SERVICE DATA SHEET Electric Ranges with ES575 T3 Electronic Oven Controls

NOTICE: This service data sheet is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects generally considered acceptable in the appliance repair trade. The manufacturer cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this data sheet.

IMPORTANT NOTE: This unit includes an EOC (electronic oven control). This board is not field-repairable.

Safe Servicing Practices

To avoid the possibility of personal injury and/or property damage, it is important that safe servicing practices be observed. The following are some, but not all, examples of safe practices.

- 1. Do not attempt a product repair if you have any doubts as to your ability to complete it in a safe and satisfactory manner.
- 2. Before servicing or moving an appliance, remove power cord from electric outlet, trip circuit breaker to Off, or remove fuse.
- Never interfere with the proper installation of any safety device. 3.
- 4. Use only replacement parts specified for this appliance. Substitutions may not comply with safety standards set for home appliances.
- Grounding: The standard color coding for safety ground wires is green or green with yellow stripes. Ground leads are not to be used as current carrying con-5 ductors. It is extremely important that the service technician reestablish all safety grounds prior to completion of service. Failure to do so will create a potential hazard
- 6. Prior to returning the product to service, ensure that:
- All electric connections are correct and secure.
- All electrical leads are properly dressed and secured away from sharp edges, high-temperature components, and moving parts.
- All uninsulated electrical terminals, connectors, heaters, etc. are adequately spaced away from all metal parts and panels.
- All safety grounds (both internal and external) are correctly and securely reassembled.
- All panels are properly and securely reassembled.

Temperature Adjustment

- 1. While in a non-cooking mode, press and hold the **Bake** key for 6 seconds.
- The current calibration offset (temperature adjustment) should appear in the temperature display. 2
- Use the number keys (0-9) to enter the desired amount of adjustments (up to 35°F). 3.
- 4. Press the Self Clean key to change the sign of the adjustment to a (-), if necessary. A positive adjustment will not display a sign.
- 5. Once the desired adjustment (-35° to 35° F) has been entered, press the Start key to accept the change or the Cancel key to reject the change.

Note: Changing calibration affects all baking modes. The adjustments made will not change the self-cleaning temperature.





Data Sheet Abbreviations and Terminology

- DLB Double Line Break
- EOC Electronic Oven Control
- LED Light-Emitting Diode
- MDL Motor Door Latch
- PS Power supply board (PS1, PS2, etc)
- RTD Resistance Temperature Detector/Oven Probe
- TCO Thermal cut out, also "thermo disc" or "thermal limiter"
- VSC Variable Speed Control



F11 Shorted Keypad or Selector Switch. For TXT Control Panel Model F11 Shorted Keypad or Selector Switch. Reset power supply to rar F12 EOC internal software error or failure • Disconnect power, wait 30 F13 Misconnected flat cables. No communication between oven and controls. 1. Check/reset ribbon harne: F14 Misconnected flat cables. No communication between oven and controls. 1. Check/reset ribbon harne: F16 EOC internal hardware error or failure 1. Disconnect power, 2ait 30 F18 EOC internal hardware error or failure 1. Disconnect power, 2ait 30 F18 Communications failure between EOC and ESEC system (electric models) 1. Test all wiring harness conclusion and ESEC system (electric models) F24 Communication failure between VSC board and EOC 1. Check karness connection 2. F30 Open RTD sensor probe/ wiring problem. Note: EOC may initially display an "F10," thinking a runaway condition statis. 1. Check KrD resistance at replace the RTD sensor probe / wiring problem. F60 EOC overtemperature 1. Verify proper assembly of 2. Check for blocked ventilat I. F90 tor Kenmore/Elite models with TST glass control panel) 1.	F10	Runaway Temperature; oven heats wien no cook cycle is programmed.	Check Oven Sensor Probe If oven is overheating, disc Reapply power to the rang (EOC). NOTE: Severe overheating may
F12 F13EOC internal software error or failure F14Disconnect power, wait 30F14Misconnected flat cables. No communi- cation between oven and controls.1.Check/reset ribbon harner 2.F15EOC internal hardware error or failure F16 F17 F181.Disconnect power, 2ait 30 2.F20Communications failure between EOC and ESEC system (electric models)1.Test all wiring harness con 2.F21Communication failure between VSC board and EOC1.Test all wiring harness concented 2.F30 or or or or or F31Open RTD sensor probe/ wiring prob- lem. Note: EOC may initially display an "F10," thinking a runaway condition exists. Shorted RTD sensor probe / wiring problem.1.Check wiring in probe circ 2.F60EOC overtemperature1.Verify proper assembly of 2.Check for blocked ventilat 3.F60EOC overtemperature1.Disconnect power, wait 30 2.F61Improper or corrupt signal voltage be- tween the EOC and power supply board (for Kenmore/Elite models with TST glass control panel)1.Verify proper assembly of 2.F90 to F94Door motor mechanism failure.1.Disconnect power, wait 30 2.F90 to F94EOC internal voltage test error or failure F941.Disconnect power, wait 30 2.F90 to F94EOC internal voltage test error or failure F941.Disconnect power, wait 30 2.F90 to F94Door motor mechanism failure.1.Disconnect power, wait 30 2. <td>F11</td> <td>Shorted Keypad or Selector Switch.</td> <td>For TXT Control Panel Models 1. Reset power supply to ran 2. Disconnect power, wait 10 3. Check/reset ribbon harnes 4. Replace TST panel. If fault</td>	F11	Shorted Keypad or Selector Switch.	For TXT Control Panel Models 1. Reset power supply to ran 2. Disconnect power, wait 10 3. Check/reset ribbon harnes 4. Replace TST panel. If fault
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F23 F24Communication failure between VSC board and EOCNOTE: F23 is for Upper or Main 1. Check harness connection 2. Test for approximately +57 3. if voltage is correct replace 1. Check wring in probe circl 2. Check RTD resistance at replace the RTD sensor probe/ wiring problem. Note: EOC may initially display 	F20	Communications failure between EOC and ESEC system (electric models)	 Test all wiring harness con Each generation of ESEC points and component rep
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F62 Improper or corrupt signal voltage between the EOC and power supply board (for Kenmore/Elite models with TST glass control panel) 1. Disconnect power, wait 30 NOTE: Harness may be permaring glass control panel) Replace the power supply 5. Replace the EOC. F90 1. Turn off power for 10 secc to 1. Turn off power for 10 secc 2. If it fails, check wiring of L Separation 1. Turn off power for 10 secc 2. If it fails, check wiring of L 3. Unplug the lock motor from Lock Motor Assembly. 4. Check Lock Switch for propowered as in above step F94 EOC internal voltage test error or failure LinE EOC internal voltage test error or failure 1. Disconnect power, wait 30 2. If fault returns upon power Note: Generally speaking, F1X implies a control failure.	F60	EOC overtemperature	Verify proper assembly of Check for blocked ventilati Inspect oven vent for prop Verify operation of colling t
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Code

Condition / Cause

Electronic Oven Control (EOC) Fault Code Descriptions

Suggested Corrective Action

using the RTD scale found in the tech sheet. Replace, if defective. connect power from the range and unplug connector P1 power supply board 1. ge. If oven continues to overheat when power is reapplied, replace the Electronic Oven Control

y require the entire oven to be replaced should damage be extensive.
s: nge.) seconds, and reapply power. ss connections between TST panel and EOC. It returns upon power-up, replace EOC.
0 seconds, and reapply power. If fault returns, replace EOC.
ss connections between TST panel and EOC. It returns upon power-up, replace EOC.
) seconds and reapply power, r-up, replace EOC.
nnections between the EOC and ESEC components. c controls has specific test points and procedures. Consult product tech sheet for specific test placement recommendations.
n Oven. F24 is for Lower Oven (if equipped). ns between VSC board and EOC. VDC to VSC board at p6 connector pins 1 & 6. æ VSC board. If voltage is incorrect replace EOC.
cuit for possible open or short condition. room temperature (compare to probe resistance chart). If resistance does not match the chart, robe. nd restart the function. place the EOC.
backguard panel. Check for damaged or loose panels, brackets, endcaps, etc. tion slots in control panel rear cover. per assembly and air flow. fan (if present).
D seconds and reapply power. uity of harness between EOC and power supply board. s if defective. nently attached to EOC ON SOME MODELS. / board.
onds, then turn on power. Test the door latch again (try to start a Clean cycle). .ock Motor, Lock Switch and Door Switch circuits. m the board and apply power (L1) directly to the Lock Motor. If the motor does not rotate, replace
oper operation (do the contacts open and close, check with ohmmeter). The Lock Motor may be to open and close Lock Switch. If the Lock Switch is defective, replace Motor Lock Assembly. orrect situation, replace the EOC.
0 seconds, and reapply power.

-up replace EOC

and F9x a latch motor problem.

RTD SCALE		
Temperature °F (°C)	Resistance (ohms)	
32 ± 1.9 (0 ± 1.0)	1000 ± 4.0	
75 ± 2.5 (24 ± 1.3)	1091 ± 5.3	
250 ± 4.4 (121 ± 2.4)	1453±8.9	
350 ± 5.4 (177 ± 3.0)	1654±10.8	
450 ± 6.9 (232 ± 3.8)	1852±13.5	
550 ± 8.2 (288 ± 4.5)	2047 ± 15.8	
650 ± 9.6 (343 ± 5.3)	2237 ± 18.5	
900 ± 13.6 (482 ±7.5)	2697 ± 24.4	
Probe circuit to case ground	Open circuit/infinite resistance	

