DATA LIST / ACTIVE TEST

1. READ DATA LIST

HINT:
Using the intelligent tester’s DATA LIST allows switch, sensor, actuator and other item values to be read without removing any parts. Reading the DATA LIST early in troubleshooting is one way to save time.
(a) Connect the intelligent tester with CAN VIM to the DLC3.
(b) Turn the ignition switch ON and push the intelligent tester main switch ON.
(c) Read the DATA LIST according to the prompts displayed on the tester.

BACK-DOOR:

<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>WIPER TURN SW</td>
<td>Rear wiper turn position switch signal/ON or OFF</td>
<td>ON: Rear wiper in turning position OFF: Rear wiper in other position</td>
<td>-</td>
</tr>
<tr>
<td>WIPER RTRCT SW</td>
<td>Rear wiper retracting switch signal/ON or OFF</td>
<td>ON: Rear wiper in retracting position OFF: Rear wiper in other position</td>
<td>-</td>
</tr>
</tbody>
</table>

2. PERFORM ACTIVE TEST

HINT:
Performing the tester’s ACTIVE TEST allows relays, VSVs, actuators, and other items to be operated without removing any parts. Performing the ACTIVE TEST early in troubleshooting is one way to save time. The DATA LIST can be displayed during the ACTIVE TEST.
(a) Connect the intelligent tester with CAN VIM to the DLC3.
(b) Turn the ignition switch ON and push the intelligent tester main switch ON.
(c) Perform the ACTIVE TEST according to the prompts displayed on the tester.

BACK-DOOR:

<table>
<thead>
<tr>
<th>Item</th>
<th>Test Details</th>
<th>Diagnostic Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAR WIPER</td>
<td>Rear wiper ON/OFF</td>
<td>-</td>
</tr>
</tbody>
</table>
**Rear Wiper Motor Circuit**

**DESCRIPTION**
The back door ECU controls the rear wiper motor.

**WIRING DIAGRAM**

![Wiring Diagram](image)

**INSPECTION PROCEDURE**

1. **CHECK DTC OUTPUT**
   
   (a) Connect the intelligent tester with CAN VIM to the DLC3.
   (b) Turn the ignition switch ON and turn the tester ON.
   (c) Clear the DTCs.
   (d) Check whether DTC B1214, B1215 or B1287 recurs 10 seconds or more after the ignition switch is turned on.

   **OK:**
   - No DTC is output.

   **NG**
   - **GO TO MULTIPLEX COMMUNICATION SYSTEM**
2 PERFORM ACTIVE TEST BY INTELLIGENT TESTER (REAR WIPER)

(a) Connect the intelligent tester with CAN VIM to the DLC3.  
(b) Turn the ignition switch ON and turn the tester ON.  
(c) Select the item below in the ACTIVE TEST and then check that the rear wiper operates.

BACK-DOOR

<table>
<thead>
<tr>
<th>Item</th>
<th>Test Details</th>
<th>Diagnostic Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>REAR WIPER</td>
<td>Rear wiper operation ON/OFF</td>
<td>-</td>
</tr>
</tbody>
</table>

OK:  
Rear wiper operates.

NG

OK> REPLACE BACK DOOR ECU

3 INSPECT REAR WIPER MOTOR ASSEMBLY

(a) Remove the rear wiper motor assembly.  
(b) Connect the battery's positive (+) lead to terminal 5 (L) and the negative (-) lead to terminal 4 (E).  
(c) Check that the rear wiper motor operates.  
   OK:  
   Rear wiper motor operates.  
(d) Reinstall the rear wiper motor assembly.

NG> REPLACE REAR WIPER MOTOR ASSEMBLY

OK
4 CHECK HARNESS AND CONNECTOR (REAR WIPER MOTOR ASSEMBLY - BACK DOOR ECU)

(a) Disconnect the S3 rear wiper motor assembly connector.
(b) Disconnect the S5 back door ECU connector.
(c) Measure the resistance.

**Standard resistance**

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>S5-1 (WIP-) - S3-4 (E)</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>S5-2 (WIP+) - S3-5 (L)</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>S5-3 (W) - S3-3 (W)</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>S5-12 (P) - S3-1 (P)</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>S5-18 (SGND) - S3-2 (E)</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>S5-2 (WIP+) - Body ground</td>
<td>10 kΩ or higher</td>
</tr>
<tr>
<td>S5-3 (W) - Body ground</td>
<td>10 kΩ or higher</td>
</tr>
<tr>
<td>S5-12 (P) - Body ground</td>
<td>10 kΩ or higher</td>
</tr>
</tbody>
</table>

(d) Reconnect the the rear wiper motor assembly connector.
(e) Reconnect the back door ECU connector.

**NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

**OK**

REPLACE BACK DOOR ECU