SPEED SENSOR AND DECELERATION SENSOR DIAGNOSIS SYSTEM

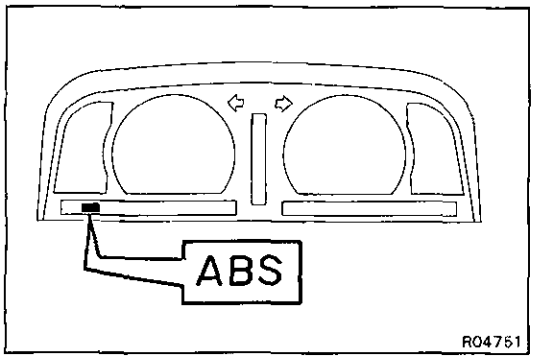
DIAGNOSIS SYSTEM INSPECTION

PRECAUTION

While checking the speed sensor diagnosis system, ABS does not operate and brake system operates as normal brake system.

1. INSPECT BATTERY VOLTAGE

Inspect that the battery voltage is about 12 V.



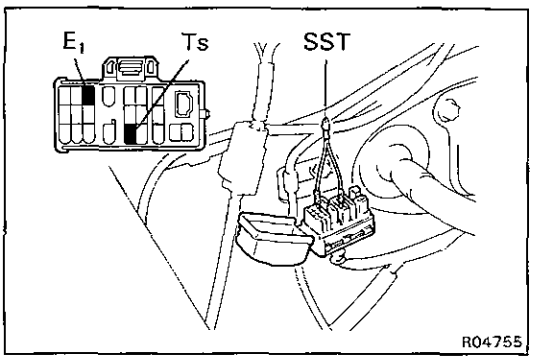
2. CHECK THAT WARNING LIGHT TURNS ON

(a) Turn the ignition switch on.

(b) Check that the "ABS" warning light turns on for 3 seconds.
If not, inspect and repair or replace the fuse, bulb and wire harness.

(c) Check that the "ABS" warning light turns off.

(d) Turn the ignition switch off.



3. PERFORM FOLLOWING STEPS

(a) Using SST, connect terminals Ts and E_1 of the check connector in engine room.

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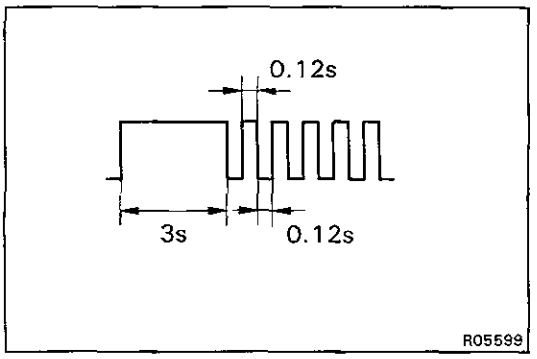
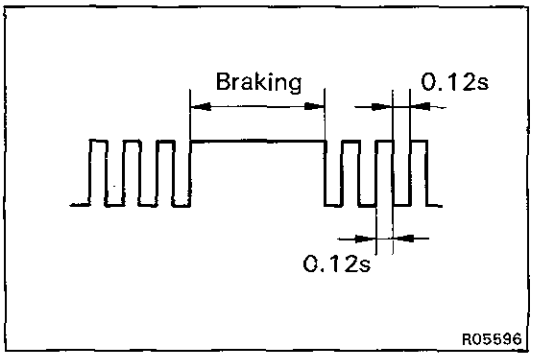
(b) Start the engine.



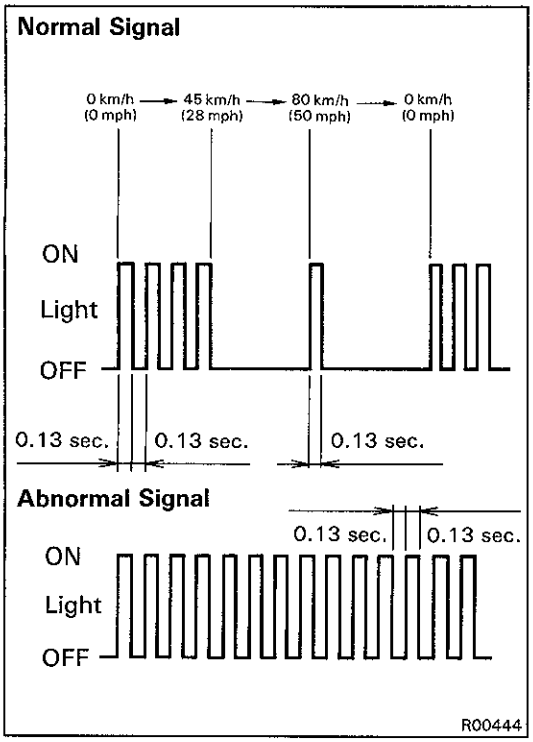
(c) Check that the warning light blinks about 4 times every 1 second as shown.



4. INSPECT DECELERATION SENSOR OPERATION

(a) Drive the vehicle straight ahead at about 20 km/h (12.4 mph) or more, depress the brake pedal a little strong.

(b) Check that the warning light turns on while braking.

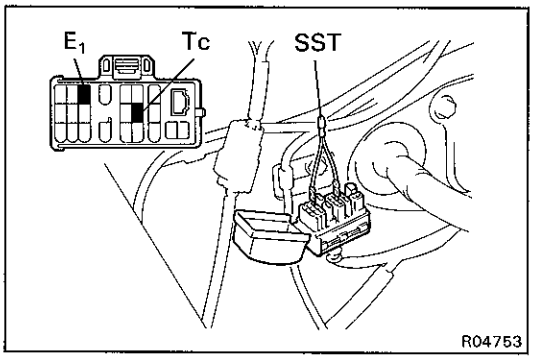


5. INSPECT SPEED SENSOR SIGNAL CHANGE

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

(b) Check the warning light signal.
If the warning light signal is abnormal, perform the steps 6 and 7.

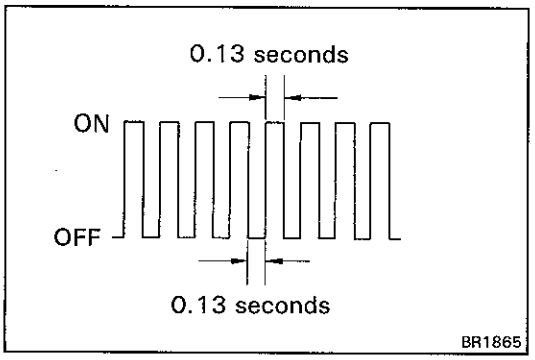
HINT:
- If the deceleration sensor operation in step 4 does not occur, an abnormal signal is output.
- The high-speed check is possible at 80 km/h (50 mph) or highter.



6. READ DIAGNOSTIC CODE

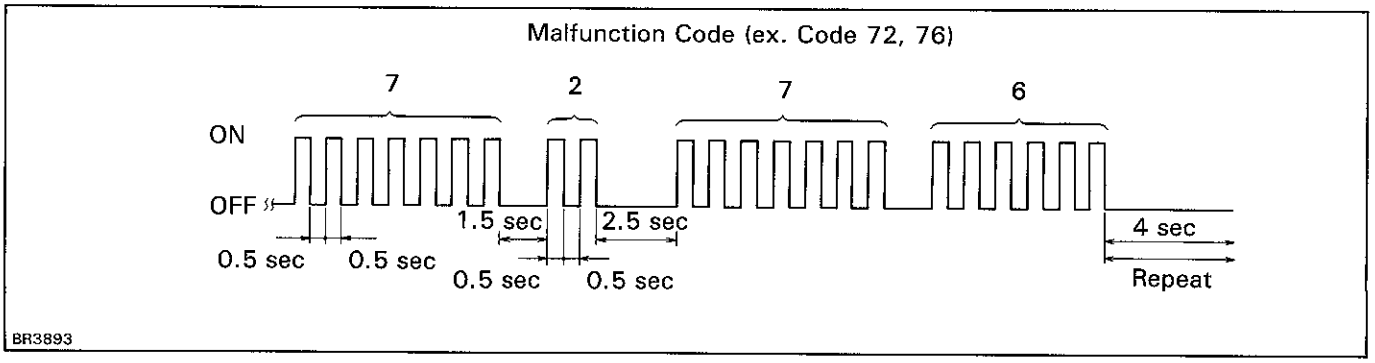
(a) Stop the vehicle, and warning light will being to blink.

(b) Using SST, connect the terminals Tc and E_1 of check connector.



(c) Read the number of blinks of the ABS warning light.
(See page BR-37)

HINT: If normal, the warning light blinks about 4 times every 1 second.
If two or more malfunctions are indicated at the same time, the smallest numbered code will be displayed first.



7. REPAIR MALFUNCTIONING PARTS

Repair or replace the malfunctioning parts.

HINT: When repairing or replacing parts, turn the ignition switch to OFF.

8. REMOVE SST

Remove the SST from terminals Tc, Ts and E_1 of the check connector.

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Code No.	Light Pattern	Diagnosis	Malfunctioning Part
	ON / OFF  BR1807	All speed sensors and sensor rotors are normal	
71	 BR1807	Low voltage of front right speed sensor signal	• Front right speed sensor • Sensor installation
72	 BR1807	Low voltage of front left speed sensor signal	• Front left speed sensor • Sensor installation
73	 BR1807	Low voltage of rear right speed sensor signal	• Rear right speed sensor • Sensor installation
74	 BR1807	Low voltage of rear left speed sensor signal	• Rear left speed sensor • Sensor installation
75	 BR1807	Abnormal change of front right speed sensor signal	• Front right sensor rotor
76	 BR1807	Abnormal change of front left speed sensor signal	• Front left sensor rotor
77	 BR1807	Abnormal change of rear right speed sensor signal	• Rear right sensor rotor
78	 BR1807	Abnormal change of rear left speed sensor signal	• Rear left sensor rotor
79	 BE3937	Deceleration sensor is faulty	• Deceleration sensor • Sensor installation