**DESCRIPTION**

To prevent the key from being locked in the vehicle, the multiplex network body ECU prevents the doors from being locked by monitoring 2 switches: 1) the unlock warning switch, which turns ON when the key is inserted into the ignition key cylinder; and 2) the driver side courtesy light switch, which turns ON when the driver side door is opened.

**WIRING DIAGRAM**

```
D11
Front Door Courtesy Light Assembly (Driver Side)

U1
Unlock Warning Switch Assembly

W-B

To Front Door Lock Assembly LH (LOCK)

To Front Door Lock Assembly LH (UNLOCK)

*1: Double Cab
*2: Access Cab
```

*1: Double Cab
*2: Access Cab

![Wiring Diagram](image-url)
1 CHECK HARNESS AND CONNECTOR (DRIVER SIDE JUNCTION BLOCK - BODY GROUND)

(a) Disconnect the 1K driver side J/B connector.
(b) Measure the resistance.

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1K-10 (KSW) - Body ground</td>
<td>No key in ignition key cylinder</td>
<td>10 kΩ or higher</td>
</tr>
<tr>
<td>1K-10 (KSW) - Body ground</td>
<td>Key inserted in ignition key cylinder</td>
<td>Below 1 Ω</td>
</tr>
</tbody>
</table>

c) Reconnect the driver side J/B connector.

NG

OK ➔ Go to step 4

2 INSPECT UNLOCK WARNING SWITCH ASSEMBLY

(a) Remove the unlock warning switch.
(b) Measure the resistance.

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Switch Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2</td>
<td>Not pushed</td>
<td>10 kΩ or higher</td>
</tr>
<tr>
<td>1 - 2</td>
<td>Pushed</td>
<td>Below 1 Ω</td>
</tr>
</tbody>
</table>

c) Reinstall the unlock warning switch.

NG ➔ REPLACE UNLOCK WARNING SWITCH ASSEMBLY

OK
3 CHECK HARNESS AND CONNECTOR (SWITCH ASSEMBLY - DRIVER SIDE J/B ASSEMBLY AND BODY GROUND)

- (a) Disconnect the U1 unlock warning switch connector.
- (b) Disconnect the 1K driver side J/B connector.
- (c) Measure the resistance of the wire harness side connectors.
  **Standard**
<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>U1-1 - 1K-10 (KSW)</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>U1-2 - Body ground</td>
<td>Below 1 Ω</td>
</tr>
</tbody>
</table>
- (d) Reconnect the unlock warning switch connector.
- (e) Reconnect the driver side J/B connector.

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**

4 CHECK FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY (DRIVER SIDE)

- (a) Move the room light switch to the DOOR position and open the driver side door. Check that the room light turns ON.
  **OK:** Room light turns ON.

**OK** REPLACE DRIVER SIDE JUNCTION BLOCK ASSEMBLY

**NG**

5 INSPECT FRONT DOOR COURTESY LIGHT SWITCH ASSEMBLY (DRIVER SIDE)

- (a) Remove the front door courtesy light switch assembly.
- (b) Measure the resistance of the switch.
  **Standard**
<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Switch Condition</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Body ground</td>
<td>Not pushed (ON)</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>1 - Body ground</td>
<td>Pushed (OFF)</td>
<td>10 kΩ or higher</td>
</tr>
</tbody>
</table>
- (c) Reinstall the front door courtesy light switch assembly.
6 CHECK HARNESS AND CONNECTOR (SWITCH ASSEMBLY (DRIVER SIDE) - DRIVER SIDE J/B ASSEMBLY)

(a) Disconnect the D11 front door courtesy light switch connector.
(b) Disconnect the 1F driver side J/B connector.
(c) Measure the resistance.

Standard

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>D11-1 - 1F-7 (DCTY)</td>
<td>Below 1 Ω</td>
</tr>
</tbody>
</table>

(d) Reconnect the front door courtesy light switch connector.
(e) Reconnect the driver side J/B connector.

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK REPLACE DRIVER SIDE JUNCTION BLOCK