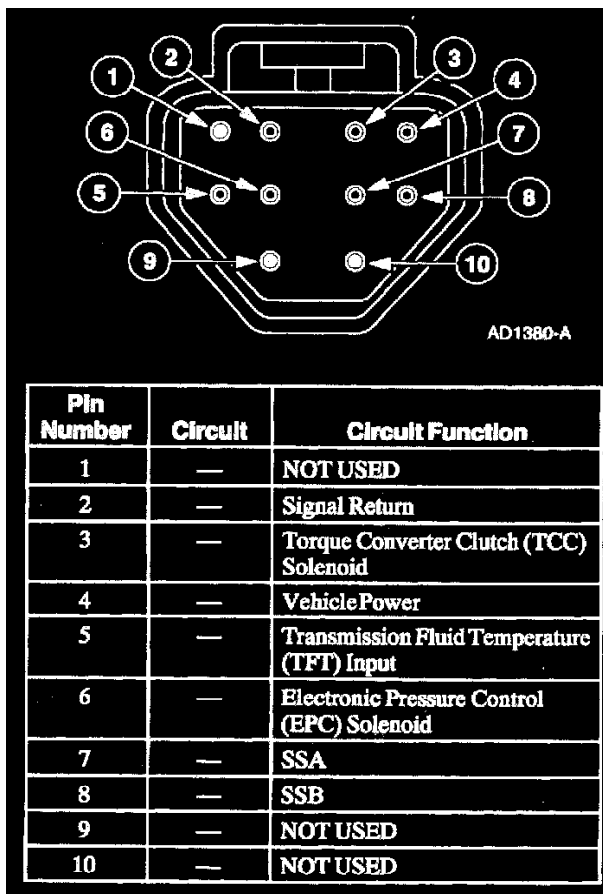


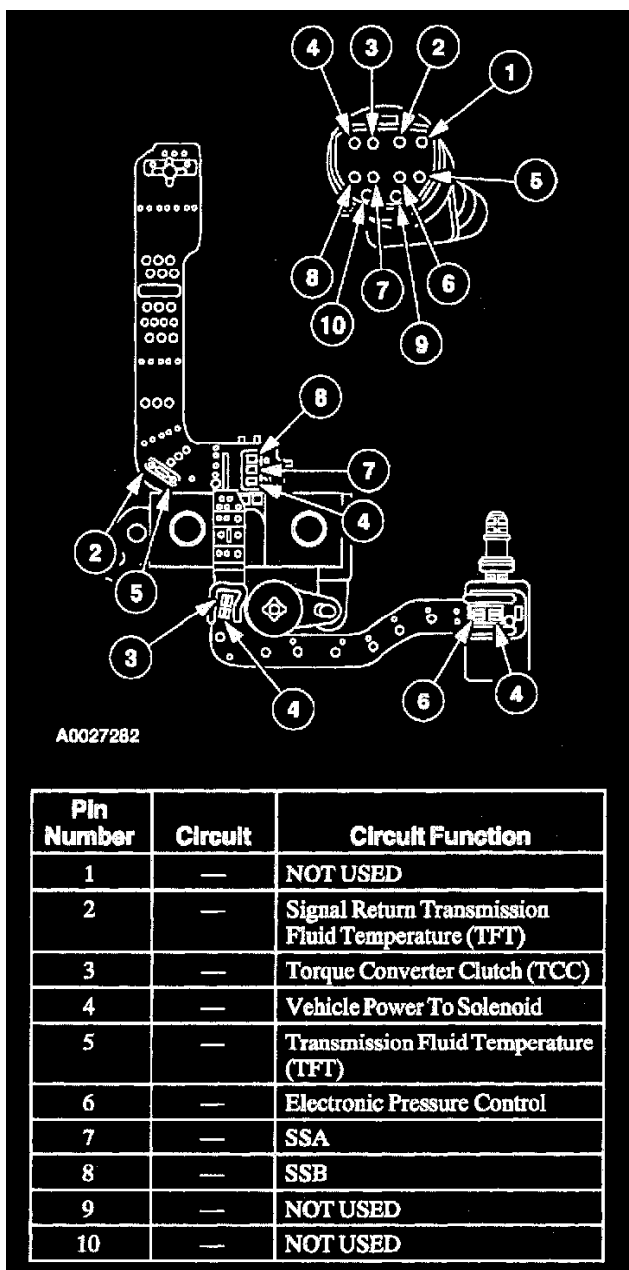
Transmission Control Systems: Testing and Inspection

Transmission Connector Layouts

Transmission Connector Layouts



Transmission Vehicle Harness Connector



Transmission Internal Harness Connector

A0030469

Pin Number	Circuit	Circuit Function
1	—	NOT USED
2	—	Signal Return
3	—	TR3A
4	—	TR1
5	—	TR2
6	—	TR4
7	—	NOT USED
8	—	NOT USED

Pin Number	Circuit	Circuit Function
9	—	Fused Power Feed
10	—	Starter Control
11	—	Reverse
12	—	Starter to Starter Interrupt Relay

Digital Transmission Range (TR) Sensor Connector

A0024295

Pin Number	Circuit	Circuit Function
1	—	Output Shaft Speed (OSS) Sensor
2	—	Signal Return

Output Shaft Speed (OSS) Sensor Harness Connector

Selector Position	PID: TR	PID: TR_D				PID: TR_V (volts)
		TR4	TR3A	TR2	TR1	TR3A (PCM Pin 64 to sigtrn)
PARK	P/N	0	0	0	0	0.0 Volts
In Between	REV	0	1	0	0	1.3 - 1.8 Volts
REVERSE	REV	1	1	0	0	1.3 - 1.8 Volts
In Between	REV	0	1	0	0	1.3 - 1.8 Volts
NEUTRAL	NTRL	0	1	1	0	1.3 - 1.8 Volts
In Between	O/D ^a	1	1	1	0	1.3 - 1.8 Volts
OVERDRIVE	O/D ^a	1	1	1	1	1.3 - 1.8 Volts
In Between	Man 2	1	0	1	1	0.0 Volts

Selector Position	PID: TR	PID: TR_D				PID: TR_V (volts)
		TR4	TR3A	TR2	TR1	TR3A (PCM Pin 64 to sigtrn)
Manual 2	Man 2	1	0	0	1	0.0 Volts
In Between	Man 2	1	0	1	1	0.0 Volts
Manual 1	Man 1	0	0	1	1	0.0 Volts

a Will read "Drive" if O/D is canceled.

Digital Transmission Range (TR) Sensor Diagnosis Chart

A. TR_V is the voltage at the PCM pin 64 (TR3A Circuit) to signal return.

B. "In Between" reading could be caused by a shift cable or digital TR sensor misaligned or a digital TR sensor circuit failure of TR1, TR2, TR3A, or TR4.

C. TRAM: 1= Open Digital TR switch, 0= Closed Digital TR switch.

D. EEC-V Control System Breakout Box Readings: Taken from PCM signal pins for TR1, TR2, TR3A, TR4 to signal return.

-Voltages for TR1, TR2, TR4:

-0 = 0.0 volts.

-1 = 9.0 - 14.0 volts.

-Voltage for TR3A:

-0 = 0.0 volts.

-1 = 1.3 - 1.8 volts.