

SYSTEM DOES NOT OPERATE [PARKING SENSOR]

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Note

- If there is any vehicle malfunction complaint lodged by a customer, perform FOREWORD [PARKING SENSOR] malfunction diagnosis according to the troubleshooting procedure.

Description

- Buzzer does not sound and the parking sensor indicator does not illuminate even if the parking sensor switch is turned on.

Possible malfunction

- Parking sensor control module power supply malfunction

With i-stop system

- Open circuit in wiring harness between IGNITION relay and parking sensor control module terminal U
- Short to ground in wiring harness between IGNITION relay and parking sensor control module terminal U

Without i-stop system

- Open circuit in wiring harness between IG1 relay and parking sensor control module terminal U
- Short to ground in wiring harness between IG1 relay and parking sensor control module terminal U
- C/U IG1 15 A fuse damage, burnt out
- Parking sensor switch/indicator malfunction
 - Open circuit or short to ground in wiring harness between climate control unit terminal 1B and parking sensor control module terminal V
 - Open circuit or short to ground in wiring harness between climate control unit terminal 1A and parking sensor control module terminal S
 - Parking sensor switch/indicator malfunction (parking sensor switch/indicator stuck open)
- Malfunction in parking sensor control module ground
 - Open circuit in wiring harness between parking sensor control module terminal Q and body ground
 - Ground point lifting or loosening
- Parking sensor control module malfunction

Diagnostic Procedure

Step	Inspection		Action
1	VERIFY MALFUNCTION SYMPTOM <ul style="list-style-type: none">• Switch the ignition ON (engine off or on).• Turn the parking sensor switch/indicator ON.• Does the parking sensor indicator illuminate and does the buzzer sound?	Yes	Did the buzzer sound after the parking sensor indicator illuminated? <ul style="list-style-type: none">• System is normal. Buzzer does not sound <ul style="list-style-type: none">• Perform troubleshooting according to the MALFUNCTION DETECTION SOUND ACTIVATED [PARKING SENSOR]. Indicator does not illuminate <ul style="list-style-type: none">• Perform troubleshooting according to the INDICATOR LIGHT DOES NOT ILLUMINATE [PARKING SENSOR].
		No	Go to the next step.
2	INSPECT PARKING SENSOR CONTROL MODULE POWER SUPPLY <ul style="list-style-type: none">• Switch the ignition ON (engine off or on).• Measure the voltage at parking sensor control module terminal U.• Is the voltage B+?	Yes	Go to the next step.
		No	With i-stop <ul style="list-style-type: none">• Inspect and repair the following wiring harness for an open circuit or short to ground.<ul style="list-style-type: none">— IGNITION relay terminal C and parking sensor control module terminal U Without i-stop <ul style="list-style-type: none">• Inspect the C/U IG1 15 A fuse. If the fuse is burned out:<ul style="list-style-type: none">• Inspect and repair the wiring harness between the C/U IG1 15 A fuse and parking sensor control module terminal U for a short circuit to the ground system.If the fuse is not damaged or burned out:<ul style="list-style-type: none">• Inspect and repair the following wiring harness for an open circuit:<ul style="list-style-type: none">— Between IG relay terminal 1B and parking sensor control module terminal U

Step	Inspection	Action
3	INSPECT PARKING SENSOR CONTROL MODULE GROUND CIRCUIT <ul style="list-style-type: none"> Switch the ignition off (LOCK). Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) Disconnect the parking sensor control module connector. Verify the continuity between connector terminal Q on parking sensor control module vehicle side and body ground. Is there continuity? 	Yes Inspect and repair the ground point for looseness, disengagement, or lifting. Repair or replace the wiring harness.
		No Go to the next step.
4	INSPECT IF MALFUNCTION CAUSE IS OPEN CIRCUIT IN PARKING SENSOR SWITCH/ INDICATOR SIGNAL WIRING HARNESS <ul style="list-style-type: none"> Disconnect the climate control unit connector. Inspect for continuity between the following wiring harnesses: <ul style="list-style-type: none"> Climate control unit terminal 1B and parking sensor control module terminal V Climate control unit terminal 1A and parking sensor control module terminal S Is there continuity? 	Yes Go to the next step.
		No Repair for an open circuit in the wiring harness.
5	INSPECT IF MALFUNCTION CAUSE IS SHORT TO GROUND IN PARKING SENSOR SWITCH/ INDICATOR SIGNAL WIRING HARNESS <ul style="list-style-type: none"> Inspect for continuity between the following wiring harnesses: <ul style="list-style-type: none"> Parking sensor control module terminal V and ground Parking sensor control module terminal S and ground Is there continuity? 	Yes Repair or replace the wiring harness.
		No Go to the next step.
6	INSPECT PARKING SENSOR SWITCH/ INDICATOR <ul style="list-style-type: none"> Reconnect all the disconnected connectors. Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].) Switch the ignition ON (engine off or on). Measure the voltages at parking sensor control module terminals S and V when the parking sensor switch is turned off (indicator turns off). Is terminal S battery voltage and is terminal V approx. 5 V? 	Yes Replace the climate control unit. (See CLIMATE CONTROL UNIT REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].) Note <ul style="list-style-type: none"> The parking sensor switch/indicator is integrated with the climate control unit.
		No Replace the parking sensor control module. (See PARKING SENSOR CONTROL MODULE INSPECTION.)