



**POWERTRAIN CONTROL SYSTEM  
ELECTRONICS DIAGNOSTIC GUIDE**

**2001 F-Series/Excursion and Econoline**

Fault Code	Circuit Index	Condition Description	Probable Causes
0541	MAIA	Manifold intake air heater circuit failure	Relay failure, open/short circuit
0542	MAIA	Manifold intake air heater circuit failure	Relay failure, short circuit
0560	N/A	System voltage malfunction	Charging system problem/load, glow plugs still enabled
0562	* VPWR	System voltage low	Low sys voltage, charging sys, internal PCM failure
0563	VPWR	System voltage high	High sys voltage, charging sys, internal PCM failure
0565	TEST	Cruise "On" signal malfunction	Switch not detected during self-test, circuit, switch
0566	TEST	Cruise "Off" signal malfunction	Switch not detected during self-test, circuit, switch
0567	TEST	Cruise "Resume" signal malfunction	Switch not detected during self-test, circuit, switch
0568	TEST	Cruise "Set" signal malfunction	Switch not detected during self-test, circuit, switch
0569	TEST	Cruise "Coast" signal malfunction	Switch not detected during self-test, circuit, switch
0571	TEST	Brake switch A (BPA) circuit malfunction	Switch not detected during self-test, circuit, switch
0603	PCM	Powertrain Control Module KAM test error	PCM or BATT was disconnected, fuse, open ckt.
0605	PCM	Powertrain Control Module ROM test error	PCM or BATT was disconnected, Internal PCM failure
0606	PCM	PCM processor fault	Internal PCM failure
0640	MAIA	Manifold intake air heater relay failure	Open MAIA relay, blown fuse, open/grounded circuit
0670	* GPCM	Glow Plug Control Module control line failure	Open/shorted circuit, GPCM, PCM
0671-0678	* GPCM	Glow Plug failure 1-8	Open/shorted circuit, PCM, faulty Glow Plug
0683	* GPCM	Glow Plug Control Module communication line failure	Open/shorted circuit, failed GPCM, PCM
0703	TEST	Brake switch B (BOO) circuit malfunction	Switch not detected during self-test, circuit, switch
0704	TEST	(CPP) Clutch input circuit malfunction	Switch not detected during self-test, circuit, switch
0705	* TRS	Digital Trans range sensor circuit malfunction	Short or open digital TRS (pin 64 short only)
0707	TRS	Digital Trans range sensor circuit low input	Short to ground digital TRS
0708	* TRS	Digital Trans range sensor circuit high input	Open pin 64 digital TRS
0712	\$ TFT	Trans fluid temp sensor ckt low input	Short to ground, TFT sensor, PCM
0713	\$ TFT	Trans fluid temp sensor ckt high input	Open/short to power, TFT sensor, PCM
0715	\$ * TSS	TSS sensor circuit malfunction fault	Short/ open circuit, sensor, PCM
0717	\$ TSS	TSS intermittent failure	Short/ open circuit, sensor, PCM
0718	TSS	Noisey TSS	Erratic signal, sensor, int. circuit
0720	\$ * OSS	OSS sensor circuit malfunction fault	Short/ open circuit, sensor, PCM
0721	OSS	Noisey OSS	Erratic signal, sensor, int. circuit
0722	\$ OSS	OSS intermittent failure	Short/ open circuit, sensor, PCM
0732	GRV	Gear 2 incorrect ratio	Mechanical/hydraulic failure, 4x4 switch failure
0733	GRV	Gear 3 incorrect ratio	Mechanical/hydraulic failure, 4x4 switch failure
0741	TCC	Torque converter clutch ckt performance	Faulty solenoid, PCM, converter hydraulic system
0743	\$ * TCC	Torque converter clutch system electrical	Faulty solenoid, circuit, PCM
0750	* SS1	Shift solenoid A malfunction	Circuit failure, faulty solenoid, PCM
0755	\$ * SS2	Shift solenoid B malfunction	Circuit failure, faulty solenoid, PCM
0781	\$ N/A	1-2 shift error	Circuit, solenoid, hydraulic/mechanical failure
0782	\$ N/A	2-3 shift error	Circuit, solenoid, hydraulic/mechanical failure
0783	\$ N/A	3-4 shift error	Circuit, solenoid, hydraulic/mechanical failure
1000	N/A	OBDII monitor status	OBDII monitors/drivecycle incomplete
1105	ALT	Dual Alternator upper fault (monitor)	Circuit failure, alternator failure, PCM
1106	ALT	Dual alternator lower fault (control)	Circuit failure, alternator failure, PCM
1107	* ALT	Dual alternator lower circuit malf. (control)	Circuit failure, alternator failure, PCM
1108	ALT	Dual alternator BATT lamp ckt. malf.	Open/short circuit, lamp, fuse, PCM
1118	* MAT	Manifold Air Temp sensor out of range low	Short to ground MAT circuit, MAT sensor
1119	* MAT	Manifold Air Temp sensor out of range high	Open/short to power circuit, MAT sensor
1139	WIFL	Water-in-Fuel Lamp circuit malfunction	WIF lamp, circuit failure, fuse, PCM
1140	WIF	Water-in-Fuel condition failure	Water in fuel, grounded circuit, shorted sensor, PCM
1184	TEST	Engine oil temp out of self test range	Engine too cold/hot, leaking thermostat, ckt, sensor
1209	* IPR	ICP system fault	IPR valve stuck
1210	* IPR	ICP above expected level	ICP sensor, open signal return
1211	* IPR	ICP pressure above/below desired	IPR valve, grounded IPR circuit, high pressure oil leak
1212	ICP	ICP press not detected during crank	low oil in reservoir, IPR fault
1218	* CI	CI stuck high	CI circuit intermittent open
1219	* CI	CI stuck low	CI circuit intermittent short to ground
1247	* MAP	Turbo boost pressure low	MAP hose, sensor, EBP sys, intake leaks, Turbo
1248	* MAP	Turbo boost pressure not detected	MAP hose, sensor, EBP sys, intake leaks, Turbo