SK700 Sandpiper II plus Apollo Error Codes

Code	Description	Comment	Type	Tip 1	Tip 2	Tip 3
E 1	W&M RAM Database Corrupted		SU	Warmstart (F1, F2)		
E 4	One or more tasks not started		SU	Warmstart (F1, F2)	Check hardware and configuration	
E 5	Software Coldstart	CC 59.1 executed.	SU	Warmstart (F1, F2)		
E 6	Configuration Error	Data memory is not the same (CPU and ECAL Board)	SU	Warmstart (F1, F2)	Open the Security Switch + F1, 0, 1, 2, 8, Enter then F2	Hardware Coldstart and Recover the configuration
E7	ECAL board memory error	Software or hardware error at the ECAL board	SU	Open the Security Switch + Warmstart (F1, F2)	Change the ECAL board or Display board (SIP dispenser)	Change the CPU board
E 8	Database not compatible with previous version	Ram Database	SU	Warmstart (F1, F2)	Recover the configuration	
E 9	Hardware Coldstart	Jumper was set	SU	Power down, remove jumper and power up		
E 10	New Software Version detected	Comes up after a software update	SU	Open the Security Switch + Warmstart (F1, F2)	Recover the configuration	
E 60	Totalizer Corrupted	Totalizers will become zero with a warmstart or power down	SU	Warmstart (F1, F2)		
E101	BOSS flash hash check failure		SU	Coldstart by jumper	Change CPU	
16	Preset Overrun	Example: 3 - 12	MI	3 = Valve number	12 = overrun value in cl	
20	Pulser Disconnected	After nozzle out, the CPU checks the pulser current. Current below 5 mA generates the error.	ME	read out the eventlog and test/change the pulser	Check pulser connection on the IS-HUB	Change the IS-HUB

26	Invalid Calibration Factor	Normal Calibration Factors: Ecometer --> 054XXX C+Meter --> 153XXX	ME	Error can happen, e.g. after an ECAL-Board exchange	Read out the eventlog	Set the factor to value 1 and calibrate with CC76
29	"Valve Stuck"	Maximum no flow or initial dispenser no flow timeout exceeded	ME	Check the solenoid valve	Check CC87.1 and 87.3	
33	Stop-Button activated	Option Scandinavia	ME	Information only		
44	Nozzle out during power up	Error happens after a restart of the dispenser	ME	Check the function of the nozzle switches	Nozzle out = contact closed	Check the eventlog for the position of the nozzle switch
46	Mininmum Preset Limit	Threshold value = 1 litre	ME	Enter an increased preset value		
50	POS communicaton lost (disconnected)		ME	Check the wiring to the POS system	Check the shielding of the cable connection	Contact POS producer
58	Battery Backup status low	Option England	ME	Check Battery Backup voltage (>11V)	Check connections	
99	BOSS: W&M Database CRC Incorrect		MA	Coldstart and Re-program Parameters		
102	Preset Overrun	Example: Preset information 2 - 962	MI	Preset information 2 = Amount preset from POS	962 = delivered value in cl	
4322	Prop.-Valve Board not connected		ME	Change the board with another valve board for a test	Exchange the valve board	Exchange the CPU board
4323	POB Board not connected	LPG or AdBlue	ME	Replace connection and restart	Check CC91.23, 91.19 or 97	Exchange the POB
4326	Prop. Valve disconnected	CC34: Check for valve coil connection, Apollo	ME	Check CC91.28 and change if required 1=disabled, 2=enabled	Check Fuse	
5034	Software Coldstart	CC 59.1 executed. Identic to E5	SU	Warmstart (F1, F2)		
5035	Hardware Coldstart	Jumper 5 was set. Identic to E9	SU	Warmstart (F1, F2)		
5036	Database Corrupted	Identic to E1, E4 to E6.	SU	Warmstart (F1, F2)		

5037	Totalizer Corrupted	Totalizers will become zero with a warmstart or power down. Identic to E60	SU	Warmstart (F1, F2)		
5047	Reverse flow detected		ME	Check the eventlog for the position of the pulser	Check the check valve infront of the meter	Check the hydraulic for leakages (air)
5049	Unauthorized flow detected	Petrol flow on a meter which is not in use for the active hose; could happen if one prop. Valve from a 40/140 product stays open	ME	Disconnect the valve coil and start a fuelling, if it is possible to fuel one prop. valve is defect	Exchange the prop. valve	
5050	Invalid pulser pattern	Pulser channel 1 and 2 are not 90° degree phase shifted	ME	Read out and analyse the eventlog	in combination with error 5047 this error could come up caused by air or dirt in the system	change the pulser
5053	SIP calibration switch open		ME	Check/close the switch at the pulser		
5054	Security Switch on serial pulser open	Modbus	ME	Check/close the switch at the Coriolis Meter		
5055	Calibration switch is open	ECAL-Board	ME	Check/close the switches		
5056	Security Switch is open	CPU-Board	ME	Check/close the switches		
5057	Unauthorized flow		ME			
5065	Motor switching board (AC1 Connector) not connected	Name of the board's: STP Connector (3 Phasen) or Single Phase AC Connector PCA (1 Phase)	ME	Check connection (AC1 plug at the CPU)	Change the board	
5081	Air sensor not connected but option enabled	Sensor is only in use in Blackmer Pumps	ME	Check the eventlog for the position of the sensor	Check CC 98	
5084	TCP/IP Interface not connected	IFSF via TCP/IP	ME			
5087	Ethernet cable not connected	IFSF via TCP/IP	ME			

5088	IFSF/LON-Interface Board not connected but option enabled		SU	Check connection	Check CC 24	Check/change board
5089	IFSF/LON-Interface Board error		ME	Check connection	Check/change board	
5091	ATC Hub Board not connected but option enabled	ATC = Automatic Temperatur Compensation	SU	Check connection	Check/change board	Check CC 91.6
5092	ATC Hub Board connected but option disabled	ATC = Automatic Temperatur Compensation	MA	Check CC 91.6		
5099	Number of ATC-Probes exceeds number of grades	ATC = Automatic Temperatur Compensation	MI	Check CC 75 and 90	Check probe connections and wiring	
5100	Number of grades exceeds number ATC-Probes	ATC = Automatic Temperatur Compensation	ME	Check CC 75 and 90	Check probe connections and wiring	
5104	Abnormal system end during transaction		MI	Check the whole hardware		
5111	Display Board communication failure	In single sided dispenser this fault is generated in the eventlog during booting session (not a real error)	MA	Check all boards and connections	Check CC 92	
5113	Display board not present	Wrong or double display addressing	MA	Check display and address jumper		
5115	Display firmware to low for the set parameter	Version < 1.09	ME			
5118	PPU Board Communication Failure		ME	Check PPU board connections	Check CC91.15	
5120	Fiscal Printer release lost	Additional release signal from printer (option Poland). Transaction fault!	ME	Check transaction records	Check printer	
5124	Density, Transaction or Preset Display Communication Failure	Multi PPU Display error	ME	Check connections	Check CC91.8	
5130	Display Board Error		MA	Warmstart (F1, F2)	Check the eventlog	change the display

5131	Preset Keypad enabled but not connected		ME	Check connection	Check CC 22.1	Check/change keypad
5139	STOP-Button stuck	Option Skandinavia	MA	Check button and wiring		
5142	Push to START-Button stuck		MA	Check button and wiring		
5146	Switch/Vibration Sensor not found		MA	Check CC 83.23	Check hardware	
5147	Vibration Sensor Alarm (UK)		MA			
5150	Too many nozzle signals at the same time		ME	Change the IS-HUB board		
5174	Etote Board communication error		MA	Check connection	Check hardware (link setting)	Check CC 90, 91.11
5175	Etote Board retrofitted		MA	Open the Security Switch + Warmstart (F1, F2)		
5176	Etote Board exchanged		ME	Warmstart (F1, F2)		
5182	Communication error to Etote Board		ME			
5183	Totalizer connected but no return pulse control		ME	Check connection	Check Totalizer	Check Display Board
5211	Slave display communication fault	In use for Satellite with display and dispenser with 4 displays	MA	Check CC 92 and 91.4	Check connections	
5230	Totalizer CRC per nozzle corrupted	CRC-Checksumm Test	ME	Open the Security Switch + Warmstart (F1, F2)		
5413	Unit price on zero		ME	Check POS setting	Check CC 20	Check CC 94
5600	Fuel Density not set but Vapour Recovery and/or ATC is set		SU	Check CC 75		
5601	ATC Temperatur out of range	ATC = Automatic Temperatur Compensation. PT100 (0°C = 100Ohm). Resitor values don't change proportional!	ME	Range: -50°C bis +70°C. Typical measuring values: 5°C = 101,95 Ohm, 10°C = 103,9 Ohm, 15°C = 105,85 Ohm, 20°C = 107,79 Ohm	Check connections	Change ATC Hub and/or probe

5603	Display Board software error or version changed	Comes up after display change, if the displays have different software versions.	MA	Send Config with open configuration switch.	Change a parameter with open security switch, reboot and change parameter back.	Check Display Board and CPU
5604	ATC probe short cut	ATC = Automatic Temperatur Compensation. PT100 (0°C = 100Ohm). Resitor values don't change proportional!	ME	Check connections	Change probe among each other	Change probe
5700	Multi-Wire Board (Pulse Output Interface) communication failure		MA	Check board and connections	Check CC 24	
5701	Multi-Wire-Board (Pulse Output Interface) unconfigured		MA	Check CC 24	Check CC 40.6-40.13	
5702	Multi-Wire Board (Pulse Output Interface) device error		MA	Check board and connections	Check connections to OPT (Outdoor Payment Terminal)	
5703	Multi-Wire Board (Pulse Output Interface) cash pulses overrun	Frequency to high	ME	Check board and connections	Check calibration factor with CC 76.2 or 99	
5704	Multi-Wire Board (Pulse Output Interface) volume pulses overrun	Frequency to high	ME	Check board and connections	Check calibration factor with CC 76.2 or 99	
5721	Head: Door switch open		MA			
5723	Hydraulic: Panel switch open		MA			
5801	CNG: Over pressure signal detected	Signal is transmitted by Limit Pressure Gauge. Setting: 267 bar in the future maybe 277 bar	MA	Check the adjustment of the Limit Pressure Gauge	Check boards and connections	JP4 at NON-IS-Pulser-Hub not linked and CC 89.49 (La Bom limit pressure gauge) activated
5802	CNG: Knock Over Protection (Shock Sensor) active	Switch opens if active	SU	Check Knock Over Protection	Check boards and connections	Check CC 89.50

5804	CNG*: No flow detected	Last Bank and less than 1,5 Kg filled	ME	Start button and nozzle signal detected but nozzle not connected		
5805	CNG*: Max tank pressure to high	Default max tank pressure setting: 195 bar	ME	Car tank is full	Check CC 89.4 and 89.5	
5806	CNG: Maximum flow rate reached		ME	Hose breakaway or pipe burst	Check CC 89.26 and 89.27	
5807	CNG*: Maximum mass exceeded	Calculation failure: Second pressure value lower than the first pressure value	ME	Pressure-, temperature- and mass values illogical		
5808	CNG*: Calculated delta pressure is negative value	Measuring failure, pressure values illogical	ME	Check Pressure Transmitter	Till SW E29-04.16 set CC89.29 to "0"	
5809	CNG*: Maximum pressure limit reached	Default setting: 250 bar	ME	Check Pressure Transmitter	Check CC 89.32	
5811	CNG*: Temperatur sensor short circuit	Temperature sensor (PT100) is located on the CNG/COMBI HUB	ME	Check board and connections		
5812	CNG*: Temperature sensor disconnected	Temperature sensor (PT100) is located on the CNG/COMBI HUB	ME	Check board and connections		
5814	CNG*: Pressure Transmitter short circuit		ME	Check Pressure Transmitter connection	Check CNG/COMBI HUB	
5815	CNG*: Pressure Transmitter disconnected		ME	Check Pressure Transmitter connection	Check CNG/COMBI HUB	
5816	CNG*: CNG/COMBI HUB disconnected		ME	Check board and connections	Check IS-Interface	
5820	CNG*: Austrian leak test error		MA			
5823	CNG*: Pressure Transmitter fault		ME	Check CNG/COMBI HUB and connections		
5825	CNG*: Temperature sensor fault	Temperature sensor (PT100) is located on the CNG/COMBI HUB	ME	Check CNG/COMBI HUB		
5827	CNG*: Austrian LPG leak test error	CNG tank detection	MA			

5828	Modbus communication problem	Meter does not reply	ME	Check board and connections	Check meter	
5829	Modbus mapping problem		ME	Check meter addresses		
5830	Modbus meter not connected		MA	Check board and connections	Check meter	
5831	Internal Coriolis Meter failure	Modbus only. Typical error, for air in the system (AdBlue Dispenser).	ME	Venting with CC76.5 (competent disposal of the delivered fluid)	Check for leakages and competent installation (pipework should be straight and true rising steadily to the dispenser inlet without any dips (drops) in the line where air can become trapped)	
5833	Magmeter system status error	No Product at the meter	ME	Use CC76.1 to prime fuel into the system	Read out the eventlog and send to Techsupport	
6001	IS-HUB 1 or IS-SWITCH-HUB disconnected		ME	Check board and connections	Check jumper setting (short cut pin 1 and 2)	Check the 230V power on the IS-Interface
6002	IS-Interface disconnected		SU	Check board and connections		
6003	IS-HUB 2 disconnected		ME	Check board and connections	Check jumper setting (short cut pin 3 and 4)	check the 230V Power on the IS-Interface
6006	AAB / PIB not connected but option enabled	Option Italy	MA	Check connections	Check CC 82 and 83	
6014	ECAL-Board not connected but option enabled		MA	Check connections	Check CC 91.18	
6027	Motor switching board (AC2 Connector) for product 5/6 not connected	Name of the board's: STP Connector (3 Phasen) or Single Phase AC Connector PCA (1 Phase)	ME	Check connection (AC2 plug at the CPU)	Change the board	
6030	Hose leak test failed (after authorization)	Option Italy	MA	Check hydraulics	Check CC 69	
6031	Hose leak test failed	Option France	MA	Check hydraulics	Check CC 83.1	

6032	Hose leak test interrupted	Option France	MA	Check hydraulics	Check CC 83.1	
6035	Tank low level error	Option Italy	MA	Check connections	Check tank sensor	
6036	AAB / PIB not detected but tank low level sensor enabled	Option Italy	MA	Check connections to AAB / PIB	Check CC 91.21	
6037	Nozzle out during power up and hose leak test not possible	Option France	SU	Replace nozzle and power up or Warmstart (F1, F2)		
6039	Kiosk Switch not connected but option enabled	Option Italy	MA	Check connections	Check CC 91.22	
6040	VRC Board not connected but option enabled		ME	Check connections	Check VRC Board	Check CC 91.14
6042	VR Monitoring STOP Side 1		ME	Reset with Service Terminal FB1 (Gilbarco VMC and Fafnir Vaporic) or Vaporix-Service-Dongle	Prevent leakages and check power of the gas pumping unit	Ceck/repair the vapour recovery with Service Terminal and gas meter
6043	VR Monitoring STOP Side 2		ME	Reset with Service Terminal FB1 (Gilbarco VMC and Fafnir Vaporic) or Vaporix-Service-Dongle	Prevent leakages and check power of the gas pumping unit	Check/repair the vapour recovery with Service Terminal and gas meter
6048	Service Terminal FB1 connected		ME	Disconnect Service Terminal from CPU Board		
6058	AAB / PIB not connected but Satellite option enabled	Satellit is an option for ultra high flow dispensers	ME	Check connections	Check CC 91.17	
6081	Maximum flow rate exceeded	Maximum flow = 85 l/min	ME	Check CC 80 and 76.2 or 99	Check flow rate	Check hydraulic
6082	High speed pulser out of range	One of the twin meter pulsers is not counting or too slow	ME	Check meters and pulsers	Check solenoid valves	
6083	Below min flow rate		ME			
6084	Hose leak test failed (after taking the nozzle)	Option Italy	ME	Check hydraulic	Check CC 69	

6086	New software version detected (E10)	Security Switch on the CPU was not open	SU	Open the Security Switch + Warmstart (F1, F2)	Recover the configuration if configuration was lost	
6088	Communication lost with pulser device		ME	Check the connection between pulser and IS Hub or SIP and IS Buss		
6089	Pulser enable state error	Pulser already enabled for transaction and enabled again	ME	Check/change pulser		
6090	To many pulsers enabled		ME	Check hardware and connections (pulsers and IS Hub or SIP and IS Buss Connector)	Check communication (LED's on CPU and IS-Interface)	
6092	ATC no Probe configured		ME	Check CC75 and 91.6		
6195	AdBlue heater power supply out of order	24VDC power supply	MA	Check power supply and connections		
6196	AdBlue ambient temperature board not present	ATC-Hub	MA	Check ATC-Hub and connections		
6197	AdBlue ambient temperature sensor not connected	PT100	MA	Check connection to ATC-Hub		
8012	IS proxy serial break error		MI	Coldstart and re-program config file	Check IS-HUB or IS-Switch-HUB	
8022	SIP encryption failure on enable		ME	Check SIP address CC76.7	Check/change SIP	
8023	SIP encryption failure on disable		ME	Check SIP address CC76.7	Check/change SIP	
8024	SIP/IS command mismatch		ME	Check SIP address CC76.7	For non SIP, address is 000000 000000	
8025	SIP serial number mismatch	Serial number programmed in SIP does not match to number in CPU	ME	Check/input SIP address CC76.7		

8026	SIP configured but not detected		ME	Check SIP installation		
8027	SIP device busy	SIP writing calibration data	ME	Information only		
8029	SIP lift-off-detection active		ME	Put the SIP back to the bracket	Check mounting	
8031	SIP Get Calib-Data error	Communication to SIP disturbed, data does not match	ME	Warmstart (F1, F2)	Change SIP	
8033	IS Proxy number of simultaneous active pulser	Pulser still active and not deactivated	ME	Check Eventlog to find the defect pulser	Change pulser	
8124	Display proxy update error		MA			
9064	BOSS: Legal data in ATCL, PumaLan or Two-Wire pump totals response contains incorrect information.		MA	Check Configuration (CC24), Check Protocol Communications, Check Software Compatibility		
9153	PHIB Board connection status disconnected		ME	Check PHIB Board connection with Apollo CPU	Connect PHIB board properly and press F1 F2	
9154	PHIB Board changed	When PHIB board is connected first time or PHIB Serial Number is Changed	ME	Press F1 F2		
9155	MWB1 Changed		ME	Press F1 F2		
9156	MWB2 Changed		ME			
9157	USB log read	log reading though USB	MI			
9162	USB incorrect filesystem or USB time out	USB may not be FAT32 formatted.	ME	unplug and plug again the USB stick and try to retrive logs.		