2003 4T65-E *when used with these engines: 3.1L LG8,   3.4L LA1,   3.8L L36,   3.8L (L67) supercharged*
in these vehicles: Malibu / Century / GrandPrix / GrandAm / Alero / Impala / MonteCarlo / Regal / LeSabre / Bonneville / Park Avenue /
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TRANSMISSION DIAGNOSTIC PARAMETERS

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SENSED PARAMETER	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA AND THRESHOLD VALUE(S)	SECONDARY PARAMETERS AND ENABLE CONDITIONS	TIME LENGTH AND FREQUENCY	MIL ILLUMINATION TYPE
Vehicle Speed Sensor - Low input	P0502	0 RPM to 6000 RPM This DTC detects a low vehicle speed when the vehicle has a large engine speed in a drive gear range.	Output Speed < 150 rpm	No Input Speed Sensor Codes No MAP Codes No TPS Codes MAP 0 psi < MAP < 105 psi Eng Torque 40 < Eng Torque < 300 No Engine_Torque_Malfunction Input Speed >= 1500 TPS >= 12%	2.5 sec Continuos	Type B
Vehicle Speed Sensor - Intermittent	P0503	0 RPM to 6000 RPM This DTC detects an unrealistic large drop in vehicle speed.	Output Speed drop >1500 RPM	Time since last Gear Range Change > 6 Sec Engine Speed > 500 rpm for 5 sec and not in fuel cutoff No Output Speed rise > 250 rpm within 2 sec. No DTC 502 codes	3 sec	Type B
Trans Fluid Temp Sensor Circuit - Range / Performance	P0711	.24V to 5.0V The DTC detects an unrealistically large change in transmission temperature or a value which remains constant for a period of time in which a measurable amount of change is expected.	1) Trans Temp has not changed ≥ 1.5 deg C (absolute value) since startup. 2) Trans Temp changes ≥ 20 deg. C (absolute value) in 200 msec. & this happens ≥ 14 times in 7 sec.	System Voltage between 9 and 18 volts No VSS DTC's .2 volts < Raw TTS < 4.92 volts Engine Running ≥ 300 sec. Vehicle Speed ≥ 5 mph for ≥ 409 sec. cumulative this ignition cycle. Torque Converter Slip ≥ 80 rpm for ≥ 409 sec. cumulative this ignition cycle. Trans Temp at startup between -40 and 21 deg. C Coolant Temp ≥ 70 deg. C Coolant Temp. has changed by ≥ 50 deg. C since startup. No Input Speed Sensor Codes No Engine Coolant Sensor Codes	1) 409 seconds continuous. 2) 7 seconds continuous	Type C
Trans Fluid Temp SensorCircuit- Low input	P0712	.24V to 5.0V The DTC detects a continuous short to ground in the TTS signal circuit or the TTS sensor	Raw TTS < .2 volts	System Voltage between 9 and 18 volts Ignition "on"	10 sec Continuos	Type C
Trans Fluid Temp. Sensor Circuit - High Input	P0713	.24V to 5.0V The DTC detects a continuous open or short to high in the TTS signal circuit or the TTS sensor	Raw TTS > 4.92 Volts	System Voltage between 9 and 18 volts Ignition "on"	400 second Continuos	Type C

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Input/Turbine Speed Sensor Range /Performance- Intermittent	P0716	0 RPM to 6000 RPM This DTC detects an unrealistically large change in input speed in a short period of time.	Input Speed change > 1300 RPM	No Input Speed Sensor Codes No DTC 751, 752, or 753 Codes No Output Speed Sensor Codes Tps >= 14% MPH >= 5 MPH Engine Running And Not In Fuel Cut Off P0717 Has Passed Is Key Cycle	0.8 sec. Continuos	Type B
Input/Turbine Speed Sensor No Input	P0717	0 RPM to 6000 RPM This DTC detects a low input speed when the vehicle has at least a minimum vehicle speed.	Input Speed <100 RPM	Engine Torque > = 50 #ft and <= 500 #ft No Output Speed Sensor Codes Engine Running And Not In Fuel Cut Off MPH >= 5 mph	5 seconds Continuos	Type B
TCC System Stuck Off	P0741	This DTC detects high TCC Slip when the Clutch is commanded on	TCC Slip > 180 rpm TCC Locked Capacity >= 50% 2 counts	Engine Speed > 500 rpm for 5 sec and not in fuel cutoff TPS between 4% and 35% 20 C < Trans Temp<130 time since last range change > 6 sec TCC is commanded locked for > 0.5 sec. TCC Pressure > Locked capacity or Max Allowed Pressure No ISS DTC's No TPS DTC's No VSS DTC's No TCC solenoid electrical DTC No TCC Stuck On DTC No TCC Release Switch DTC If In 2nd Gear Then 1.5<ratio<1.6 or If In 3rd Gear The n .95<ratio<1.05 or If In 4th Gear Then .7<ratio<.8	7 sec Continuos	Type B
TCC System Stuck On	P0742	This DTC detects Torque Converter release oil pressure (Switch is Closed) when the TCC is commanded off.	The TCC Release Switch being closed (indicating TCC applied) for the length of the fail timer (4sec)increments the fail counter; the diagnostic is set when this fail counter is ≥ 6.	Engine Speed > 500 rpm for 5 sec and not in fuel cutoff Throttle Position between 5% and 45% TCC is commanded off No TPS DTC's No TCC Control Sol. DTC's No TCC Release Switch DTC's time since last range change > 6 sec + 10<Trans Temperature<130 -20 rpm < Slip < 25 rpm 70 lb-ft < Engine Torque < 200 lb-ft 0< Speed Ratio <7	8 seconds Continuos	Type B

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Pressure Control Solenoid Circuit Electrical	P0748	0V to 12V This DTC detects a continuous open or short to ground in the PCS circuit or the PCS sensor	Pressure Control Solenoid short/open bit is set. (i.e. - The FM Duty Cycle is outside the range of 0.5% - 95%.)	Pressure Control Solenoid is enabled. This diagnostic is disabled if system voltage falls below 10.5 volts at low temp (-40 C) or 12.5 at high temp (151 C) for > 0.025 sec. The Diagnostic is enabled again when system voltage recovers to above 11 volts at low temp or 13 volts at high temp. The disable and enable voltage values are determined by linear interpolation when the transmission fluid temperature is between the low and high values. ** see description of retest mode at bottom	0.2 seconds Continuos	Type C
Shift Solenoid A Performance Stuck Off	P0751	This DTC detects 2-2-3-3 shift pattern	Fail Counter >=2 The fail counter is incremented if fail cases 1 & 2 are true	General No TPS DTC's No VSS low or intermittent DTC's No Shift or TCC Solenoid electrical DTC's No PSA DTC's No ISS DTC's Engine Speed > 500 rpm for 5 sec and & not in fuel cutoff Vehicle speed >5 mph 20 C < Trans. Temp. < 130 C 8 volts <System Voltage < 18volts 150 rpm < Input Speed < 8000 rpm Output Speed > 300 rpm No Torque DTC No Trans Slipping DTC Fail Case 1 Commanded Gear is 1 Ratio is 2nd gear (1.52 - 1.62) TPS> 5% 20 ftlbs < Eng Torque < 200 ftlbs Gear Change Timer > 1 sec Fail Fail Case 2 Commanded gear is 4 Ratio is 3rd gear (.95 - 1.05) TPS> 10% 30 ftlbs < Eng Torque < 200 ftlbs Gear Change Timer > 1 sec	Fail Case1 1 sec Fail Case2 1 sec Continuos	Type B

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Shift Solenoid A Performance Stuck On	P0752	This DTC detects 1-1-4-4 shift pattern	Fail Counter >=2 The fail counter is incremented if fail cases 3 & 4 are true	General No TPS DTC's No VSS low or intermittent DTC's No Shift or TCC Solenoid electrical DTC's No ISS DTC's Engine Speed > 500 rpm for 5 sec and & not in fuel cutoff Vehicle speed >5 mph 20 C < Trans. Temp. < 130 C 8 volts <System Voltage < 18volts 150 rpm < Input Speed < 8000 rpm Output Speed > 300 rpm No Torque DTC No Trans Slipping DTC No Pressure Switch DTC Fail Case 3 Commanded gear is 2 Ratio is 1st gear (2.87 - 2.97) TPS> 10% 20 ftlbs < Eng Torque < 200 ftlbs Gear Change Timer > 1 sec Fail Case 4 Commanded gear is 3 Ratio is 4th gear (0.65 - 0.75) TPS> 10% 20 ftlbs < Eng Torque < 200 ftlbs Gear Change Timer > 1 sec FC4 Enabled	Fail Case3 1 sec Fail Case4 1 sec Continuos	Type B
Shift Solenoid A Electrical	P0753	0V to 12V This DTC detects a continuous open or short to ground in the SSA circuit or the SSA solenoid	Every 100msec the circuit is checked and a fail counter is incremented if an open or short is detected. In order to fail the solenoid must change states	System Voltage between 9 and 18 volts Ign On Engine Speed > 500 rpm for 5 sec & not in fuel cutoff	Fail Counter >43 Counts out of 50 Total Counts Continuous	Type B

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Shift Solenoid B Performance Stuck Off	P0756	This DTC detects 4-3-3-4 shift pattern	Fail Counter >=2 The fail counter is incremented if fail cases 5 & 6 are true	General No TPS DTC's No VSS low or intermittent DTC's No Shift or TCC Solenoid electrical DTC's No ISS DTC's Engine Speed > 500 rpm for 5 sec and & not in fuel cutoff Vehicle speed >5 mph 20 C < Trans. Temp. < 130 C 8 volts <System Voltage < 18volts 150 rpm < Input Speed < 8000 rpm Output Speed > 300 rpm No Torque DTC No Trans Slipping DTC No Pressure Switch DTC Fail Case 5 Commanded gear is 1 Ratio is 4th gear (0.65 - 0.75) TPS> 10% 60 ftlbs < Eng Torque < 200 ftlbs Gear Change Timer > 1 sec -8191 rpm < Slip < 8191 rpm Output Speed >= 100 rpm Fail Case 6 Commanded gear is 2 Ratio is 3rd gear (0.95 - 1.05) TPS> 10% 60 ftlbs < Eng Torque < 200 ftlbs Gear Change Timer > 1 sec	<u>Fail Case5</u> 1 sec <u>Fail Case6</u> 1 sec Continuous	Type A

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Shift Solenoid B Performance Stuck On	P0757	This DTC detects 1-2-2-1 shift pattern	Fail Counter >=1 The fail counter is incremented if fail cases 7 & 8 are true	General No TPS DTC's No VSS low or intermittent DTC's No Shift or TCC Solenoid electrical DTC's No ISS DTC's Engine Speed > 500 rpm for 5 sec and & not in fuel cutoff Vehicle speed >5 mph 20 C < Trans. Temp. < 130 C 8 volts <System Voltage < 18volts 150 rpm < Input Speed < 8000 rpm Output Speed > 300 rpm No Torque DTC No Trans Slipping DTC No Pressure Switch DTC Fail Case 7 Commanded gear is 3 Ratio is 2nd gear (1.52 - 1.62) TPS> 10% 20 ftlbs < Eng Torque < 200 ftlbs Gear Change Timer > 1 sec Fail Case 8 Commanded gear is 4 Ratio is 1st gear (1.8 - 2.97) TPS> 5% 0 ftlbs < Eng Torque < 1300 ftlbs Gear Change Timer > 1 sec	<u>Fail Case 7</u> 1 sec <u>Fail Case 8</u> 1 sec Continuous	Type A
Shift Solenoid B Electrical	P0758	0V to 12V This DTC detects a continuous open or short to ground in the SSB circuit or the SSB solenoid	Every 100msec the circuit is checked and a fail counter is incremented if an open or short is detected. . In order to fail the solenoid must change states	System Voltage between 9 and 18 volts Ign On Engine Speed > 500 rpm for 5 sec & not in fuel cutoff	Fail Counter >43 Counts out of 50 Total Counts Continuous	Type A
TCC PWM Solenoid Electrical	P1860	0V to 12V This DTC detects a continuous open or short to ground in the TCC PWM circuit or the TCC PWM sensor	Every 100msec the circuit is checked and a fail counter is incremented if an open or short is detected.	System Voltage between 9 and 18 volts Engine Speed > 500 rpm for 5 sec & not in fuel cutoff TCC Duty Cycle < 10% or > 90%	Fail Counter >43 Counts out of 50 Total Counts Continuous	Type B

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TCC Release Switch Circuit Fault	P1887	This DTC detects the Release switch being open (indicating TCC is not applied) when the PCM and slip speed indicate the TCC is locked.	Fail Counter >=2 The fail counter is incremented if TCC Release Switch Status indicates released (switch open) for 8 seconds.	Engine Speed > 500 rpm for 5 sec and not in fuel cutoff TCC commanded on TCC Slip between -20 and 60 rpm No TCC solenoid DTC No ISS DTC's Engine Torque is between 30 and 300 ft-lbs. TCC Pressure is between 15 and 120 psi.	6 sec Continuous	Type B