</b></p> <p><b>DUKE #153747</b></p> <p><small>The model is a large gas-fired convection oven with a touch screen control panel. It is designed for use in commercial kitchens and is suitable for use in food service environments.</small></p> <p><b>Duke Manufacturing Co.</b> 2018 S. Avenue P.O. Box 153747 Phoenix, AZ 85015-3747 Tel: (602) 998-1234 Fax: (602) 998-1235 www.dukeco.com</p>	<p><a href="#">Duke 6/13 Series Gas Fired Convection Oven Ignition Retrofit Kit Installation Instructions</a></p> <p>Detailed installation instructions for the Duke 6/13 Series Gas Fired Convection Oven Ignition Retrofit Kit (Kit #153747). Includes kit contents, required tools, safety precautions, and step-by-step procedures for qualified personnel.</p>
 <p><b>Service Manual</b></p> <p><b>PROOFER OVEN WITH TOUCH SCREEN CONTROLS (TSC)</b></p> <p><b>MODEL</b> TSC-6/18</p> <p><small>The model is a large gas-fired convection oven with a touch screen control panel. It is designed for use in commercial kitchens and is suitable for use in food service environments.</small></p> <p><b>Duke Manufacturing Co.</b> 2018 S. Avenue P.O. Box 153747 Phoenix, AZ 85015-3747 Tel: (602) 998-1234 Fax: (602) 998-1235 www.dukeco.com</p>	<p><a href="#">Duke Proofer Oven with Touch Screen Controls (TSC) Service Manual</a></p> <p>Comprehensive service manual for the Duke Proofer Oven with Touch Screen Controls (TSC), model TSC-6/18, covering installation, operation, maintenance, troubleshooting, and component replacement. Includes safety information, specifications, and electrical schematics.</p>
 <p><b>Quick Reference Users Guide</b></p> <p><b>EXTENDED HOLDING UNIT</b></p> <p><small>The model is a large gas-fired convection oven with a touch screen control panel. It is designed for use in commercial kitchens and is suitable for use in food service environments.</small></p> <p><b>Duke Manufacturing Co.</b> 2018 S. Avenue P.O. Box 153747 Phoenix, AZ 85015-3747 Tel: (602) 998-1234 Fax: (602) 998-1235 www.dukeco.com</p>	<p><a href="#">Duke Extended Holding Unit Quick Reference User Guide</a></p> <p>Quick reference guide for the Duke Extended Holding Unit (EHU), detailing preheating, timer functions, cancellation, and expiration alerts. Includes operational steps and contact information for Duke Manufacturing Co.</p>