QUICK REFERENCE TO SIGMA RANGE

This document is intended for use as a reference for Westomatic Trained Service engineers

Error Code	Fault Description	Actions to take
9	Keyboard Fault	• Disconnect external keypad and power up the machine, if fault disappears then check keypad/loom, replace keypad. • If problem persists then replace processor board
11	Cups sold out or switch damaged	• Ensure there are cups present within the motorised cup unit. • Ensure the cup switches in the cup unit both work correctly.
12	Waste overflow bucket is full	• Empty and replace the overflow bucket make sure the brass pressure weight is on the inside of the overflow bucket. • To reset the machine - power down for 10 seconds and then turn back on using the rocker switch. • Test the pressure switch and replace if necessary.
13	Boiler probe set has not detected water after 3 minute time-out	• Check the water has not been turned off at the stop cock. • Check water supply to inlet valves is no less than 20 PSI • Are there appliances near by draining the water pressure? • Ensure the probe set terminals are a tight fit on top of the boiler lid. • Check continuity from the probe set to the processor on all terminals and plugs. • Check for scale obstructing the fill level probe inside the boiler. De-scale if necessary. • Replace the probe set.
14	Triac/circuit failure **(SEE PAGES 3 - 4 FOR FULL INFORMATION)**	• Check the output table within diagnostics for the circuit at fault. See page 3 for circuit numbers. • Check the fuse associated to the circuit. For example F11 fuse protects whipper circuits 20 to 24. • Check all crimps and connectors to the motor/component. • Replace the motor/component with new. Has the fault gone? Or swap the motor/component over with its neighbour has • The circuit number changed (refer to page 3). If yes, replace with a new motor/component. **For service engineers who do not have immediate access to parts.** • If you do not hold spare parts, disable the drinks associated with that particular motor/component. This will keep the machine up and running until you schedule a return visit to replace the motor/component. • If the fault is still present re-check the terminals to the motor/component. Also check the terminal within the output plug on • The processor (Do all female terminals within this particular circuit make a good contact with the male terminals?). • Using a multi-meter check the output circuit and also the red common circuit for breaks. • Replace the control board.
20	Water Fail safe	• Check the machine for internal water leak. • Check for scale obstructing the probeset inside the boiler. De-scale if necessary. • Fault code will be rectified by interrupting power.
21	Leak Detected / Boiler / Valve leak detection	• Check the boiler for leaks. • Check boiler valves for scale and replace if necessary. • Check / replace the main water inlet valves. • Check the Leak detect value in software is correct. • Check for scale obstructing the fill level probe inside the boiler. De-scale if necessary. • Check boiler for scale. De-scale if necessary. • Follow the guidance under Error 13 - both Errors are very similar.
30	Dispense Arm Jam time-out activated	• The Dispense arm has not moved or activated the switch within the time set (5 seconds), • Check the condition of the switches and the dispense arm motor. • Replace if necessary.
50	Brewer 1 Fault	• Check the brewer micro switch is homing correctly
52	Brewer 2 Fault	• Check the brewer micro switch is homing correctly
56	Boiler full & empty	• The processor detects signals from the boiler probe set that indicate that the boiler is both empty & full at the same time. • Ensure the probeset is free from scale. • Replace boiler probe set.

Error Code	Fault Description	Actions to take
57	Boiler Overflow	• Ensure machine is level. • Ensure probes are connected and fitted to the boiler lid. • Ensure the boiler lid is fitted to the boiler and all gaskets are in place. • Ensure the probeset is free from scale.
58	Boiler Under temperature	• Ensure the connectors are fitted correctly. • Check / replace the boiler fuse. • This fault will also show if there is no water to the machine
59	Temperature Thermistor open circuit	• Ensure the probe connectors are fitted correctly. • Ensure the probe is connected to the control board. • Replace boiler probes.
60	Bean grinder time-out	• Ensure Grinder is connected. • Ensure the grinder fuse is fitted. • Ensure no objects are jammed in grinder.
61	Drive motor not reaching home within the time-out set	• Ensure the brewer is mounted correctly in the machine. • Ensure the connectors are fitted correctly. • Replace the drive motor for the brewer.
84	Fault generated by a bill reader	• Check the EVA DTS code, this will be displayed within the fault log. • EVA & DTS codes can be downloaded via the internet:- www.vending-europe.eu/standards/EVA-DTS.html

ESPRESSO BREWER ERROR CODES

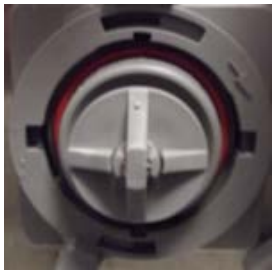
Error Code	Error	Error Code	Error
32	Brewer 1 no flow	**43**	High pressure boiler no fill
33	Brewer 2 no flow	**44**	High pressure boiler under temperature
34	Brewer 1 slow flow	**45**	High pressure boiler temperature sensor fail
35	Brewer 2 slow flow	**46**	High pressure boiler level sensor fail
36	Brewer 1 doser fault	**62**	Brewer 1 24V lost
37	Brewer 2 doser fault	**63**	Brewer 2 24V lost
38	High pressure boiler leak	**67**	Brewer 1 PCB over-temperature
41	Brewer 1 chamber removed with door closed	**68**	Brewer 2 PCB over temperature
42	Brewer 2 chamber removed with door closed		

ERROR 14 TRIAC/CIRCUIT FAILURE

14 - 20 TRIAC ERROR

You may see this more than once on your Sigma LCD display

The error code 14 represents a circuit failure, nothing more.
The number after the hyphen represents the circuit with the issue/problem



14-20 on a Sigma would mean you have a problem with Whipper Station 1
To give you an idea, with it being a whipper issue the cause could be one of the following:-

- The operator has fitted the impelor incorrectly (most common)
- The Fuse has then blown (very likely)
- The whipper base seal has worn (common)
- The whipper motor is faulty (rare)
- The terminal and crimps to the motor are loose or disconnected (rare)
- An Engineer, operator or a site Service Engineer has decided to fit a higher rated fuse to protect the whipper motor circuit which has damaged the main cabinet loom and processor (extremely rare)

SIGMA TRIAC MACHINE LAYOUR & CIRCUIT TABLE

In the event of a circuit failure the 14 represents an open circuit, the number after the hyphen represents the circuit with the fault. The table below allows you to pinpoint the component with the fault for example: 14-20 would be an open circuit regarding the Whipper Station 1.

						BAY 1	BAY 2	
	Station 1	**Station 2**	**Station 3**	**Station 4**	**Station 5**	**Station 6**	**Station 7**	**Hot Water**
Ingredient Motor	13	**14**	**15**	**16**	**17**	**18**	**19**	
Water Valve	06	**07**	**08**	**09**	**10**	**11**	**12**	33
Whipper Motor (Brewer Motor in Brewer Bay Positions)	20	**21**	**22**	**23**	**24**	**25**	**34**	
Exit Pinch Solenoid (Tea Brewers)						**30**	**29**	
Air Pump (Coffee Brewers)						**31**	**32**	
Air Pinch (Coffee Brewers)						**04**	**05**	
Triple Brew Brewer Motor						**41**		

	Chiller Unit (Where Fitted)							
Syrup 1	**36**							
Syrup 2	**37**							
Syrup 3	**38**							
Still Water	**39**							
Carb. Water	**53**							

MACHINE TYPE								
A - All Instant	Soup	Instant Tea	Coffee 2	Sugar	Coffee 2	Chocolate	Whitener	Hot Water
B - FBT/Instant	Whitener		Coffee 2 Or Soup	Sugar	Coffee 1	Chocolate	FB Tea	Hot Water
C - FBC/Instant	Whitener		Coffee 2 Or Soup	Sugar	Coffee 1	Chocolate	FB Coffee	Hot Water
D - FBC/FBT	Whitener		Chocolate	Sugar	Coffee 1	FB Coffee	FB Tea	Hot Water
E - BTC/FBT	Whitener		Chocolate	Sugar	Coffee 1	BTC	FB Tea	Hot Water
F - BTC/Instant - 2 x FBC/FBT	Whitener		Instant 2	Sugar	Instant 1	Chocolate	BTC	Hot Water
G - 2 x FBC/FBT	Whitener		Chocolate	Sugar	Coffee 1	FB Coffee 1 FB Coffee 2	FB Tea	Hot Water

DO NOT FIT A DIFFERENT TYPE OF FUSE RATING OTHER THAN THE FUSES SPECIFIED ON PAGE 4

CIRCUIT NUMBER	FUNCTION	RELATED FUSE	CPU CONNECTOR	FUSE RATING
1	Master Water Inlet Valve	F10	P10	T2.0
2	Boiler Fill Valve	F10	P9	T2.0
3	Cold Water Inlet Valve	F10	P8	T2.0
4	Brewer 1 Air Pinch Solenoid – Coffee Brewer in Bay 1 Position	F15	P7	T3.15
5	Brewer 2 Air Pinch Solenoid – Coffee Brewer in Bay 2 Position	F16	P6	HP - T5.0 LP - T3.15
6	Boiler Valve 1	F12	P5	T3.15
7	Boiler Valve 2 (Instant machines only)	F12	P4	T3.15
8	Boiler Valve 3	F12	P3	T3.15
9	Boiler Valve 4	F12	P2	T3.15
10	Boiler Valve 5	F12	P1	T3.15
11	Boiler Valve 6 (Bay 1)	F12	O12	T3.15
12	Boiler Valve 7 (Bay 2)	F12	O11	T3.15
13	Ingredient Motor 1	F13	O10	T3.15
14	Ingredient Motor 2 (Instant Machines Only)	F13	09	T3.15
15	Ingredient Motor 3	F13	08	T3.15
16	Ingredient Motor 4	F13	07	T3.15
17	Ingredient Motor 5	F13	06	T3.15
18	Ingredient Motor 6 (Bay 1)	F15	05	T3.15
19	Ingredient Motor 7 (Bay 2)	F16	04	HP - T5.0 LP - T3.15
20	Whipper Motor 1	F11	03	T3.15
21	Whipper Motor 2 (Instant Only Machines)	F11	02	T3.15
22	Whipper Motor 3	F11	01	T3.15
23	Whipper Motor 4	F11	N10	T3.15
24	Whipper Motor 5	F11	N9	T3.15
25	Whipper Motor 6 (Bay 1)	F15	N8	T3.15
26	Cup Unit Peeler Motor	F9	N7	T2.0
27	Cup Unit Transfer Motor	F9	N6	T2.0
28	Moving Dispense Head Motor	F10	N5	T2.0
29	Exit Pinch Solenoid – Tea Brewer in Bay 2 Position	F16	N4	HP - T5.0 LP - T3.15
30	Exit Pinch Solenoid – Tea Brewer in Bay 1 Position	F15	N3	T3.15
31	Air Pump Motor – Coffee Brewer in Bay 1 Position	F15	N2	T3.15
32	Air Pump Motor – Coffee Brewer in Bay 2 Position	F16	N1	HP - T5.0 LP - T3.15
33	Boiler Valve 8 – Hot Water Valve	F12	R8	T3.15
34	Instant Machines – Whipper Motor 7 (Bay 2 Position) FB/BTC Machines – Brewer Motor (Bay 2 Position)	F16 F16	R7	HP - T5.0 LP - T3.15
35	UV Lamp			
36	Syrup Pump 1	F14	R6	T2.0
37	Syrup Pump 2	F14	R5	T2.0
38	Syrup Pump 3	F14	R4	T2.0
39	Still Cold Water Dispense Solenoid	F14	R3	T2.0
40	Carbonated Water Dispense Solenoid	F14	R2	T2.0
41	Triple Brewer Ingredient Motor	F15	R1	T3.15
42	Internal LED Lighting Strip	F8	Q8	T3.15
43	Uncommitted		Q7	
44	Uncommitted		Q6	
45	Uncommitted		Q5	
46	Uncommitted		Q4	
47	CUP STATION LEDs		Q3	T3.15
48	Uncommitted	F7	Q2	

Part Numbers: **T3.15** - 1025002 **T2.0** - 1025001 **T5.0** - 1025007