

SERVICE DATA SHEET

Electric Smoothtop Ranges with Electronic Surface Element Control (ESEC20R)

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, but without limitation, of such practices.

1. Before servicing or moving an appliance remove power cord from electrical outlet, trip circuit breaker to OFF, or remove fuse.
2. Never interfere with the proper installation of any safety device.
3. **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 safety hazard.**
4. 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.

ELECTRONIC SURFACE ELEMENT CONTROL (ESEC)-

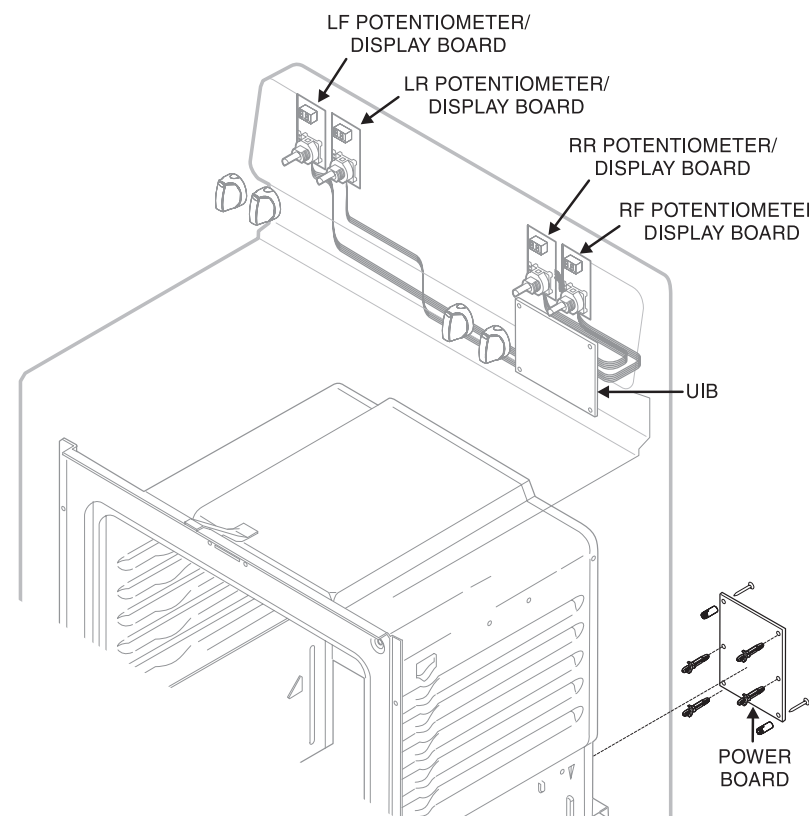
This range is equipped with an Electronic Surface Element Control (ESEC), which precisely controls the smoothtop cooking elements at multiple settings. (The Warming Zone element is not controlled by the ESEC). For the user, the elements are operated in the same way as with conventional controls, by pushing in and turning the knob to the desired setting. The setting is shown in the digital display above the knob, instead of using graphics on the control panel.

ESEC Hot Element Indicator ("HE") - While an element surface is hot, that element's display will show "HE". This is in place of the usual hot surface indicator light on ranges with conventional controls.

ESEC Lockout Feature ("- -") - The electronic oven control's Clean feature will not operate when a surface element is ON. Conversely, the surface elements controlled by the ESEC will not operate when an oven control Clean mode is active. When the oven control is in a Clean mode, "- -" will appear in the ESEC displays to signify that the surface elements are locked out.

NOTE: The "HE" (hot element) display will always have priority over the "- -" display.

ESEC System Components - The ESEC system consists of a **Power Board** (control board mounted on the mainback of the range) and User Interface Board or **UIB** (main circuit board mounted in the control panel), four **Potentiometer Display Boards** (push-to-turn control for each element) and the **ESEC Harness** that connects the boards and the oven control. The ESEC boards communicate with each other to control the elements and with the oven control for the lockout modes (See the ESEC System Diagram on reverse side of this Service Data Sheet).



SERVICE DATA SHEET

Electric Smoothtop Ranges with Electronic Surface Element Control (ESEC20R)

ELECTRONIC SURFACE ELEMENT CONTROL (ESEC20R) TROUBLESHOOTING GUIDE

Symptom	Likely Failure Condition/Cause	Suggested Corrective Action
F0 13	Bad EEPROM checksum.	1. Replace UIB.
F0 15	ESEC Self-test failure.	1. Replace UIB.
F5 00	No LinBUS master communication.	1. Bad ESEC harness connections. 2. Bad EOC. 3. Bad UIB. 4. Contact technical line for further assistance.
F7 00 F7 01 F7 10	Missing connection between Potentiometer/Display Board and UIB.	1. Bad ESEC harness connections 2. Bad UIB. 3. Bad Potentiometer/Display Board. 4. Contact technical line for further assistance.

Notes on Replacing ESEC Parts

***NOTE:** Electronic boards are very sensitive to static electricity. Static electricity can permanently damage electronic boards. Before handling these parts, be sure to drain static electricity from your body by properly grounding yourself.

Replacing Potentiometer/Display Boards * - Each of the four push-to-turn controls (Potentiometer/Display Boards) are mounted to the control panel with a hex nut and lockwasher. When replacing a potentiometer, do not over-tighten the hex nut - a torque of only 5 in.-lbs. is required to properly mount the potentiometer. Over-tightening the hex nut will negatively affect the smooth feel of the knob turn and can damage the potentiometer.

NOTE: Both Potentiometer/Display Boards must be replaced in pairs (LH or RH sides) at the same time.

Replacing the Power Board * - When replacing the main control board (Power Board) on the back of the range, do not over-tighten the 2 screws that secure the Power Board. A torque of only 10 in.-lbs. is required to tighten the screws. Over-tightening the screws can damage the plastic standoffs and possibly the board itself.

Replacing the UIB * - When replacing the UIB, DO NOT over-tighten the 2 screws that secure the UIB.

IMPORTANT
DO NOT REMOVE THIS BAG
OR DESTROY THE CONTENTS
WIRING DIAGRAMS AND SERVICE
INFORMATION ENCLOSED
REPLACE CONTENTS IN BAG

