

Diagnosis – Diagnostic Trouble Code (DTC) Memory

Preparation for Test (DTC readout):

1. Fuses OK.
2. Ignition: **ON**
3. Connect Hand-Held Tester (HHT) according to connection diagram shown in section 0.
4. Voltage supply to control modules and CAN data lines ok, see 23,
5. All CAN data lines must be connected.



The diagnostic trouble codes (DTC's) can only be read out and erased using the Hand-Held Tester (HHT).

DTCs for the system being checked may be located in other control modules, therefore it is important to check the DTC memory on all control modules that are relevant to the system being checked.

While performing the DTC readout, it is possible that DTCs may appear that are not relevant to the system being checked, meaning that all stored DTCs in that particular control module are being displayed.

Non-relevant DTCs are described in each system as necessary.

Note regarding Diagnostic Trouble Codes (DTC's):

Current diagnostic trouble codes are highlighted in black on the display.

Additional detailed fault information based on fault type is displayed with nearly all diagnostic codes (DTC's) such as:

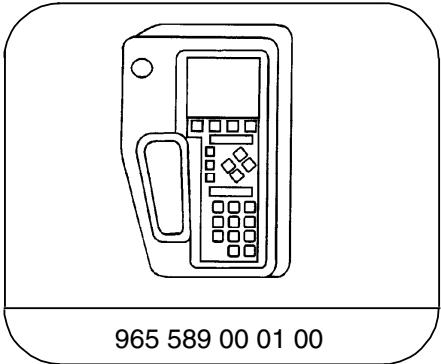
> Ω	Resistance too great
< Ω	Resistance too low
ΓΓ–	Short circuit to ground (GND)
ΓΓ+	Short circuit to positive (POS)
–//–	Open circuit

Fault frequency

Faults are noted by frequency of occurrence, i.e.: 4 periodic faults, 4 occurrences.

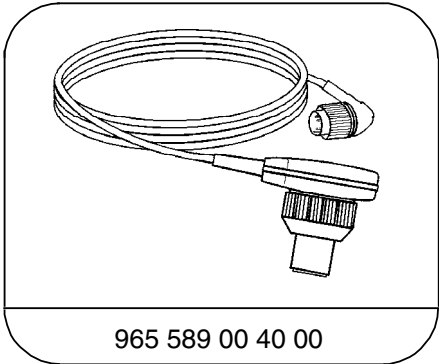
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Special Tools



965 589 00 01 00

Hand-Held-Tester



965 589 00 40 00


Test cable

Conventional tools, test equipment

Description	Brand, model, etc.
Multimeter ¹⁾	Fluke models 23, 83, 85, 87, 88


¹⁾ Available through the MBUSA Standard Equipment Program.

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DTC 	Possible cause	Test step/Remedy ¹⁾
B1000	Electronic ignition lock control module (N73)	Replace N73
B1000	Roof control panel control module (N70)	Replace N70
B1000	Signal pick-up and activation module (SAM) (N10/1)	Replace N10/1
B1010	Low voltage	23 ⇒ 1.0–11.0
B1011	Excessive voltage	23 ⇒ 1.0–11.0
B1507	CAN: communication fault between electronic ignition lock control module (N73) and Roof control panel control module (N70)	23 ⇒ 54.0–62.0, 64.0, 67.0, 89.0–96.0
B1509	CAN: communication fault between electronic ignition lock control module (N73) and Signal pick-up and activation module (SAM) (N10/1)	23 ⇒ 89.0–96.0
B1141	HCS switch (S4/1), signal > 25 seconds	23 ⇒ 122.0
B1142	Tailgate window wiper switch (S6/1s4), signal > 25 seconds	23 ⇒ 121.0

¹⁾ Observe Preparation for Test, see 22.

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DTC 	Possible cause	Test step/Remedy ¹⁾
B1217 000	Rain sensor (B38), no communication	23 ⇒ 112.0–114.0
B1217 001	Rain sensor (B38) faulty	Replace B38
B1217 002	Rain sensor (B38) not adapted to windshield (IR beam functional problems)	Clean windshield, Replace wiper blade insert, B38, Replace optical unit of B38, replace windshield.
B1217 003	Excessive windshield surface temperature	Windshield temperature > 65° C (148° F), replace B38
B1217 004	Sporatic faults	if often, replace B38
B1217 006	Wiper system operation not synchronised	Erase DTC memory, Operate windshield wiper through 40 cycles.
B1483	Activation of windshield washer relay (K40/2k3) Γ1+, Γ1– (tailgate)	23 ⇒ 116.0–118.0
B1484	Activation of windshield washer relay (K40/2k3) Γ1– (windshield)	23 ⇒ 109.0
B1643	Rain sensor (B38) no communication	23 ⇒ 113.0–115.0
B1729	PSE control module (A37), combined functions	Replace A37

¹⁾ Observe Preparation for Test, see 22.

7.1 Networked Systems (NS) (CAN)

Models 202, 208, 210 as of M.Y. 1998

Diagnosis – Diagnostic Trouble Code (DTC) Memory


DTC 	Possible cause	Test step/Remedy ¹⁾
B1000	Roof control panel control module (N70)	Replace N70
B1010	Low voltage	23 ⇒ 1.0–11.0
B1011	Excessive voltage	23 ⇒ 1.0–11.0
B1143	Dome lamp switch on/off (N70s4), signal > 25 seconds, Γ1	See 13
B1144	Work lamp switch on/off (N70s5), signal > 25 seconds, Γ1 Model 208.4 only: Left front work lamp switch on/off (N70s6), signal > 25 seconds, Γ1 Right front work lamp switch on/off (N70s7), signal > 25 seconds, Γ1	See 13
B1145	Door switch on/off (N70s3), signal > 25 seconds, Γ1	See 13
B1146	Rear dome lamp switch on/off (N70s2), signal > 25 seconds, Γ1	See 13
B1212	Voltage supply for left and right vanity mirror, Γ1	Wiring, Replace N70
B1407	Entrance/exit lamps (E17)	23 ⇒ 130.0 23 ⇒ 131.0

¹⁾ Observe Preparation for Test, see 22.

7.1 Networked Systems (NS) (CAN)

Models 202, 208, 210 as of M.Y. 1998

Diagnosis – Diagnostic Trouble Code (DTC) Memory

DTC 	Possible cause	Test step/Remedy ¹⁾
B1000	Signal pick-up and activation module (SAM) (N10/1)	Replace N10/1
B1010	Low voltage	23 ⇒ 1.0–11.0
B1011	Excessive voltage	23 ⇒ 1.0–11.0
B1115	Heated rear window switch, signal > 25 seconds, Γ1 +	23 ⇒ 133.0
B1729	PSE control module (A37), combined functions	Replace A37

¹⁾ Observe Preparation for Test, see 22.