

Bench Oven, Hydraulic Thermostat Replacement

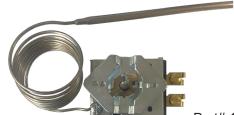
For analog oven series 250, 350, and 550

These instructions provide a step-by-step guide on how to replace a hydraulic thermostat on your oven. If the enclosed replacement thermostat differs from the original thermostat supplied with the oven, please contact Quincy Lab for assistance.

Tools needed for this installation (tools not included)

- No. 2 Phillips screwdriver
- ► Flat-blade screwdriver
- Pliers

All the hardware removed from the old thermostat will be required for the installation of the new thermostat.



Part# 101-2223

Follow the steps outlined below in sequential order for ease of installation:

⚠ Disconnect the oven from the electrical outlet before servicing, failure to do so may result in the possibility of injury.

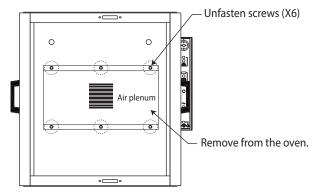
Remove all items from inside the oven before servicing.

Heavy Object - Use two (2) persons when lifting or moving the oven.

Removing the Old Thermostat

Step 1: Remove the Air Plenum

Unfasten the six (6) sheet metal screws. Remove the air plenum from the oven to expose the thermostat bulb. Set the screws aside for reinstallation.



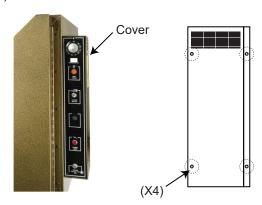
Step 2: Remove Bulb/Capillary from the Clips

Release the thermostat sensing bulb and capillary from the two mounting clips using a flat-blade screwdriver.



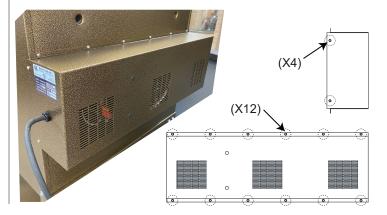
Step 3: Remove Control Panel Cover

Remove the control panel side cover by unfastening the four (4) screws. Set the hardware aside for reinstallation.



Step 4: Remove the Electrical Back Cover

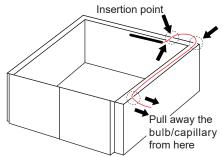
Remove the back cover by unfastening the sixteen (16) screws. Place the cover on top of the oven while replacing the thermostat. Set the hardware aside for reinstallation.



Step 5: Remove the Thermostat Bulb/Capillary

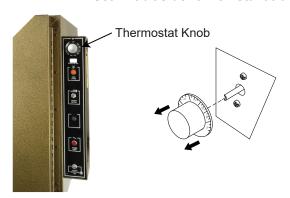
Carefully pull on the bulb/capillary from the side of the oven to remove it. It may be necessary to manually feed the bulb through insertion points as you remove it.





Step 6: Remove Thermostat Knob

Remove by pulling the press-fit knob away from the thermostat shaft. **Set knob aside for reinstallation.**

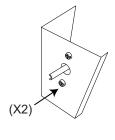


Step 7: Remove Thermostat from the Panel

Unfasten the two (2) thermostat screws and remove the thermostat from the oven.

Set the screws aside for reinstallation.

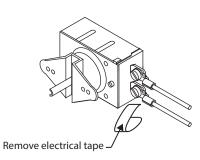




Step 8: Remove Tape from the Thermostat

Set the thermostat on its side and remove any electrical tape to expose the thermostat's wire screws.

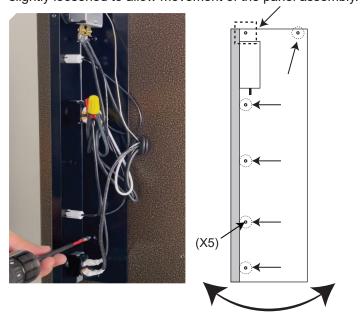




Installing the New Thermostat

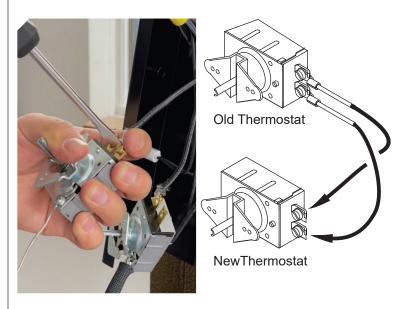
Step 1: Loosen Control Panel from the Oven

Unfasten and remove five (5) of the six screws holding the controller panel to the oven (indicated by the dashed circle), leaving the top left screw (indicated by the dashed square) slightly loosened to allow movement of the panel assembly.



Step 2: Swap Thermostat Wire Connections

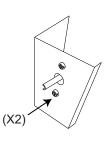
Remove one wire at a time from the old thermostat and attach it to the corresponding location on the new thermostat.



Step 3: Attach the New Thermostat to the Control Panel

Insert the thermostat shaft through the hole in the control panel, align the screw holes, and use the screws removed in the previous step to secure it in place.

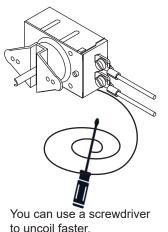




Step 4: Prepare the Bulb/Capillary

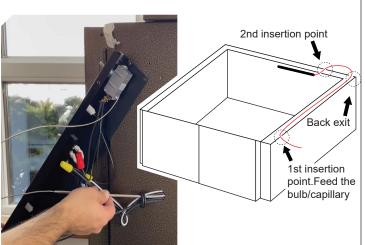
Carefully uncoil the new replacement thermostat's capillary fully, being careful not to kink it.





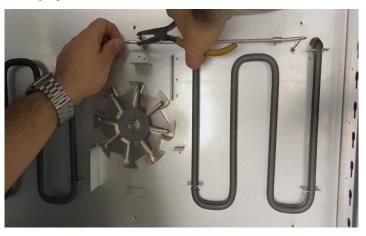
Step 5: Feed the Bulb/Capillary to the Chamber

Insert the bulb/capillary through the first insertion point on the oven side, feeding it through the interior wall of the oven. Once it exits, insert it into the second insertion point in the oven chamber.



Step 6: Attach Bulb to the Thermocouple Clips

Place the thermostat bulb on the clips and use a set of pliers to secure it in place. Avoid overtightening to prevent damaging the bulb.



Step 7: Reattach the Air Plenum to the Oven

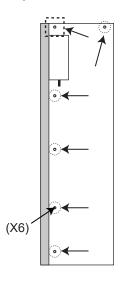
Place and secure the air plenum back in the oven using the six screws that were removed previously.



Step 8: Reattach Control Panel to the Oven

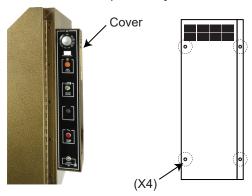
Secure the control panel to the oven by tightening the holding screw (indicated by the dashed square) and the five screws removed previously (indicated by the dashed circle).





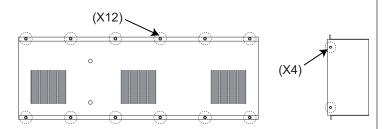
Step 9: Reattach the Control Panel Cover

Place and secure the control panel cover using the four screws that were removed previously.



Step 10: Reattach the Electrical Back Cover

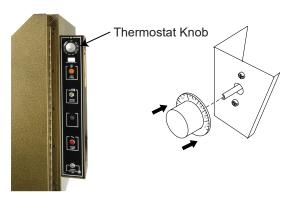
Secure the electrical back cover by using the sixteen (16) screws that were removed earlier.





Step 11: Place Back the Thermostat Knob

Align the D-shaped part of the knob with the thermostat shaft and gently push it into place.



Step 12: Calibrate Thermostat (Recommended)

For this step, you will need a separate temperature probe or thermometer (not provided) to insert inside the oven.

After completing the thermostat replacement, it is recommended to verify that the oven's internal temperature matches the dial temperature setting. If the reading differs significantly, you can adjust it to align with the oven's internal temperature by calibrating the dial.



If you do not have access to a separate temperature probe or thermometer, you can still operate the oven, but the temperature on the dial may not match the internal temperature of the oven.

Calibrating the Dial

- 1. Turn the knob dial to the desired temperature and allow the oven to settle at that temperature.
- 2. Pull the press-fit knob from the thermostat shaft, (be careful not to change the position of the shaft).
- 3. Using pliers, hold the outside of the shaft, maintaining it in its original position and using a small flat screwdriver, turn the trim screw, located recessed within the shaft center to increase or decrease temperature to match the marking on the knob.



Turn the trim screw no more than 1/8 of a turn in the required direction. Allow 15 minutes for the temperature to stabilize at the new setting before taking a new reading. Make further adjustments as necessary.

a) Turn the trim screw counter-clockwise to adjust the temperature UP.



b) Turn the trim screw clockwise to adjust the temperature DOWN.





When adjusting the oven's temperature range, do not modify the oven to operate above the specified maximum operating temperature.

Technical Support

Email: information@quincylab.com Phone: 800-482-4328 Option 2