

## PRE-CHECK

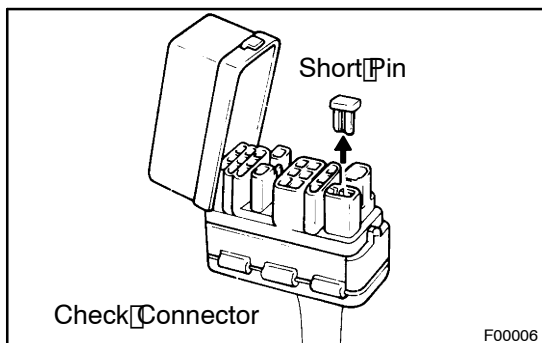
### 1. DIAGNOSIS SYSTEM

#### (a) Check the Indicator.

When the Ignition switch is turned ON, check that the ABS warning light goes on for 3 seconds.

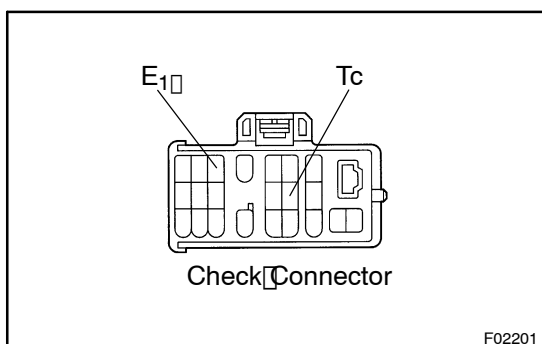
#### HINT:

If the Indicator check result is not normal, proceed to troubleshooting for the ABS warning light circuit (See page DI-86).



#### (b) Check the DTC.

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



##### (2) Using SST, connect terminals Tc and E1 of check connector.

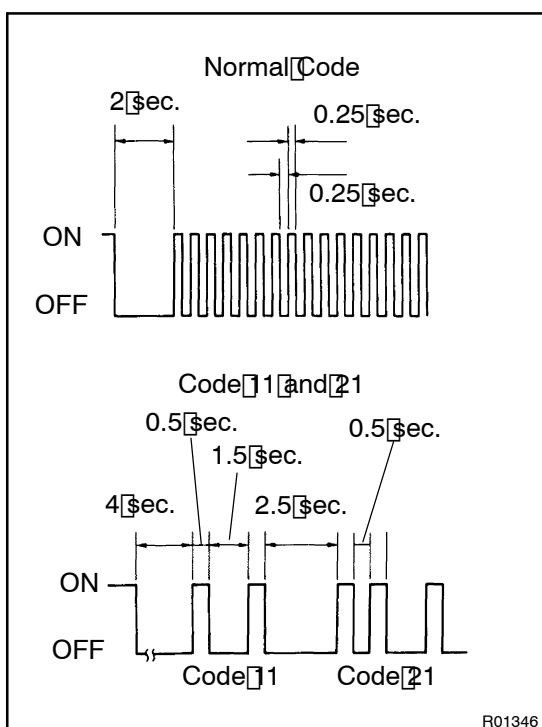
SST 09843 - 8020

##### (3) Turn the Ignition switch ON.

##### (4) Read the DTC from the ABS warning light on the combination meter.

#### HINT:

- If no code appears, inspect the diagnostic circuit or ABS warning light circuit (See page DI-86 or DI-90).

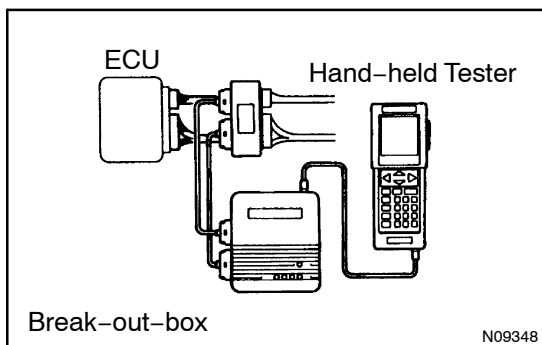
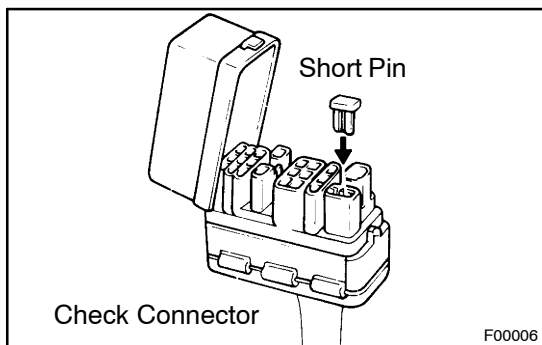
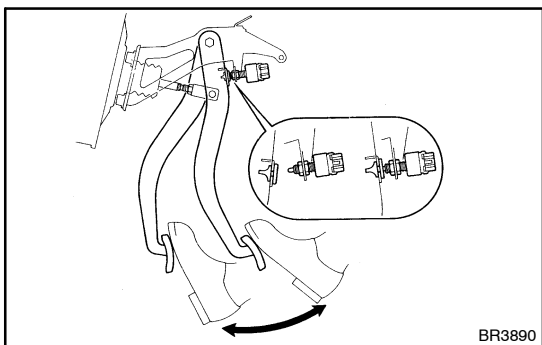


- As an example, the blinking patterns for normal code and codes 11 and 21 are shown on the left.

##### (5) Codes are explained in the code table on page DI-56.

##### (6) After completing the check, disconnect terminals Tc and E1, 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) Clear the DTC.
- (1) Using SST, connect terminals Tc and E<sub>1</sub> of check connector and remove the short pin from check connector.
- SST 09843 - 18020
- (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.
  - (4) Check that the warning light shows the normal code.
  - (5) Remove the SST from the terminals of check connector.
- SST 09843 - 18020
- (6) Connect the short pin to check connector.

**HINT:**

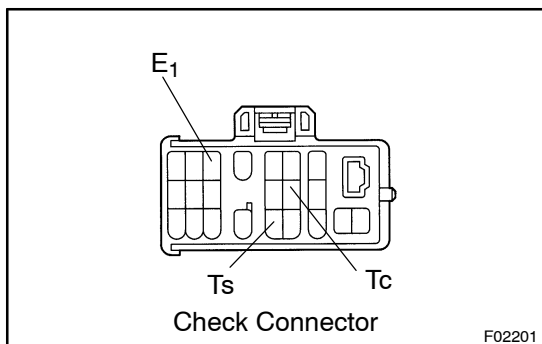
Cancellation can also be done by removing the ECU-B fuse, but in this case, other memory systems will also be cancelled out.

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

**HINT:**

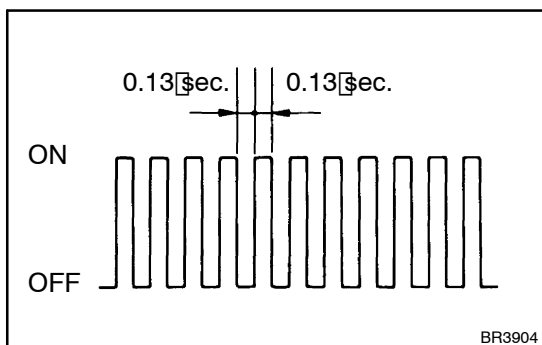
Hand-held tester has a "Snapshot" function. This records the measured values and is effective in the diagnosis of intermittent problems.

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



## 2. SPEED SENSOR SIGNAL

- (a) Check the speed sensor signal.
- (1) Turn the ignition switch OFF.
  - (2) Using SST, connect terminals Ts and E<sub>1</sub> of check connector.
- SST 09843-18020
- (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-86).

- (5) Drive vehicle straight forward.  
Drive the vehicle with the speed faster than 45 km/h (28 mph) for several seconds.
- (6) Stop the vehicle.
- (7) Using SST, connect terminals Tc and E<sub>1</sub> of check connector.

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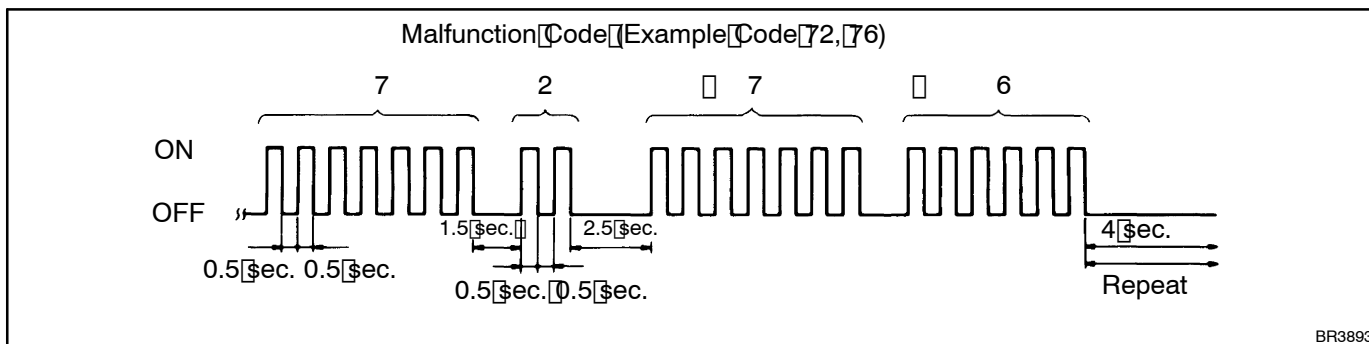
- (8) Read the number of blinks of the ABS warning light.

HINT:

See the list of DTC at the bottom of this 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 malfunction are indicated at the same time, the lowest numbered code will be displayed 1st.



- (9) After doing the check, disconnect terminals Tc and E<sub>1</sub> of check connector, and ignition switch turned OFF.

DTC of the speed sensor check function:

Code No.	Diagnosis	Trouble Area
71	Low output voltage of right front speed sensor	<ul style="list-style-type: none"> <li>Right front speed sensor</li> <li>Sensor installation</li> <li>Sensor rotor</li> </ul>
72	Low output voltage of left front speed sensor	<ul style="list-style-type: none"> <li>Left front speed sensor</li> <li>Sensor installation</li> <li>Sensor rotor</li> </ul>
73	Low output voltage of right rear speed sensor	<ul style="list-style-type: none"> <li>Right rear speed sensor</li> <li>Sensor installation</li> <li>Sensor rotor</li> </ul>
74	Low output voltage of left rear speed sensor	<ul style="list-style-type: none"> <li>Left rear speed sensor</li> <li>Sensor installation</li> <li>Sensor rotor</li> </ul>
75	Abnormal change in output voltage of right front speed sensor	<ul style="list-style-type: none"> <li>Right front speed sensor rotor</li> </ul>
76	Abnormal change in output voltage of left front speed sensor	<ul style="list-style-type: none"> <li>Left front speed sensor rotor</li> </ul>

**DIAGNOSTICS** – ANTI-LOCK BRAKE SYSTEM

77	Abnormal change in output voltage of right rear speed sensor	• Right rear speed sensor rotor
78	Abnormal change in output voltage of left rear speed sensor	• Left rear speed sensor rotor