

<b>DTC</b>	<b>C1751/51</b>	<b>Continuous Electric Current to Height Control Compressor</b>
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**DESCRIPTION**

The signal from the suspension control ECU operates the air suspension relay, and the height control compressor motor starts.

The height control compressor assembly operates until the targeted vehicle height is reached. Then the height control sensor sub-assembly sends the signal to the suspension control ECU, and stops the height control compressor.

DTC No.	DTC Detecting Condition	Trouble Area
C1751/51	When the ECU detects (a) or (b) for 1 trip, it outputs DTCs. (a) Continuity exists for 2 minutes in total within past 4 minutes. (b) Continuity has existed for more than 100 seconds in succession.	<ul style="list-style-type: none"> <li>• Height control compressor motor</li> <li>• Height control compressor circuit</li> <li>• Height control sensor link sub-assembly</li> <li>• Height control sensor sub-assembly</li> <li>• Relief valve</li> <li>• AIR SUS relay comes off</li> <li>• Air leakage from the air tube or each valve</li> <li>• Clogging in the air tube or each valve</li> <li>• Suspension control ECU</li> </ul>

<b>1</b>	<b>CHECK VEHICLE HEIGHT</b>
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HINT:  
Make the vehicle vacant and unloaded.

NEXT

<b>2</b>	<b>CHECK HEIGHT CONTROL COMPRESSOR CIRCUIT</b>
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NEXT

<b>3</b>	<b>CHECK AIR LEAKAGE</b>
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OK:  
No leaks

**Result**

Result	Proceed to
OK	A (When using intelligent tester)
	(Reference) B (When not using intelligent tester)
NG	C

**SC**

B Go to step 5

C REPAIR OR REPLACE AIR TUBE

A

**4 INSPECT HEIGHT CONTROL SOLENOID VALVE**

- (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) Select the item below in the ACTIVE TEST, and operate it with the intelligent tester.

**AIRSUS**

Item	Vehicle Condition / Test Details	Diagnostic Note
FR SOL	Turn OFF right front solenoid valve one second after turning it ON	Operation of solenoid (clicking sound) can be heard
FR SOL	Turn OFF left front solenoid valve one second after turning it ON	Operation of solenoid (clicking sound) can be heard
RR SOL	Turn OFF right rear solenoid valve one second after turning it ON	Operation of solenoid (clicking sound) can be heard
RL SOL	Turn OFF left rear solenoid valve one second after turning it ON	Operation of solenoid (clicking sound) can be heard

- (d) Check whether the height control solenoid valve has a continuity (will vibrate).

**OK:**

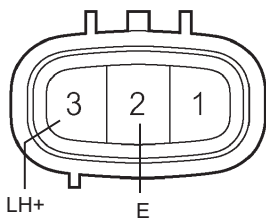
**The solenoid makes sound, and the height control solenoid valve has continuity (will vibrate).**

**OK** → **Go to step 6**

**NG**

**5 INSPECT HEIGHT CONTROL SOLENOID VALVE**

Height Control Solenoid Valve Rear LH:



H

G025100E16

- (a) HEIGHT CONTROL SOLENOID VALVE FRONT RH:
  - (1) Disconnect the height control solenoid valve connector.
  - (2) Check the operating sound of the height control solenoid valve when positive battery voltage is applied to the terminals.

Battery Positive	Battery Negative
3 (RH+)	2 (E)

**OK:**

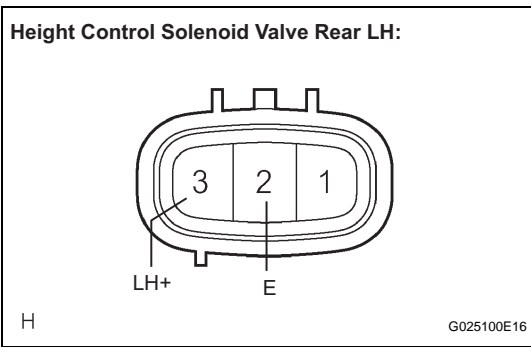
**It should make an operating sound (click).**

**Result**

OK	A
NG	B

**HINT:**

When a malfunction is found in the front solenoid valve, replace the height control valve sub?assembly No. 1.



- (b) HEIGHT CONTROL SOLENOID VALVE FRONT LH:
- (1) Disconnect the height control solenoid valve connector.
  - (2) Check the operating sound of the height control solenoid valve when positive battery voltage is applied to the terminals.

Battery Positive	Battery Negative
1 (LH+)	2 (E)

**OK:**  
It should make an operating sound (click).  
**Result**

OK	A
NG	B

**HINT:**

When a malfunction is found in the front solenoid valve, replace the height control valve sub-assembly No. 1.

- (c) HEIGHT CONTROL SOLENOID VALVE REAR RH:
- (1) Disconnect the height control solenoid valve connector.
  - (2) Check the operating sound of the height control solenoid valve when positive battery voltage is applied to the terminals.

Battery Positive	Battery Negative
1 (RH+)	2 (E)

**OK:**  
It should make an operating sound (click).  
**Result**

OK	A
NG	C

**HINT:**

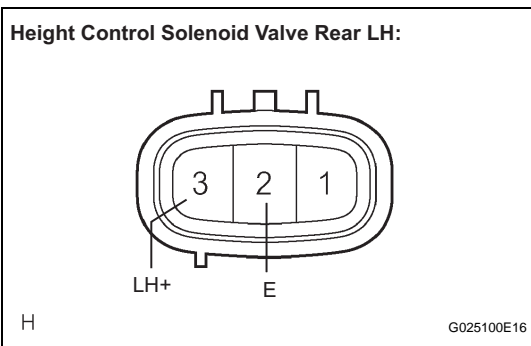
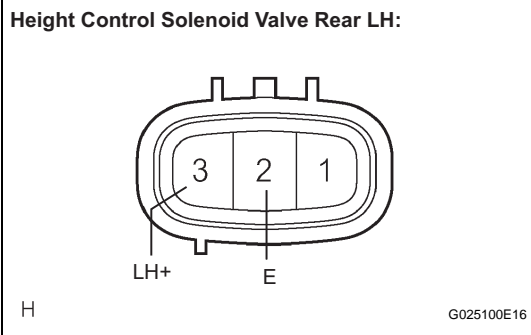
When a malfunction is found in the front solenoid valve, replace the height control valve sub-assembly No. 2.

- (d) HEIGHT CONTROL SOLENOID VALVE REAR LH:
- (1) Disconnect the height control solenoid valve connector.
  - (2) Check the operating sound of the height control solenoid valve when positive battery voltage is applied to the terminals.

Battery Positive	Battery Negative
3 (LH+)	2 (E)

**OK:**  
It should make an operating sound (click).  
**Result**

OK	A
NG	C



HINT:

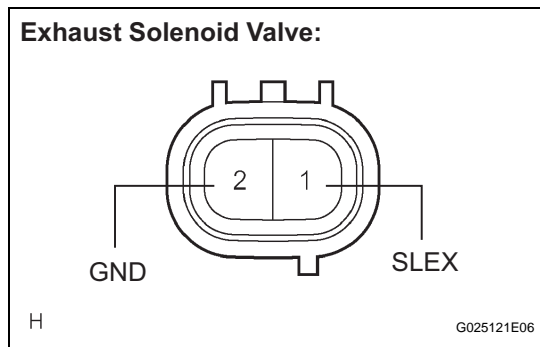
When a malfunction is found in the front solenoid valve, replace the height control valve sub-assembly No. 2.

**B** → REPLACE HEIGHT CONTROL VALVE SUB-ASSEMBLY NO.1

**C** → REPLACE HEIGHT CONTROL VALVE SUB-ASSEMBLY NO.2

**A**

**6 INSPECT EXHAUST SOLENOID VALVE**



- (a) Disconnect the exhaust solenoid valve connector.
- (b) Check the operating sound of the exhaust solenoid valve when positive battery voltage is applied to the terminals.

Battery Positive	Battery Negative
1 (SLEX)	2 (GND)

**OK:**  
It should make an operating sound (click).

**Result**

Result	Proceed to
OK	A (When using intelligent tester)
	(Reference) B (When not using intelligent tester)
NG	C

**B** → Go to step 8

**C** → REPLACE EIGHT CONTROL COMPRESSOR ASSEMBLY

**A**

**7 INSPECT TANK SOLENOID VALVE**

- (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) Select the item below in the ACTIVE TEST, and operate it with the intelligent tester.

**SC**

**AIRSUS**

Item	Vehicle Condition / Test Details	Diagnostic Note
LOW PRS TNK SOL	Turn OFF tank solenoid valve one second after turning it ON	Operation of solenoid (clicking sound) can be heard

- (d) Check whether the tank solenoid valve has a continuity (will vibrate).

**OK:**

The solenoid makes sound, and the tank solenoid valve has a continuity (will vibrate).

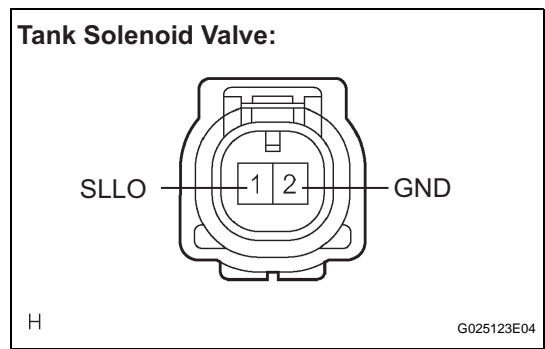
**OK** →

**Go to step 9**

**NG**

**REPLACE PNEUMATIC W/TUBE TANK ASSEMBLY**

**8 INSPECT TANK SOLENOID VALVE**



- (a) Disconnect the tank solenoid valve connector.
- (b) Check the operating sound of the tank solenoid valve when positive battery voltage is applied to the terminals.

Battery Positive	Battery Negative
1 (SLEX)	2 (GND)

**OK:**

It should make an operating sound (click).

**HINT:**

When a malfunction is found in the tank solenoid valve, replace the pneumatic tank assembly.

**NG** →

**REPLACE PNEUMATIC W/TUBE TANK ASSEMBLY**

**OK**

**9 INSPECT HEIGHT CONTROL SENSOR LINK SUB-ASSEMBLY**

- (a) Inspect and adjust the height control sensor link sub-assembly (See page [SC-124](#)).

**NEXT**

**10 SYSTEM CHECK**

- (a) Change the height control switch to the "N" position.
- (b) Change the height control switch to the "H" position.
- (c) Check that the vehicle height changes from the "N" to the "H" position.

**HINT:**

When the vehicle height does not change, proceed to the next step.

**NEXT**

**CHECK AIR SUSPENSION SYSTEM**