**ELECTROLUX HOME PRODUCTS PTY LTD**

**ABN 51 004 762 341**

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# *SERVICE MANUAL*

# *VCU User Interface, OVC3000 Power Board*

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# SAFETY INFORMATION

Under NO circumstances should any service work be carried out unless you are qualified and licensed as per Federal, State and Territory requirements.

**General Safety**

- Work should not be under taken on any electrical appliance without first checking the earthing integrity of the appliance and electrical supply.
- A safety audit should be carried out of the work area to ensure the area has adequate room to work in and is free from any hazards that may cause any injury to yourself and any other person in the vicinity.
- After repair, product has to be reassembled as it was which complies with specification of the Manufacturer to ensure product is safe to operate both mechanically and electrically.

**Electrical Safety**

- Under NO circumstances should changing or repairs to parts be carried out on live appliances. Any changing or repair to parts must be done with the appliance removed from the electrical supply. Failure to do so may result is injury or death.
- After any work is completed the earthing integrity of the appliance must be checked.
- If you need to do electrical testing with the product live the following must be observed:
    - It must be on a circuit with earth leakage protection.
    - As much skin as possible should be covered to reduce the chances of coming into contact with live terminals
    - All jewellery should be removed.
    - There should not be any water/moisture on the ground.
    - A safety sign should be displayed to warn others of the danger.

**Running appliances with panels/covers removed**

- All the electrical safety procedures above must be observed.
- Care must be taken not to come into contact with moving parts.
- Loose clothing or jewellery that can become entrapped should not be worn.
- If handling or working near sharp edges the appropriate personal protection equipment must be used.
- Safety eyewear should be used if removing parts that may “spring and fly” if they slip of a tool. Eg removing a spring which is under compression.
- Any removed panels that have sharp edges should be placed where they do not cause any danger of injury to yourself or others.
- A safety sign should be displayed to warn others of the danger.
- If handling or working in a dusty area or with Dust Product, dust mask or appropriate PPE should be used.

**Refrigeration**

- Ensure you know which refrigerant is in the appliance so the correct gas handling procedures can be used. Failure to use the correct procedure may result in injury.
- If hot work needs to be done ensure all the surround area is safe and free from combustibles. Where necessary heat shielding should be used.
- Ensure pipework has cooled down before touching.
- When handling gas make sure all necessary PPE is used.
- Ensure there is enough ventilation.
- Place warnings signs so others know flames/smoking must not be in the area.

**Gas Safety**

- Under no circumstances should a naked flame be used, eg match, lighter etc, to try and find a gas leak, only an appropriate gas leak detector or soapy water should be used.
- When converting an appliance to another gas type, the gas type label supplied must be fitted in the appropriate area.
- Always ensure the product is connected to the correct gas type.
- When working with a gas leak place warnings signs so others know flames/smoking must not be in the area.
- After fixing a gas leak do not try and ignite the burner(s) until any remaining escaped gas has dissipated.

# TOOLS

Standard tools

- Pliers;
- Side cutters;
- Long nose pliers;
- Phillips screwdriver;
- Flat blade screwdriver;
- Torx bits;
- Shifter;
- Insulation tape;
- PTFE tape
- Polishing cloth;
- Antistatic strap;

Measuring Instruments

- Multimeter
- Manometer

# CONTENTS

# DIAGNOSTICS & ALARM/FAULT CODES

## FAULT CODES

| Fault Code | Fault Code | Description | Comment | Fix |
|---|---|---|---|---|
| F01 or 01 | F101 | Door lock sensor alarm | This relates to a door lock failure or microswitch. | Check wiring/plugs.<br>Replace microswitch.<br>Replace door lock. |
| F02 or 02 | F102 | Door lock actuator alarm | | |
| F04 or 04 | F104 | Oven Probe (PT500) out of range alarm | This relates to the temperature sensing probe which may be out of tolerance, or have open/short circuit connections. | Replace probe. |
| F05 or 05 | F105 | Oven Probe (PT500) too high temperature alarm | | |
| F25 or 25 | F195 | Board Temperature Sensor (NTC) too high temperature alarm | This relates to the temperature of the powerboard and/or the temperature-sensing element (NTC) on the powerboard. | Cooling fan not working.<br>Replace powerboard. |
| F26 or 26 | F196 | Board Temperature Sensor (NTC) out of range warning | | |
| F06 or 06 | F106 | Board Temperature Sensor (NTC) out of range alarm | | |
| F08 or 08 | F908 | Communication alarm | This relates to an error in communication between the powerboard and the IOI controller. This can occur if the IOI controller is connected while the powerboard is energised. | Reset power. (Minimum of 20 sec.)<br>Check or replace data cable. |
| F09 or 09 | F109 | Software compatibility code alarm | This relates to a mismatch between powerboard firmware version and the IOI controller firmware version. | Ensure power board and user interface part numbers and software versions are compatible. |
| | F130 | Triac Fault | Relates to errors of small loads including cooling fans, cooking fans or lamps and associated wiring | Turn off product for 30 seconds and re-test. If still exists, check fans and lamps for faults or wiring issues.<br>Replace powerboard. |
| | F134 | | Internal fault on powerboard | Replace powerboard |
| | F239 | Touch board alarm | Water or condensation on the touch board. | Turn off product for 30 seconds and re-test.<br>Check steam water drawer for obstructions and ensure no water dripping from drawer.<br>Suggest to customer not closing drawer when water still in drawer.<br>Ensure foam seal is fitted to rear base of control panel glass.<br>Clean and dry as required - fit back together.<br>If only condensation, then leaving for a few hours may be enough for it to resume functionality. |
| | F241 | Rotary Control not connected | Rotary controls not connected | Check connection to rotary controls. Check resistance of controls changes with each function to ensure correct functionality. |
| F03 or 03 | F203 | EEPROM check sum alarm | Relates to the controller. | Replace Controller. |
| F14 or 14 | F214 | EEPROM compatibility code alarm | Relates to the controller. | Replace Controller. |

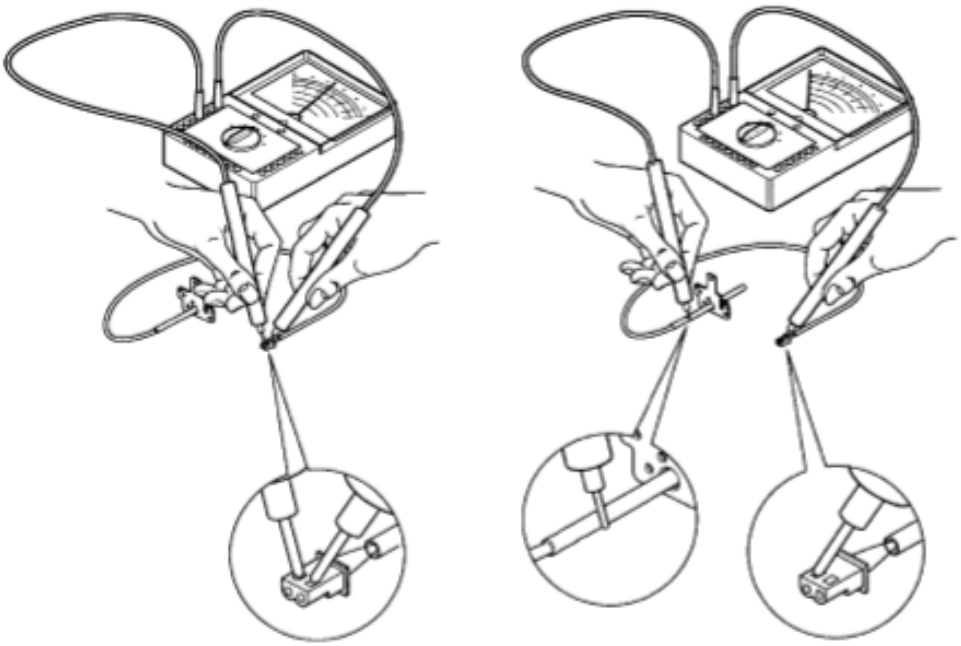
| Fault Code | Fault Code | Description | Comment | Fix |
|---|---|---|---|---|
| F36 | F136 | Food probe configuration alarm | Only applies to models with food probe. | Reset power (minimum 30 seconds)<br>Check the cable between the powerboard and food probe module.<br>Replace the food probe module.<br>Replace the powerboard. |
| F37 | F137 | Food probe communication alarm | | |
| C1 | | Telescopic runners fitted | Only applies to Pyro product | Remove both side rack/telescopic runners and re-start pyro cycle. |
| C3 | | Door open | Only applies to Pyro product. | Close door and re-start pyro cycle. |

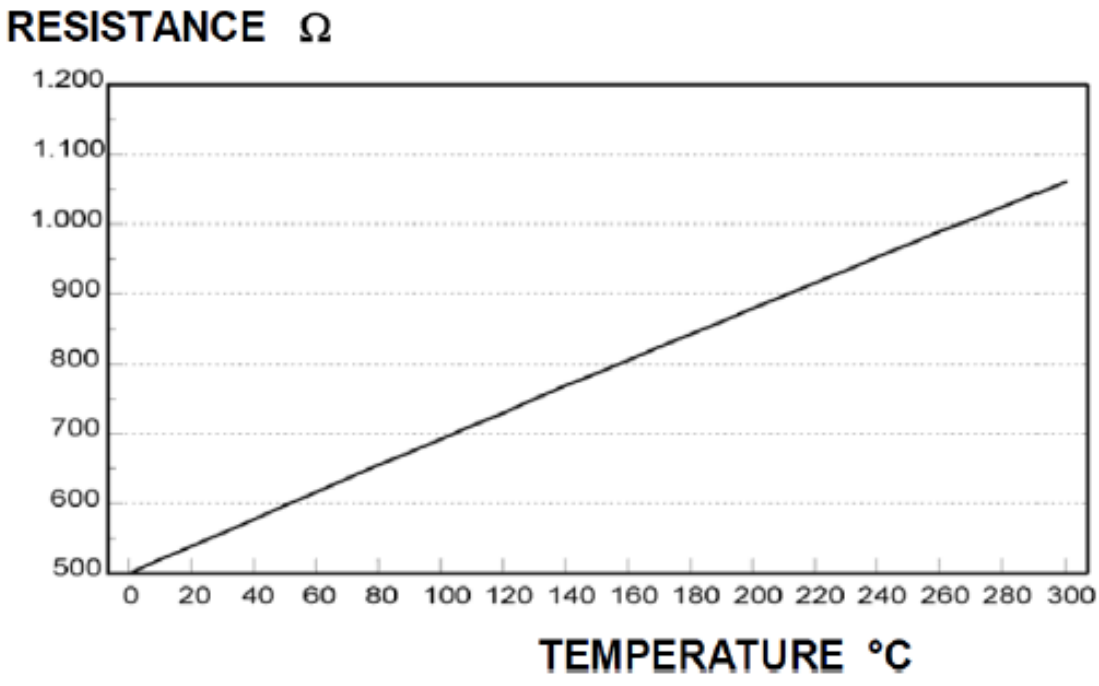
## Fault Codes Miscellaneous

| Code | Description |
|---|---|
| 111 | OVC - Meat probe out of range alarm |
| 112 | OVC - PT500 steam out of range alarm |
| 113 | OVC - Internal error alarm |
| 131 | OVC - NTC Temperature sensor alarm |
| 132 | OVC - Door lock configuration alarm |
| 133 | OVC - Data flash alarm |
| 135 | OVC - Electronic clixon alarm |
| 138 | OVC - PT500 fixed value alarm |
| 142 | OVC - Steamer NTC sensor alarm |
| 143 | OVC - Humidity sensor alarm |
| 144 | Water level sensor in tank out of range alarm |
| 191 | OVC - PT500 steam out of range warning |
| 192 | OVC - Meat probe humidity alarm |
| 193 | OVC - Humidity sensor warning |
| 194 | OVC - PT500 out of range warning |
| 197 | OVC - Steamer NTC sensor warning |
| 215 | INTERNAL - Configuration coherent alarm |
| 233 | INTERNAL - Firmware Data flash alarm |

## PT500 SENSOR

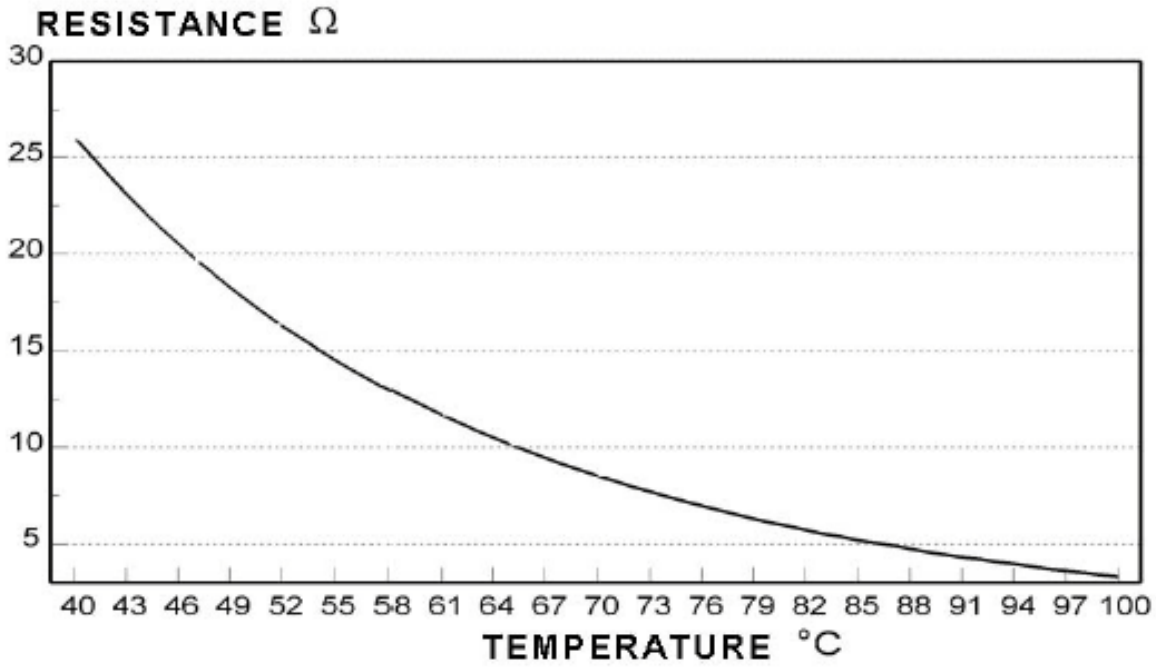
If a failure of the sensor is assumed, the resistance can be checked with an ohmmeter.
Check the resistance of the sensor - it should be between 500 – 600 Ω at room temperature.
Check the insulation resistance - it should be higher than 2 M Ω.



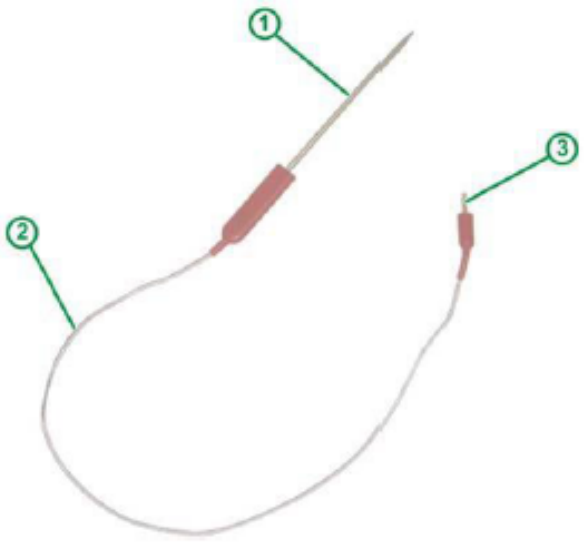


## FOOD PROBE

Some models are equipped with a cooking temperature function made by a temperature probe. The probe consists of an NTC sensor placed in a metal casing with an insulated and temperature resistant cable. This probe is inserted into food to be cooked (or immersed in the liquid container to be heated). As the temperature detected by the probe rises there will be a change in the resistance of the probe.

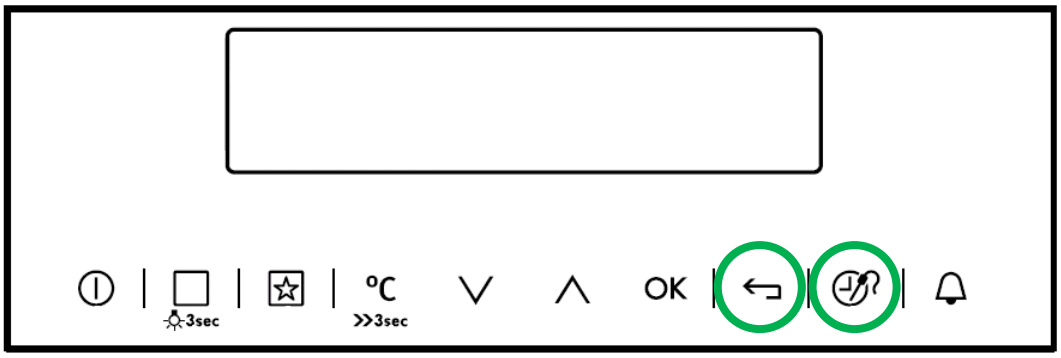



1 - FOOD PROBE TIP
2 - WIRE
3 - PLUG

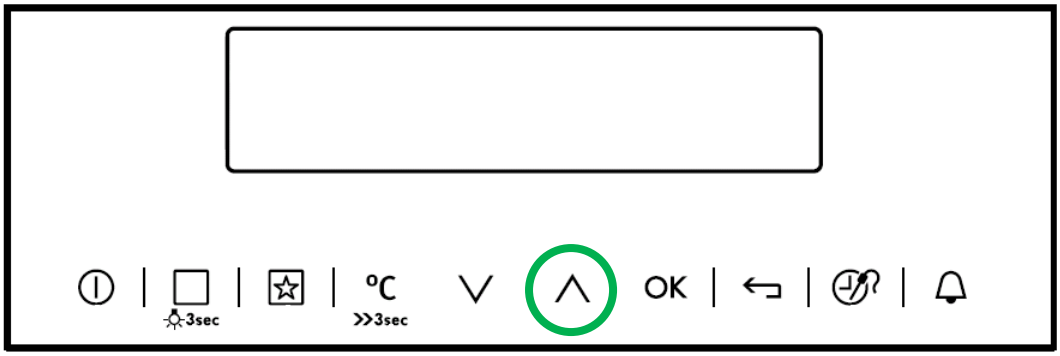


## SERVICE MODE

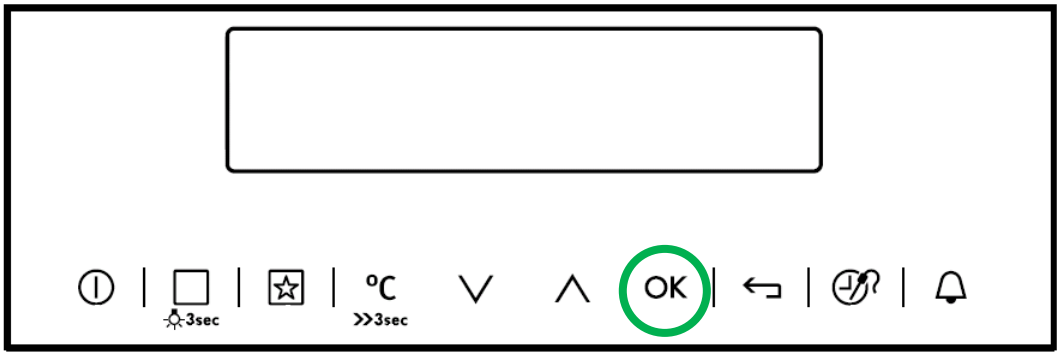
Within 7 seconds of powering up, simultaneously touch both the ‘Food Probe and ‘Return’ sensors. This will enter the Service Mode where individual components can be tested.




Use the Up sensor to test the elements, fans and lights.

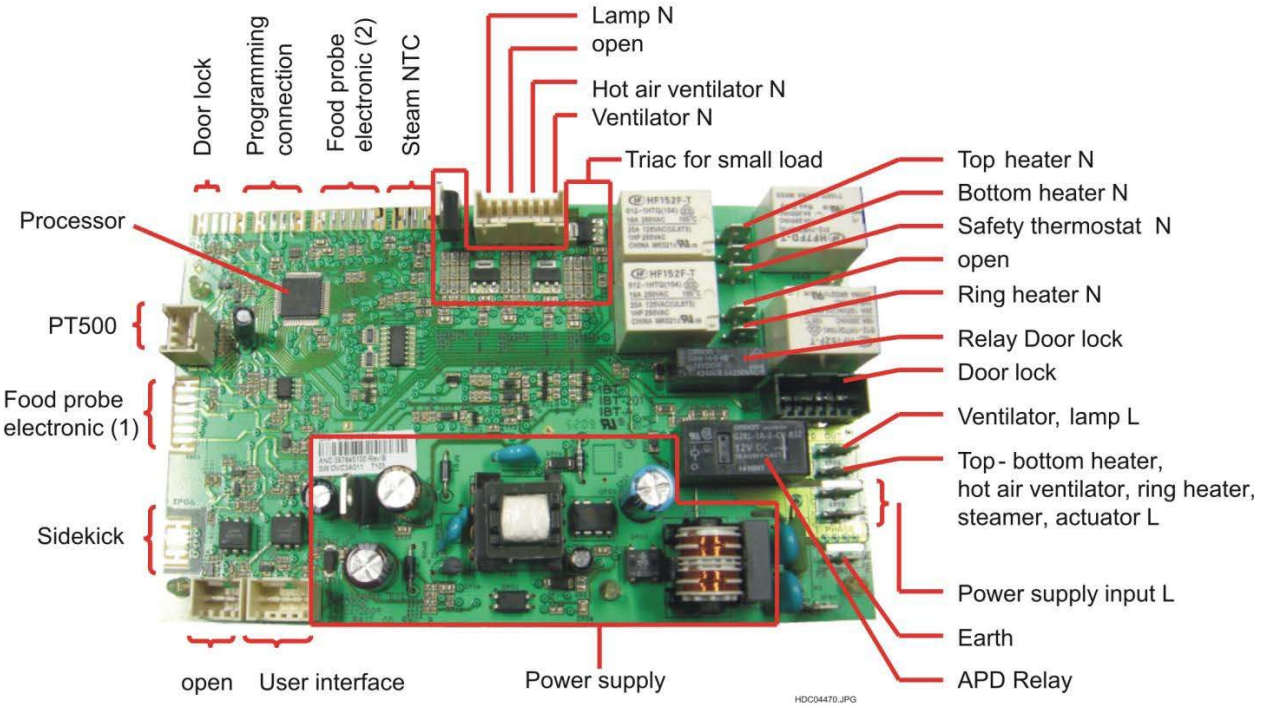


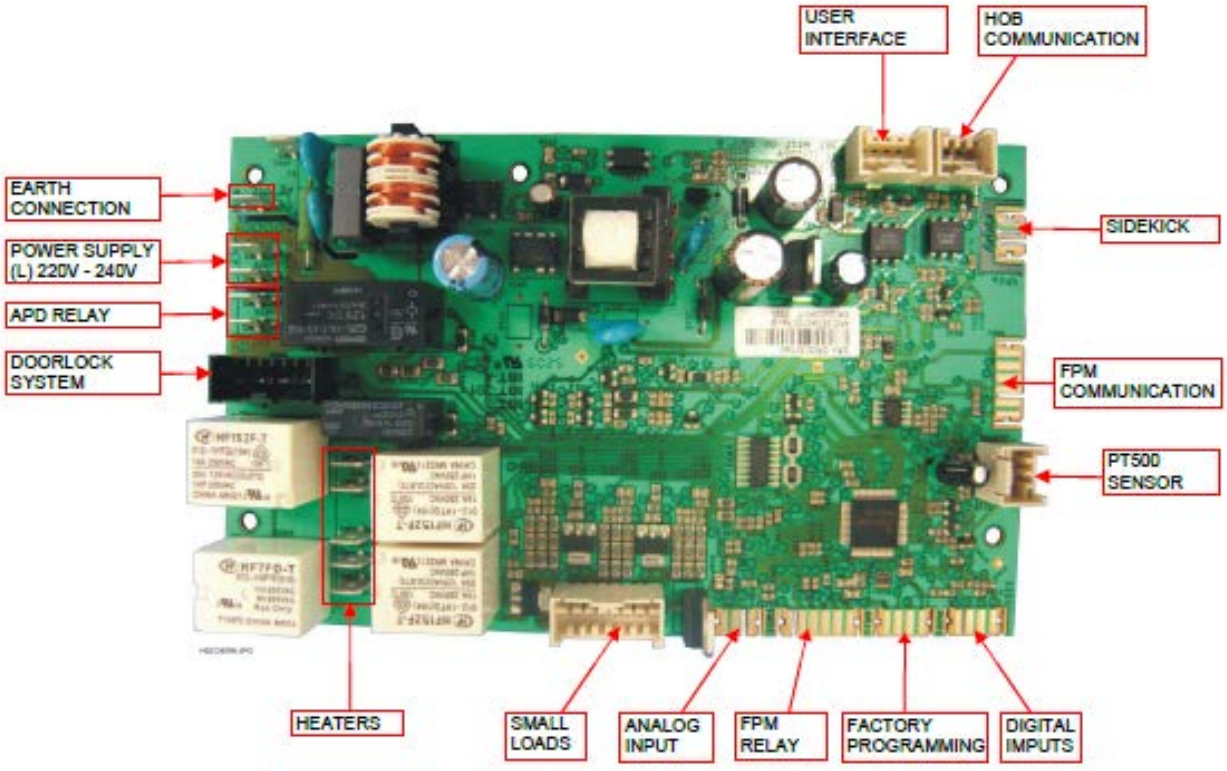

Use OK sensor to test the temperature probe, food probe and door lock.



# PCB LAYOUT

## OVC3000

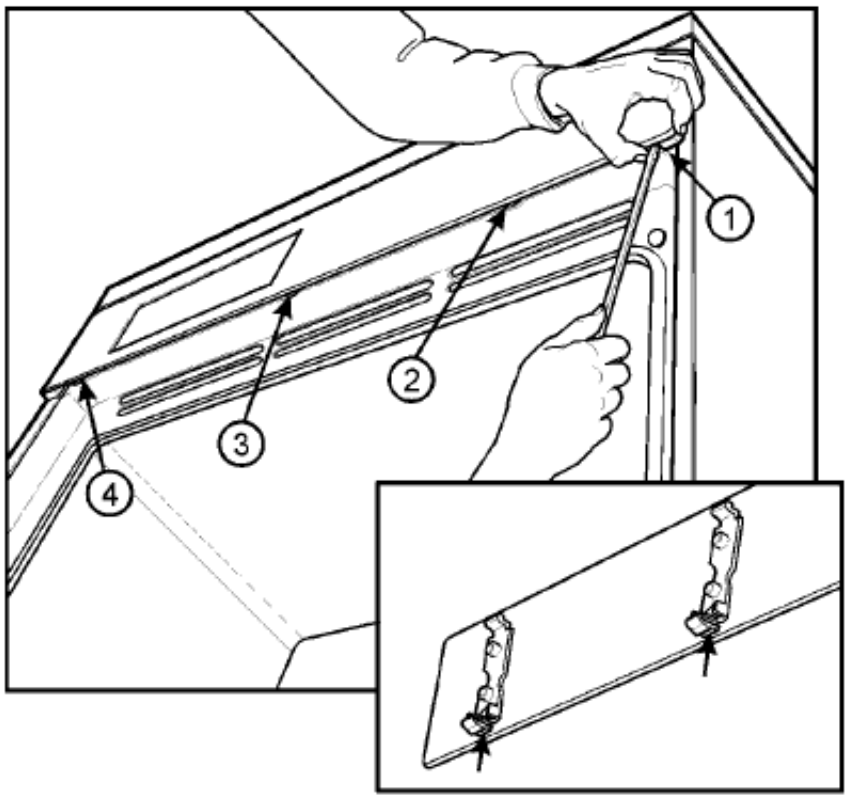


# DISASSEMBLY / ASSEMBLY

## CONTROL PANEL

1. Hold the panel and apply some light force away from the oven.
2. Insert a flat bladed screwdriver into the slots on the underside of the panel - This will disengage the clips.
3. Continue to apply the light force and repeat for the remaining 3 clips.



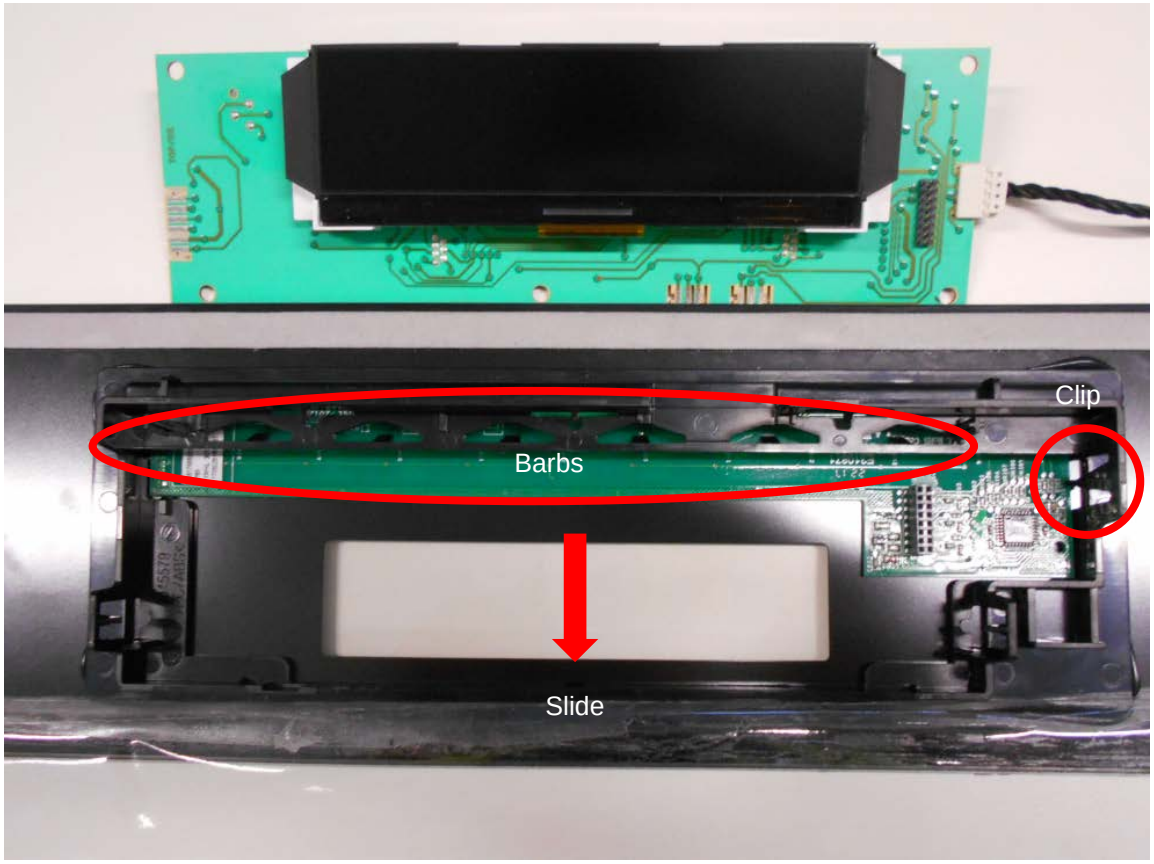
## CONTROLLER AND TOUCH SENSOR

At the rear of the control panel a plastic cover encloses the controller and touch sensor. To gain access to the controller and touch sensor 6 clips will require disengaging.


To remove the controller 5 clips require disengaging. Once disengaged carefully lift the controller from its housing.

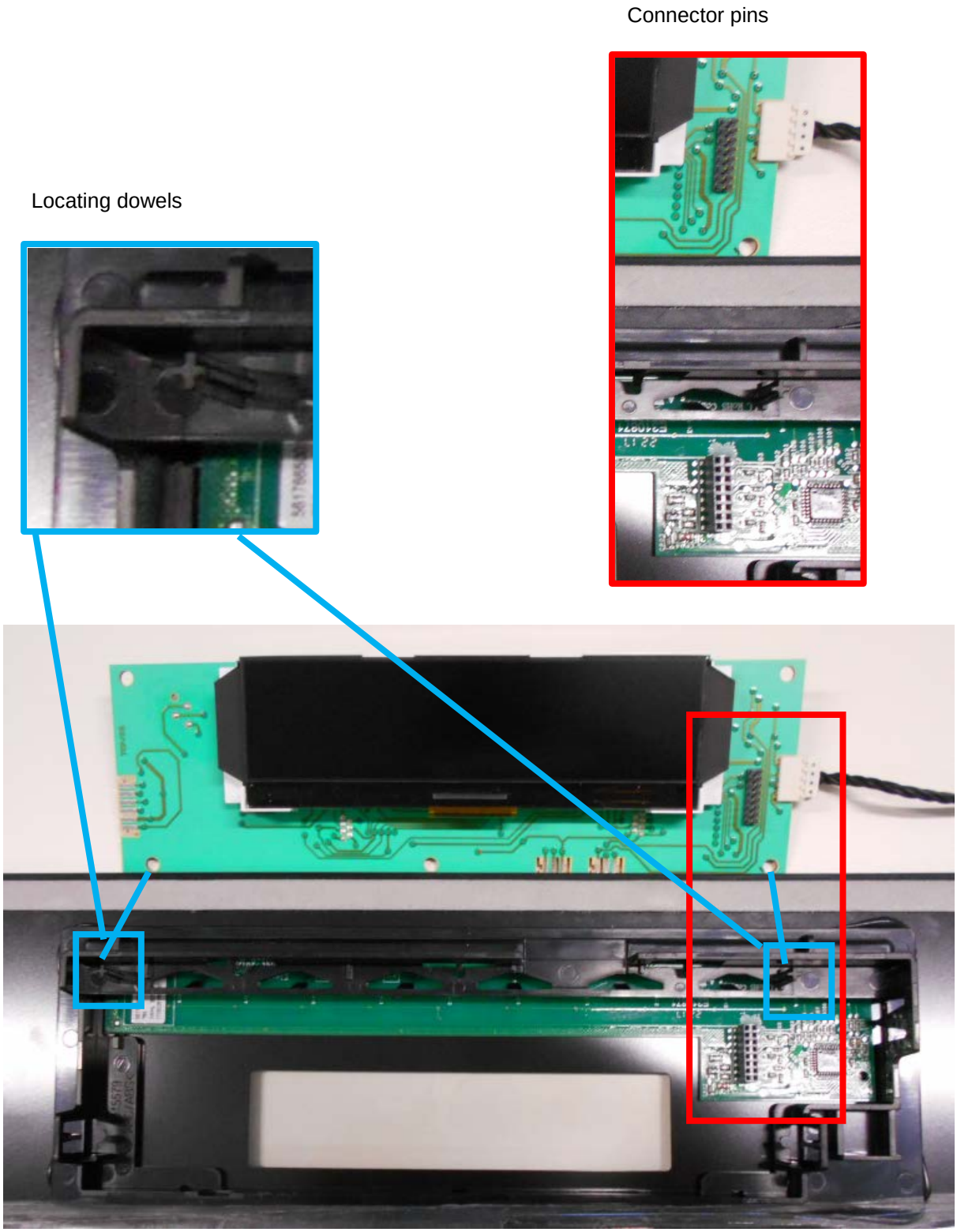
A single clip holds the touch sensor in place with additional barbs to press the sensor against the control panel. Release the clip and lift, then slide the touch sensor out.

To refit the touch sensor slide in and re-clip.



When re-fitting the controller care must be taken to ensure the connector pins locate correctly into the touch sensor.

Use the locating dowels on the control panel controller housing to align the controller correctly.



| PUBLICATION VERSION CONTROL CHART | | |
|---|---|---|
| **Issue Number** | **Reason** | **Date** |
| 1 | Original Document | 27-05-2019 |