

<b>Last Modified:</b> 12-15-2015	6.6 J	<b>Doc ID:</b> RM0000012CL0B4X
<b>Model Year Start:</b> 2012	<b>Model:</b> Prius V	<b>Prod Date Range:</b> [06/2011 - ]
<b>Title:</b> NAVIGATION / MULTI INFO DISPLAY: NAVIGATION SYSTEM (for Navigation Receiver Type): Speaker Circuit; 2012 MY Prius V [06/2011 - ]		

**Speaker Circuit**

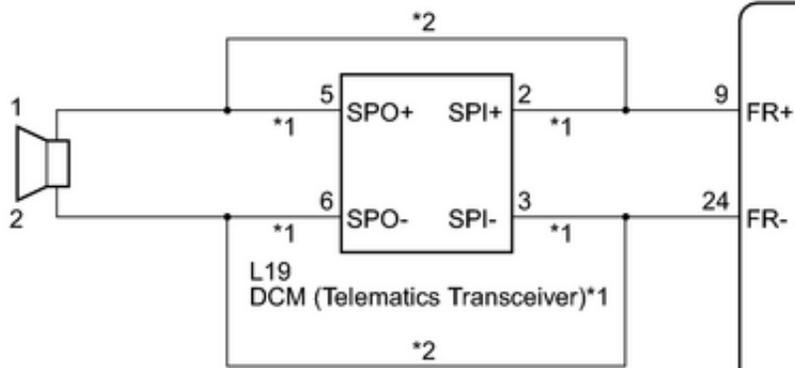
**DESCRIPTION**

If there is a short in a speaker circuit, the stereo component amplifier assembly detects it and stops output to the speakers.  
Thus sound cannot be heard from the speakers even if there is no malfunction in the stereo component amplifier assembly, DCM (telematics transceiver)\*1 or speakers.  
If a short is detected in a speaker circuit, no sound can be heard from the speakers.

\*1: w/ Manual (SOS) Switch

**WIRING DIAGRAM**

I4  
Front No. 2 Speaker  
Assembly RH



I5  
Front No. 2 Speaker  
Assembly LH



N1  
Front No. 1 Speaker  
Assembly RH

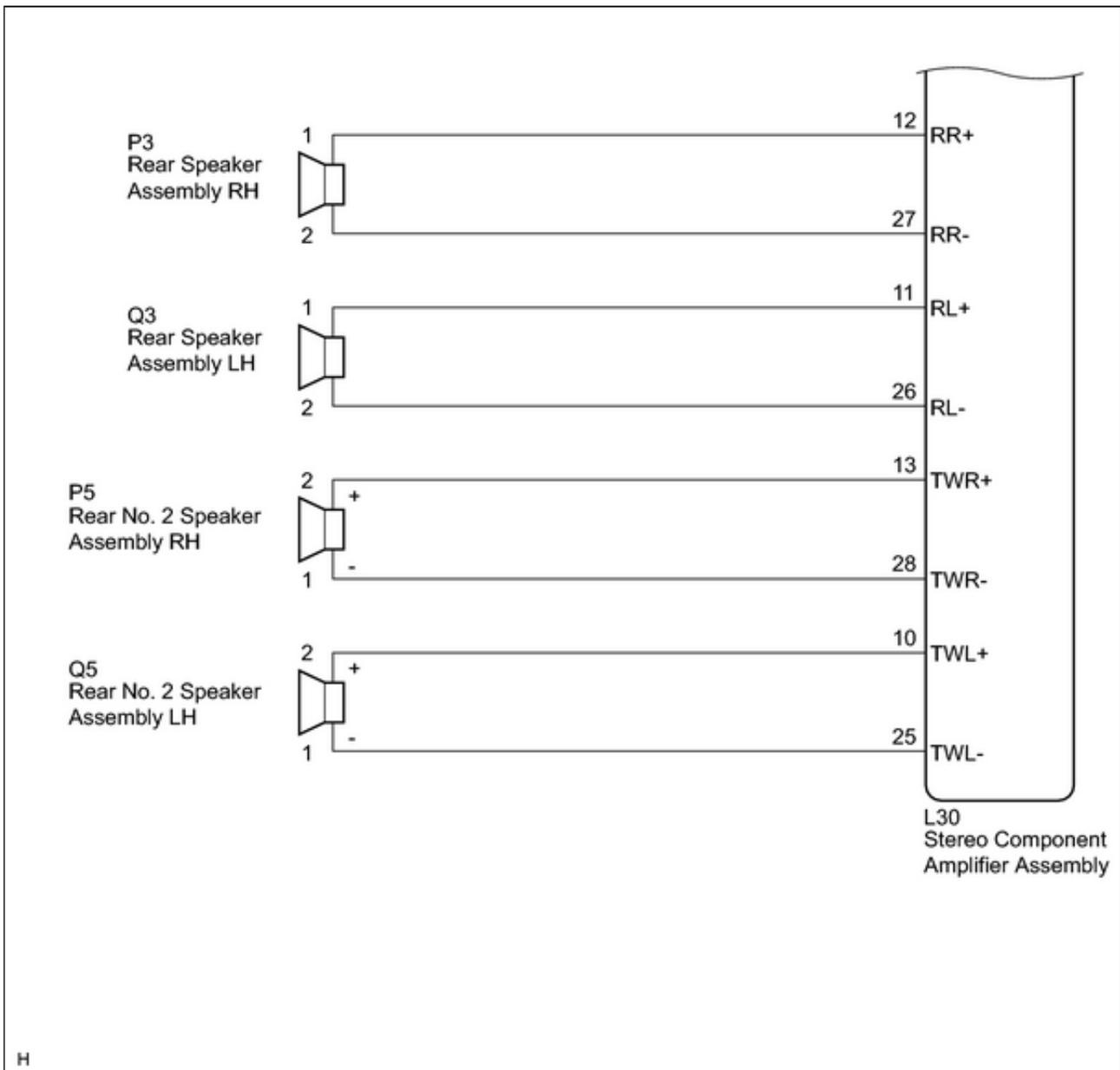


O1  
Front No. 1 Speaker  
Assembly LH



L30  
Stereo Component  
Amplifier Assembly

\*1: w/ Manual (SOS) Switch  
\*2: w/o Manual (SOS) Switch



## INSPECTION PROCEDURE

### PROCEDURE

<b>1.</b>	<b>CHECK HARNESS AND CONNECTOR</b>
-----------	------------------------------------

(a) Disconnect the connectors from the stereo component amplifier assembly, DCM (telematics transceiver)\*1 and speakers.

\*1: w/ Manual (SOS) Switch

(b) w/ Manual (SOS) Switch

Measure the resistance between the stereo component amplifier assembly and the DCM (telematics transceiver) to check for an open circuit in the wire harness.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L30-9 (FR+) - L19-2 (SPI+)	Always	Below 1 $\Omega$
L30-24 (FR-) - L19-3 (SPI-)	Always	Below 1 $\Omega$

(c) w/ Manual (SOS) Switch

Measure the resistance between the front No. 2 speaker assembly RH and the DCM (telematics transceiver) to check for an open circuit in the wire harness.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
I4-1 - L19-5 (SPO+)	Always	Below 1 $\Omega$
I4-2 - L19-6 (SPO-)	Always	Below 1 $\Omega$

(d) w/o Manual (SOS) Switch

Measure the resistance between the front No. 2 speaker assembly RH and the stereo component amplifier assembly to check for an open circuit in the wire harness.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L30-9 (FR+) - I4-1	Always	Below 1 $\Omega$
L30-24 (FR-) - I4-2	Always	Below 1 $\Omega$

(e) Measure the resistance between the front No. 2 speaker assembly LH and the stereo component amplifier assembly to check for an open circuit in the wire harness.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L30-14 (FL+) - I5-1	Always	Below 1 $\Omega$
L30-29 (FL-) - I5-2	Always	Below 1 $\Omega$

(f) Measure the resistance between each of the front No. 1 speaker assemblies and the stereo component amplifier assembly to check for an open circuit in the wire harness.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L30-15 (WFR+) - N1-1	Always	Below 1 $\Omega$
L30-30 (WFR-) - N1-2	Always	Below 1 $\Omega$
L30-8 (WFL+) - O1-1	Always	Below 1 $\Omega$

L30-23 (WFL-) - O1-2	Always	Below 1 $\Omega$
----------------------	--------	------------------

(g) Measure the resistance between each of the rear speaker assemblies and the stereo component amplifier assembly to check for an open circuit in the wire harness.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L30-12 (RR+) - P3-1	Always	Below 1 $\Omega$
L30-27 (RR-) - P3-2	Always	Below 1 $\Omega$
L30-11 (RL+) - Q3-1	Always	Below 1 $\Omega$
L30-26 (RL-) - Q3-2	Always	Below 1 $\Omega$

(h) Measure the resistance between each of the rear No. 2 speaker assemblies and the stereo component amplifier assembly to check for an open circuit in the wire harness.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L30-13 (TWR+) - P5-2 (+)	Always	Below 1 $\Omega$
L30-28 (TWR-) - P5-1 (-)	Always	Below 1 $\Omega$
L30-10 (TWL+) - Q5-2 (+)	Always	Below 1 $\Omega$
L30-25 (TWL-) - Q5-1 (-)	Always	Below 1 $\Omega$

(i) Measure the resistance between the stereo component amplifier assembly and body ground to check for a short circuit in the wire harness.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L30-9 (FR+) - Body ground	Always	10 k $\Omega$ or higher
L30-24 (FR-) - Body ground	Always	10 k $\Omega$ or higher
L30-14 (FL+) - Body ground	Always	10 k $\Omega$ or higher
L30-29 (FL-) - Body ground	Always	10 k $\Omega$ or higher
L30-15 (WFR+) - Body ground	Always	10 k $\Omega$ or higher
L30-30 (WFR-) - Body ground	Always	10 k $\Omega$ or higher
L30-8 (WFL+) - Body ground	Always	10 k $\Omega$ or higher
L30-23 (WFL-) - Body ground	Always	10 k $\Omega$ or higher
L30-12 (RR+) - Body ground	Always	10 k $\Omega$ or higher
L30-27 (RR-) - Body ground	Always	10 k $\Omega$ or higher
L30-11 (RL+) - Body ground	Always	10 k $\Omega$ or higher
L30-26 (RL-) - Body ground	Always	10 k $\Omega$ or higher

L30-13 (TWR+) - Body ground	Always	10 kΩ or higher
L30-28 (TWR-) - Body ground	Always	10 kΩ or higher
L30-10 (TWL+) - Body ground	Always	10 kΩ or higher
L30-25 (TWL-) - Body ground	Always	10 kΩ or higher

(j) w/ Manual (SOS) Switch

Measure the resistance between the DCM (telematics transceiver) and body ground to check for a short circuit in the wire harness.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L19-5 (SPO+) - Body ground	Always	10 kΩ or higher
L19-6 (SPO-) - Body ground	Always	10 kΩ or higher

**NG**  **REPAIR OR REPLACE HARNESS OR CONNECTOR**

**OK**



<b>2.</b>	<b>INSPECT FRONT NO. 1 SPEAKER ASSEMBLY</b>
-----------	---

(a) Resistance check

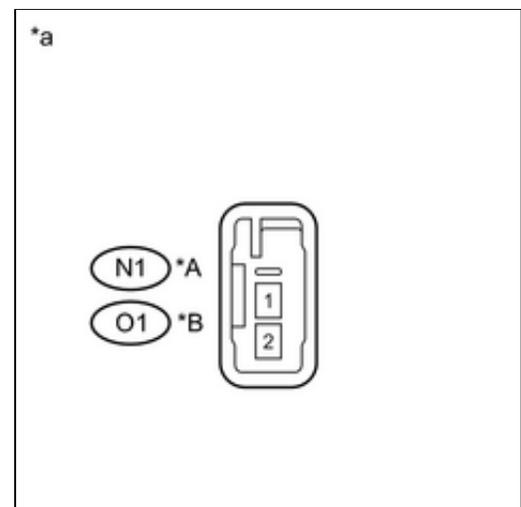
(1) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
N1-1 - N1-2	Always	4.6 to 6.6 Ω
O1-1 - O1-2	Always	4.6 to 6.6 Ω

**Text in Illustration**

*A	for RH
*B	for LH
*a	Component without harness connected (Front No. 1 Speaker Assembly)



**NG**  **REPLACE FRONT NO. 1 SPEAKER ASSEMBLY**

**OK**



<b>3.</b>	<b>INSPECT FRONT NO. 2 SPEAKER ASSEMBLY</b>
-----------	---

(a) Resistance check

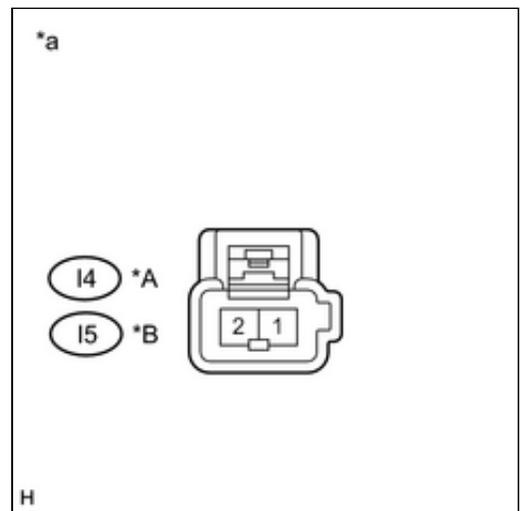
(1) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
I4-1 - I4-2	Always	3.2 to 4.8 Ω
I5-1 - I5-2	Always	3.2 to 4.8 Ω

**Text in Illustration**

*A	for RH
*B	for LH
*a	Component without harness connected (Front No. 2 Speaker Assembly)



**NG**  **REPLACE FRONT NO. 2 SPEAKER ASSEMBLY**

**OK**



<b>4.</b>	<b>INSPECT REAR SPEAKER ASSEMBLY</b>
-----------	--------------------------------------

(a) Resistance check

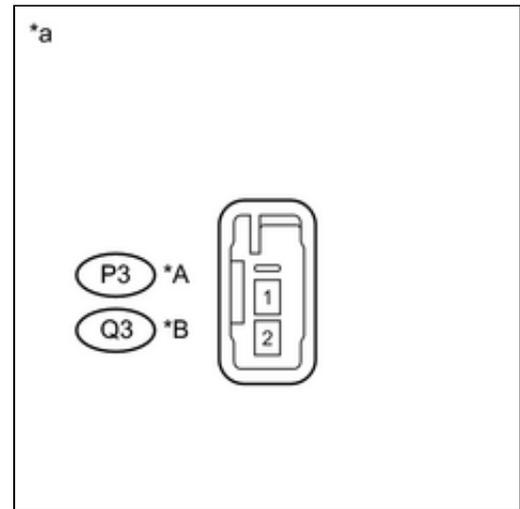
(1) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P3-1 - P3-2	Always	3.2 to 5.2 $\Omega$
Q3-1 - Q3-2	Always	3.2 to 5.2 $\Omega$

**Text in Illustration**

*A	for RH
*B	for LH
*a	Component without harness connected (Rear Speaker Assembly)



**NG** **REPLACE REAR SPEAKER ASSEMBLY**

**OK**



**5. INSPECT REAR NO. 2 SPEAKER ASSEMBLY**

(a) Resistance check

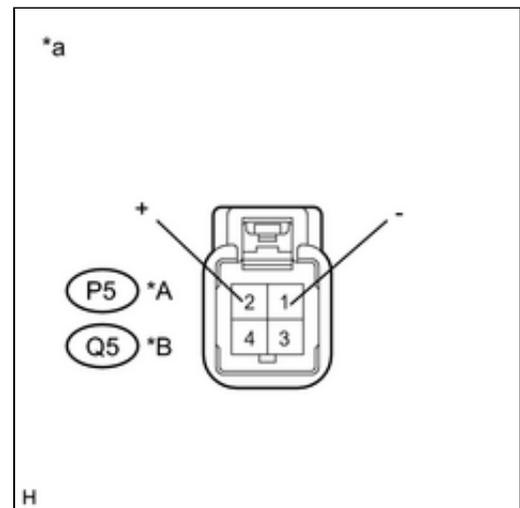
(1) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
P5-1 (-) - P5-2 (+)	Always	3.2 to 4.8 $\Omega$
Q5-1 (-) - Q5-2 (+)	Always	3.2 to 4.8 $\Omega$

**Text in Illustration**

*A	for RH
*B	for LH
*a	Component without harness connected (Rear No. 2 Speaker Assembly)



(b) Proceed to the next step based on the inspection result.

CONDITION	PROCEED TO
OK (w/ Manual (SOS) Switch)	A
OK (w/o Manual (SOS) Switch)	B
NG	C

**B ▶ PROCEED TO NEXT SUSPECTED AREA SHOWN IN PROBLEM SYMPTOMS TABLE**

**C ▶ REPLACE REAR NO. 2 SPEAKER ASSEMBLY**

**A**



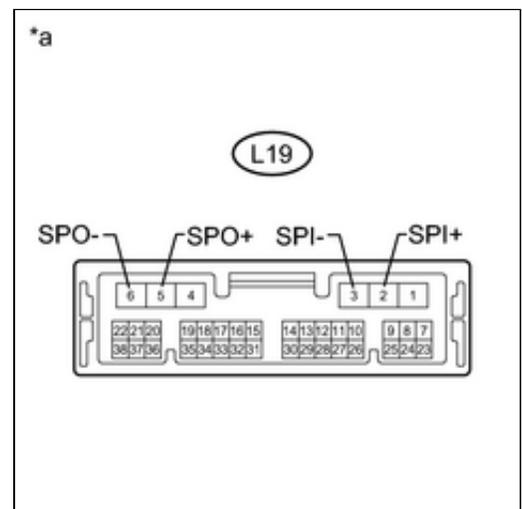
<b>6.</b>	<b>INSPECT DCM (TELEMATICS TRANSCEIVER)</b>
-----------	---

(a) Resistance check

(1) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
L19-2 (SPI+) - L19-5 (SPO+)	Always	Below 1 $\Omega$
L19-3 (SPI-) - L19-6 (SPO-)	Always	Below 1 $\Omega$
L19-2 (SPI+) - L19-3 (SPI-)	Always	10 k $\Omega$ or higher
L19-5 (SPO+) - L19-6 (SPO-)	Always	10 k $\Omega$ or higher
L19-2 (SPI+) - Body ground	Always	10 k $\Omega$ or higher
L19-3 (SPI-) - Body ground	Always	10 k $\Omega$ or higher



**Text in Illustration**

*a	Component without harness connected (DCM (Telematics Transceiver))
----	--

**NG** ▶ REPLACE DCM (TELEMATICS TRANSCEIVER)

**OK** ▶ PROCEED TO NEXT SUSPECTED AREA SHOWN  
IN PROBLEM SYMPTOMS TABLE

