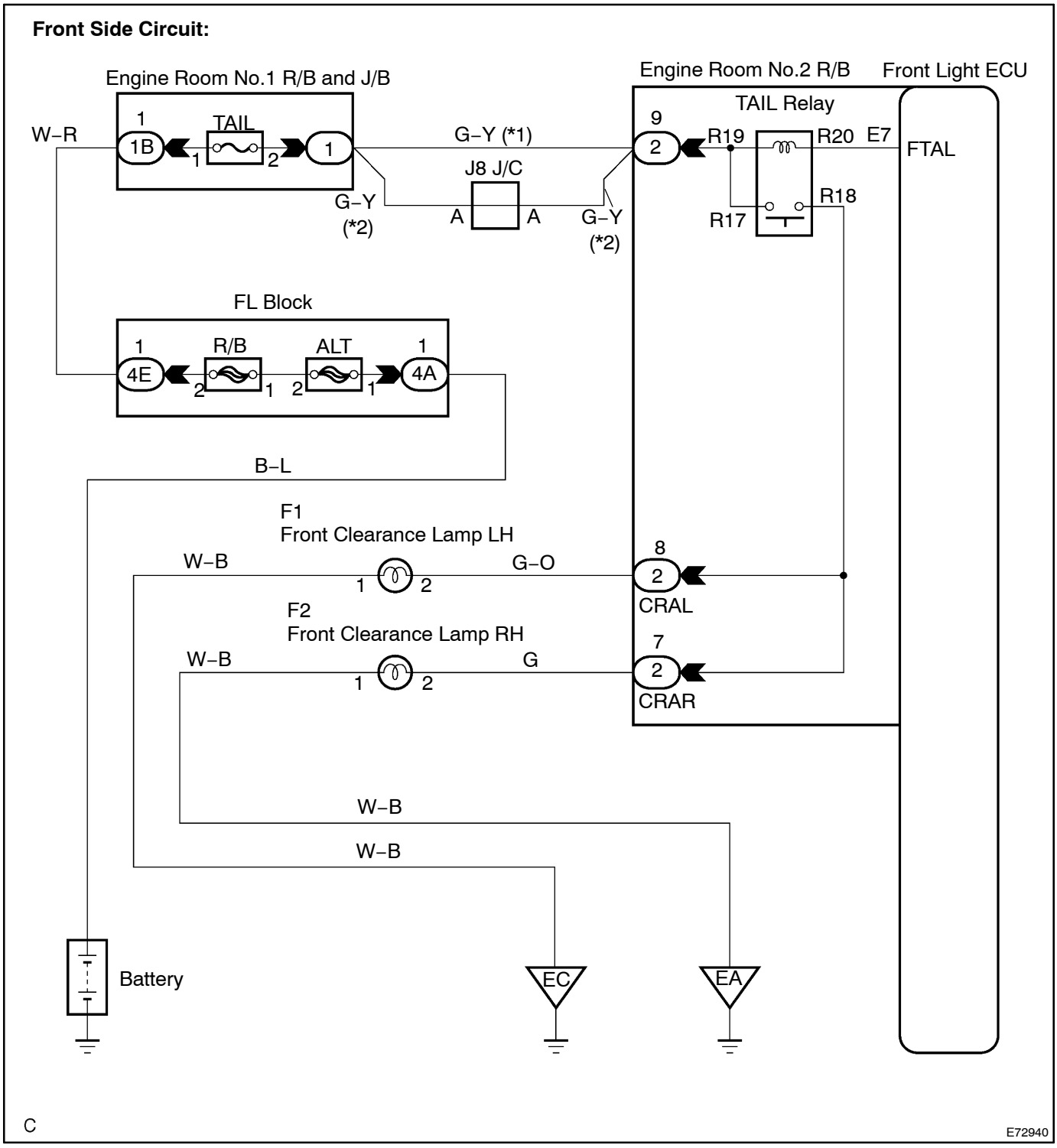
# TAILLIGHT CIRCUIT

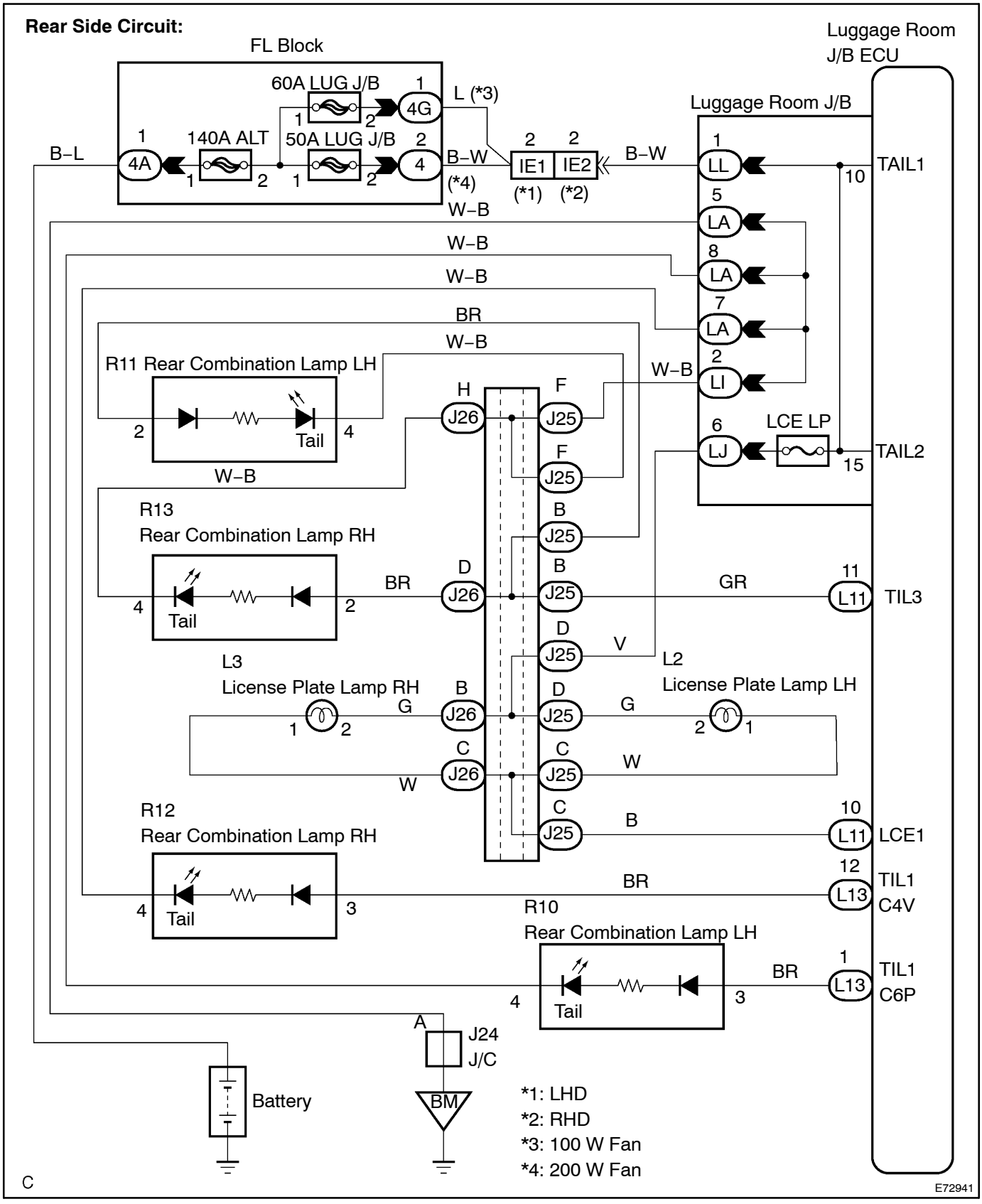
## CIRCUIT DESCRIPTION

The front light ECU and luggage room junction block receive taillamp switch information from the combination switch, and turn on the front parking lamp and rear taillamp.

## WIRING DIAGRAM



**Rear Side Circuit:**



# INSPECTION PROCEDURE

| 1 | CHECK VEHICLE CONDITION |
|---|---|

(a) Check the malfunctioning part of the taillight circuit.

**Result:**

| | |
|---|---|
| Front side taillamp is malfunctioning | A |
| Rear side taillamp is malfunctioning | B |

HINT:

First, inspect the combination switch circuit when each side lamp is malfunctioning (see page 05–1511).

**B** → **Go to step 9**

**A**

| 2 | PERFORM ACTIVE TEST ON INTELLIGENT TESTER II |
|---|---|

(a) Connect the intelligent tester II to the DLC3.

(b) Turn the ignition switch to the ON position and turn the intelligent tester II main switch on.

(c) Select the item below in the ACTIVE TEST and then check that the relay operation.

**BODY NO.5 (MULTIPLEX NETWORK FRONT LIGHT ECU):**

| Item | Test Details | Diagnostic Note |
|---|---|---|
| Clearance Light Operation | Clearance light ON/OFF | – |

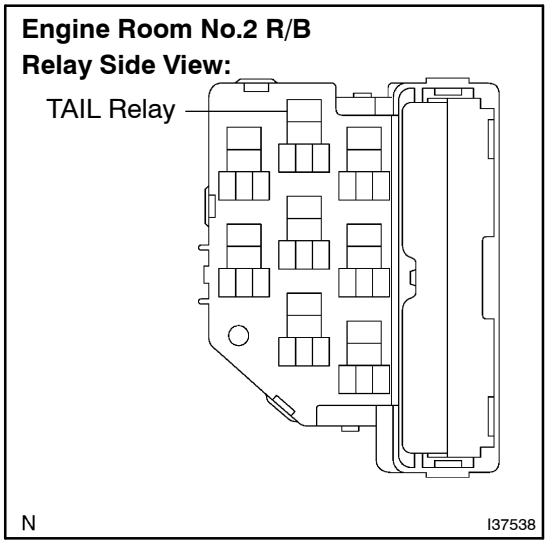
**OK: Lamp comes on.**

**NG** → **Go to step 3**

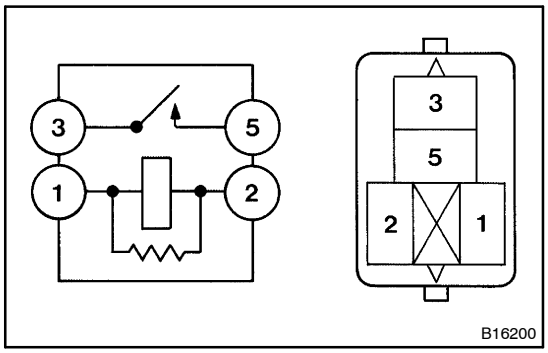
**OK**

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–1369)**

## 3 INSPECT RELAY




(a) Remove the TAIL relay from the engine room No.2 R/B.




(b) Inspect the TAIL relay continuity.

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

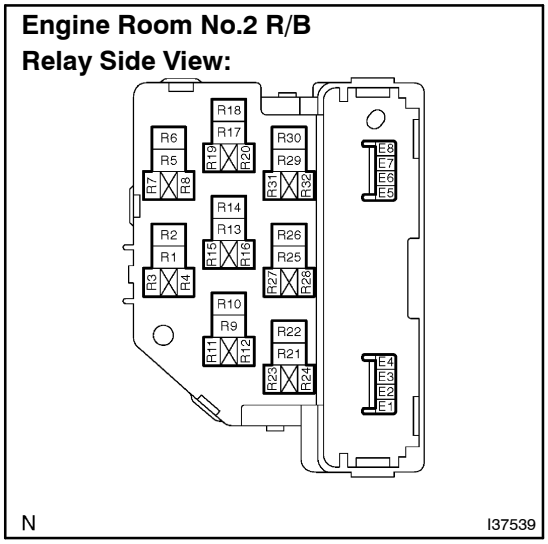
**Standard:**

| Tester Connection | Specified Condition |
|---|---|
| 3 – 5 | 10 kΩ or higher |
| 3 – 5 | Below 1 Ω<br>(When battery voltage is applied to terminal 1 – 2) |

**NG** → **REPLACE RELAY**

**OK**

## 4 INSPECT MULTIPLEX NETWORK BODY ECU(ENGINE ROOM NO.2 R/B)




(a) Using a service wire, connect R17 and R18 in the engine room No.2 R/B.

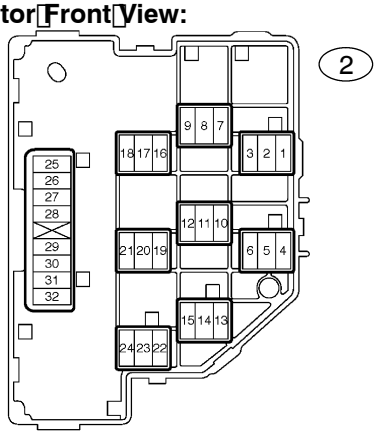
**OK: Lamp comes on.**

**NG** → **Go to step 6**

**OK**

| 5 | INSPECT MULTIPLEX NETWORK BODY ECU (ENGINE ROOM NO.2 R/B) |
|---|---|

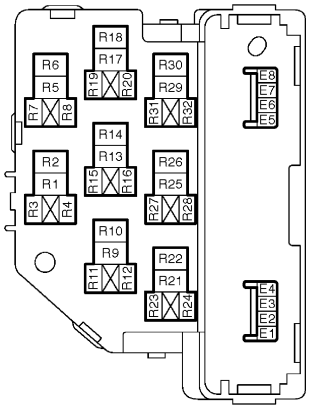
**Engine Room No.2 R/B**
**Connector Front View:**




N I37540

(a) Disconnect 2–9 connector from the engine room No.2 R/B.
(b) Remove the front light ECU from the engine room No.2 R/B.

**Engine Room No.2 R/B**
**Relay Side View:**




N I37539

(c) Using a service wire, connect R19 and R20 in the engine room No.2 R/B.
(d) Measure the resistance according to the value(s) in the table below.

**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| 2–9 – E7 | Connect R19 and R20 | Below 1 Ω |

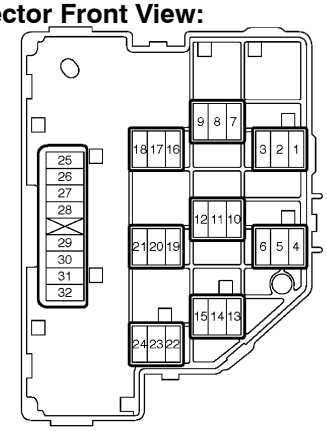
NG → **REPLACE MULTIPLEX NETWORK BODY ECU (ENGINE ROOM NO.2 R/B)**

OK

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–1369)**

## 6 INSPECT MULTIPLEX NETWORK BODY ECU(ENGINE ROOM NO.2 R/B)

**Engine Room No.2 R/B**
**Connector Front View:**




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

HINT:

Inspect the side the suspected malfunctioning part is on.

**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| 2–7 – Body ground (*1) | Connect R17 and R18 | 10 to 14 V |
| 2–8 – Body ground (*2) | Connect R17 and R18 | 10 to 14 V |

*1: RH side

*2: LH side

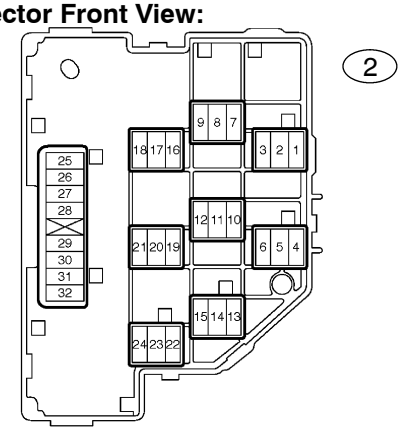
**NG** → **Go to step 7**

**OK**

**REPAIR OR REPLACE HARNESS OR CONNECTOR (EACH OF LAMP CIRCUIT)**

## 7 CHECK HARNESS AND CONNECTOR(POWER SOURCE CIRCUIT)

**Engine Room No.2 R/B**
**Connector Front View:**




(a) Disconnect 2–9 connector from the engine room No.2 R/B.

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

**Standard:**

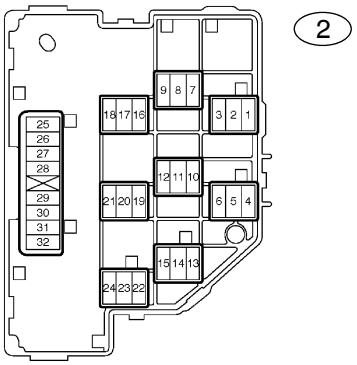
| Tester Connection | Condition | Specified Condition |
|---|---|---|
| 2–9 – Body ground | Always | 10 to 14 V |

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

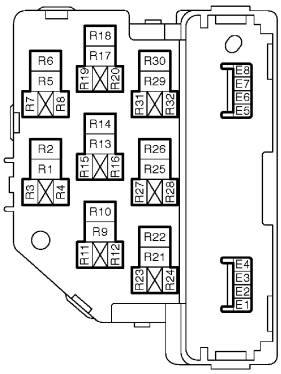
**OK**

| 8 | INSPECT MULTIPLEX NETWORK BODY ECU (ENGINE ROOM NO.2 R/B) |
|---|---|

**Engine Room No.2 R/B**
**Connector Front View:**




**Relay Side View:**

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I37539
I39838

(a) Remove the front light ECU from engine room No.2 R/B.
(b) Using a service wire, connect R19 and R20 of the engine room No.2 R/B.
(c) Measure the resistance according to the value(s) in the table below.

**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| 2–7 – 2–9 | Connect R17 and R18 | Below 1 Ω |
| 2–8 – 2–9 | Connect R17 and R18 | Below 1 Ω |
| 2–9 – E7 | Connect R19 and R20 | Below 1 Ω |

NG → **REPLACE MULTIPLEX NETWORK BODY ECU (ENGINE ROOM NO.2 R/B)**

OK

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–1369)**

| 9 | PERFORM ACTIVE TEST ON INTELLIGENT TESTER II |
|---|---|

(a) Connect the Intelligent tester II to the DLC3.
(b) Turn the ignition switch to the ON position and turn the Intelligent tester II main switch on.
(c) Select the item below in the ACTIVE TEST and then check the operation of each lamp.

**BODY NO.4 (LUGGAGE ROOM JUNCTION BLOCK ECU):**

| Item | Test Details | Diagnostic Note |
|---|---|---|
| Tail Light | Taillamp ON/OFF | – |
| License Light | Licence lamp ON/OFF | – |

**OK: Each lamp comes on.**

**Result:**

| OK | A |
|---|---|
| NG (License light is normal) | B |
| NG (Taillight is normal) | C |
| NG (Both sides are abnormal) | D |

**B** → **Go to step 10**

**C** → **Go to step 14**

**D** → **Go to step 16**

**A**

**PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE**
**(SEE PAGE 05–1369)**

## 10 INSPECT LUGGAGE ROOM JUNCTION BLOCK ASSY

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

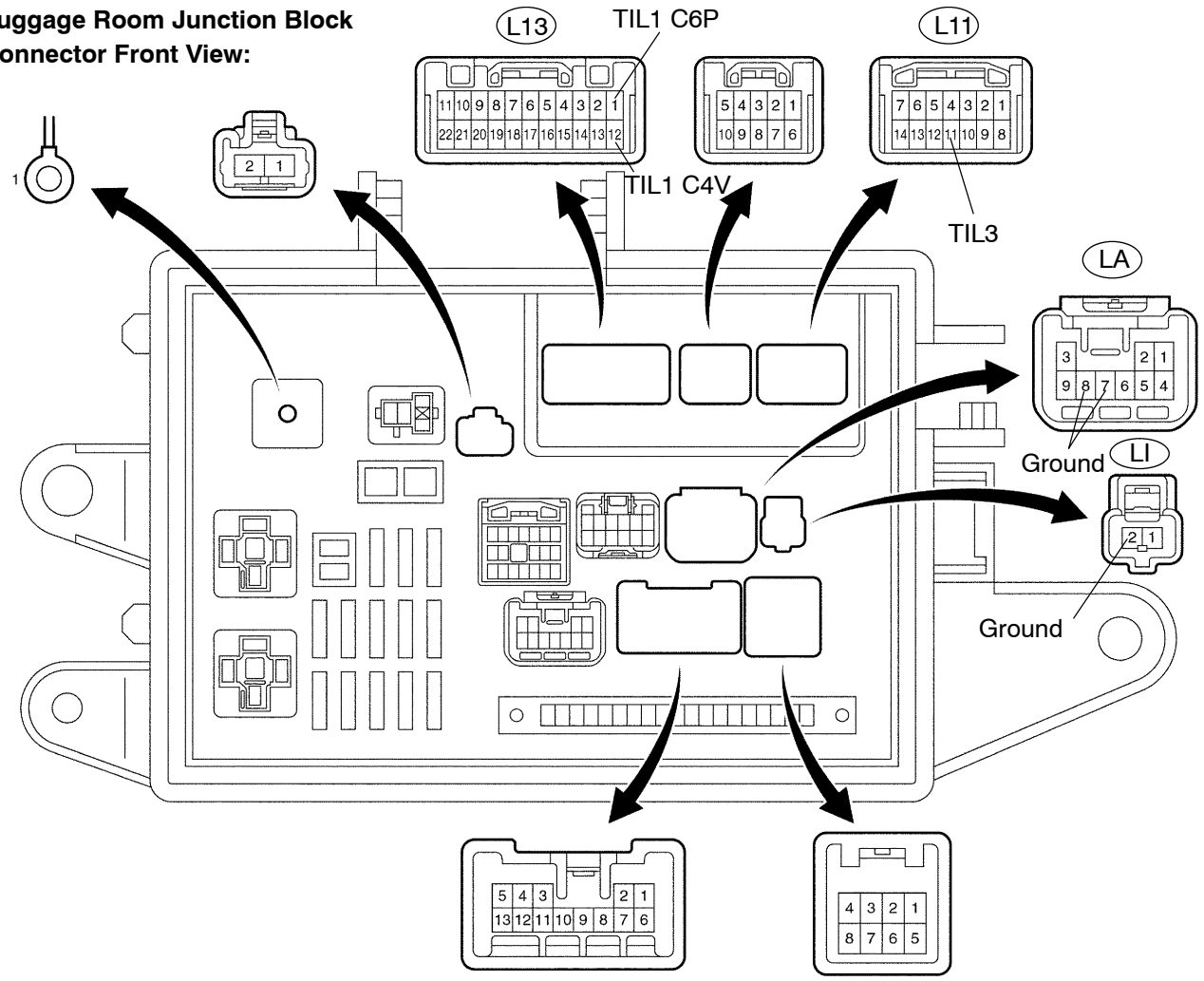
HINT:

Inspect the side the suspected malfunctioning part is on.

**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| L11–11 – LI–2 | Light control switch in TAIL position | 10 to 14 V |
| L13–1 – LA–8 | Light control switch in TAIL position | 10 to 14 V |
| L13–12 – LA–7 | Light control switch in TAIL position | 10 to 14 V |

**Luggage Room Junction Block Connector Front View:**




NG → **Go to step 11**

OK

**REPAIR OR REPLACE HARNESS OR CONNECTOR (EACH OF TAILLAMP CIRCUIT)**

| 11 | INSPECT LUGGAGE ROOM JUNCTION BLOCK ASSY |
|---|---|

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

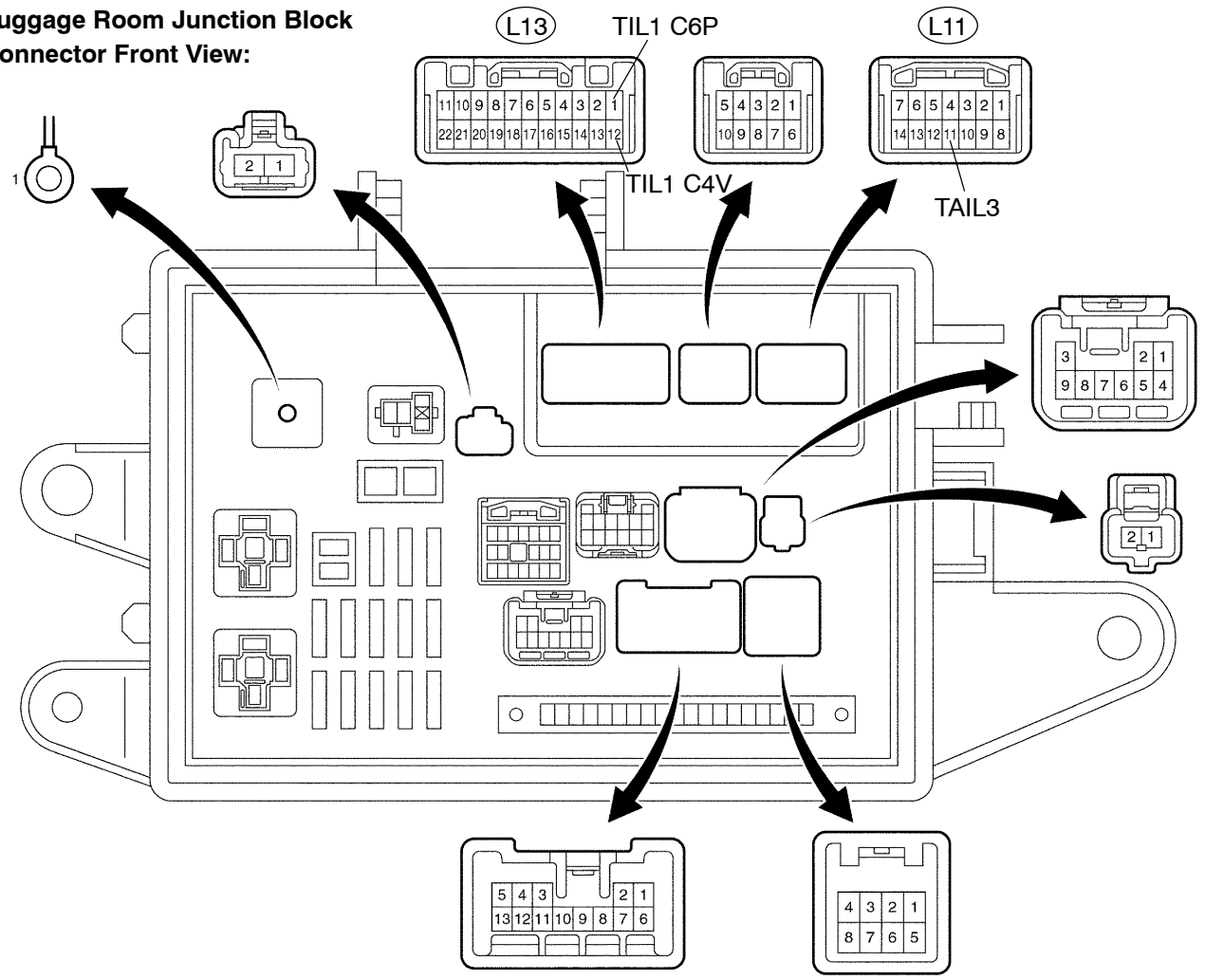
HINT:

Inspect the side the suspected malfunctioning part is on.

**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| L11–11 – Body ground | Light control switch in TAIL position | 10 to 14 V |
| L13–1 – Body ground | Light control switch in TAIL position | 10 to 14 V |
| L13–12 – Body ground | Light control switch in TAIL position | 10 to 14 V |

**Luggage Room Junction Block Connector Front View:**




NG → **REPLACE LUGGAGE ROOM JUNCTION BLOCK ASSY**

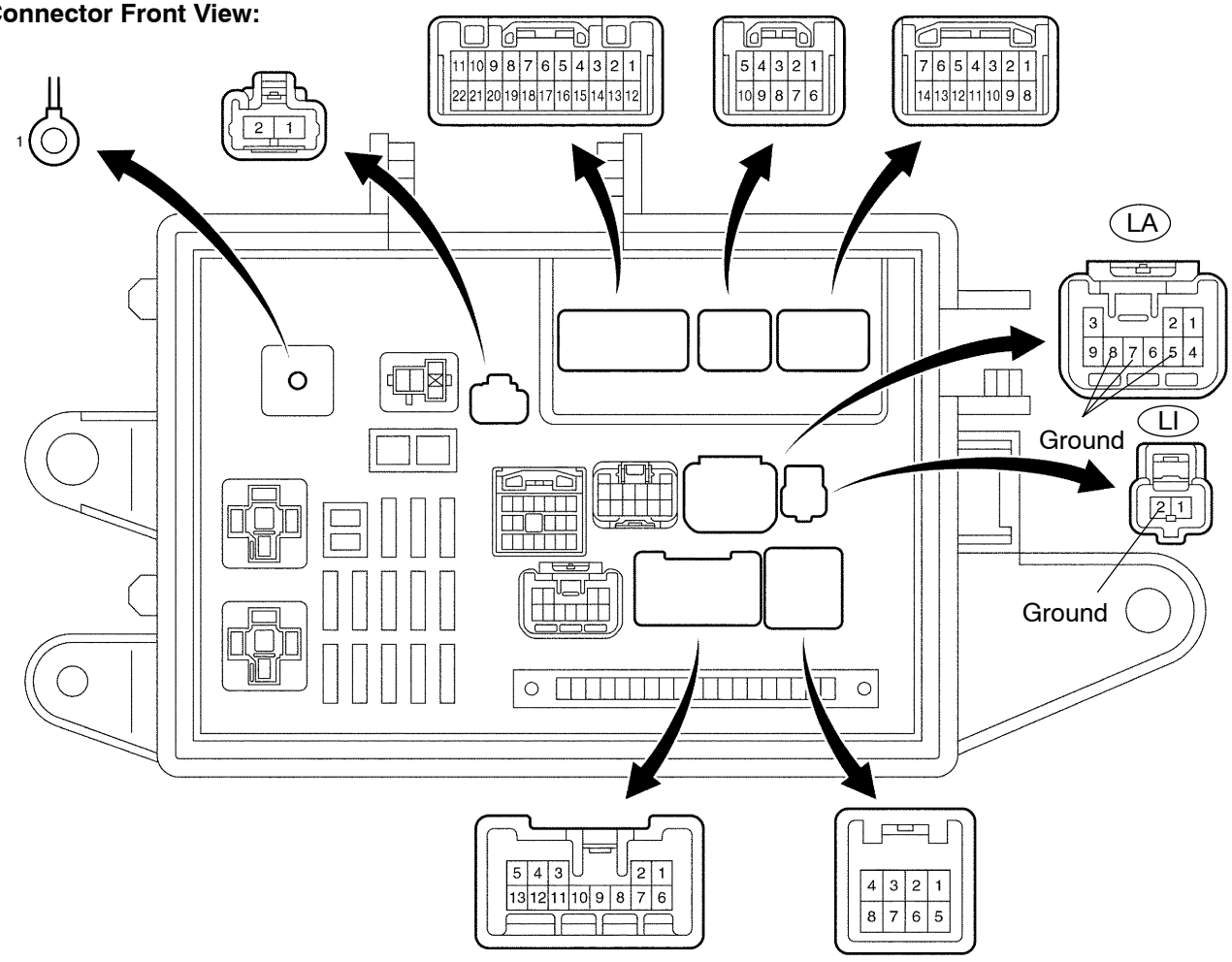
OK

## 12 INSPECT LUGGAGE ROOM JUNCTION BLOCK ASSY

(a) Disconnect the LA and LI connectors from the luggage room junction block assy.
(b) Measure the resistance according to the value(s) in the table below.
**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| LA–7 – LA–5 | Always | Below 1 Ω |
| LA–8 – LA–5 | Always | Below 1 Ω |
| LI–2 – LA–5 | Always | Below 1 Ω |

**Luggage Room Junction Block**
**Connector Front View:**

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NG → REPLACE LUGGAGE ROOM JUNCTION BLOCK ASSY

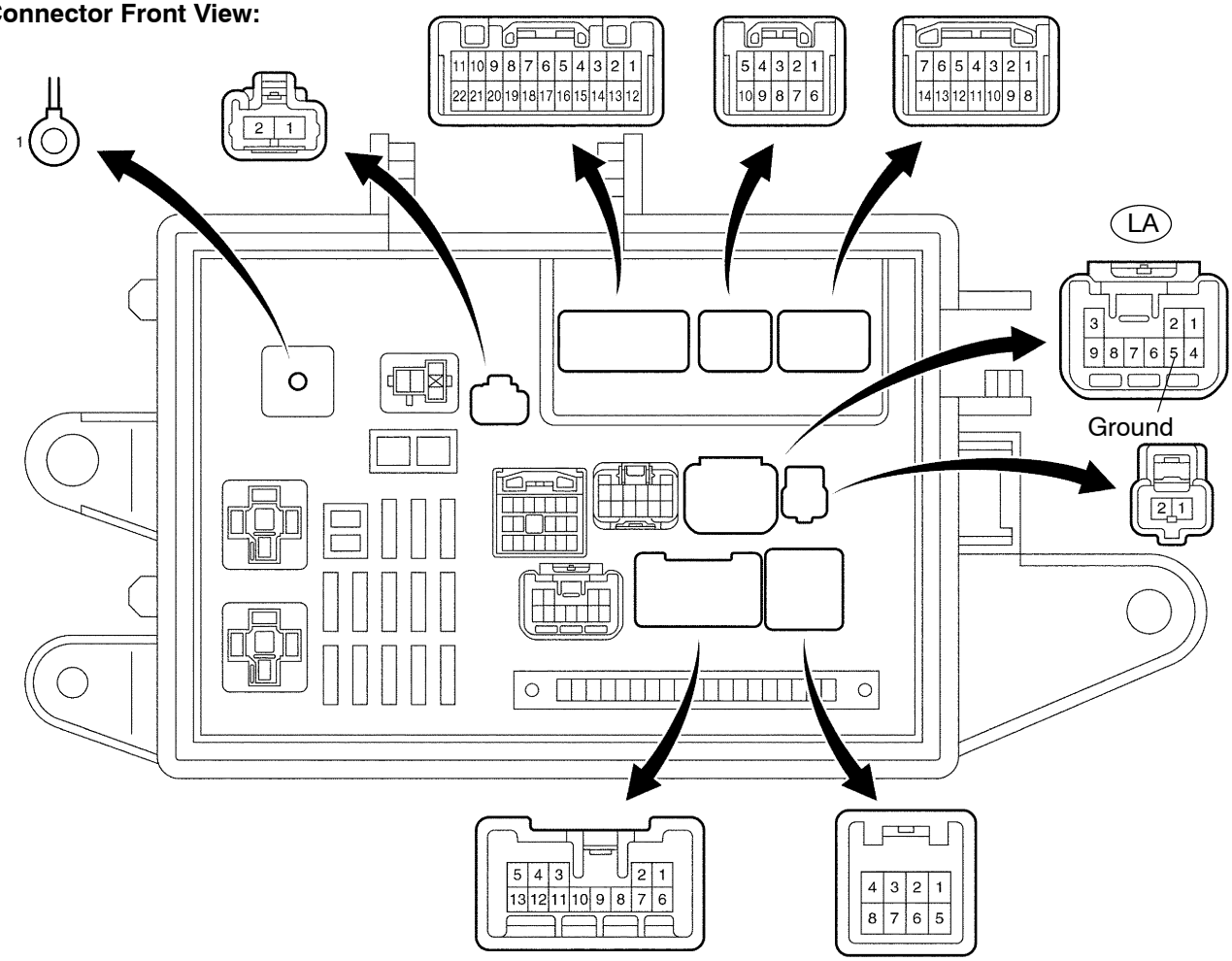
OK

| 13 | CHECK HARNESS AND CONNECTOR(GROUND CIRCUIT) |
|---|---|

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

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| LA–5 – Body ground | Always | Below 1 Ω |

**Luggage Room Junction Block**
**Connector Front View:**




P E70400

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (GROUND CIRCUIT)**

OK

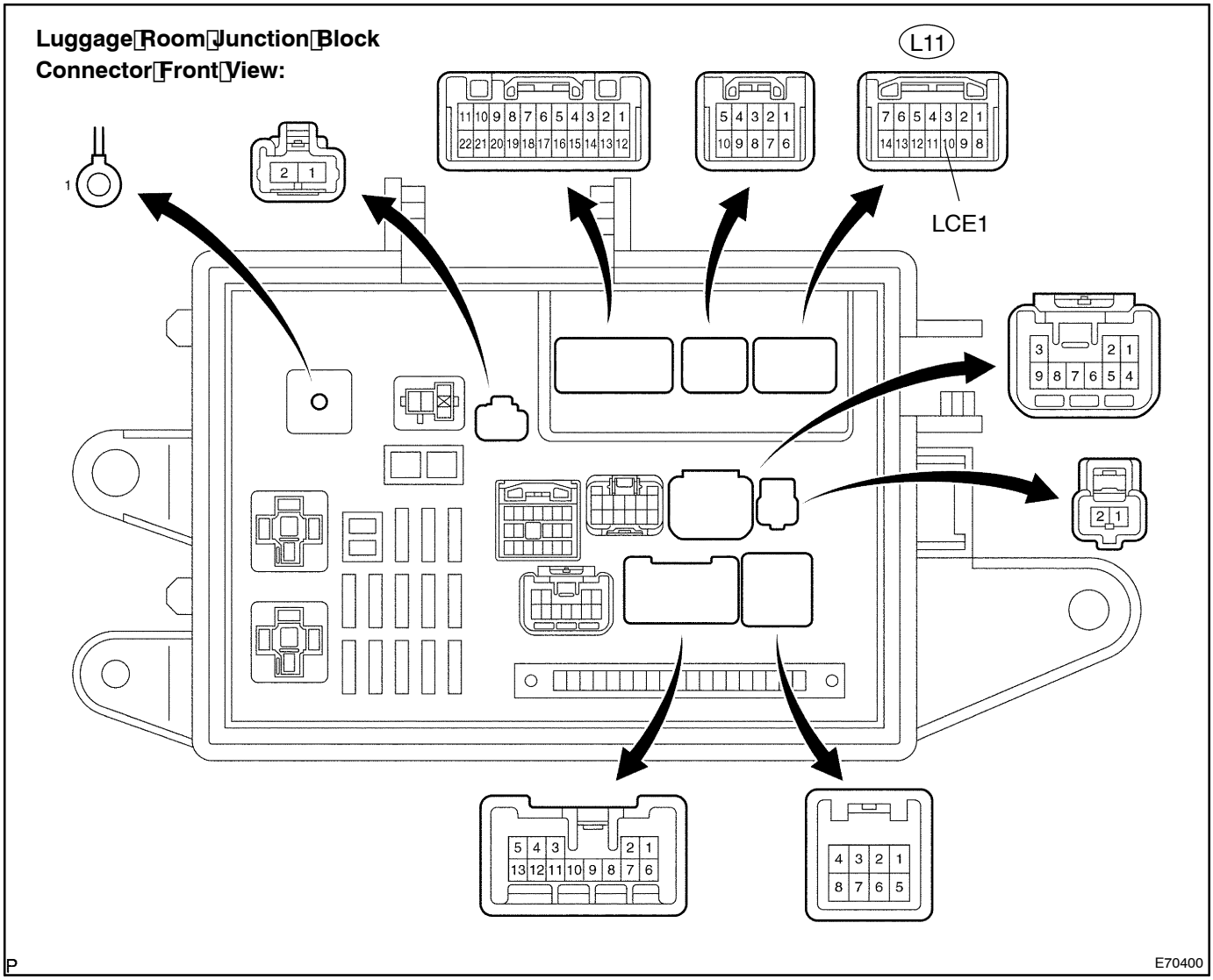
**REPAIR OR REPLACE HARNESS OR CONNECTOR (EACH OF TAILLAMP CIRCUIT)**

| 14 | INSPECT LUGGAGE ROOM JUNCTION BLOCK ASSY |
|---|---|

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

**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| L11–10 – Body ground | Light control switch in except TAIL position | 10 to 14 V |
| L11–10 – Body ground | Light control switch in TAIL position | Below 1 V |




NG → Go to step 15

OK

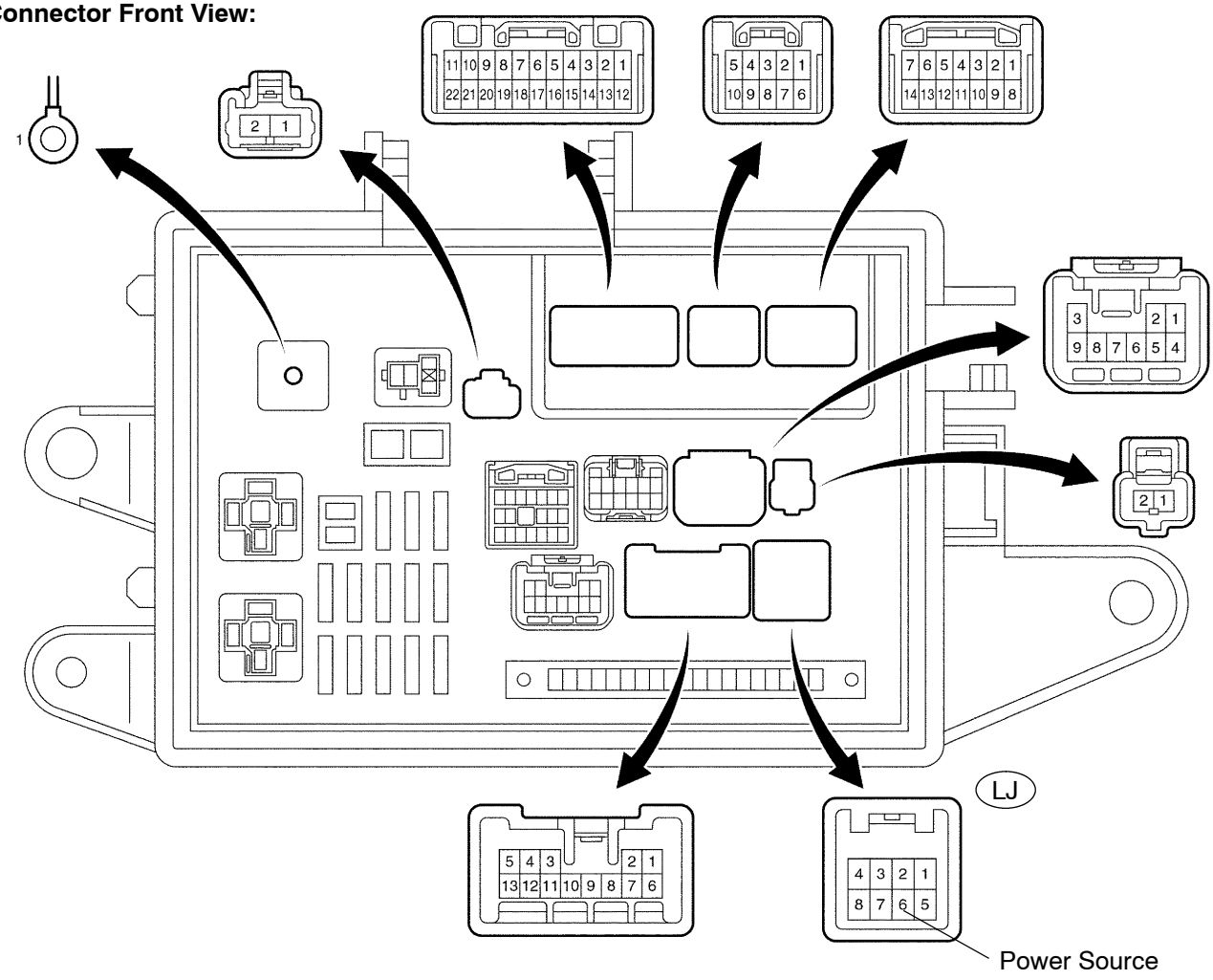
PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE
(SEE PAGE 05–1369)

| 15 | INSPECT LUGGAGE ROOM JUNCTION BLOCK ASSY |
|---|---|

(a) Measure the voltage according to the value(s) in the table below.
**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| LJ–6 – Body ground | Always | 10 to 14 V |

**Luggage Room Junction Block**
**Connector Front View:**




NG → **REPLACE LUGGAGE ROOM JUNCTION BLOCK ASSY**

OK

**REPAIR OR REPLACE HARNESS OR CONNECTOR (LICENSE PLATE LAMP CIRCUIT)**

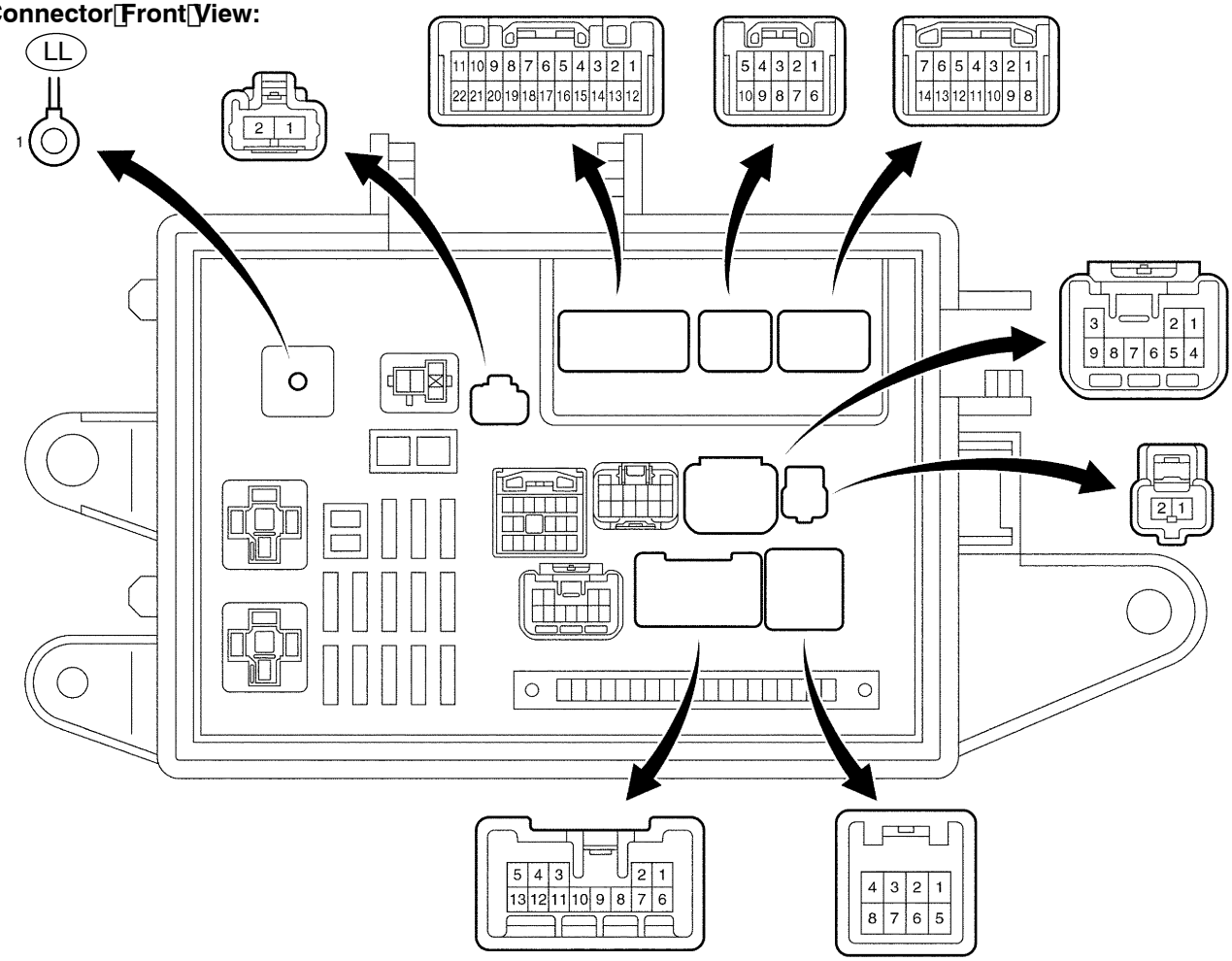
| 16 | CHECK HARNESS AND CONNECTOR(POWER SOURCE CIRCUIT) |
|---|---|

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

**Standard:**

| Tester Connection | Condition | Specified Condition |
|---|---|---|
| LL–1 – Body ground | Always | 10 to 14 V |

**Luggage Room Junction Block**
**Connector Front View:**

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NG → REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN IN PROBLEM SYMPTOMS TABLE (SEE PAGE 05–1369)