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 will appear on the display when it is happening to the appliance without entering diagnostic mode.*
- *Though not listed, the cause of all error codes could be the result of, in rare cases, other factors such as:*
  - *Faulty wiring e.g. through a short circuit, break, loose contact, earth contact, etc.*
  - *Problems with the electronics assembly groups, caused by moisture, dirt, component failure, EMC influences, etc.*
- *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	Massage	Diagnostic Of Error *(Through Microcontroller)*	Possible Cause (Ranked by Frequency)
E01	**F5**	**EEPROM** Read error (after 50 tries)	1. Problems with processor, caused by moisture or EMC influences.
E02	**F5**	**EEPROM** Write error (after 10 tries)	1. Problems with processor, caused by moisture or EMC influences.
E03	**F5**	**FLASH** Incorrect process data (device ID number)	1. Loaded incorrect process data. Reload process data.
E04	**F5**	**FLASH** Incorrect process data (checksum)	1. Process data error. Reload process data.
E05	**F5**	**FLASH** Incorrect firmware (checksum)	1. Firmware error. Reload firmware or replace processor.
E06	**---**	**SOFTWARE** Watchdog reset	1. Processor faulty.
E09	**F0**	**Cooking Space Temperature** Sensor with too low of a resistance (temp. < ca. -4°F/-20°C)	1. Short circuit in PT 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 PT sensor or in its wiring.
E11	**F0**	**Cooking space temperature** Reference with too low of a resistance	1. Processor faulty.
E12	**F0**	**Cooking space temperature** Reference with too high of a resistance	1. Processor faulty.
E13	**---**	**Cooking space temperature** Temperature > 662°F/350°C during Off / Standby Mode	1. Electromagnetic disturbances - Replace processor. 2. Heating and main relay short circuited - Replace processor.
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	Massage	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 > 356°F/180°C for 60 seconds	1. Hairline crack in climate sensor.
E29	**F9**	**Climate temperature** 3 times measured temperature differential of less than 41°F/5°C during 180-second monitoring cycle (active monitoring only during first 20 minutes after start as well as with climate temperature of over 194°F/90°C)	1. Cooking space not tightly sealed (door not closed properly, exhaust slide valve not tight, food probe socket is defective). 2. Too much cold food in the cooking space (when steaming, weight of frozen food should not exceed 3kg). 3. Food probe socket dirty / wet. 4. Hot air fan seal is missing or faulty. To check: remove the hot air panel and rotor (caution: left-hand thread).
E33	**F12**	**Processor temperature** Sensor with too low of a resistance (temp. > ca. 392°F/200°C)	1. Processor faulty.
E34	**F12**	**Processor temperature** Sensor with too high of a resistance (temp. < ca. 3°F/-16°C)	1. Processor faulty.
E35	**F13**	**Processor temperature** Temperature > 185°F/85°C for 60 seconds	1. Niche temperature too high (caused by second appliance?). 2. Cool air fan failure. 3. Power failure during baking process.
E36	**F14**	**Control unit temperature** Sensor with too low of a resistance (temp. > ca. 200°C)	1. Control unit faulty.

Error Code	Massage	Diagnostic Of Error *(Through Microcontroller)*	Possible Cause (Ranked by Frequency)
E37	**F14**	**Control unit temperature** Sensor with too high of a resistance (temp. < ca. 3°F/-16°C)	1. Control unit faulty.
E38	**F15**	**Control unit temperature** Temperature > 185°F/85°C for 120 seconds	1. Niche temperature too high (caused by second appliance?). 2. Cool air fan failure. 3. Power failure during baking process.
E41	**F2**	**Water temperature** Sensor with too low of a resistance (temp. > ca. 392°F/200°C)	1. Short circuit in water temperature sensor or in its wiring. 2. Boiler leaking water.
E42	**F2**	**Water temperature** Sensor with too high a resistance (temp. < ca. 14°F/-10°C)	1. Break or loose contact in water temperature sensor or in its wiring.
E44	**F7**	**Water temperature** Increase in temperature to min. 180°F/85°C within 185-seconds (active monitoring only when temperature below 185°F/85°C)	1. Break in flange (fastening screws not tightened enough, etc.). 2. Heating element for boiler is faulty. Over-temperature protection activated (caution: one of which is self-resetting). 3. Food probe socket dirty / wet. 4. Boiler very scaled up. Descale.
E49	**F10**	**Control unit** Button(s) closed for min. 60 seconds	1. Button is mechanically blocked or jammed. 2. Moisture on the control unit.
E50	**F10**	**Control unit** Moisture sensor closed for min. 20 seconds	1. Moisture on the control unit.
E51	**F6**	**Processor** Neutral conductor 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 processor with version smaller -2). 3. Processor faulty.
E52	**F10**	**Leaked water detection** Leaked water detected for min. 10 seconds	1 Water tank valve not tight.
E57	**U0**	**Mains connection** Voltage N > 340V	1. Pole conductor connected to neutral conductor terminal. 2. Neutral conductor break in the house wiring system. 3. Mains calibration error (see error code E63).

Error Code	Massage	Diagnostic Of Error *(Through Microcontroller)*	Possible Cause (Ranked by Frequency)
E58	**U1**	**Mains connection** L2 no signal	1. No pole conductor connected to L2 clamp. 2. Circuit breaker or fuse in house wiring system activated.
E59	**U0**	**Mains connection** Voltage > 270VAC for 1 second	1. Overvoltage in mains power supply. 2. Neutral conductor break in the house wiring system. 3. Mains calibration error (see error code E63).
E61	**U2**	**Mains connection** Voltage < 170VAC for 1 minute	1. Undervoltage in mains power supply. 2. Mains calibration error (see error code E63).
E62	**U3**	**Mains connection** Voltage < 150VAC	1. Undervoltage in mains power supply. 2. Mains calibration error (see error code E63).
E63	**---**	**Mains calibration**	1. No calibration of mains voltage. Replace processor.
E66	**---**	**Water system** If it has been a while since last descaling: Level detector pin with low resistance only after refilling (occurring at least 6 times consecutively)	1 . Boiler scaled up.
E67	**F20**	**Water system** If descaling was carried out recently: Level detector pin with low resistance only after refilling (occurring at least 6 times consecutively)	1. Boiler scaled up. 2. Silicon hose kinked.
E68	**---**	**Water system** If it has been a while since last descaling: Pumping off water at least 3 times within 2 hours	1. Boiler scaled up. 2. Inlet valve leaking (valve not tight, limescale fragments in seal, etc.) 3. There could be foam in the boiler housing (especially after descaling).
E69	**F21**	**Water system** If descaling was carried out recently: Pumping off water at least 3 times within 2 hours	1. Boiler scaled up. 2. Inlet valve leaking (valve not tight, limescale fragments in seal, etc.) 3. There could be foam in the boiler housing (especially after descaling).
E70	**---**	**Water system** If descaling was carried out recently: Water is not continuing to be fed in during steaming	1. Boiler scaled up. 2. Inlet valve leaking (valve not tight, limescale fragments in seal, etc.)

Error Code	Massage	Diagnostic Of Error *(Through Microcontroller)*	Possible Cause (Ranked by Frequency)
E71	**F22**	**Water system** If descaling was carried out recently: Water is not continuing to be fed in during steaming	1. Boiler scaled up. 2. Inlet valve leaking (valve not tight, limescale fragments in seal, etc.)
E72	**---**	**Water system** If it has been a while since last descaling: Level detector pin with high resistance again after pumping off water 5 times	1. Drain pump pumping off too little water. 2. Water conductivity too low. 3. Foam in boiler housing (unsuitable descaling agent).
E73	**F23**	**Water system** If descaling was carried out recently: Level detector pin with high resistance again after pumping off water 5 times	1. Drain pump pumping off too little water. 2. Water conductivity too low. 3. Foam in boiler housing (unsuitable descaling agent).
E74	**---**	**Water system** Descaling error during descaling phase (appliance is blocked)	1. No descaler added. 2. Error in measurement of level (possibly due to formation of foam).
E75	**---**	**Water system** Descaling error during 1 st rinsing phase (appliance is blocked)	1. No or insufficient amount of water for rinsing. 2. Excessive build-up of foam.
E76	**---**	**Water system** Descaling error during 2nd rinsing phase (appliance is blocked)	1. No or insufficient amount of water for rinsing. 2. Excessive build-up of foam.
E81	**---**	**Relay calibration**	1. No calibration of relay. Replace processor.
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.

Error Code	Massage	Diagnostic Of Error *(Through Microcontroller)*	Possible Cause (Ranked by Frequency)
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).

2 Malfunctions/Messages Without Error Codes

Display Text	Possible Cause (Ranked by Frequency)
Insert water tank	1. Water tank is missing. 2. Water tank not in end position or faulty. 3. Mechanical lock damaged or missing. 4. Switch holder broken off or warped. 5. Break in switch contact or in its wiring.
Fill water tank	1. No water in tank. 2. Water tank not inserted correctly. 3. Water inlet blocked or scaled up. 4. Inlet valve jammed or faulty. Hose is squashed. 5. Faulty level detector pin wiring. 6. Break in earth conductor of heating element of boiler or in processor.
Pour away descale, add 40.9 oz (1.2 l) water	
Pour away water, add 40.9 oz (1.2 l) water	
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 will 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.
Boiler scaled up, please descale!	1. Boiler scaled up (reached max. number of operating hours for boiler). 2. Problems in the water system (see also E66, E68, E70 and E72 error codes).
Appliance blocked, descaling necessary	1. Descale run error (see error codes E74 to E76).
Add 16.9 oz (0.5 l) descaler and press OK	1. Start not confirmed by pressing OK button.
Descale running	1. Descale in descaling phase.
Descale 1st rinsing cycle	1. Descale in 1st rinsing cycle.
Descale repeat 1st rinsing cycle	
Descale 2nd rinsing cycle	1. Descale in 2nd rinsing cycle.
Descale repeat 2nd rinsing cycle	
Descaling aborted	1. Descaling aborted (with OFF button) though not yet completed.
Pour away water, descaling completed	1. Remove water tank and empty water
***** Demo-Modus *****	1. Demo-Modus (mode used for demonstration purposes) is on.
1 Diagnostic mode is on.	1. Diagnostic mode is on.

3. Malfunctions Without Fault Displays//Messages

Malfunction	**Possible Cause** (Ranked by Frequency)
Heating element(s) not heating up.	1. Heating element(s) or the corresponding wiring is faulty. 2. Demo-Modus is activated.
From time to time, strange (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 (FPC connector with loose contact).
From time to time, control unit with a strange display.	1. Moisture in control unit due to steam penetrating panel area. 2. Loose or faulty plug and socket connection or ribbon cable.
Water being pumped back even though water tank not in place	1. Water tank detection switch caught on housing.
Large quantity of residual water in water tank compartment	1. Appliance being operated without lid on water tank.
Heavily build-up of condensate laterally 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.
Appliances with the K3.20398-1 software release: With an operating mode with a set switch-off time and a preset food temperature, the appliance starts immediately (without waiting out the delayed start) if, during the delayed start, the food probe is unplugged and then plugged back in again.	1. Immediate remedy: Cancel the operation and reset selection. 2. Install processor with software version 2 or higher.

4 Switching Demo-Modus ON/OFF

Requirements: In order to switch the Demo Modus (Showroom Mode) ON / OFF, the appliance must be ready for operation, i.e. all displays - with the exception of the time display – should be dark/off.

To Turn ON:
1. Press and hold the **"LIGHT" + "OK" + "OFF"** buttons for ten (10) seconds. *NOTE: press and hold the buttons in the order listed.*
   a **«Demo-Modus» «off»** appears in the display.
2. Using the adjusting “OK” knob set the display to **«Demo-Modus» «on»**.
3. Press the "OK" knob to confirm the change in setting. Press the "Off" button to exit the configuration mode.

To Turn OFF:
1. Press the **"LIGHT" + "OK" + "OFF"** buttons simultaneously. **«Demo-Modus» «on»** appears in the display.
2. Using the adjusting knob set the display to **«Demo-Modus» «off»**.
3. Press the **"OK"** button to confirm the change in setting. Press the **"Off"** button to exit the configuration mode.

Diagnostic Mode

This mode shows only error history and different time information. If the appliance has an error, that error code will appear on the display when it is happening to the appliance without entering 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 - Use the **"OK"** adjusting knob and button to navigate the menu (see table below).

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