ADVANCED KEYLESS ENTRY SYSTEM DOES NOT OPERATE [SECURITY AND LOCKS]

id0903k7012100

Description

- The door locking operation using the door request switch is not possible.
- The liftgate cannot be open using the liftgate opener switch.

Possible cause

- Liftgate opener switch malfunction
- Open circuit in wiring harness between the following terminals:
  - — Rear body control module (RBCM) terminal 4M and liftgate opener switch terminal C
  - — LF control unit terminal G and request switch (LF) terminal D
  - — LF control unit terminal E and request switch (RF) terminal D
  - — LF control unit terminal A and request switch (liftgate) terminal I
  - — Start stop unit terminal 1P and door lock link switch (driver's side) terminal D (L.H.D.) / J (R.H.D.)
  - — Start stop unit terminal 1AF and ground
  - — Start stop unit terminal 2B and ground
- Short to ground in wiring harness between start stop unit terminal 1P and door lock link switch (driver's side) terminal D (L.H.D.) / J (R.H.D.)
- Connector poor contact or terminal damage
- Customer's mis-operation or misunderstanding

Diagnostic Procedure

Step	Inspection		Action
1	**DETERMINE IF MALFUNCTION CAUSE IS DOOR LOCK** • Refer to "door lock does not operate" symptom troubleshooting and perform the inspection. (See DOOR LOCK DOES NOT OPERATE [SECURITY AND LOCKS].) • Is the advanced keyless entry system operating normally?	Yes	Troubleshooting completed. (Explain the contents of the servicing to the customer.)
		No	Go to the next step.
2	**VERIFY IF MALFUNCTION CAUSE IS OPERATION OTHER THAN OPERATION PERMISSION CONDITION** • Verify the advanced keyless operation by operating each request switch and the liftgate opener switch with all the following conditions met. — All doors and liftgate closed — Ignition switched off (LOCK) — Remote transmitter is within reception area (80 cm radius from driver's door, front passenger's door, and liftgate) • Is the advanced keyless entry system operating normally?	Yes	System is normal. (Explain to customer about operation range of advanced keyless entry system)
		No	Go to the next step.
3	**VERIFY MALFUNCTION SYMPTOM** • Does the liftgate open using the liftgate opener switch operation?	Yes	Go to Step 6.
		No	Go to the next step.
4	**DETERMINE IF MALFUNCTION CAUSE IS LIFTGATE OPENER SWITCH** • Measure the voltage at rear body control module (RBCM) terminal 4M. • Is the voltage normal? **Specification** Liftgate opener switch pressed: 1.0 or less Except above: 4.5 V	Yes	Go to Step 11.
		No	Go to the next step.

Step	Inspection		Action
5	**INSPECT IF MALFUNCTION CAUSE IS OPEN CIRCUIT IN WIRING HARNESS BETWEEN REAR BODY CONTROL MODULE (RBCM) AND LIFTGATE OPENER SWITCH** • 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 rear body control module (RBCM) and liftgate opener switch connector. • Inspect for continuity between the following terminals (vehicle wiring harness). — Liftgate opener switch terminal C and rear body control module (RBCM) terminal 4M • Is there continuity?	Yes	• Inspect the liftgate opener switch. If there is any malfunction, replace it. (See LIFTGATE OPENER SWITCH INSPECTION.) • If the liftgate opener switch inspection is normal, inspect or repair the following: — Liftgate latch and actuator (See LIFTGATE LATCH AND LOCK ACTUATOR INSPECTION.) • After repair procedure, go to Step 11.
		No	• Repair or replace the wiring harness for an open circuit. • After repair procedure, go to Step 11.
6	**VERIFY MALFUNCTION SYMPTOM** • 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].) • Verify the lock/unlock operation for all doors and liftgate using the request switch operation. • Is door locked/unlocked?	Yes	Go to Step 11.
		No	Go to the next step.
7	**INSPECT IF MALFUNCTION CAUSE IS OPEN CIRCUIT IN WIRING HARNESS BETWEEN START STOP UNIT AND DOOR LOCK LINK SWITCH (DRIVER-SIDE)** • 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 start stop unit and the front door latch and lock actuator (driver's side) connector. • Inspect for continuity between the following terminals (vehicle wiring harness). — Start stop unit terminal 1P and front door lock link switch terminal D (L.H.D.) / J (R.H.D.) • Is there continuity?	Yes	Go to the next step.
		No	• Repair or replace the wiring harness for an open circuit. • After repair procedure, go to Step 11.

Step	Inspection		Action
8	**INSPECT IF MALFUNCTION CAUSE IS SHORT TO GROUND IN WIRING HARNESS BETWEEN START STOP UNIT AND DOOR LOCK LINK SWITCH (DRIVER-SIDE)** • Verify that the start stop unit connector is disconnected. • Inspect for continuity between the following wiring harness terminals (vehicle wiring harness side) and body ground. — Start stop unit terminal 1P and ground • Is there continuity?	Yes	Go to the next step.
		No	• Repair or replace the wiring harness for an open circuit. • After repair procedure, go to Step 11.
9	**INSPECT IF MALFUNCTION CAUSE IS OPEN CIRCUIT IN WIRING HARNESS BETWEEN START STOP UNIT AND GROUND** • Verify that the start stop unit connector is disconnected. • Inspect for continuity between the following terminals (vehicle wiring harness). — Start stop unit terminal 1AF and ground — Start stop unit terminal 2B and ground • Is there continuity?	Yes	Go to the next step.
		No	• Repair or replace the wiring harness for an open circuit. • After repair, go to Step 11.
10	**INSPECT IF MALFUNCTION CAUSE IS OPEN CIRCUIT IN WIRING HARNESS BETWEEN REQUEST SWITCH AND LF CONTROL UNIT** • Disconnect the LF control unit and request switch connector. • Inspect for continuity between the following terminals (vehicle wiring harness). — Request switch (LF) terminal G and LF control unit terminal D — Request switch (RF) terminal E and LF control unit terminal D — Request switch (liftgate) terminal A and LF control unit terminal I • Is there continuity?	Yes	Go to the next step.
		No	• Repair or replace the wiring harness for an open circuit. • After repair, go to the next step.
11	**VERIFY IF MALFUNCTION CAUSE WAS CORRECTED** • Does the advanced keyless entry system operate normally?	Yes	Troubleshooting completed. (Explain the contents of the servicing to the customer.)
		No	If the malfunction has not been resolved, repeat the inspection from Step 1.