| | | |
|---|---|---|
| **Last Modified:** 12-04-2024 | 6.11:8.1.0 | **Doc ID:** RM100000002BM37 |
| **Model Year Start:** 2023 | **Model:** Prius Prime | **Prod Date Range:** [12/2022 - ] |
| **Title:** LIGHTING (INT): LIGHTING SYSTEM: Illumination Notification does not Operate; 2023 - 2024 MY Prius Prius Prime [12/2022 - ] | | |

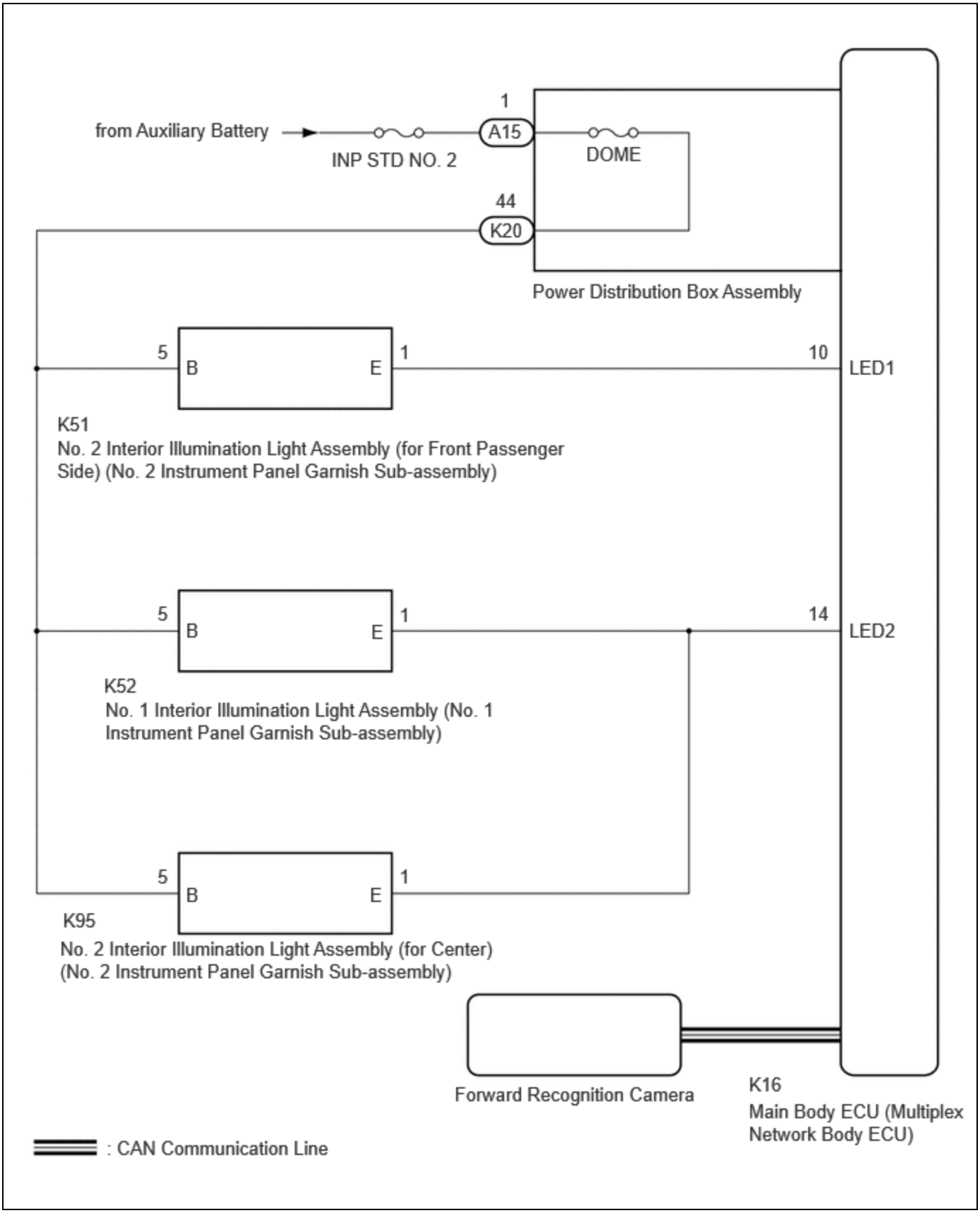
**Illumination Notification does not Operate**

# DESCRIPTION

The following lights flash as an illumination notification:

- No. 1 Interior Illumination Light Assembly (No. 1 Instrument Panel Garnish Sub-assembly)
- No. 2 Interior Illumination Light Assembly (for Front Passenger Side) (No. 2 Instrument Panel Garnish Sub-assembly)
- No. 2 Interior Illumination Light Assembly (for Center) (No. 2 Instrument Panel Garnish Sub-assembly)

# WIRING DIAGRAM




## CAUTION / NOTICE / HINT

**NOTICE:**

- Inspect the fuses for circuits related to this system before performing the following procedure.
- Before replacing the main body ECU (multiplex network body ECU), refer to Registration.

Click here INFO

- By performing customization using the GTS, check that "Illumination Notification" is "ON".

Click here INFO

- Using meter / gauge system customization, check that "PDA" is "ON".

Click here INFO

## PROCEDURE

| | |
|---|---|
| 1. | **CHECK FOR DTCs (HEALTH CHECK)** |

(a) Using the GTS, perform a health check.

OK:
DTCs are not output by any system other than the front camera system (Front Recognition Camera).

| RESULT | PROCEED TO |
|---|---|
| DTC is not output | A |
| DTC is output | B |

**B** ▶ **GO TO FRONT CAMERA SYSTEM** INFO

**A** ▼

| | |
|---|---|
| 2. | **PERFORM ACTIVE TEST USING GTS** |

(a) Perform the Active Test according to the display on the GTS.

**Body Electrical > Main Body > Active Test**

| TESTER DISPLAY | MEASUREMENT ITEM | CONTROL RANGE | DIAGNOSTIC NOTE |
|---|---|---|---|
| Extended Illumination 1 | Turns on the following lights:<br>• No. 2 Interior Illumination Light Assembly (for Front Passenger Side) (No. 2 Instrument Panel Garnish Sub-assembly) | OFF or ON | Perform the Active Test with the vehicle stopped and ignition switch ON. |
| Extended Illumination 2 | Turns on the following lights:<br>• No. 1 Interior Illumination Light Assembly (No. 1 Instrument Panel Garnish Sub-assembly) | OFF or ON | Perform the Active Test with the vehicle stopped and ignition switch ON. |

| TESTER DISPLAY | MEASUREMENT ITEM | CONTROL RANGE | DIAGNOSTIC NOTE |
|---|---|---|---|
| | • No. 2 Interior Illumination Light Assembly (for Center) (No. 2 Instrument Panel Garnish Sub-assembly) | | |

**Body Electrical > Main Body > Active Test**

| TESTER DISPLAY |
|---|
| Extended Illumination 1 |

**Body Electrical > Main Body > Active Test**

| TESTER DISPLAY |
|---|
| Extended Illumination 2 |

| RESULT | PROCEED TO |
|---|---|
| OK | A |
| NG (No. 2 interior illumination light assembly (for front passenger side) (No. 2 instrument panel garnish sub-assembly) does not come on) | B |
| NG (No. 1 interior illumination light assembly (No. 1 instrument panel garnish sub-assembly) does not come on) | C |
| NG (No. 2 interior illumination light assembly (for center) (No. 2 instrument panel garnish sub-assembly) does not come on) | D |
| NG (No. 1 interior illumination light assembly (No. 1 instrument panel garnish sub-assembly) and No. 2 interior illumination light assembly (for center) (No. 2 instrument panel garnish sub-assembly) do not come on) | E |
| NG (All lights do not come on) | F |

**A** ▶ **USE SIMULATION METHOD TO CHECK**

**C** ▶ **GO TO STEP 6**

**D** ▶ **GO TO STEP 9**

**E** ▶ **GO TO STEP 12**

**F** ▶ **GO TO STEP 14**

**B**

| | |
|---|---|
| **3.** | **INSPECT NO. 2 INTERIOR ILLUMINATION LIGHT ASSEMBLY (for FRONT PASSENGER SIDE) (NO. 2 INSTRUMENT PANEL GARNISH SUB-ASSEMBLY)** |

Click here INFO

**NG** ▶ **REPLACE NO. 2 INTERIOR ILLUMINATION LIGHT ASSEMBLY (for FRONT PASSENGER SIDE) (NO. 2 INSTRUMENT PANEL GARNISH SUB-ASSEMBLY)**

**OK**

| | |
|---|---|
| **4.** | **CHECK HARNESS AND CONNECTOR (NO. 2 INTERIOR ILLUMINATION LIGHT ASSEMBLY (for FRONT PASSENGER SIDE) - MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU))** |

(a) Disconnect the K16 main body ECU (multiplex network body ECU) connector.

(b) Disconnect the K51 No. 2 interior illumination light assembly (for front passenger side) (No. 2 instrument panel garnish sub-assembly) connector.

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

Standard Resistance:

EWD INFO

**Click Location & Routing(K16,K51)**
**Click Connector(K16)**
**Click Connector(K51)**

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K16-10 (LED1) - K51-1 (E) | Always | Below 1 Ω |
| K16-10 (LED1) or K51-1 (E) - Body ground | Always | 10 kΩ or higher |

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

**OK**

| | |
|---|---|
| **5.** | **CHECK HARNESS AND CONNECTOR (NO. 2 INTERIOR ILLUMINATION LIGHT ASSEMBLY (for FRONT PASSENGER SIDE) - POWER DISTRIBUTION BOX ASSEMBLY)** |

(a) Disconnect the K20 power distribution box assembly connector.

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

Standard Resistance:

EWD INFO

**Click Location & Routing(K51,K20)**
**Click Connector(K51)**
**Click Connector(K20)**

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K51-5 (B) - K20-44 | Always | Below 1 Ω |
| K51-5 (B) or K20-44 - Body ground | Always | 10 kΩ or higher |

**OK** ▶ **REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)** INFO

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

| | |
|---|---|
| **6.** | **INSPECT NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY (NO. 1 INSTRUMENT PANEL GARNISH SUB-ASSEMBLY)** |

Click here INFO

**NG** ▶ **REPLACE NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY (NO. 1 INSTRUMENT PANEL GARNISH SUB-ASSEMBLY)**

**OK** ▼

| | |
|---|---|
| **7.** | **CHECK HARNESS AND CONNECTOR (NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY - MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU))** |

(a) Disconnect the K16 main body ECU (multiplex network body ECU) connector.

(b) Disconnect the K52 No. 1 interior illumination light assembly (No. 1 instrument panel garnish sub-assembly) connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(K16,K52)
Click Connector(K16)
Click Connector(K52)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K16-14 (LED2) - K52-1 (E) | Always | Below 1 Ω |
| K16-14 (LED2) or K52-1 (E) - Body ground | Always | 10 kΩ or higher |

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

**OK** ▼

| | |
|---|---|
| **8.** | **CHECK HARNESS AND CONNECTOR (NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY - POWER DISTRIBUTION BOX ASSEMBLY)** |

(a) Disconnect the K20 power distribution box assembly connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(K52,K20)
Click Connector(K52)
Click Connector(K20)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K52-5 (B) - K20-44 | Always | Below 1 Ω |
| K52-5 (B) or K20-44 - Body ground | Always | 10 kΩ or higher |

**OK** ▶ **USE SIMULATION METHOD TO CHECK**

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

| | |
|---|---|
| **9.** | **INSPECT NO. 2 INTERIOR ILLUMINATION LIGHT ASSEMBLY (for CENTER) (NO. 2 INSTRUMENT PANEL GARNISH SUB-ASSEMBLY)** |

Click here INFO

**NG** ▶ **REPLACE NO. 2 INTERIOR ILLUMINATION LIGHT ASSEMBLY (for CENTER) (NO. 2 INSTRUMENT PANEL GARNISH SUB-ASSEMBLY)**

**OK** ▼

| | |
|---|---|
| **10.** | **CHECK HARNESS AND CONNECTOR (NO. 2 INTERIOR ILLUMINATION LIGHT ASSEMBLY (for CENTER) - MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU))** |

(a) Disconnect the K16 main body ECU (multiplex network body ECU) connector.

(b) Disconnect the K95 No. 2 interior illumination light assembly (for center) (No. 2 instrument panel garnish sub-assembly) connector.

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

Standard Resistance:

EWD INFO

**Click Location & Routing(K16,K95)**
**Click Connector(K16)**
**Click Connector(K95)**

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K16-14 (LED2) - K95-1 (E) | Always | Below 1 Ω |
| K16-14 (LED2) or K95-1 (E) - Body ground | Always | 10 kΩ or higher |

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

**OK** ▼

| | |
|---|---|
| **11.** | **CHECK HARNESS AND CONNECTOR (NO. 2 INTERIOR ILLUMINATION LIGHT ASSEMBLY (for CENTER) - POWER DISTRIBUTION BOX ASSEMBLY)** |

(a) Disconnect the K20 power distribution box assembly connector.

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

Standard Resistance:

EWD INFO

**Click Location & Routing(K95,K20)**

**Click Connector(K95)**
**Click Connector(K20)**

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K95-5 (B) - K20-44 | Always | Below 1 Ω |
| K95-5 (B) or K20-44 - Body ground | Always | 10 kΩ or higher |

**OK** ▶ **USE SIMULATION METHOD TO CHECK**

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

| | |
|---|---|
| **12.** | **CHECK HARNESS AND CONNECTOR (NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY - MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU))** |

(a) Disconnect the K16 main body ECU (multiplex network body ECU) connector.

(b) Disconnect the K52 No. 1 interior illumination light assembly (No. 1 instrument panel garnish sub-assembly) connector.

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

Standard Resistance:

EWD INFO

**Click Location & Routing(K16,K52)**
**Click Connector(K16)**
**Click Connector(K52)**

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K16-14 (LED2) - K52-1 (E) | Always | Below 1 Ω |
| K16-14 (LED2) or K52-1 (E) - Body ground | Always | 10 kΩ or higher |

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

**OK** ▼

| | |
|---|---|
| **13.** | **CHECK HARNESS AND CONNECTOR (NO. 1 INTERIOR ILLUMINATION LIGHT ASSEMBLY - POWER DISTRIBUTION BOX ASSEMBLY)** |

(a) Disconnect the K20 power distribution box assembly connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(K52,K20)
Click Connector(K52)
Click Connector(K20)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K52-5 (B) - K20-44 | Always | Below 1 Ω |
| K52-5 (B) or K20-44 - Body ground | Always | 10 kΩ or higher |

**OK** ▶ **REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)** INFO

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

| | |
|---|---|
| **14.** | **CHECK HARNESS AND CONNECTOR (POWER DISTRIBUTION BOX ASSEMBLY - POWER SOURCE)** |

(a) Disconnect the A15 power distribution box assembly connectors.

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

Standard Voltage:

EWD INFO

Click Location & Routing(A15)
Click Connector(A15)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| A15-1 - Body ground | Ignition switch off | 11 to 14 V |

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

**OK** ▼

| | |
|---|---|
| **15.** | **INSPECT POWER DISTRIBUTION BOX ASSEMBLY** |

(a) Disconnect the K20 power distribution box assembly connectors.

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

Standard Resistance:

EWD INFO

Click Location & Routing(A15,K20)
Click Connector(A15)
Click Connector(K20)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| A15-1 - K20-44 | Always | Below 1 Ω |

**NG** ▶ **REPLACE POWER DISTRIBUTION BOX ASSEMBLY**
INFO

**OK** ▼

| | |
|---|---|
| **16.** | **CHECK HARNESS AND CONNECTOR (MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU) - ILLUMINATION LIGHTS)** |

(a) Disconnect the K16 main body ECU (multiplex network body ECU) connector.

(b) Disconnect the K51 No. 2 interior illumination light assembly (for front passenger side) (No. 2 instrument panel garnish sub-assembly) connector.

(c) Disconnect the K52 No. 1 interior illumination light assembly (No. 1 instrument panel garnish sub-assembly) connector.

(d) Disconnect the K95 No. 2 interior illumination light assembly (for center) (No. 2 instrument panel garnish sub-assembly) connector.

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

Standard Resistance:

EWD INFO

Click Location & Routing(K16,K51,K52,K95)
Click Connector(K16)
Click Connector(K51)
Click Connector(K52)
Click Connector(K95)

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K16-10 (LED1) - K51-1 (E) | Always | Below 1 Ω |
| K16-14 (LED2) - K52-1 (E) | Always | Below 1 Ω |
| K16-14 (LED2) - K95-1 (E) | Always | Below 1 Ω |
| K16-10 (LED1) or K51-1 (E) - Body ground | Always | 10 kΩ or higher |
| K16-14 (LED2) or K52-1 (E) - Body ground | Always | 10 kΩ or higher |

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K16-14 (LED2) or K95-1 (E) - Body ground | Always | 10 kΩ or higher |

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

**OK** ▼

| | |
|---|---|
| **17.** | **CHECK HARNESS AND CONNECTOR (ILLUMINATION LIGHTS - POWER DISTRIBUTION BOX ASSEMBLY)** |

(a) Disconnect the K20 power distribution box assembly connector.

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

Standard Resistance:

EWD INFO

**Click Location & Routing(K51,K20,K52,K95)**
**Click Connector(K51)**
**Click Connector(K20)**
**Click Connector(K52)**
**Click Connector(K95)**

| TESTER CONNECTION | CONDITION | SPECIFIED CONDITION |
|---|---|---|
| K51-5 (B) - K20-44 | Always | Below 1 Ω |
| K52-5 (B) - K20-44 | Always | Below 1 Ω |
| K95-5 (B) - K20-44 | Always | Below 1 Ω |
| K51-5 (B) or K20-44 - Body ground | Always | 10 kΩ or higher |
| K52-5 (B) or K20-44 - Body ground | Always | 10 kΩ or higher |
| K95-5 (B) or K20-44 - Body ground | Always | 10 kΩ or higher |

**OK** ▶ **REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)** INFO

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