

| | | |
|------------|-----------------|--|
| DTC | B1655/37 | Driver Side Seat Belt Buckle Switch Circuit Malfunction |
|------------|-----------------|--|

DESCRIPTION

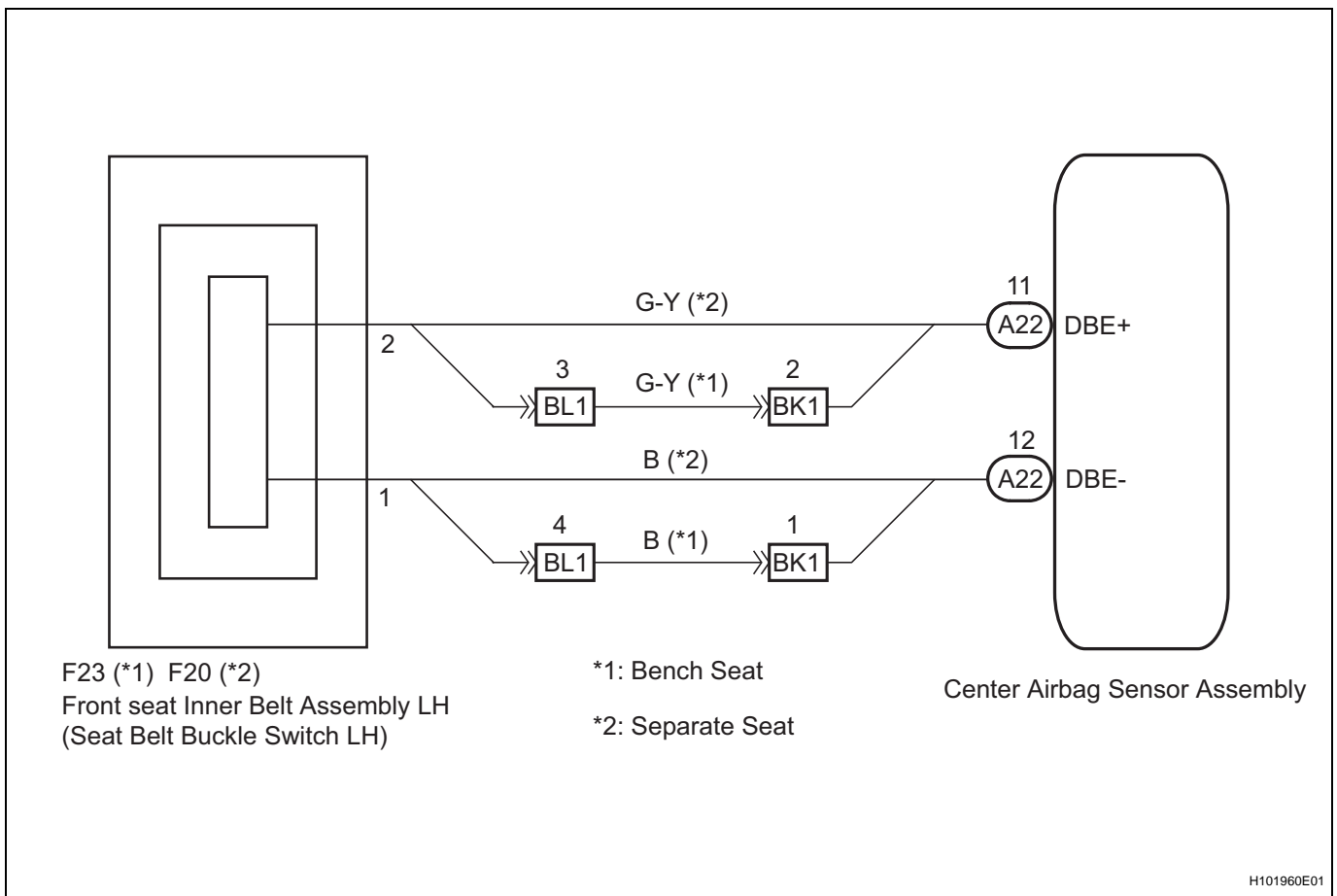
The seat belt buckle switch LH circuit consists of the center airbag sensor assembly and the front seat inner belt assembly LH (seat belt buckle switch LH).

DTC B1655/37 is set when a malfunction is detected in the seat belt buckle switch (driver seat side) circuit.

| DTC No. | DTC Detections Conditions | Trouble Areas |
|----------|--|---|
| B1655/37 | <ul style="list-style-type: none"> The center airbag sensor assembly receives a line short circuit signal, an open circuit signal, a short circuit to ground signal or a short circuit to B+ signal in the seat belt buckle switch (Driver seat side) circuit for 2 seconds Front seat inner belt assembly LH malfunction Center airbag sensor assembly malfunction | <ul style="list-style-type: none"> No. 2 floor wire No. 1 seat wire (*1) No. 2 seat wire (*1) Front seat inner belt assembly LH (Seat belt buckle switch LH) Center airbag sensor assembly |

*1: Bench seat

WIRING DIAGRAM



RS

CAUTION:

In order to prevent unexpected airbag deployment, disconnect the following connectors before inspecting parts such as wire harnesses, if the application of tester probes to the center airbag sensor assembly connector is necessary.

- Turn the ignition switch to the LOCK position.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.

- (c) Disconnect the connectors from the center airbag sensor assembly.
- (d) Disconnect the connectors from the steering pad.
- (e) Disconnect the connector from the front passenger airbag assembly.
- (f) Disconnect the connector from the front seat airbag assembly LH.
- (g) Disconnect the connector from the front seat airbag assembly RH.

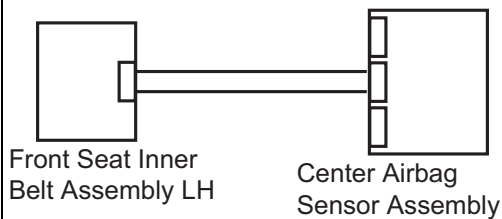
HINT:

Skip the following steps if side and curtain shield airbags are not fitted.

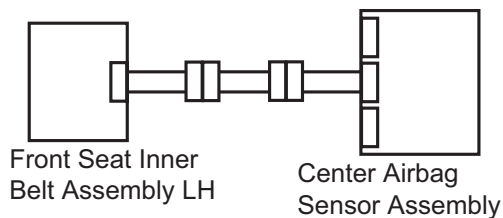
- (h) Disconnect the connector from the curtain shield airbag assembly LH.
- (i) Disconnect the connector from the curtain shield airbag assembly RH.
- (j) Disconnect the connector from the front seat outer belt assembly LH.
- (k) Disconnect the connector from the front seat outer belt assembly RH.

1 CHECK DTC

Separate seat :

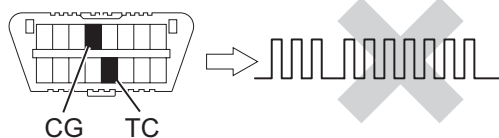


Bench seat :



DLC3

DTC B1655/37



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- (a) Turn the ignition switch to the ON position.
- (b) Clear any DTCs stored in the memory (See page [RS-34](#)).
- (c) Turn the ignition switch to the LOCK position.
- (d) Turn the ignition switch to the ON position and wait for at least 60 seconds.
- (e) Check for DTCs (See page [RS-34](#)).

OK:

DTC B1655/37 is not output.

HINT:

DTCs other than B1655/37 may be output at this time, but they are not related to this check.

OK

USE SIMULATION METHOD TO CHECK

NG

2 CHECK CONNECTION OF CONNECTORS

- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Check that the connectors are properly connected to the center airbag sensor assembly and the front seat inner belt assembly LH.

NG **CONNECT CONNECTORS**

OK

3 CHECK CONNECTORS

- (a) Check that the connectors (on the center airbag sensor assembly side and front seat inner belt assembly LH side) are not damaged (See page IN-34).

OK:

The connectors are not deformed or damaged.

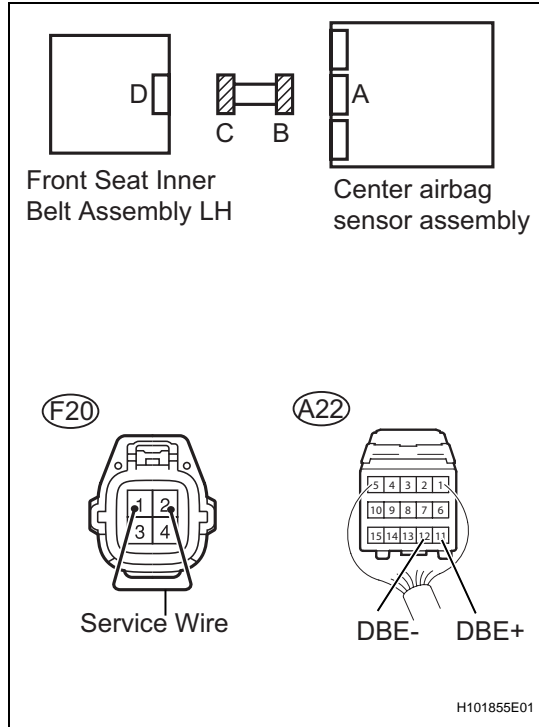
| Condition | Proceed to |
|------------------------|------------|
| Normal (separate seat) | A |
| Normal (bench seat) | B |
| Abnormal | C |

B **Go to step 9**

C **REPAIR OR REPLACE WIRE HARNESS**

A

4 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR OPEN)



- (a) Disconnect the connectors from the center airbag sensor assembly and the front seat inner belt assembly LH.

- (b) Using a service wire, connect F20-2 and F20-1 of connector C.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting.

- (c) Measure the resistance.

Standard resistance

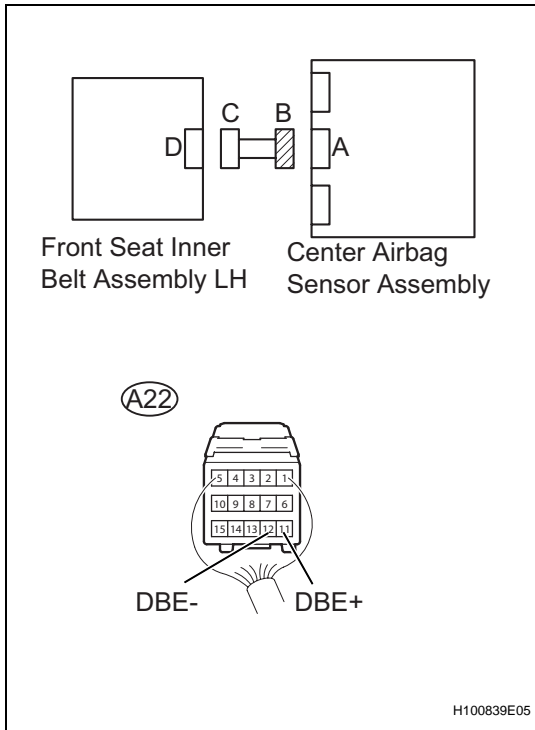
| Tester Connection | Condition | Specified Condition |
|-------------------------------|-----------|---------------------|
| A22-11 (DBE+) - A22-12 (DBE-) | Always | Below 1 Ω |

NG **REPAIR OR REPLACE NO. 2 FLOOR WIRE**

RS

OK

5 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR SHORT)



- (a) Disconnect the service wire from connector C.
- (b) Measure the resistance.

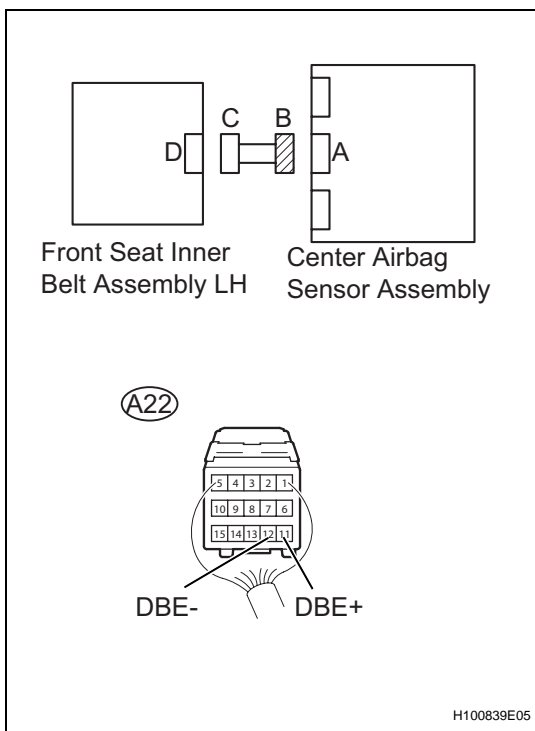
Standard resistance

| Tester Connection | Condition | Specified Condition |
|-------------------------------|-----------|---------------------|
| A22-11 (DBE+) - A22-12 (DBE-) | Always | 1 MΩ or Higher |

NG REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

6 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO B+)



- (a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (b) Turn the ignition switch to the ON position.
- (c) Measure the voltage.

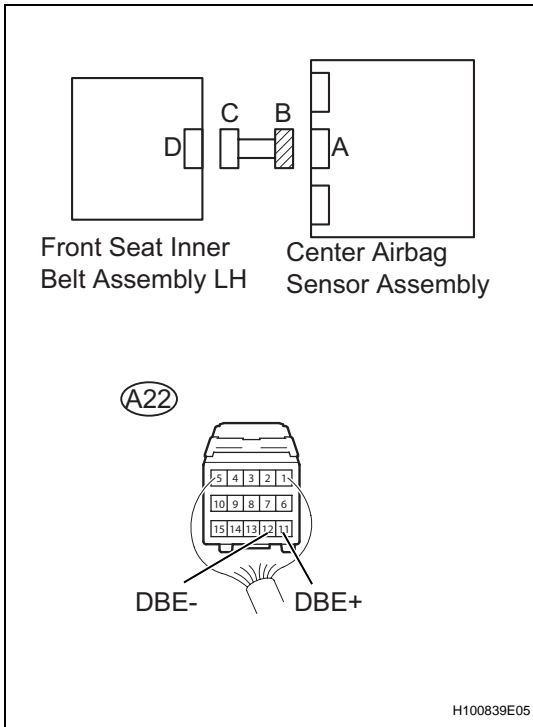
Standard voltage

| Tester Connection | Condition | Specified Condition |
|-----------------------------|--------------------|---------------------|
| A22-11 (DBE+) - Body ground | Ignition switch ON | Below 1 V |
| A22-12 (DBE-) - Body ground | Ignition switch ON | Below 1 V |

NG REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

7 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO GROUND)



- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Measure the resistance.

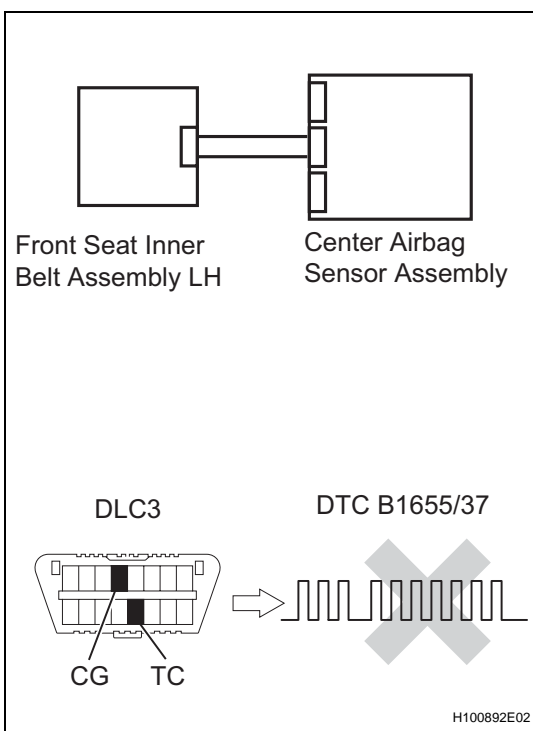
Standard resistance

| Tester Connection | Condition | Specified Condition |
|-----------------------------|-----------|---------------------|
| A22-11 (DBE+) - Body ground | Always | 1 MΩ or Higher |
| A22-12 (DBE-) - Body ground | Always | 1 MΩ or Higher |

NG REPAIR OR REPLACE NO. 2 FLOOR WIRE

OK

8 CHECK FRONT SEAT INNER BELT ASSEMBLY LH



- (a) Connect the connectors to the center airbag sensor assembly.
- (b) Connect the connector to the front seat inner belt assembly LH.
- (c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- (e) Clear any DTCs stored in the memory (See page RS-34).
- (f) Turn the ignition switch to the LOCK position.
- (g) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- (h) Check for DTCs (See page RS-34).

OK:
DTC B1655/37 is not output.

HINT:
 DTCs other than B1655/37 may be output at this time, but they are not related to this check.

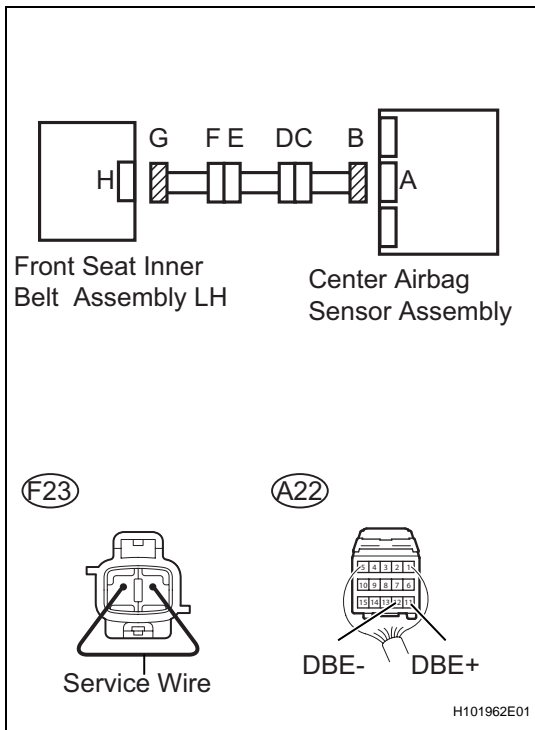
NG Go to step 22

RS

OK

USE SIMULATION METHOD TO CHECK

9 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR OPEN)



- (a) Disconnect the connectors from the center airbag sensor assembly and the seat inner belt assembly LH.
- (b) Using a service wire, connect F23-1 and F23-2 of connector G.

NOTICE:

Do not forcibly insert the service wire into the terminals of the connector when connecting.

- (c) Measure the resistance.

Standard resistance

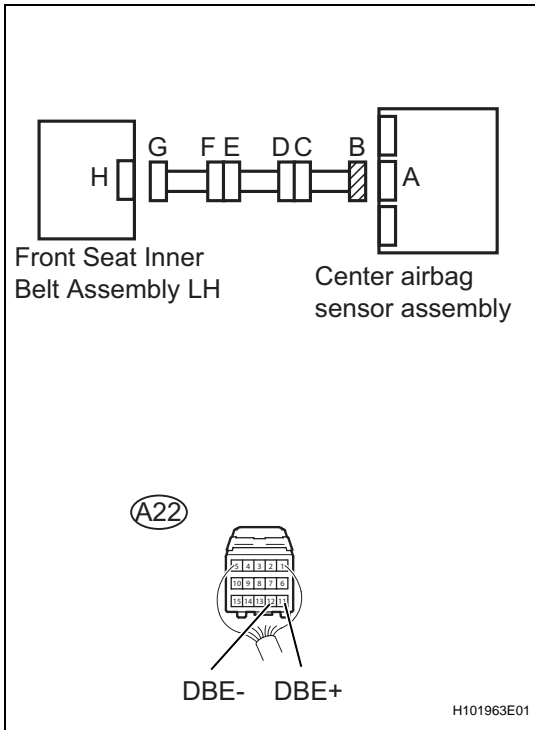
| Tester Connection | Condition | Specified Condition |
|-------------------------------|-----------|---------------------|
| A22-11 (DBE+) - A22-12 (DBE-) | Always | Below 1 Ω |

NG

Go to step 14

OK

10 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR SHORT)



- (a) Disconnect the service wire from connector G.
- (b) Measure the resistance.

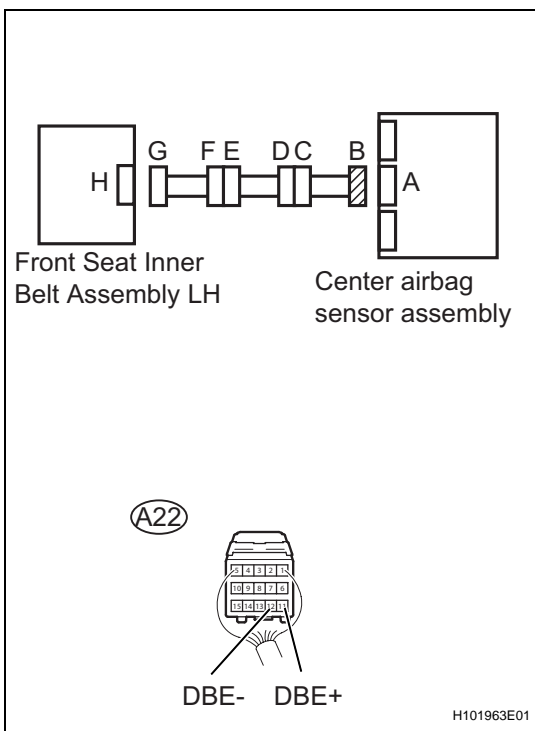
Standard resistance

| Tester Connection | Condition | Specified Condition |
|-------------------------------|-----------|---------------------|
| A22-11 (DBE+) - A22-12 (DBE-) | Always | 1 MΩ or Higher |

NG → **Go to step 15**

OK

11 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO B+)



- (a) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (b) Turn the ignition switch to the ON position.
- (c) Measure the voltage.

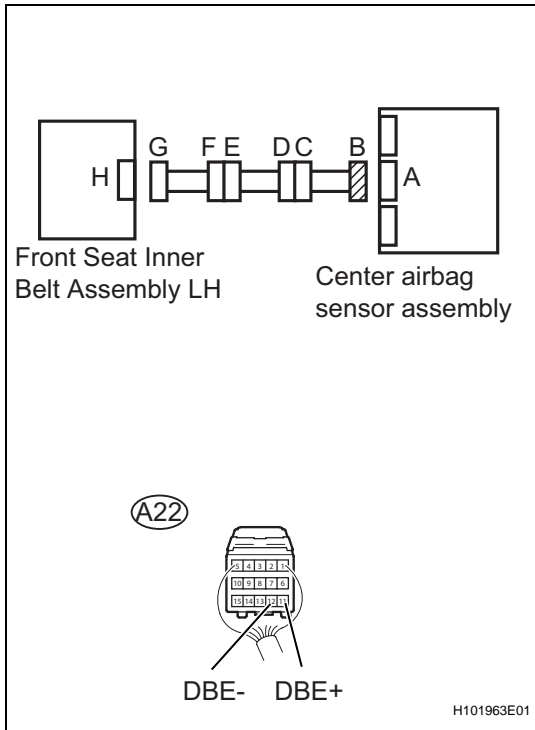
Standard voltage

| Tester Connection | Condition | Specified Condition |
|-----------------------------|--------------------|---------------------|
| A22-11 (DBE+) - Body ground | Ignition switch ON | Below 1 V |
| A22-12 (DBE-) - Body ground | Ignition switch ON | Below 1 V |

NG → **Go to step 16**

OK

12 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO GROUND)



- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Measure the resistance.

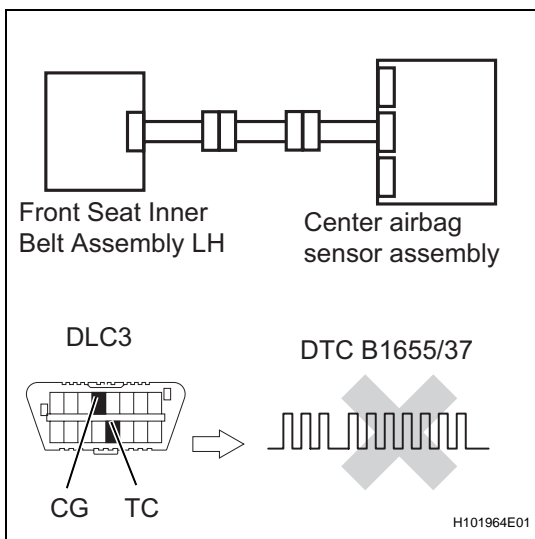
Standard resistance

| Tester Connection | Condition | Specified Condition |
|-----------------------------|-----------|---------------------|
| A22-11 (DBE+) - Body ground | Always | 1 MΩ or Higher |
| A22-12 (DBE-) - Body ground | Always | 1 MΩ or Higher |

NG → **Go to step 17**

OK

13 CHECK FRONT SEAT INNER BELT ASSEMBLY LH



- (a) Connect the connectors to the center airbag sensor assembly.
- (b) Connect the connectors to the front seat inner belt assembly LH.
- (c) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- (d) Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- (e) Clear any DTCs stored in the memory (See page RS-34).
- (f) Turn the ignition switch to the LOCK position.
- (g) Turn the ignition switch to the ON position and wait for at least 60 seconds.
- (h) Check for DTCs (See page RS-34).

OK:
DTC B1655/37 is not output.

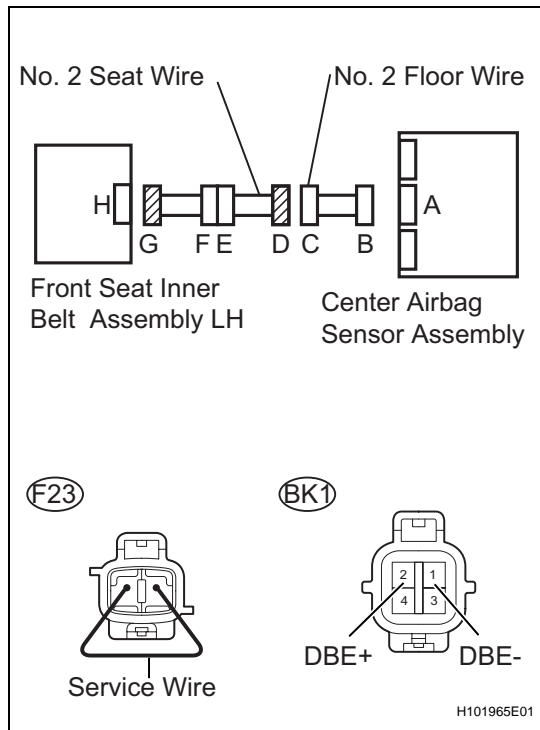
HINT:
DTCs other than B1653/35 may be output at this time, but they are not related to this check.

NG → **Go to step 22**

OK

USE SIMULATION METHOD TO CHECK

14 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR OPEN)



(a) Disconnect the No. 2 seat wire connector from the No. 2 floor wire.

HINT:

The service wire has already been inserted into connector G.

(b) Measure the resistance.

Standard resistance

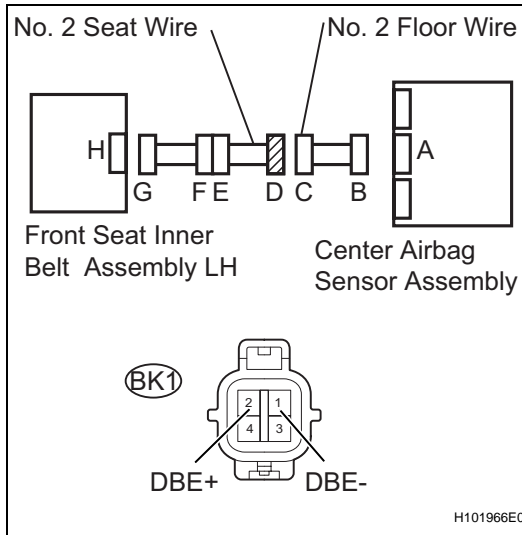
| Tester Connection | Condition | Specified Condition |
|-----------------------------|-----------|---------------------|
| BK1-2 (DBE+) - BK1-1 (DBE-) | Always | Below 1 Ω |

NG

Go to step 18

OK

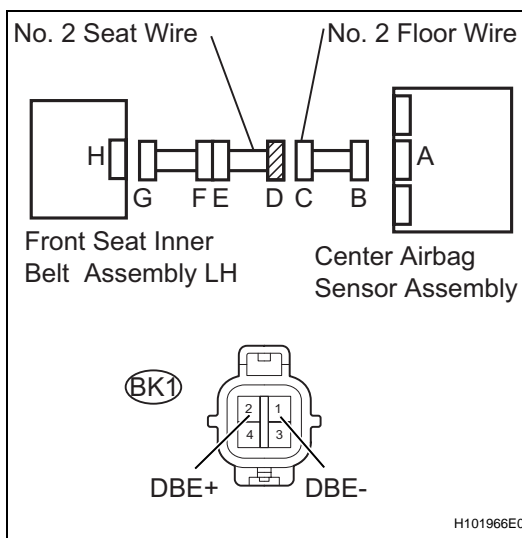
REPAIR OR REPLACE NO. 2 FLOOR WIRE

15 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (FOR SHORT)

- Disconnect the No. 2 seat wire connector from the No. 2 floor wire.
- Measure the resistance.

Standard resistance

| Tester Connection | Condition | Specified Condition |
|-----------------------------|-----------|---------------------|
| BK1-2 (DBE+) - BK1-1 (DBE-) | Always | 1 MΩ or Higher |

NG**Go to step 19****OK****REPAIR OR REPLACE NO. 2 FLOOR WIRE****16 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO B+)**

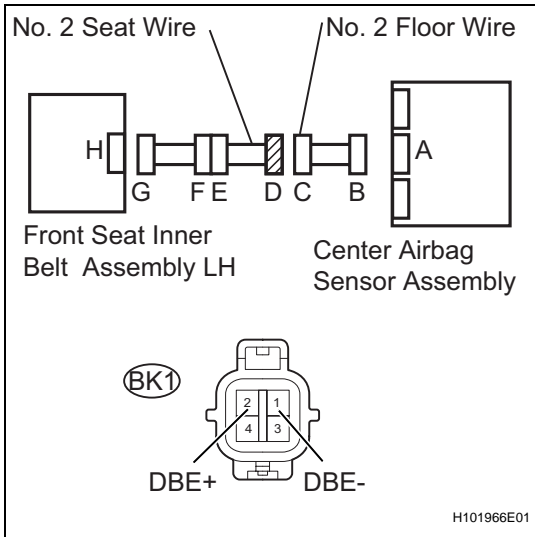
- Turn the ignition switch to the LOCK position.
- Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- Disconnect the No. 2 seat wire connector from the No. 2 floor wire.
- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch to the ON position.
- Measure the voltage.

Standard voltage

| Tester Connection | Condition | Specified Condition |
|----------------------------|--------------------|---------------------|
| BK1-2 (DBE+) - Body ground | Ignition switch ON | Below 1 V |
| BK1-1 (DBE-) - Body ground | Ignition switch ON | Below 1 V |

NG**Go to step 20****OK****REPAIR OR REPLACE NO. 2 FLOOR WIRE**

17 CHECK DRIVER SIDE SEAT BELT BUCKLE SWITCH CIRCUIT (TO GROUND)



- (a) Disconnect the No. 2 seat wire connector from the No. 2 floor wire.
- (b) Measure the resistance.

Standard resistance

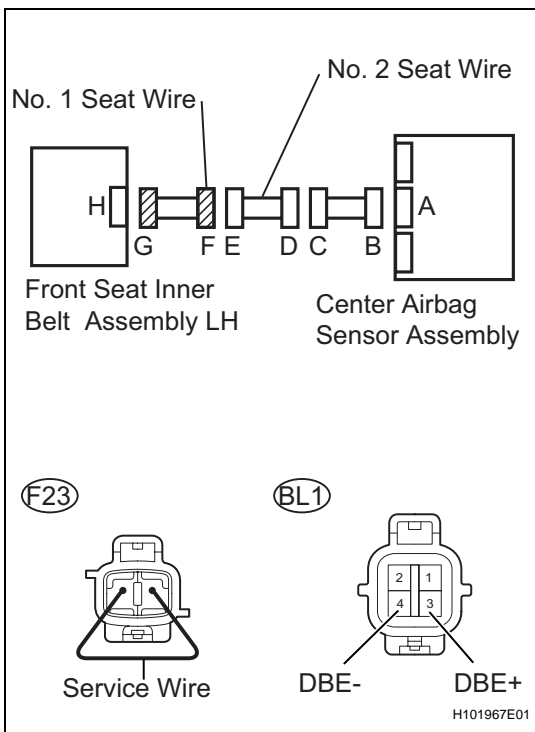
| Tester Connection | Condition | Specified Condition |
|----------------------------|-----------|---------------------|
| BK1-2 (DBE+) - Body ground | Always | 1 MΩ or Higher |
| BK1-1 (DBE-) - Body ground | Always | 1 MΩ or Higher |

NG → **Go to step 21**

OK

REPAIR OR REPLACE NO. 2 FLOOR WIRE

18 CHECK NO. 1 SEAT WIRE (FRO OPEN)



- (a) Disconnect the No. 2 seat wire connector from the No. 2 seat wire.

HINT:

The service wire has already been inserted into connector G.

- (b) Measure the resistance.

Standard resistance

| Tester Connection | Condition | Specified Condition |
|-----------------------------|-----------|---------------------|
| BL1-3 (DBE+) - BL1-4 (DBE-) | Always | Below 1 Ω |

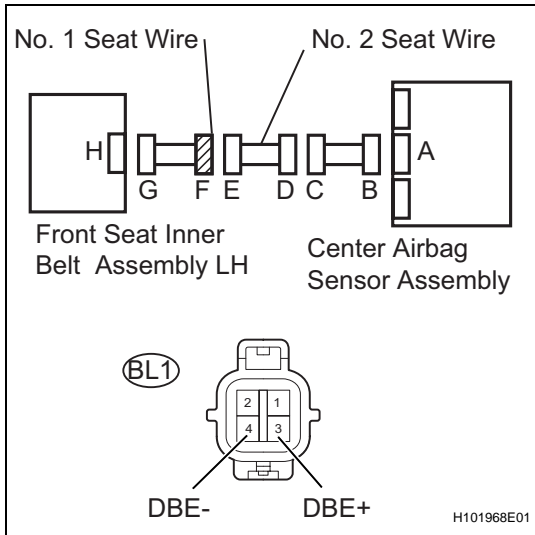
NG → **REPAIR OR REPLACE NO. 1 SEAT WIRE**

RS

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

19 CHECK NO. 1 SEAT WIRE (FOR SHORT)



- (a) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
 - (b) Measure the resistance.
- Standard resistance**

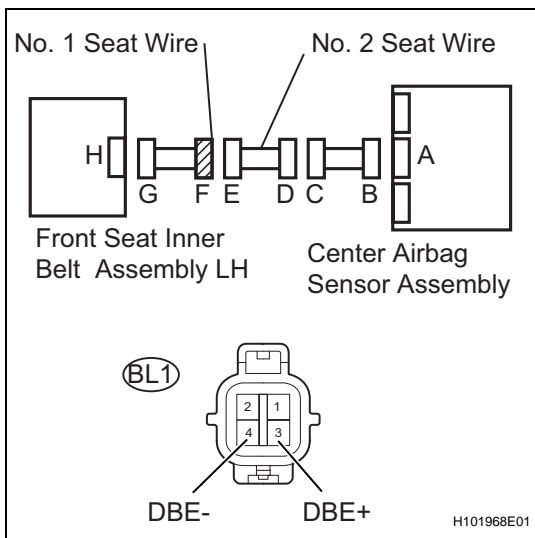
| Tester Connection | Condition | Specified Condition |
|-----------------------------|-----------|---------------------|
| BL1-3 (DBE+) - BL1-4 (DBE-) | Always | 1 MΩ or Higher |

NG REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

20 CHECK NO. 1 SEAT WIRE (TO B+)



- (a) Turn the ignition switch to the LOCK position.
 - (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
 - (c) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
 - (d) Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
 - (e) Turn the ignition switch to the ON position.
 - (f) Measure the voltage.
- Standard voltage**

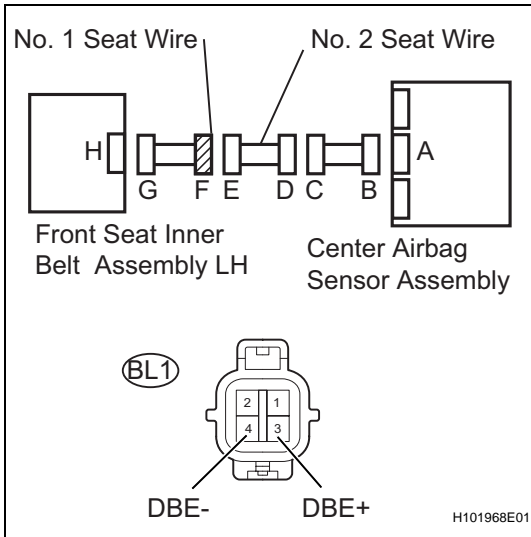
| Tester Connection | Condition | Specified Condition |
|----------------------------|--------------------|---------------------|
| BL1-3 (DBE+) - Body ground | Ignition switch ON | Below 1 V |
| BL1-4 (DBE-) - Body ground | Ignition switch ON | Below 1 V |

NG REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

21 CHECK NO. 1 SEAT WIRE (TO GROUND)



- (a) Disconnect the No. 1 seat wire connector from the No. 2 seat wire.
- (b) Measure the resistance.

Standard resistance

| Tester Connection | Condition | Specified Condition |
|----------------------------|-----------|---------------------|
| BL1-3 (DBE+) - Body ground | Always | 1 MΩ or Higher |
| BL1-4 (DBE-) - Body ground | Always | 1 MΩ or Higher |

NG REPAIR OR REPLACE NO. 1 SEAT WIRE

OK

REPAIR OR REPLACE NO. 2 SEAT WIRE

22 REPLACE FRONT SEAT INNER BELT ASSEMBLY LH

- (a) Turn the ignition switch to the LOCK position.
- (b) Disconnect the negative (-) terminal cable from the battery, and wait for at least 90 seconds.
- (c) Replace the front seat inner belt assembly LH (See page [SB-12](#) or [SB-8](#)).

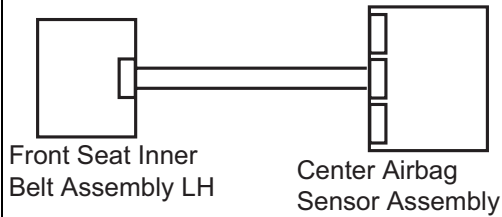
HINT:

Perform the inspection using parts from a normal vehicle when possible.

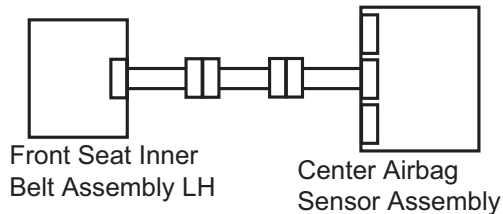
NEXT

23 CHECK CENTER AIRBAG SENSOR ASSEMBLY

Separate seat :

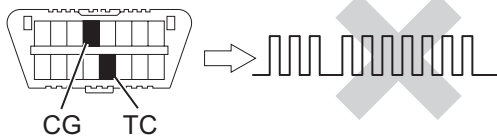


Bench seat :



DLC3

DTC B1655/37



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- Connect the negative (-) terminal cable to the battery, and wait for at least 2 seconds.
- Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- Clear any DTCs stored in the memory (See page [RS-34](#)).
- Turn the ignition switch to the LOCK position.
- Turn the ignition switch to the ON position, and wait for at least 60 seconds.
- Check for DTCs (See page [RS-34](#)).

OK:**DTC B1655/37 is not output.****HINT:**

DTCs other than B1655/37 may be output at this time, but they are not related to this check.

NG**REPLACE CENTER AIRBAG SENSOR ASSEMBLY****OK****END**