GEO JF403E

ELECTRICAL INFORMATION

The Geo Metro computer control transaxle looks like and operates just like a Chevy Sprint transaxle. However, there is a difference in the control system. With the Chevy Sprint we have vacuum switches, an accelerator switch, a shift lever switch, and a speed sensor (figure 1). With the Geo Metro, we see that the accelerator switch and the vacuum switches have been replaced with a throttle position sensor (figure 2 & 3)

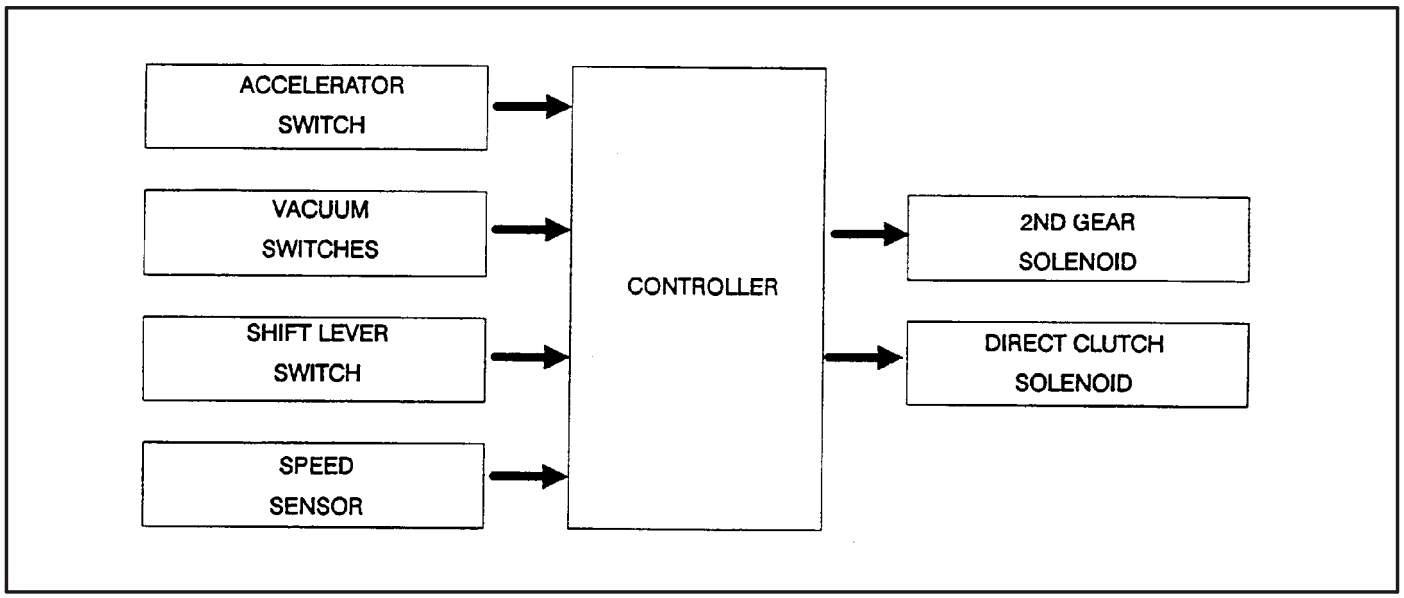


FIGURE 1 - CHEVY SPRINT GEAR SHIFT CONTROL SYSTEM (VACUUM)

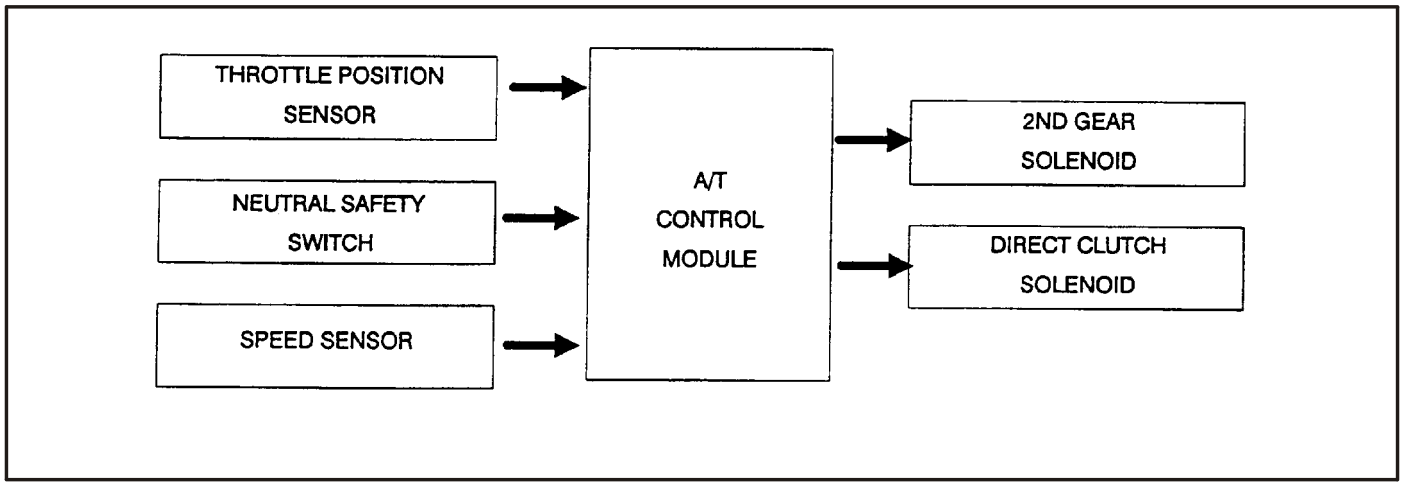


FIGURE 2 - GE0 METRO GEAR SHIFT CONTROL SYSTEM (ELECTRICAL)

A - GROUND
B - ON/OFF SIGNAL (IDLE SIGNAL)
C - OUTPUT VOLTAGE (OPENING ANGLE SIGNAL)
D - POWER SUPPLY FROM ECM (REFERENCE VOLTAGE)
1 - THROTTLE POSITION SENSOR
2 - THROTTLE BODY

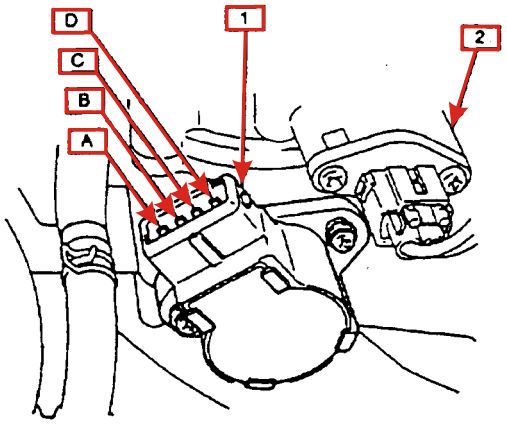


FIGURE 3 - GE0 METRO THROTTLE POSITION SENSOR

The throttle position sensor can be easily checked for proper operation at the sensor itself using an ohmmeter (Figure 4 &5).

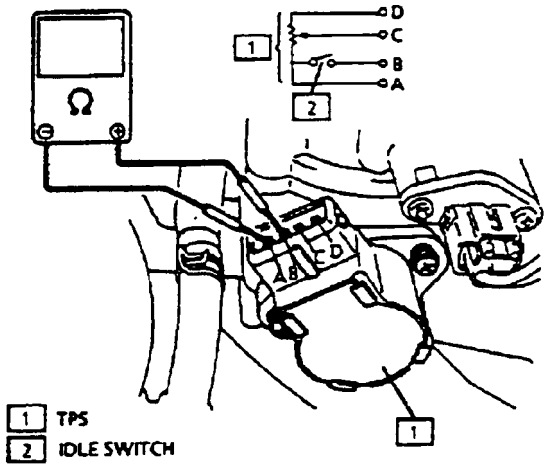
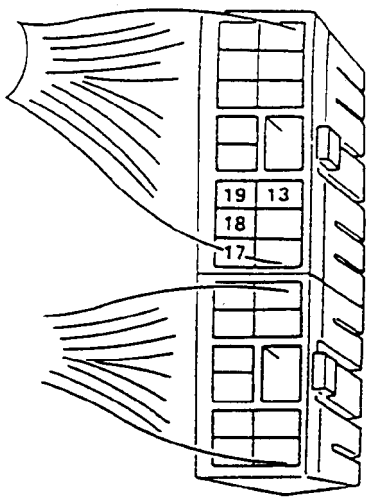


Figure 4

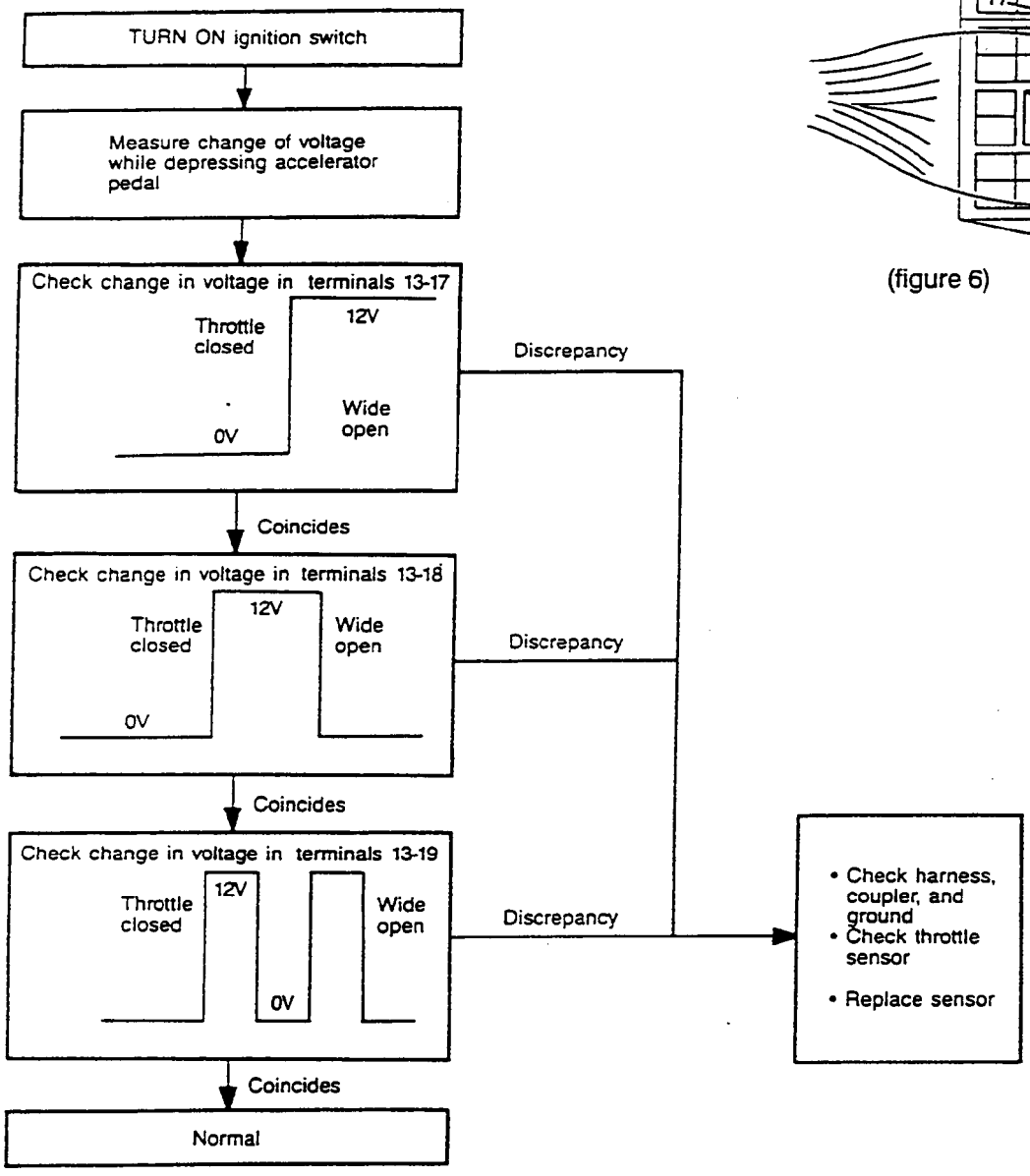
TERMINALS	CONDITION	RESISTANCE
Between A and B terminals (Idle Switch)	When throttle lever-to-stop screw clearance is 0.3 mm (0.012 in.)	0
	When throttle lever-to-stop screw clearance is 0.9 mm (0.035 in.)	Continuity
Between A and D terminals	Throttle valve is at idle position	4.37 - 8.13 k Ω
Between A and C terminals	Throttle valve is at idle position	240 - 1140 Ω
	Throttle valve is fully opened	3.17 - 6.6 k Ω

Figure 5

The throttle position sensor can also be checked at the A/T control module harness plug with a voltmeter (figure 6 & 7).



(figure 6)



(Figure 7)

Figure 6