Eberspacher Hydronic M-II Fault Codes

Fault code Display	Fault description	Comments • Remedial action
000	No faults	
005	Warning Short circuit in "Burglar Alarm" output	Check connection and / or lead for continuity, short circuit and damage.
009	ADR / ADR99 shutdown	 Switch the heater off and then on again – The shutdown must be cancelled by D+ or HA / NA.
010	Overvoltage cutoff	 Overvoltage applied to control box for at least 6 seconds without interruption -> heater not working. Disconnect heater / cable harness plug-in connector, start the vehicle engine, measure the voltage. Connector B2, PIN A2 and A3: If the voltage is >15 volt or >30 volt, check the generator regulator and / or the battery.
011	Undervoltage cutoff	 Undervoltage applied to control box for at least 20 seconds without interruption -> heater not working. Disconnect heater / cable harness plug-in connector, start the vehicle engine, measure the voltage. Connector B2, PIN A2 and A3: If the voltage is <10 volt or <20 volt, then check the fuses, the supply cables, the negative connections and the positive support point at the battery for voltage drop (corrosion).
012	Overheating	 Overheating sensor signals temperature greater than 120 °C. Vent heater (water shortage), open heater slide valve, check water flow rate. Measure the resistive value of the overheating sensor, connector B1, PIN 2 and 4, for measured values see page 28. If overheating sensor ok, check connection leads for continuity, short circuit and damage.
014	Difference between the overheating and temperature sensor is too large	 Difference between measured value in overheating sensor and temperature sensor greater than 70 K. Vent heater (water deficiency), open heater slide valve and check water flow rate. Measure the resistive value of the temperature sensor, connector B1, PIN 2 and 4 or connector B1 PIN 1 and 2; for measured values see page 28. If temperature sensor ok, check connection leads for continuity, short circuit and damage.
015	Operating lock-out: Too many overheating events detected.	Delete error to cancel the operating lock-out.Check water circuit and flow rate.
017	Overheating, Hardware threshold exceeded Control box is locked	 Max. temperature exceeded at the overheating sensor (180 °C). Vent heater (water shortage), open heater slide valve, check water flow rate. Check overheating sensor -> fault code 012. Check control box.
019	Glow plug 1, Ignition energy too low	 Glow plug 1 energy input is too low (< 2000 Ws) Check glow plug for continuity, short circuit and damage —> Fault code 020. Check control box.
020 021 022	Glow plug 1, interruption Glow plug 1, overload / short circuit downstream of earth Glow plug 1, short circuit down- stream of +Ub	 Measure cold resistance of the glow plug at approx. 20 °C ambient temperature – connector B1, PIN 7 and 10. If the values are as follows the glow plug is ok, if the values differ – replace the glow plug. Measured value: 12 volt – glow plug = 0.42 – 0.6 ohm 24 volt – glow plug = 1.2 – 1.9 ohm If the glow plug is ok, check the lead harness of the glow plug for continuity, short circuit and damage.

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Fault code Display	Fault description	Comments Remedial action
023 024	Glow plug 2, interruption Glow plug 2, overload / short circuit downstream of earth	 Measure cold resistance of the glow plug at approx. 20 °C ambient temperature – connector B1, PIN 11 and 14. If the values are as follows the glow plug is ok, if the values differ – replace the glow plug. Measured value: 12 volt – glow plug = 0.42 – 0.6 ohm 24 volt – glow plug = 1.2 – 1.9 ohm If the glow plug is ok, check the lead harness of the glow plug for continuity, short circuit and damage.
025	JE-K line fault Heater remains ready for operation	 Check diagnostics cable for continuity, short circuit and damage – connector B2, PIN B4. – if ok, check control box.
026	Glow plug 2, short circuit down- stream of +Ub	see fault code 023 / 024
029	Glow plug 2, Ignition energy too low	 Glow plug 2 energy input is too low (< 2000 Ws) Check glow plug for continuity, short circuit and damage. – > Fault code 023. Check control box.
031 032 033	Burner motor, interruption Burner motor, overload Burner motor, speed error / blocked	 Check the burner motor's connection leads for continuity, short circuit and damage – connector B1, PIN 3, 6 and 9. Check burner motor for easy movement by manually rotating the impeller – if not smooth running, remove the blockage. – if ok, replace control box / blower unit.
034	Burner motor short circuit downstream of +Ub or earth	
037	Water pump not working	 Check water pump. Apply voltage to the water pump – connector B1, PIN 12 and 13 (power input = max. 4 A or 2 A) If WP does not rotate, replace WP. If WP is ok -> replace control box / blower unit.
041 042 043	Water pump, interruption Water pump Overload short circuit Water pump Overload downstream of +Ub	 Check the water pump's connection and lead harness for continuity, short circuit and damage – connector B1, PIN 12 and 13. If ok, check water pump —> fault code 037. Water pump in dry running Vent heater (water shortage), open heater slide valve, check water flow rate
047 048 049	Metering pump Overload short circuit Metering pump interruption Metering pump Overload downstream of +Ub	 Check the metering pump's connection and lead harness for continuity, short circuit and damage – connector B2, PIN A1. If ok, check the metering pump – setpoint value approx. 20 ohm.
050	Operating lock-out: Too many start attempts detected.	 Delete error to cancel the operating lock-out. Check fuel supply. Remove combustion chamber and check for carbonization / soot formation, replace if necessary.
052	Exceeding of safety time	 No flame detected within the start phase. Flame sensor value < 80 °C, therefore automatic shutdown because safety time exceeded. Check fuel supply, exhaust and combustion air system. Check glow plug -> see fault code 019 to 024 / 026 / 029. Check flame sensor -> fault code 064 / 065.

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Fault code Display	Fault description	Comments • Remedial action
053	Flame cutout in "POWER" control stage	Heater ignited (flame detected) and signals flame cutout during a power stage.
054	Flame cutout in "HIGH" control stage	 Check fuel quantity, blower speed, fuel supply, exhaust and combustion air system. Check flame sensor -> fault code 064 / 065.
055	Flame cutout in "Medium" control stage (D 8 W / D 10 W) "Medium1" control stage (D 12 W)	
056	Flame cutout in "Medium 2" control stage (D 12 W)	
057	Flame cutout in "Medium 3" control stage (D 12 W)	
058	Flame cutout in "LOW" control stage	
059	Too rapid rise in water temperature	 Vent heater (water shortage), open heater slide valve, check water flow rate. Check temperature sensor -> fault code 060 / 061
060 061	Temperature sensor interruption Temperature sensor short circuit	 Temperature sensor signals temperature value outside the measuring range. Measure the resistive value of the temperature sensor, Connector B1, PIN 1 and 2; for measured values see page 28. If temperature sensor ok, check connection leads for continuity, short circuit and damage.
064 065	Flame sensor interruption Flame sensor short circuit	 Flame sensor signals temperature value outside the measuring range. Measure the resistive value of the flame sensor – connector B1, PIN 5 and 8; for measured values see page 29. If flame sensor ok, check connection leads for continuity, short circuit and damage.
071	Overheating sensor interruption	Overheating sensor signals temperature value outside the measuring range.Check overheating sensor -> fault code 012.
072	Overheating sensor short circuit Overheating detection hardware is defective, operating lock-out	Control box is defective. Replace control box / blower unit.
090	External reset	Control box reset by external interference voltage. Check voltage supply, e.g. battery, leads, generator, fuses.
091 092	Internal reset ROM error	Internal control box fault, replace control box / blower unit.
093	RAM error, at least one RAM cell is not working	
094	EEPROM error, checksum error within the area of the operating data, diagnostic parameters or cali- bration values	
095	Invalid data record, checksum error	
096	Internal temperature sensor is de- fective / ECU too hot	
097	Internal device error	
098	Main relay is faulty	
099	Too many resets, operating lock-out	

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