Back-up Light Circuit

DESCRIPTION
A/T models: The park / neutral position switch turns on when the shift lever is moved into the R position, causing the back-up lights to illuminate.
M/T models: The back-up light switch turns on when the shift lever is moved into the R position, causing the back-up lights to illuminate.

WIRING DIAGRAM

INSPECTION PROCEDURE

1  INSPECT FUSE (IG1)

   (a) Remove the IG1 fuse from the main body ECU.
   (b) Measure the resistance.
       Standard resistance:
       Below 1 Ω
   (c) Reinstall the IG1 fuse.

   OK

   NG  REPLACE FUSE
2 INSPECT BULB (BACK-UP LIGHT BULB)

(a) Remove the back-up light bulb.
(b) Apply battery voltage to the terminals and check that the back-up light illuminates.

Standard

<table>
<thead>
<tr>
<th>Measurement Condition</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive battery - Terminal 1</td>
<td>back-up light illuminates</td>
</tr>
<tr>
<td>Negative battery - Terminal 2</td>
<td></td>
</tr>
</tbody>
</table>

(c) Reinstall the back-up light bulb.

NG → REPLACE BULB

OK

3 CHECK TRANSAXLE TYPE

(a) Check the vehicle's transaxle type.

Result

<table>
<thead>
<tr>
<th>Transaxle Type</th>
<th>Proceed To</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/T</td>
<td>A</td>
</tr>
<tr>
<td>M/T</td>
<td>B</td>
</tr>
</tbody>
</table>

B → Go to step 7

A

4 INSPECT PARK / NEUTRAL POSITION SWITCH

(a) Disconnect the B35 park / neutral position switch.
(b) Measure the resistance.

Standard resistance

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Shift Position</th>
<th>Specified Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (RB) - 1 (RL)</td>
<td>R</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>2 (RB) - 1 (RL)</td>
<td>Except R</td>
<td>10 kΩ or higher</td>
</tr>
</tbody>
</table>

(c) Reconnect the park / neutral position switch.

NG → REPLACE PARK / NEUTRAL POSITION SWITCH

OK
5 CHECK HARNESS AND CONNECTOR (FUSE - PARK / NEUTRAL POSITION SWITCH)

(a) Disconnect the B35 park / neutral position switch connector.
(b) Measure the voltage.
   **Standard voltage**
   
<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Condition</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B35-2 (RB) - Body ground</td>
<td>Ignition switch ON</td>
<td>11 to 14 V</td>
</tr>
</tbody>
</table>
   
   (c) Reconnect the park / neutral position switch connector.

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

6 CHECK HARNESS AND CONNECTOR (PARK / NEUTRAL POSITION SWITCH - REAR BACK-UP LIGHT)

(a) Disconnect the B35 park / neutral position switch connector.
(b) Disconnect the L13 and L16 back-up light connectors.
(c) Measure the resistance.
   **Standard resistance**
   
<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B35-1 (RL) - L13-1</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>B35-1 (RL) - L16-1</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>L13-1 - Body ground</td>
<td>10 kΩ or higher</td>
</tr>
<tr>
<td>L16-1 - Body ground</td>
<td>10 kΩ or higher</td>
</tr>
</tbody>
</table>
   
   (d) Reconnect the park / neutral position switch connector.
   (e) Reconnect the back-up light connectors.

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPAIR OR REPLACE HARNESS OR CONNECTOR (BACK-UP LIGHT - BODY GROUND)
7  INSPECT BACK-UP LIGHT SWITCH

Component Side:
Back-up Light Switch

(a) Disconnect the B42 back-up light switch connector.
(b) Measure the resistance. **Standard resistance**

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Shift Position</th>
<th>Specified Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2</td>
<td>R</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>1 - 2</td>
<td>Except R</td>
<td>10 kΩ or higher</td>
</tr>
</tbody>
</table>

(c) Reconnect the back-up light switch connector.

**NG** REPLACE BACK-UP LIGHT SWITCH

8  CHECK HARNESS AND CONNECTOR (FUSE - BACK-UP LIGHT SWITCH)

Wire Harness Side:
Back-up Light Switch Connector

(a) Disconnect the B42 back-up light switch connector.
(b) Measure the voltage. **Standard voltage**

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Condition</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B42-2 - Body ground</td>
<td>Ignition switch ON</td>
<td>11 to 14 V</td>
</tr>
</tbody>
</table>

(c) Reconnect the back-up light switch connector.

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR
(a) Disconnect the B42 back-up light switch connector.
(b) Disconnect the L13 and L16 back-up light connectors.
(c) Measure the resistance.

**Standard resistance**

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>B42-1 - L13-1</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>B42-1 - L16-1</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>L13-1 - Body ground</td>
<td>10 kΩ or higher</td>
</tr>
<tr>
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<td>10 kΩ or higher</td>
</tr>
</tbody>
</table>

(d) Reconnect the back-up light switch connector.
(e) Reconnect the back-up light connectors.

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

REPAIR OR REPLACE HARNESS OR CONNECTOR (BACK-UP LIGHT - BODY GROUND)