

Eberspacher Air Heater V7S Fault Codes

4 TROUBLESHOOTING

| FAULT CODE DISPLAY | FAULT DESCRIPTION | COMMENTS ▪ REMEDIAL ACTION |
|--------------------|---|--|
| 000 | No fault | — — |
| 001 | Early warning, overvoltage | Voltage between A3 and A4 at control box is higher than 28 V. |
| 002 | Early warning, undervoltage | Voltage between A3 and A4 at control box is lower than 22 V. |
| 010 | Overvoltage shutdown | Voltage between A3 and A4 at control box is higher than 29.4 V (voltage values must be applied for longer than 20 sec.). ▪ Check battery, controller and electrical supply leads. |
| 011 | Shutdown due to undervoltage (heater not functioning) | Voltage between A3 and A4 at control box is lower than 21 V (voltage values must be applied for longer than 20 sec.). ▪ Check battery, controller and electrical supply leads. |
| 012 | Overheating or metering pump interruption (B12) | ▪ Check connection of control box B12 up to the metering pump for continuity. – Check overheating switch (switching value 70 °C and 90 °C). – Check hot air pipes for blockage, if necessary remove blockage. |
| 020 | Glow plug interruption | ▪ Check glow plug, replace if necessary. ▪ Check connection of control box A1 up to the ignition spark generator and glow plug for continuity. PLEASE NOTE! Interruption in the glow coil alone is not detected due to ignition spark generator connected in parallel. |
| 025 | Diagnostic output short circuit (B4) | Check connection at control box B4 up to amplifier for short circuit to plus (positive pole). |
| 029 | Burner motor is defective | Speed difference for longer than 240 seconds: |
| 032 | | Speed < 40 % compared to setpoint value (motor does not turn). |
| 033 | | ▪ Use analog voltmeter to measure voltage while blower is running. – If voltage is applied but motor is not running, the replace motor. |
| 036 | Air solenoid valve relay short circuit (B6) | Check connection of control box B6 up to the connection of relay 2.5.15. for short circuit. ▪ If ok ⇒ replace relay. |
| 047 | Short circuit in metering pump | ▪ Check connection of control box B12 up to the metering pump for short circuit. ▪ Check metering pump, replace if necessary. |
| 052 | No start – safety time limit exceeded | ▪ No flame detected within the start phase. Flame sensor value < 100 °C (1380 Ω). ▪ Check fuel supply and glow plug. ▪ Check exhaust and combustion air system. ▪ Check flame sensor, flame sensor values, see Page 10 . |
| 054 | Flame cutout in high stage | Heater has ignited (flame detected) and signals flame cutout during a power stage. Check fuel quantity, blower speed and fuel supply. ▪ Check exhaust and combustion air system, If combustion ok ⇒ check flame sensor, diagram of flame sensor values, see Page 10 . |
| 056 | Flame cutout in low stage | |

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|--------------------------|--|--|
| 060 061 | Temperature sensor interruption (B3) Temperature sensor short circuit (B3) | Temperature sensor signals temperature value outside the measuring range. ▪ Check connection cables: – Ohmic value between B2 and B3 > 3000 Ω (in case of interruption) – Ohmic value between B2 and B3 > 260 Ω (in case of short circuit) ▪ For diagram of temperature sensor values, see Page 10 . |
| 062 063 | Setpoint potentiometer interruption (B6) Setpoint potentiometer short circuit (B6) | Potentiometer of the control unit signals setpoint outside of the control range. ▪ Check connection cables: – Ohmic value between B2 and B3 > 3000 Ω (in case of interruption) – Ohmic value between B2 and B3 > 260 Ω (in case of short circuit) ▪ Normal values: 680 Ω – 1150 Ω. |
| 064 065 | Flame sensor interruption (B10) Flame sensor short circuit (B10) | Flame sensor signals temperature value outside the measurement range. ▪ Check connection cables: – Ohmic value between B2 and B3 > 3000 Ω (in case of interruption) – Ohmic value between B2 and B3 > 200 Ω (in case of short circuit) ▪ For diagram of flame sensor values, see Page 10 . |
| 091 | Fault due to external interference voltage (reset) | Control box fault due to interference voltages from the vehicle's electrical system. Possible causes: Poor battery, charger, other interference sources. ▪ Remove interference voltages. |
| 090 092 093 094 | Control box is defective (internal fault / reset) Control box is defective (ROM error) Control box is defective (RAM error) Control box is defective (EEPROM error) | Internal error found in the microprocessor / memory. ▪ Replace control box. |
| 255 | Control box fault memory deleted | The fault memory has been overwritten by external interference voltages. ▪ Remove interference voltages. |