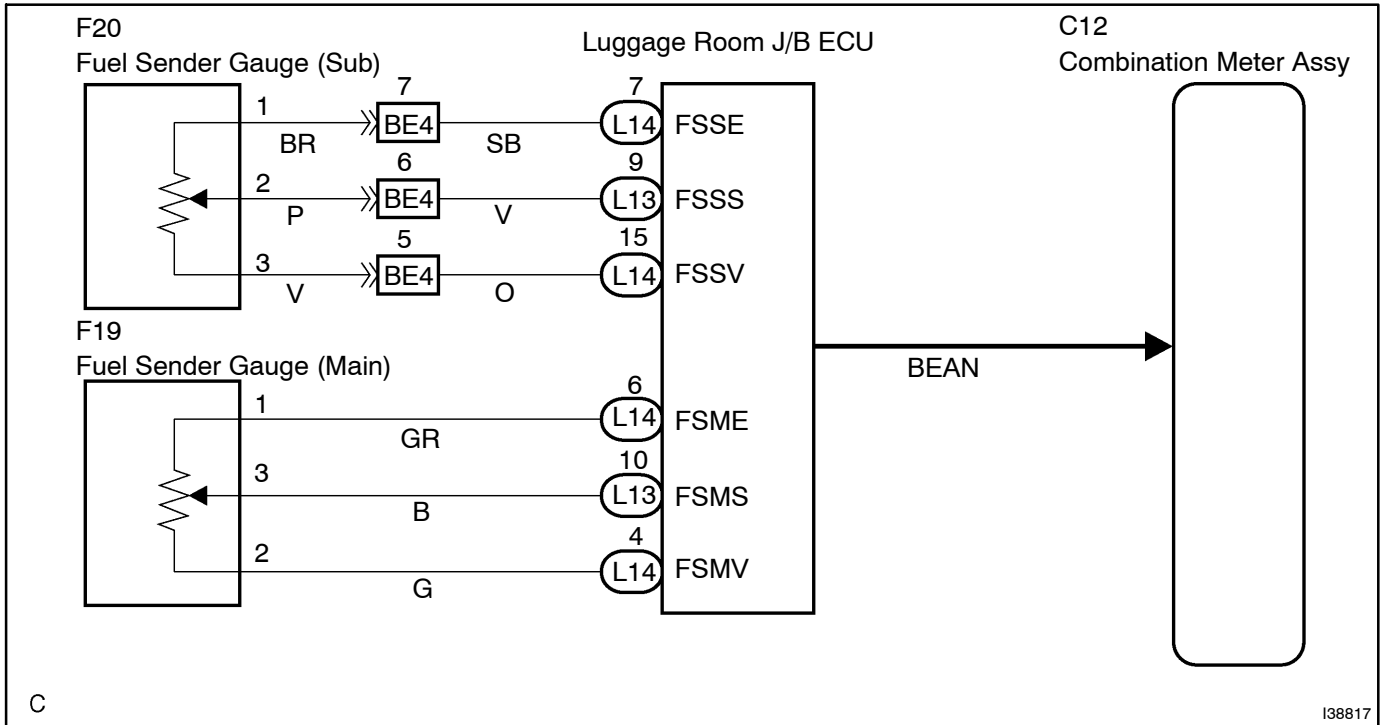


MALFUNCTION IN FUEL RECEIVER GAUGE

WIRING DIAGRAM



INSPECTION PROCEDURE

1 PERFORM ACTIVE TEST BY HAND-HELD TESTER

(a) Operate the hand-held tester according to the steps on the display and select the "ACTIVE TEST".

METER:

Item	Test Details	Diagnostic Note
FUEL GAUGE	OFF, EMPTY, 1/2, FULL	-

OK:

Needle indication is normal.

NG REPLACE COMBINATION METER ASSY (SEE PAGE 71-21)

OK

2 READ VALUE OF HAND-HELD TESTER(FUEL GAUGE)

(a) Operate the hand-held tester according to the steps on the display and select the "DATA LIST".

METER:

Item	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
FUEL GAUGE	Fuel input signal Min.: 1, Max.: 255	Fuel gauge indicates (F): 233 Fuel gauge indicates (3/4): 233 Fuel gauge indicates (1/2): 233 Fuel gauge indicates (1/4): 132 Fuel gauge indicates (E): 36	-
SUB FUEL GAUGE	Fuel input signal Min.: 1, Max.: 255	Fuel gauge indicates (F): 204 Fuel gauge indicates (3/4): 116 Fuel gauge indicates (1/2): 23 Fuel gauge indicates (1/4): 18 Fuel gauge indicates (E): 18	-

OK:

Fuel value signal displayed on the tester is almost the same as needle indication.

NG

**REPLACE COMBINATION METER ASSY
(SEE PAGE 71-21)**

OK**3 READ VALUE OF HAND-HELD TESTER(FUEL GAUGE)**

(a) Operate the hand-held tester according to the steps on the display and select the "DATA LIST".

BODY No.4:

Item	Measurement Item/ Range (Display)	Normal Condition	Diagnostic Note
FUEL LEVEL (MAIN)	Fuel input signal Min.: 0 V, Max.: 5 V	Fuel gauge indicates (F): 4.5 V Fuel gauge indicates (3/4): 4.5 V Fuel gauge indicates (1/2): 4.5 V Fuel gauge indicates (1/4): 2.7 V Fuel gauge indicates (E): 0.7 V	-
FUEL LEVEL (SUB)	Fuel input signal Min.: 0 V, Max.: 5 V	Fuel gauge indicates (F): 4.0 V Fuel gauge indicates (3/4): 2.3 V Fuel gauge indicates (1/2): 0.5 V Fuel gauge indicates (1/4): 0.4 V Fuel gauge indicates (E): 0.4 V	-

OK:

Fuel value signal displayed on the tester is almost the same as needle indication.

NG

Go to step 4

OK

Go to step 5

4 REPLACE LUGGAGE ROOM JUNCTION BLOCK ASSY

OK:
Normal operation

NG

REPLACE COMBINATION METER ASSY
(SEE PAGE 71-21)

OK

END

5 INSPECT FUEL SENDER GAUGE ASSY(MAIN)

Fuel Sender Gauge
Connector Front View:



le-5-1-A

I30899

- (a) Measure the voltage according to the value(s) in the table below.

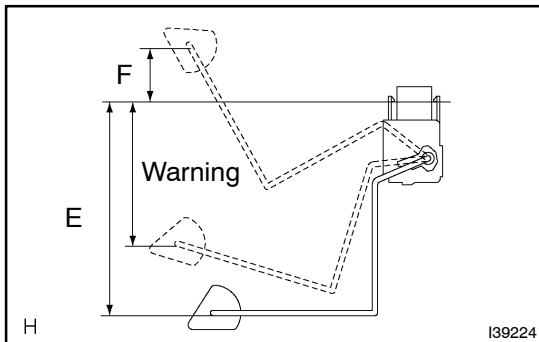
Standard:

Tester Connection	Condition	Specified Condition
F19-1 - F19-3	Ignition switch ACC or ON	Below 1 to 5 V

- (b) Remove the fuel sender gauge assy.
 (c) Connect the fuel sender gauge connector.
 (d) Check that the float position is between E and F.
 (e) Measure the voltage between the terminals 2 and 1 of connector according to the value(s) in the table below.

Standard:

Float level	Float position mm (in.)	Voltage (V)
F	-34.8 (-1.37) ± 3 (0.12)	4.5 to 4.75
1/2	92.8 (3.65) ± 3 (0.12)	1.41 ± 1.61
Warning	137.0 (5.39) ± 3 (0.12)	0.20 to 0.45



I39224

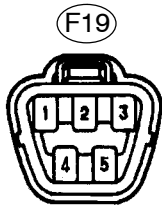
NG

REPLACE FUEL SENDER GAUGE ASSY(MAIN)

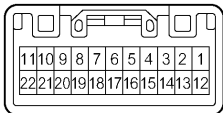
OK

6 CHECK HARNESS AND CONNECTOR(FUEL SENDER GAUGE ASSY - LUGGAGE ROOM JUNCTION BLOCK ASSY)(SEE PAGE 01-32)

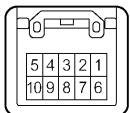
Fuel Sender Gauge Connector Front View:



Luggage Room J/B ECU Wire Harness View: L14



Luggage Room J/B ECU Wire Harness View: L13



I39223

- (a) Disconnect the F19, L13 and L14 connectors.
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

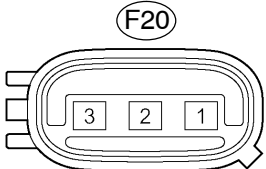
Tester Connection	Condition	Specified Condition
L14-6 - F19-1	Always	Below 1 Ω
L14-4 - F19-2	Always	Below 1 Ω
L13-10 - F19-3	Always	Below 1 Ω
F19-1 - Body ground	Always	10 kΩ or higher
F19-2 - Body ground	Always	10 kΩ or higher
F19-3 - Body ground	Always	10 kΩ or higher

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

7 INSPECT FUEL SENDER GAUGE ASSY(SUB)

Fuel Sender Gauge Connector Front View:



I40080

- (a) Measure the voltage according to the value(s) in the table below.

Standard:

Tester Connection	Condition	Specified Condition
F20-1 - F20-3	Ignition switch ACC or ON	Below 1 to 5 V

- (b) Remove the fuel sender gauge assy.
- (c) Connect the fuel sender gauge connector.
- (d) Check that the float position is between E and F.
- (e) Measure the voltage between the terminals 2 and 1 of connector according to the value(s) in the table below.

Standard:

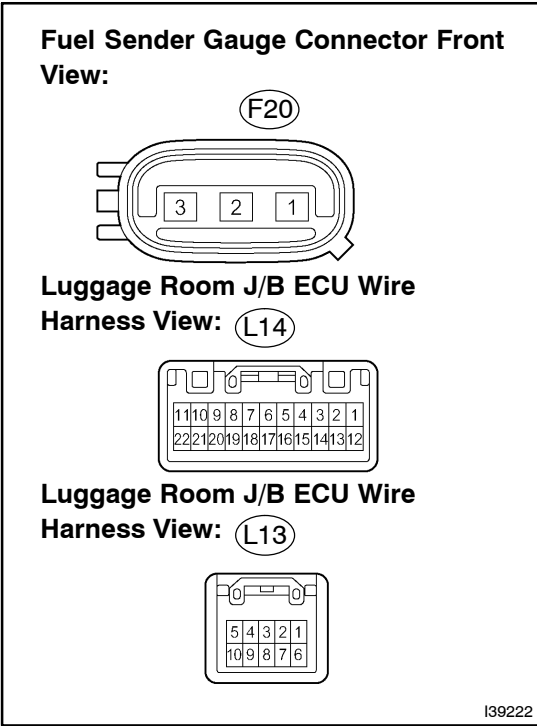
Float level	Float position mm (in.)	Voltage (V)
F	1.4 (0.06) ± 3 (0.12)	4.5 to 4.75
1/2	190.2 (7.49) ± 3 (0.12)	0.45 ± 0.65
Warning	195.7 (7.70) ± 3 (0.12)	0.20 to 0.45

I39221

NG REPLACE FUEL SENDER GAUGE ASSY(SUB)

OK

8 CHECK HARNESS AND CONNECTOR(FUEL SENDER GAUGE ASSY - LUGGAGE ROOM JUNCTION BLOCK ASSY)(SEE PAGE 01-32)



- (a) Disconnect the F20, L13 and 14 connectors.
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester Connection	Condition	Specified Condition
L14-7 - F20-1	Always	Below 1 Ω
L13-9 - F20-2	Always	Below 1 Ω
L14-15 - F20-3	Always	Below 1 Ω
F20-1 - Body ground	Always	10 kΩ or higher
F20-2 - Body ground	Always	10 kΩ or higher
F20-3 - Body ground	Always	10 kΩ or higher

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE LUGGAGE ROOM JUNCTION BLOCK ASSY