Key Lock-in Prevention Function does not Work Properly

DESCRIPTION
When the key is in the ignition key cylinder or the door courtesy light ON signal is output to the main body ECU, performing the door lock operation with the lock switch does not lock the doors.

WIRING DIAGRAM

INSPECTION PROCEDURE

1 READ VALUE OF INTELLIGENT TESTER (D DOR CTY SW)
   (a) Use the DATA LIST to check the operation of the front door courtesy switch.

<table>
<thead>
<tr>
<th>Item</th>
<th>Measurement Item / Display (Range)</th>
<th>Normal Condition</th>
<th>Diagnostic Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>D DOR CTY SW</td>
<td>Driver side door courtesy switch signal / ON or OFF</td>
<td>ON: Driver side door is open OFF: Driver side door is closed</td>
<td>-</td>
</tr>
</tbody>
</table>

OK: 
The display is as specified in the normal condition.

NG  Go to step 5

2 READ VALUE OF INTELLIGENT TESTER (KEY UNLK WRN SW)
   (a) Use the DATA LIST to check the operation of the door unlock warning switch.
OK:
The display is as specified in the normal condition.

NG  REPLACE MAIN BODY ECU

OK

3  INSPECT UNLOCK WARNING SWITCH ASSEMBLY

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

**Standard resistance**

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Condition</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>

NG  REPLACE UNLOCK WARNING SWITCH ASSEMBLY

OK
4 CHECK HARNESS AND CONNECTOR (UNLOCK WARNING SWITCH ASSEMBLY - MAIN BODY ECU)

(a) Disconnect the E21 unlock warning switch assembly connector.
(b) Disconnect the E8 main body ECU connector.
(c) Measure the resistance.

**Standard resistance**

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>E21-1 - E8-14 (KSW)</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>E21-1 or E8-14 (KSW) - Body ground</td>
<td>10 kΩ or higher</td>
</tr>
<tr>
<td>E21-2 - Body ground</td>
<td>Below 1 Ω</td>
</tr>
</tbody>
</table>

(d) Reconnect the unlock warning switch connector.
(e) Reconnect the main body ECU connector.

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU

5 INSPECT FRONT DOOR COURTESY SWITCH ASSEMBLY (DRIVER SIDE)

(a) Remove the front door courtesy switch (driver side).
(b) Measure the resistance.

**Standard resistance**

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>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 switch (driver side).

**NG** REPLACE FRONT DOOR COURTESY SWITCH ASSEMBLY (DRIVER SIDE)

OK
(a) Disconnect the J1 front door courtesy switch (driver side) connector.
(b) Disconnect the E7 main body ECU connector.
(c) Measure the resistance.

Standard resistance

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1-1 - E7-23 (DCTY)</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>J1-1 or E7-23 (DCTY) - Body ground</td>
<td>10 kΩ or higher</td>
</tr>
</tbody>
</table>

(d) Reconnect the front door courtesy switch connector.
(e) Reconnect the main body ECU connector.

NG > REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE MAIN BODY ECU