

Diagnosis – Reading Actual Values (via A/C Pushbutton Control Module [N22])



1. The display window will show in sequence the actual temperature readings, refrigerant pressure, blower control voltage and software status of the A/C pushbutton control module (N22).
2. The temperature control is maintained during the duration of the test.

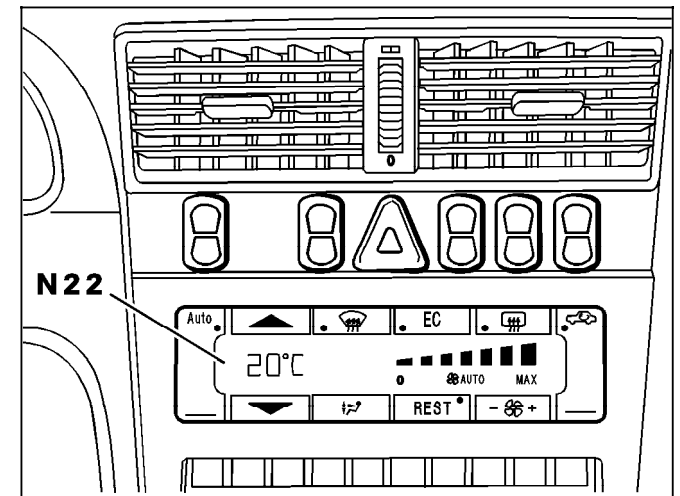



Figure 1

P83.40-0313-01

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Preparation for Test

1. Review 11, 12, 14, 15, 20, 21, 23, 31, 33, 31
2. Ignition: **ON**
2. Set temperature selection to 72 °F.
3. Press **REST** for more than 6 seconds.
4. The left side of the display window will alternately display the number "01" and the in-car temperature (e.g. 72 °F)
5. By pressing  + the next highest test step is displayed (see table).
6. Press **REST** to end test program.

Note:


The display will, or "OP E" if there is an open circuit, "CL 0" if there is a short circuit.

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Display code in N22 window 	Possible cause	Test step/Remedy ¹⁾
01 01	In-car temperature sensor (B10/4)	23 ⇒ 4.0
02 02	Outside temperature indicator temperature sensor (B14)	23 ⇒ 10.0
03 03	Heater core temperature sensor (B10/1)	23 ⇒ 7.0
05 06	Evaporator temperature sensor (B10/6)	23 ⇒ 5.0
06 05	ECT sensor (DFI, IFI) (B11/4)	23 ⇒ 10.0
07 07	Refrigerant pressure in bar, e.g. 06 °4 corresponds to 6.4 bar	23 ⇒ 8.0
08 08	Refrigerant temperature sensor (B12/1), e.g. 73 °4 corresponds to 73.4 °F	23 ⇒ 6.0
09 -	Not used	-
10 13	Blower control voltage, e.g. 08 °0 (min) - 60 °0 (max) corresponds to 0.8 - 6.0 volts	23 ⇒ 15.0
20 -	Control current for auxiliary fan e.g. 7 corresponds to 7 mA	23 ⇒ 11.0
21 12	Engine speed, e.g. 00 . . 99 (x 100) corresponds to 9900 rpm	23 ⇒ 10.0
22 11	Vehicle speed 155 (km/h)	23 ⇒ 10.0
23 14	Terminal 58d e.g. 99 corresponds to 99 % battery voltage	-

1) Observe Preparation for Test, see 22.

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Display code in N22 window 	Possible cause	Test step/Remedy ¹⁾
40 ³⁾	Software status e.g. 37	-
41 ³⁾	Software status e.g. 08	-
42 ²⁾	Version code 1. number code e.g. 03	-
43 ²⁾	Version code 2. number code e.g. d1E = diesel/ bEn = benzin (gas)	-
50 -	not used	-
51 -	not used	-
52 -	not used	-
54 15	0n – 0FF A/C compressor emergency off signal from engine control module	23 ⇒ 10.0
- 16	Compressor WOT cut-off on diesel engines	-

- 1) Observe Preparation for Test.
- 2) Version code menu.
- 3) Control module identification.