

DTC P2227:00 [SKYACTIV-D 2.2]

id0102s4153100

DTC P2227:00	BARO sensor circuit range/performance problem
DETECTION CONDITION	<ul style="list-style-type: none"> The following conditions remain for a continuous specified time when the battery voltage is 8 V or more: <ul style="list-style-type: none"> — Difference between air charging pressure and barometric pressure: Specified value (kPa {kgf/cm², psi}) or more — Difference between intake air pressure and barometric pressure: Specified value (kPa {kgf/cm², psi}) or more — Difference between exhaust gas pressure and barometric pressure: Specified value (kPa {kgf/cm², psi}) or more <p>Diagnostic support note</p> <ul style="list-style-type: none"> This is a continuous monitor (CCM). The check engine light illuminates if the PCM detects the above malfunction condition in two consecutive drive cycles or in one drive cycle while the DTC for the same malfunction has been stored in the PCM. PENDING CODE is available if the PCM detects the above malfunction condition during the first drive cycle. FREEZE FRAME DATA (Mode 2)/Snapshot data is available. DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	<ul style="list-style-type: none"> Inhibits the EGR control. The fast idle up correction for the idle speed control is inhibited. Inhibits engine-stop by operating the i-stop function. PCM restricts engine-transaxle integration control.
POSSIBLE CAUSE	<ul style="list-style-type: none"> BARO sensor (built-into PCM) malfunction PCM malfunction
SYSTEM WIRING DIAGRAM	Not applicable

Diagnostic Procedure

STEP	INSPECTION	ACTION
1	IDENTIFY TRIGGER DTC FOR FREEZE FRAME DATA (MODE 2) <ul style="list-style-type: none"> Perform the Freeze Frame PID Data Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) Is the DTC P2227:00 on FREEZE FRAME DATA (Mode 2)? 	Yes Go to the next step.
		No Go to the troubleshooting procedure for DTC on FREEZE FRAME DATA (Mode 2). (See DTC TABLE [SKYACTIV-D 2.2].)
2	VERIFY FREEZE FRAME DATA (MODE 2)/SNAPSHOT DATA HAS BEEN RECORDED <ul style="list-style-type: none"> Has the FREEZE FRAME DATA (Mode 2)/snapshot data been recorded? 	Yes Go to the next step.
		No Record the FREEZE FRAME DATA (Mode 2)/snapshot data on the repair order, then go to the next step.
3	VERIFY RELATED SERVICE INFORMATION AVAILABILITY <ul style="list-style-type: none"> 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.
4	INSPECT BARO SENSOR <ul style="list-style-type: none"> Inspect the BARO sensor. (See BAROMETRIC PRESSURE (BARO) SENSOR INSPECTION [SKYACTIV-D 2.2].) Is there any malfunction? 	Yes Replace the PCM, then go to the next step. (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
		No Go to the next step.

STEP	INSPECTION	ACTION	
5	VERIFY DTC TROUBLESHOOTING COMPLETED <ul style="list-style-type: none"> • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].) • Start the engine and idle it. • Switch the ignition off and wait for 10 s or more. • Perform the Pending Trouble Code Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].) • Is the PENDING CODE for this DTC present? 	Yes	Replace the PCM, then go to the next step. (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
		No	Go to the next step.
6	VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none"> • 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.