

B1503: A/C Evaporator Air Temperature Sensor and/or Its Circuit Malfunction

Wiring Diagram



[A]: HVAC control module connector "G52" (harness side view)	2. Evaporator temperature sensor
1. HVAC control module	3. To other sensors

DTC Detecting Condition and Trouble Area

DTC Detecting Condition	Trouble Area
Evaporator temperature sensor signal voltage is more than or less than specified value for specified time continuously.	<ul style="list-style-type: none"> Evaporator temperature sensor circuit Evaporator temperature sensor HVAC control module

DTC Confirmation Procedure

- 1) Connect scan tool to DLC with ignition switch turned OFF.
- 2) Turn ON ignition switch and clear DTC using scan tool.
- 3) Check DTC.

DTC Troubleshooting

NOTE

When DTC B1502, B1511, B1512 and B1530 are indicated together, it is possible that "BLK/RED" wire circuit open.

Step	Action	Yes	No
1	<p>Evaporator temperature sensor signal circuit check</p> <p>1) Disconnect evaporator temperature sensor connector with ignition switch turned OFF.</p> <p>2) Check for proper connection to evaporator temperature sensor at "WHT/BLK" and "BLK/RED" wire terminals.</p> <p>3) If OK, measure voltage between "WHT/BLK" wire terminal of evaporator temperature sensor connector and vehicle body ground with ignition switch turned ON. Is voltage 4 – 6 V?</p>	Go to Step 5.	Go to Step 2.
2	<p>Evaporator temperature sensor signal circuit check</p> <p>1) Disconnect connector from HVAC control module with ignition switch turned OFF.</p> <p>2) Check for proper connection to HVAC control module connector at "G52-19" and "G52-13" terminals.</p> <p>3) If OK, measure resistance between "WHT/BLK" wire terminal of evaporator temperature sensor connector and "G52-19" terminal of HVAC control module connector. Is resistance below 5 Ω?</p>	Go to Step 3.	"WHT/BLK" wire open or high resistance circuit.
3	<p>Evaporator temperature sensor signal circuit check</p> <p>1) Measure resistance between "WHT/BLK" wire terminal of evaporator temperature sensor connector and vehicle body ground. Is resistance infinity?</p>	Go to Step 4.	"WHT/BLK" wire shorted to ground circuit.

Step	Action	Yes	No
4	<p>Evaporator temperature sensor signal circuit check</p> <p>1) Measure voltage between "WHT/BLK" wire terminal of evaporator temperature sensor connector and vehicle body ground with ignition switch turned ON. Is voltage 0 V?</p>	Go to Step 5.	"WHT/BLK" wire shorted to other circuit.
5	<p>Evaporator temperature sensor ground circuit check</p> <p>1) Connect HVAC control module connector with ignition switch turned OFF. 2) Measure resistance between "BLK/RED" wire terminal of evaporator temperature sensor connector and vehicle body ground. Is resistance below 5 Ω?</p>	Go to Step 7.	Go to Step 6.
6	<p>Evaporator temperature sensor ground circuit check</p> <p>1) Measure resistance between "G52-13" terminal of HVAC control module connector and vehicle body ground. Is resistance below 5 Ω?</p>	"BLK/RED" wire open or high resistance circuit.	HVAC control module faulty.
7	<p>Evaporator temperature sensor check</p> <p>1) Check evaporator temperature sensor referring to "A/C Evaporator Temperature Sensor Inspection: ". Is it in good condition?</p>	HVAC control module faulty.	Evaporator temperature sensor faulty.