

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 P0461:00	Fuel gauge sender unit circuit range/performance problem
DETECTION CONDITION	<ul style="list-style-type: none"> • The PCM monitors the fuel tank level difference before and after the PCM-calculated fuel consumption has reached more than 25 L {26 US qt, 22 Imp qt}. If the difference is less than 5 %, the PCM determines that there is a fuel gauge sender unit circuit range/performance problem. Diagnostic support note <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. (Type A VIN) • PENDING CODE is available if the PCM detects the above malfunction condition during the first drive cycle. (Type A VIN) • The check engine light does not illuminate. (Type B VIN) • FREEZE FRAME DATA (Mode 2) is not available. (Type B VIN) • FREEZE FRAME DATA (Mode 2) is available. (Type A VIN) • Snapshot data is available. • DTC is stored in the PCM memory.
FAIL-SAFE FUNCTION	Not applicable
POSSIBLE CAUSE	<ul style="list-style-type: none"> • Fuel gauge sender unit malfunction • Instrument cluster malfunction • PCM malfunction
SYSTEM WIRING DIAGRAM	Not applicable

Diagnostic Procedure

STEP	INSPECTION	ACTION
1	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.
2	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.
3	INSPECT FUEL GAUGE SENDER UNIT <ul style="list-style-type: none"> • Switch the ignition off. • Inspect the fuel gauge sender unit. (See FUEL GAUGE SENDER UNIT INSPECTION [2WD].) (See FUEL GAUGE SENDER UNIT INSPECTION [4WD].) • Is there any malfunction? 	Yes Replace the fuel gauge sender unit, then go to Step 5. (See FUEL GAUGE SENDER UNIT REMOVAL/ INSTALLATION [2WD].) (See FUEL GAUGE SENDER UNIT REMOVAL/ INSTALLATION [4WD].)
		No Go to the next step.

STEP	INSPECTION	ACTION	
4	INSPECT INSTRUMENT CLUSTER <ul style="list-style-type: none"> Inspect the instrument cluster. (See INSTRUMENT CLUSTER INSPECTION.) Is there any malfunction? 	Yes	Replace the instrument cluster, then go to the next step. (See INSTRUMENT CLUSTER REMOVAL/INSTALLATION.)
		No	Go to the next step.
5	VERIFY DTC TROUBLESHOOTING COMPLETED <ul style="list-style-type: none"> 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].) Start the engine and warm it up completely. <p>Caution</p> <ul style="list-style-type: none"> While performing this step, always operate the vehicle in a safe and lawful manner. When the M-MDS is used to observe monitor system status while driving, be sure to have another technician with you, or record the data in the M-MDS using the PID/DATA MONITOR AND RECORD capturing function and inspect later. <ul style="list-style-type: none"> Drive the vehicle under the snapshot data condition. Perform the Pending Trouble Code Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Is the PENDING CODE for this 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.
6	VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none"> 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.