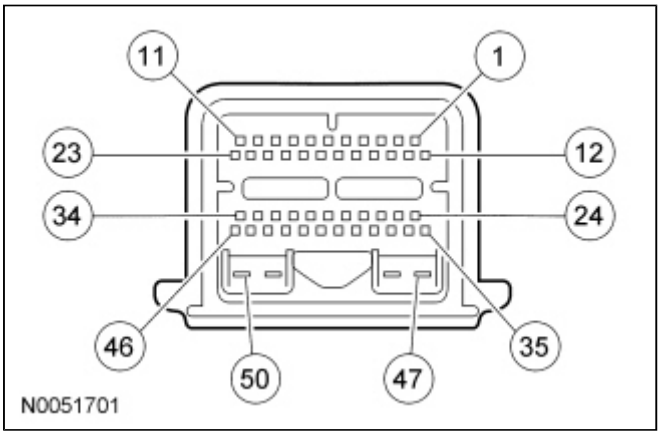
Transmission Connector Layouts

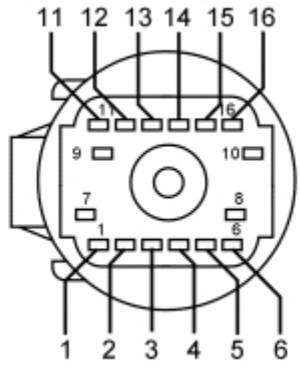
Connector Reference and Terminal Readings

PCM — C175T



Pin Number	Circuit Description
3	Output Shaft Speed (OSS) sensor signal input
4	Intermediate shaft speed sensor signal input
11	Pressure Control Solenoid A (PCA)
15	Turbine Shaft Speed (TSS) sensor signal input
16	Transmission Range (TR)1 sensor to PCM
17	TR 2 sensor to PCM
23	Pressure Control Solenoid B (PCB)
27	TR 3 sensor to PCM
28	TR 4 sensor to PCM
29	Transmission Fluid Temperature (TFT) sensor signal
34	Pressure Control Solenoid C (PCC)
41	Signal return
42	Shift Solenoid A (SSA)
43	Shift Solenoid B (SSB)
44	Shift Solenoid C (SSC)
45	Shift Solenoid D (SSD)
46	Torque Converter Clutch (TCC) solenoid

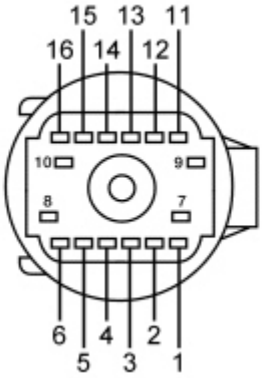
Transmission Vehicle Harness — C199



A0051260

Pin Number	Circuit Description
1	Pressure Control Solenoid B (PCB)
2	Transmission Fluid Temperature (TFT) sensor input
3	Solenoid power
4	Pressure Control Solenoid C (PCC)
5	Shift Solenoid D (SSD)
6	Shift Solenoid C (SSC)
11	Pressure Control Solenoid A (PCA)
12	Signal return
14	Torque Converter Clutch (TCC) solenoid
15	Shift Solenoid B (SSB)
16	Shift Solenoid A (SSA)

Transmission Internal Harness

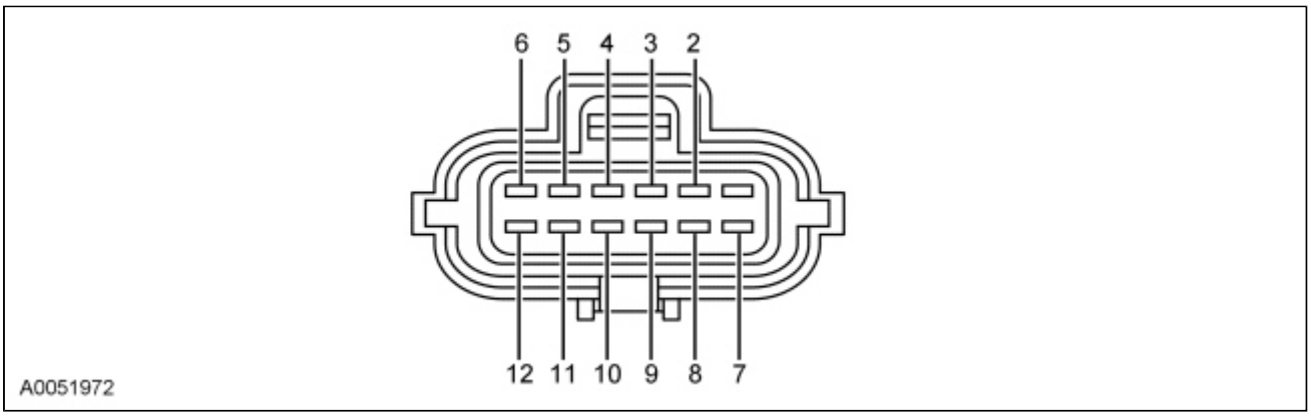


N0085528

Pin Number	Circuit Description
1	Pressure Control Solenoid B (PCB)
2	Transmission Fluid Temperature (TFT) sensor input
3	Solenoid power
4	Pressure Control Solenoid C (PCC)
5	Shift Solenoid D (SSD)
6	Shift Solenoid C (SSC)
11	Pressure Control Solenoid A (PCA)
12	Signal return
14	Torque Converter Clutch (TCC) solenoid

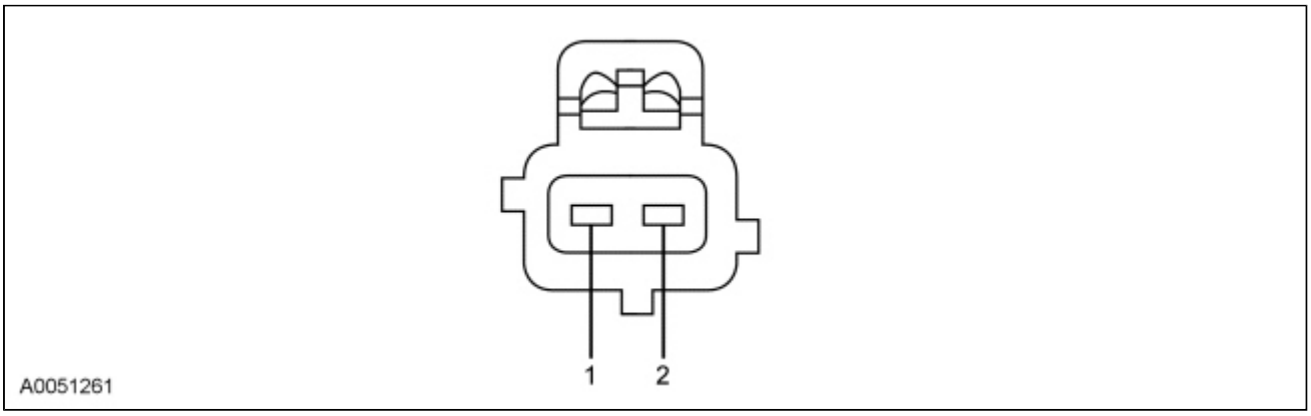
15	Shift Solenoid B (SSB)
16	Shift Solenoid A (SSA)

Transmission Range (TR) Sensor — C167



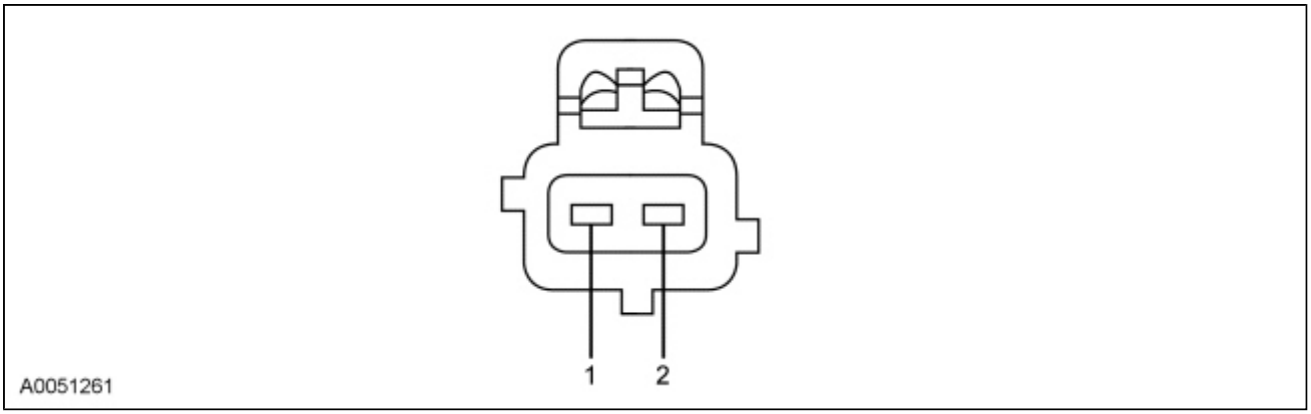
Pin Number	Circuit Description
2	Signal return
3	Transmission Range (TR)3 sensor
4	TR 1 sensor
5	TR 2 sensor
6	TR 4 sensor
7	Ground
8	Neutral switch sense input
9	Not used
10	Starter solenoid central power
11	Not used
12	Starter relay (overload protected)

Turbine Shaft Speed (TSS) Sensor — C143



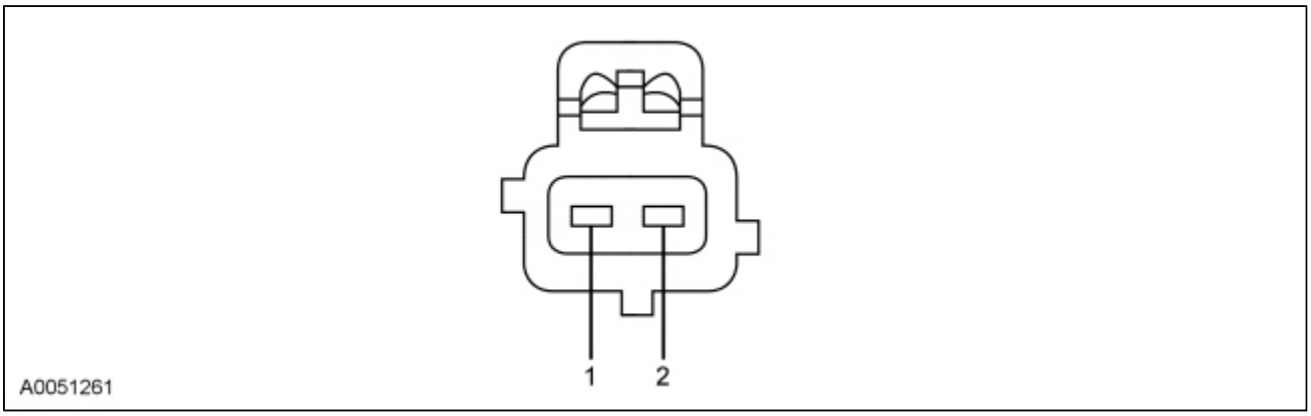
Pin Number	Circuit Description
1	Turbine Shaft Speed (TSS) sensor signal
2	Signal return

Output Shaft Speed (OSS) Sensor — C193



Pin Number	Circuit Description
1	Output Shaft Speed (OSS) sensor signal
2	Signal return

Intermediate Shaft Speed Sensor Harness — C164



Pin Number	Circuit Description
1	Intermediate shaft speed sensor signal
2	Signal return

Transmission Range (TR) Sensor Diagnosis Chart

Selector Lever Position	PID: TR	TR4	TR3	TR2	TR1	TR3_V PCM pin 27 to signal return
Park	P	Closed	Closed	Closed	Closed	0.0 volt
Reverse	R	Open	Open	Closed	Closed	1.3-1.8 volts
Neutral	N	Closed	Open	Open	Closed	1.3-1.8 volts
(D)	D	Open	Open	Open	Open	1.3-1.8 volts
Manual 3	3	Open	Closed	Open	Closed	0.0 volt
Manual 2	2	Open	Closed	Closed	Open	0.0 volt

Manual 1	1	Closed	Closed	Open	Open	0.0 volt

A. TR 3_V is the voltage at the PCM C175T-27 circuit VET55(BN) to signal return.
   - **Voltages for TR1, TR2 and TR4:**
   - 0 = 0.0 volt.
   - 1 = 9.0-14.0 volts.
   - **Voltage for TR3A:**
   - 0 = 0.0 volt.
   - 1 = 1.3-1.8 volts.

Wiggle Test Information for Open/Shorts

A. TR 4, TR 3, TR 2 and TR 1 are all closed in PARK. PARK is a good position to check for intermittent open circuits.
B. TR 4, TR 3, TR 2 and TR 1 are all open in (D), so (D) is a good position to check for shorts to ground. To determine the shorted components while observing the TR PIDs, unplug the TR sensor C167 and see if the short goes away. If the short is still present, unplug the transmission C199 and see if the short goes away. If the short is still present, then the short is in the PCM or vehicle harness. Remove the suspect circuit(s) wire terminal from PCM C175T. If the short is still present, then the PCM has an internal failure; otherwise the failure is in the vehicle harness.