### Diagnosis – Diagnostic Trouble Code (DTC) Memory

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- 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).



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#### **Preparations for DTC Readout**

- 1. Review 11, 12, 14, 15, 20, 21, 23, 31, 33, 31
- 2. Connect HHT, see section 0, readout DTC's. DTC'S which are transmitted via the instrument cluster (IC) series interface, must be readout and the DTC's noted via the DTC memory in the instrument cluster, finally erase the DTC's.
- 3. Ignition: **ON**
- 4. Temperature selector "L0".
- 5. Within 20 seconds press **REST** and **W** simultaneously for more than 5 seconds.
- 6. The LED in set flashes and the display shows "di  $\mathbb{R}$ ".
- 7. Press Auro 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 Auro again, dEL (delete, erase) will then appear in display.

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

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Special Tools



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Diagnostic trouble code (DTC) N22		Possible cause	Test step/Remedy 1)
-	-	No malfunction in system	-
026	81026	CAN communication	Wiring.
226	81552	In-car temperature sensor (B10/4)	23⇒ 4.0
227	BI227	Outside temperature indicator temperature sensor (B14)	23⇒ 10.0
228	81558	Heater core temperature sensor (B10/1)	23⇒7.0
230	81530	Evaporator temperature sensor (B10/6)	23⇒ 5.0
23I	81531	ECT sensor (B11/4)	23⇒ 10.0
232	81535	Refrigerant pressure sensor (B12)	23⇒ 8.0
233	81533	Refrigerant temperature sensor (B12/1)	23⇒6.0
241	81241	Refrigerant fill	23⇒ 8.0, 6.0
416	вічіб	Coolant circulation pump (A31m1)	23⇒ 14.0
417	ВІЧІЛ	Left-side water valve (Y21y1)	23⇒ 15.0
418	81418	Right-side water valve (Y21y2)	23⇒ 15.0
419	81419	Electromagnetic clutch (A9k1)	23⇒ 17.0
420	81420	Idle speed increase	-
421	81421	Pulse module (N65)	23⇒ 11.0

<sup>1)</sup> Observe Preparation for Test, see 22.

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Diagnostic trouble code (DTC)		Possible cause	Test step/Remedy 1)
N22			
422	B1422	Serial interface (K1)	23⇒ 10.0
451	81451	Diverter flap (Y11/3)	23⇒ 20.0
452	B1452	Blend air flap (Y11/3)	23⇒21.0
453	81453	Fresh/recirculated airflap (Y11/3) (long stroke)	23⇒ 24.0
454	81454	Fresh/recirculated airflap (Y11/3) (short stroke)	23⇒ 25.0
455	81455	Defroster outlet flap (Y11/3) (long stroke)	23⇒ 18.0
456	81456	Defroster outlet flap (Y11/3) (short stroke)	23⇒ 19.0
457	81457	Footwell flap (Y11/3) (long stroke)	23⇒ 22.0
458	81458	Footwell flap (Y11/3) (short stroke)	23⇒ 23.0
459	81459	Serial interface (K2)	23⇒ 11.0
462	81462	Wide open throttle (WOT) signal diesel engines	-

<sup>1)</sup> Observe Preparation for Test, see 22.