TROUBLESHOOTING

This section of the manual is divided into five troubleshooting guides and categories (see table of contents below).

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NOTES:
- *If the appliance has an error, that error code appears on the display when it is happens without entering diagnostic mode.*
- *Though not listed, the cause of all error codes could be the result of other factors such as:*
    - *Faulty wiring e.g. through a short circuit, break, loose contact, earth contact, etc.*
    - *Moisture, dirt, component failure, electromagnetic interference or other impacts to the electronics.*
- *Before continuing, please take note of the WARNINGS and CAUTIONS below.*

⚠ WARNING

- **TO AVOID ELECTRIC SHOCK, NEVER TOUCH ANY PART OF THE ELECTRICAL CIRCUIT WITH HANDS OR UN-INSULATED TOOLS WHILE THE POWER IS CONNECTED.**
- **FAILURE TO INSTALL THE MOUNTING SCREWS CAN ALLOW THE OVEN TO TIP FORWARD DURING USE!**

⚠ CAUTION

Be careful when handling sheet metal parts - Edges may be sharp.

Error Code	Message	Diagnostic Of Error *(Through Microcontroller)*	Possible Cause (Ranked by Frequency)
E01	F5	**EEPROM** Read error (after 50 tries)	1. Problems with relay board, caused by moisture or Electromagnetic Interference (EMI) influences.
E02	F5	**EEPROM** Write error (after 10 tries)	1. Problems with relay board, caused by moisture or EMI influences.
E03	F5	**FLASH** Incorrect process data (device ID number)	1. Loaded incorrect process data. Cycle power to the unit and then clear the error. If error returns replace the relay board.
E04	F5	**FLASH** Incorrect process data (checksum)	1. Process data error. Cycle power to the unit and then clear the error. If error returns replace the relay board.
E05	F5	**FLASH** Incorrect firmware (checksum)	1. Firmware error. Cycle power to the unit and then clear the error. If error returns replace the relay board.
E06	---	**SOFTWARE** Watchdog reset	1. Relay board faulty.
E09	F0	**Cooking Space Temperature** Sensor with too low of a resistance (temp. < ca. -4°F/-20°C)	1. Short circuit in Temperature Sensor or in its wiring.
E10	F0	**Cooking space temperature** Sensor with too high of a resistance (temp. >ca. 1472°F/800°C)	1. Break or loose contact in Temperature Sensor or in its wiring.
E11	F0	**Cooking space temperature** Reference with too low of a resistance	1. Relay board faulty.
E12	F0	**Cooking space temperature** Reference with too high of a resistance	1. Relay board faulty.
E13	---	**Cooking space temperature** Temperature > 662°F/350°C during Off / Standby Mode	1. Electromagnetic disturbances - Replace relay board. 2. Heating and main relay short circuited - Replace relay board.
E17	F1	**Food temperature** Food probe with too low of a resistance (temp. > ca. 446°F/230°C)	1. Short circuit in food probe or in its wiring. 2. Food probe not inserted into food, tip too hot. 3. Moisture in food probe socket.

Error Code	Message	Diagnostic Of Error *(Through Microcontroller)*	Possible Cause (Ranked by Frequency)
E18	F1	**Food temperature** Food probe with too high of a resistance (temp. < ca. -20°C)	1. Break or loose contact in food probe or in its wiring.
E25	F3	**Climate temperature** Sensor with too low of a resistance (temp. > ca. 509°F/265°C)	1. Short circuit in climate sensor or in its wiring. 2. Exhaust duct blocked. 3. Duct between cooking space and sensor blocked.
E26	F3	**Climate temperature** Sensor with too high of a resistance (temp. < ca. 28°F/-2°C)	1. Break or loose contact in climate sensor or in its wiring. 2. Exhaust duct blocked. 3. Duct between cooking space and sensor blocked.
E27	F17	**Climate temperature** Temperature > 392°F/200°C for 60 seconds	1. Hairline crack in climate sensor.
E33	F12	**Relay board temperature** Sensor with too low of a resistance (temp. > ca. 392°F/200°C)	1. Relay board faulty.
E34	F12	**Relay board temperature** Sensor with too high of a resistance (temp. < ca. 3°F/-16°C)	1. Relay board faulty.
E35	F13	**Relay board temperature** Temperature > 185°F/85°C for 60 seconds	1. Electronics area temperature too high (caused by second appliance?). 2. Exhaust fan failure. 3. Power failure during baking process.
E36	F14	**Control Board temperature** Sensor with too low of a resistance (temp. > ca. 200°C)	1. Control board faulty.
E37	F14	**Control Board temperature** Sensor with too high of a resistance (temp. < ca. 3°F/-16°C)	1. Control board faulty.
E38	F15	**Control Board temperature** Temperature > 185°F/85°C for 120 seconds	1. Electronics area temperature too high (caused by second appliance?). 2. Exhaust fan failure. 3. Power failure during baking process.

Error Code	Message	Diagnostic Of Error *(Through Microcontroller)*	Possible Cause (Ranked by Frequency)
E46	---	**Pyrolysis** Elevated cavity temperature in phase 2	In Pyrolysis operation at the end of phase 2 the set-point temperature was not reached in order to change to phase 3. Phase 2 was extended automatically which leads to a shorter phase 3. 1. Faulty thermostat wiring. 2. Door lock microswitches loose. 3. Undervoltage in power supply (no defect, but may lead to a poor pyrolytic cleaning effect). 4. Interrupt during Pyrolysis (no fault, but may lead to a poor pyrolytic cleaning effect).
E48	---	**Pyrolysis** Elevated cavity temperature in phase 2	The cavity temperature increased in phase 2 of the Pyrolysis operation.
E49	F10	**Control Board** Button(s) closed for min. 60 seconds	1. Button is mechanically blocked or jammed. 2. Moisture on the control board.
E50	F10	**Control Board** Moisture sensor closed for min. 20 seconds	1. Moisture on the control board.
E51	F6	**Relay Board** Neutral wire to main relay (N') records error	1. Quit error in the case of appliances with K3.20398-0 or K3.20398-1 software. Message probably caused by software error. 2. Wrong connection of neutral and pole conductor in case of 1–phase connection (Applies for appliances with relay board with version smaller -2). 3. Relay board faulty.
E54	F25	**Supplementary Board** Communication error ***NOTE:** The Supplementary board plugs directly into the relay board*	1. Check connection (including cable) between Supplementary Board and relay board.
E55	---	**Supplementary Board** Hardware error	1. Supplementary Board faulty. Replace Relay board.
E56	---	**Supplementary Board** Software incompatibly	1. Replace relay board (to update firmware).
E57	U0	**Electrical connection** Voltage on Neutral > 340V	1. Energized wire connected to neutral terminal. 2. Neutral wire has a break in the house wiring. 3. Electrical calibration error (see error code E63).
E58	U1	**Electrical connection** No voltage on L2	1. No wire connected to L2 terminal, or no voltage on L2. 2. Circuit breaker or fuse in house wiring tripped off. 3. L1 and L2 are the same supply leg. 4. Relay board faulty

Error Code	Message	Diagnostic Of Error *(Through Microcontroller)*	Possible Cause (Ranked by Frequency)
E59	U0	**Electrical connection** Voltage > 270VAC for 1 second	1. Overvoltage in power supply. 2. Neutral wire break in the house wiring. 3. Electrical calibration error (see error code E63).
E61	U2	**Electrical connection** Voltage < 170VAC for 1 minute	1. Undervoltage in electrical power supply. 2. Electrical calibration error (see error code E63).
E62	U3	**Electrical connection** Voltage < 150VAC	1. Undervoltage in electrical power supply. 2. Electrical calibration error (see error code E63).
E63	---	**Electrical calibration**	1. No calibration of electrical voltage. Replace relay board.
E81	---	**Relay calibration**	1. No calibration of relay. Replace relay board.
E85	F4	**Slide motor** Motor current shows short circuit	1. Short circuit in slide motor or in its wiring.
E86	F4	**Slide motor** Motor current shows break	1. Break or loose contact in slide motor or in its wiring.
E87	F4	**Exhaust air slide valve** Path of slide valve restricted (motor current error during slide valve test)	1. Exhaust slide valve stuck with grease deposits. 2. Motor or slide valve jammed (mechanical defect). 3. Short circuit in slide motor or in its wiring.
E88	---	**Exhaust air slide valve** Path of slide valve restricted during normal operation (motor current shows current reduction)	1. Exhaust slide valve stuck with grease deposits. 2. Motor or slide valve jammed (mechanical defect).

Malfunctions/Messages Without Error Codes

Display Text	Possible Cause (Ranked by Frequency)
Please close door	1. Door is open. 2. Magnet in door is not in correct position or has come away. 3. Reed switch or its holder not mounted correctly. 4. Door does not close properly too (e.g. because of faulty door seal). 5. Break in door contact or in its wiring.
Insert food probe	1. Food probe is not plugged in. 2. Loose contact in food probe socket. 3. Wiring of food probe socket is faulty.
Remove food probe	1. Food probe is plugged in. 2. Food probe socket or its wiring is defective.
*** Demo-Modus ***	1. Demo-Modus (mode used for demonstration purposes) is on.
Diagnostic mode is on.	1. Diagnostic mode is on.

Malfunctions Without Fault Displays//Messages

Malfunction	Possible Cause (Ranked by Frequency)
Heating element(s) not heating.	1. Heating element(s) or the corresponding wiring is faulty. 2. Demo-Modus is activated.
Strange display or illegible characters appear in the text display.	1. Moisture in LCD due to steam penetrating panel area. 2. Loose or faulty plug and socket connection or ribbon cable. 3. Faulty LCD (loose connector). 4. Door lock microswitches loose.
Heavily build-up of condensate externally or in condensate conduit	1. Door not closed firmly enough. 2. Door seal fitted incorrectly or damaged. 3. Door hinge faulty or damaged. Check closing force.
A Shut-off time is set that requires a Delayed Start, but the Delayed Start does not begin if the food probe is unplugged and plugged back in.	1. Immediate remedy: Cancel the operation and reset selection. 2. If relay board software is K3.20398-1, replace relay board with software version 2 or higher.
Pyrolysis: Poor cleaning results	1. Faulty or dirty door seal. 2. Build-up of heat in the back panel of the unit around the thermostats. 3. Faulty thermostat wiring.
Delayed start longer then 2 hours shuts off after Delayed start is completed.	1. Firmware error. Replace Relay board.

Diagnostic Mode

This mode shows only error history and different time information. Error codes appear on the display when the error occurs without enter diagnostic mode.

Requirements: In order to turn the diagnostic mode on / off, the appliance must be OFF (all displays - with the exception of the time display - should be dark) or in the error mode (error message is displayed).

To Turn ON: -   Press and hold the **"LIGHT" + "OK"** buttons for ten (10) seconds. **«Diagnostic mode» «Error history»** appears in the display.

Menu   -   Rotate the **"OK"** knob to move up and down the menu level. Press the **"OK"** knob to move from Menu Level 1 to Menu Level 2 or backward.

To Turn OFF: -   Press the **"Off"** button. Alternatively, the diagnostic mode turns off automatically after 1 hour.

MENU STRUCTURE		
Menu Level 1	**Menu Level 2**	**Description**
Diagnostic mode ⌐ Error history	Error history ⌐ Error history is empty.	No history entries
	Error history ⌐ ww) xxx / yyy zzzzzhzz	ww: Entry number. xxx: Error code of malfunction that has occurred (e.g. E03). yyy: Error message of malfunction that has occurred (e.g. F05, U01 or H11). zzzzzhzz:: Total operating hours at the time the malfunction occurred.
Diagnostic mode ⌐ Error counter	Error counter ⌐ Error counters show zero	All error counters show zero.
	Error counters ⌐ ww) xxx / yyy zzz	ww: Entry number. xxx: Error code (e.g. E03) yyy: Error message (e.g. F05 or U01) zzz Number of events
Diagnostic mode ⌐ Clear history/counter	Clear history/counter ⌐ no	Do not clear error history / counters.
	Clear history/counter ⌐ yes	Clear error history / counters.
Diagnostic mode ⌐ Operating hours counter	Operating hours counter ⌐ Total operation xxxxxh	xxxxx: Total number of operating hours (rounded)
Diagnostic mode ⌐ Event counter	Event counter ⌐ Hardware reset xxxxx	xxxxx: Number of resets
	Event counter ⌐ Descale xxxxx	xxxxx: Number of times descaling performed
Diagnostic mode ⌐ Version numbers	Version numbers ⌐ Software xx.xxxx-yy	xx.xxxx: Software number yy: Software version
	Version numbers ⌐ Process xx.xxxx-yy	xx.xxxx: Process number yy: Process version
	Version numbers ⌐ Hardware xx.xxxx-yy	xx.xxxx: Hardware number yy: Hardware version