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<b>Model Year Start:</b> 2023	<b>Model:</b> Prius	<b>Prod Date Range:</b> [12/2022 - ]
<b>Title:</b> NETWORKING: CAN COMMUNICATION SYSTEM (for HEV Model): Check Bus 1 Line; 2023 - 2024 MY Prius [12/2022 - ]		

[Check Bus 1 Line](#)

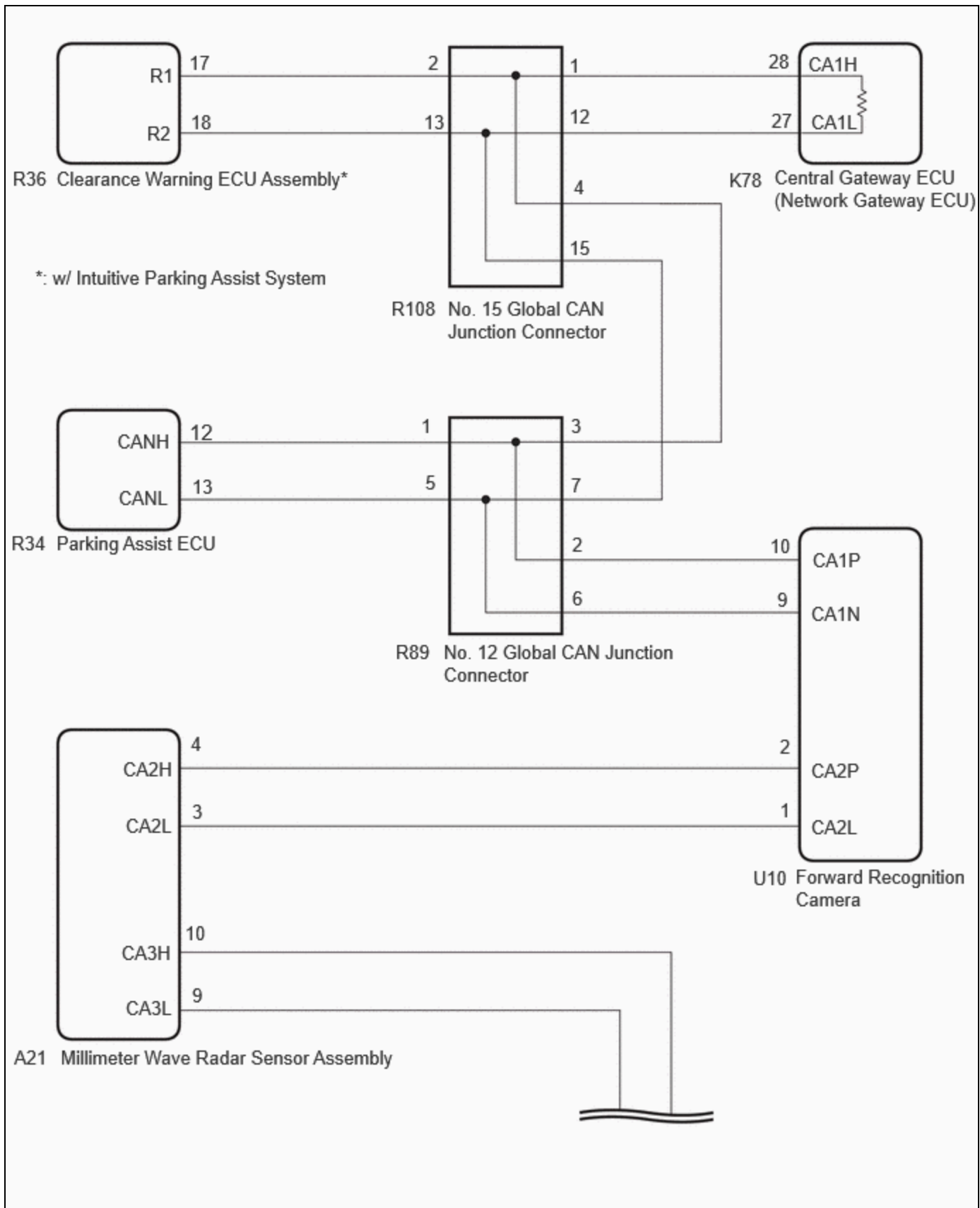
## DESCRIPTION

SYMPTOM	TROUBLE AREA
<p>There are ECUs or sensors that display a communication stop on the bus diagnostic screen. Or, there are ECUs or sensors that display communication stop history on the "Detail" screen.</p>	<ul style="list-style-type: none"> <li>• CAN main bus line, CAN branch line or connector</li> <li>• Central gateway ECU (network gateway ECU)</li> <li>• Clearance warning ECU assembly (w/ Intuitive Parking Assist System)</li> <li>• Forward recognition camera</li> <li>• Millimeter wave radar sensor assembly</li> <li>• Front side radar sensor (A) (w/ Front Side Radar Sensor System)</li> <li>• Parking assist ECU (w/ Panoramic View Monitor System)</li> <li>• Blind spot monitor sensor LH (B)</li> <li>• Rear television camera assembly (w/ Parking Assist Monitor System)</li> <li>• No. 2 global CAN junction connector</li> <li>• No. 11 global CAN junction connector</li> <li>• No. 12 global CAN junction connector (w/ Panoramic View Monitor System)</li> <li>• No. 15 global CAN junction connector</li> <li>• No. 16 global CAN junction connector (w/ Parking Assist Monitor System)</li> </ul>

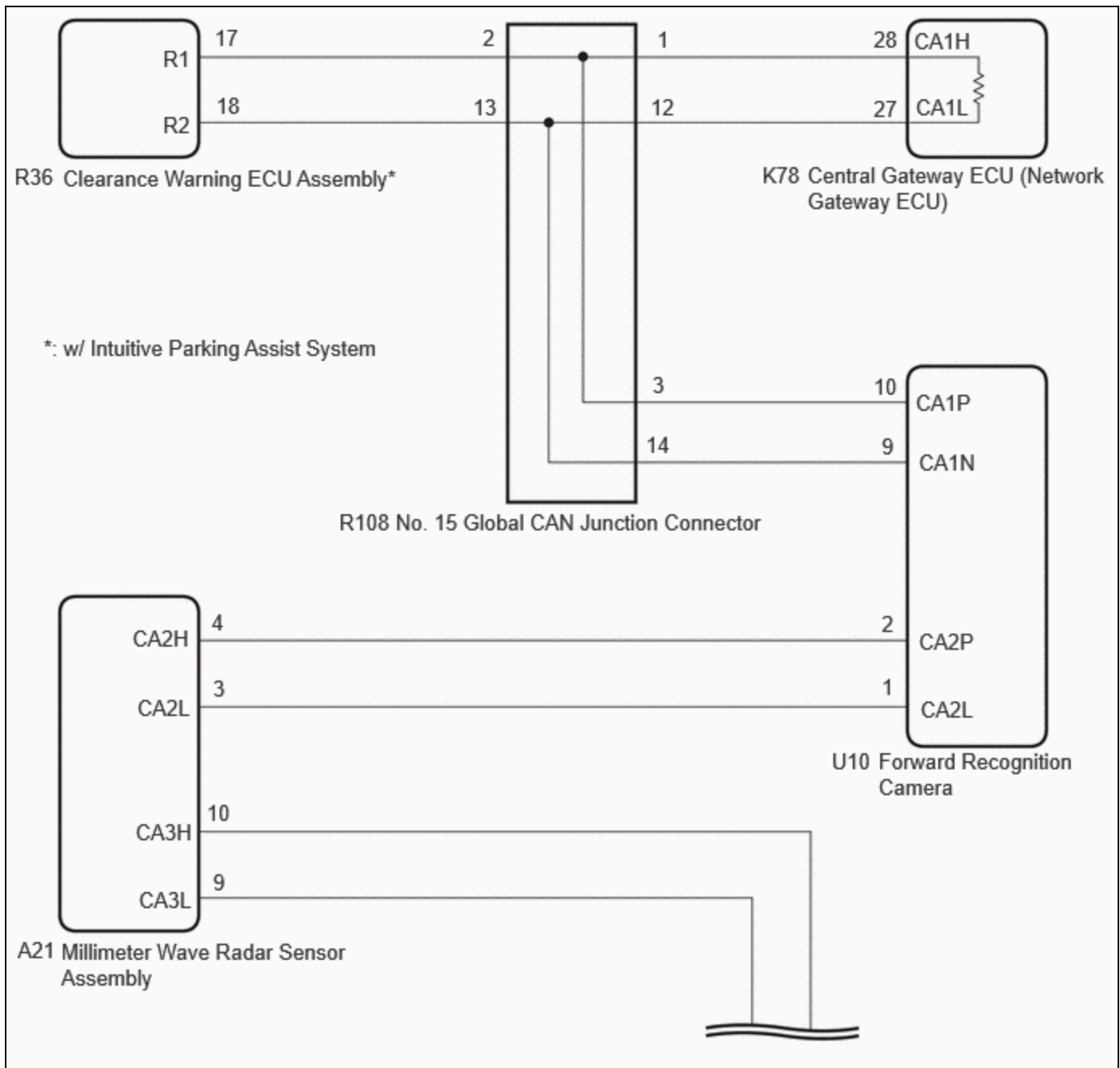
SYMPTOM	TROUBLE AREA
	<ul style="list-style-type: none"><li>No. 2 CAN junction terminal</li></ul>

## **WIRING DIAGRAM**

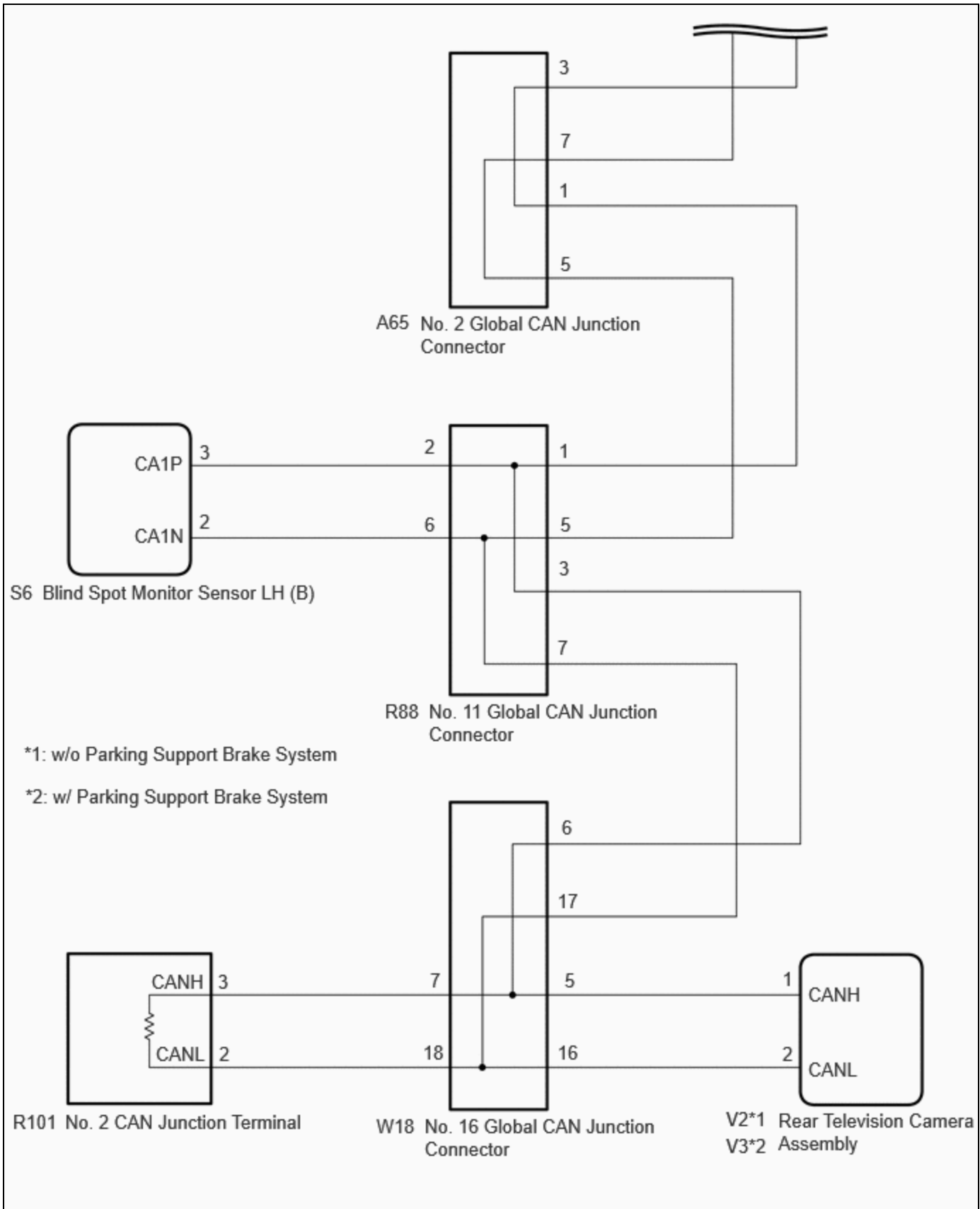
**w/ Panoramic View Monitor System:**



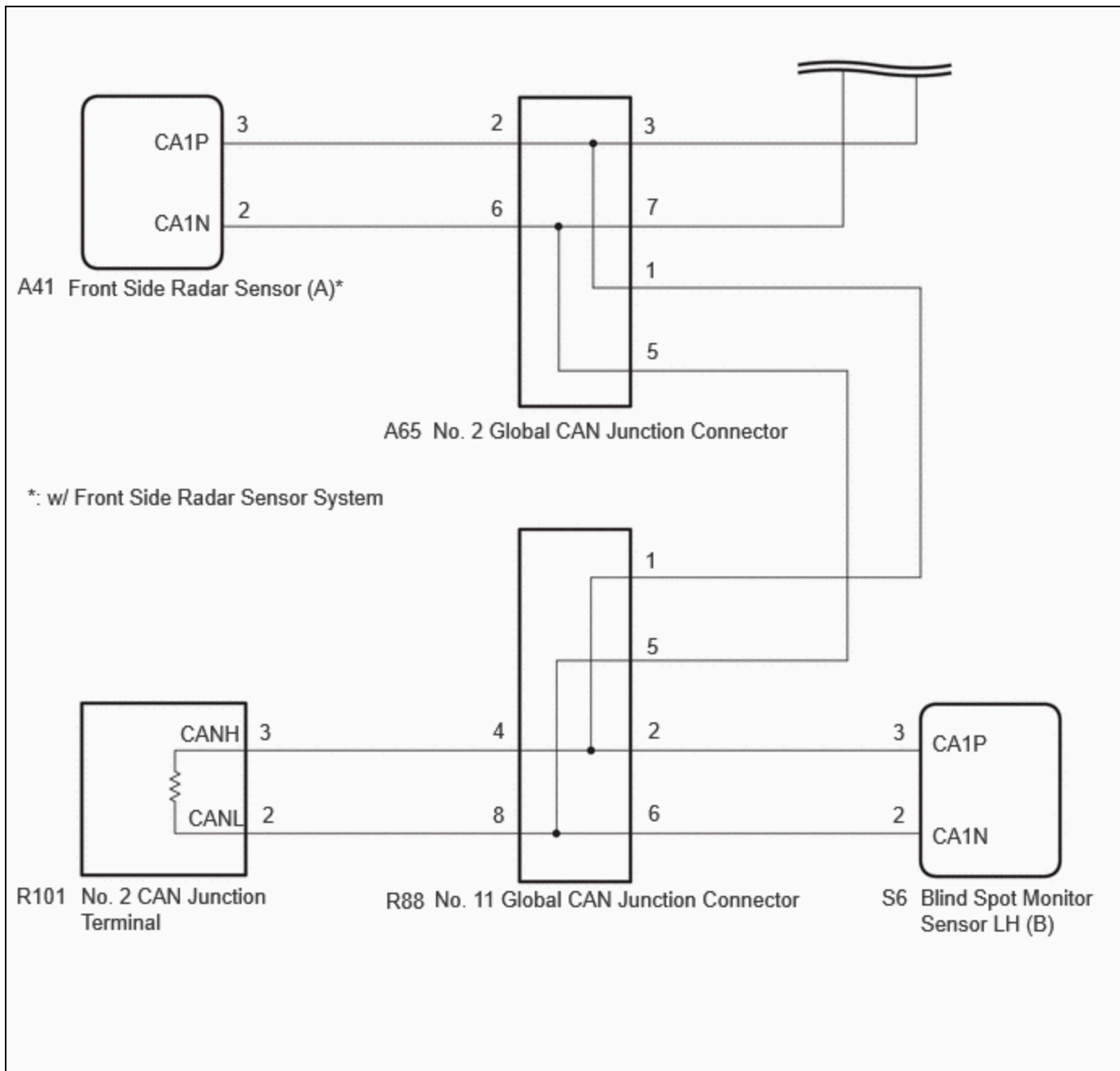
**w/o Panoramic View Monitor System:**



**w/ Parking Assist Monitor System:**



**w/o Parking Assist Monitor System:**



## CAUTION / NOTICE / HINT

### CAUTION:

When performing the confirmation driving pattern, obey all speed limits and traffic laws.

### NOTICE:

- Because the order of diagnosis is important to allow correct diagnosis, make sure to begin troubleshooting using How to Proceed with Troubleshooting when CAN communication system related DTCs are output.

Click here [INFO](#)

- Before measuring the resistance of the CAN bus, turn the ignition switch off and leave the vehicle for 1 minute or more without operating the key or any switches, or opening or closing the doors. After that, disconnect the cable from the negative (-) auxiliary battery terminal and leave the vehicle for 10 minutes or more before measuring the resistance.
- After the ignition switch is turned off, there may be a waiting time before disconnecting the negative (-) auxiliary battery terminal.

Click here [INFO](#)

- When disconnecting and reconnecting the auxiliary battery.

[Click here](#)

**HINT:**

When disconnecting and reconnecting the auxiliary battery, there is an automatic learning function that completes learning when the respective system is used.

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

- Some parts must be initialized and set when replacing or removing and installing parts.

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

- After performing repairs, perform the DTC check procedure and confirm that the DTCs are not output again.

DTC check procedure: Turn the ignition switch to ON and wait for 1 minute or more. Then operate the suspected malfunctioning system and drive the vehicle at 60 km/h (37 mph) or more for 5 minutes or more.

- After the repair, perform the CAN bus check and check that all the ECUs and sensors connected to the CAN communication system are displayed as normal.

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

**HINT:**

- Before disconnecting related connectors for inspection, push in on each connector body to check that the connector is not loose or disconnected.
- When a connector is disconnected, check that the terminals and connector body are not cracked, deformed or corroded.

## PROCEDURE

<b>1.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES</b>
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(a) Disconnect the cable from the negative (-) auxiliary battery terminal.

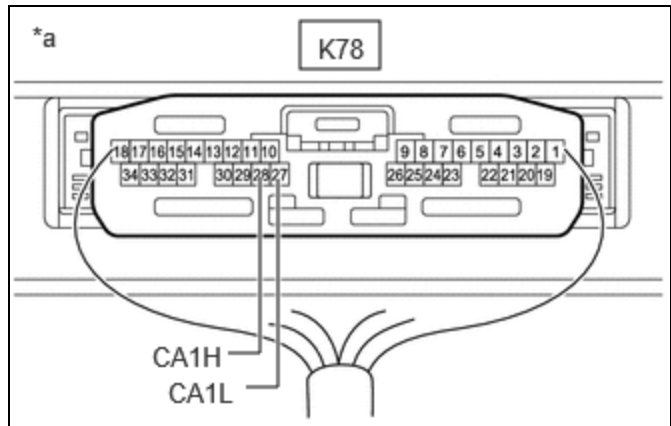
(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(K78\)](#)

[Click Connector\(K78\)](#)



*a	Component with harness connected (Central Gateway ECU (Network Gateway ECU))
----	--

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K78-28 (CA1H) - K78-27 (CA1L)	Cable disconnected from negative (-) auxiliary battery terminal	Below 70 Ω

**NG** **GO TO STEP 107**

**OK**  
▼

**2. CHECK FOR SHORT IN CAN BUS LINES**

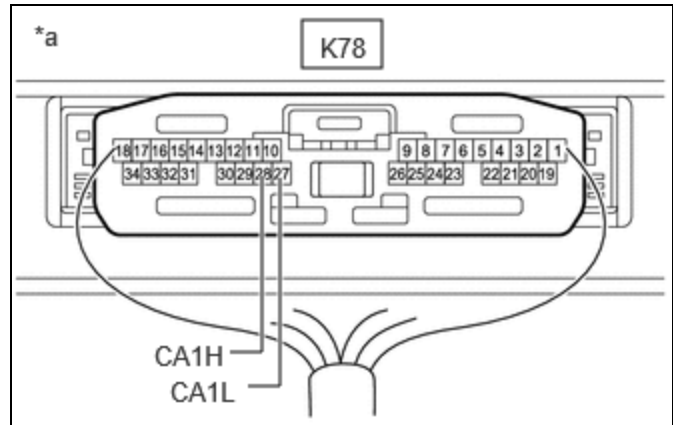
(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(K78\)](#)

[Click Connector\(K78\)](#)



TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K78-28 (CA1H) - K78-27 (CA1L)	Cable disconnected from negative (-) auxiliary battery terminal	54 Ω or higher

*a	Component with harness connected (Central Gateway ECU (Network Gateway ECU))
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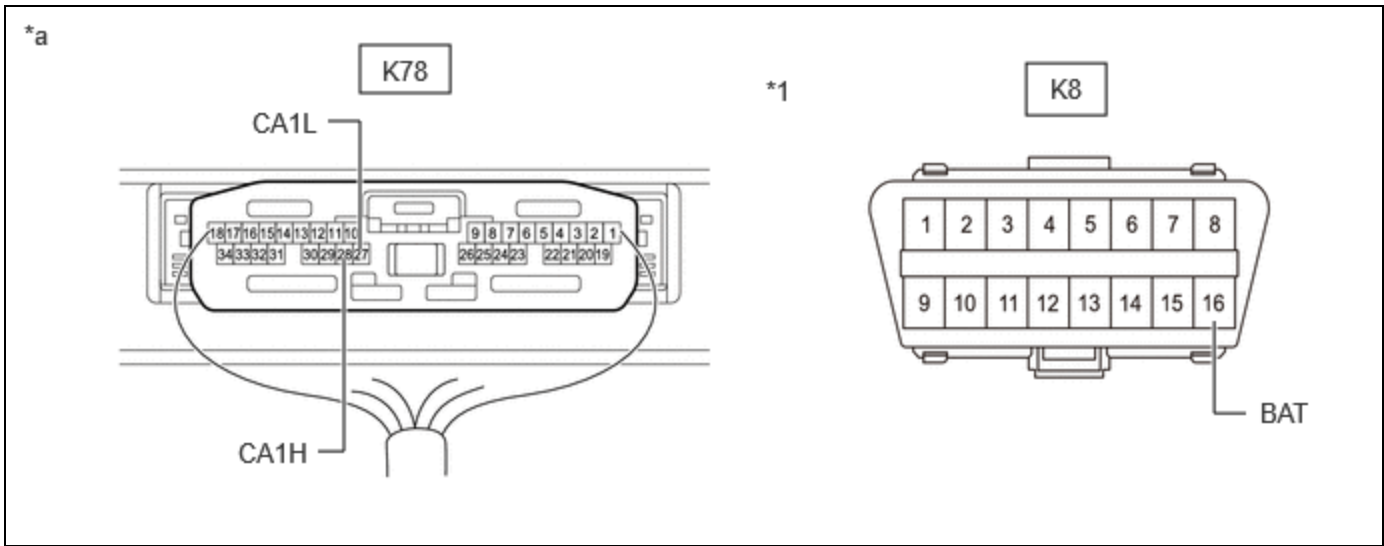
**NG** ► [GO TO STEP 73](#)

**OK**  
▼

**3. CHECK FOR SHORT TO +B IN CAN BUS LINE**

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





*1	DLC3	-	-
*a	Component with harness connected (Central Gateway ECU (Network Gateway ECU))	-	-

Standard Resistance:



[Click Location & Routing\(K78,K8\).](#)

[Click Connector\(K78\).](#)

[Click Connector\(K8\).](#)

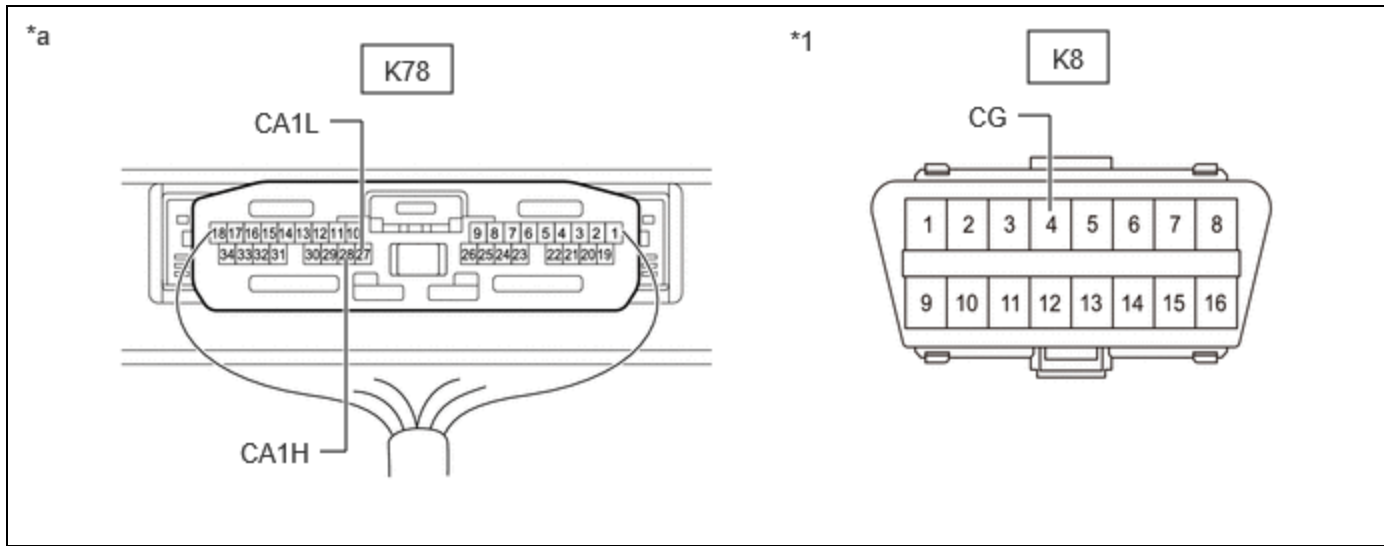
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K78-28 (CA1H) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
K78-27 (CA1L) - K8-16 (BAT)		

**NG** **GO TO STEP 39**

**OK**

<b>4.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE</b>
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(a) Measure the resistance according to the value(s) in the table below.



*1	DLC3	-	-
*a	Component with harness connected (Central Gateway ECU (Network Gateway ECU))	-	-

Standard Resistance:



[Click Location & Routing\(K78,K8\).](#)

[Click Connector\(K78\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K78-28 (CA1H) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
K78-27 (CA1L) - K8-4 (CG)		

**OK** ▶ **REPLACE CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU)**

**NG**  
▼

<b>5.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))</b>
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(a) Disconnect the R108 No. 15 global CAN junction connector.

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

Standard Resistance:



[Click Location & Routing\(R108,K8\)](#)

[Click Connector\(R108\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-1 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
R108-12 (CANL) - K8-4 (CG)		

**NG** **GO TO STEP 8**

**OK**



<b>6.</b>	<b>CHECK VEHICLE TYPE</b>
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(a) Check vehicle type.

RESULT	PROCEED TO
w/ Panoramic View Monitor System	A
w/o Panoramic View Monitor System	B

**B** **GO TO STEP 14**

**A**



<b>7.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)</b>
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(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R108,K8\)](#)

[Click Connector\(R108\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-4(CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
R108-15 (CANL) - K8-4 (CG)		

**OK** ► **GO TO STEP 15**

**NG** ► **GO TO STEP 9**

<b>8.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))</b>
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(a) Disconnect the K78 central gateway ECU (network gateway ECU) connector.

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

Standard Resistance:



[Click Location & Routing\(R108,K8\).](#)

[Click Connector\(R108\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-1 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
R108-12 (CANL) - K8-4 (CG)		

**OK** ► **REPLACE CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU)**

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))**

<b>9.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)</b>
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(a) Disconnect the R89 No. 12 global CAN junction connector.

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

Standard Resistance:



[Click Location & Routing\(R89,K8\)](#)

[Click Connector\(R89\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-3 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
R89-7 (CANL) - K8-4 (CG)		

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**



<b>10.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - FORWARD RECOGNITION CAMERA)</b>
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(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R89,K8\)](#)

[Click Connector\(R89\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-2 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
R89-6 (CANL) - K8-4 (CG)		

**NG** ► **GO TO STEP 12**

**OK**

<b>11.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - PARKING ASSIST ECU)</b>
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(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R89,K8\).](#)

[Click Connector\(R89\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-1 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
R89-5 (CANL) - K8-4 (CG)		

**OK** **REPLACE NO. 12 GLOBAL CAN JUNCTION CONNECTOR**

**NG** **GO TO STEP 13**

<b>12.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (FORWARD RECOGNITION CAMERA - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)</b>
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(a) Disconnect the U10 forward recognition camera connector.

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

Standard Resistance:



[Click Location & Routing\(U10,K8\).](#)

[Click Connector\(U10\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-10 (CA1P) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
U10-9 (CA1N) - K8-4 (CG)		

**OK** ▶ **GO TO STEP 19**

**NG** ▶ **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (FORWARD RECOGNITION CAMERA - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)**

<b>13.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - PARKING ASSIST ECU)</b>
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- (a) Disconnect the R34 parking assist ECU connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R89,K8\).](#)

[Click Connector\(R89\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-1 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
R89-5 (CANL) - K8-4 (CG)		

**OK** ▶ **REPLACE PARKING ASSIST ECU**

**NG** ▶ **REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - PARKING ASSIST ECU)**

<b>14.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - FORWARD RECOGNITION CAMERA)</b>
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- (a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R108,K8\).](#)

[Click Connector\(R108\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-3 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
R108-14 (CANL) - K8-4 (CG)		

**NG**  **GO TO STEP 18**

**OK**



<b>15.</b>	<b>CHECK VEHICLE TYPE</b>
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(a) Check vehicle type.

RESULT	PROCEED TO
w/ Intuitive Parking Assist System	A
w/o Intuitive Parking Assist System	B

**B**  **REPLACE NO. 15 GLOBAL CAN JUNCTION CONNECTOR**

**A**



<b>16.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CLEARANCE WARNING ECU ASSEMBLY)</b>
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(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R108,K8\).](#)

[Click Connector\(R108\).](#)

[Click Connector\(K8\).](#)



TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-2 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
R108-13 (CANL) - K8-4 (CG)		

**OK** ▶ REPLACE NO. 15 GLOBAL CAN JUNCTION CONNECTOR

**NG**



<b>17.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CLEARANCE WARNING ECU ASSEMBLY)</b>
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- (a) Disconnect the R36 clearance warning ECU assembly connector.
- (b) Measure the resistance according to the value(s) in the table below.  
Standard Resistance:



[Click Location & Routing\(R108,K8\)](#)  
[Click Connector\(R108\)](#)  
[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-2 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
R108-13 (CANL) - K8-4 (CG)		

**OK** ▶ REPLACE CLEARANCE WARNING ECU ASSEMBLY

**NG** ▶ REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CLEARANCE WARNING ECU ASSEMBLY)

<b>18.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (FORWARD RECOGNITION CAMERA - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)</b>
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- (a) Disconnect the U10 forward recognition camera connector.
- (b) Measure the resistance according to the value(s) in the table below.  
Standard Resistance:

### EWD INFO

[Click Location & Routing\(U10,K8\).](#)

[Click Connector\(U10\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-10 (CA1P) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
U10-9 (CA1N) - K8-4 (CG)		

**NG**  **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (FORWARD RECOGNITION CAMERA - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**



<b>19.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (FORWARD RECOGNITION CAMERA - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)</b>
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(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

### EWD INFO

[Click Location & Routing\(U10,K8\).](#)

[Click Connector\(U10\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-2 (CA2P) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
U10-1 (CA2L) - K8-4 (CG)		

**OK**  **REPLACE FORWARD RECOGNITION CAMERA**

Click here 

**NG**



<b>20.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - FORWARD RECOGNITION CAMERA)</b>
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(a) Disconnect the A21 millimeter wave radar sensor assembly connector.

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

Standard Resistance:



[Click Location & Routing\(A21,K8\)](#)

[Click Connector\(A21\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A21-4 (CA2H) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
A21-3 (CA2L) - K8-4 (CG)		

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - FORWARD RECOGNITION CAMERA)**



<b>21.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)</b>
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(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:




[Click Location & Routing\(A21,K8\)](#)

[Click Connector\(A21\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A21-10 (CA3H) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
A21-9 (CA3L) - K8-4 (CG)		

**OK**  **REPLACE MILLIMETER WAVE RADAR SENSOR ASSEMBLY**

Click here 

**NG**  


<b>22.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)</b>
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- (a) Disconnect the A65 No. 2 global CAN junction connector.
  - (b) Measure the resistance according to the value(s) in the table below.
- Standard Resistance:



- [Click Location & Routing\(A65,K8\)](#)
- [Click Connector\(A65\)](#)
- [Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-3 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
A65-7 (CANL) - K8-4 (CG)		

**NG**  **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)**

**OK**  


<b>23.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)</b>
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- (a) Measure the resistance according to the value(s) in the table below.
- Standard Resistance:



[Click Location & Routing\(A65,K8\).](#)

[Click Connector\(A65\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-1 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
A65-5 (CANL) - K8-4 (CG)		

**NG** **GO TO STEP 27**

**OK**



<b>24.</b>	<b>CHECK VEHICLE TYPE</b>
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(a) Check vehicle type.

RESULT	PROCEED TO
w/ Front Side Radar Sensor System	A
w/o Front Side Radar Sensor System	B

**B** **REPLACE NO. 2 GLOBAL CAN JUNCTION CONNECTOR**

**A**



<b>25.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - FRONT SIDE RADAR SENSOR (A))</b>
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(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(A65,K8\).](#)

[Click Connector\(A65\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-2 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
A65-6 (CANL) - K8-4 (CG)		

**OK**  **REPLACE NO. 2 GLOBAL CAN JUNCTION CONNECTOR**

**NG**



<b>26.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - FRONT SIDE RADAR SENSOR (A))</b>
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(a) Disconnect the A41 front side radar sensor (A) connector.

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

Standard Resistance:



[Click Location & Routing\(A65,K8\)](#)

[Click Connector\(A65\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-2 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
A65-6 (CANL) - K8-4 (CG)		

**OK**  **REPLACE FRONT SIDE RADAR SENSOR (A)**

Click here 

**NG**  **REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - FRONT SIDE RADAR SENSOR (A))**

<b>27.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)</b>
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- (a) Disconnect the R88 No. 11 global CAN junction connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R88,K8\).](#)

[Click Connector\(R88\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-1 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
R88-5 (CANL) - K8-4 (CG)		

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**



<b>28.</b>	<b>CHECK VEHICLE TYPE</b>
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- (a) Check vehicle type.

RESULT	PROCEED TO
w/ Parking Assist Monitor System	A
w/o Parking Assist Monitor System	B

**B** ► **GO TO STEP 35**

**A**



<b>29.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 16 GLOBAL CAN JUNCTION CONNECTOR)</b>
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(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R88,K8\)](#)

[Click Connector\(R88\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-3 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
R88-7 (CANL) - K8-4 (CG)		

**OK** ► **GO TO STEP 36**

**NG**



<b>30.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)</b>
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(a) Disconnect the W18 No. 16 global CAN junction connector.

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

Standard Resistance:



[Click Location & Routing\(W18,K8\)](#)

[Click Connector\(W18\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-6 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
W18-17 (CANL) - K8-4 (CG)		

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**





<b>31.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(W18,K8\)](#)

[Click Connector\(W18\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-7 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
W18-18 (CANL) - K8-4 (CG)		

**NG** **GO TO STEP 33**

**OK**



<b>32.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - REAR TELEVISION CAMERA ASSEMBLY)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(W18,K8\)](#)

[Click Connector\(W18\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-5 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
W18-16 (CANL) - K8-4 (CG)		

**OK** ► REPLACE NO. 16 GLOBAL CAN JUNCTION CONNECTOR

**NG** ► GO TO STEP 34

**33. CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)**

- (a) Disconnect the R101 No. 2 CAN junction terminal connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(W18,K8\)](#)

[Click Connector\(W18\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-7 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
W18-18 (CANL) - K8-4 (CG)		

**OK** ► REPLACE NO. 2 CAN JUNCTION TERMINAL

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)

**34. CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - REAR TELEVISION CAMERA ASSEMBLY)**

- (a) Disconnect the V2 or V3 rear television camera assembly connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(W18,K8\)](#)

[Click Connector\(W18\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-5 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
W18-16 (CANL) - K8-4 (CG)		

**OK** ► **REPLACE REAR TELEVISION CAMERA ASSEMBLY**

**NG** ► **REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - REAR TELEVISION CAMERA ASSEMBLY)**

<b>35.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(R88,K8\).](#)

[Click Connector\(R88\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-4 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
R88-8 (CANL) - K8-4 (CG)		

**NG** ► **GO TO STEP 37**

**OK**



<b>36.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - BLIND SPOT MONITOR SENSOR LH (B))</b>
------------	---

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

Standard Resistance:



[Click Location & Routing\(R88,K8\).](#)

[Click Connector\(R88\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-2 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
R88-6 (CANL) - K8-4 (CG)		

**OK** ► REPLACE NO. 11 GLOBAL CAN JUNCTION CONNECTOR

**NG** ► GO TO STEP 38

<b>37.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
------------	--

- (a) Disconnect the R101 No. 2 CAN junction terminal connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R88,K8\)](#)

[Click Connector\(R88\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-4 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher
R88-8 (CANL) - K8-4 (CG)		

**OK** ► REPLACE NO. 2 CAN JUNCTION TERMINAL

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)

<b>38.</b>	<b>CHECK FOR SHORT TO GND IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - BLIND SPOT MONITOR SENSOR LH (B))</b>
------------	---

- (a) Disconnect the S6 blind spot monitor sensor LH (B) connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R88,K8\).](#)

[Click Connector\(R88\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-2 (CANH) - K8-4 (CG)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher
R88-6 (CANL) - K8-4 (CG)		

**OK** ► REPLACE BLIND SPOT MONITOR SENSOR LH (B)

Click here [INFO](#)

**NG** ► REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - BLIND SPOT MONITOR SENSOR LH (B))

<b>39.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))</b>
------------	---

(a) Disconnect the R108 No. 15 global CAN junction connector.

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

Standard Resistance:



[Click Location & Routing\(R108,K8\).](#)

[Click Connector\(R108\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-1 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 k $\Omega$ or higher
R108-12 (CANL) - K8-16 (BAT)		

**NG** ► GO TO STEP 42

**OK**



<b>40.</b>	<b>CHECK VEHICLE TYPE</b>
------------	---------------------------

(a) Check vehicle type.

RESULT	PROCEED TO
w/ Panoramic View Monitor System	A
w/o Panoramic View Monitor System	B

**B** **GO TO STEP 48**

**A**

<b>41.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(R108,K8\).](#)

[Click Connector\(R108\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-4 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R108-15 (CANL) - K8-16 (BAT)		

**OK** **GO TO STEP 49**

**NG** **GO TO STEP 43**

<b>42.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))</b>
------------	---

(a) Disconnect the K78 central gateway ECU (network gateway ECU) connector.

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

Standard Resistance:



[Click Location & Routing\(R108,K8\).](#)

[Click Connector\(R108\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-1 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R108-12 (CANL) - K8-16 (BAT)		

**OK** ► **REPLACE CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU)**

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))**

<b>43.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	--

(a) Disconnect the R89 No. 12 global CAN junction connector.

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

Standard Resistance:



[Click Location & Routing\(R89,K8\).](#)

[Click Connector\(R89\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-3 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R89-7 (CANL) - K8-16 (BAT)		

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**  
▼

<b>44.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - FORWARD RECOGNITION CAMERA)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(R89,K8\).](#)

[Click Connector\(R89\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-2 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R89-6 (CANL) - K8-16 (BAT)		

**NG** ► **GO TO STEP 46**

**OK**  
▼

<b>45.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - PARKING ASSIST ECU)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(R89,K8\).](#)

[Click Connector\(R89\).](#)

[Click Connector\(K8\).](#)



TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-1 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 k $\Omega$ or higher
R89-5 (CANL) - K8-16 (BAT)		

**OK** ► REPLACE NO. 12 GLOBAL CAN JUNCTION CONNECTOR

**NG** ► GO TO STEP 47

<b>46.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (FORWARD RECOGNITION CAMERA - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	--

- (a) Disconnect the U10 forward recognition camera connector.  
 (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(U10,K8\).](#)

[Click Connector\(U10\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-10 (CA1P) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 k $\Omega$ or higher
U10-9 (CA1N) - K8-16 (BAT)		

**OK** ► GO TO STEP 53

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (FORWARD RECOGNITION CAMERA - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)

<b>47.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - PARKING ASSIST ECU)</b>
------------	--

- (a) Disconnect the R34 parking assist ECU connector.  
 (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R89,K8\).](#)

[Click Connector\(R89\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-1 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R89-5 (CANL) - K8-16 (BAT)		

**OK** ► REPLACE PARKING ASSIST ECU

**NG** ► REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - PARKING ASSIST ECU)

<b>48.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - FORWARD RECOGNITION CAMERA)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(R108,K8\).](#)

[Click Connector\(R108\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-3 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R108-14 (CANL) - K8-16 (BAT)		

**NG** ► GO TO STEP 52



<b>49.</b>	<b>CHECK VEHICLE TYPE</b>
------------	---------------------------

(a) Check vehicle type.

RESULT	PROCEED TO
w/ Intuitive Parking Assist System	A
w/o Intuitive Parking Assist System	B

**B** **REPLACE NO. 15 GLOBAL CAN JUNCTION CONNECTOR**

**A**

<b>50.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CLEARANCE WARNING ECU ASSEMBLY)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(R108,K8\).](#)

[Click Connector\(R108\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-2 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R108-13 (CANL) - K8-16 (BAT)		

**OK** **REPLACE NO. 15 GLOBAL CAN JUNCTION CONNECTOR**

**NG**

<b>51.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CLEARANCE WARNING ECU ASSEMBLY)</b>
------------	--

- (a) Disconnect the R36 clearance warning ECU assembly connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R108,K8\).](#)  
[Click Connector\(R108\).](#)  
[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-2 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R108-13 (CANL) - K8-16 (BAT)		

**OK** ► REPLACE CLEARANCE WARNING ECU ASSEMBLY

**NG** ► REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CLEARANCE WARNING ECU ASSEMBLY)

<b>52.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (FORWARD RECOGNITION CAMERA - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	--

- (a) Disconnect the U10 forward recognition camera connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(U10,K8\).](#)  
[Click Connector\(U10\).](#)  
[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-10 (CA1P) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
U10-9 (CA1N) - K8-16 (BAT)		

**NG** ▶ **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (FORWARD RECOGNITION CAMERA - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**  
▼

<b>53.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (FORWARD RECOGNITION CAMERA - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)</b>
------------	---

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

Standard Resistance:



[Click Location & Routing\(U10,K8\).](#)

[Click Connector\(U10\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-2 (CA2P) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
U10-1 (CA2L) - K8-16 (BAT)		

**OK** ▶ **REPLACE FORWARD RECOGNITION CAMERA**

Click here [INFO](#)

**NG**  
▼

<b>54.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - FORWARD RECOGNITION CAMERA)</b>
------------	---

(a) Disconnect the A21 millimeter wave radar sensor assembly connector.

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

Standard Resistance:



[Click Location & Routing\(A21,K8\).](#)

[Click Connector\(A21\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A21-4 (CA2H) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
A21-3 (CA2L) - K8-16 (BAT)		

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - FORWARD RECOGNITION CAMERA)**

**OK**



<b>55.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(A21,K8\)](#)

[Click Connector\(A21\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A21-10 (CA3H) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
A21-9 (CA3L) - K8-16 (BAT)		

**OK** ► **REPLACE MILLIMETER WAVE RADAR SENSOR ASSEMBLY**

Click here [INFO](#)

**NG**



**56. CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)**

- (a) Disconnect the A65 No. 2 global CAN junction connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(A65,K8\).](#)

[Click Connector\(A65\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-3 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
A65-7 (CANL) - K8-16 (BAT)		

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)**

**OK**

**57. CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)**

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

Standard Resistance:



[Click Location & Routing\(A65,K8\).](#)

[Click Connector\(A65\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-1 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-5 (CANL) - K8-16 (BAT)		

**NG**  **GO TO STEP 61**

**OK**



**58. CHECK VEHICLE TYPE**

(a) Check vehicle type.

RESULT	PROCEED TO
w/ Front Side Radar Sensor System	A
w/o Front Side Radar Sensor System	B

**B**  **REPLACE NO. 2 GLOBAL CAN JUNCTION CONNECTOR**

**A**



**59. CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - FRONT SIDE RADAR SENSOR (A))**

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

Standard Resistance:



[Click Location & Routing\(A65,K8\).](#)

[Click Connector\(A65\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-2 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher



TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-6 (CANL) - K8-16 (BAT)		

**OK** ▶ REPLACE NO. 2 GLOBAL CAN JUNCTION CONNECTOR

**NG**  
▼

<b>60.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - FRONT SIDE RADAR SENSOR (A))</b>
------------	--

- (a) Disconnect the A41 front side radar sensor (A) connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(A65,K8\)](#)

[Click Connector\(A65\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-2 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
A65-6 (CANL) - K8-16 (BAT)		

**OK** ▶ REPLACE FRONT SIDE RADAR SENSOR (A)

Click here [INFO](#)

**NG** ▶ REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - FRONT SIDE RADAR SENSOR (A))

<b>61.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	---

- (a) Disconnect the R88 No. 11 global CAN junction connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R88,K8\).](#)

[Click Connector\(R88\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-1 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R88-5 (CANL) - K8-16 (BAT)		

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**



<b>62.</b>	<b>CHECK VEHICLE TYPE</b>
------------	---------------------------

(a) Check vehicle type.

RESULT	PROCEED TO
w/ Parking Assist Monitor System	A
w/o Parking Assist Monitor System	B

**B** ► **GO TO STEP 69**

**A**



<b>63.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 16 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	--

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

Standard Resistance:



- [Click Location & Routing\(R88,K8\).](#)
- [Click Connector\(R88\).](#)
- [Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-3 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R88-7 (CANL) - K8-16 (BAT)		

**OK** ► **GO TO STEP 70**

**NG**  
▼

<b>64.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	--

- (a) Disconnect the W18 No. 16 global CAN junction connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



- [Click Location & Routing\(W18,K8\).](#)
- [Click Connector\(W18\).](#)
- [Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-6 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
W18-17 (CANL) - K8-16 (BAT)		

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)**

**OK****65.****CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)**

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

Standard Resistance:

[Click Location & Routing\(W18,K8\)](#)[Click Connector\(W18\)](#)[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-7 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
W18-18 (CANL) - K8-16 (BAT)		

**NG** **GO TO STEP 67****OK****66.****CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - REAR TELEVISION CAMERA ASSEMBLY)**

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

Standard Resistance:

[Click Location & Routing\(W18,K8\)](#)[Click Connector\(W18\)](#)[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-5 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-16 (CANL) - K8-16 (BAT)		

**OK** ► REPLACE NO. 16 GLOBAL CAN JUNCTION CONNECTOR

**NG** ► GO TO STEP 68

<b>67.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
------------	---

- (a) Disconnect the R101 No. 2 CAN junction terminal connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(W18,K8\)](#)

[Click Connector\(W18\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-7 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
W18-18 (CANL) - K8-16 (BAT)		

**OK** ► REPLACE NO. 2 CAN JUNCTION TERMINAL

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)

<b>68.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - REAR TELEVISION CAMERA ASSEMBLY)</b>
------------	---

- (a) Disconnect the V2 or V3 rear television camera assembly connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(W18,K8\)](#)

[Click Connector\(W18\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-5 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
W18-16 (CANL) - K8-16 (BAT)		

**OK** ► REPLACE REAR TELEVISION CAMERA ASSEMBLY

**NG** ► REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - REAR TELEVISION CAMERA ASSEMBLY)

<b>69.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
------------	---

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

Standard Resistance:



[Click Location & Routing\(R88,K8\)](#)

[Click Connector\(R88\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-4 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R88-8 (CANL) - K8-16 (BAT)		

**NG** ► GO TO STEP 71

**OK**



<b>70.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - BLIND SPOT MONITOR SENSOR LH (B))</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(R88,K8\)](#)

[Click Connector\(R88\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-2 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R88-6 (CANL) - K8-16 (BAT)		

**OK** ► REPLACE NO. 11 GLOBAL CAN JUNCTION CONNECTOR

**NG** ► GO TO STEP 72

<b>71.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
------------	---

(a) Disconnect the R101 No. 2 CAN junction terminal connector.

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

Standard Resistance:



[Click Location & Routing\(R88,K8\)](#)

[Click Connector\(R88\)](#)

[Click Connector\(K8\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-4 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R88-8 (CANL) - K8-16 (BAT)		

**OK** ► REPLACE NO. 2 CAN JUNCTION TERMINAL

**NG** ▶ **REPAIR OR REPLACE CAN MAIN BUS LINE OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)**

<b>72.</b>	<b>CHECK FOR SHORT TO +B IN CAN BUS LINE (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - BLIND SPOT MONITOR SENSOR LH (B))</b>
------------	--

- (a) Disconnect the S6 blind spot monitor sensor LH (B) connector.  
 (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R88,K8\).](#)

[Click Connector\(R88\).](#)

[Click Connector\(K8\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-2 (CANH) - K8-16 (BAT)	Cable disconnected from negative (-) auxiliary battery terminal	6 kΩ or higher
R88-6 (CANL) - K8-16 (BAT)		

**OK** ▶ **REPLACE BLIND SPOT MONITOR SENSOR LH (B)**

Click here [INFO](#)

**NG** ▶ **REPAIR OR REPLACE CAN BRANCH LINE OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - BLIND SPOT MONITOR SENSOR LH (B))**

<b>73.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))</b>
------------	--

- (a) Disconnect the R108 No. 15 global CAN junction connector.  
 (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R108\).](#)

[Click Connector\(R108\).](#)



TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-1 (CANH) - R108-12 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG**  **GO TO STEP 76**

**OK**



<b>74.</b>	<b>CHECK VEHICLE TYPE</b>
------------	---------------------------

(a) Check vehicle type.

RESULT	PROCEED TO
w/ Panoramic View Monitor System	A
w/o Panoramic View Monitor System	B

**B**  **GO TO STEP 82**

**A**



<b>75.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	---

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

Standard Resistance:



[Click Location & Routing\(R108\)](#)

[Click Connector\(R108\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-4 (CANH) - R108-15 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** ► **GO TO STEP 83**

**NG** ► **GO TO STEP 77**

<b>76.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))</b>
------------	--

- (a) Disconnect the K78 central gateway ECU (network gateway ECU) connector.  
 (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R108\)](#)

[Click Connector\(R108\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-1 (CANH) - R108-12 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	1 MΩ or higher

**OK** ► **REPLACE CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU)**

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))**

<b>77.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	---

- (a) Reconnect the R108 No. 15 global CAN junction connector.  
 (b) Disconnect the R89 No. 12 global CAN junction connector.  
 (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R89\)](#)

[Click Connector\(R89\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-3 (CANH) - R89-7 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**



<b>78.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - FORWARD RECOGNITION CAMERA)</b>
------------	---

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

Standard Resistance:



[Click Location & Routing\(R89\)](#)

[Click Connector\(R89\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-2 (CANH) - R89-6 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ► **GO TO STEP 80**

**OK**



<b>79.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - PARKING ASSIST ECU)</b>
------------	---

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

Standard Resistance:



[Click Location & Routing\(R89\)](#)

[Click Connector\(R89\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-1 (CANH) - R89-5 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher

**OK** ► **REPLACE NO. 12 GLOBAL CAN JUNCTION CONNECTOR**

**NG** ► **GO TO STEP 81**

<b>80.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (FORWARD RECOGNITION CAMERA - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	---

- (a) Reconnect the R89 No. 12 global CAN junction connector.
- (b) Disconnect the U10 forward recognition camera connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(U10\)](#)  
[Click Connector\(U10\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-10 (CA1P) - U10-9 (CA1N)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**OK** ► **GO TO STEP 87**

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (FORWARD RECOGNITION CAMERA - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)**

<b>81.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - PARKING ASSIST ECU)</b>
------------	---

- (a) Disconnect the R34 parking assist ECU connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R89\)](#)

[Click Connector\(R89\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-1 (CANH) - R89-5 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	1 M $\Omega$ or higher

**OK** ► REPLACE PARKING ASSIST ECU

**NG** ► REPAIR OR REPLACE CAN BRANCH LINES OR CONNECTOR (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - PARKING ASSIST ECU)

<b>82.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - FORWARD RECOGNITION CAMERA)</b>
------------	---

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

Standard Resistance:



[Click Location & Routing\(R108\)](#)

[Click Connector\(R108\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-3 (CANH) - R108-14 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ► GO TO STEP 86

**OK**  
▼

<b>83.</b>	<b>CHECK VEHICLE TYPE</b>
------------	---------------------------

(a) Check vehicle type.

RESULT	PROCEED TO
w/ Intuitive Parking Assist System	A
w/o Intuitive Parking Assist System	B

**B** ▶ REPLACE NO. 15 GLOBAL CAN JUNCTION CONNECTOR

**A**  
▼

<b>84.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CLEARANCE WARNING ECU ASSEMBLY)</b>
------------	---

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

Standard Resistance:



[Click Location & Routing\(R108\)](#)

[Click Connector\(R108\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-2 (CANH) - R108-13 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	200 Ω or higher

**OK** ▶ REPLACE NO. 15 GLOBAL CAN JUNCTION CONNECTOR

**NG**  
▼

<b>85.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CLEARANCE WARNING ECU ASSEMBLY)</b>
------------	---

(a) Disconnect the R36 clearance warning ECU assembly connector.

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

Standard Resistance:



[Click Location & Routing\(R108\)](#)

[Click Connector\(R108\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-2 (CANH) - R108-13 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	1 MΩ or higher

**OK** ► REPLACE CLEARANCE WARNING ECU ASSEMBLY

**NG** ► REPAIR OR REPLACE CAN BRANCH LINES OR CONNECTOR (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CLEARANCE WARNING ECU ASSEMBLY)

<b>86.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (FORWARD RECOGNITION CAMERA - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	---

- (a) Reconnect the R108 No. 15 global CAN junction connector.
- (b) Disconnect the U10 forward recognition camera connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

[Click Location & Routing\(U10\)](#)[Click Connector\(U10\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-10 (CA1P) - U10-9 (CA1N)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (FORWARD RECOGNITION CAMERA - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)

**OK**



<b>87.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (FORWARD RECOGNITION CAMERA - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(U10\)](#)

[Click Connector\(U10\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-2 (CA2P) - U10-1 (CA2L)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** **REPLACE FORWARD RECOGNITION CAMERA**

Click here

**NG**



<b>88.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - FORWARD RECOGNITION CAMERA)</b>
------------	--

- (a) Reconnect the U10 forward recognition camera connector.
- (b) Disconnect the A21 millimeter wave radar sensor assembly connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(A21\)](#)

[Click Connector\(A21\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A21-4 (CA2H) - A21-3 (CA2L)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - FORWARD RECOGNITION CAMERA)**

**OK**





<b>89.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	---

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

Standard Resistance:



[Click Location & Routing\(A21\)](#)

[Click Connector\(A21\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A21-10 (CA3H) - A21-9 (CA3L)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** **REPLACE MILLIMETER WAVE RADAR SENSOR ASSEMBLY**

Click here

**NG**



<b>90.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)</b>
------------	---

(a) Reconnect the A21 millimeter wave radar sensor assembly connector.

(b) Disconnect the A65 No. 2 global CAN junction connector.

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

Standard Resistance:



[Click Location & Routing\(A65\)](#)

[Click Connector\(A65\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-3 (CANH) - A65-7 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 2 GLOBAL CAN JUNCTION**

**CONNECTOR - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)****OK**

<b>91.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	--

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

Standard Resistance:

[Click Location & Routing\(A65\)](#)[Click Connector\(A65\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-1 (CANH) - A65-5 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** **GO TO STEP 95****OK**

<b>92.</b>	<b>CHECK VEHICLE TYPE</b>
------------	---------------------------

(a) Check vehicle type.

RESULT	PROCEED TO
w/ Front Side Radar Sensor System	A
w/o Front Side Radar Sensor System	B

**B** **REPLACE NO. 2 GLOBAL CAN JUNCTION CONNECTOR**

**A****93.****CHECK FOR SHORT IN CAN BUS LINES (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - FRONT SIDE RADAR SENSOR (A))**

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

Standard Resistance:

[Click Location & Routing\(A65\)](#)[Click Connector\(A65\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-2 (CANH) - A65-6 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher

**OK** **REPLACE NO. 2 GLOBAL CAN JUNCTION CONNECTOR****NG****94.****CHECK FOR SHORT IN CAN BUS LINES (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - FRONT SIDE RADAR SENSOR (A))**

(a) Disconnect the A41 front side radar sensor (A) connector.

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

Standard Resistance:

[Click Location & Routing\(A65\)](#)[Click Connector\(A65\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-2 (CANH) - A65-6 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	1 M $\Omega$ or higher

**OK** **REPLACE FRONT SIDE RADAR SENSOR (A)**

Click here [INFO](#)

**NG** ▶ **REPAIR OR REPLACE CAN BRANCH LINES OR CONNECTOR (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - FRONT SIDE RADAR SENSOR (A))**

<b>95.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)</b>
------------	--

- (a) Reconnect the A65 No. 2 global CAN junction connector.
- (b) Disconnect the R88 No. 11 global CAN junction connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R88\)](#)

[Click Connector\(R88\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-1 (CANH) - R88-5 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**NG** ▶ **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**  
▼

<b>96.</b>	<b>CHECK VEHICLE TYPE</b>
------------	---------------------------

- (a) Check vehicle type.

RESULT	PROCEED TO
w/ Parking Assist Monitor System	A
w/o Parking Assist Monitor System	B

**B**  **GO TO STEP 103****A****97.****CHECK FOR SHORT IN CAN BUS LINES (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 16 GLOBAL CAN JUNCTION CONNECTOR)**

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

Standard Resistance:

[Click Location & Routing\(R88\)](#)[Click Connector\(R88\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-3 (CANH) - R88-7 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK**  **GO TO STEP 104****NG****98.****CHECK FOR SHORT IN CAN BUS LINES (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)**

(a) Reconnect the R88 No. 11 global CAN junction connector.

(b) Disconnect the W18 No. 16 global CAN junction connector.

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

Standard Resistance:

[Click Location & Routing\(W18\)](#)[Click Connector\(W18\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-6 (CANH) - W18-17 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**



<b>99.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
------------	--

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

Standard Resistance:



[Click Location & Routing\(W18\)](#)

[Click Connector\(W18\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-7 (CANH) - W18-18 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ► **GO TO STEP 101**

**OK**



<b>100.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - REAR TELEVISION CAMERA ASSEMBLY)</b>
-------------	--

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

Standard Resistance:



[Click Location & Routing\(W18\)](#)

[Click Connector\(W18\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-5 (CANH) - W18-16 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher

**OK** ► REPLACE NO. 16 GLOBAL CAN JUNCTION CONNECTOR

**NG** ► GO TO STEP 102

<b>101.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
-------------	--

- (a) Disconnect the R101 No. 2 CAN junction terminal connector.  
 (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

[Click Location & Routing\(W18\)](#)[Click Connector\(W18\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-7 (CANH) - W18-18 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	1 M $\Omega$ or higher

**OK** ► REPLACE NO. 2 CAN JUNCTION TERMINAL

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)

<b>102.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - REAR TELEVISION CAMERA ASSEMBLY)</b>
-------------	--

- (a) Disconnect the V2 or V3 rear television camera assembly connector.  
 (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

[Click Location & Routing\(W18\)](#)[Click Connector\(W18\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-5 (CANH) - W18-16 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	1 M $\Omega$ or higher

**OK** ► **REPLACE REAR TELEVISION CAMERA ASSEMBLY**

**NG** ► **REPAIR OR REPLACE CAN BRANCH LINES OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - REAR TELEVISION CAMERA ASSEMBLY)**

<b>103.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
-------------	--

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

Standard Resistance:



[Click Location & Routing\(R88\).](#)

[Click Connector\(R88\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-4 (CANH) - R88-8 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ► **GO TO STEP 105**

**OK**



<b>104.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - BLIND SPOT MONITOR SENSOR LH (B))</b>
-------------	---

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

Standard Resistance:



[Click Location & Routing\(R88\).](#)

[Click Connector\(R88\).](#)



TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-2 (CANH) - R88-6 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	200 $\Omega$ or higher

**OK** ► REPLACE NO. 11 GLOBAL CAN JUNCTION CONNECTOR

**NG** ► GO TO STEP 106

<b>105.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
-------------	--

- (a) Disconnect the R101 No. 2 CAN junction terminal connector.  
 (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R88\).](#)

[Click Connector\(R88\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-4 (CANH) - R88-8 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	1 M $\Omega$ or higher

**OK** ► REPLACE NO. 2 CAN JUNCTION TERMINAL

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)

<b>106.</b>	<b>CHECK FOR SHORT IN CAN BUS LINES (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - BLIND SPOT MONITOR SENSOR LH (B))</b>
-------------	---

- (a) Disconnect the S6 blind spot monitor sensor LH (B) connector.  
 (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R88\).](#)

[Click Connector\(R88\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-2 (CANH) - R88-6 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	1 MΩ or higher

**OK** ▶ REPLACE BLIND SPOT MONITOR SENSOR LH (B)

Click here [INFO](#)

**NG** ▶ REPAIR OR REPLACE CAN BRANCH LINES OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - BLIND SPOT MONITOR SENSOR LH (B))

<b>107.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))</b>
-------------	---

(a) Disconnect the K78 central gateway ECU (network gateway ECU) connector.

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

Standard Resistance:



[Click Location & Routing\(K78\)](#)

[Click Connector\(K78\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K78-28 (CA1H) - K78-27 (CA1L)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**OK** ▶ REPLACE CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU)

**NG**  
▼

<b>108.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))</b>
-------------	--

(a) Reconnect the K78 central gateway ECU (network gateway ECU) connector.

(b) Disconnect the R108 No. 15 global CAN junction connector.

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

Standard Resistance:



[Click Location & Routing\(R108\)](#)

[Click Connector\(R108\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-1 (CANH) - R108-12 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - CENTRAL GATEWAY ECU (NETWORK GATEWAY ECU))**

**OK**



<b>109.</b>	<b>CHECK VEHICLE TYPE</b>
-------------	---------------------------

(a) Check vehicle type.

RESULT	PROCEED TO
w/ Panoramic View Monitor System	A
w/o Panoramic View Monitor System	B

**B** ► **GO TO STEP 114**

**A**



<b>110.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)</b>
-------------	---

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

Standard Resistance:



[Click Location & Routing\(R108\)](#)

[Click Connector\(R108\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-4 (CANH) - R108-15 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** ► REPLACE NO. 15 GLOBAL CAN JUNCTION CONNECTOR

**NG**



<b>111.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)</b>
-------------	---

- (a) Reconnect the R108 No. 15 global CAN junction connector.
- (b) Disconnect the R89 No. 12 global CAN junction connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R89\)](#)

[Click Connector\(R89\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-3 (CANH) - R89-7 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)

**OK**



<b>112.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 12 GLOBAL CAN JUNCTION CONNECTOR - FORWARD RECOGNITION CAMERA)</b>
-------------	---

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

Standard Resistance:



[Click Location & Routing\(R89\)](#)

[Click Connector\(R89\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R89-2 (CANH) - R89-6 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**OK** ► REPLACE NO. 12 GLOBAL CAN JUNCTION CONNECTOR

**NG**



<b>113.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (FORWARD RECOGNITION CAMERA - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)</b>
-------------	---

(a) Reconnect the R89 No. 12 global CAN junction connector.

(b) Disconnect the U10 forward recognition camera connector.

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

Standard Resistance:



[Click Location & Routing\(U10\)](#)

[Click Connector\(U10\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-10 (CA1P) - U10-9 (CA1N)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**OK** ► GO TO STEP 116

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (FORWARD RECOGNITION CAMERA - NO. 12 GLOBAL CAN JUNCTION CONNECTOR)

**114. CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 15 GLOBAL CAN JUNCTION CONNECTOR - FORWARD RECOGNITION CAMERA)**

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

Standard Resistance:



[Click Location & Routing\(R108\).](#)

[Click Connector\(R108\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R108-3 (CANH) - R108-14 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**OK ► REPLACE NO. 15 GLOBAL CAN JUNCTION CONNECTOR**

**NG ▼**

**115. CHECK FOR OPEN IN CAN MAIN BUS LINES (FORWARD RECOGNITION CAMERA - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)**

(a) Reconnect the R108 No. 15 global CAN junction connector.

(b) Disconnect the U10 forward recognition camera connector.

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

Standard Resistance:



[Click Location & Routing\(U10\).](#)

[Click Connector\(U10\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-10 (CA1P) - U10-9 (CA1N)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**NG ► REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (FORWARD RECOGNITION CAMERA - NO. 15 GLOBAL CAN JUNCTION CONNECTOR)**

**OK****116.****CHECK FOR OPEN IN CAN MAIN BUS LINES (FORWARD RECOGNITION CAMERA - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)**

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

Standard Resistance:



[Click Location & Routing\(U10\)](#)

[Click Connector\(U10\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
U10-2 (CA2P) - U10-1 (CA2L)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** **REPLACE FORWARD RECOGNITION CAMERA**

Click here

[INFO](#)**NG****117.****CHECK FOR OPEN IN CAN MAIN BUS LINES (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - FORWARD RECOGNITION CAMERA)**

(a) Reconnect the U10 forward recognition camera connector.

(b) Disconnect the A21 millimeter wave radar sensor assembly connector.

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

Standard Resistance:



[Click Location & Routing\(A21\)](#)

[Click Connector\(A21\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A21-4 (CA2H) - A21-3 (CA2L)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ▶ **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - FORWARD RECOGNITION CAMERA)**

**OK**  
▼

<b>118.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (MILLIMETER WAVE RADAR SENSOR ASSEMBLY - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)</b>
-------------	---

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

Standard Resistance:



[Click Location & Routing\(A21\)](#)

[Click Connector\(A21\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A21-10 (CA3H) - A21-9 (CA3L)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 Ω

**OK** ▶ **REPLACE MILLIMETER WAVE RADAR SENSOR ASSEMBLY**

Click here [INFO](#)

**NG**  
▼

<b>119.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)</b>
-------------	---

(a) Reconnect the A21 millimeter wave radar sensor assembly connector.

(b) Disconnect the A65 No. 2 global CAN junction connector.

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

Standard Resistance:



[Click Location & Routing\(A65\)](#)

[Click Connector\(A65\)](#)



TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-3 (CANH) - A65-7 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - MILLIMETER WAVE RADAR SENSOR ASSEMBLY)**

**OK**



<b>120.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 2 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)</b>
-------------	--

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

Standard Resistance:



[Click Location & Routing\(A65\)](#)

[Click Connector\(A65\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
A65-1 (CANH) - A65-5 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** ► **REPLACE NO. 2 GLOBAL CAN JUNCTION CONNECTOR**

**NG**



<b>121.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)</b>
-------------	--

(a) Reconnect the A65 No. 2 global CAN junction connector.

(b) Disconnect the R88 No. 11 global CAN junction connector.

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

Standard Resistance:



[Click Location & Routing\(R88\)](#)

[Click Connector\(R88\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-1 (CANH) - R88-5 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG** ► **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**



<b>122.</b>	<b>CHECK VEHICLE TYPE</b>
-------------	---------------------------

(a) Check vehicle type.

RESULT	PROCEED TO
w/ Parking Assist Monitor System	A
w/o Parking Assist Monitor System	B

**B** ► **GO TO STEP 127**

**A**



<b>123.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 16 GLOBAL CAN JUNCTION CONNECTOR)</b>
-------------	---

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

Standard Resistance:



[Click Location & Routing\(R88\)](#)

[Click Connector\(R88\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-3 (CANH) - R88-7 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK**  **REPLACE NO. 11 GLOBAL CAN JUNCTION CONNECTOR**

**NG**



<b>124.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)</b>
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- (a) Reconnect the R88 No. 11 global CAN junction connector.
- (b) Disconnect the W18 No. 16 global CAN junction connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

[Click Location & Routing\(W18\)](#)[Click Connector\(W18\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-6 (CANH) - W18-17 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**NG**  **REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)**

**OK**



<b>125.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 16 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)</b>
-------------	--

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

Standard Resistance:


[Click Location & Routing\(W18\)](#)
[Click Connector\(W18\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
W18-7 (CANH) - W18-18 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** ► REPLACE NO. 16 GLOBAL CAN JUNCTION CONNECTOR

**NG**

**126. CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 2 CAN JUNCTION TERMINAL)**

- (a) Reconnect the W18 No. 16 global CAN junction connector.
- (b) Disconnect the R101 No. 2 CAN junction terminal connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:


[Click Location & Routing\(R101\)](#)
[Click Connector\(R101\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R101-3 (CANH) - R101-2 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** ► REPLACE NO. 2 CAN JUNCTION TERMINAL

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 2 CAN JUNCTION TERMINAL - NO. 16 GLOBAL CAN JUNCTION CONNECTOR)

**127. CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 11 GLOBAL CAN JUNCTION CONNECTOR - NO. 2 CAN JUNCTION TERMINAL)**

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

Standard Resistance:


[Click Location & Routing\(R88\)](#)
[Click Connector\(R88\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R88-4 (CANH) - R88-8 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** ► REPLACE NO. 11 GLOBAL CAN JUNCTION CONNECTOR

**NG**



<b>128.</b>	<b>CHECK FOR OPEN IN CAN MAIN BUS LINES (NO. 2 CAN JUNCTION TERMINAL)</b>
-------------	---

- (a) Reconnect the R88 No. 11 global CAN junction connector.
- (b) Disconnect the R101 No. 2 CAN junction terminal connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:


[Click Location & Routing\(R101\)](#)
[Click Connector\(R101\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R101-3 (CANH) - R101-2 (CANL)	Cable disconnected from negative (-) auxiliary battery terminal	108 to 132 $\Omega$

**OK** ► REPLACE NO. 2 CAN JUNCTION TERMINAL

**NG** ► REPAIR OR REPLACE CAN MAIN BUS LINES OR CONNECTOR (NO. 2 CAN JUNCTION TERMINAL - NO. 11 GLOBAL CAN JUNCTION CONNECTOR)

