DI3GL–05

DTC	C1731 / 31 to C1736 / 36	Control Valve Solenoid and Accumulator Solenoid Circuit

CIRCUIT DESCRIPTION

The control valve assembly consists of each front and rear leveling valve and gate valve and performs the height control and connecting and disconnecting the fluid line of the right and left shock absorber by operating the solenoid valve ON and OFF with the control signal from the ECU.

| DTC No.	DTC Detecting Condition	Trouble Area
C1731 / 31 C1733 / 33	When either of the following condition consisted 4 times continuously: 1. When the condition that the B terminal voltage of ECU is more than 10 ± 0.5 V and the lower reaches voltage of the solenoid while it is in non–operation condition is less than 20 % of the B terminal voltage continued for 20 ± 5 msec. 2. When the condition that the B terminal voltage of ECU is more than 10 ± 0.5 V and the lower reaches voltage of the solenoid while it is in operation condition is more than 80 % of the B terminal voltage continued for 20 ± 5 msec.	• Front, rear gate valve solenoid • Front, rear gate valve solenoid circuit • Suspension control ECU
C1732 / 32 C1734 / 34		• Front, rear leveling valve solenoid • Front, rear leveling valve solenoid circuit • Suspension control ECU
C1736 / 36		• Accumulator solenoid • Accumulator solenoid circuit • Suspension control ECU

HINT:
- Code C1731 / 31 corresponds to the front gate valve solenoid circuit.
- Code C1732 / 32 corresponds to the front leveling valve solenoid circuit.
- Code C1733 / 33 corresponds to the rear gate valve solenoid circuit.
- Code C1734 / 34 corresponds to the rear leveling valve solenoid circuit.
- Code C1736 / 36 corresponds to the accumulator solenoid circuit.

Fail safe function:

If trouble occurs in the control valve assembly circuit, the ECU prohibits the height control and fixed the damping force at the sports mode.

WIRING DIAGRAM
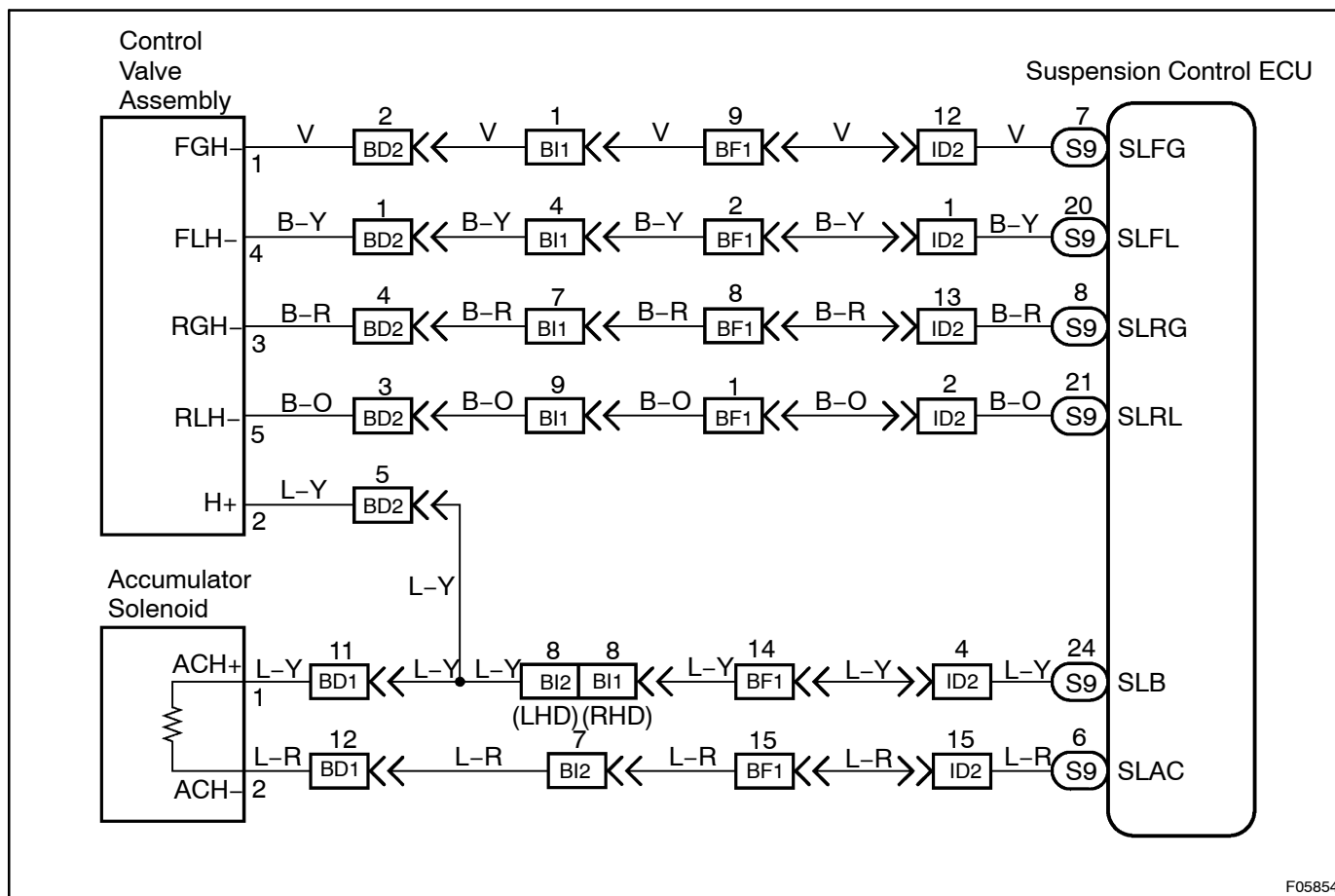
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INSPECTION PROCEDURE

1	Check control valve assembly and accumulator solenoid operation.

IN CASE OF USING HAND–HELD TESTER:
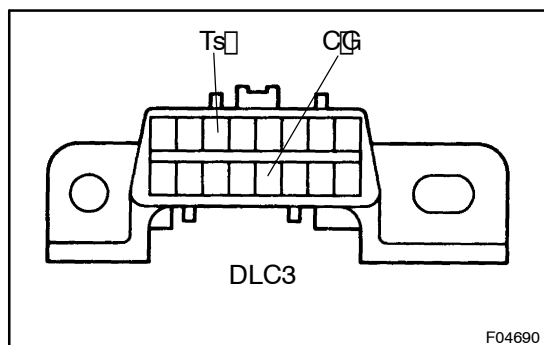
PREPARATION:

(a)   Connect the hand–held tester to the DLC3.

(b)   Start the engine and push the hand–held tester main switch ON.

(c)   Select the ACTIVE TEST mode on the hand–held tester.

CHECK:

Check that the operation sound of solenoid or vibration of the control valve assembly and height control accumulator when operating the solenoid with the hand–held tester.
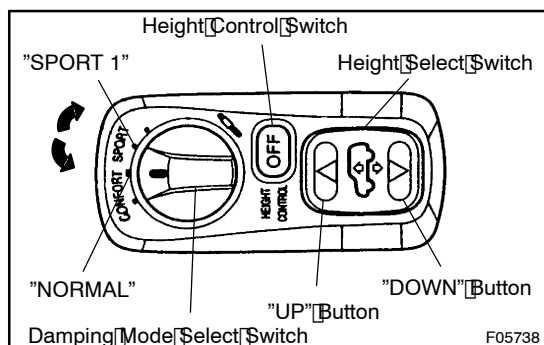
OK:

The operation sound of the solenoid be heard or the vibration of the control valve assembly or height control accumulator should be felt.

Ts   CG

DLC3

F04690

Height Control Switch

"SPORT 1"   Height Select Switch

"NORMAL"

"DOWN" Button

"UP" Button

Damping Mode Select Switch   F05738

IN CASE OF NOT USING HAND–HELD TESTER:
PREPARATION:

(a) Using SST, connect the terminal Ts to CG of DLC3.
     SST   09843–18040

(b) Push the "DOWN" button of the height select switch 5
     times or more within 5 seconds after starting the engine.
HINT:
At this time the height control OFF indicator light flashes at 0.25
second intervals.

CHECK:
Perform each solenoid inspection by the switches of the follow-
ing table, then check that the operation sound of the solenoid
or the vibration of the control valve assembly or height control
accumulator.

	Damping mode select switch	Height control switch	Height select switch
Front leveling solenoid	"SPORT 1" mode	–	Push "UP" button
Rear leveling solenoid	"SPORT 1" mode	–	Push "DOWN" button
Front gate solenoid	"SPORT 1" mode	Push and hold	Push "UP" button
Rear gate solenoid	"SPORT 1" mode	Push and hold	Push "DOWN" button
Accumulator solenoid	"NORMAL" mode	–	Push "UP" button

OK:

**The operation sound of the solenoid should be heard
or the vibration of the control valve assembly or
height control accumulator should be felt.**
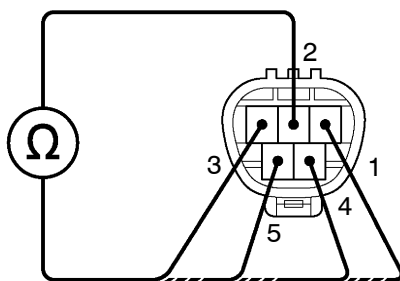
OK ⟩ **Clear the DTC (See page DI–208).**

NG

2	Check for open and short circuit in harness and connector between control valve assembly or accumulator solenoid and suspension control ECU (**See page IN–35**).

NG ▷ Repair or replace harness or connector.

OK

3	Check control valve solenoid and accumulator solenoid.

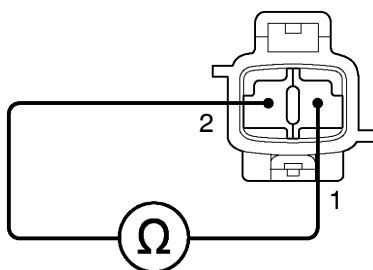**CONTROL VALVE SOLENOID**
PREPARATION:
Disconnect the control valve assembly connector.
CHECK:
Check continuity between terminals 2 and 1, 3, 4, 5 of the control valve assembly connector.
OK:
　　Continuity

F05729

ACCUMULATOR SOLENOID
PREPARATION:
Disconnect the accumulator solenoid connector from the height control accumulator.
CHECK:
Check continuity between terminals 1 and 2 of the accumulator solenoid connector.
OK:
　　Continuity

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NG ▷ Replace control valve assembly or accumulator solenoid.

OK

Clear the DTC (**See page DI–208**).