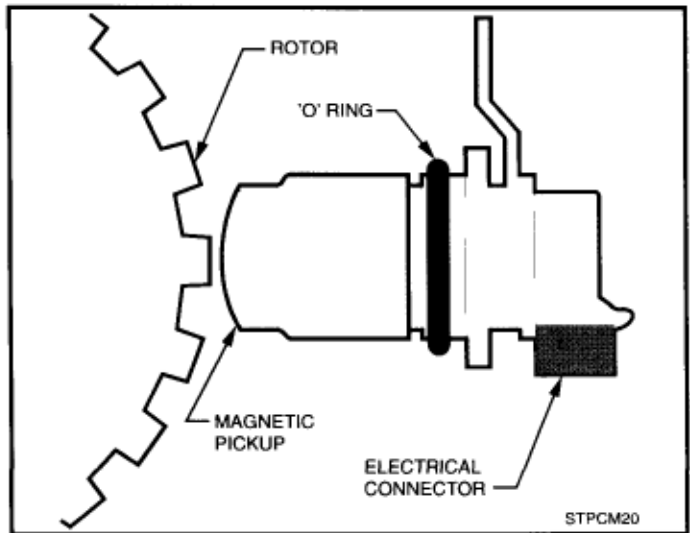


## VEHICLE SPEED SENSOR

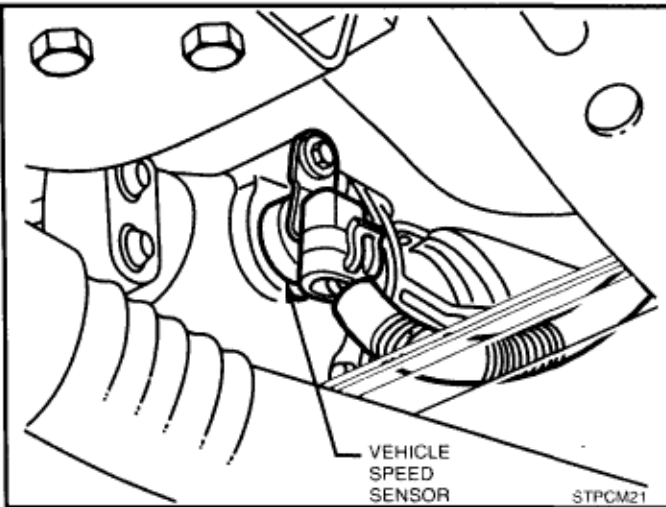
The PCM receives vehicle speed information from the Vehicle Speed Sensor (VSS) located on the rear of the transmission. The VSS basically consists of a magnetic core and a coil. As the output shaft turns, the teeth on the output shaft concentrate the magnetic field causing the magnetic flux to increase and then decrease as the teeth move in and out of the magnetic field, inducing a voltage into the coil, first, in a positive and then in a negative direction.

This AC voltage produced in the VSS sensor circuit is fed into the PCM, the PCM filters and shapes the signal. The PCM then counts the number of pulses received in a given time, to determine the vehicle speed.

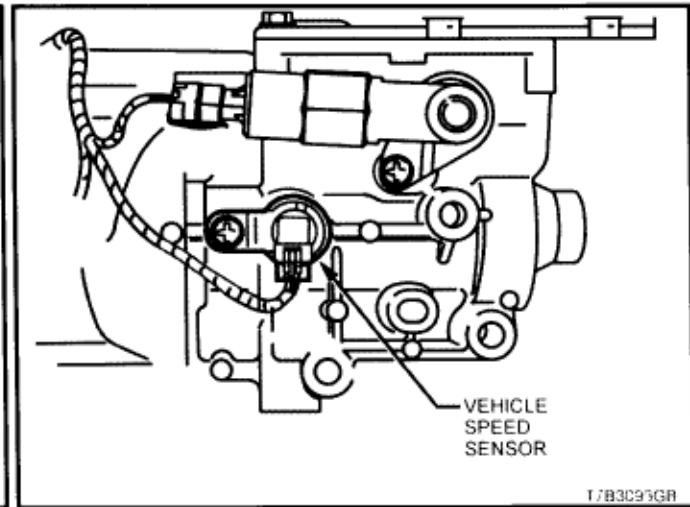
Once the PCM has calculated the vehicle speed it then pulses circuit 123 (Violet/White wire) to earth, this will cause the 12 volts at terminal 17 of the instruments to be pulled down to less than 0.2 volts. The instrument determines the vehicle speed and the kilometres from the numbers of pulses it receives. The PCM also transmits vehicle speed information to other control modules via the serial data bus normal mode message.



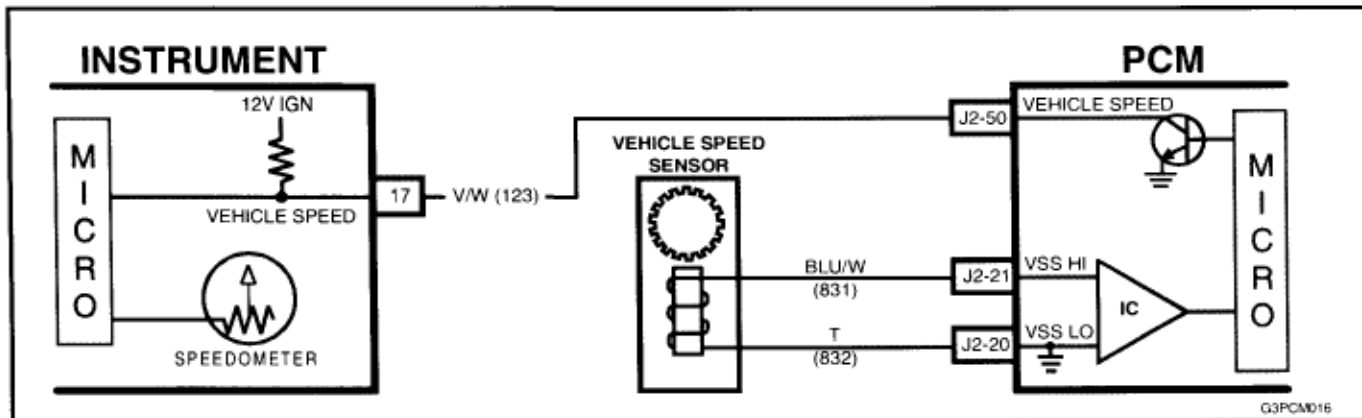
Vehicle Speed Sensor



VSS Location - Automatic Transmission



VSS Location - Manual Transmission



Vehicle Speed Sensor Circuit