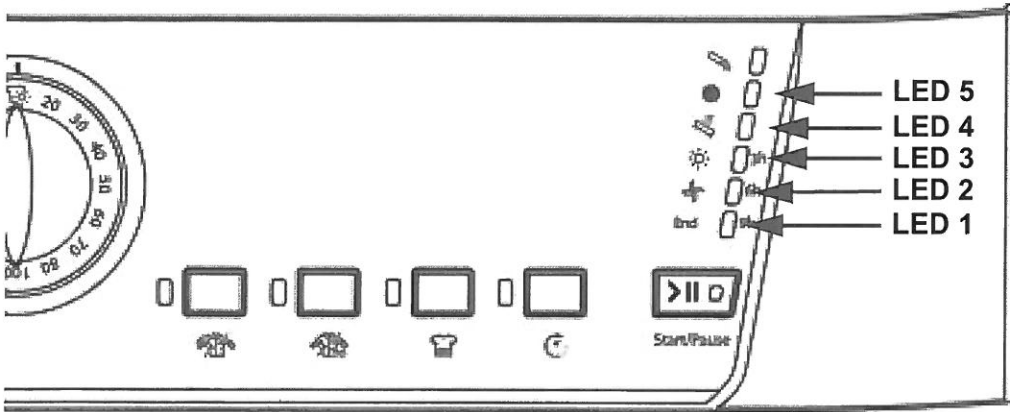


FAULT CODES



A fault is indicated by one or more LEDs flashing together.

FAULT CODE TABLE

FAULT	CAUSE	STATUS OF LEDs				
		LED COMBINATION				
		5	4	3	2	1
F01	Motor triac in short circuit or Relay of motor welded closed	OFF	OFF	OFF	OFF	ON
F02	Blocked motor (fan blocked).	OFF	OFF	OFF	ON	OFF
F03	Front NTC open or short circuit	OFF	OFF	OFF	ON	ON
F04	Pump working when should be off.	OFF	OFF	ON	OFF	OFF
F05	Pump not working when should be on.	OFF	OFF	ON	OFF	ON
F06	Non used, active	OFF	OFF	ON	ON	OFF
F07	Lower element failure	OFF	OFF	ON	ON	ON
F08	Static heater relay welded closed	OFF	ON	OFF	OFF	OFF
F09	Error set-up file. EEPROM is not programmed or not functioning	OFF	ON	OFF	OFF	ON
F10	Common of heater open, one shot open	OFF	ON	OFF	ON	OFF
F11	Pump open circuit.	OFF	ON	OFF	ON	ON
F12	No communication between display board and control board	OFF	ON	ON	OFF	OFF
F13	Rear NTC open or short circuit.	OFF	ON	ON	OFF	ON
F14	Upper element failure	OFF	ON	ON	ON	OFF
F15	Dynamic (PD) heater relay welded closed	OFF	ON	ON	ON	ON
F16	Not used, active	ON	OFF	OFF	OFF	OFF
F17	Master relay welded closed	ON	OFF	OFF	OFF	ON

For additional Fault Code information see pages 21 and 22.

Below is a list of fault codes and possible solutions if a fault code is displayed.

FAULT	Cause	Control Action
F01	The motor is running when it should be off.	<ul style="list-style-type: none"> • Check if module connector J3 has shorted due to moisture. • Replace module.
F02	Open circuit between module and motor Common.	<ul style="list-style-type: none"> • Check security of module connector J3; • Test motor Common (TOC); • Check wiring between J3 and motor.
F03	Front thermistor open or short circuit.	<ul style="list-style-type: none"> • Check security of module connector J12; • Test from connector pins (approximately 500 Kohms); • If open or short circuit, test thermistor and wiring between thermistor and J12 to locate fault.
F04	Pump working when should be off.	<ul style="list-style-type: none"> • Check security of module connector J5; • Check connector for signs of shorting due to moisture; • Replace module (F04 would normally be caused by a faulty module).
F05	Pump is not working when it should be on.	<ul style="list-style-type: none"> • Check security of module connector J5; • Check connector for signs of shorting due to moisture; • Replace module (F05 would normally be caused by a faulty module).
F06	Not used.	•
F07	Lower element failure	<ul style="list-style-type: none"> • Check security of module connector J4; • Test between pins 4 and 3 on J4 (approximately 48 Ohms); • If open circuit, test lower element and wiring between J4 and the heater.
F08	Lower element is energised when it should be off.	<ul style="list-style-type: none"> • Check security of module connector J4; • check connector for signs of shorting due to moisture; • Test heater elements and wiring; • Replace module (F08 would normally be caused by a faulty module).
F09	Error Set Up File. Eeprom is either not programmed or is not functioning.	<ul style="list-style-type: none"> • If the module is a production board, replace the module; • If the module has an Eeprom socket, check the eeprom is correctly inserted and programmed.
F10	Open circuit in the heater Common wiring.	<ul style="list-style-type: none"> • Check module connector J4; • Check wiring between module connector J4 and the heater; • Test heater elements. <p>Note: - Frequent cycling stat operation can cause F10, check filter and condenser for blockages.</p>
F11	Open circuit pump circuit.	<ul style="list-style-type: none"> • Test continuity of pump; • Check connector J5; • Check wiring between pump and module J5. <p>Note: - F11 is usually caused by a fault in the pump circuit not the module.</p> <p>Auto cycle being used fault displays within 1 minute Time and Wool cycles being used fault displays at the end of the cycle.</p>

FAULT	Cause	Control Action
F12	No communication between display module and control module.	<ul style="list-style-type: none"> • Check connector J9 on module; • Check wiring between module connector J9 and display; • Check display connector; • Replace module, display or wiring as required.
F13	Rear thermistor open or short circuit.	<ul style="list-style-type: none"> • Check security of module connector J4; • Test from J4 connector pins 1 and 2 (approximately 500 Kohms); • If open circuit, test thermistor and wiring between thermistor and J4 to locate fault.
F14	Upper element failure	<ul style="list-style-type: none"> • Check security of module connector J4; • Test between pins 4 and 5 on J4 (approximately 48 ohms); • If open circuit, test upper element and the wiring between J4 and the heater.
F15	Upper element is on when it should be off.	<ul style="list-style-type: none"> • Check security of module connector J4; • Check connector for signs of shorting due to moisture; • Check heater elements and wiring; • Replace module (F15 would normally be caused by a faulty module).
F16	Not used.	
F17	Master Relay contacts welded closed.	<ul style="list-style-type: none"> • Replace module.

If testing for a heater related fault always test on a Cotton high heat setting.

FAULT / REPAIR NOTES: -

- If the heater one-shot stat operates and goes open circuit, the machine will be 'dead' and the display will be blank. No fault code will be displayed.
- If the door microswitch is open circuit, the machine will not start and the Empty Water lamp will illuminate, giving the impression the float switch is faulty.