DESCRIPTION
The motor relay (semiconductor relay) is built in the master cylinder solenoid and drives the pump motor based on a signal from the skid control ECU.

<table>
<thead>
<tr>
<th>DTC No.</th>
<th>DTC Detection Condition</th>
<th>Trouble Area</th>
</tr>
</thead>
</table>
| C1253/53| Motor system circuit (motor input circuit) | • Hydraulic brake booster pump motor  
• Hydraulic brake booster pump motor circuit |

WIRING DIAGRAM

INSPECTION PROCEDURE
NOTICE:
When replacing the hydraulic brake booster (master cylinder solenoid), perform zero point calibration (See page BC-20).

1. PERFORM ACTIVE TEST BY INTELLIGENT TESTER (H/B MOTOR RELAY)
   (a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch to the ON position and push the intelligent tester main switch ON.
(c) Start the engine.
(d) Select "ACTIVE TEST" mode on the intelligent tester.

(e) Check operation sound of the H/B motor individually when operating it with the intelligent tester.

OK:
The operation sound of the H/B motor can be heard.

NG

### 2 INSPECT SKID CONTROL ECU (+BM TERMINAL)

(a) Disconnect the skid control ECU connectors.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage according to the value(s) in the table below.

**Standard voltage**

<table>
<thead>
<tr>
<th>Item</th>
<th>Tester Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>H/B MOT RELAY</td>
<td>S28-2 (+BM1) - Body ground</td>
<td>10 to 14 V</td>
</tr>
<tr>
<td></td>
<td>S29-2 (+BM2) - Body ground</td>
<td>10 to 14 V</td>
</tr>
</tbody>
</table>

NG

REPAIR OR REPLACE HARNESS OR CONNECTOR (+BM CIRCUIT)
3 INSPECT SKID CONTROL ECU (GND TERMINAL)

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

**Standard resistance**

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>S28-1 (GND1) - Body ground</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>S28-32 (GND2) - Body ground</td>
<td>Below 1 Ω</td>
</tr>
<tr>
<td>S29-4 (GND3) - Body ground</td>
<td>Below 1 Ω</td>
</tr>
</tbody>
</table>

NG > REPAIR OR REPLACE HARNESS OR CONNECTOR (GND CIRCUIT)

OK

4 RECONFIRM DTC

(a) Clear the DTC (See page BC-39).
(b) Turn the ignition switch off.
(c) Depress the brake pedal more than 20 times.
(d) Turn the ignition switch to the ON position.
(e) Wait until the pump motor stops.
(f) Depress the brake pedal several times until the pump motor turns on.
(g) Wait until the pump stops.
(h) Repeat (f) and (g) 3 more times.
(i) Check if the same DTC is detected (See page BC-39).

HINT:
Reinstall the sensors, connectors, etc. and restore the previous vehicle conditions before rechecking for DTCs.

**Result**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Proceed to</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTC is output</td>
<td>A</td>
</tr>
<tr>
<td>DTC is not output</td>
<td>B</td>
</tr>
</tbody>
</table>

B > END
REPLACE HYDRAULIC BRAKE BOOSTER