DI8CY–01

PRE–CHECK

1. DIAGNOSIS SYSTEM

(a) Check the indicator light.

(1) Set the absorber control switch to "NORM".

(2) Turn the ignition switch ON and check that the absorber control indicator light goes on for 2 seconds.

HINT:

If the indicator check result is not normal, proceed to trouble-shooting for the absorber control indicator light circuit (See page DI–331).

(3) Start the engine.

(4) Turn the absorber control switch "SPORT" and check the absorber control indicator light.

Switch Position	Indicator Light
NORM	Light OFF
SPORT	Light ON

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

(1) Turn the ignition switch OFF.

(2) Using SST, connect terminals Tc and CG of the DLC3.

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(3) Start the engine with the door open.

(4) Read the DTC output by the absorber control indicator light.

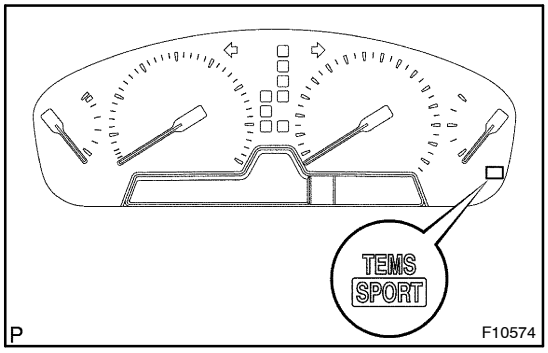
HINT:

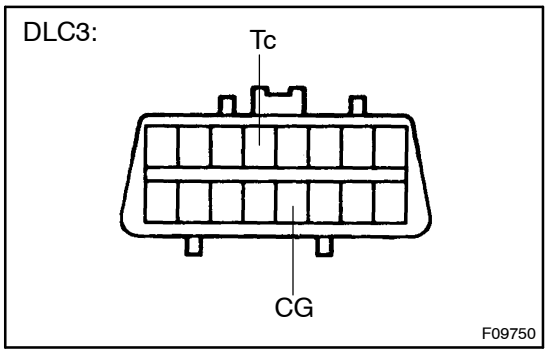
- If no code appears, inspect the Tc circuit (See page DI–333) and absorber control indicator light circuit (See page DI–331).
- As an example, the blinking patterns for normal code and codes 11 and 21 are shown on the left.

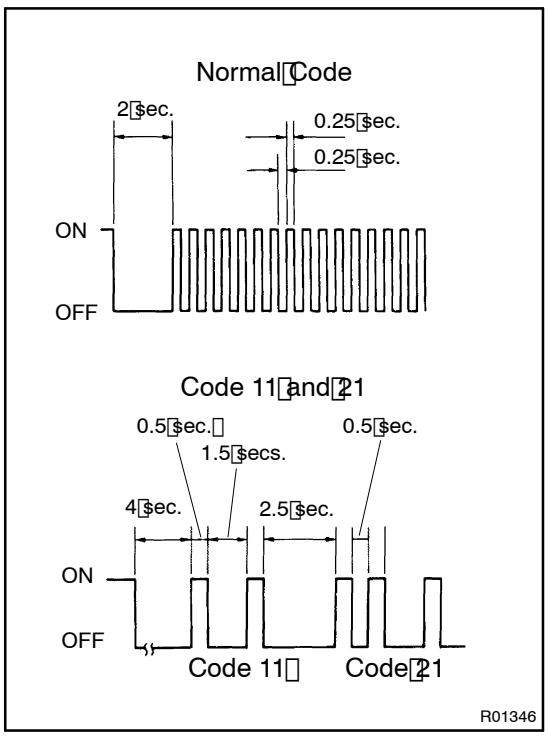
(5) Codes are explained in the code table on page DI–257.

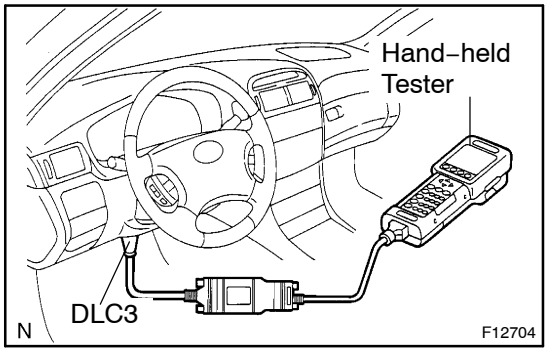
(6) After completing the check, disconnect terminals Tc and CG of the DLC3, and turn off the display.

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



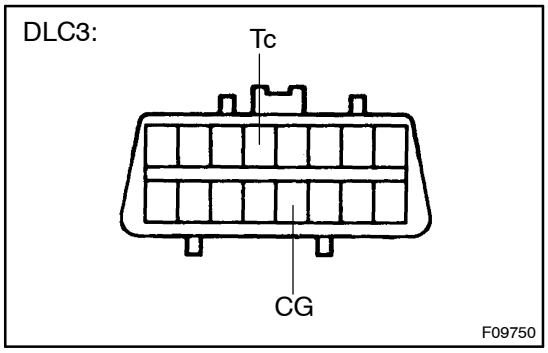






(c) In case of using hand–held tester:
Check the DTC.
(1) Hook up the hand–held tester to the DLC3.
(2) Turn the ignition switch ON.
(3) Read the DTC by following the prompts on the tester screen.

HINT:
Please refer to the hand–held tester operator's manual for further details.



(d) In case of not using hand–held tester:
Clear the DTC.
(1) Using SST, connect terminals Tc and CG of the DLC3.
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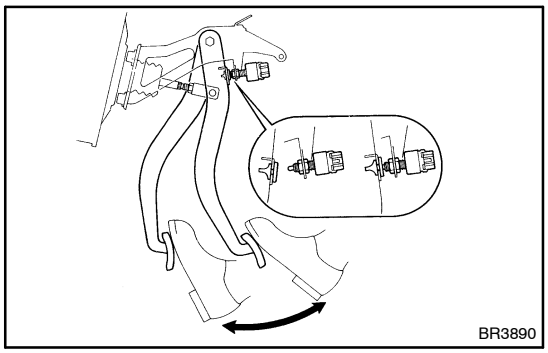
(2) Turn the ignition switch ON.



(3) 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, TRC and VSC will be cancelled out.

(4) Check that the indicator light shows the normal code.
(5) Remove the SST from the terminals of the DLC3.
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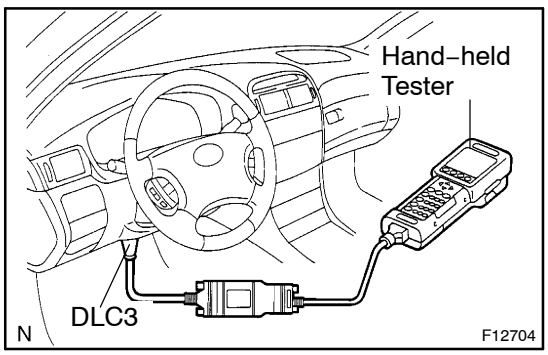
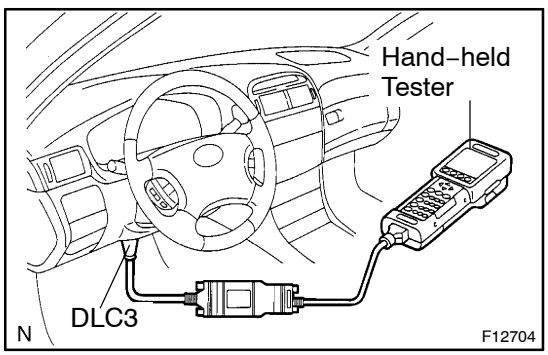


(e) In case of using hand–held tester:
Clear the DTC.
(1) Hook up the hand–held tester to the DLC3.
(2) Turn the ignition switch ON.
(3) Operating the hand–held tester to erase the codes. (See hand–held tester operator's manual.)



2. ECU DATA MONITOR BY USING HAND–HELD TESTER

(a) Hook up the hand–held tester to the DLC3.
(b) Monitor the ECU data by following the prompts on the tester screen.

HINT:
Hand–held tester has a "Snapshot" function and record the monitored data.

3. INPUT SIGNAL CHECK (TEST MODE)

HINT:

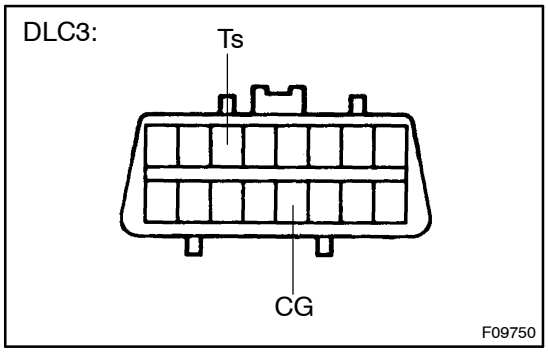
This check is to see whether signals from the steering sensor and stop light switch, etc. are being input normally to the ECU.

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

Check the input signal (Test mode).

(1) Turn the ignition switch OFF.

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



(3) Using SST, connect terminals Ts and CG of the DLC3.

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(4) Start the engine.

HINT:

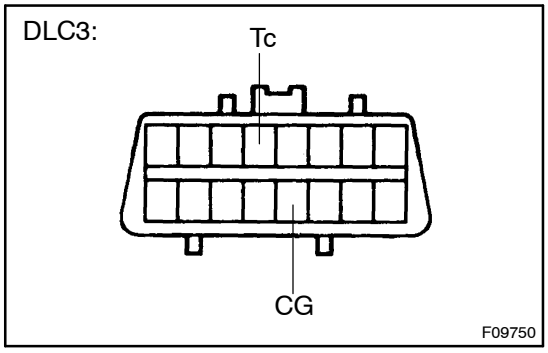
- At this time the absorber control indicator light comes on for 2 seconds. After that, this light blinks at 0.25 second intervals.
- When the absorber control indicator does not blink, check the Ts terminal circuit on page DI–335.

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

HINT:

When (5) is performed, the absorber control indicator light comes on for 1 second.

Check Item	Operation (A)	Operation (B)
Steering sensor	Steering straight ahead	Steering angle 36° degrees or more
Stop light switch	OFF (Brake pedal not depressed)	ON (Brake pedal depressed)
Door courtesy switch	OFF (All doors closed)	ON (Each door opened)
Height control switch	NORM position	HIGH position
Absorber control switch	–	Slowly move the absorber control switch ”NORM” ↔ ”SPORT” both ways one
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
Rear acceleration sensor	–	Keep the vehicle still without any vertical movement for 1 second
Right front vehicle speed sensor	Vehicle speed below 12 mph (20 km/h)	Vehicle speed 12 mph (20 km/h) or higher
Crankshaft position sensor	Engine revolution below 2,000 rpm	Engine revolution 2,000 rpm or higher



(6) Using SST, connect terminals Tc and CG of the DLC3.
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HINT:
This should be done with terminals Ts and CG of the DLC3 connected.

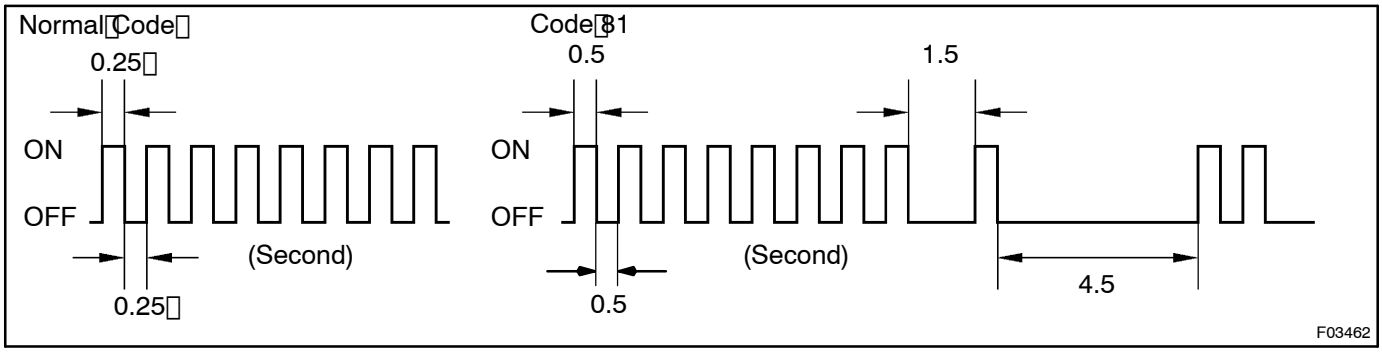
(7) Read the DTC output by the absorber control indicator light.

HINT:

- See the list of DTC on the next page.
- 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–333.

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 DLC3.
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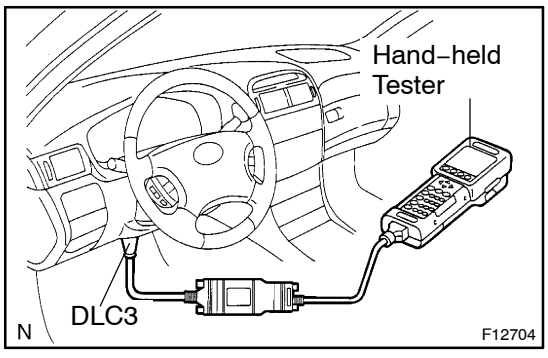

(b) In case of using hand–held tester:
Check the input signal.

(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:

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

DTC No. (See Page)	Detection Item	Trouble Area
C1781 / 81 (DI–315)	Steering angle sensor communication circuit malfunction	• Steering angle sensor • Steering angle sensor circuit • Suspension control ECU
C1782 / 82 (DI–323)	Stop light switch circuit malfunction	• Stop light switch • Stop light switch circuit • Skid control ECU • Suspension control ECU
C1783 / 83 (DI–324)	Door courtesy switch circuit malfunction	• Door courtesy switch • Door courtesy switch circuit • Skid control ECU • Suspension control ECU
C1786 / 86 (DI–325)	Height control switch circuit malfunction	• Height control switch • Height control switch circuit • Suspension control ECU
C1787 / 87 (DI–328)	Absorber control switch circuit malfunction	• Absorber control switch • Absorber control switch circuit • Suspension control ECU
C1791 / 91 (DI–271)	Right front acceleration sensor circuit malfunction	• Right front, left front, rear acceleration sensor • Each acceleration sensor circuit • Suspension control ECU
C1792 / 92 (DI–271)	Left front acceleration sensor circuit malfunction	
C1793 / 93 (DI–271)	Rear acceleration sensor circuit malfunction	
C1794 / 94 (DI–313)	Right front vehicle speed sensor circuit malfunction	• Right front speed sensor • Vehicle speed sensor circuit • Skid control ECU • Suspension control ECU
C1797 / 97 (DI–320)	Engine revolution signal circuit malfunction	• Crankshaft position sensor • Crankshaft position sensor circuit • Engine & ECT ECU • Suspension control ECU

(c) Finishing the input signal check (Test mode).
With the ignition switch OFF, disconnect the SST from the terminals of the DLC3 and then turn the ignition switch ON.
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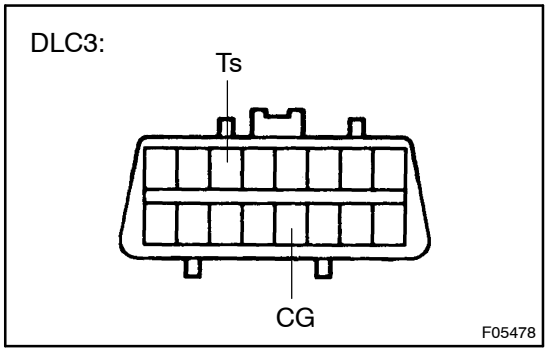

4. DAMPING FORCE CONTROLLING CONDITION CHECK

(a) Using SST, connect terminals Ts and CG of the DLC3.
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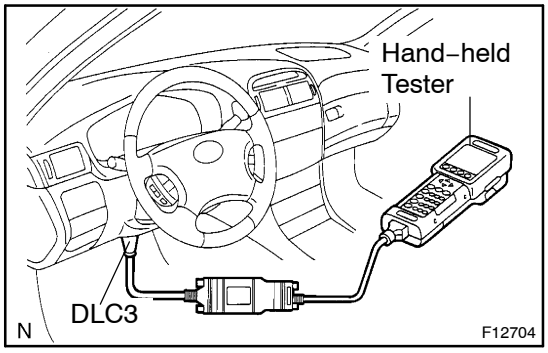
(b) Turn the ignition switch ON.

(c) Check that the damping force changes from soft to hard, when the absorber control switch is turned ON and OFF, while each corner of the vehicle is swung up and down.

HINT:

- When terminals Ts and CG of the DLC3 are connected the absorber control indicator light blinks by 1 Hz.
- When the absorber control indicator light does not flash, check the Ts terminal of DLC3 circuit on page DI–335.

(d) Turn the ignition switch OFF, remove SST from the terminals of the DLC3.



5. REFERENCE VALUE OF ECU DATA

(a) Hook up the hand–held tester to the DLC3.

(b) Monitor the ECU data by following the prompts on the tester screen.

Please refer to the hand–held tester operator's manual for more information.

Item	Inspection Condition	Reference Value
VEHICLE SPD	During driving (Comparison with speedmeter)	No large differences
IG VOLTAGE	Ignition switch ON	About 12 V
STEERING ANG	Steering angle 36˚degrees or more	The same angle shown in the left
ENGINE SPD	Press the acceleration pedal	Engine speed shall be displayed
DOOR SW	Close all doors	OFF
STOP LIGHT SW	Press the brake pedal	ON
HEIGHT SW	Operate the height control switch	The same as switch position
TC	Connect Tc of the DLC3 and body ground	ON
TS	Connect Ts of the DLC3 and body ground	ON
DAMPER SW1	Operate the absorber control switch	The same as switch position
TD	Connect T_D of the DLC3 and body ground	ON
G (BACK & FORTH)	Shake the vehicle back and forth, up and down	Reading shall be changed
G (UP & DOWN) FR		
G (UP & DOWN) FL		
G (UP & DOWN) R		
FR HEIGHT	Set height control switch to HIGH position from NORM	Reading shall be 20 ± 10 mm (0.79 ± 0.39 in.)
FL HEIGHT		
RR HEIGHT		
RL HEIGHT		
BUMPY ROAD SENS	Drive the vehicle under the condition where "Bumpy road" will be detected.	"Bumpy road" shall be detected
WARP SENS	Drive the vehicle under the condition where "Warp" will be detected.	"Warp" shall be detected
DAMPER STEP FR	Test–drive the vehicle	Step motor position of the actuator shall be changed
DAMPER STEP FL		
DAMPER STEP RR		
WHEEl SPD FR	During driving (Comparison with speedmeter)	No large differences