ATTENTION:
GENERAL MANAGER ❑
PARTS MANAGER ❑
CLAIMS PERSONNEL ❑
SERVICE MANAGER ❑

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.

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QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY: 2020-22MY Outback & Legacy
2022MY BRZ

NUMBER: 18-217-22

DATE: 01/14/22

SUBJECT: Service Manual Correction / DTC B1788
Occupant Detection Sensor Power Supply

INTRODUCTION:

This Service Information Bulletin announces Service Manual corrections for the diagnostic trouble tree for DTC B1788. These corrections will be made to the Service Manual at a later date. If DTC B1788 is detected in the applicable models listed above, follow the new diagnostic information outlined below.

SERVICE PROCEDURE / INFORMATION:

IMPORTANT NOTES:

- Customer satisfaction and retention starts with performing quality repairs.

- Refer to the applicable Service Manual and review: General Description > Repair Contents > Action required before & after Battery Disconnect. Additionally, record any stored seat position(s) before proceeding. Relearn any seat position memory after work is complete. If the power rear gate (PRG) height has been customized, that position must also be noted and relearned.

- Required diagnostic tool information/description is listed on page #2.

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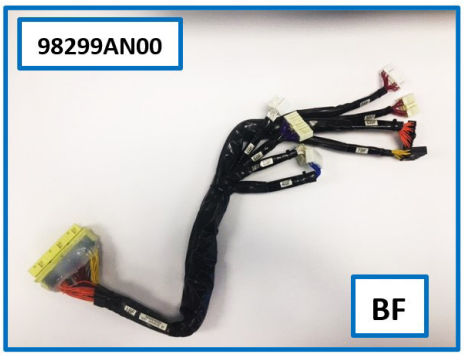
Required Diagnostic Tools:



NOTE: BF Test Harness (**98299AN000**), BB Test Harness (**98299FL020**) and **BC** Test Harness (**98299FL030**) are all essential tools.

Section 1: DTC CHECK

1. Perform a visual inspection of the associated wiring harness and seat area to verify there is no obvious physical damage, foreign objects / obstructions, or aftermarket modifications. If any such conditions are found, submit a completed QMR with detailed photos of the findings.
2. Switch the ignition to ON.
3. Read the DTCs of the airbag control module using the Subaru Select Monitor.

Are any of the following DTCs displayed as a current malfunction? (DTC B178D, B178E, B178F, B1790, B1791, B1792, B1793, or B1794)

YES Perform the diagnosis for the displayed DTCs.

NO Proceed to Section 2.

Section 2: CHECKING HARNESS & ODS (SHORT TO GROUND)

IMPORTANT REMINDER: Whenever reconnecting the ground cable terminal to the battery sensor, torque to 7.5Nm (5.5ft.-lbs. or 66inch-lbs.) while supporting the sensor with the other hand as outlined in the applicable Service Manual under: STARTING/CHARGING SYSTSEMS > Battery Sensor.

NOTE: Steps **1** through **7** are to be performed to prevent any unintentional airbag module inflation caused by residual electrical current.

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1. Turn the ignition switch to the "OFF" position. After 60 seconds or more, **CAREFULLY** disconnect the ground terminal from the battery sensor.
2. Disconnect the connector (AB93) from the RH belt pretensioner.
3. Disconnect the connector (AB97) from the RH adaptive force limiter.
4. Disconnect the connector (AB99) from the RH seatbelt pretensioner.
5. Disconnect the connector (AB89) from the RH seat cushion airbag module.
6. Disconnect the connector (AB87) from the RH side airbag control module.
7. Disconnect the connector (AB91) from the RH curtain airbag module.
8. Disconnect the connectors (AB41, AB42, & AB43)from the airbag control module.
9. Connect the connector (1BF) of the test harness BF to connectors (AB41, AB42, &AB43).

Perform the following measurements with an ohmmeter at connector (4BF) of the BF test harness.

Connector and Terminal Information:

- (Connector 4BF of Test Harness) Terminal No. 10 – Chassis Ground
- (Connector 4BF of Test Harness) Terminal No. 10 - (Connector 4BF of Test Harness) Terminal No. 15.

CAUTION:

- Connect the positive terminal of the ohmmeter to IGN side (No.10).
- Connect negative terminal of the ohmmeter to GND side (Chassis ground or No.15).
- **IMPORTANT:** If these test connections are reversed, an incorrect value will be displayed.

Is the resistance 1MΩ or more?

YES Proceed to Section 4.

NO Proceed to Section 3.

Continued...

Section 3: CHECK THE SEAT HARNESS & ODS FOR SHORT TO GROUND

1. Disconnect the connector (AB7) from the rear airbag harness.
2. Connect the connector (1BB) of the BB test harness to connector (AB7).

Perform the following measurements with an ohmmeter at connector (2BB) of the BB test harness.

Connector and Terminal Information:

- (Connector 2BB of Test Harness) Terminal No. 5 – Chassis Ground.
- (Connector 2BB of Test Harness) Terminal No. 5 - (Connector 2 of the BB Test Harness) Terminal No. 4.

CAUTION:

- Connect positive terminal of the ohmmeter to IGN side (No.5).
- Connect negative terminal of the ohmmeter to GND side (Chassis ground or No.4).
- **IMPORTANT:** If these test connections are reversed, an incorrect value will be displayed.

Is the resistance 1MΩ or more?

YES Replace the rear airbag harness along with the body harness.

NO Proceed to Section 8.

Section 4: CHECK THE HARNESS FOR OPEN CIRCUIT

1. Disconnect connectors (AB67, AB68, AB69, & AB70) from the load sensors.

Using an ohmmeter, measure the resistance between connector (4BF) of the BF test harness and the load sensor connectors (AB67, AB68, AB69, and AB70).

IMPORTANT CAUTION: DO NOT connect the ohmmeter directly to the load sensors. In order to prevent any terminal damage, the BC test harness must be connected directly to load sensor connectors (AB67, AB68, AB69, and AB70).

Connector and Terminal Information:

- (Connector 4BF of Test Harness) Terminal No. 10 – (AB67) Terminal No. 1
- (Connector 4BF of Test Harness) Terminal No. 10 – (AB68) Terminal No. 1
- (Connector 4BF of Test Harness) Terminal No. 10 – (AB69) Terminal No. 1
- (Connector 4BF of Test Harness) Terminal No. 10 – (AB70) Terminal No. 1.

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Is the resistance less than 10Ω?

YES — Proceed to Section 6.

NO — Proceed to Section 5.

Section 5: CHECK THE SEAT HARNESS FOR OPEN CIRCUIT

1. **Disconnect the connector (AB7) from the rear airbag harness.**
2. **Connect the connector (1BB) of the BB test harness to connector (AB7).**

Using an ohmmeter, measure the resistance between the connector (2BB) of the BB test harness and the load sensor connectors.

IMPORTANT CAUTION: DO NOT connect the ohmmeter directly to the load sensors. In order to prevent any terminal damage, the BC test harness must be connected directly to load sensor connectors (AB67, AB68, AB69, and AB70).

Connector and Terminal Information:

- (Connector 2BB of Test Harness) Terminal No. 5 – (AB67) Terminal No. 1
- (Connector 2BB of Test Harness) Terminal No. 5 – (AB68) Terminal No. 1
- (Connector 2BB of Test Harness) Terminal No. 5 – (AB69) Terminal No. 1
- (Connector 2BB of Test Harness) Terminal No. 5 – (AB70) Terminal No. 1.

Is the resistance less than 10Ω?

YES — Replace the rear airbag harness along with the body harness.

NO — Proceed to Section 8.

Section 6: CHECK THE REAR HARNESS FOR SHORT TO POSITIVE

1. **CAREFULLY** re-connect the ground terminal to the battery sensor and turn the ignition switch to the "ON" position.

Using a voltmeter, measure the voltage between the connector (4BF) of the BF test harness and chassis ground.

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Connector and Terminal Information:

- (Connector 4BF of Test Harness) Terminal No. 10 – Chassis Ground.

Is the voltage less than 1V?

YES Replace the airbag control module.

NO Proceed to Section 7.

Section 7: CHECK THE SEAT HARNESS FOR SHORT TO POSITIVE

1. Turn the ignition switch to the "OFF" position. After 60 seconds or more, **CAREFULLY** disconnect the ground terminal from the battery sensor.
2. Disconnect the connector (AB7) from the rear airbag harness.
3. Connect the connector (1BB) of the BB test harness to the (AB7) connector.
4. Connect the ground terminal the battery sensor, turn the ignition to the "ON" position.

Using a voltmeter, measure the voltage between the connector (2BB) of the BB test harness and chassis ground.

Connector and Terminal Information:

- (Connector 2BB of Test Harness) Terminal No. 5 – Chassis Ground.

Is the voltage less than 1V?

YES Replace the rear airbag harness along with the body harness.

NO Proceed to Section 5.

Section 8: CHECK THE CONNECTOR

1. Turn the ignition switch to the "OFF" position. After 60 seconds or more, disconnect the ground terminal from the battery sensor.
2. Inspect the airbag control module connectors and load sensor connectors for loose pin drag and/or poor terminal contact of any kind. Replace any section that has been found to be a fault source.

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3. Disconnect all the test harness connections and revert vehicle harness connections to the original status.
4. **CAREFULLY** re-install the ground terminal to the battery sensor and turn the ignition switch to the "ON" position.
5. Read the DTCs of the airbag control module using the Subaru Select Monitor.

Is the DTC B1788 currently stored?

YES	Replace the seat cushion frame assembly.
NO	Finish the diagnosis.

IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.