DTC P0532:00 [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

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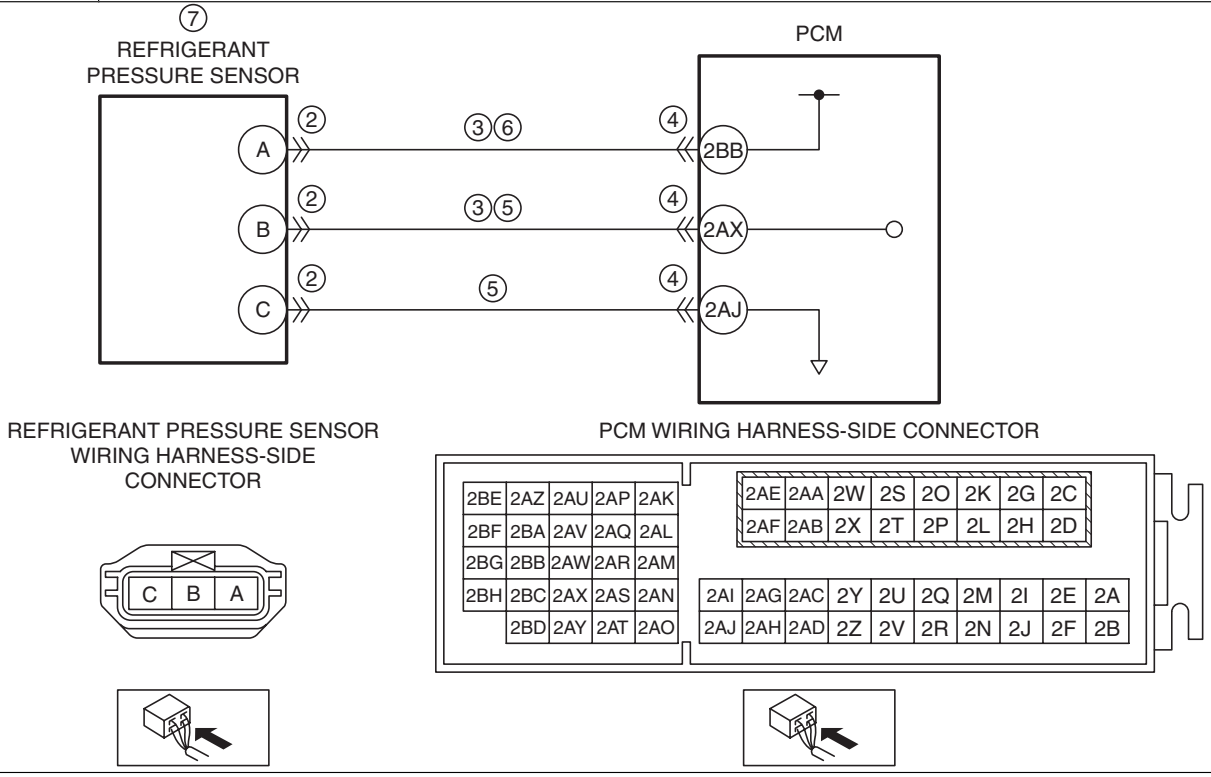
DTC P0532:00	Refrigerant pressure sensor circuit low input
DETECTION CONDITION	• The PCM monitors input voltage from the refrigerant pressure sensor. If the input voltage at the PCM terminal 2AX is **below 0.1 V** for **5 s**, the PCM determines that the refrigerant pressure sensor circuit has a malfunction. **Diagnostic support note** • This is a continuous monitor (other). • The check engine light does not illuminate. • FREEZE FRAME DATA (Mode 2)/Snapshot data is not available. • DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	Not applicable
POSSIBLE CAUSE	• Refrigerant pressure sensor connector or terminals malfunction • Short to ground in wiring harness between the following terminals: — Refrigerant pressure sensor terminal A—PCM terminal 2BB — Refrigerant pressure sensor terminal B—PCM terminal 2AX • PCM connector or terminals malfunction • Refrigerant pressure sensor signal circuit and ground circuit are shorted to each other • Open circuit in wiring harness between refrigerant pressure sensor terminal A and PCM terminal 2BB • Refrigerant pressure sensor malfunction • PCM malfunction



Diagnostic Procedure

STEP	INSPECTION		ACTION
1	**VERIFY RELATED SERVICE INFORMATION AVAILABILITY** • Verify related Service Information availability. • Is any related Service Information available?	Yes	Perform repair or diagnosis according to the available Service Information. • If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
2	**INSPECT REFRIGERANT PRESSURE SENSOR CONNECTOR CONDITION** • Switch the ignition off. • Disconnect the refrigerant pressure sensor connector. • Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the connector and/or terminals, then go to Step 8.
		No	Go to the next step.

STEP	INSPECTION		ACTION
3	**INSPECT REFRIGERANT PRESSURE SENSOR CIRCUIT FOR SHORT TO GROUND** • Verify that the refrigerant pressure sensor connector is disconnected. • Inspect for continuity between the following terminals (wiring harness-side) and body ground: — Refrigerant pressure sensor terminal A — Refrigerant pressure sensor terminal B • Is there continuity?	Yes	If the short to ground circuit could be detected in the wiring harness: • Repair or replace the wiring harness for a possible short to ground. If the short to ground circuit could not be detected in the wiring harness: • Replace the PCM (short to ground in the PCM internal circuit). (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Go to Step 8.
		No	Go to the next step.
4	**INSPECT PCM CONNECTOR CONDITION** • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace the connector and/or terminals, then go to Step 8.
		No	Go to the next step.
5	**INSPECT REFRIGERANT PRESSURE SENSOR SIGNAL CIRCUIT AND GROUND CIRCUIT FOR SHORT TO EACH OTHER** • Verify that the refrigerant pressure sensor and PCM connectors are disconnected. • Inspect for continuity between refrigerant pressure sensor terminals B and C (wiring harness-side). • Is there continuity?	Yes	Repair or replace the wiring harness for a possible short to each other, then go to Step 8.
		No	Go to the next step.
6	**INSPECT REFRIGERANT PRESSURE SENSOR POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT** • Verify that the refrigerant pressure sensor and PCM connectors are disconnected. • Inspect for continuity between refrigerant pressure sensor terminal A (wiring harness-side) and PCM terminal 2BB (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 8.
7	**INSPECT REFRIGERANT PRESSURE SENSOR** • Inspect the refrigerant pressure sensor. (See REFRIGERANT PRESSURE SENSOR INSPECTION [MANUAL AIR CONDITIONER].) (See REFRIGERANT PRESSURE SENSOR INSPECTION [FULL-AUTO AIR CONDITIONER].) • Is there any malfunction?	Yes	Replace the refrigerant pressure sensor, then go to the next step. (See REFRIGERANT PRESSURE SENSOR REMOVAL/ INSTALLATION [MANUAL AIR CONDITIONER].) (See REFRIGERANT PRESSURE SENSOR REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].)
		No	Go to the next step.
8	**VERIFY DTC TROUBLESHOOTING COMPLETED** • Always reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Perform the KOEO or KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Is the same DTC present?	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Go to the next step.
		No	Go to the next step.
9	**VERIFY AFTER REPAIR PROCEDURE** • Perform the “AFTER REPAIR PROCEDURE”. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	DTC troubleshooting completed.