

PRE-CHECK

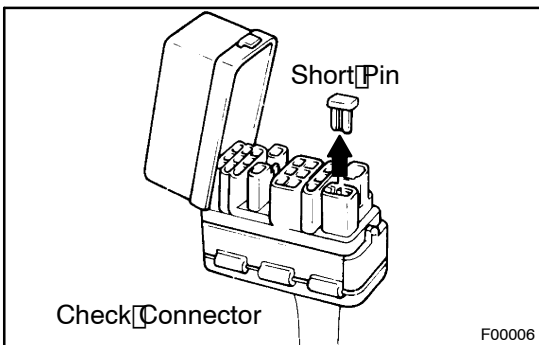
1. DIAGNOSIS SYSTEM

(a) Check the Indicator.

When the ignition switch is turned ON, check that the ABS warning light, TRC OFF indicator light and SLIP indicator light go on for 3 seconds.

HINT:

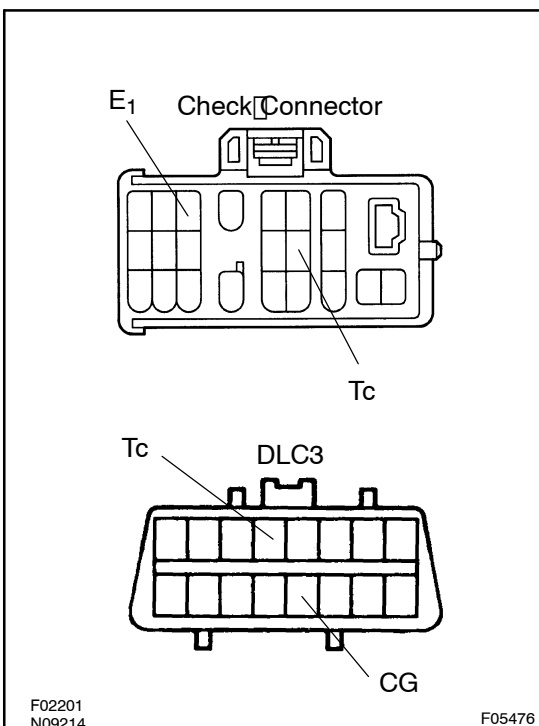
If the indicator check result is not normal, proceed to troubleshooting for the ABS warning light circuit, TRC OFF indicator light circuit and SLIP indicator light circuit (See page DI-270, DI-275, DI-278).



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

Check the DTC.

(1) Disconnect the short pin from the check connector.



(2) Using SST, connect terminals Tc and E₁ of check connector or Tc and CG of DLC3.

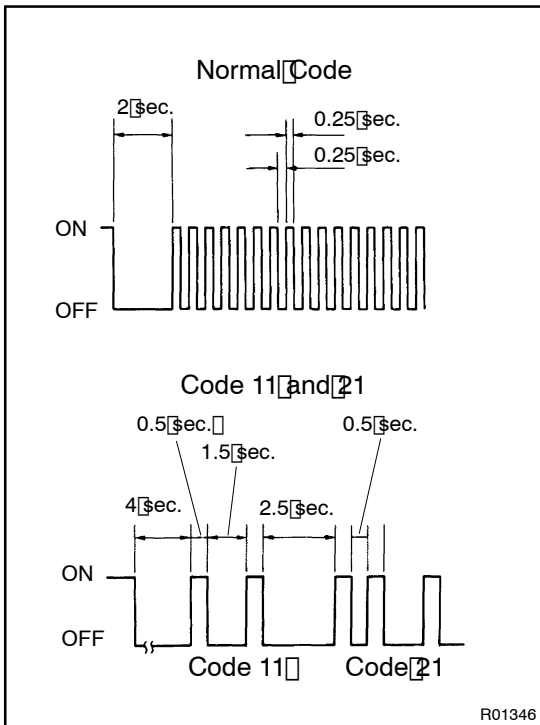
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(3) Turn the ignition switch ON.

(4) Read the DTC from the ABS warning light and TRC OFF indicator light on the combination meter.

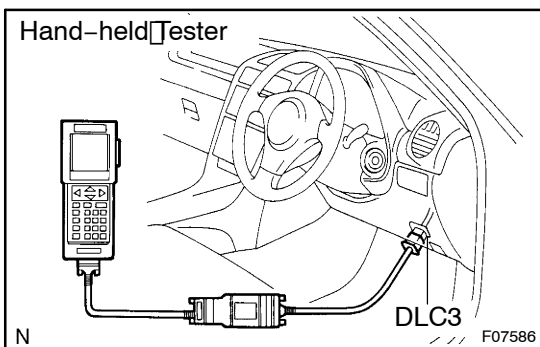
HINT:

- If no code appears, inspect the diagnostic circuit, ABS warning light circuit or TRC OFF indicator light circuit (See page DI-270, DI-275, DI-280).



- 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-228.
- After completing the check, disconnect terminals Tc and E₁ of check connector or Tc and CG of 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.

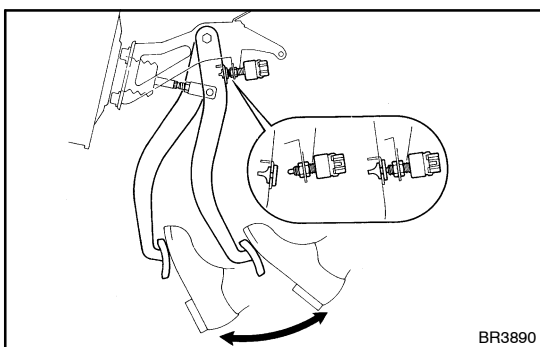


- In case of using hand-held tester:
Check the DTC.

- 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.



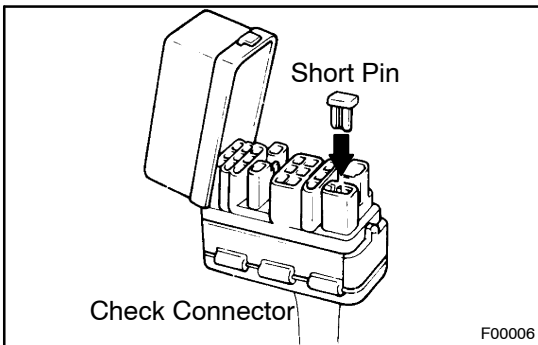
- In case of not using hand-held tester:
Clear the DTC.

- Using SST, connect terminals Tc and E₁ of check connector or Tc and CG of DLC3 and remove the short pin from check connector.

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- Turn the ignition switch ON.
- Clear the DTC stored in ECU by depressing the brake pedal 5 or more times within 5 seconds.
- Check that the warning light shows the normal code.
- Remove the SST from the terminals of check connector or DLC3.

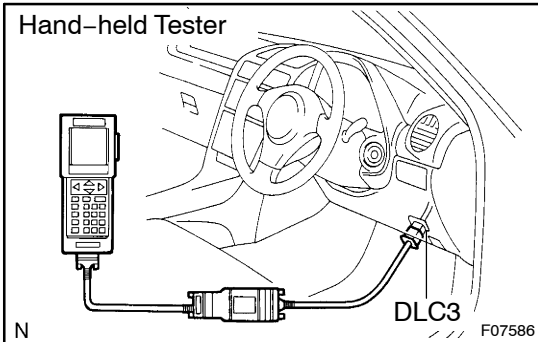
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- (6) Connect the short pin to check connector.

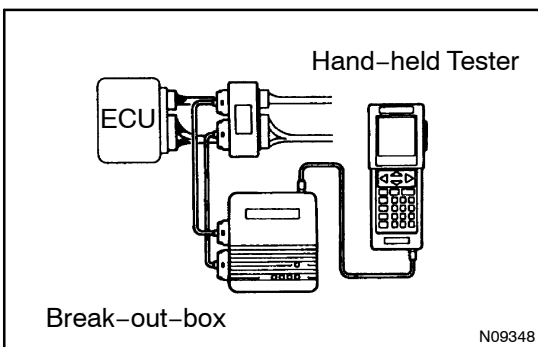
HINT:

The DTC stored in the ECU will be erased when the battery terminal is disconnected for the troubleshooting.



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



- (f) Reference:

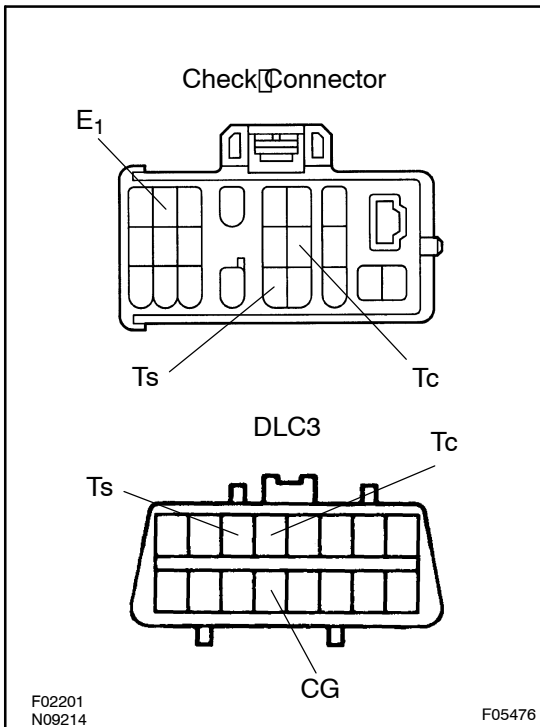
Using break-out-box and hand-held tester, measure the ECU terminal values.

- (1) Hook up the hand-held tester and break-out-box to the vehicle.
- (2) Turn the ignition switch ON.
- (3) Read the ECU input/output values by following the prompts on the tester screen.

HINT:

Hand-held tester has a "Snapshot" function. This records the measured values and is effective in the diagnosis of intermittent problems.

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



2. SPEED SENSOR SIGNAL CHECK

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

Check the speed sensor signal.

(1) Turn the ignition switch OFF.

(2) Using SST, connect terminals Ts and E₁ of check connector or Ts and CG of DLC3.

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(3) Start the engine.

(4) Check that the ABS warning light blinks.

HINT:

If the ABS warning light does not blink, inspect the ABS warning light circuit (See page DI-270).

(5) Drive vehicle straight forward.

Drive vehicle faster than 45 km/h (28 mph) for several seconds.

(6) Stop the vehicle.

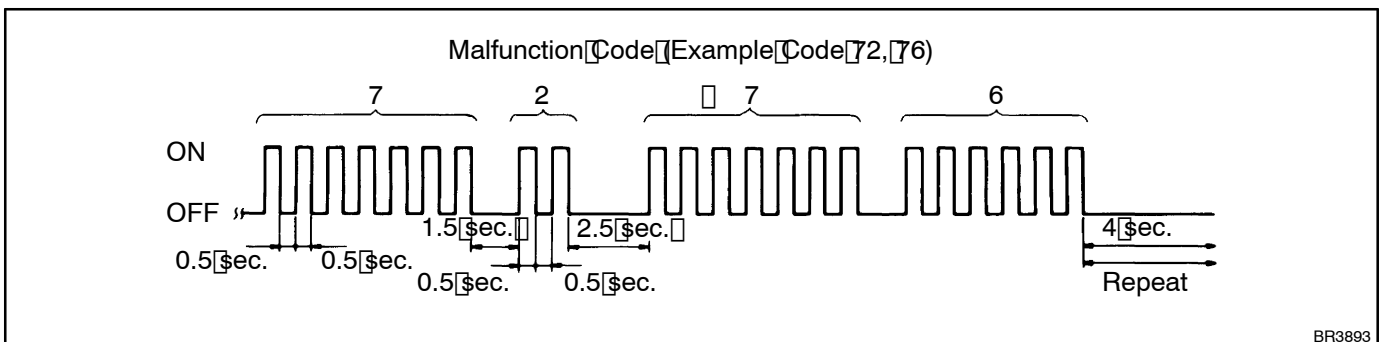
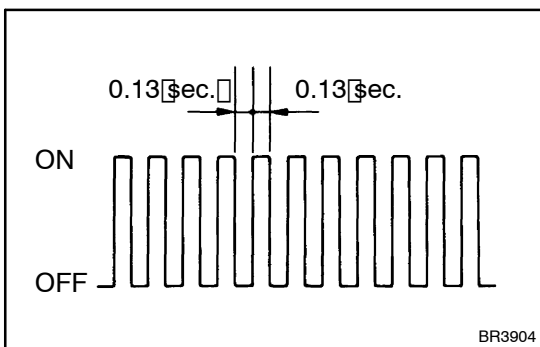
(7) Using SST, connect terminals Tc and E₁ of check connector or Tc and CG of DLC3.

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(8) Read the number of blinks of the ABS warning light.

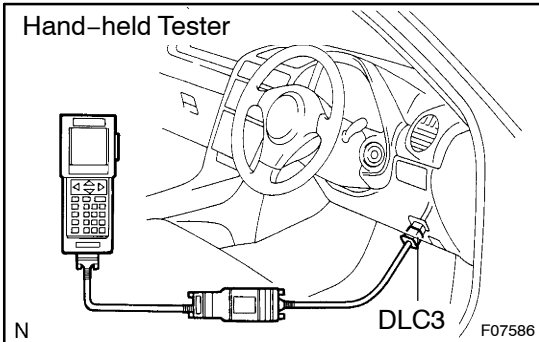
HINT:

- See the list of DTC shown on the next page.
- If every sensor is normal, a normal code is output (A cycle of 0.25 sec. ON and 0.25 sec. OFF is repeated).
- If 2 or more malfunctions are indicated at the same time, the lowest numbered code will be displayed 1st.



- (9) After doing the check, disconnect the SST from terminals Ts and E₁, Tc and E₁ of check connector or Ts and CG, Tc and CG of DLC3, and turn ignition switch OFF.

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- (b) In case of using and-held tester:
Check the speed sensor signal.
- (1) Hook up the hand-held tester to the DLC3.
 - (2) Do step (3) to (6) 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 speed sensor check function:

Code No.	Diagnosis	Trouble Area
C1271/71	Low output voltage of right front speed sensor	<ul style="list-style-type: none"> • Right front speed sensor • Sensor installation • Right front speed sensor rotor • Right front speed sensor circuit
C1272/72	Low output voltage of left front speed sensor	<ul style="list-style-type: none"> • Left front speed sensor • Sensor installation • Left front speed sensor rotor • Left front speed sensor circuit
C1273/73	Low output voltage of right rear speed sensor	<ul style="list-style-type: none"> • Right rear speed sensor • Sensor installation • Right rear speed sensor rotor • Right rear speed sensor circuit
C1274/74	Low output voltage of left rear speed sensor	<ul style="list-style-type: none"> • Left rear speed sensor • Sensor installation • Left rear speed sensor rotor • Left rear speed sensor circuit
C1275/75	Abnormal change in output voltage of right front speed sensor	<ul style="list-style-type: none"> • Right front speed sensor rotor • Right front speed sensor
C1276/76	Abnormal change in output voltage of left front speed sensor	<ul style="list-style-type: none"> • Left front speed sensor rotor • Left front speed sensor
C1277/77	Abnormal change in output voltage of right rear speed sensor	<ul style="list-style-type: none"> • Right rear speed sensor rotor • Right rear speed sensor
C1278/78	Abnormal change in output voltage of left rear speed sensor	<ul style="list-style-type: none"> • Left rear speed sensor rotor • Left rear speed sensor