DTC P2299:00 [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

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Caution

- **Vehicle specifications differ depending on the vehicle identification number (VIN).**
  - **— Type A VIN:**
    JM0 KE**** 100001—**
    JM6 KE**** 100001—**
    JM7 KE**** 100001—**
    JM8 KE**** 100001—**
    JMZ KE**** 100001—**
    KE10 100001—**
  - **— Type B VIN:**
    JM0 KE**** 200001—**
    JM6 KE**** 200001—**
    JM8 KE**** 200001—**
    JMZ KE**** 200001—**
    KE10 200001—**

DTC P2299:00	Accelerator pedal: spring back malfunction
DETECTION CONDITION	**Type A VIN** • Brake override system operates. **Type B VIN** • When under the following conditions it is detected that the brake pedal is depressed during driving for the specified time*. — Racing — Engine speed: **875 rpm or more** *: Specified time is **0.6—10 s** according to braking force calculated in PCM. **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	• Controls the throttle valve so that the engine speed is at specification*. (Brake override system) *: For MTX vehicles, engine speed is **1,200 rpm** when in neutral, and **1,100 rpm** when not in neutral. For ATX vehicles, engine speed is **1,200 rpm** when in N position, and **1,100 rpm** when in D position.
POSSIBLE CAUSE	**Note** • If the brake override system operates, the PCM detects DTC P2299:00. • Driver depresses accelerator and brake pedals simultaneously (during braking operation using left foot) • Accelerator pedal is pressed in by object such as floor mat • Accelerator pedal sticking • APP sensor signal malfunction — APP sensor malfunction — Related connector or terminals malfunction — Related wiring harness malfunction • Brake switch signal malfunction — Brake switch malfunction — Related connector or terminals malfunction — Related wiring harness malfunction — Brake pedal malfunction (increase in play due to joint pin wear) • PCM malfunction
SYSTEM WIRING DIAGRAM	Not applicable

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.

STEP	INSPECTION		ACTION
2	**VERIFY DTC REPEATABILITY** • 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 KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Is the same DTC present?	Yes	Go to the next step.
		No	DTC troubleshooting completed. • Explain to the customer that P2299:00 is stored by the brake override system operation.
3	**VERIFY VEHICLE USE CONDITION** • Verify the vehicle use condition. — The floor mat is doubled over — The floor mat is spread against the accelerator pedal — The accelerator and brake pedals are being depressed simultaneously • Are any of the conditions above applicable to the vehicle use condition?	Yes	**There is a malfunction in a related floor mat** • Explain to the customer that the floor mat may prevent the accelerator pedal from springing back after release, then go to Step 11. **There is a malfunction in the pedal operation** • Give the customer advice on how to depress the accelerator and brake pedals while driving the vehicle, then go to Step 11.
		No	Go to the next step.
4	**INSPECT APP SENSOR** • Is the condition of the accelerator pedal one of the following? — Accelerator pedal sticking has occurred when operated — There is evidence of accelerator pedal disassembly	Yes	Replace the accelerator pedal, then go to Step 11. (See ACCELERATOR PEDAL REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	Go to the next step.
5	**VERIFY CURRENT INPUT SIGNAL STATUS OF APP SENSOR** • Access the APP PID using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Is the value for PID APP **0 %** when the accelerator pedal is not depressed? • Does the value for PID APP change when the accelerator pedal is continually depressed?	Yes	Go to Step 7.
		No	Go to the next step.
6	**INSPECT APP SENSOR RELATED WIRING HARNESS AND CONNECTOR** • Inspect the wiring harness related to the APP sensor for connector disconnection, short circuit, and poor contact. • Is there any malfunction?	Yes	Repair or replace the malfunctioning part according to the inspection results, then go to Step 11.
		No	APP sensor malfunction. • Replace the accelerator pedal, then go to Step 11. (See ACCELERATOR PEDAL REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
7	**VERIFY CURRENT INPUT SIGNAL STATUS OF BRAKE SWITCH** • Access the following PIDs using the M-MDS: (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) — BOO — BPA • Are all PIDs normal?	Yes	Go to Step 10.
		No	Go to the next step.
8	**INSPECT BRAKE SWITCH** • Inspect the brake switch. (See BRAKE SWITCH INSPECTION.) • Is there any malfunction?	Yes	Replace the brake switch, then go to Step 11. (See BRAKE PEDAL REMOVAL/INSTALLATION [R.H.D.].) (See BRAKE PEDAL REMOVAL/INSTALLATION [L.H.D.].)
		No	Go to the next step.
9	**INSPECT BRAKE PEDAL PLAY AMOUNT** • Inspect the brake pedal play amount. (See BRAKE PEDAL INSPECTION.) • Is the amount of brake pedal play normal?	Yes	Inspect the wiring harness related to the brake switch for connector disconnection, short circuit, and poor contact. • If there is any malfunction: — Repair or replace the malfunctioning part according to the inspection results, then go to Step 11.
		No	Repair or replace the malfunctioning part according to the inspection results, then go to Step 11.

STEP	INSPECTION		ACTION
10	**VERIFY IF A DTC RELATED TO DRIVE-BY-WIRE CONTROL IS DETECTED** • Perform the KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Is a DTC related to the drive-by-wire control present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)
		No	It is possible that the accelerator and brake pedals have been depressed simultaneously. (during braking operation using left foot) • Go to the next step.
11	**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 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.
12	**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.