

DTC B0001:11/B0001:12/B0001:13/B0001:19/B0001:1A

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| System malfunction location | <ul style="list-style-type: none"> • B0001:11: Driver-side air bag module circuit short to body ground • B0001:12: Driver-side air bag module circuit short to power supply • B0001:13: Driver-side air bag module circuit open circuit or resistance high • B0001:19: Short circuit to driver-side air bag module and other air bag module circuits • B0001:1A: Driver-side air bag module circuit resistance low |
| Detection condition | <p>Warning</p> <ul style="list-style-type: none"> • Detection conditions are for understanding the DTC outline before performing an inspection. Performing an inspection according to only the detection conditions may cause injury due to an operating error, or damage the system. When performing an inspection, always follow the inspection procedure. <ul style="list-style-type: none"> • Resistance other than 0.99–6.42 ohms detected in driver-side air bag module circuit • Wiring harness between driver-side air bag module and SAS control module has malfunction |
| Fail-safe | — |
| Possible cause | <ul style="list-style-type: none"> • Clock spring connector malfunction • Clock spring malfunction • Short circuit to power supply or body ground in the wiring harness between the clock spring and SAS control module • Open circuit in the wiring harness between the clock spring and SAS control module • Driver-side air bag module malfunction • SAS control module malfunction |
| <div style="text-align: center;"> <p>CLOCK SPRING</p> <p>SAS CONTROL MODULE</p> <p>DRIVER-SIDE AIR BAG MODULE</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p>SAS CONTROL MODULE HARNESS-SIDE CONNECTOR</p> </div> <div style="text-align: center;"> <p>CLOCK SPRING HARNESS-SIDE CONNECTOR</p> </div> <div style="text-align: center;"> <p>CLOCK SPRING CONNECTOR</p> </div> </div> | |

Diagnostic Procedure

| Step | Inspection | Action |
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| 1 | INSPECT DRIVER-SIDE AIR BAG MODULE CONNECTOR Warning • Handling the component parts improperly can accidentally operate (deploy) the air bag module, which may seriously injure you. Read the service warnings/cautions and the workshop manual before handling the air bag system components. (See AIR BAG SYSTEM SERVICE WARNINGS.) (See AIR BAG SYSTEM SERVICE CAUTIONS.) • Switch the ignition to off. • Disconnect the negative battery cable and wait for 1 min or more . (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].) • Remove the driver-side air bag module connector. (See DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.) • Inspect the clock spring connector. (Corrosion, damage, and disconnected pins) • Is there any malfunction of the clock spring connector? | Yes Replace clock spring. (See CLOCK SPRING REMOVAL/INSTALLATION.) Then go to Step 7. |
| | | No Go to the next step. |
| 2 | INSPECT CLOCK SPRING • Remove the steering wheel. (See STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION.) • Remove the column cover. (See COLUMN COVER REMOVAL/INSTALLATION.) • Remove the clock spring. (See CLOCK SPRING REMOVAL/INSTALLATION.) • Inspect for continuity between clock spring connector terminals 1B—3A and 1A—3B. Note • Inspect the clock spring wiring harness for continuity while shaking it. • Is there continuity? | Yes Go to the next step. |
| | | No Replace clock spring. (See CLOCK SPRING REMOVAL/INSTALLATION.) Then go to Step 7. |

| Step | Inspection | Action | |
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| 3 | INSPECT DRIVER-SIDE AIR BAG MODULE CIRCUIT FOR SHORT TO GROUND <ul style="list-style-type: none"> Remove the glove compartment. (See GLOVE COMPARTMENT REMOVAL/INSTALLATION.) Disconnect the passenger-side air bag module connector. (See PASSENGER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.) Disconnect the driver and passenger-side front seat connector. (See FRONT SEAT REMOVAL/INSTALLATION.) Remove the headliner. (See HEADLINER REMOVAL/INSTALLATION.) Disconnect the driver and passenger-side curtain air bag module connectors. (See CURTAIN AIR BAG MODULE REMOVAL/INSTALLATION.) Remove the B-pillar lower trim. (See B-PILLAR LOWER TRIM REMOVAL/INSTALLATION.) Disconnect the driver and passenger-side pretensioner seat belt connectors. (See FRONT SEAT BELT REMOVAL/INSTALLATION.) Remove the rear console. (See REAR CONSOLE REMOVAL/INSTALLATION.) Disconnect the all SAS control module connectors. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.) Inspect for continuity between the following terminals (wiring harness-side) and body ground: <ul style="list-style-type: none"> SAS control module terminal 3A SAS control module terminal 3D <p>Note</p> <ul style="list-style-type: none"> Inspect for continuity while shaking the wiring harness between the SAS control module and clock spring. | Yes | Replace the wiring harness for a possible short to ground, then go to Step 7. |
| | | No | Go to the next step. |
| 4 | INSPECT DRIVER-SIDE AIR BAG MODULE CIRCUIT FOR OPEN CIRCUIT <ul style="list-style-type: none"> SAS control module and clock spring connectors are disconnected. Inspect for continuity between the following terminals (wiring harness-side): <ul style="list-style-type: none"> Clock spring terminal B—SAS control module terminal 3A Clock spring terminal A—SAS control module terminal 3D <p>Note</p> <ul style="list-style-type: none"> Inspect for continuity while shaking the wiring harness between the SAS control module and clock spring. | Yes | Go to the next step. |
| | | No | Replace the wiring harness for a possible open circuit, then go to Step 7. |
| | • Is there continuity? | | |
| | • Is there continuity? | | |

| Step | Inspection | Action | |
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| 5 | INSPECT DRIVER-SIDE AIR BAG MODULE CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> • SAS control module and clock spring connectors are disconnected. • 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 voltage at the following terminals (wiring harness-side): <ul style="list-style-type: none"> — SAS control module terminal 3A — SAS control module terminal 3D <p>Note</p> <ul style="list-style-type: none"> • Measure the voltage while shaking the wiring harness between the SAS control module and clock spring. | Yes | Go to the next step. |
| | | No | Replace the wiring harness for a possible short to power supply, then go to Step 7. |
| | <ul style="list-style-type: none"> • Is the voltage 0V? | | |

| Step | Inspection | Action | |
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| 6 | INSPECT DRIVER-SIDE AIR BAG MODULE <ul style="list-style-type: none"> Switch the ignition to off. Disconnect the negative battery cable and wait for 1 min or more. (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].) Connect the SAS control module connectors. Except for the driver-side air bag module connector, reconnect all disconnected connectors. Connect the SST (Fuel and thermometer checker) or apply 2 ohms resistance to the clock spring connector terminals 3A and 3B. Set the SST (Fuel and thermometer checker) to 2 ohms. 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). Clear the DTC for the SAS control module using the M-MDS. (See CLEARING DTC.) Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.) Are the same DTCs present? | Yes | Go to the next step. |
| | | No | Replace the driver-side air bag module. (See DRIVER-SIDE AIR BAG MODULE REMOVAL/INSTALLATION.) Then go to the next step. |

| Step | Inspection | Action | |
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| 7 | PERFORM SAS CONTROL MODULE DTC INSPECTION <ul style="list-style-type: none">• Switch the ignition to off.• Disconnect the negative battery cable and wait for 1 min or more. (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 SST (Fuel and thermometer checker) or the 2 ohms resistance.• Connect the driver-side air bag module connector.• 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).• Clear the DTC for the SAS control module using the M-MDS. (See CLEARING DTC.)• Perform the DTC inspection for the SAS control module using the M-MDS. (See DTC INSPECTION.)• Are the same DTCs present? | Yes | Replace the SAS control module. (See SAS CONTROL MODULE REMOVAL/INSTALLATION.) |
| | | No | DTC troubleshooting completed. |