

P0533: A/C Refrigerant Pressure Sensor Circuit High

Wiring Diagram

Refer to "DTC P0532: A/C Refrigerant Pressure Sensor Circuit Low".

DTC Detecting Condition and Trouble Area

DTC detecting condition	Trouble area
A/C refrigerant pressure sensor signal voltage is higher than specified value. (1 driving detection logic but MIL does not light up)	<ul style="list-style-type: none">• A/C refrigerant pressure sensor circuit• A/C refrigerant pressure sensor • MAP sensor• ECM

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) Start engine and warm up engine to normal operating temperature.
- 4) Run engine at idle and turn both A/C switch and heater blower switch ON (turn ON air conditioning) for 3 min. or more.
- 5) Check DTC and pending DTC.

Step	Action	Yes	No
1	Was "Engine and Emission Control System Check" performed?	Go to Step 2.	Go to "Engine and Emission Control System Check".
2	A/C refrigerant pressure sensor power supply circuit check 1) Disconnect connector from A/C refrigerant pressure sensor with ignition switch turned OFF. 2) Check for proper connection of A/C refrigerant pressure sensor at "GRY/RED", "RED/BLU" and "ORN" wire terminals. 3) Turn ON ignition switch, measure voltage between engine ground and "GRY/RED" wire terminal of A/C refrigerant pressure sensor connector. Is voltage 4 – 6 V?	Go to Step 4.	Go to Step 3.
3	A/C refrigerant pressure sensor power supply circuit check 1) Disconnect connectors from MAP sensor with ignition switch turned OFF. 2) Turn ON ignition switch, measure voltage between engine ground and "GRY/RED" wire terminal of A/C refrigerant pressure sensor connector. Is voltage 4 – 6 V?	Faulty MAP sensor.	"GRY/RED" wire is open or shorted to power circuit.
4	A/C refrigerant pressure sensor signal circuit check 1) Turn ON ignition switch, measure voltage between engine ground and "RED/BLU" wire terminal of A/C refrigerant pressure sensor connector. Is voltage 4 – 6 V?	Go to Step 6.	Go to Step 5.

Step	Action	Yes	No
5	A/C refrigerant pressure sensor signal circuit check 1) Disconnect connectors from ECM with ignition switch turned OFF. 2) Measure resistance between "RED/BLU" wire terminal of A/C refrigerant pressure sensor connector and "E01-55" terminal of ECM connector. Is resistance below 2 Ω ?	"RED/BLU" wire is shorted to power supply circuit.	"RED/BLU" wire is open or high resistance circuit.
6	A/C refrigerant pressure sensor ground circuit check 1) Turn OFF ignition switch, measure resistance between engine ground and "ORN" wire terminal of A/C refrigerant pressure sensor connector. Is resistance below 5 Ω ?	Go to Step 8.	Go to Step 7.
7	ECM ground circuit check 1) Remove ECM from its bracket with ECM connectors connected. 2) Measure resistance between engine ground and "E01-54" terminal of ECM connector. Is resistance below 5 Ω ?	"ORN" wire is open or high resistance circuit.	ECM grounds "C01-58", "C01-15", "C01-30" and/or "E01-31" is open or high resistance circuit.
8	A/C refrigerant pressure sensor check 1) Check A/C refrigerant pressure sensor referring to "A/C Refrigerant Pressure Sensor and Its Circuit Inspection: Manual Type in Section 7B" or "A/C Refrigerant Pressure Sensor and Its Circuit Inspection: Automatic Type in Section 7B". Is it good condition?	Substitute a known-good ECM and recheck.	Faulty A/C refrigerant pressure sensor.