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## **SERVICE/MAINTENANCE INSTRUCTIONS LOSS -ON-HEATING / THIN FILM OVEN**

### **1. REPLACING THE CONTROL THERMOSTAT**

- 1.1 DISCONNECT FROM THE MAINS SUPPLY BEFORE STARTING WORK.
- 1.2 Remove the table and table-connecting shaft from the motor; remove the clip holding the thermostat bulb inside the chamber.
- 1.3 Turn the unit onto its side or top (if onto the top use suitable packing to prevent damage to the motor). Remove the baseplate.
- 1.4 Remove the control knob and thermostat retaining nut.
- 1.5 Carefully remove the wires attached to the thermostat head.
- 1.6 Locate the two wires from the thermostat capillary to the terminal block and disconnect these from the terminal block
- 1.7 Withdraw the thermostat.
- 1.8 Fit the new thermostat and re-assemble in the reverse order.
- 1.9 When refitting the dial, ensure that the thermostat spindle is in the 'OFF' position. Set the dial to '0' and tighten. Refer to the recalibration instructions below.
- 1.10 Check all wiring before refitting the baseplate.

### **2. REPLACING THE OVERHEAT THERMOSTAT**

- 2.1 Follow the same instructions as for the control thermostat. There are no capillary wires on this thermostat. Refer to recalibration instructions.

### **3. RECALIBRATION**

- 3.1 Insert a suitable thermometer or thermocouple via the top vent or attached to the motor shaft.
- 3.2 Set the control dial to 6.5, ensuring that the overheat dial is set higher than this. Remove the control knob to gain access to the adjusting screw.
- 3.3 Allow the temperature to stabilise.

- 3.4 Calibration point is 100°C, adjust the range screw to achieve this temperature. Turn the screw clockwise in small increments to raise the temperature, and anti clockwise to lower the temperature. Allow the temperature to stabilise between adjustments.
- 3.5 Refit the control knob at 6.5 and adjust the dial to achieve the correct working temperature of 163°C.
- 3.6 If a new overheat thermostat has been fitted, set both dials to 6.5 and remove the overheat knob. Allow the temperature to stabilise at the calibration point (100°C).
- 3.7 Adjust the overheat thermostat so that the red light just comes on, turn the screw anticlockwise to just extinguish the lamp.
- 3.8 Refit the knob at 6.5 and set the control dial to achieve 163°C. Set the overheat dial 2 increments above the control dial setting. The overheat will not activate at approximately 5°C higher than the control point.

#### **4. REPLACING THE ELEMENTS**

- 4.1 Follow procedure for removing control and overheat thermostat.
- 4.2 Disconnect the element wires and wires to the control panel.
- 4.3 Remove the clips retaining the bottom vent.
- 4.4 Drill out any rivets retaining the lagging plate legs and remove the lagging plate and insulation material to gain access to the element.
- 4.5 Replace the faulty element with the new part.
- 4.6 Reassemble in the reverse order.

#### **5. REPLACING THE MOTOR**

- 5.1 Remove the table and table-connecting shaft from the motor.
- 5.2 Remove the aluminium cowl from around the motor.
- 5.3 Disconnect the wires from the motor.
- 5.4 Remove the 4 retaining nuts holding the motor in place.
- 5.5 Fit the replacement motor, ensuring that the shaft is central in the top vent. Reconnect wires and refit the cowl.

#### **6. REPLACING THE TIMER**

- 6.1 Follow steps 1.1 to 1.3 inclusive.
- 6.2 Pull off the 11- pin connector base.



## 9. GENERAL

Take normal precautions not to allow water to come into contact with electrical components. The outer surfaces can be cleaned with a warm, damp, soapy cloth or any proprietary cleaner suitable for a painted surface (do not use solvents or harsh abrasives). The work chamber may also be cleaned as above.

### REPLACEMENT PARTS LIST

#### LOSS -ON-HEATING / THIN FILM OVEN

WHEN ORDERING REPLACEMENT PARTS, PLEASE QUOTE MODEL AND SERIAL NUMBER OF UNIT. REFER TO SERIAL PLATE NEXT TO MAINS LEAD.

CODE	DESCRIPTION
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#### TEMPERATURE CONTROL SYSTEM:

B4501.....	Single thermocouple type 'K'
C3704.....	Cal 3200 Digital controller
W2308.....	Overheat thermostat
0165/OH.....	Overheat thermostat knob & dial lock set
D1009.....	Triac

#### DOOR ASSEMBLY:

E2602.....	Hinge
H3303.....	Door handle
Seal.....	Door seal

#### SUNDRY ITEMS

D1011.....	Green indicator lamp
D1012.....	Amber indicator lamp
D1013.....	Red indicator lamp
D1016.....	Filter
M0201.....	Fan motor (240V)
M0202.....	Fan motor (110V)
R10114.....	Hi-Lo switch
R10127.....	Mains on-off switch
S2517.....	Element (2 per unit)