DTC P1140:00 [SKYACTIV-D 2.2]

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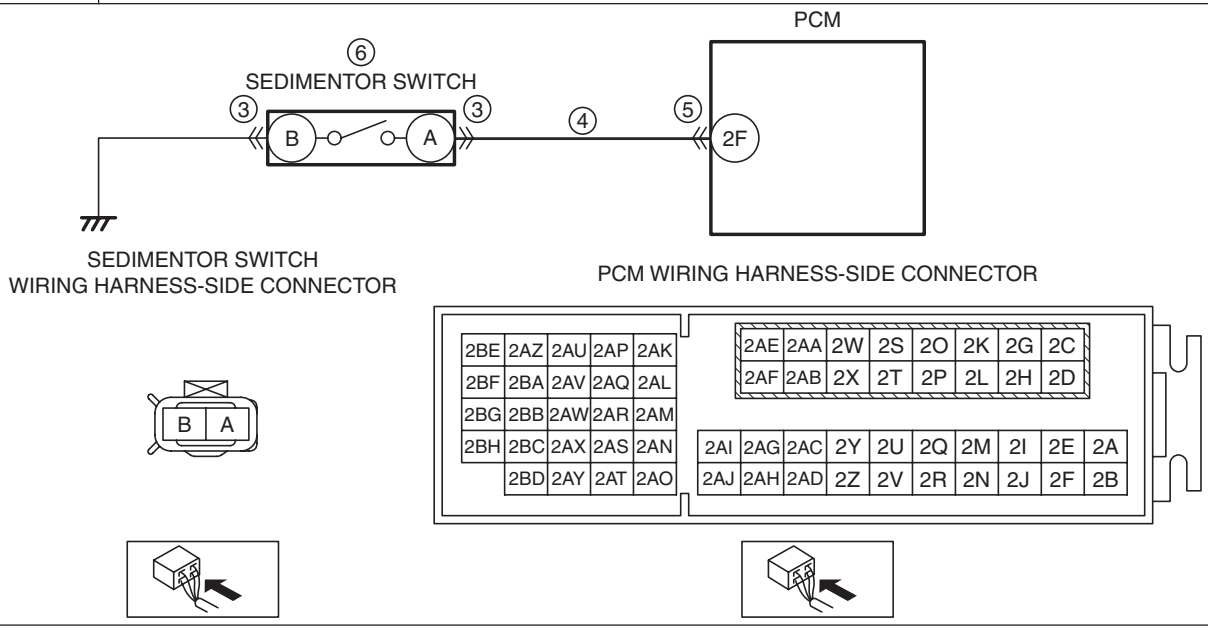
DTC P1140:00	Sedimentor switch control circuit range/performance problem
DETECTION CONDITION	• The level of accumulated water in the fuel filter exceeds the specification (sedimentor switch turns on in this case). **Diagnostic support note** • This is a continuous monitor (other). • The check engine 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	• The level of accumulated water in the fuel filter exceeds the specification • Sedimentor switch connector or terminals malfunction • Short to ground in wiring harness between sedimentor switch terminal A and PCM terminal 2F • PCM connector or terminals malfunction • Sedimentor switch 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	**DETERMINE IF MALFUNCTION CAUSE IS LEVEL OF ACCUMULATED WATER IN THE FUEL FILTER EXCEEDS THE SPECIFICATION** • Perform the “FUEL FILTER WATER DRAINING”. (See FUEL FILTER WATER DRAINING [SKYACTIV-D 2.2].) • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].) • Perform the KOEO or KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-D 2.2].) • Is the same DTC present?	Yes	Go to the next step.
		No	Go to Step 8.

STEP	INSPECTION		ACTION
3	**INSPECT SEDIMENTOR SWITCH CONNECTOR CONDITION** • Switch the ignition off. • Disconnect the sedimentor switch 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 7.
		No	Go to the next step.
4	**INSPECT SEDIMENTOR SWITCH CONTROL CIRCUIT FOR SHORT TO GROUND** • Verify that the sedimentor switch connector is disconnected. • Inspect for continuity between sedimentor switch terminal A (wiring harness-side) and body ground. • 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-D 2.2].) Go to Step 7.
		No	Go to the next step.
5	**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 7.
		No	Go to the next step.
6	**INSPECT SEDIMENTOR SWITCH** • Inspect the sedimentor switch. (See SEDIMENTOR SWITCH INSPECTION [SKYACTIV-D 2.2].) • Is there any malfunction?	Yes	Replace the fuel filter, then go to the next step. (See FUEL FILTER REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
		No	Go to the next step.
7	**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-D 2.2].) • Perform the DTC Reading Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) • Is the same DTC present?	Yes	Repeat the inspection from Step 1. • If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) Go to the next step.
		No	Go to the next step.
8	**VERIFY AFTER REPAIR PROCEDURE** • Perform the “AFTER REPAIR PROCEDURE”. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-D 2.2].)
		No	DTC troubleshooting completed.