

<sup>2</sup> Shift Solenoid 2 - (SS2)	1 OUTPUT	OUTPUT 53	— (SS3) - Shift Solenoid 3 <sup>2</sup>
	2	54	—
Engine Enable Input - (EEI)	3 INPUT	SYSPWR 55	— (KAPWR) - Keep Alive (Memory) Power
Heated Exhaust Gas Oxygen Sensor 1 Ground (HO2S1)	4 INPUT	56	—
<sup>6</sup> Air Conditioner Pressure Transducer - (ACPT)	5 INPUT	57	—
<sup>5</sup> Traction Control Engine Torque Output - (MMI)	6 OUTPUT	INPUT 58	— (VSS) - Vehicle Speed Sensor
	7	INPUT 59	— (CCS) - Cruise Control Signal <sup>4</sup>
Camshaft Position Sensor Negative - (CMP)	8 INPUT	60	—
<sup>6</sup> Air Conditioner Refrigerant Discharge Temp. - (ACRT)	9 INPUT	INPUT 61	— (HO2S2) Heated Exhaust Gas Oxygen Sensor 2
	10	INPUT 62	— (MMR) - Traction Control Engine Torque Request <sup>5</sup>
<sup>2</sup> Power Economy Switch - (PES)	11 INPUT	63	—
	12	INPUT 64	— (TR) - Transmission Range Sensor <sup>2</sup>
EEPROM Power Supply - (FEPS)	13 SYSTEM	65	—
	14	66	—
BUS Negative - (BUSN)	15 SYSTEM	OUTPUT 67	— (EVAP) - Evap Canister Purge Solenoid
BUS Positive - (BUSP)	16 SYSTEM	68	—
Electro-Drive Fan 1 - (EDF1)	17 OUTPUT	INPUT 69	— (ACR) - Air Conditioning Relay <sup>6</sup>
	18	70	—
Starter Relay - (START)	19 OUTPUT	SYSPWR 71	— (VPWR) - Vehicle Power
	20	OUTPUT 72	— (INJ7) - Injector 7
Crankshaft Position Sensor Positive - (CKP+)	21 INPUT	OUTPUT 73	— (INJ5) - Injector 5
Crankshaft Position Sensor Negative - (CKP-)	22 INPUT	OUTPUT 74	— (INJ3) - Injector 3
Heated Exhaust Gas Oxygen Sensor 2 Ground (HO2S2G)	23 INPUT	OUTPUT 75	— (INJ1) - Injector 1
Power Ground - (PWRGND)	24 SYSPWR	SYSPWR 76	— (PWRGND) - Power Ground
Case Ground - (CASEGN)	25 SYSPWR	SYSPWR 77	— (PWRGND) - Power Ground
Ignition Coil 1 - (COIL1)	26 OUTPUT	OUTPUT 78	— (COIL3) - Ignition Coil 3
<sup>2</sup> Shift Solenoid 1 - (SS1)	27 OUTPUT	79	—
<sup>2</sup> Shift Solenoid 4 - (SS4)	28 OUTPUT	OUTPUT 80	— (FP) - Fuel Pump
	29	OUTPUT 81	— (VPS) - Variable Pressure Solenoid <sup>2</sup>
<sup>6</sup> Air Conditioner Evaporator Temperature - (AEAT)	30 INPUT	82	—
	31	OUTPUT 83	— (IAC) - Idle Air Control Solenoid
	32	84	—
	33	INPUT 85	— (CMP) - Camshaft Position Sensor Positive
	34	INPUT 86	— (BFS) - Blower Fan Speed <sup>6</sup>
Heated Exhaust Gas Oxygen Sensor 1 - (HO2S)	35 INPUT	87	—
Mass Air Flow Sensor Return - (MAFRTN)	36 INPUT	INPUT 88	— (MAF) - Mass Air Flow Sensor
<sup>2</sup> Transmission Fluid Temperature Sensor - (TFT)	37 INPUT	INPUT 89	— (TP) - Throttle Position Sensor
Engine Coolant Temperature Sensor - (ECT)	38 INPUT	SYSPWR 90	— (VREF) - Vehicle Reference Voltage
Intake Air Temperature Sensor - (IAT)	39 INPUT	INPUT 91	— (SIGRTN) - Signal Return
	40	INPUT 92	— (ACD) - Air Conditioner Demand <sup>6</sup>
	41	OUTPUT 93	— (RCO) - Air Conditioning Recirculation Override <sup>6</sup>
Electro-Drive Fan 2 - (EDF2)	42 OUTPUT	OUTPUT 94	— (PCS) - Power Control, Solenoid 6 <sup>2</sup>
Data Output Link - (DOL)	43 SYSTEM	95	—
	44	OUTPUT 96	— (LUS) - Lock Up, Solenoid 7 <sup>2</sup>
Clean Tachometer Output - (CTO)	45 OUTPUT	SYSPWR 97	— (VPWR) - Vehicle Power
	46	OUTPUT 98	— (INJ8) - Injector 8
	47	OUTPUT 99	— (INJ6) - Injector 6
	48	OUTPUT 100	— (INJ4) - Injector 4
	49	OUTPUT 101	— (INJ2) - Injector 2
	50	102	—
Power Ground - (PWRGND)	51 SYSPWR	SYSPWR 103	— Power Ground - (PWRGND)
Ignition Coil 2 - (COIL2)	52 OUTPUT	OUTPUT 104	— (COIL4) - Ignition Coil 4

NOTES: 2=Automatic Transmission, where fitted; 4=Cruise Control, where fitted; 5=Traction Control, where fitted; 6=Air Conditioning, where fitted

**FIG. 16 PCM Connections, V8 Engine**

### Maintenance

Removal and installation of the PCM is described in Group 9-1, Electronic Distributorless Ignition System.

### Diagnosis

Diagnostic Trouble Codes (DTC) are retrieved through the diagnostic connector using the New Generation Star (NGS) tester. Fault Finding Tables for DTCs are in the Diagnosis Section of this Group.

DTCs applicable to the PCM are shown in the following table.

### FAILURE MODE

The Powertrain Control Module (PCM) has a Failure Mode Effects Management (FMEM) strategy to manage failure of major components. Vehicle operation may be impaired if any of the major input or output components fail.