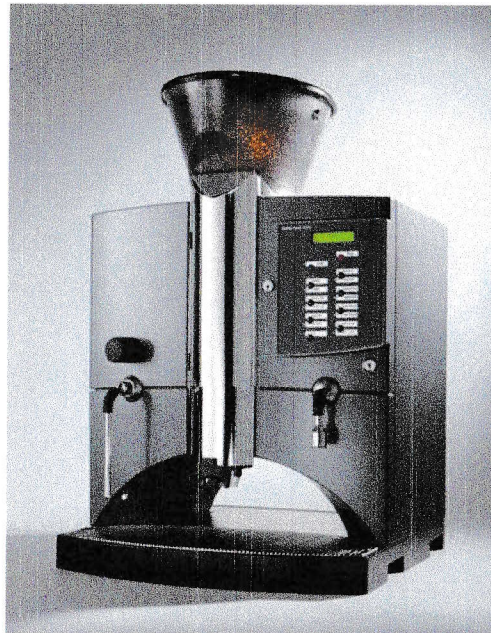


Fault finding

Swiss Egro 70 Series



SWISS COFFEE SYSTEMS



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Where	Symptom	Cause	Action
1 Boiler			
Boiler	ER31 Coffee boiler could not be refilled	Pump pressure too high Brewing valve leaky Coil to brewing valve defective Flowmeter defective Expansion valve defective	Set the pump pressure / rep Maintenance the brewing va Replace the coil Replace the Flowmeter Replace the expansions valv
Boiler	ER32 Tea boiler could not be refilled	Pump pressure too high Boiler inlet restrictor calcified Hot water valve Y2 calcified Flowmeter defective Expansion valve defective Hot water outlet (spout) is turned to 90°	Set the pump pressure / rep Descaling the restrictor Maintenance the valve Replace the flowmeter Replace the expansion valve Turn the hot water spout do
Boiler	ER33 Steam boiler could not be refilled	Water inlet pipe calcified Inlet restrictor calcified Valve Y1 mechanical or electrical defective Level sensor defective	Descaling the pipe Descaling the restrictor Replace Y1 Descaling, cleaning the sen
Boiler	ER41 Coffee boiler does not heat	Temperature sensor F11 triggered (Boiler calcified) Solid state relay K11 defective Heater / connector / X2 (interrupt) Temperature sensor B1 / connector J11 pin 9/10 Main board defective	Check the sensor (check th Replace the solid state relay Check the heater Check / replace the sensor Replace the main board
Boiler	ER42 Tea boiler does not heat	Temperature sensor F21 triggered (Boiler calcified) Solid state relay K21 defective Heater / connector / X2 (interrupt) Temperature sensor B2 / connector J11 pin 11/12 Main board defective	Check the sensor (check th Replace the solid state rela Check the heater Check / replace the sensor Replace the main board

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Boiler	ER43 Steam boiler does not heat	Temperature sensor F31 triggered (Boiler calcified) Solid state relay K31 defective Heater / connector / X2 (interrupt) Pressure switch defective	Check the sensor (check the cause) Replace the solid state relay Check the heater Check / replace the pressure switch
Boiler	No steam at times	Boiler inlet valve leaky. Boiler overfilling	Maintenance the valve.
Boiler	Boiler connections leaky	Corroded from Brita filter	Check and set the bypass from Brita (Hardness-test)
Boiler	Steam or hot water from the drain tray	Pressure switch, faulty Safety valve leaky Solid state relay faulty Level sensor calcified Inlet valve leaky	Replace the pressure switch Replace the safety valve Replace the relay Descaling the sensor Maintenance the valve
2 Brewing group			
Brewing group	ER44 Brewing block unit does not heat	Heater faulty Temperature sensor defective Cable connection from heater to J14 / NTC to J10 (interruption) Main board faulty	Replace the heater Check / replace the sensor Check the connection Replace the main board
Brewing group	ER71 Piston 1 = brewing time > 90 s (Brewing seave obstructed)	Coffee powder dose / bad mill result (too fine) Seave obstructed Pump defective Check the lower piston height (rest of coffee grounds over the seave)	Set again the grinder, fine - course Clean the seave Replace the pump Set the piston height
Brewing group	ER72 Piston 2 = brewing time > 90 s (Brewing seave obstructed)	Coffee powder dose / bad mill result (too fine) Seave obstructed Pump defective Check the lower piston height (rest of coffee grounds over the seave)	Set again the grinder, fine - course Clean the seave Replace the pump Set the piston height



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Brewing group	ER81 No signal from end switch S 15 (piston 1) after 7 s.	Piston 1 is blocked up Gear motor M7 / end switch S 15 (no signal) Main board Cable connection M7 to J2 (no contact)	Dismantle and cleaning the piston Replace the gear motor and the cable Lubricate the spindle with grease Replace the main board Check the connection
Brewing group	ER82 No signal from end switch S 17 (piston 2) after 7 s.	Piston 2 is blocked up Gear motor M8 / end switch S 17 (no signal) Main board Cable connection M8 to J3 (no contact)	Dismantle and cleaning the piston Replace the gear motor and the cable Lubricate the spindle with grease Replace the main board Check the connection
Brewing group	ER85 Brewing group pivoting (1 position) > 2 s	Brewing group jam (mechanical) Micro switch faulty S11 Faulty on the rotor motor M6, mechanical or electrical No contact on the cable connection M6 /J10 Defective main board / power supply	Find the cause (why jam the brewing group?) Replace the micro switch Replace the rotor motor Check the connection Replace the main board / power supply
Brewing group	ER91 P1: time until compression > 8 s. P1: time for ejection motion > 5 s.	P1 jam Gear motor M7 / rotation counter S14 (no signal) Main board faulty Cable connection M7 to J2 (no contact)	Dismantle and cleaning the piston Replace the gear motor and the cable Lubricate the spindle with grease Replace the main board Check the connection
Brewing group	ER92 P2: time until compression > 8 s. P2: time for ejection motion > 5 s.	P2 jam Gear motor M8 / rotation counter S16 (no signal) Main board faulty Cable connection M8 to J3 (no contact)	Dismantle and cleaning the piston Replace the gear motor and the cable Lubricate the spindle with grease Replace the main board Check the connection
Brewing group	ER93 P1: Height limit exceeded during brewing process (>100 motor rotations)	Gear motor M7 jam Rotation counter S14 (no signal) Faulty main board	Check the gear motor Replace the rotation counter (cable assy.) Replace the main board
Brewing group	ER94 P2: Height limit exceeded during brewing process (>100 motor rotations)	Gear motor M8 jam Rotation counter S16 (no signal) Faulty main board	Check the gear motor Replace the rotation counter (cable assy.) Replace the main board



Brewing group	ER97 P1: No pulses from rotation counter S14	Gear motor M7 Rotation counter S14 (no signal) Faulty main board	Check the gear motor Replace the rotation counter (cable assy.) Replace the main board
Brewing group	ER98 P2: No pulses from rotation counter S16	Gear motor M8 Rotation counter S16 (no signal) Faulty main board	Check the gear motor Replace the rotation counter (cable assy.) Replace the main board
Brewing group	Coffee powder on the right side (main board)	Soft ware faulty, grinder mill to long in "mode2", particularly by connection with a card reeder or coin checker Piston goes not enough high by ejection Overdosing	Replace the EPROM from V1.11 > Check the piston height at all events replace the gear motor Check and set again the grinder
Brewing group	Noise from gear motor	Gear motor roisters	Lubricate the spindle with grease
Brewing group	Coffee drawer, overfilling	The customer don't understanding the correct handling and control REED-contact S12 partially interrupt (adjusting dirtying.)	Explain the correct function and control of the drawer, by „drawer full“ is obligatory to remove and empty the drawer With reference to "user instructions manual" Check the REED-contact S12 Check and set again the grinder
Brewing group	ER 85 by ejection (coffee grounds)	Coffee grounds stick on the drawer and obstruct the ejection to the dregs shed, drawer overfill and jam the brewing group	Cleaning (solve the problem with a Teflon coated unit)
3 Coffee outlet (spout)			
Coffee outlet (spout)	When 1 or 2 cups of coffee are brewing, the coffee overflows. (over the spout)	Spout blocked Coffee flow too fast	Clean the spout Setting the coffee outlet, powder, pressure, pre infusion.



Coffee outlet (spout)	No coffee is brewed only water from spout.	The powder funnel blocked. toothed rod jam Grinder blocked (impurity) No beans in the hopper (slider closed?) Fault programming, piston 1 and piston 2	Clean and adjust, check with monitor program Clean the grinder (consign the part to the customer) Refill the hopper with beans and open the slider Check the piston program
Coffee outlet (spout)	Insufficient coffee volume or different quantity in the cups	Lines / pipes leaky Pump pressure too high (see er 31) Piston O-Ring faulty	Replace lines / pipes Check / set the pump pressure Servicing the pistons
Coffee outlet (spout)	First coffee product too cold	Brewing block heater defective	Replace the heater
4 Cold water valves			
Cold water valves	ER61 No pulses from flowmeter P1 (piston 1)	Flowmeter P1 defective (no pulses) Inlet / outlet from coffee boiler is calcified Piston 1 is blocked Restrictor blocked Brewing valve (Y5) defective	Replace the flowmeter (check valve defective?) Descaling the in / outlet on the boiler Clean the piston Clean the restrictor Replace the valve
Cold water valves	ER62 No pulses from flowmeter P1 (piston 2)	Flowmeter P1 defective (no pulses) Inlet / outlet from coffee boiler is calcified Piston 2 is blocked Restrictor blocked Brewing valve (Y6) defective	Replace the flowmeter (check valve defective?) Descaling the in / outlet on the boiler Clean the piston Clean the restrictor Replace the valve
Cold water valves	ER63 No pulses from flowmeter P2 (hot water)	Flowmeter P2 defective (no pulses) Inlet / outlet from hot water boiler is calcified Hot water line is calcified Hot water valve Y2 (mech./ electr.) defective	Replace the flowmeter (check valve defective?) Descaling the in / outlet on the boiler Descaling the line Replace the valve
Cold water valves	ER73 Hot water release too long	Flowmeter P2 defective (no pulses) Inlet / outlet from hot water boiler is calcified Hot water line is calcified Hot water valve Y2 (mech./ electr.) defective Pump defective	Replace the flowmeter (check valve defective?) Descaling the in / outlet on the boiler Descaling the line Replace the valve Replace the pump



Cold water valves	On the display appears: "W Control"	Pump defective Too much coffee powder Coffee powder too fine Coffee pressure too high Coffee spout blocked (ball) No water lines, pipes are jammed	Replace the pump Grinder test Coffee setting Reduce the pressure Remove the ball and spring from coffee spout Check all valves, lines, pipes
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5 Electrical

Electrical	ER111	Short circuit, temperature sensor Coffee boiler NTC B1	Check the wiring, J11 pin 9/10 Replace the temperature sensor
Electrical	ER112	Short circuit, temperature sensor Hot water boiler NTC B2	Check the wiring, J11 pin 11/12 Replace the temperature sensor
Electrical	ER114	Short circuit, temperature sensor Brewing block NTC B4	Check the wiring, J10 pin 11/12 Replace the temperature sensor
Electrical	ER121	Breakdown temperature sensor Coffee boiler NTC B1	Check the wiring, J11 pin 9/10 Replace the temperature sensor
Electrical	ER122	Breakdown temperature sensor Hot water boiler NTC B2	Check the wiring, J11 pin 11/12 Replace the temperature sensor
Electrical	ER124	Breakdown temperature sensor Brewing block NTC B4	Check the wiring, J10 pin 11/12 Replace the temperature sensor
Electrical	On the display appears always "heating/rinsing"	1 Phase is missing (Boiler don't heat) Pump is blocked Over-temperature safety, faulty	Check Connections / fuses Replace the pump Check / activate the unit

6 Electronic

Electronic	ER01	Faulty on the NV-Ram	Switch machine off and on Replace the NV-Ram
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Electronic	Machine „wheeze“ and all LED flashing (all Functions are possible)	Connector on the flat cable, flat cable faulty, interruption in the connection Keyboard defective	Check the position of the connector if necessary replace the flat cable Replace the keyboard
Electronic	Display is dark, when switching machine, the green LED glow shortly	Short circuit on the main board (caused from gear motor, flowmeter, heater....)	Replace the main board, (brewing group possibly)
7 Hot water valves			
Hot water valves	Steam noise	Vacuum valve leaky (steam noise)	Replace the vacuum valve
8 Lines / pipes / pump			
Lines, pipes, pump	Noise from water pump	Pump noise (squeak)	Replace the pump
9 Milk outlet (spout)			
Milk outlet (spout)	Milk from cool-box not hot enough (<65°C)	Steam capacity too low (feeble)	Bore the hole in steam restrictor of the cappuccinatore to 2mm, check the tightness of the boiler
Milk outlet (spout)	Milk is not hot enough, with 2 cappuccino heads (70 series)	One head produce only cold milk. 1 Valve on the block faulty.	Replace the valve.
Milk outlet (spout)	Milk is not hot enough	Restrictor or cappuccinatore is dirty Pressure switch faulty Level sensor calcified	Clean the unit and check if is necessary to insert a smaller restrictor Check / replace the pressure switch Descaling / replace the sensor
Milk outlet (spout)	No a milk product is done (only steam)	Hose is uptight Milk pump don't work Check valve is obstruct (closed) Restrictor obstruct, possibly by cleaning product (tabs)	Check the hose position Check / replace the pump Clean the valve Clean the restrictor(s), use the liquid product "Egro Lactoclean"
Milk outlet (spout)	Different milk products volumes	Steam pressure vacillate, too much steam extraction Pressure switch work no properly (KB) Milk pumps variegate in the (Milk) quantity (KS)	Replace the pressure switch Replace the pumps



Milk outlet (spout)	Not a respectable milk product is done	Incorrect cappuccino heads assy. (Tangle with hoses and restrictor, not so easy for the customer)	Fix the silicon hoses with a cable tie, to put in order the cappuccino unit. Cover will better close and hose will be not uptight
Milk outlet (spout)	From one head flow only hot milk (no foam)	One of both valves faulty I/O-Print defective	Check / replace the aeration valve Replace the I/O-board
Milk outlet (spout)	From one head flow only foam (no hot milk)	Leak in the sucking hoses Bad assy. From cappuccino head O-Ring from cappuccino head leaky Aeration valve faulty / obstruct I/O Print defective	Replace the hose Assembly the cappuccino heads correct Check the cappuccino head Clean / replace the valve Replace the I/O-board
Milk outlet (spout)	No steam to the cappuccino head	Valve, on the valve block faulty (steam boiler)	Replace the valve
Milk outlet (spout)	Only milk or steam from the cappuccinatore	Check valve on the cold water line faulty or missing (leak air)	Check / replace the valve unit