

## DIAGNOSIS SYSTEM

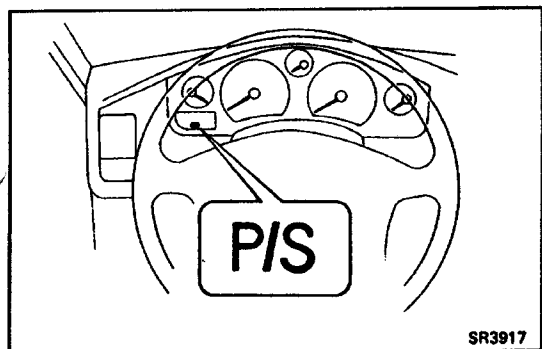
SR082-01

### DESCRIPTION

When a malfunction exists, the corresponding code number is stored in memory until the ignition switch is turned off.

In case of a malfunction other than one identified by code No. 21, the P/S warning light is turned on to warn the driver.

By connecting terminals Tc and E1 of the data link connector, malfunction codes that are stored in memory can be displayed by the way the light blinks.

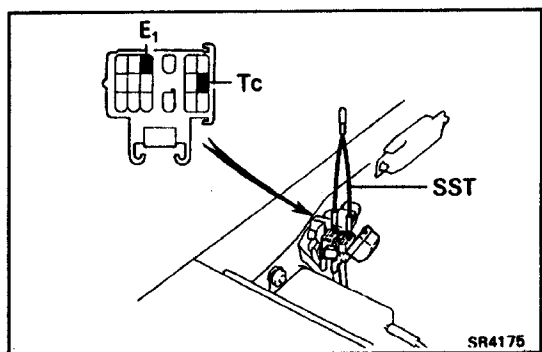


SR3917

### P/S WARNING LIGHT CHECK

SR088-01

- (a) Turn the ignition switch to ON and check that the P/S warning light lights up.
- (b) Turn the ignition switch to ON and Check that the P/S warning light lights up.
- (c) Check that the P/S warning light goes out after approx. 2 seconds.



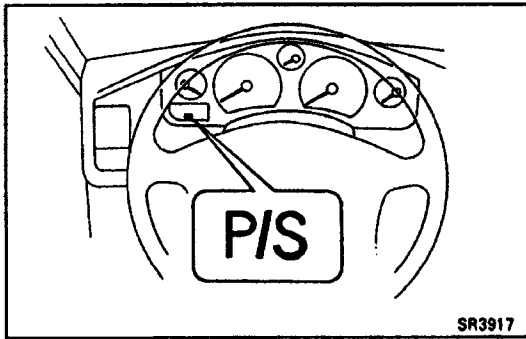
SR4175

### STEERING SENSOR CHECK

SR084-01

- (a) Turn the ignition switch to ON.
- (b) Using SST, connect terminals Tc and E1 of the data link connector.  
SST 09843-18020

**NOTICE:** Never make a mistake with the terminal connection position as this will cause a malfunction.



(c) Check that the warning light condition changes according to the steering angle and the vehicle speed, as shown below.

Vehicle Speed	Below 20 km/h (12 mph)	Above 20 km/h (12 mph)
Steering Angle		
Less than 36 degrees	BLINK	<b>ON</b>
More than 36 degrees	OFF	OFF

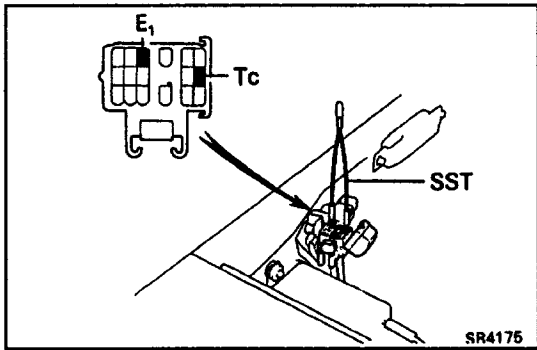
**HINT:**

The steering angle is defined as 0° at the steering position at which the ignition switch and terminals Tc and E1 are turned on simultaneously.

This check is not performed when a diagnostic code has been stored in memory.

V01011

SR088-01

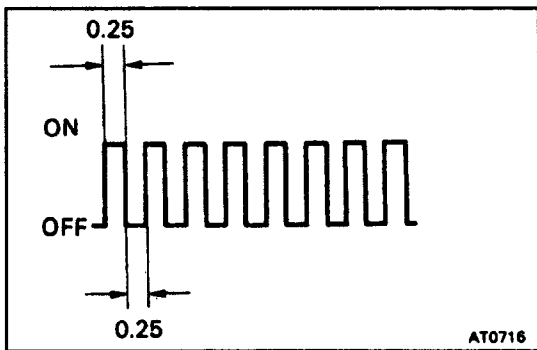


**DIAGNOSTIC CODE CHECK**

**1. OUTPUT DIAGNOSTIC CODE**

- (a) Turn the ignition switch to ON.
- (b) Using SST, connect terminals Tc and E1 of the data link connector.  
SST 09843-18020

**NOTICE:** Never make a mistake with the terminal connection position as this will cause a malfunction.



**2. READ DIAGNOSTIC CODE**

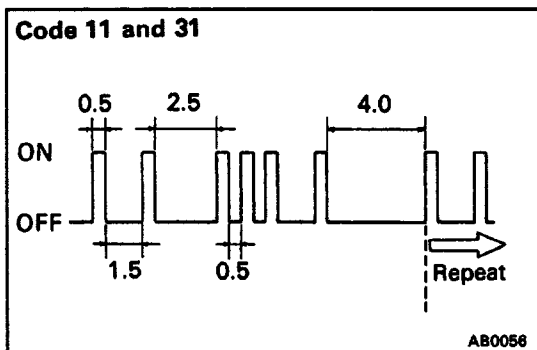
Read the diagnostic code as indicated by the number of times the P/S warning light blinks.

- Normal code indication  
The light will blink 2 times per second.






- Malfunction code indication  
In the event of a malfunction, the light will blink. The first number of the code No. will equal the first digit of a 2-digit diagnostic code, and after a 1.5 second pause, the 2nd number of the code No. will equal the 2nd digit. If there are two or more codes, there will be a 2.5 second pause between each.

After all the codes have been output, there will be a 4.0 second pause and they will all be repeated.

**HINT:** in the event of a number of trouble codes, indication will begin from the smaller numbered code to the larger.



## DIAGNOSTIC CODES

Code No.	Blink Pattern	Diagnosis	Trouble Area	Warning Light	PS Operation
11	 AB0057	No electric current being supplied to power steering motor	<ul style="list-style-type: none"> <li>• Wire harness and connector between battery and power steering motor</li> <li>• Wire harness and connector between ECU and power steering motor</li> <li>• Power steering relay</li> <li>• Power steering motor</li> <li>• ECU</li> </ul>	ON	Stopped (*1)
12	 FI1389	Short-circuit in power steering relay coil circuit	<ul style="list-style-type: none"> <li>• Wire harness and connector between ECU and power steering relay</li> <li>• Power steering relay</li> <li>• ECU</li> </ul>	ON	Stopped (*1)
21	 FI1809	Power steering motor temperature is abnormally high	<ul style="list-style-type: none"> <li>• Wire harness and connector between ECU and power steering motor</li> <li>• Power steering motor</li> <li>• ECU</li> </ul>	OFF	Discontinued (.2)
22	 FI1392	Abnormally high current being supplied to power steering motor	<ul style="list-style-type: none"> <li>• Wire harness and connector between ECU and powersteering driver</li> <li>• Power steering driver</li> <li>• ECU</li> </ul>	ON	Stopped (*1)
31	 FI1394	Wearing out of power steering motor brush	<ul style="list-style-type: none"> <li>• Wire harness and connector between ECU and power steering motor</li> <li>• Power steering motor</li> <li>• ECU</li> </ul>	ON	Continues

\*1: Until fault is fixed and ignition is turned OFF, then ON.

\*2: Returns when temp. of PS pump drops.