

## PRE-CHECK

### 1. DIAGNOSIS SYSTEM

- (a) Check the height indicator light.
- (1) Set the height control switch to "NORM".
  - (2) Turn the ignition switch ON and check that the height control indicator light goes on for 2 seconds.

#### HINT:

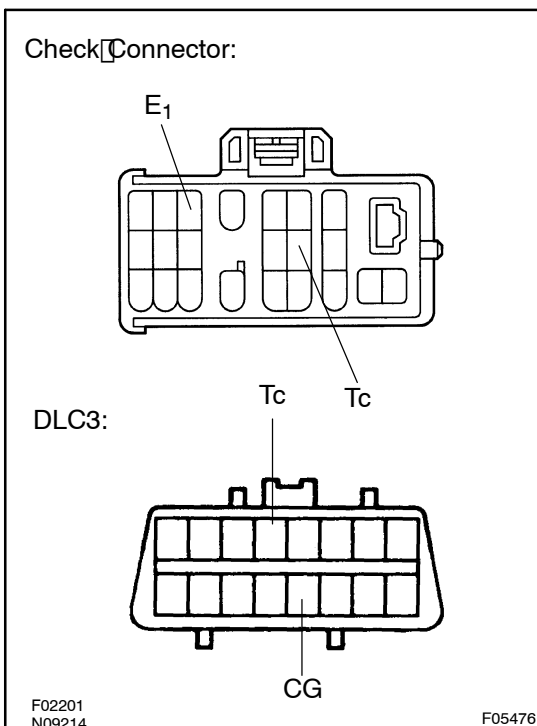
If the indicator check result is not normal, proceed to troubleshooting for the height control switch circuit (See page [DI-138](#)).

- (b) In case of not using hand-held tester:  
Check the DTC.

#### NOTICE:

**After the engine stop. (ignition switch is ON) the diagnosis code 73 is output.**

- (1) Turn the ignition switch OFF.



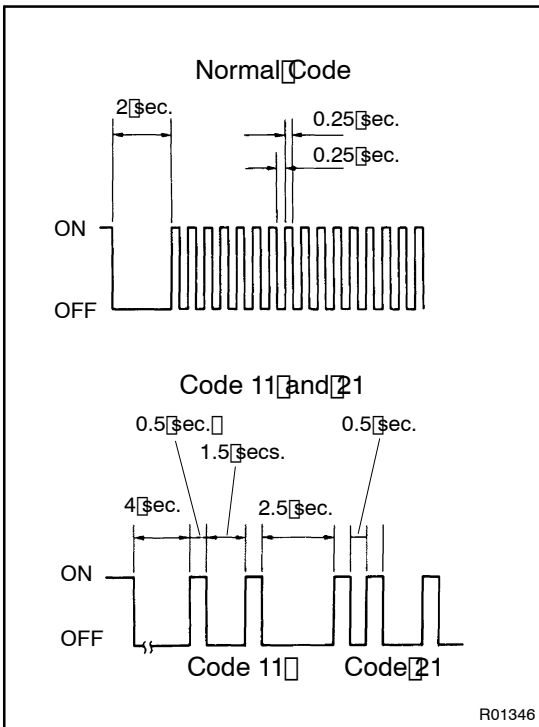
- (2) Using SST, connect terminals Tc and E<sub>1</sub> of the check connector or Tc and CG of the DLC3.

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- (3) Start the engine with the door open.
- (4) Read the DTC output by height indicator light or indication on the multi-information display.

#### HINT:

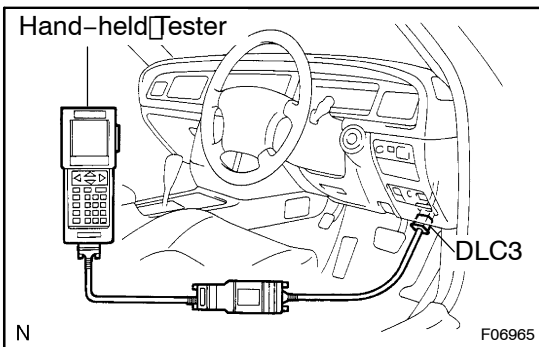
- If no code appears, inspect the Tc circuit (See page [DI-144](#)) and height control switch circuit (See page [DI-138](#)).



- As an example, the blinking patterns for normal code and codes 11 and 21 are shown on the left.

- Codes are explained in the code table on page DI-72.
- After completing the check, disconnect terminals Tc and E<sub>1</sub> of the check connector or Tc and CG of the DLC3, and turn off the display.

If 2 or more malfunctions are indicated at the same time the lowest numbered DTC will be displayed 1st.

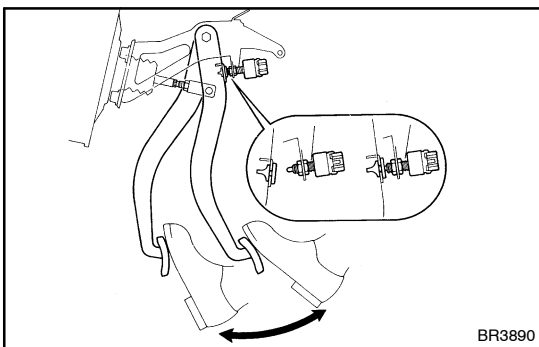


- In case of using hand-held tester:  
Check the DTC.

- Hook up the hand-held tester to the DLC3.
- Turn the ignition switch ON.
- Read the DTC by following the prompts on the tester screen.

**HINT:**

Please refer to the hand-held tester operator's manual for further details.



- In case of not using hand-held tester:  
Clear the DTC.

- Using SST, connect terminals Tc and E<sub>1</sub> of the check connector or Tc and CG of the DLC3.

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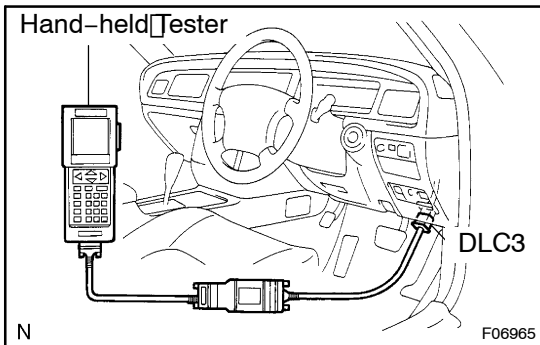
- Turn the ignition switch ON.
- Clear the DTC stored in ECU by depressing the brake pedal 8 or more times within 5 seconds.

**NOTICE:**

**By completing the above operation, the DTC of the ABS will be cancelled out.**

- Check that the indicator light shows the normal code.
- Remove the SST from the terminals of the check connector or DLC3.

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(e) In case of using hand-held tester:

Clear the DTC.

(1) Hook up the hand-held tester to the DLC3.

(2) Turn the ignition switch ON.

(3) Operating the hand-held tester to erase the codes.  
(See hand-held tester operator's manual.)

## 2. INPUT SIGNAL CHECK (TEST MODE)

HINT:

Test mode:

When the test mode is selected from the normal mode, each computer memorizes the test mode codes of all the check items for the undercarriage control system. Operation is made on respective check items and when the computer judges the subject is normal, then each test mode is erased.

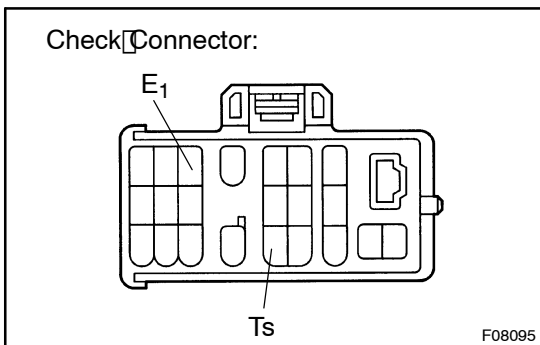
Therefore, when checking a certain system only, test mode may remain unerased for other undercarriage control systems.

(a) In case of not using hand-held tester:

Check the input signal (Test mode).

(1) Turn the ignition switch OFF.

(2) Set each of the check items in the following table to the condition in Operation (A).



(3) Using SST, connect the terminals Ts and E1 of the check connector.

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(4) Start the engine.

HINT:

- At this time the height control indicator light comes on for 2 seconds. After, this light flashes at 0.25 second intervals.

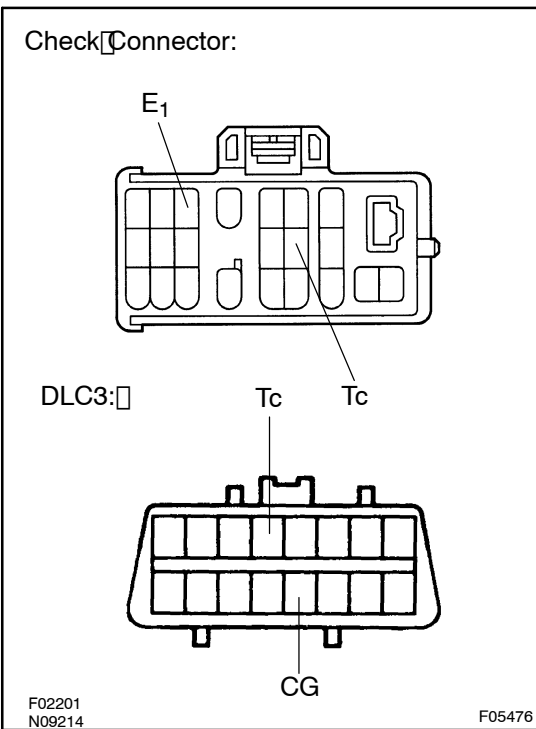
- When the height control indicator does not flash, check the Ts terminal of check connector circuit on [page DI-147](#).

(5) Each of the check items is set to the condition in Operation (B).

HINT:

When operating the check items, the height control indicator light comes on for 1 second.

Check Item	Operation (A)	Operation (B)
Steering sensor	Steering straight ahead	Steering angle 36° degrees or larger
Stop light switch	OFF (Brake pedal not depressed)	ON (Brake pedal depressed)
Door courtesy switch	OFF (All doors closed)	ON (Each door opened)
Throttle position sensor	OFF (Accelerator pedal not depressed)	ON (Accelerator pedal depressed)
Vehicle speed sensor	Vehicle speed below 12 mph (20 km/h)	Vehicle speed 12 mph (20 km/h) or higher
Height control switch	NORM position	HIGH position
Right front acceleration sensor	-	Keep the vehicle still without any vertical movement for 1 second
Left front acceleration sensor	-	Keep the vehicle still without any vertical movement for 1 second
Right rear acceleration sensor	-	Keep the vehicle still without any vertical movement for 1 second



(6) Using SST, connect terminals Tc and E<sub>1</sub> of the check connector or Tc and CG of the DLC3.

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HINT:

This should be done while you connect terminals Tc and E<sub>1</sub> of the check connector.

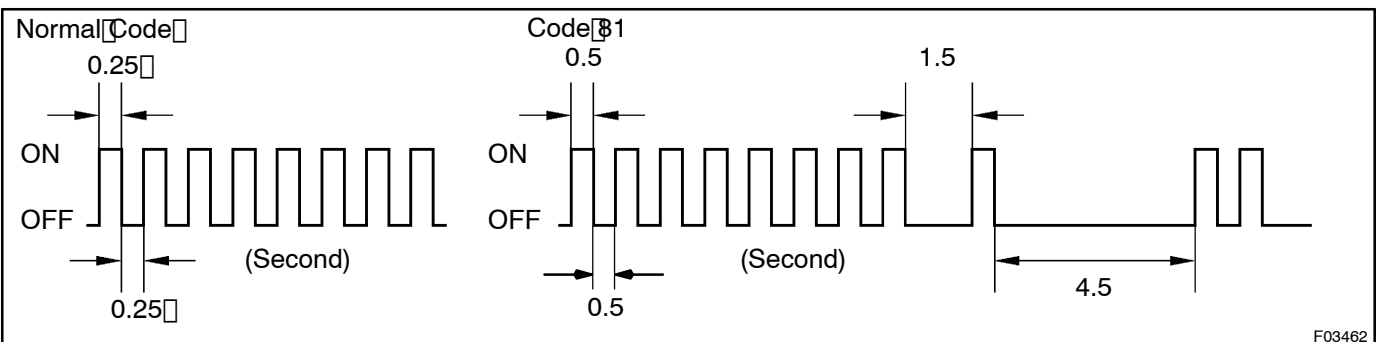
(7) Read the test DTC output by height indicator light.

HINT:

- Reading method of the code is the same as that of the diagnosis code.
- When the DTC is not output, check the Tc terminal circuit on [page DI-138](#).

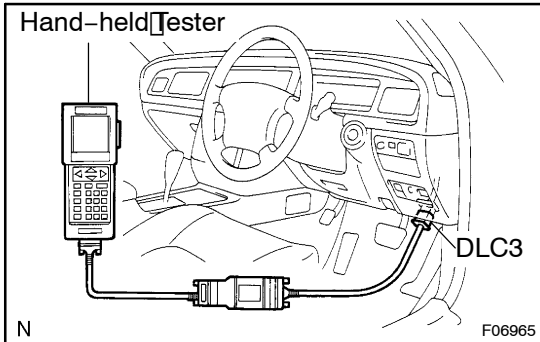
As an example, the blinking patterns for normal code and code 81 are as shown in the illustration.

(8) Check the malfunction using the code in the following table.



- (9) Remove the SST from the terminals of the check connector and DLC3.

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- (b) In case of using hand-held tester:

Check the input signal.

- (1) Hook up the hand-held tester to the DLC3.
- (2) Do step (1) to (5) on the previous page.
- (3) Read the DTC by following the prompts on the tester screen.

HINT:

Please refer to the hand-held tester operator's manual for further details.

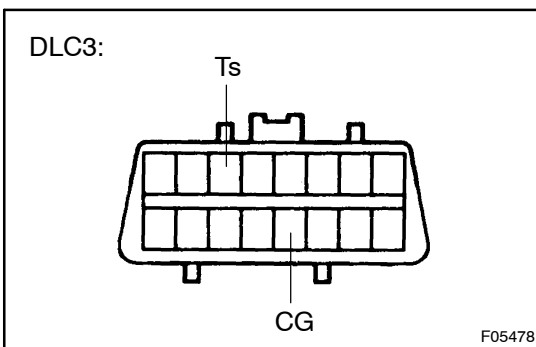
#### DTC of the input signal check function:

If a malfunction code is displayed during the test DTC check, check the circuit listed for that code. For details of each code, turn to the page referred to under the "See page" for respective "DTC No." in the DTC chart.

DTC No. (See Page)	Detection Item	Trouble Area
81 (DI-124)	Steering sensor circuit malfunction	<ul style="list-style-type: none"> <li>• Steering sensor</li> <li>• Steering sensor circuit</li> <li>• Suspension control ECU</li> </ul>
82 (DI-128)	Stop light switch circuit malfunction	<ul style="list-style-type: none"> <li>• Stop light switch</li> <li>• Stop light switch circuit</li> <li>• Suspension control ECU</li> </ul>
83 (DI-131)	Door courtesy switch circuit malfunction	<ul style="list-style-type: none"> <li>• Door courtesy switch</li> <li>• Door courtesy switch circuit</li> <li>• Body ECU</li> <li>• Suspension control ECU</li> </ul>
84 (DI-133)	Throttle position sensor circuit malfunction	<ul style="list-style-type: none"> <li>• Throttle position sensor circuit</li> <li>• Engine and ECT ECU (Left bank control)</li> <li>• Suspension control ECU</li> </ul>
85 (DI-136)	Vehicle speed sensor circuit malfunction	<ul style="list-style-type: none"> <li>• ABS speed sensor</li> <li>• Vehicle speed sensor circuit</li> <li>• Combination meter</li> <li>• ABS &amp; TRC ECU</li> <li>• Suspension control ECU</li> </ul>
86 (DI-138)	Height control switch circuit malfunction	<ul style="list-style-type: none"> <li>• Height control switch</li> <li>• Height control switch circuit</li> <li>• Suspension control ECU</li> </ul>

91 (DI-143)	Right front acceleration sensor circuit malfunction	<ul style="list-style-type: none"> <li>• Right front, left front, rear acceleration sensor</li> <li>• Each acceleration sensor circuit</li> <li>• Suspension control ECU</li> </ul>
92 (DI-143)	Left front acceleration sensor circuit malfunction	
93 (DI-143)	Rear acceleration sensor circuit malfunction	

- (c) Exit from the input signal check (Test mode).  
 With the ignition switch OFF, disconnect the SST from the terminals of the check connector or DLC3 and then turn ignition switch ON.  
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### 3. DAMPING FORCE CONTROLLING CONDITION CHECK

- (a) Using SST, connect terminals Ts and CG of the DLC3.  
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- (b) Turn the ignition switch ON.
- (c) Check that the damping force changes from soft to hard, when turning the height control switch ON and OFF, while swinging each corner of the vehicle up and down.

#### HINT:

- When connecting terminals Ts and CG of the DLC3 the height control indicator light blinks by 1 Hz.
  - When the height control indicator light does not flash, check the Ts terminal of DLC3 circuit on [page DI-149](#).
- (d) Turn the ignition switch OFF, remove the SST from the terminals of the DLC3.  
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