Diagnosis – Diagnostic Trouble Code (DTC) Memory

ℹ️

- The A/C pushbutton control module (N22) has DTC memory and data output. The diagnostic trouble codes and data are displayed via the temperature display window. The stored DTC's will remain in memory even with the vehicle battery disconnected.
- The DTC memory differentiates between current and intermittent faults.
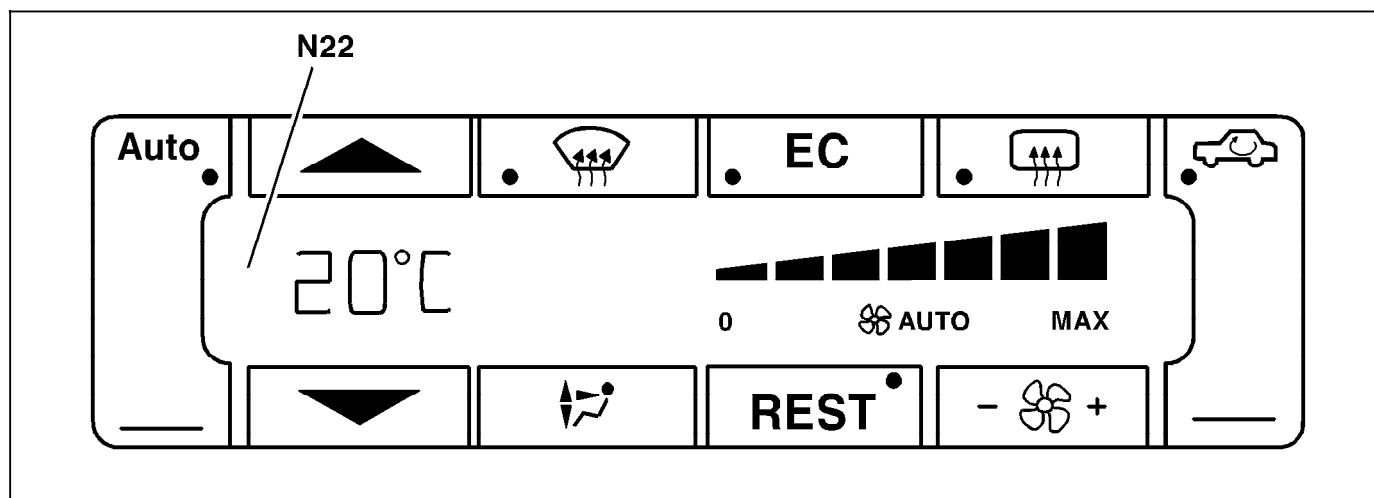- All DTC's can also be read with the Hand-Held Tester (HHT).

Figure 1

P83.40-2028-04

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Preparations for DTC Readout

1. Review 11, 12, 14, 15, 20, 21, 22, 31, 32, 41

2. Ignition: **ON**

3. Temperature selector ″L0″.

4. Within 20 seconds press **REST** and ▦ simultaneously for more than 5 seconds.

5. The LED in ⬬ flashes and the display reads ″di A″.

6. Press **AUTO** repeatedly until all DTC's are displayed. Record each DTC as it is displayed. The current faults (refer to table) are displayed first, next, the intermittant failures (e.g. 45 °5) are displayed in the display window next to the ▦ symbol. End ° will apppear after the last DTC is displayed.
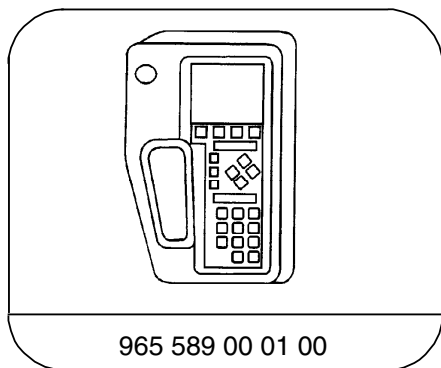   Press **AUTO** again, dEl (delete, erase) will be displayed.

7. To erase: Press ◣ and simultaneously for more than 5 seconds and the display shows "-- -".
   To cancel erase: By pressing **AUTO** the current faults will appear again.
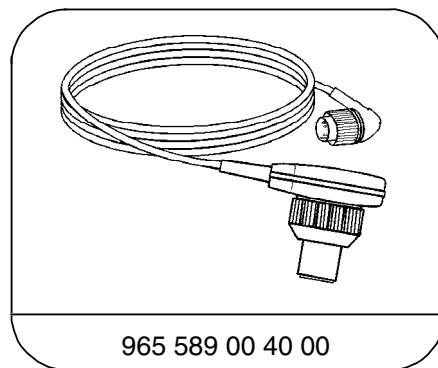
8. Turn ignition **OFF** to end test.

ⓘ

Due to instrument cluster (IC) serial interface K1, K2; DTC's may be stored in IC memory, therefore readout and erase DTC memory.

Diagnosis – Diagnostic Trouble Code (DTC) Memory

Special Tools

965 589 00 01 00	965 589 00 40 00
Hand-Held-Tester	Test cable

Diagnosis – Diagnostic Trouble Code (DTC) Memory

Diagnostic trouble code (DTC) N22		Possible cause	Test step/Remedy [1]
-	-	No malfunction in system	–
226	B1226	In-car temperature sensor (B10/4)	23 ⟹ 4.0
227	B1227	Outside temperature indicator temperature sensor (B14)	23 ⟹ 10.0
228	B1228	Left heater core temperature sensor (B10/2)	23 ⟹ 7.0
230	B1230	Evaporator temperature sensor (B10/6)	23 ⟹ 5.0
231	B1231	ECT sensor (B11/4)	23 ⟹ 10.0
232	B1232	Refrigerant pressure sensor (B12)	23 ⟹ 8.0
233	B1233	Refrigerant temperature sensor (B12/1)	23 ⟹ 6.0
241	B1241	Refrigerant fill	23 ⟹ 6.0, 8.0
416	B1416	Coolant circulation pump (M13)	23 ⟹ 18.0
417	B1417	Automatic A/C monovalve (Y19)	23 ⟹ 19.0

[1]   Observe Preparation for Test, see 22.

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Diagnostic trouble code (DTC)		Possible cause	Test step/Remedy [1]
N22			
419	B1419	Electromagnetic clutch (A9k1)	23⟹ 21.0
420	B1420	Idle speed increase	-
421	B1421	AIR control module (N65/1)	23⟹ 16.0
422	B1422	Serial interface K1	23⟹ 10.0
423	B1423	Switchover valve block (15 connection multiplex) (Y11)	23⟹ 22.0
459	B1459	Serial interface K2	23⟹ 23.0

[1]   Observe Preparation for Test, see 22.