

Eberspacher D7W Error Fault Codes



Function and fault test for unit B 7 W 20 1673 05 00 00 – 12 Volt,
D 7 W 25 1666 05 00 00 – 12 Volt and 25 1667 05 00 00 – 24 Volt

Fault description	Indication		Cause	Remedy
	Signal	Seconds		
Start, heating phase (trouble-free operation)				
Normal operation (trouble-free operation)				
Delayed shut-off, restart (heater still not shut off or in the control interval when started)			Heater still not shut off Water temperature still above the triggering point for the temperature sensor (approx. 80 °C) Temperature sensor interruption	Wait until end of delayed shut-off Wait until temperature falls below the triggering point Replace temperature sensor
Warning: power supply (undervoltage or overvoltage)			Undervoltage Overvoltage	Charge battery Check regulator
Overheat (automatic cutout)			Electric line to metering pump interrupted Insufficient cooling water Water circuit not properly bled Water pump defective	Check line Top up cooling water Bleed water circuit Replace water pump Operate safety thermal cutout switch
Flame sensor defective (short-circuit)			Flame sensor defective	Replace flame sensor
Flame out L o w (flame goes out by itself in „Low“ setting)			Insufficient fuel Speed of blower not reduced Vapour lock in the fuel line? Control unit defective Flame sensor fouled/defective	Measure fuel quantity Replace partial-load resistor Re-route line Replace control unit Clean/replace flame sensor
Flame out H i g h (flame goes out by itself in „High“ setting)			Insufficient fuel Vapour lock in the fuel line? Flame sensor fouled/defective	Measure fuel quantity Fuel line becomes too hot – re-route line Clean/replace fuel sensor



**Function and fault test for unit B 7 W 20 1673 05 00 00 – 12 Volt,
D 7 W 25 1666 05 00 00 – 12 Volt and 25 1667 05 00 00 – 24 Volt**

Indication	Cause	Remedy
<p>Faults not shown by the indicator:</p>		
<p>Sooty combustion</p>	<p>Combustion air line/exhaust line clogged Metering pump conveying too much Combustion air blower speed too low Deposits in heat exchanger</p>	<p>Remove clog Measure fuel quantity Replace blower Remove and clean heat exchanger</p>
<p>Heater does not regulate in „Low“ setting No warm air in interior</p>	<p>Temperature sensor short-circuited (vehicle blower does not switch on above approx. 55°C water temperature) Heater lever closed Vehicle blower not switched on Vehicle blower relay defective Vehicle blower fuse defective</p>	<p>Remove temperature sensor Open heater lever Switch on vehicle blower Replace relay Replace fuse</p>

**Function and fault test for unit D 7 W 25 1807 05 00 00 – 12 Volt
(Control unit 25 1732 50 00 04 0C)**

		Indication								Remedy	
Fault code	Fault description	Fault signal / flashing code									
		0	1	2	3	4	5	6	7	8	
000	No fault	[Solid bar from 0 to 8]									
001	Pre-heating, overvoltage	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar from 2 to 8]							Voltage at control unit (between A12 and B12) greater than 14.5 V
002	Pre-heating, undervoltage	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar from 2 to 8]							Voltage at control unit (between A12 and B12) less than 11 V
010	Overvoltage switch-off	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar 2-3]	[Solid bar 3-4]						Voltage at control unit (between A12 and B12) greater than 15 V for longer than 20 sec.
011	Undervoltage switch-off	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar 2-3]							Voltage at control unit (between A12 and B12) less than 10.2 V for longer than 20 sec.
012	Overheating	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar 2-3]	[Solid bar 3-4]	[Solid bar 4-5]	[Solid bar 5-6]	[Solid bar 6-7]	[Solid bar 7-8]		Overheating switch has triggered, vent heater (lack of water), open heating valve, check water flow and switch
013	Temperature at heat exchanger to high	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar 2-3]	[Solid bar 3-4]	[Solid bar 4-5]	[Solid bar 5-6]	[Solid bar 6-7]	[Solid bar 7-8]		Flame sensor has reported temperature > 560 °C (corresponding to 3000 Ω). Check sensor (connections A4 and A5 at control unit).
020	Glow plug defect	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar 2-3]							Check glow plug. Check connections to glow plug and to glow plug relay (2.5.5). Check connection to control unit.
022	Short circuit in current regulator contacts	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar 2-3]							Check glow plug relay (current regulator). Check connection to glow plug, check connection to control unit.
023	Interruption in current regulator	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar 2-3]							Check coil connection to glow plug relay (connections 85 and 86). Check connection to control unit (connection B6).
024	Short circuit in current regulator coil	[Solid bar 0-1]	[Solid bar 1-2]	[Solid bar 2-3]	[Solid bar 3-4]	[Solid bar 4-5]	[Solid bar 5-6]	[Solid bar 6-7]	[Solid bar 7-8]		Check coil connection at glow plug relay (connections 85 and 86). Check connection to control unit (connection B6).



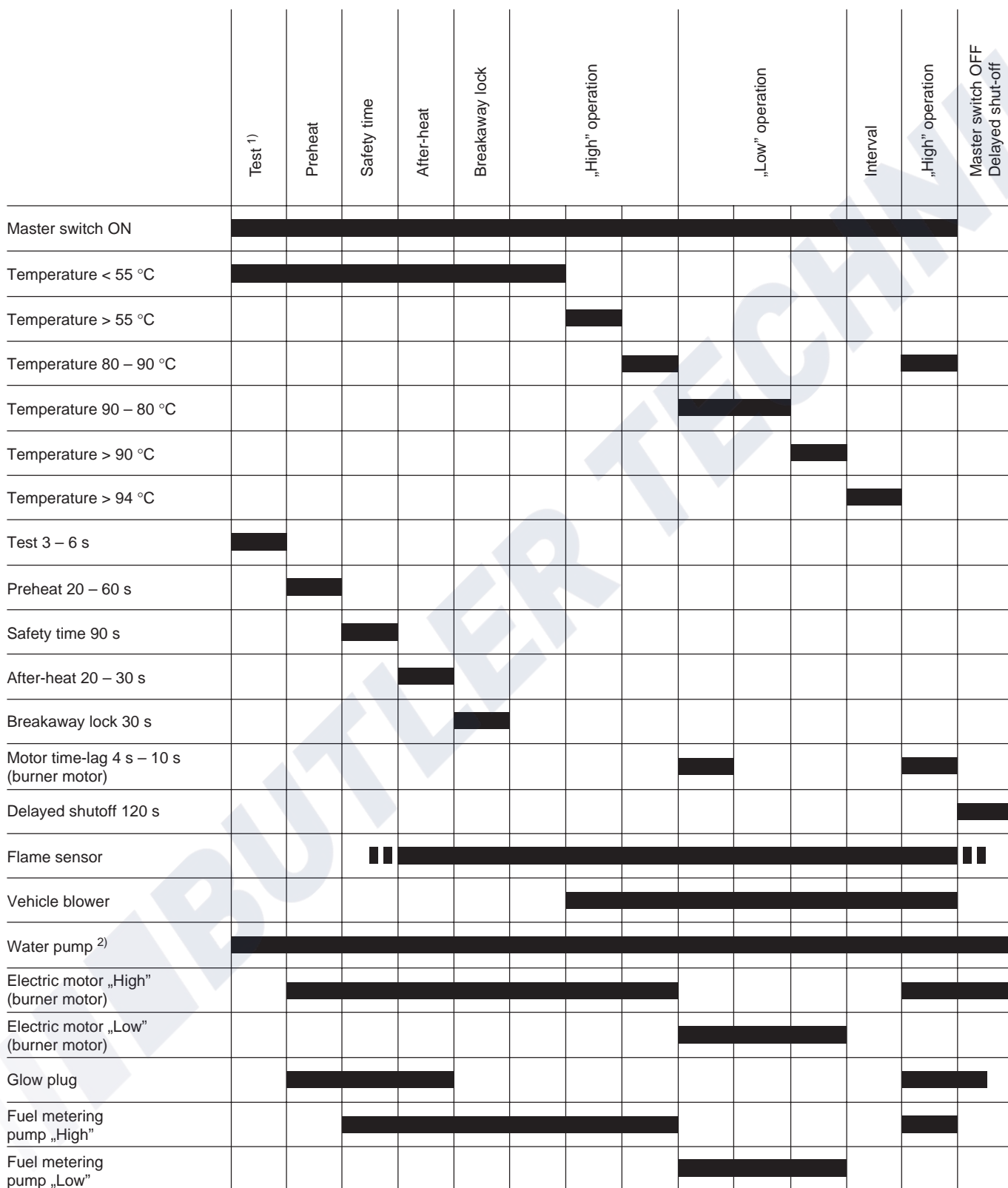
**Function and fault test for unit D 7 W 25 1807 05 00 00 – 12 Volt
(Control unit 25 1732 50 00 04 0C)**

		Indication								Remedy	
Fault code	Fault description	0	1	2	3	4	5	6	7		8
025	Short circuit at diagnosis output				No flashing code						Check diagnosis lead (connection A1 at control unit). Check connection to control unit.
030											
031	Combustion air fan does not rotate	█									Check combustion air fan. Check motor speed relay (2.5.8). Check connection to control unit (connections A11 and B1).
032											
033											
037	Water pump does not rotate	█	█	█	█	█					Check water pump (external triggering). Check connections to control unit (connections A11 and A13).
047	Short circuit in metering pump	█	█	█	█	█					Check metering pump. Check connections to control unit (connections A10 and B10).
051	Flame sensor defect	█									Temperature at flame sensor does not fall below 80 °C (corresponding to 1300 Ω). Check flame sensor or combustion, possibly replace. (Setpoints: 900 Ω to -25 °C, 1100 Ω to +25 °C).
052	Failure to start/safety time expired	█	█	█	█	█					See D 9 W
053	Flame abort in "large" stage	█	█	█	█	█					See D 9 W
055	Flame abort in "small" stage	█	█	█	█	█					See D 9 W
059	as D 9 W										See D 9 W

**Function and fault test for unit D 7 W 25 1807 05 00 00 – 12 Volt
(Control unit 25 1732 50 00 04 0C)**

		Indication								Remedy	
Fault code	Fault description	0	1	2	3	4	5	6	7		8
060	Interruption in temperature sensor	█	█	█	█	█	█	█	█	█	Measured temperature lies outside measuring range. Check sensor. (Setpoints: 650 Ω at -25 °C, 1000 Ω at +25 °C). Check connections to control unit (connections A5 and A6).
061	Short circuit in temperature sensor	█	█	█	█	█	█	█	█	█	
064	Interruption in flame sensor	█	█	█	█	█	█	█	█	█	Measured temperature lies outside measuring range. Check sensor. (Setpoints: 900 Ω at -25 °C, 1100 Ω at +25 °C). Check connections to control unit (connections A4 and A5).
065	Short circuit in temperature sensor	█	█	█	█	█	█	█	█	█	
090	Control unit defect (internal reset)										Replace control unit.
092	ROM fault										
093	RAM fault										
094	EEPROM fault										
095	Control unit defect (general fault)										
096	Control unit defect (general fault)										
097	Control unit defect or cable harness fault	█	█	█	█	█	█	█	█	█	Check and where necessary replace control unit. Check cable harness.
091	External interference voltage	█	█	█	█	█	█	█	█	█	
<p>For faults not shown here, please see page 5</p>											

Function sequence „Starting and control operation”



¹⁾ not for unit 25 1807 05 00 00

²⁾ for unit 25 1807 05 00 00: no water pump during test