

SERVICE DATA SHEET

318127026 (0510) Rev. A

Gas Range with Electronic Oven Control

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.**

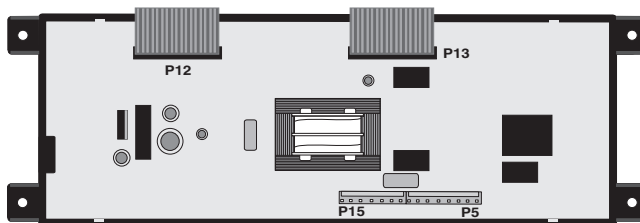
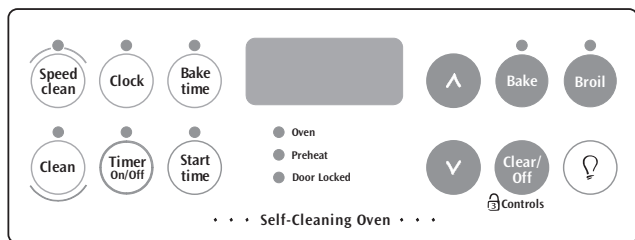
SAFE SERVICING PRACTICES

To avoid the possibility of personal injury and/or property damage, it is important that safe servicing practices be observed. The following are examples of some, but not all, of these 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 and turn off gas supply.
3. Never interfere with the proper installation of any safety device.
4. USE ONLY REPLACEMENT PARTS CATALOGED FOR THIS APPLIANCE. SUBSTITUTIONS MAY DEFEAT COMPLIANCE WITH SAFETY STANDARDS SET FOR HOME APPLIANCES.
5. 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 conductors. 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 non-insulated 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.

ELECTRONIC OVEN CONTROL

1. This self-cleaning controller offers Bake, Broil modes, Timed and Delayed Baking, and Cleaning functions.
2. This Controller has a membrane interface.



NOTE: The Controller's are not field repairable. Only temperature settings can be changed. See oven calibration.

NORMAL BAKE

During a normal bake mode, the controller preheats the oven and bake with the bake burner.

CLEAN

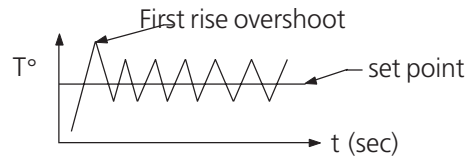
During a cleaning process, the oven uses bake burner.

CLEAN AND TIMED CLEAN

When these modes are selected, the door locks right after start button is pushed.

FIRST RISE

It is normal to see a temperature overshoot in the first rise of all modes when you monitor the temperature.



OVEN CALIBRATION

Set the electronic oven control for normal baking at 350°F/176°C. Obtain an average oven temperature after a minimum of 5 cycles. Press Cancel to end bake mode.

Note: Changing calibration affects all the cooking modes but not the clean mode.

ELECTRONIC OVEN CONTROL

ELECTRONIC OVEN CONTROL (EOC) FAULT CODE DESCRIPTIONS AND RTD SCALE

| Likely Failure Condition/Cause | Suggested Corrective Action |
|--|--|
| <p>F10 Control has sensed a potential runaway oven condition. Control may have shorted relay, RTD sensor probe may have gone bad.</p> <p>F11 Shorted keypad.</p> <p>F13 Control's internal checksum may have become corrupted.</p> <p>F14 Misconnected flat cables.</p> | <ol style="list-style-type: none"> 1. Check RTD sensor probe and replace if necessary. If oven is overheating, disconnect power. If oven continues to overheat when the power is reapplied, replace EOC. Severe overheating may require the entire oven to be replaced, should damage be extensive. 2. Press CLEAR key. 3. Disconnect power, wait 30 seconds and reapply power. If fault returns upon power-up, replace EOC. 4. Disconnect power; verify flat cable connections (P12 or P13). |
| <p>F30 Open RTD sensor probe/ wiring problem. Note: EOC may initially display an "F1", thinking a runaway condition exists.</p> <p>F31 Shorted RTD sensor probe/wiring problem. Note: "F3" is displayed when oven is in active mode or an attempt to enter an active mode is made.</p> | <ol style="list-style-type: none"> 1. Press CLEAR key. 2. Check wiring in probe circuit for possible open condition. Check RTD resistance at room temperature (compare to probe resistance chart). If resistance does not match the chart, replace the RTD sensor probe. 3. Let the oven cool down and restart the function |
| <p>F90 to F94 Door motor mechanism failure.</p> | <ol style="list-style-type: none"> 1. Press CLEAR key. 2. If CLEAR key does not eliminate problem, turn off power for 30 seconds, then turn on power. 3. Check wiring of Lock Motor, and Lock Switch and Door Switch circuits. 4. Unplug P5, apply power (L1) directly to the Lock Motor, if the motor does not rotate, replace Lock Motor Assembly. Plug P5. 5. Check Lock Switch A for proper operation (do they open and close, check with ohmmeter). The Lock Motor may be powered as in above step to open and close Lock Switch. If the Lock Switch is defective, replace Motor Lock Assembly. 6. If all above steps fail to correct situation, replace control. |

CIRCUIT ANALYSIS MATRIX

| | ELEMENTS | | Light P5-8 | Door Motor P5-6 | Lock Motor P15-1 & P15-2 | Switch A P15-1 & P15-7 | Door Switch P15-1 & P15-3 |
|-------------|--------------|---------------|---------------|-----------------------|-----------------------------------|------------------------------------|---------------------------------|
| | Bake P5-1 | Broil P5-2 | | | | | |
| Bake | X | | | | | | |
| Broil | | X | | | | | |
| Clean | X | | | | | | |
| Locking | | | | X | NC | NO | |
| Locked | | | | | NO | NC | |
| Unlocking | | | | X | NO | NC | |
| Unlocked | | | | | NC | NO | |
| Light | | | X | | | | |
| Door Open | | | X | | | | X |
| Door Closed | | | | | | | |

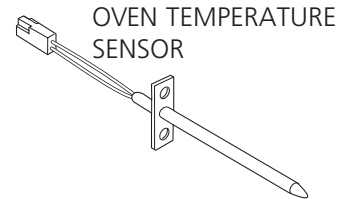
Relay will operate in this condition only

RTD SCALE

| Temp. °F | Temp. °C | Resistance (ohms) |
|------------|-------------|-------------------|
| 32 ± 1.9 | 0.0 ± 1.1 | 1000 ± 4.0 |
| 75 ± 2.5 | 23.9 ± 1.4 | 1091 ± 5.3 |
| 250 ± 4.4 | 121.1 ± 2.4 | 1453 ± 8.9 |
| 350 ± 5.4 | 176.7 ± 3.0 | 1654 ± 10.8 |
| 450 ± 6.9 | 232.2 ± 3.8 | 1852 ± 13.5 |
| 550 ± 8.2 | 287.8 ± 4.6 | 2047 ± 15.8 |
| 650 ± 9.6 | 343.3 ± 5.3 | 2237 ± 18.5 |
| 900 ± 13.6 | 482.2 ± 7.6 | 2697 ± 24.4 |

BURNER RATING

| Rating | See nameplate |
|--------------|---------------|
| Bake Burner | 16 000BTU |
| Broil Burner | 12 500BTU |

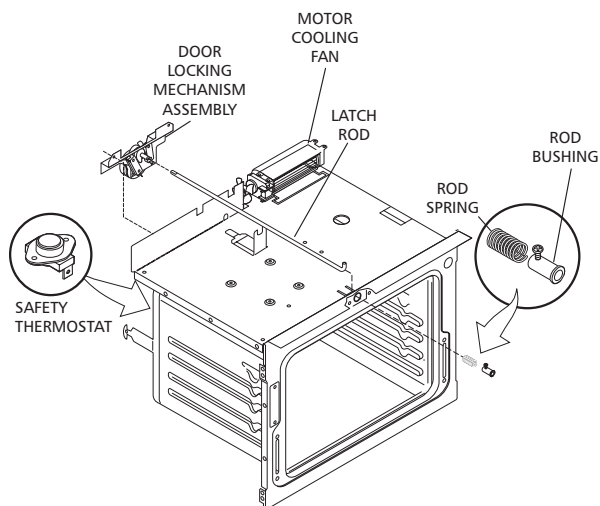
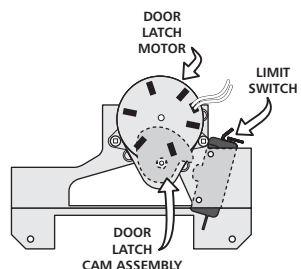


COOLING FAN

A two way thermostat (140°F/170°F) controls the cooling fan operation. The cooling fan should engage in clean mode only.

DOOR LOCK MECHANISM

The appliance is equipped with an electronic oven control and has an auto locking door latch feature. When the self clean cycle is programmed, the door is locked by a motor operated latch system. The interior of oven does'nt need to heat up to 500°F/260°C before the door locks. However, until the temperature inside oven reaches 500°F/260°C, the self-clean program can be canceled and door will unlock immediately. After oven reaches temperatures over 500°F/260°C, the door will not unlock until temperature drops below 500°F/260°C.



OVEN DOOR REMOVAL AND REPLACEMENT

CAUTION The door is heavy. For safe, temporary storage, lay the door flat with the inside of the door facing down. The oven door can be removed to make oven cleaning easier.

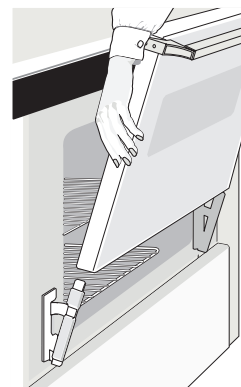
To Remove Oven Door:

1. Open door approximately 4 inches to the stop position.
2. Grasp door at side edges.
3. Lift door up and off hinges.

To Replace Oven Door:

1. Be sure the hinge arms are in the stop position. Be careful if pulling the hinges open by hand. The hinges may snap back against the oven frame and could pinch fingers.
2. Hold the door at the sides near the top.
3. Slide the door down onto the hinges as far as it will go and close the door.
4. If the door is not in line with the oven frame, remove door and repeat the above steps.

Removing the Oven Door



GAS COOKTOP REMOVAL

1. Shut off gas to range.
2. Disconnect power.
3. Remove gas supply line at the regulator. Move range out of the cabinet opening.
4. Remove grates, burner covers, knobs and seals.
5. Remove screws securing rings and remove rings. Inspect burners, loose screws, electrode, cleanliness, etc.
6. Remove back upper panel.
7. Remove the 2 screws at the back of the cooktop.
8. Remove the 5 knobs.
9. Remove the 2 screws securing the manifold (see figure).
10. Slide out the cooktop.
11. To reassemble the cooktop, reverse procedure.

