

<b>Last Modified:</b> 12-04-2024	6.11:8.1.0	<b>Doc ID:</b> RM1000000291Z9
<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [12/2022 - ]
<b>Title:</b> AUDIO / VIDEO: AUDIO AND VISUAL SYSTEM: B15C371; Speaker Output Short Actuator Stuck; 2023 - 2024 MY Prius Prius Prime [12/2022 - ]		

<b>DTC</b>	<b>B15C371</b>	<b>Speaker Output Short Actuator Stuck</b>
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## DESCRIPTION

This DTC is stored when the stereo component amplifier assembly\*1 or radio and display receiver assembly\*2 detects a short in a speaker circuit.

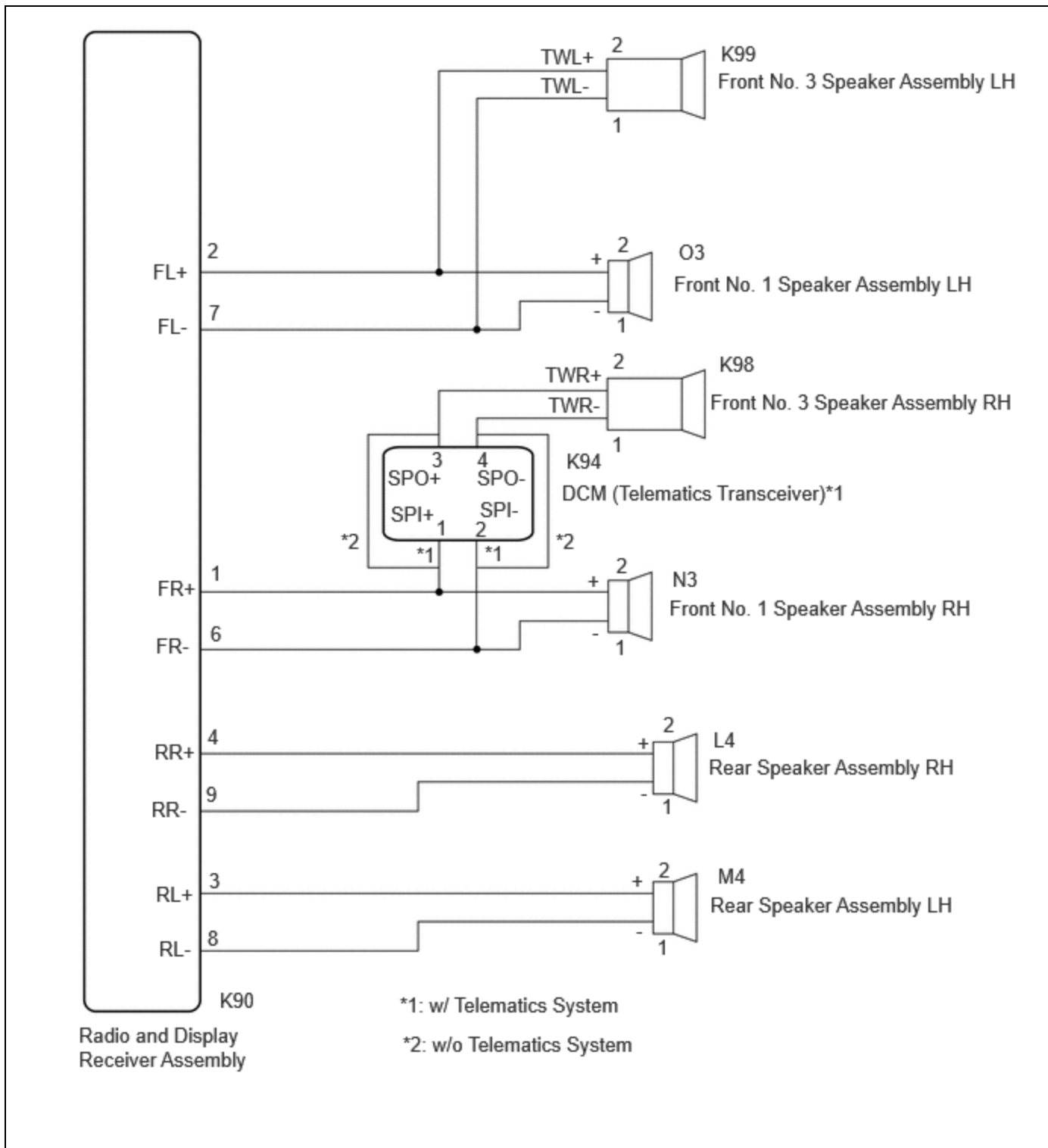
DTC NO.	DETECTION ITEM	DTC DETECTION CONDITION	TROUBLE AREA	DTC OUTPUT FROM	PRIORITY
B15C371	Speaker Output Short Actuator Stuck	When any of the following conditions is met: (2 trip detection logic) <ul style="list-style-type: none"> <li>A short is detected in the speaker output circuit</li> <li>Internal direct current is detected in the AMP power IC</li> </ul>	<ul style="list-style-type: none"> <li>Harness or connector</li> <li>Speaker</li> <li>Stereo Component Amplifier*1</li> <li>Radio and Display Receiver Assembly*2</li> </ul>	Navigation System	A

\*1: with "JBL" Sound System

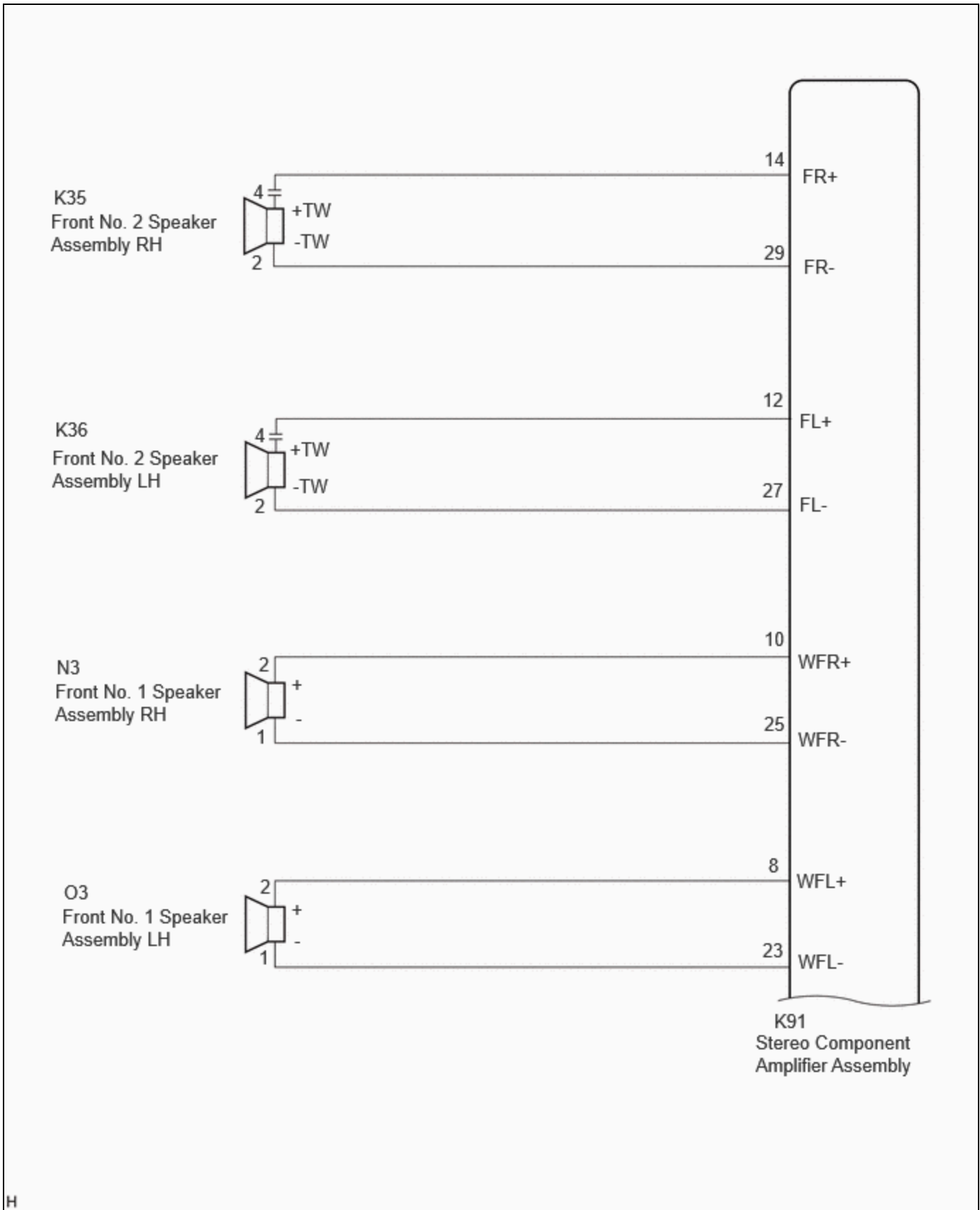
\*2: without "JBL" Sound System

## WIRING DIAGRAM

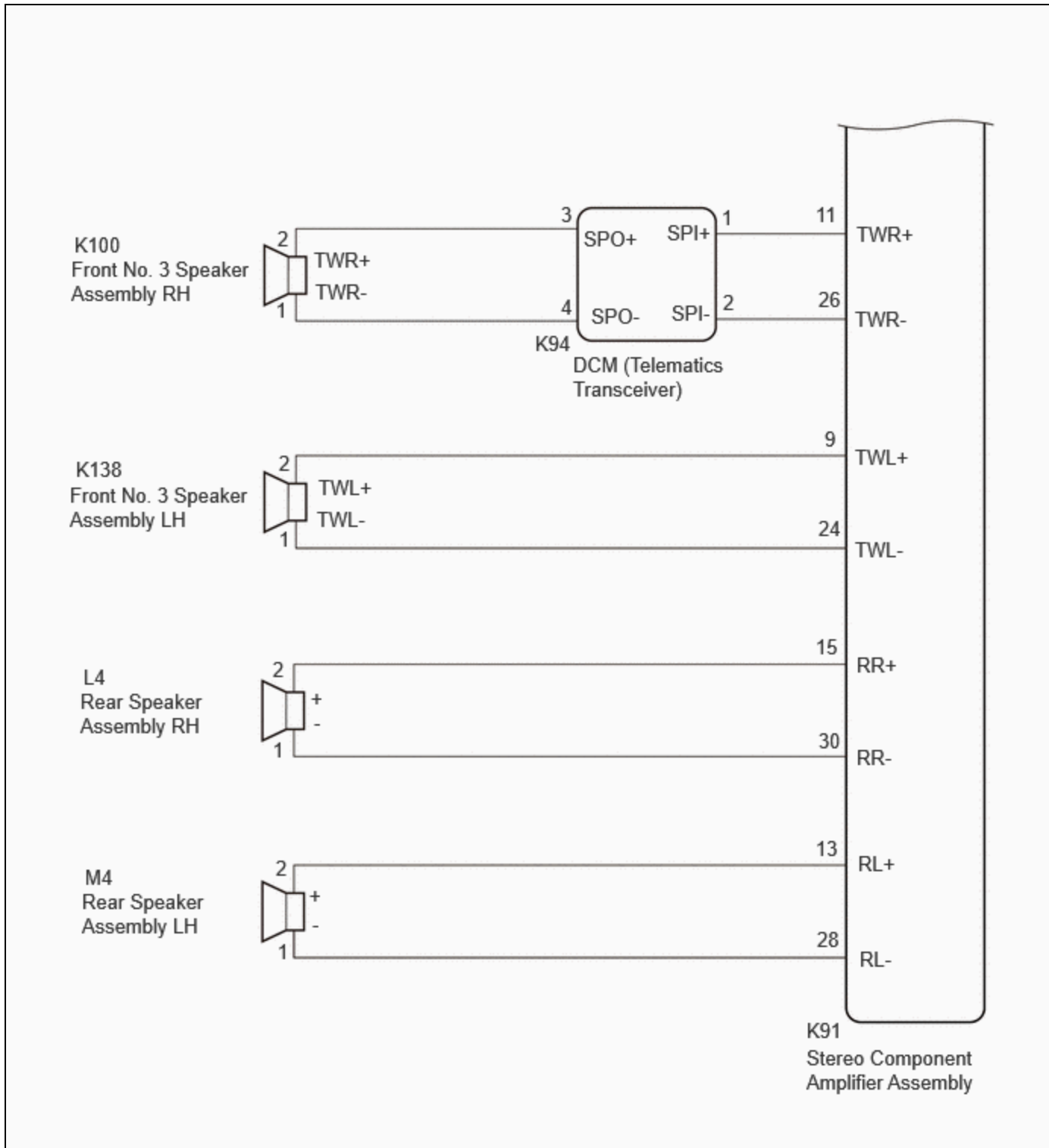
**w/o "JBL" Sound System**



**w/ "JBL" Sound System**



H



## CAUTION / NOTICE / HINT

### NOTICE:

Depending on the parts that are replaced during vehicle inspection or maintenance, performing initialization, registration or calibration may be needed.

Click here [INFO](#)

## PROCEDURE

<b>1.</b>	<b>CHECK MODEL</b>
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(a) Choose the model to be inspected.

RESULT	PROCEED TO
w/o "JBL" Sound System with Telematics Transceiver	A
w/o "JBL" Sound System without Telematics Transceiver	B
w/ "JBL" Sound System	C

**B** ► GO TO STEP 10

**C** ► GO TO STEP 17

**A**  
▼

<b>2.</b>	<b>CHECK HARNESS AND CONNECTOR (RADIO AND DISPLAY RECEIVER ASSEMBLY - EACH SPEAKER AND DCM (TELEMATICS TRANSCEIVER))</b>
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Pre-procedure1

- (a) Disconnect the K90 radio and display receiver assembly connector.
- (b) Disconnect the K94 DCM (telematics transceiver) connector.
- (c) Disconnect the K99 front No. 3 speaker assembly LH connector.
- (d) Disconnect the O3 and N3 front No. 1 speaker assembly connector.
- (e) Disconnect the L4 and M4 rear speaker assembly connectors.

Procedure1

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

Standard Resistance:



[Click Location & Routing\(K90,K94,N3,K99,O3,L4,M4\)](#)

[Click Connector\(K90\)](#)

[Click Connector\(K94\)](#)

[Click Connector\(N3\)](#)

[Click Connector\(K99\)](#)

[Click Connector\(O3\)](#)

[Click Connector\(L4\)](#)[Click Connector\(M4\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K90-1 (FR+) or K94-1 (SPI+) - Body ground	Always	10 kΩ or higher	kΩ
K90-6 (FR-) or K94-2 (SPI-) - Body ground	Always	10 kΩ or higher	kΩ
K90-1 (FR+) or N3-2 (+) - Body ground	Always	10 kΩ or higher	kΩ
K90-6 (FR-) or N3-1 (-) - Body ground	Always	10 kΩ or higher	kΩ
K90-2 (FL+) or K99-2 (TWL+) - Body ground	Always	10 kΩ or higher	kΩ
K90-7 (FL-) or K99-1 (TWL-) - Body ground	Always	10 kΩ or higher	kΩ
K90-2 (FL+) or O3-2 (+) - Body ground	Always	10 kΩ or higher	kΩ
K90-7 (FL-) or K99-1 (-) - Body ground	Always	10 kΩ or higher	kΩ
K90-4 (RR+) or L4-2 (+) - Body ground	Always	10 kΩ or higher	kΩ
K90-9 (RR-) or L4-1 (-) - Body ground	Always	10 kΩ or higher	kΩ
K90-3 (RL+) or M4-2 (+) - Body ground	Always	10 kΩ or higher	kΩ
K90-8 (RL-) or M4-1 (-) - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(g) None

**NG**  **REPAIR OR REPLACE HARNESS OR CONNECTOR****OK****3.****CHECK HARNESS AND CONNECTOR (DCM (TELEMATICS TRANSCEIVER) - FRONT NO. 3 SPEAKER ASSEMBLY RH)**

Pre-procedure1

(a) Disconnect the K94 DCM (telematics transceiver) connector.

(b) Disconnect the K98 front No. 3 speaker assembly RH connector.

Procedure1

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

Standard Resistance:

[Click Location & Routing\(K94,K98\)](#)[Click Connector\(K94\)](#)[Click Connector\(K98\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K94-3 (SPO+) or K98-2 (TWR+) - Body ground	Always	10 kΩ or higher	kΩ
K94-4 (SPO-) or K98-1 (TWR-) - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(d) None

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

**OK**



<b>4.</b>	<b>INSPECT FRONT NO. 1 SPEAKER ASSEMBLY</b>
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**HINT:**

[Click here](#) 

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

**OK**



<b>5.</b>	<b>INSPECT REAR SPEAKER ASSEMBLY</b>
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**HINT:**

[Click here](#) 

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

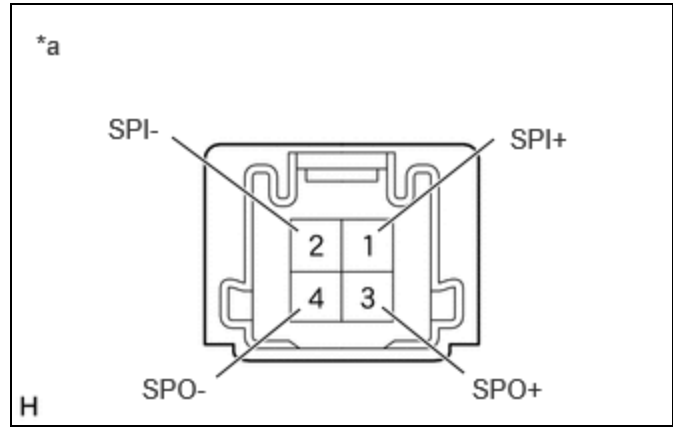
**OK**



<b>6.</b>	<b>INSPECT TELEMATICS TRANSCEIVER</b>
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Pre-procedure1

(a) Disconnect the telematics transceiver connector.



*a	Component without harness connected (DCM (Telematics Transceiver))
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Procedure1

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

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
1 (SPI+) - 3 (SPO+)	Always	Below 1 Ω	Ω
2 (SPI-) - 4 (SPO-)	Always	Below 1 Ω	Ω
1 (SPI+) - 2 (SPI-)	Always	10 kΩ or higher	kΩ
3 (SPO+) - 4 (SPO-)	Always	10 kΩ or higher	kΩ

Post-procedure1

(c) None

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

**OK**



**7. REPLACE FRONT NO.3 SPEAKER ASSEMBLY**

(a) Replace the speaker assembly with a new or known good one.

**HINT:**

[Click here](#) INFO



**NEXT**

<b>8.</b>	<b>CLEAR DTC</b>
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(a) Clear the DTCs.

**Body Electrical > Navigation System > Clear DTCs**

**NEXT**

<b>9.</b>	<b>CHECK FOR DTC</b>
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Pre-procedure1

(a) Turn the ignition switch off.

Procedure1

(b) Check for DTCs and proceed to the following step.

**Body Electrical > Navigation System > Trouble Codes**

RESULT	PROCEED TO
B15C371 is not output	A
B15C371 is output	B

Post-procedure1

(c) None

**A** **END**

**B** **REPLACE RADIO AND DISPLAY RECEIVER ASSEMBLY**

<b>10.</b>	<b>CHECK HARNESS AND CONNECTOR (RADIO AND DISPLAY RECEIVER ASSEMBLY - EACH SPEAKER)</b>
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Pre-procedure1

(a) Disconnect the K90 radio and display receiver assembly connector.

(b) Disconnect the K98 and K99 front No. 3 speaker assembly connectors.

(c) Disconnect the L4 and M4 rear speaker assembly connectors.

Procedure1

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

Standard Resistance:



[Click Location & Routing\(K90,K98,K99,L4,M4\)](#)

[Click Connector\(K90\)](#)

[Click Connector\(K98\)](#)

[Click Connector\(K99\)](#)

[Click Connector\(L4\)](#)

[Click Connector\(M4\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K90-1 (FR+) or K98-4 (TWR+) - Body ground	Always	10 kΩ or higher	kΩ
K90-6 (FR-) or K98-2 (TWR-) - Body ground	Always	10 kΩ or higher	kΩ
K90-2 (FL+) or K99-4 (TWL+) - Body ground	Always	10 kΩ or higher	kΩ
K90-7 (FL-) or K99-2 (TWL-) - Body ground	Always	10 kΩ or higher	kΩ
K90-4 (RR+) or L4-2 (+) - Body ground	Always	10 kΩ or higher	kΩ
K90-9 (RR-) or L4-1 (-) - Body ground	Always	10 kΩ or higher	kΩ
K90-3 (RL+) or M4-2 (+) - Body ground	Always	10 kΩ or higher	kΩ
K90-8 (RL-) or M4-1 (-) - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(e) None

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

**OK**



<b>11.</b>	<b>CHECK HARNESS AND CONNECTOR (FRONT NO. 1 SPEAKER ASSEMBLY - FRONT NO. 3 SPEAKER ASSEMBLY)</b>
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Pre-procedure1

(a) Disconnect the N3 and O3 front No. 1 speaker assembly connectors.

(b) Disconnect the K98 and K99 front No. 3 speaker assembly connectors.

Procedure1

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

Standard Resistance:



[Click Location & Routing\(O3,K99,N3,K98\)](#)

[Click Connector\(O3\)](#)

[Click Connector\(K99\)](#)

[Click Connector\(N3\)](#)

[Click Connector\(K98\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
O3-2 or K99-2 (+) - Body ground	Always	10 kΩ or higher	kΩ
O3-1 or K99-1 (-) - Body ground	Always	10 kΩ or higher	kΩ
N3-2 or K98-2 (+) - Body ground	Always	10 kΩ or higher	kΩ
N3-1 or K98-1 (-) - Body ground	Always	10 kΩ or higher	kΩ

Post-procedure1

(d) None

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

**OK**



<b>12.</b>	<b>INSPECT FRONT NO. 1 SPEAKER ASSEMBLY</b>
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**HINT:**

Click here [INFO](#)

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

**OK**



<b>13.</b>	<b>INSPECT REAR SPEAKER ASSEMBLY</b>
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**HINT:**

Click here [INFO](#)

**NG** ► REPLACE REAR SPEAKER ASSEMBLY

**OK****14. REPLACE FRONT NO.3 SPEAKER ASSEMBLY**

(a) Replace the speaker assembly with a new or known good one.

**HINT:**

Click here [INFO](#)

**NEXT****15. CLEAR DTC**

(a) Clear the DTCs.

**Body Electrical > Navigation System > Clear DTCs**

**NEXT****16. CHECK FOR DTC**

Pre-procedure1

(a) Turn the ignition switch off.

Procedure1

(b) Check for DTCs and proceed to the following step.

**Body Electrical > Navigation System > Trouble Codes**

RESULT	PROCEED TO
B15C371 is not output	A
B15C371 is output	B

Post-procedure1

(c) None

**A** ▶ END**B** ▶ REPLACE RADIO AND DISPLAY RECEIVER ASSEMBLY**17. CHECK HARNESS AND CONNECTOR (STEREO COMPONENT AMPLIFIER ASSEMBLY - EACH SPEAKER AND DCM (TELEMATICS TRANSCEIVER))**

Pre-procedure1

- (a) Disconnect the K91 stereo component amplifier assembly connector.
- (b) Disconnect the K94 DCM (telematics transceiver) connector.
- (c) Disconnect the K138 front No. 3 speaker assembly LH connector.
- (d) Disconnect the K35 and K36 front No. 2 speaker assembly connectors.
- (e) Disconnect the L4 and M4 rear speaker assembly connectors.
- (f) Disconnect the O3 and N3 front No. 1 speaker assembly connectors.

Procedure1

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

Standard Resistance:



[Click Location & Routing\(K91,K94,K138,K35,K36,L4,M4,N3,O3\)](#)

[Click Connector\(K91\)](#)

[Click Connector\(K94\)](#)

[Click Connector\(K138\)](#)

[Click Connector\(K35\)](#)

[Click Connector\(K36\)](#)

[Click Connector\(L4\)](#)

[Click Connector\(M4\)](#)

[Click Connector\(N3\)](#)

[Click Connector\(O3\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K91-11 (TWR+) or K94-1 (SPI+) - Body ground	Always	10 kΩ or higher	kΩ
K91-26 (TWR-) or K94-2 (SPI-) - Body ground	Always	10 kΩ or higher	kΩ
K91-9 (TWL+) or K138-2 (TWL+) - Body ground	Always	10 kΩ or higher	kΩ
K91-24 (TWL-) or K138-1 (TWL-) - Body ground	Always	10 kΩ or higher	kΩ
K91-14 (FR+) or K35-4 (+TW) - Body ground	Always	10 kΩ or higher	kΩ
K91-29 (FR-) or K35-2 (-TW) - Body ground	Always	10 kΩ or higher	kΩ
K91-12 (FL+) or K36-4 (+TW) - Body ground	Always	10 kΩ or higher	kΩ
K91-27 (FL-) or K36-2 (-TW) - Body ground	Always	10 kΩ or higher	kΩ
K91-15 (RR+) or L4-2 (+) - Body ground	Always	10 kΩ or higher	kΩ

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K91-30 (RR-) or L4-1 (-) - Body ground	Always	10 k $\Omega$ or higher	k $\Omega$
K91-13 (RL+) or M4-2 (+) - Body ground	Always	10 k $\Omega$ or higher	k $\Omega$
K91-28 (RL-) or M4-1 (-) - Body ground	Always	10 k $\Omega$ or higher	k $\Omega$
K91-10 (WFR+) or N3-2 (+) - Body ground	Always	10 k $\Omega$ or higher	k $\Omega$
K91-25 (WFR-) or N3-3 (-) - Body ground	Always	10 k $\Omega$ or higher	k $\Omega$
K91-8 (WFL+) or O3-2 (+) - Body ground	Always	10 k $\Omega$ or higher	k $\Omega$
K91-23 (WFL-) or O3-1 (-) - Body ground	Always	10 k $\Omega$ or higher	k $\Omega$

Post-procedure1

(h) None

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

**OK**



<b>18.</b>	<b>CHECK HARNESS AND CONNECTOR (DCM (TELEMATICS TRANSCEIVER) - FRONT NO. 3 SPEAKER ASSEMBLY)</b>
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Pre-procedure1

(a) Disconnect the K94 DCM (telematics transceiver) connector.

(b) Disconnect the K100 front No. 3 speaker assembly RH connector.

Procedure1

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

Standard Resistance:



[Click Location & Routing\(K94,K100\)](#)

[Click Connector\(K94\)](#)

[Click Connector\(K100\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K94-3 (SPO+) or K100-2 (TWR+) - Body ground	Always	10 k $\Omega$ or higher	k $\Omega$
K94-4 (SPO-) or K100-1 (TWR-) - Body ground	Always	10 k $\Omega$ or higher	k $\Omega$

Post-procedure1

(d) None

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

**OK**



<b>19.</b>	<b>INSPECT FRONT NO. 1 SPEAKER ASSEMBLY</b>
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**HINT:**

Click here 

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

**OK**



<b>20.</b>	<b>INSPECT FRONT NO.3 SPEAKER ASSEMBLY</b>
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**HINT:**

Click here 

**NG**  **REPLACE FRONT NO.3 SPEAKER ASSEMBLY**

**OK**



<b>21.</b>	<b>INSPECT REAR SPEAKER ASSEMBLY</b>
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**HINT:**

Click here 

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

**OK**



<b>22.</b>	<b>INSPECT DCM (TELEMATICS TRANSCEIVER)</b>
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Pre-procedure1

(a) Remove the DCM (telematics transceiver).

**HINT:**

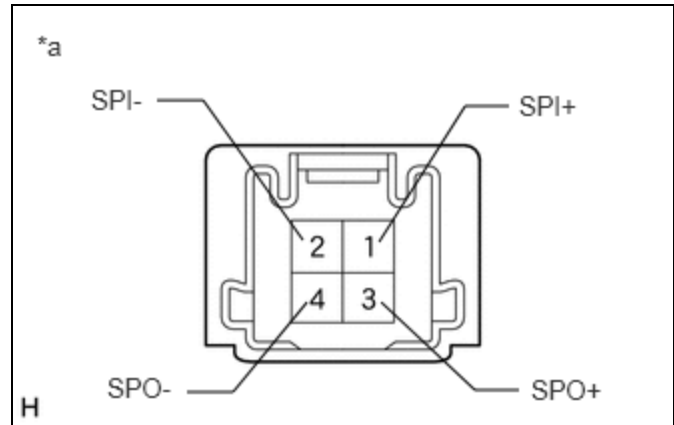
[Click here](#) **INFO**

Procedure1

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

Standard Resistance:

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
1 (SPI+) - 3 (SPO+)	Always	Below 1 Ω	Ω
2 (SPI-) - 4 (SPO-)	Always	Below 1 Ω	Ω
1 (SPI+) - 2 (SPI-)	Always	10 kΩ or higher	kΩ
3 (SPO+) - 4 (SPO-)	Always	10 kΩ or higher	kΩ
1 (SPI+) or 3 (SPO+) - Body ground	Always	10 kΩ or higher	kΩ
2 (SPI-) or 4 (SPO-) - Body ground	Always	10 kΩ or higher	kΩ



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

Result:

PROCEED TO
OK
NG

Post-procedure1

(c) None

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

**OK**



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

(a) Replace the speaker assembly with a new or known good one.

**HINT:**

[Click here](#) 

**NEXT**



**24. CLEAR DTC**

(a) Clear the DTCs.

**Body Electrical > Navigation System > Clear DTCs**

**NEXT**



**25. CHECK FOR DTC**

Pre-procedure1

(a) Turn the ignition switch off.

Procedure1

(b) Check for DTCs and proceed to the following step.

**Body Electrical > Navigation System > Trouble Codes**

RESULT	PROCEED TO
B15C371 is not output	A
B15C371 is output	B

Post-procedure1

(c) None

**A**  **END**

**B**  **REPLACE STEREO COMPONENT AMPLIFIER ASSEMBLY**



