

Primo X Fault Finding Guide

Scroll down to find your fault code...

Error Messages

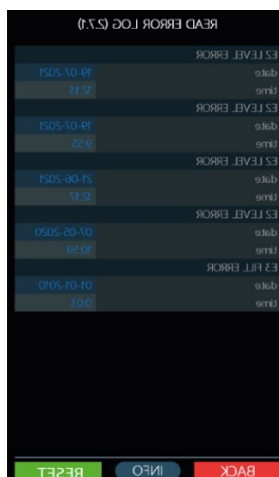
1 – Enter the service menu

2 – Select 07 ERROR MESSAGES



Read Error Log

This overview shows the last 30 error messages, if it becomes too long the oldest error will be discarded.



Reset

Confirm YES or NO to remove the error log.

Black Display

Check:

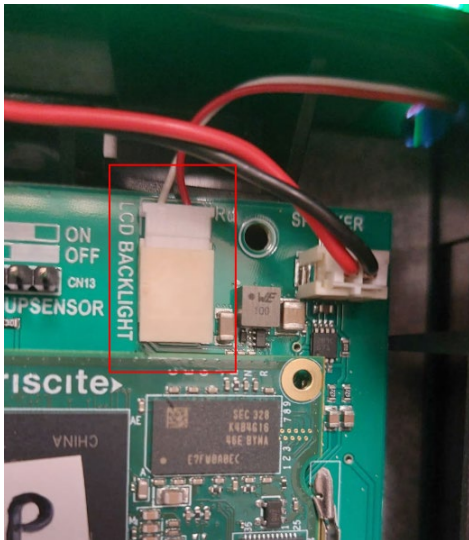
Does OptiLight work properly?

Brewer opens & closes when you open and close the door?

YES to the above...

The backlight of the display screen doesn't work anymore

1. Switch off the machine
2. Remove the metal cover inside the door
3. Remove the plastic cover where the interface is hidden
4. Check if the back light connector is in place



1. Remove the connector
2. Check if the contacts are in place and secure, push them in further
3. Reconnect the connector again to the interface
4. Restart the machine

If the display does not light up, the glass panel and display need replacing.

Attention: The display is mounted against the glass panel in our cleanroom to prevent dust particles getting between the glass and the display. It is classed as a single component so never separate the two.

Unkown Error

This message appears when:

Rinsing is set to 'Obligated' in service menu/cleaning management

If rinsing procedure is carried out and the rest-water bin is put in the machine the wrong way round (back-side towards the front)

Solution: Replace the rest-water bin correctly in the machine and finish the rinsing procedure.

Check Flow

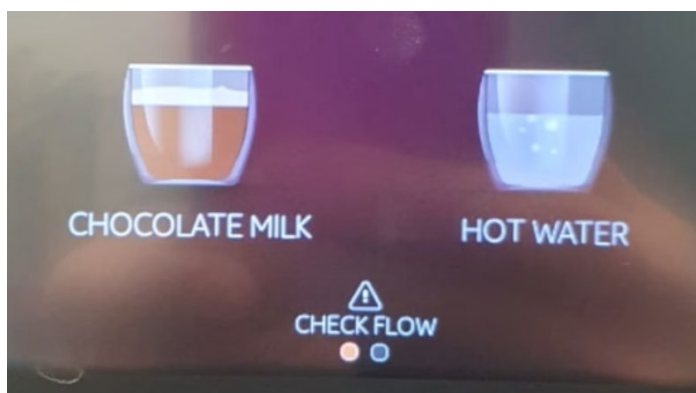
A flow control check signal was added in software V1.3 March 2024 to detect issues with clogged-up mixer bowls.

After each cleaning and flushing cycle, the water flow through the mixer bowl is automatically measured and checked. A flushing cycle must be done after a software update.

The instant product (shots) will be dispensed according to the set product steps as long as the calculated water flows through the mixer bowl.

When the water flow through the mixer is blocked there will be a text message: 'Check Flow' in the bottom of the display.

The machine does not stop working but one of the flow restrictions needs attention, also, the product will be limited to max 2 shots.



Why a flow restrictor?

It controls the water flow towards the mixers as the hot water from the boiler is pumped through a flow restrictor with a nominal width of 0.7mm.

Testing the flow – (SW Version V1.6.1 or higher)

2 – Service Menu

6 – Hardware

5 – Calibration

Select: Flowrate Test

Push the 'Active' button



Once the test is finished the display will show the actual flowrate in ml/sec.

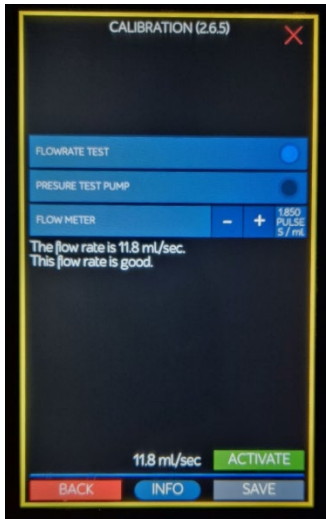
Good Flow: The mixer flow is good when it's between 8 and 15ml/sec.

Bad Flow: Flow <8ml/sec (not good). Message in display 'check flow'.

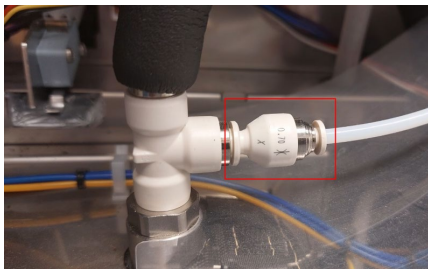
Check/clean/renew the 0.7mm flow reducer on top of the boiler.

Flow >15ml/sec

Check the coffee machines 3-way brewer valve is properly installed. You can test this by running the rinse cycle. During this cycle, no water should enter the rest water bin. If water does flow into the container, the valve may be incorrectly connected.



The flow restrictor is located above the boiler Art. No.: 1010827



To replace the flow restrictor the boiler must be depressurized first.

Old Menu:

1. Enter the service menu
2. Select 2.14 installation

New Menu:

1. Enter the Service menu
2. Select 10 Installation
3. Select 03 Depressurize system
4. Confirm with YES to continue
5. Place an empty container under the output and initiate the process

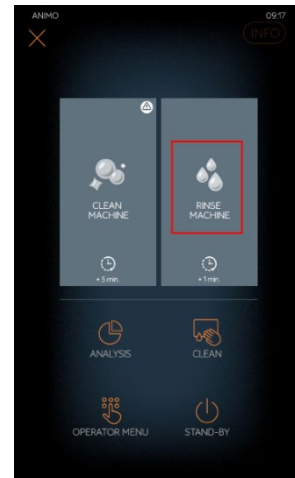
The boiler becomes depressurized causing some water to drain through the hot water outlet into the bin.

1. Select 2.14.01 Shut Down
2. Press OK – the boiler will depressurize and some water will drain into the bin.
3. Then Press CANCEL
4. Press OK to switch off the machine
5. Replace the flow restrictor for a new one
6. Switch the machine back on

Dispense at least 2 hot water drinks to bring the boiler back up to working pressure.

Start the mixer flushing program to calibrate the mixer flow:

1. Start the rinsing process and follow the instructions on the display
2. If the mixer water flow is approved by the software the CHECK FLOW message must have disappeared.



E3 Fill Error

Possible Cause:

The boiler is filling up too slowly. During commissioning, the inlet valve KW1 must have filled the boiler within 180 seconds.

Solution:

1. Check the water pressure, fully open the water supply tap, check the connecting hose for kinks.
2. Switch the machine off and on to reset the error and start up the machine software again.

E6 High Temperature

Possible Cause:

Temperature sensor measures a temperature over 105°C

Solution:

1. Check the water supply for air.
2. Check the temperature sensor operation in the service menu 2.07 Hardware Test
3. Check whether the boil-dry protection was activated. Reset if necessary.

4. Switch the machine off and on to reset the error and start up the machine software again.

E8 Mixer Error

Possible Cause

- Mixer 1 motor stalled
- Mixer 1 motor outputs overloaded (current too high)
- The control has disabled the output

Solution

1. Check whether the mixer 1 is contaminated or incorrectly mounted
2. Clean and/or check whether the motor turns freely
3. Switch the machine off and on to reset the error and start up the machine software again.

E9 Mixer 2 Error

Possible cause

- Mixer 2 motor stalled
- Mixer 2 motor outputs overloaded (current too high)
- The control has disabled the output

Solution

1. Check whether mixer 2 is contaminated or incorrectly installed
2. Clean and/or check whether the rotor turns freely
3. Switch the machine off and on to reset the error and start up the machine software again.

E10 Valve-Group Error

Possible cause

- Valve outputs overloaded. The valve current is over 2500mA
- Pump-current is over 2500mA
- The mainboard has disabled the output

Solution

1. Check the inlet, brewer, dispensing valve for shortcuts
2. Check wiring towards valves or pump for short circuits
3. Switch the machine off/on to reset the error and start up the machine software again
4. Upgrade to the latest SW for the current limits have been raised to encounter this problem.

E11 Ingredient Motor Error

Possible Cause

- Ingredient motor or canister stalled
- Ingredient motor current is over 600mA
- The control has disabled the output

Solution

1. Check the motor current of the ingredient motors in the service menu 2.07 Hardware Test/Outputs/Ingredient Motor
2. A motor current (unloaded) between 25 – 50mA is OK
3. Empty the canisters and clean thoroughly
4. Switch the machine off and on to reset the error and start up the machine software again

E13 Mixer Group Error

Possible cause

- Mixer output group overloaded (current too high). The control has disabled the output

Solution

1. Carry out the checks as specified for E8 and E9
2. Switch the machine off and on to reset the error and start up the machine software again

E14 Output Error

Possible cause

- Ingredient motor output group overloaded (current too high). The control has disabled the output.
- Valve output group overloaded (Current too high). The control has disabled the outputs.

Solution

1. Carry out the checks as specified for E11
2. Carry out the checks as specified for E10
3. Switch the machine off and on to reset the error and start up the machine software again

E17 MDB Error

Possible cause

- There is no communication between the machine and the MDB payment system

Solution

1. Check the machine between the machine and the MDB payment system
2. Switch the machine off and on to reset the error and start up the machine software again

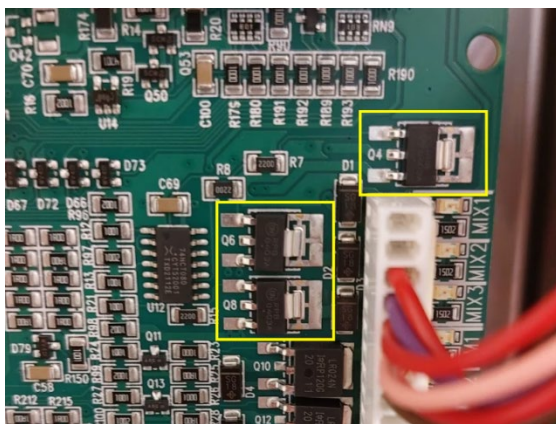
E18 Mixer Group FET Error

Possible cause

- Mixer motor output remains activated

Solution

1. Mixer motor output (FET) is defective
2. Replace the main control board on the left
3. Switch the machine off and on to reset the error and start up the machine software again



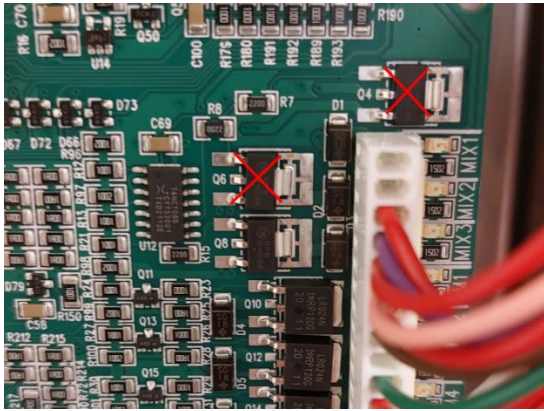
E19 Output FET Error

Possible cause

- Ingredient motor / valve remains activated

Solution

1. Ingredient motor / valve output (output FET defective)
2. Replace main control board



E21 Boiler Timeout

Possible cause

- Heating element is active for 6 minutes
- If the boiler has not come to the set temperature this error is the result
- The control has disabled the heater output

Solution 1

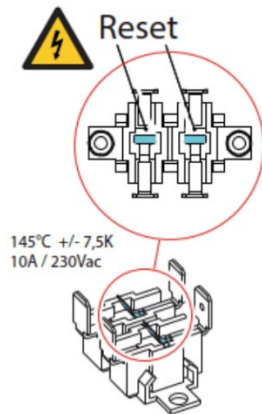
1. Check the log menu. If E6 Temperature hot water to high error also occurred, the boiler has boiled dry
2. Check the NTC sensor and wiring/connection and check the relays
3. Switch the machine off and on to reset the error and start up the machine software again

Solution 2

1. Check whether the boil-dry protection was activated. Reset if necessary
2. Attention: the metal reset levers are LIVE

Solution 3

1. Check the resistance of the heating element
2. The resistance must be approx. 30 Ω



E22 Brew Timeout

Possible causes

- Maximum coffee preparation time has been exceeding 120 seconds

Solution

1. Run the Brewer Cleaning program
2. Check if the coffee grind is not too fine
3. Check the brewer system for internal obstructions
4. Check the pump pressure (9-10bar) – Use the pump test program
5. Clean or replace both brewer filters
6. Switch the machine off/on to reset the error and to restart the machine software

E23 Inlet Valve Error

Possible cause

- Flow meter registers water flow while the inlet valve is electrically closed

Solution

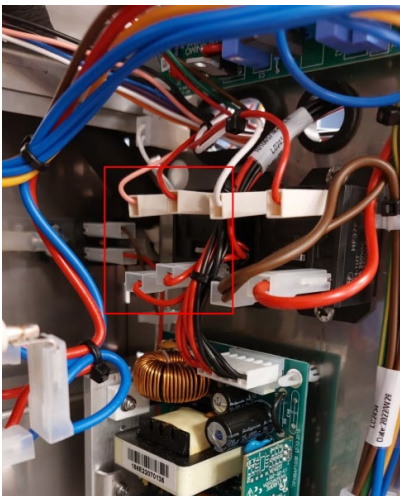
1. Check the operation of the inlet valve
2. Replace the inlet valve if it does not close 100%
3. Switch the machine off/on to reset the error and to restart the machine software

E25 Flow Error

Flow error does not always mean that the flow meter is defect. When the software starts the espresso pump the flow meter must produce pulses.

Possible Causes

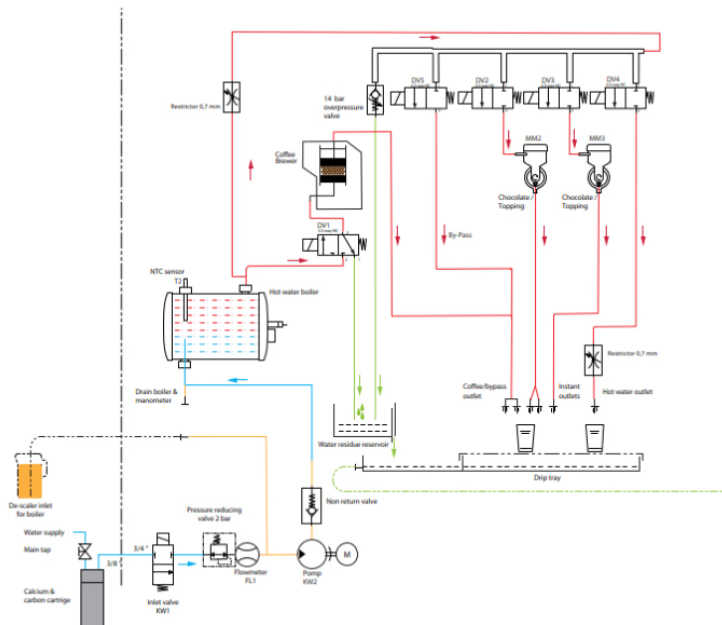
- No water flow detected during a drink production. The flowmeter pulses are not made or do not arrive at the electronic board.
- The espresso pump, KW2, is activated but the flow meter, FL1, does not register water flow.



Solution

1. Check DV1/brewervalve on pollution (cracked brewfilter)
2. Check the pump circuit, electrically, 24Vdc, the relay in the picture controls the pump.
3. Switch the machine off and on to reset the error and start up the machine software again.
4. Check after which recipe the error occurs and check if one of the below mentioned dispensing valves are involved with the problem: DV1 brewer, DV2/DV3 mixers, DV4 hot water.
5. Use the water circuit diagram to find out which drink circuit/ component needs attention

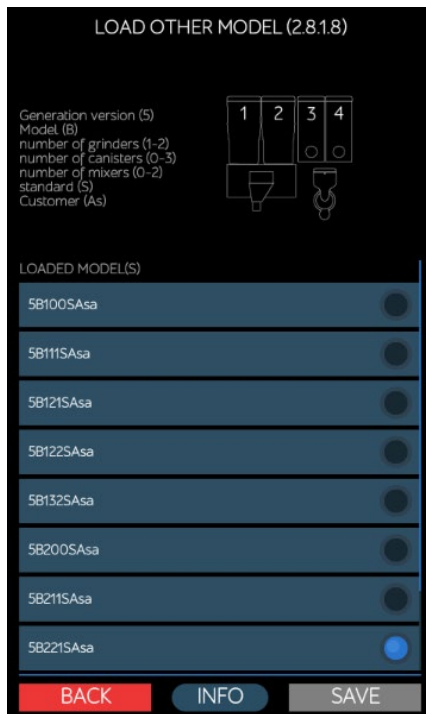
6. Clean or replace if necessary
7. Check if the flow meter connection is okay, and if the contacts are not wet or oxidized.



E25 during cleaning and flushing program

Check if the wrong model is set

- Enter the service menu
- Navigate to 08 Software / 01 Load data_Software / 08 Load other model
- Check whether the installed machine model matches the version of your machine



Still E25 errors (every now and then) during the weekly cleaning program with the tablet?

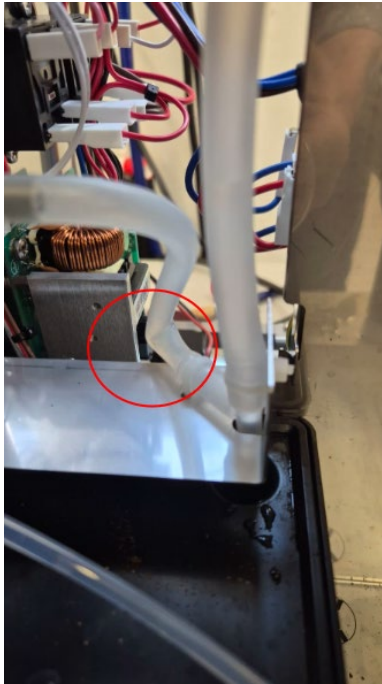
Early 2025 (March/April) machine had temporarily an AK muller DV1 instead of the original ODE valve

This caused an obstructed hose towards the restwaterbin

During weekly cleaning this obstruction can cause a bad flow or no flow at all, ending in an E25 error

Solution

1. Fix the obstruction in the hose by fitting a longer hose
2. Fit an ODE valve when indeed an AK Muller valve was fitted



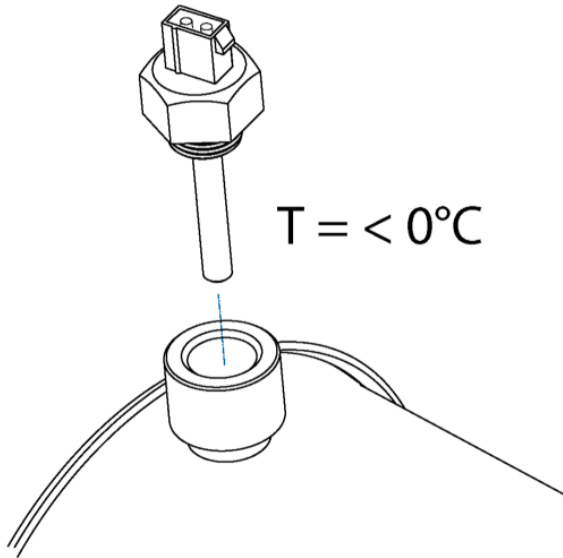
E26 Low Temperature

Possible causes

Temperature sensor in hot water boiler measures a boiler temperature below 0 °C

Solution

1. Let the machine warm up to room temperature
2. Always check the machine afterwards for leaks if the machine has been frozen
3. Switch the machine off and on to reset the error and start up the machine software again



E27 NTC Short Circuit

Possible cause

- Temperature sensor measures a temperature over 125°C or has a short circuit
- The control has disabled the heater output

Solution

1. Boiler overheated so let the boiler cool down. Check whether the boil-dry protection was activated. Reset if necessary
Attention: the metal reset levers are LIVE.
2. Check the temperature sensor operation in the service menu 2.07 Hardware test/inputs/temperature
3. Switch the machine off and on to reset the error and start up the machine software again

E28 NTC Not Detected

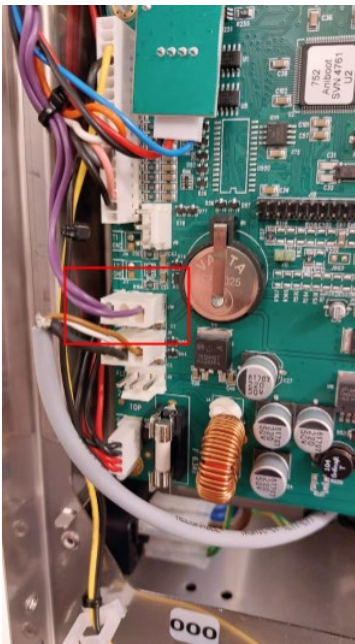
Possible cause

- Temperature sensor not detected

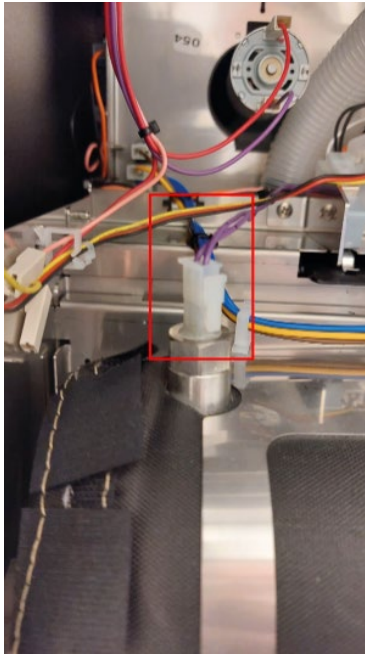
Solution

1. Check the NTC sensor and wiring/connection
2. Switch the machine off and on to reset the error and start up the machine software again

Main PC board (remove left side panel)



Water boiler (remove rear panel)



E101 Brewer Cover Does Not Move

Upper lid-motor does not rotate

How is this detected?

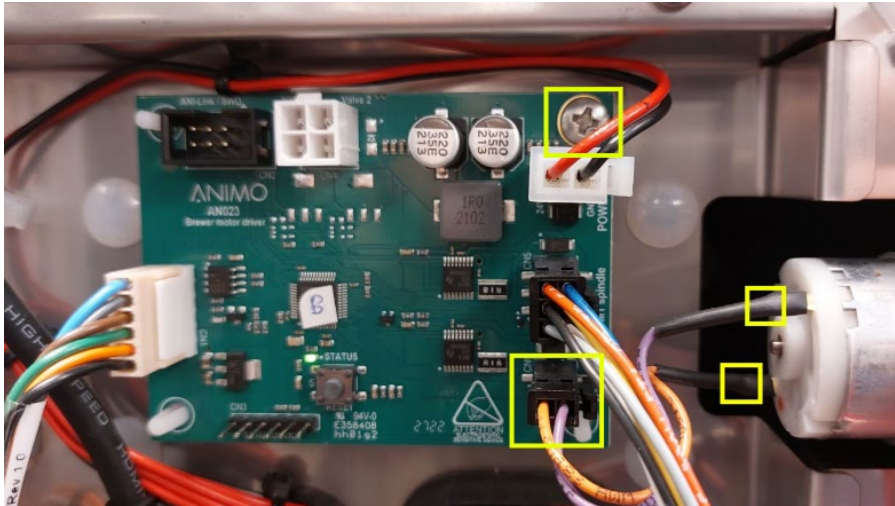
No current (milli-amps) through motor when it open/closes the brewer lid

Possible cause

- Cable breakage
- Connector wrongly soldered on PCB

Solution

1. Check connectors on brewer print
2. Replace brewer print r motor unit
3. Check the earth screw in R-upper corner
4. Check connector R-lower corner
5. Check both (orange and purple) connection to the upper motor by pulling them.
If they come off there is / was a bad connection and you need to re-connect them by soldering or otherwise



E102 Brewer Cover Blocked During Opening

How is this discovered?

Brewer lid is lifted and moved to the left

The time the brewer lid needs to open and motor current is measured, if there is a deviation, error 102 follows

Possible cause

- The brewer lid is blocked during opening, usually due to contamination

The blue waste bin is misplaced and too high and will block the brewer lid

Solution

1. Take out the brewer and clean it under a tap
2. Pay extra attention to the correct fitting of the blue insert
3. For brewer remove instruction

E103 Brewer Cover Blocked During Closing

Normal operation brewer 'lid closing'

The brewer lid is moved to the right and moves down to close the O-ring seal into the brewer cylinder

How is this observed?

The time taken for the brewer lid to close is measured and the motor current is measured, if a deviation is detected after two closing attempts, an error E103 follows

Possible cause

- The brewer lid is blocked during closing, usually due to contamination
- The brewer lid is difficult to slide and close

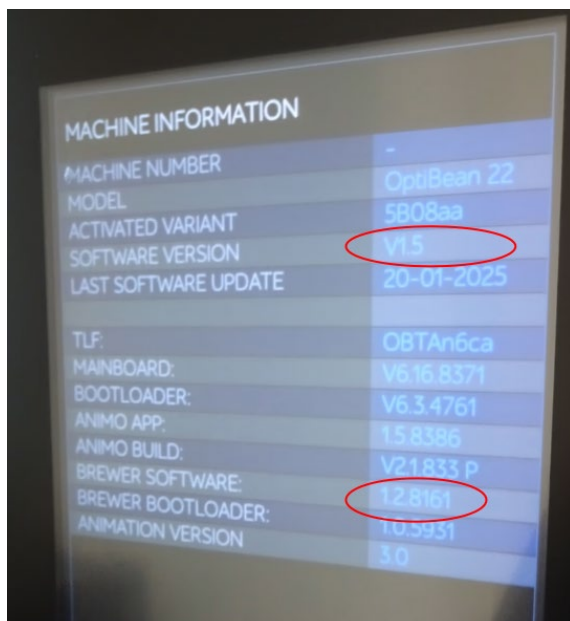
Solution

1. Take out the brewer and clean it under the tap
2. Update software to THE LATEST VERSION – since November 2024, a software hotfix is available with a higher milli-ampere (mA) measurement for lid closure. Previously the lid would be detected as closed at 450 mA, but with this update it is now set at 600 mA at the second attempt.

If E103 still occurs after:

- Brewer is cleaned
- SW version is upgraded to V1.3.2 (or higher)
- Brewer software is checked and is 1.2.8161 (or higher)

Contact technical support



E105 Motor Cover Does Not Move During Opening

How is this discovered?

A current is measured from the brewing group lid motor but does not reach a current peak within 2.5 seconds so that it is detected that the lid is fully open

Possible cause

The error may appear while opening the brewer lid:

- If there is no brewing group in the machine
- If there is no transmission from the motor to the brewing group

Solution

1. Check that the brewing unit is inside the machine
2. Check that the gearing of the brewing unit lid is functioning

E106 Motor Covers Does Not Move During Closing

Possible cause

This error may appear while opening the brewer lid

- If there is no brewing group in the machine
- If there is no transmission from the motor to the brewing group

Solution

1. Check the brewing unit is inside the machine
2. Check that the gearing of the brewing unit lid motor is functioning

E121 Brewer Piston Does Not Move

Normal position: when the piston motor is activated the lower brewer piston must run up and down

How is this registered?

When the piston motor is activated, the built-in encoder detect the piston movement by monitoring the motor current

Possible cause

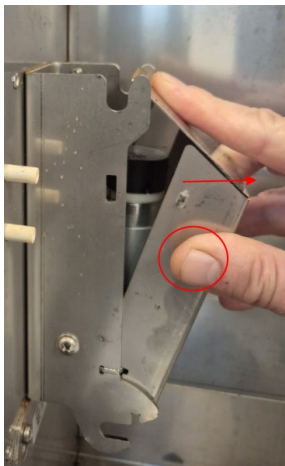
- Bad contact in the motor wiring
- Bad contact in the wiring on the brewerboard or in the wire loom brewerboard-mainboard

Solution

1. Check the connector on top of the piston motor
2. Check connections on brewer board plus main board
3. Possibly replace the motor unit or brewer board

Take the brewer from the motor unit

Remove stainless steel cover by squeezing it and move it to the right



Move the black plastic cover upwards

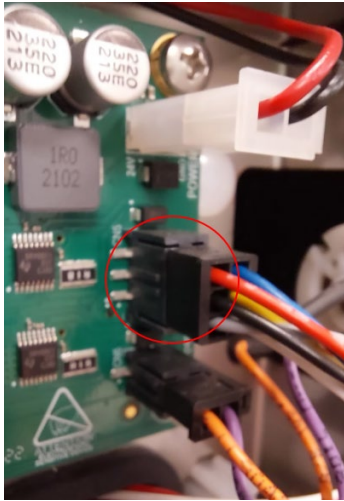


With the plastic cover in the upwards position:

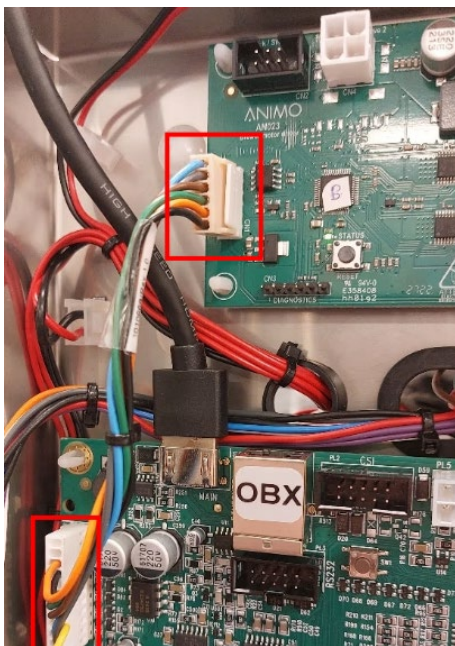
1. Disconnect the connector
2. Check if the wires are in good condition and fitted correctly into the connector
3. Refit the connector firmly to the motor
4. Refit the plastic cover onto the motor
5. Refit the stainless steel cover onto the motor unit



1. Remove the left side panel to access the brewer control board
2. Locate the connector in the red circle
3. Disconnect the connector
4. Inspect the wires for bad connections
5. Replace the connector to the board



1. Disconnect both connectors of the wireloom which connects the brewer board with the mainboard
2. Make sure ALL wires are pushed deep enough into the connectors
3. Pay special attention to the blue wire
4. Replace both connectors
5. Refit the left side panel and restart the machine



E122 Brewer Piston Timeout

Normal operation: When the piston motor is activated the lower brewer piston must run up and down

How is this discovered?

When the piston initialisation takes longer than 8 seconds

Possible cause

- Encoder malfunction
- Contamination of brewer
- Defective bearing at the bottom of the brewer

Solution

1. Restart the machine
2. Clean brewer under the tap
3. Replace the brewer

E123 Brewer Piston Blocked During Moving Up

How is this discovered: It takes the piston longer than 8 seconds to move upwards and reach the upper position

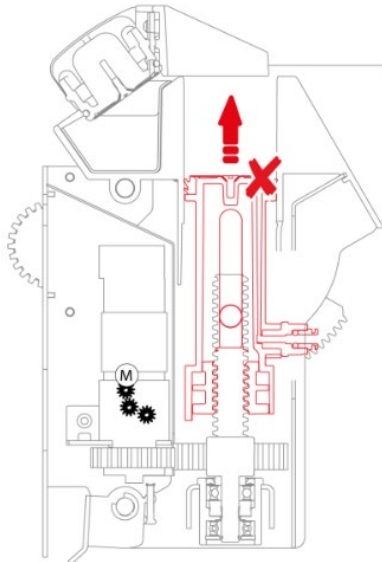
Possible cause

- Contamination of the brewer
- Hose to brewer-valve too long
- Bug in the first release software V1.0
- Defective bearing at the bottom of the brewer
- Bottom circlip of the lower axle dispositioned
- Motor encoder malfunction

Solution

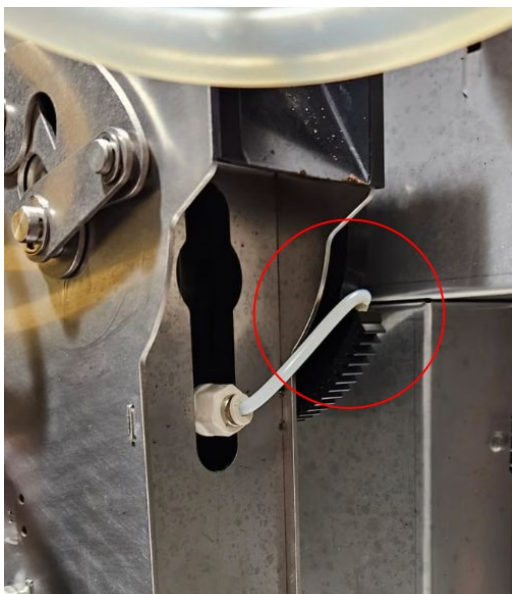
1. Clean brewer
2. In the case of first software edition V1.0 – update software
3. Check length of brewer hose (210mm)

4. Modify cover DV1 in case of problems regarding the hose being stuck behind the sprocket and repeating
5. Check the correct position of the lower axle circlip
6. Replace brewer if after doing all the above you still encounter E123 errors

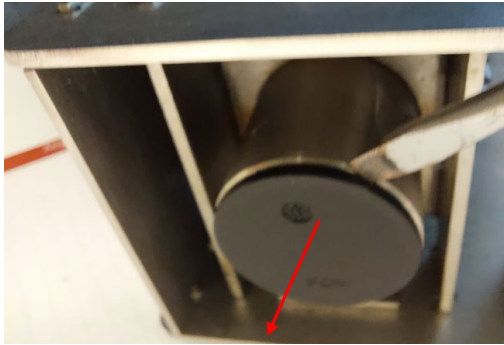


1. This image is of the brewer hose getting caught behind the sprocket when it is too long (210mm)
2. when the hose has moved upwards during cleaning (end-user)

See also 'Upgrade cover DV1' for a permanent solution in case of option 2.



1. Take out the brewer
2. Turn it upside down
3. Remove the lower axle bearing cover



1. Check if the circlip is still in the right position. If not:
2. Try to re-assemble the brewer piston again and refit the circlip
3. If you fail doing so correctly contact technical support



E124 Brewer Piston Blocked During Moving Down

When the lower piston moves down it must reach within 8 seconds its end position

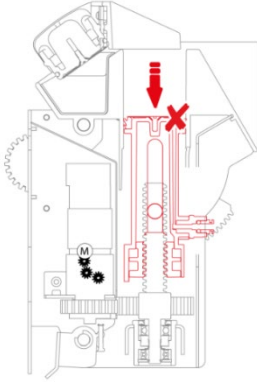
How is this fault detected: the piston takes longer than 8 seconds to move downwards to reach end-position

Possible cause

- Encoder malfunction
- Contamination of brewer
- Defective bearing at the bottom of the brewer

Solution

1. Restart the machine
2. Clean brewer under tap
3. Replace brewer



E131 Communication Error Main and Brewer Board

This error appears after rinsing, cleaning and descaling.

In software versions prior to V1.6.1, the system may incorrectly trigger E131 when the brewer fails to return to its home position

Recommended action

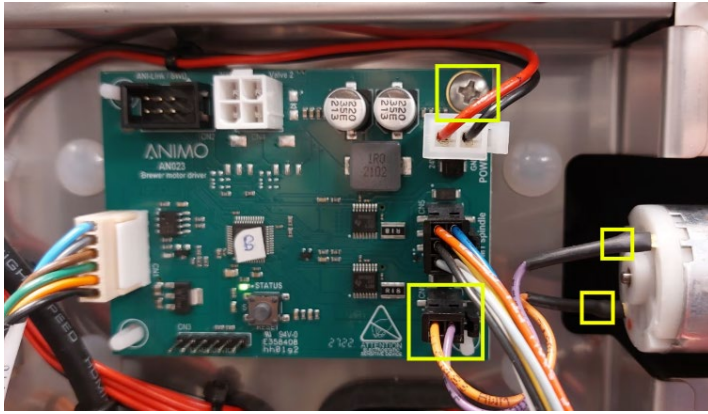
- If version is lower than V1.6.1, proceed to update
- Download and install software version V1.6.1 or higher
- After update, run a rinse or cleaning cycle. Ensure the brewer returns to the home position correctly

Possible cause:

- No connection with the electric motor

Solution

1. Remove the left-side panel
2. Check the mass screw (on presence) and tighten it
3. Reconnect both two-pin connectors
4. Check the soldering (under the heat shrink tubing) of the electric motor by pulling gently the orange and purple cable
5. When disconnected, use a soldering iron to restore the connection



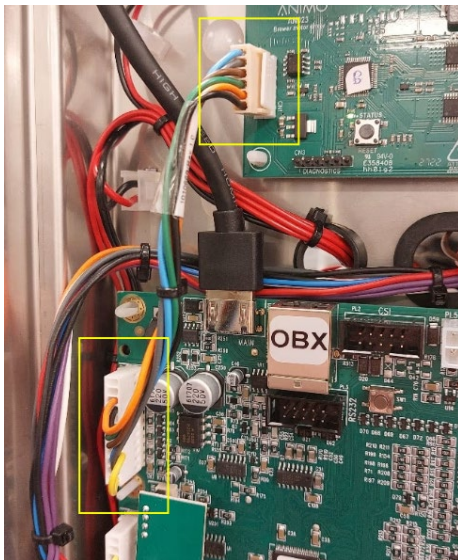
Error 131

Possible cause

- No communication between main board and brewer board

Solution

1. Unplug both connectors shown in the picture
2. Make sure all wires are pushed deep enough into the connectors
3. Pay extra attention to the blue wire
4. Restart the machine in order to find out if the error has disappeared
5. When not (or whenever the error come back after some time): replace the brewer board (art.nr.1011075)
6. Refit the left-side panel



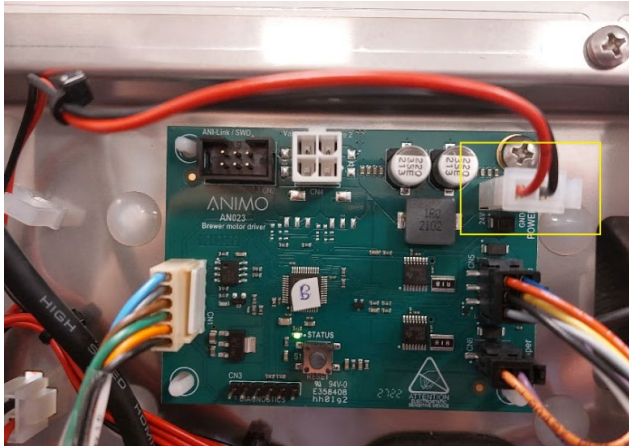
E132 No Power (24V) to Brewer Board

Possible cause

No 24V power on the brewer PC board

Solution

1. Check 24V power connection brewer board. Picture shows the position of the 24V power connection



E133 Brewer is in the Wrong Position

Since SW version V1.6.1 this error is implemented

Occurs when:

The brewer is not returned to the 'home' position (can be due to several causes like rinsing, cleaning, descaling, etc.) Until this error was implemented, the log showed a non-intended and non-correct E131 (communication error Main Board-Brewer board)