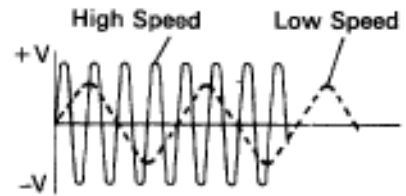
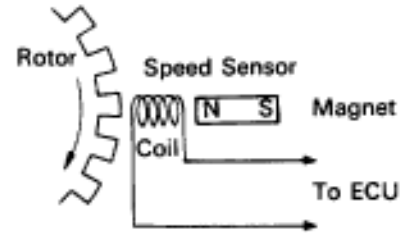


## Diag. Code 31, 32 33, 34

## Speed Sensor Circuit

### CIRCUIT DESCRIPTION

The speed sensor detects the wheel speed and sends the appropriate signals to the ECU. These signals are used for control of both the ABS and TRAC control systems. The front rotor and rear rotor have 48 serrations. When the rotors rotate, the magnetic field emitted by the permanent magnet in the speed sensor generates an AC voltage. Since the frequency of this AC voltage changes in proportion to the speed of the rotors (wheels), the frequency is used by the ECU to detect the speed of each wheel.



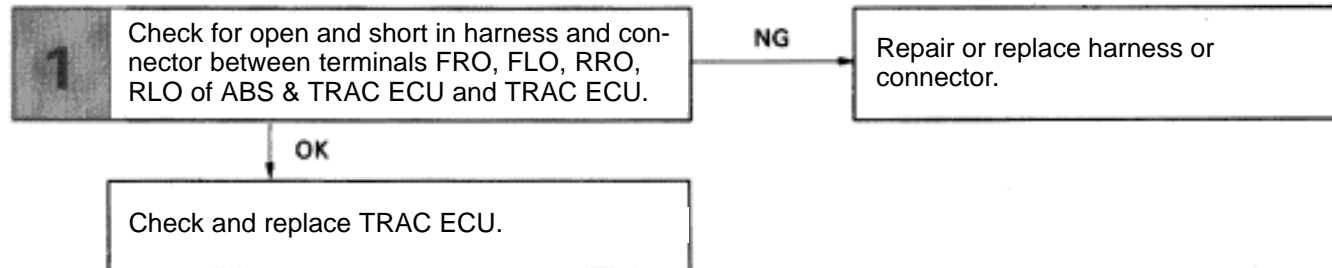
Code No.	Diagnostic Code Detecting Condition	Trouble Area
31, 32 33, 34	Detection of any of conditions (1) through (3): (1) At vehicle speed of 10 km/h (6 mph) or more, pulses are not input for 5 sec. (2) Momentary interruption of the vehicle speed sensor signal occurs at least 7 times in the time between switching the ignition switch ON and switching it OFF. (3) Abnormal fluctuation of speed sensor signals with the vehicle speed 20 km/h (12 mph) or more.	<ul style="list-style-type: none"> <li>•Right front, left front, right rear and left rear speed sensor.</li> <li>•Open or short in each speed sensor circuit.</li> <li>•ECU</li> </ul>

**HINT:** Diag. code 31 is for the right front wheel speed sensor.  
 Diag. code 32 is for the left front wheel speed sensor.  
 Diag. code 33 is for the right rear wheel speed sensor.  
 Diag. code 34 is for the left rear wheel speed sensor.

**Fail safe function:** If trouble occurs in the speed sensor circuit, the ECU cuts off current to the ABS solenoid relay and prohibits ABS control.

## DIAGNOSTIC CHART

HINT: If the same code is output from the ABS warning light, troubleshoot the ABS first.



## WIRING DIAGRAM

