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## Repair Instructions - Oven Temperature Sensor Replacement

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Description of repair instructions

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To suit: TD-150F - TD-700F

Approvals		
Written By:	Reviewed By:	Approved By:
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## Safety Reminder

These instructions do not purport to address all potential safety issues, if any, associated with the product's use. It is the responsibility of the user of these instructions to establish appropriate safety and health practices and determine the applicability of regulatory limitations before use.

Before attempting any of the following, perform the actions listed below:

- Turn OFF power to the machine.
- Unplug the machine.

## Summary

These instructions show how to remove the old blower and air heater, and how to install the new fan and air heater.

Tools Required	
Screw Driver	Medium Philips Head
Pliers	

Kit Contents		
Item	Description	Quantity
40716	PT100 Temperature Sensor	1

## Section 1: Preparation



Turn off the oven and disconnect from the power.



One top of the oven you you will see the oven exhaust and intake ports. Unscrew the two screws holding the covers of the ports and remove them. This will allow for the top of the oven to be removed.

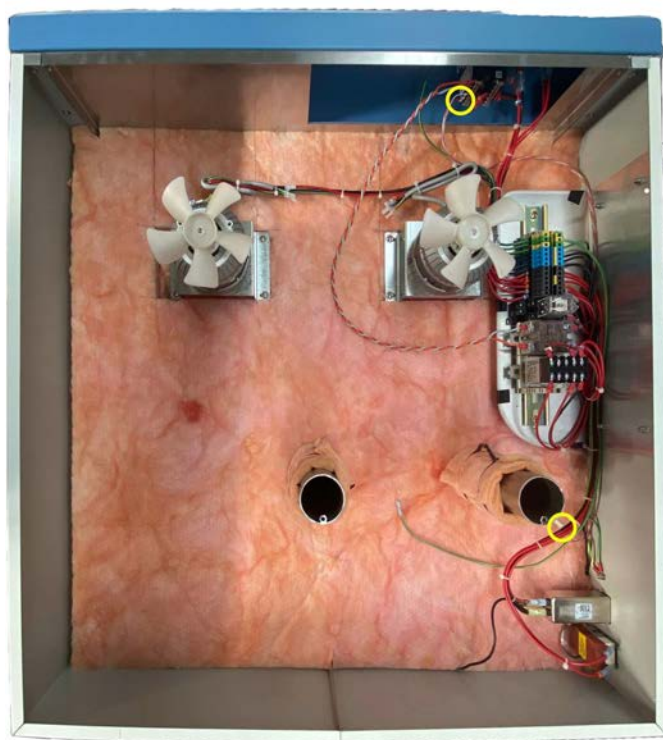


Unscrew the screws holding the top cover of the oven in place. There is four on either side and on the larger ovens, there will be an additional two at the back of the cabinet.



To access the electrical components of the oven, you need to unscrew the screws holding the top cover in place. Then, tilt the top cover from the back side of the chamber. On the underside of the back of the oven cover, next to the rectangular vents, you will see a green and yellow earth wire connected via a spade clip. Simply remove this earth wire from the cover and then you will be able to remove the cover completely.

Once you remove the cover you will be able to access the back of the PT100 Sensor.



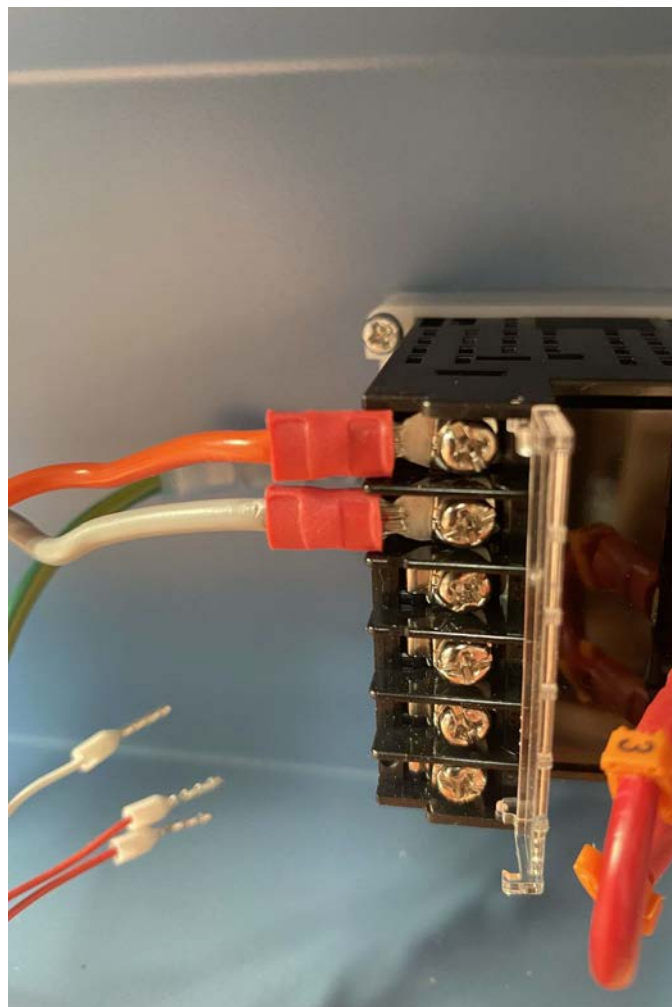
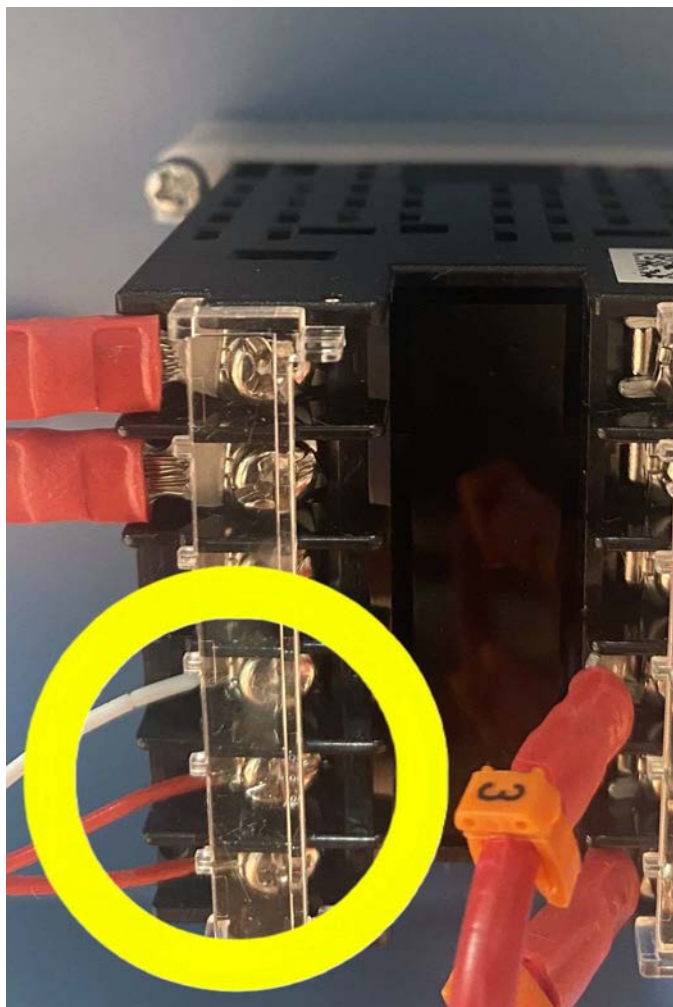
To access the PT100 Sensor from inside the oven, first make sure the oven is cool and then remove the oven shelves and Shelvex clips



To remove the internal top cover of the oven, you need to unscrew six screws - three at the front and three at the back. Please refer to the picture below which shows the location of the screws indicated by six arrows. While unscrewing the screws, make sure to support the top panel with your hand or with another person to prevent any injury in case it drops down once the screws are removed.



## Section 2: Remove the PT100 Temperature Sensor



Undo the three sensor wires (2 Red and 1 White) at the back of the Omron controller

Cut any cable ties that are securing the PT100 sensor with other wires at the top of the oven to allow the PT100 sensor to be removed. These cable ties will need to be replaced once the new sensor has been fitted.



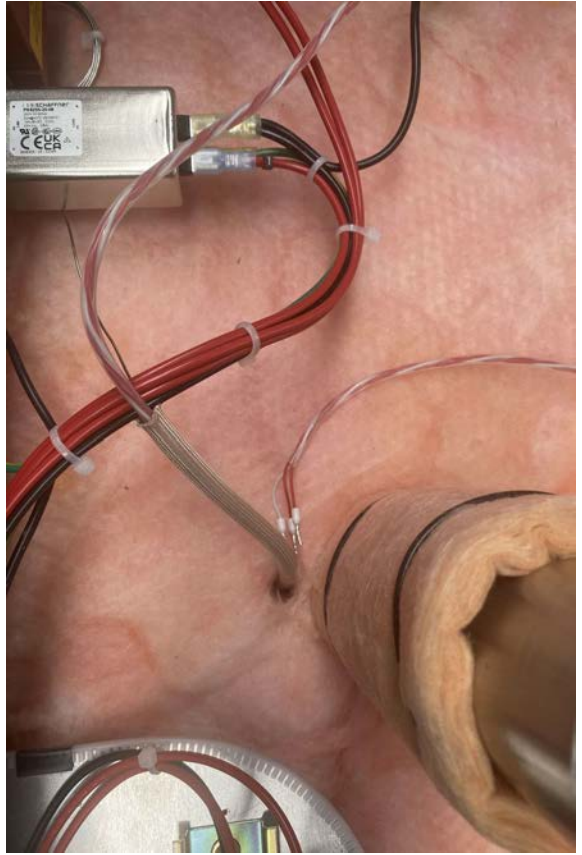


On the inside of the oven, the PT100 sensor can be located in at the top of the oven next to the blower wheel, resting in a curved metal support



Generally to remove the PT100 Sensor from the curved metal support, all you will need to do is pull the sensor out. If the sensor is stuck, use a pair of pliers and bend the metal back slightly. This will allow the PT100 sensor to be removed.





Once the head of the PT 100 sensor has been removed from the metal support, pull the PT100 sensor through the sheath from the head of the sensor and into the oven interior, until it has been pulled completely out.

### Section 3: Installation the new PT100 Sensor

The sensor will need to be inserted from the inside of the oven.

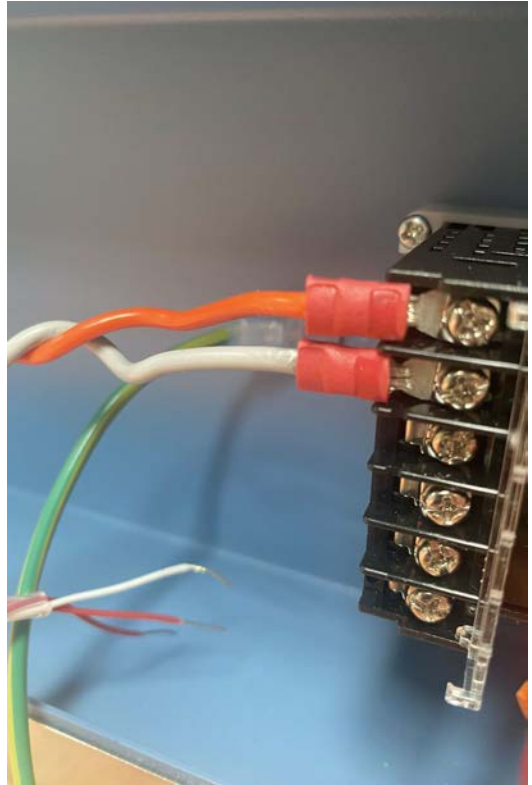
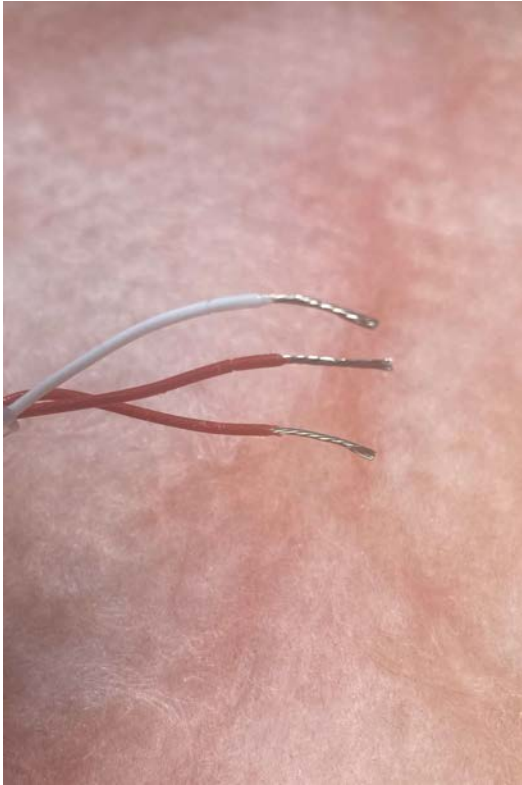


To make it easier to thread the sensor through the white sheath it is recommend that you evenly cut the three loose wires off while ensuring that the plastic casing is still wrapped around the wires.

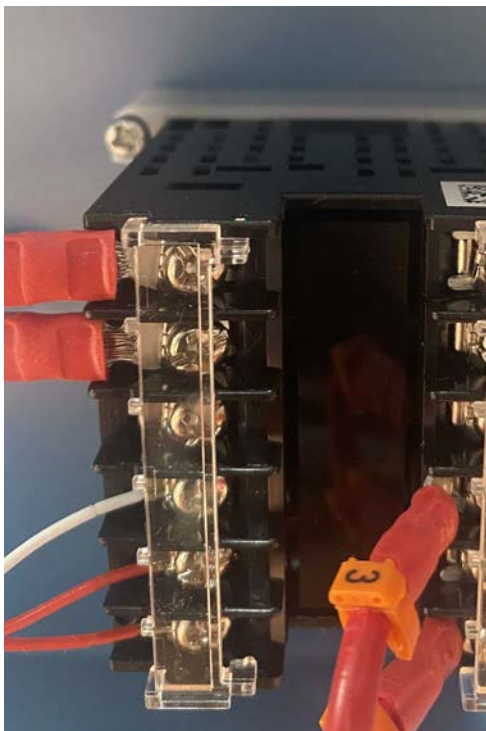


To install the sensor, insert its end into the white sheath hanging inside the oven and feed it through until it comes out at the top. Once the back end of the sensor is fed through, place the sensor bulb back into the metal support.





To connect the new sensor to the controller, strip about 1-1.5cm of the plastic sheath from the end of the PT100 wires, as shown.



Reattach the wires of the PT100 sensor to the back of the controller and then cable tie the PT100 wire to the other wires inside the oven.





Once the Pt100 has been installed in the back of the controller, place the cover on top the oven and reattach the green and yellow earth wire to the spade clip to the spade terminal. Once the the earth wire has been connected, let the cover sit on to the oven and ensure that the screw holes of the cover are lined up with the cabinet. Replace the screws and fix the cover back into place.

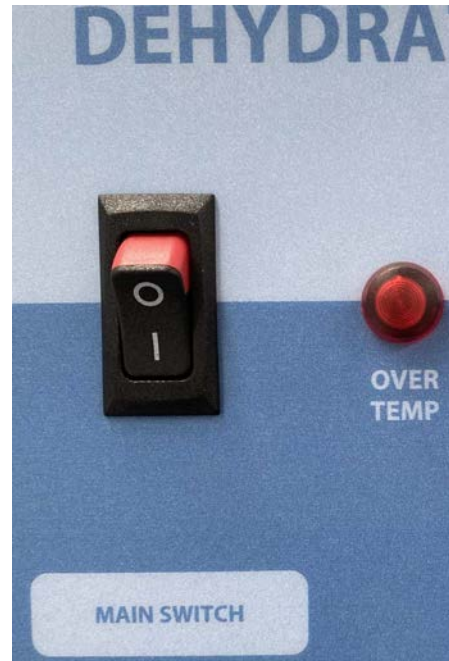


Slide the internal top panel back into place and fix it with the original six screws. You can then re-insert the shelvex clips at your required level and put the shelves back.



Screw the vent covers for the inlet and the exhaust port back on.

#### Section 4: Power ON



Connect the oven back to power and turn it back on. You will need to check the offset value (calibration) once the oven is at temperature.

## Section 5: Support and Contact

Repair and Support is available over the telephone Monday through Thursday from 8:30am to 4pm and Friday 8:30am to 2pm. Please contact [service@thermoline.com.au](mailto:service@thermoline.com.au) for email technical support. You can also visit our website at [www.thermoline.com.au](http://www.thermoline.com.au) for access to additional useful troubleshooting guides, operating manuals, and technical information.

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