
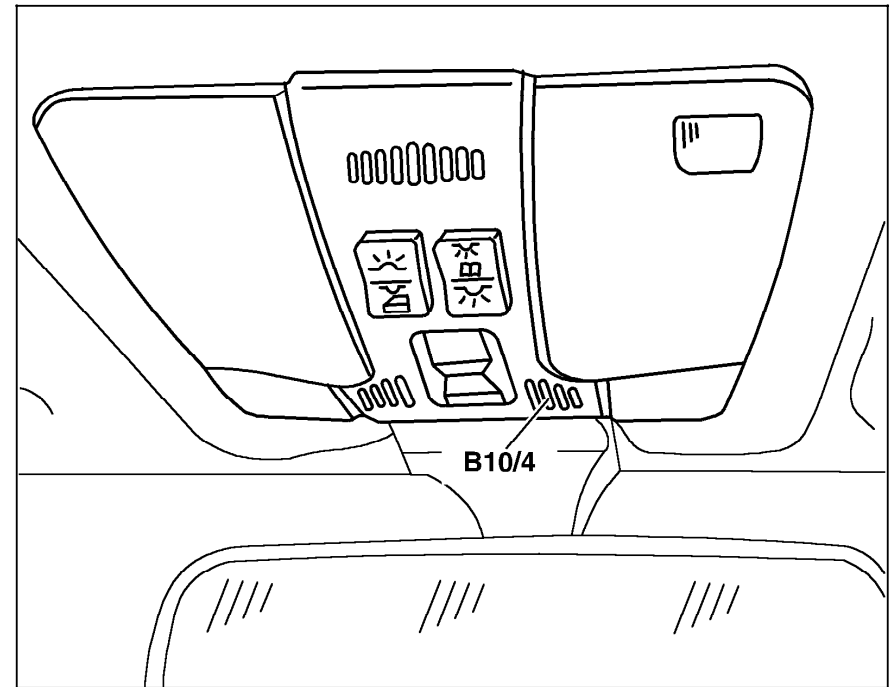


### Diagnosis – Function Test

#### Preparation for Test

1. Review 11, 12, 13, 14, 15, 20, 21, 22, 31, 32, 41, 42
2. Check condition of fuses F1/4, F1/7, F1/8
3. Check in-car temperature sensor aspirator blower (Figure 1) by placing a small piece of paper (arrow) approximately 1" square over in-car temperature sensor aspirator blower vent grille (B10/4) with ignition **ON**. If there is sufficient ventilation the paper will remain on the vent grille, if not check aspirator blower for voltage supply and function. The after-run time for the blower motor is greater than six seconds.
4. Run engine at closed throttle and operating temperature (approx. 80 °C engine coolant temperature) during entire test (ensure that the shift lever is in "P" and that the parking brake is engaged).
5. Manually open the center and side air outlets.
6. Ensure that the  button is **not depressed**.





P83.40-0437-11

Figure 1

B10/4 In-car temperature sensor

#### Diagnosis – Function Test

Test step/Test sequence	Test condition	Nominal value	Possible cause/Remedy <sup>1)</sup>
⇒ 1.0 Defrost	Press  Temperature selection at random setting	Blower runs with increased speed. Air venting from defroster outlets. A/C compressor engaged. Maximum heat output, 100% fresh air	23 ⇒ 9.0, 10.0, 14.0, 15.0, 18.0 20.0
⇒ 2.0 Ventilation in cooling mode	Press <b>AUTO</b> Temperature selection “L0”	Blower runs with increased speed. Air venting from center and side outlets. A/C compressor engaged, no heat output.	32 ⇒ Test A, B, C, 23 ⇒ 9.0, 14.0, 18.0, 20.0
⇒ 3.0 Normal setting in regulating mode	Press <b>AUTO</b> Temperature selection set at present in-car temperature.	Blower speed decreases. Air venting from defroster outlets, leak air from footwell outlets. A/C compressor engaged. Tempered air venting. Duovalve cycles and auxiliary coolant pump runs.	32 ⇒ Test A, B, C, 23 ⇒ 9.0, 14.0, 18.0, 19.0, 20.0
⇒ 4.0 Economy mode, no heating	Temperature selection “L0” Press <b>EC</b> Press 	Air venting from dash outlets (ambient temperature) A/C compressor OFF.	32 ⇒ Test A, B, C, 23 ⇒ 18.0, 19.0

1) Observe Preparation for Test, see 22.

#### Diagnosis – Function Test

Test step/Test sequence	Test condition	Nominal value	Possible cause/Remedy <sup>1)</sup>
⇒ 5.0 Economy in heating mode	Temperature selection "HI" Press <b>EC</b>	Air venting from footwell and side outlets left/right. Leak air from defroster outlets. Maximum heat output.	23 ⇒ 14.0, 15.0, 18.0, 19.0 32 ⇒ Testing A, B, C
⇒ 6.0 Residual engine heat utilization	Ignition: <b>OFF</b> Press <b>REST</b> Selected temperature > 79 °F (26 °C)	Heated air from footwell and side outlets, leak air from defroster outlets. Blower runs at low speed.	32 ⇒ Testing A, B, C, 23 ⇒ 14.0, 15.0, 16.0, 17.0, 18.0, 19.0, 23.0

1) Observe Preparation for Test, see 22.