

## SPEAKER CIRCUIT

### CIRCUIT DESCRIPTION

- When the vehicle has a built-in type amplifier, a sound signal is sent from the radio receiver assy to the speakers via the "standard type" circuit.
- When the vehicle has a separate type amplifier, a sound signal from the radio receiver assy is amplified by the stereo component amplifier and then transmitted to the speaker via the "JBL type".

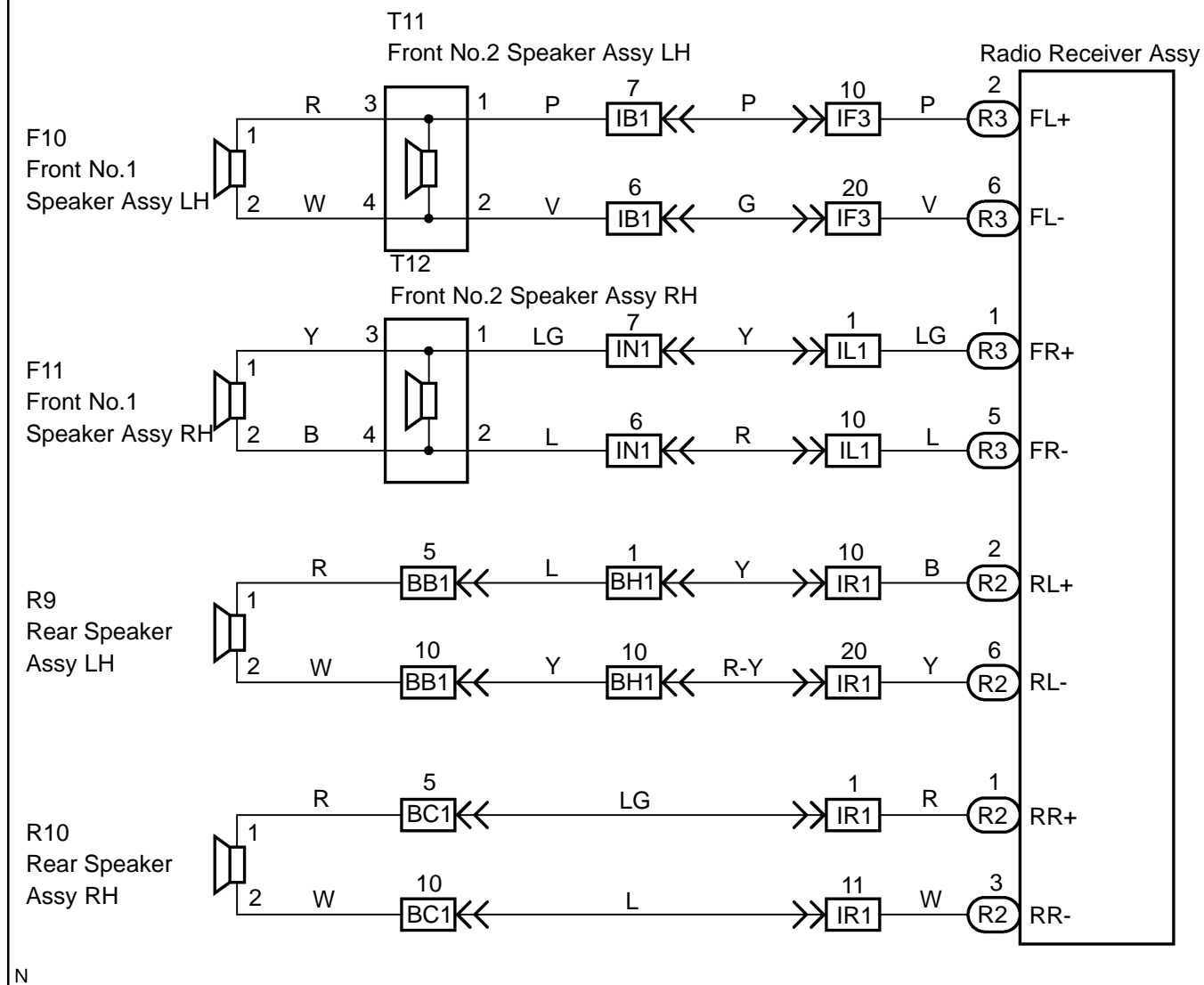
If there is a short in this circuit, the stereo component amplifier assy detects it and stops output to the speaker. Thus sound can not be heard from the speaker even if there is no malfunction in the stereo component amplifier assy or speaker.

JBL Type:

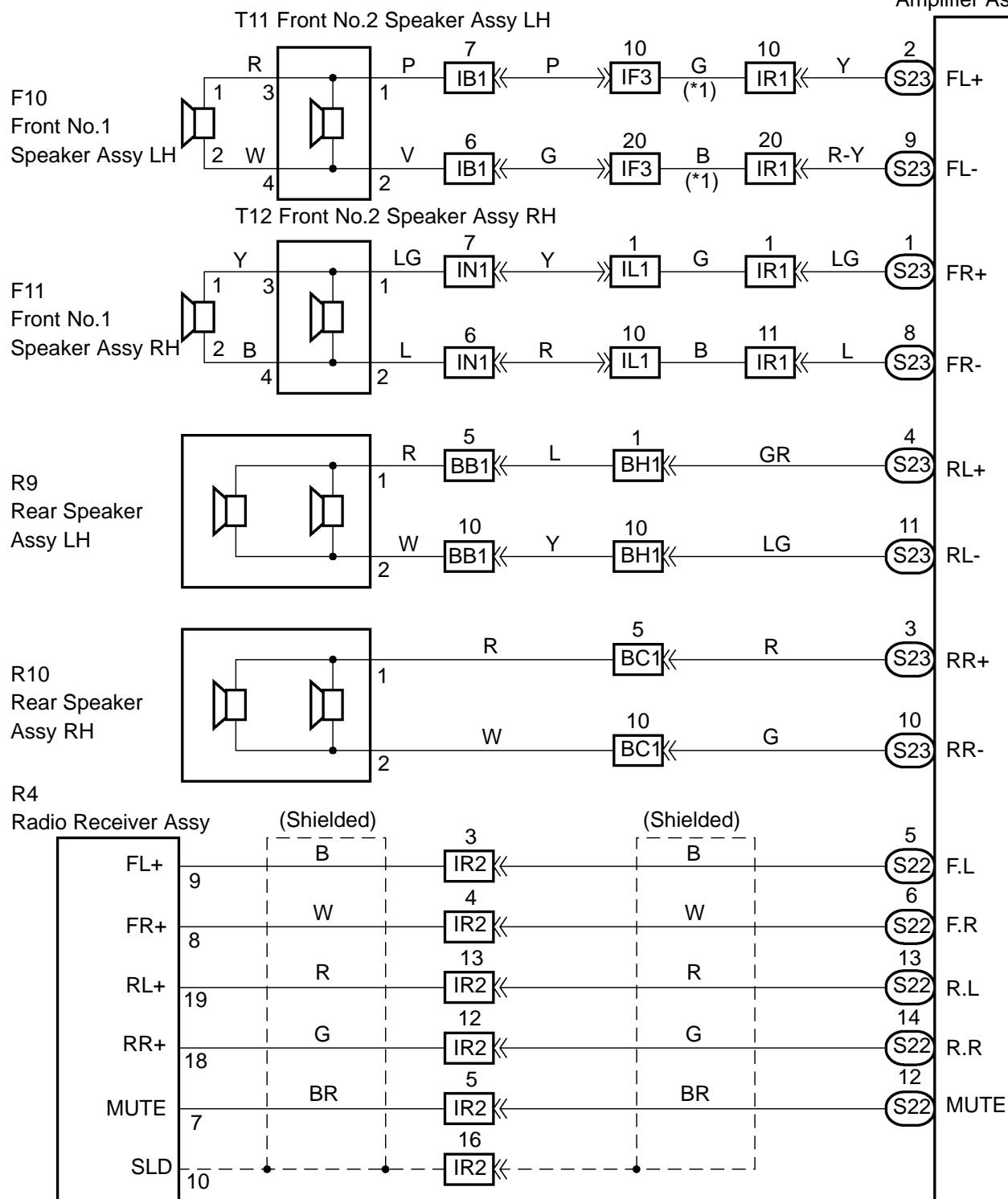
When a short in the speaker circuit is detected, all sound output is stopped.

## WIRING DIAGRAM

Standard type:



I30205

**JBL type:****Stereo Component  
Amplifier Assy**

\*1: w/o Navigation System

C

I39172

## INSPECTION PROCEDURE

### 1 CHECK TYPE

HINT:

If the radio receiver assy is JBL type, "JBL" is indicated on its surface.

(a) Choose type to be inspected.

| Type          | Go to step |
|---------------|------------|
| Standard type | A          |
| JBL type      | B          |

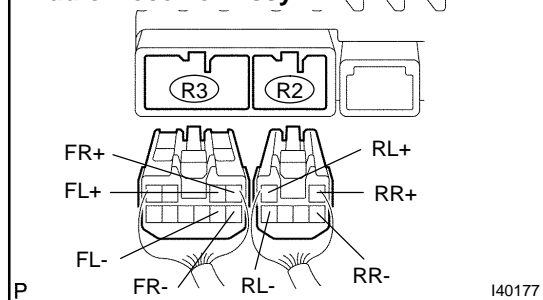
**B**

**Go to step 6**

**A**

### 2 CHECK HARNESS AND CONNECTOR(RADIO RECEIVER ASSY - SPEAKER ASSY)

#### Radio Receiver Assy:

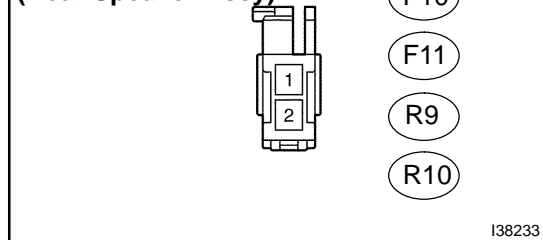


- Disconnect the connectors from the radio receiver assy and speakers.
- Measure the resistance according to the value(s) in the table below.

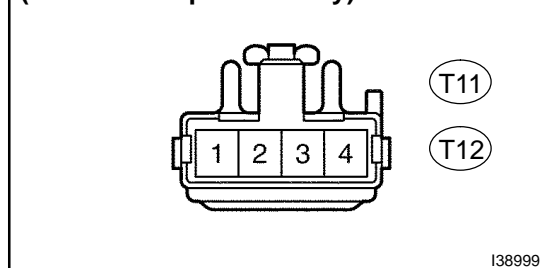
#### Standard:

| Tester connection                    | Specified condition     |
|--------------------------------------|-------------------------|
| FL+ - 1 (Front No.1 speaker assy LH) | Below 1 $\Omega$        |
| FL- - 2 (Front No.1 speaker assy LH) | Below 1 $\Omega$        |
| FR+ - 1 (Front No.1 speaker assy RH) | Below 1 $\Omega$        |
| FR- - 2 (Front No.1 speaker assy RH) | Below 1 $\Omega$        |
| FL+ - 1 (Front No.2 speaker assy LH) | Below 1 $\Omega$        |
| FL- - 2 (Front No.2 speaker assy LH) | Below 1 $\Omega$        |
| FR+ - 1 (Front No.2 speaker assy RH) | Below 1 $\Omega$        |
| FR- - 2 (Front No.2 speaker assy RH) | Below 1 $\Omega$        |
| RL+ - 1 (Rear speaker assy LH)       | Below 1 $\Omega$        |
| RL- - 2 (Rear speaker assy LH)       | Below 1 $\Omega$        |
| RR+ - 1 (Rear speaker assy RH)       | Below 1 $\Omega$        |
| RR- - 2 (Rear speaker assy RH)       | Below 1 $\Omega$        |
| FL+ - Body ground                    | 10 k $\Omega$ or higher |
| FL- - Body ground                    | 10 k $\Omega$ or higher |
| FR+ - Body ground                    | 10 k $\Omega$ or higher |
| FR- - Body ground                    | 10 k $\Omega$ or higher |
| RL+ - Body ground                    | 10 k $\Omega$ or higher |
| RL- - Body ground                    | 10 k $\Omega$ or higher |
| RR+ - Body ground                    | 10 k $\Omega$ or higher |
| RR- - Body ground                    | 10 k $\Omega$ or higher |

#### Wire Harness Side: (Front No.1 Speaker Assy) (Rear Speaker Assy)



#### Wire Harness Side: (Front No.2 Speaker Assy)



**NG**

**REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**

### 3 INSPECT FRONT NO. 1 SPEAKER ASSY

(a) Resistance check

(1) Measure the resistance between the terminals of the speaker.

**NOTICE:**

The speaker should not be removed for checking.

Standard: 4  $\Omega$

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REPLACE FRONT NO. 1 SPEAKER ASSY (SEE PAGE 67-10 )

OK

### 4 INSPECT FRONT NO. 2 SPEAKER ASSY

(a) Check that malfunction disappears when another speaker in a good condition is installed.

**OK: Malfunction disappears.**

**HINT:**

- Connect all the connectors to the speakers.
- When there is a possibility that either right or left front speaker is defective, inspect by interchanging the right one and the left one.

OK

REPLACE FRONT NO. 2 SPEAKER ASSY (SEE PAGE 67-11 )

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### 5 INSPECT REAR SPEAKER ASSY

(a) Resistance check

(1) Measure the resistance between the terminals of the speaker.

**NOTICE:**

The speaker should not be removed for checking.

Standard: 8  $\Omega$

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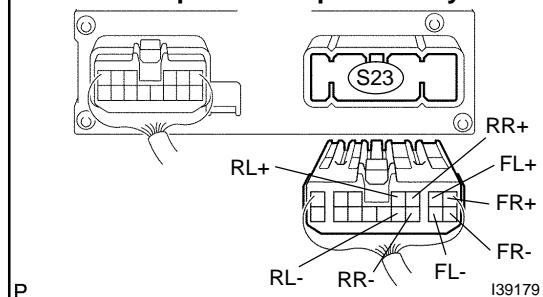
REPLACE REAR SPEAKER ASSY (SEE PAGE 67-12 )

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05-1632 )

## 6 CHECK HARNESS AND CONNECTOR(STEREO COMPONENT AMPLIFIER ASSY - SPEAKER ASSY)

### Stereo Component Amplifier Assy:



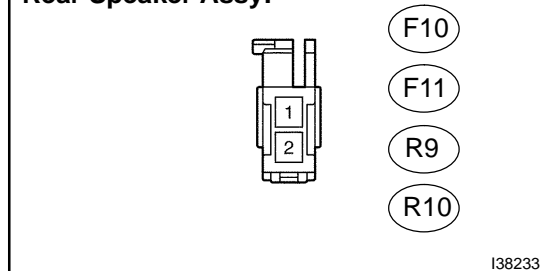
- Disconnect the connectors from the stereo component amplifier assy and speakers.
- Measure the resistance according to the values in the table below.

#### Standard:

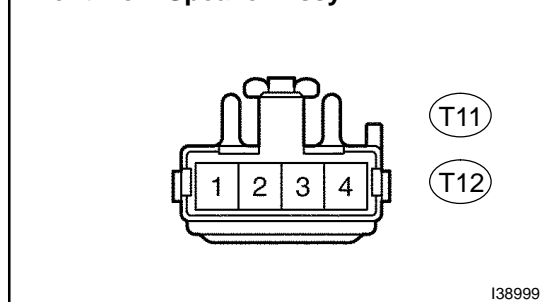
| Tester connection                    | Specified condition     |
|--------------------------------------|-------------------------|
| FL+ - 1 (Front No.1 speaker assy LH) | Below 1 $\Omega$        |
| FL- - 2 (Front No.1 speaker assy LH) | Below 1 $\Omega$        |
| FR+ - 1 (Front No.1 speaker assy RH) | Below 1 $\Omega$        |
| FR- - 2 (Front No.1 speaker assy RH) | Below 1 $\Omega$        |
| FL+ - 1 (Front No.2 speaker assy LH) | Below 1 $\Omega$        |
| FL- - 2 (Front No.2 speaker assy LH) | Below 1 $\Omega$        |
| FR+ - 1 (Front No.2 speaker assy RH) | Below 1 $\Omega$        |
| FR- - 2 (Front No.2 speaker assy RH) | Below 1 $\Omega$        |
| RL+ - 1 (Rear speaker assy LH)       | Below 1 $\Omega$        |
| RL- - 2 (Rear speaker assy LH)       | Below 1 $\Omega$        |
| RR+ - 1 (Rear speaker assy RH)       | Below 1 $\Omega$        |
| RR- - 2 (Rear speaker assy RH)       | Below 1 $\Omega$        |
| FL+ - Body ground                    | 10 k $\Omega$ or higher |
| FL- - Body ground                    | 10 k $\Omega$ or higher |
| FR+ - Body ground                    | 10 k $\Omega$ or higher |
| FR- - Body ground                    | 10 k $\Omega$ or higher |
| RL+ - Body ground                    | 10 k $\Omega$ or higher |
| RL- - Body ground                    | 10 k $\Omega$ or higher |
| RR+ - Body ground                    | 10 k $\Omega$ or higher |
| RR- - Body ground                    | 10 k $\Omega$ or higher |

### Front No.1 Speaker Assy:

### Rear Speaker Assy:



### Front No.2 Speaker Assy:



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**REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

## 7 INSPECT FRONT NO. 1 SPEAKER ASSY

- Resistance check
  - Measure the resistance between the terminals of the speaker.

#### NOTICE:

The speaker should not be removed for checking.

Standard: 2  $\Omega$

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**REPLACE FRONT NO. 1 SPEAKER ASSY  
(SEE PAGE 67-10)**

OK

**8 INSPECT FRONT NO. 2 SPEAKER ASSY**

- (a) Check that malfunction disappears when another speaker in a good condition is installed.

**OK: Malfunction disappears.**

HINT:

- Connect the connector to the speaker.
- When there is a possibility that either right or left front speaker is defective, inspect by interchanging the right one and the left one.

**OK**

**REPLACE FRONT NO. 2 SPEAKER ASSY  
(SEE PAGE 67-1 1)**

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**9 INSPECT REAR SPEAKER ASSY**

- (a) Resistance check

- (1) Measure the resistance between the terminals of the speaker.

**NOTICE:**

**The speaker should not be removed for checking.**

**Standard: 2  $\Omega$**

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**REPLACE REAR SPEAKER ASSY  
(SEE PAGE 67-12 )**

**OK**

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE  
(SEE PAGE 05-1632 )**