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
Input Speed Sensor - IntermiTFTent	P0716	0 RPM to 8192 RPM The DTC detects an unrealistic large change in Input Speed.	Input Speed loss > 1200 RPM	PP Sensor > 15% Vehicle Speed > 20 MPH Engine Speed > 475 rpm > 7.0 seconds No ISS DTC's No OSS DTC's No SSA or SSB Sol. DTC's	4.0 seconds Continuous	DTC Type B
Input Speed Sensor - Low input	P0717	0 RPM to 8192 RPM The DTC detects a Low Input Speed when the vehicle has large Vehicle speed.	Input Speed < 50 RPM	VSS > 20 MPH Engine Speed > 475 rpm > 7.0 seconds No OSS DTC's No PSA Sensor DTC's PSA indicating not in P/N	5.0 seconds Continuous	DTC Type B
Output Speed Sensor - Low input	P0722	0 RPM to 8192 RPM This DTC detects a low output speed when the vehicle has a large input speed in a drive gear range.	Output Speed < 25 RPM	Pedal Position => 10.0% Engine Speed < 3800 RPM 80 ft lbs<Engine Torque<475ftlbs Input Speed > 1500 RPM 0 KPA > VAC < 106 KPA No PSA DTC No Map Sensor DTC's PSA indicated not Park or Neutral	4.0 seconds Continuous	DTC Type B
Output Speed Sensor - Intermittent	P0723	0 RPM to 8192 RPM This DTC detects an unrealistic large change in output shaft speed.	Output Speed loss > 1000 RPM	Engine running > 475 rpm > 7.0 seconds PSA indicated not Park or Neutral No PSA change > 6.38 sec. No Output Speed rise > 250 rpm within 2 sec. No 4WD Lo state change > 2.0 sec. No PSA DTC No Four Wheel Drive Low DTC Not in four wheel drive low.	3.5 seconds Continuous	DTC Type B
TCC System Stuck Off	P0741	This DTC detects high torque converter slip when the TCC is commanded on.	TCC Slip is > 175 RPM	Engine running > 475 rpm > 7.0 seconds +20 C < TFT < +150.5 deg. C 15% < PP sensor < 100% TCC is commanded > 0.5 sec TCC Duty Cycle => 70% No PSA change > 4.0 sec. Commanded Gear = 2nd, 3rd, or 4th Gear Range is D4, D3 or D2 No PSA DTC No OSS DTC's No ISS DTC No TCC PWM Sol. DTC's	3.0 seconds 4th Occurrence Continuous	DTC Type B

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
TCC System Stuck ON	P0742	This DTC detects low torque converter slip when the TCC is commanded off.	TCC Slip is between -10.0 rpm and +10.0 rpm	Engine running > 475 rpm > 7.0 seconds and < 3300 rpm 130 ft lbs<Eng Torque<475 ftlbs PP sensor > 15 % 0 KPA > VAC < 106 KPA Commanded Gear is not 1st PSA Range is D4 No ISS DTC's No OSS DTC's No PSA DTC No TCC Stuck Off DTC No TCC PWM Sol. DTC No Engine Speed DTC's No MAP DTC's	4.5 seconds 2nd Occurrence Continuous	DTC Type B
Shift Solenoid A Performance (1-2 Shift Solenoid)	P0751	This DTC detects 2-2-3-3 or a 1-1-4-4 shift pattern (Shift Solenoid stuck Off = 2-2-3-3 / Shift Solenoid Stuck On = 1-1-4-4)	**Stuck OFF** Commanded Gear = First with measured Ratio = Second >1.5 sec. **and** Commanded Gear = Fourth with TCC Locked and measured Ratio = Third > 3.0 seconds **Stuck ON** Commanded Gear = Second and measured Ratio = First > 2.2 seconds.	Vehicle Speed > 2.0 MPH PPS > 10.0% +20C < TFT < +130 degrees C 80 ft.lbs<Engine Torque<475 ft. Lbs. 0 KPA > VAC < 106 KPA Engine Speed > 475 rpm > 7.0 sec and < 3750 rpm No PSA DTC's No OSS DTC's Not in Four Wheel Drive Low No Four Wheel Drive DTC No Shift Solenoid Electrical DTC's NO ISS DTC's No Engine Speed Code No MAP DTC's 1st gear = 2.52 < Ratio < 2.43 2nd gear = 1.50 < Ratio < 1.45 3rd gear = 1.02 < Ratio < 0.98 4th gear = 0.77 < Ratio < 0.73	**Stuck OFF** 2nd occurrence **Stuck ON** 5th occurrence Continuous	DTC Type B
Shift Solenoid A Electrical (1-2 Shift Solenoid)	P0753	0V to 12V This DTC detects a continuous open or short to ground in the SSA circuit or the SSA solenoid	Every 100 msec the circuit is checked and a fail counter is incremented if an open or short is detected.	Engine Speed > 475 rpm > 7.0 sec 9.0 < System Voltage < 16.0	Fail Counter >43 Counts out of 50 Total Counts Continuous	DTC Type B

2000 6.5L (L65) C/K-truck, P-truck / chassis
4L80-E TRANSMISSION DIAGNOSTIC PARAMETERS

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
Shift Solenoid B Performance (2-3 Shift Solenoid)	P0756	This DTC detects 4-3-3-4 or a 1-2-2-1 shift pattern (Shift Solenoid stuck On = 4-3-3-4 / Shift Solenoid Stuck Off = 1-2-2-1)	**Stuck ON** Commanded Gear = First and measured Ratio = 3rd > 2.75 seconds. AND Commanded Gear =Second with measured Ratio = Third > 2.75 seconds. **Stuck OFF** Commanded Gear = Third with measured Ratio =Second > 2.75 seconds.	Vehicle Speed > 2.0 MPH PPS > 10.0% +20C < TFT < +130 degrees C 80 ft.lbs<Engine Torque<475 ft.lbs. 0 KPA > VAC < 106 KPA Engine running > 475 rpm > 7.0 seconds and < 3750 rpm No PSA DTC No OSS DTC's Not in Four Wheel Drive Low No Four Wheel Drive DTC No Shift Solenoid Electrical DTC's No ISS DTC's No Engine Speed DTC No MAP DTC's 1st gear = 2.52 < Ratio < 2.43 2nd gear = 1.50 < Ratio < 1.45 3rd gear = 1.02 < Ratio < 0.98 4th gear = 0.77 < Ratio < 0.73	**Stuck On:** 2nd Occurrence **Stuck Off:** 7th Occurrences Continuous	DTC Type A
Shift Solenoid B Electrical (2-3 Shift Solenoid)	P0758	0V to 12V This DTC detects a continuous open or short to ground in the SSB circuit or the SSB solenoid	Every 100 msec the circuit is checked and a fail counter is incremented if an open or short is detected.	Engine Speed > 475 rpm > 7.0 sec 9.0 < System Voltage < 16.0	Fail Counter >43 Counts out of 50 Total Counts Continuous	DTC Type A
PSA Circuit Malfunction	P1810	0V to 12V This DTC detects an invalid state of the PSA sensor or the PSA circuit by deciphering the PSA inputs.	**Fail Case 1** Illegal Trans Pressure Switch State Combinations **Fail Case 2** Gear range is D2 during & after engine startup **Fail Case 3** **(A)** Gear range is P/N with drive ratio < 1.05 OR **(B)** Gear range is Reverse Ratio not between 2.05 and 2.11 OR **(C)** Gear range is Drive with Ratio between 2.05 and 2.11 (Reverse)	**Fail Case 1** Engine Running > 475 RPM > 7.0 seconds 9.0 < System Voltage < 16.0 **Fail Case 2** No OSS DTC's Engine Speed < 50 rpm for > 1.5 sec, then Engine Speed >50 rpm and < 575 rpm for > 0.08 sec, then Engine Speed > 575 rpm. Vehicle Speed < 2.5 mph **Fail Case 3** Engine Running > 475 RPM > 7.0 seconds < 3750 rpm Vehicle > 5.0 MPH PPS > 12% 80 ft. Lbs < Engine Torque < 475 ft. Lbs 9.0 < System Voltage < 16.0 0 KPA > VAC < 106 KPA No OSS DTC's No ISS DTC's No PSA DTC No Shift Solenoid Electrical or Performance DTC's No MAP DTC's	**Fail Case 1** 25.5 seconds **Fail Case 2** 7.5 Seconds **Fail Case 3** 3A > 15.0 seconds 3B > 15.0 seconds 3C > 5.0 seconds Continuous	DTC Type B

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
TCC PWM Solenoid Electrical	P1860	0V to 12V This DTC detects a continuous open or short to ground in the SSB circuit or the SSB solenoid	Every 100 msec the circuit is checked and a fail counter is incremented if an open or short is detected.	Engine Speed > 475 rpm > 7.0 sec Gear = 1st 9.0 < System Voltage < 16.0	Fail Counter >43 Counts out of 50 Total Counts Continuous	DTC Type B
Transmission Component Slipping	P1870	This DTC detects excessive TCC slip when the torque converter clutch should be engaged.	If TCC slip is above 120 rpm and below 525 rpm for 6 sec, then increment the Trans Slip Counter by one. When the counter is greater than 3, the DTC is set.	Engine Speed > 475 rpm >7.0 sec Commanded Gear is 4th Gear Range is D4 12%<PPS<80% +20C<TFT<+130C 70 ft. Lbs < Engine Torque < 475 ft. Lbs TCC Duty Cycle > 75% for 5.0 seconds Speed Ratio >0.7 & < 1.90 Engine Speed > 1200 RPM < 3750 RPM 30< MPH < 110 9.0 < System Voltage < 16.0 0 KPA > VAC < 106 KPA No MAP DTC's TCC Commanded on No PSA DTC's No OSS DTC's No TCC PWM Sol. DTC No SSA Sol. DTC's No SSB Sol. DTC's Shift Solenoid Perf Counters equal zero	6.0 seconds 3rd Occurrence Continuous	DTC Type B
Four Wheel Drive Low Circuit Performance	P1875	0V to 12V This DTC detects a continuous open or short to ground in the Four Wheel Drive Circuit	**Stuck On** 4th Gear with TCC On with 0.95 < Measured Transfer Case Ratio < 1.05 **Stuck Off** Two different commanded gears with 2.65 < Measured Transfer Case Ratio < 2.75 (MTC Ratio = Input Speed Divided by Transfer Case Output Spd	Engine Speed > 475 rpm > 7.0 seconds 9% < PPS < 100% +20C<TFT<+130C Vehicle Speed > 2.0 MPH Gear Range is D4 Shift Solenoid Performance Counters are zero No PSA DTC's No OSS DTC's No ISS DTC's No TCC PWM Sol. DTC No SSA Sol. DTC's No SSB Sol. DTC's	**Stuck On** 5.0 seconds 1st occurrence **Stuck Off** 1.5 seconds 1st occurrence in 2 different gears	DTC Type B

2000 6.5L (L65) C/K-truck, P-truck / chassis
4L80-E 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
Trans Fluid Temp Sensor Circuit Range/ Performance (Contains 2 tests)	P0711	The DTC detects two failure modes of the TFT: 1) A sensor that remains at a value. (Stuck Sensor) 2) an unrealistically large change in Transmission Temperature.	1) Stuck sensor: TFT has not changed => 2.2499 deg C 2) Unrealistic change: TFT changes => 20 deg C	System voltage between 9.0 & 16.0 volts No Engine Coolant DTC's No Output Speed DTC's No Input Speed DTC's No Transmission Component Slipping DTC Engine run > 475 RPM for > 30.0 sec. TFT => 10 AD counts and <= 251 AD counts TFT between -40 deg C and +21 C at startup Engine Coolant => 80.0 deg C Engine Coolant has changed => 55.0 deg C since startup Vehicle Speed since startup => 3 MPH => 900 seconds (cumulative timer) TCC Slip => 60 RPM => 700 seconds (cumulative timer)	1) Stuck sensor: => 80.0 seconds **OR** 2) Unrealistic change: Loop to loop change => 14 times > 20 deg C in 7 seconds (Note: Slip and VSS timers must meet calibrations to enable test 2) Continuous	DTC Type Federal & California D GVW => 15.000 Lbs D
Trans Fluid Temp Sensor Circuit - Low Input (High Temperature)	P0712	0.13671875 V to 4.94140625 V The DTC detects a continuous short to ground in the TFT signal circuit or the TFT sensor	Raw TFT <= 0.13671875 Volts (<=7 A/D counts)	Ignition is On	15.0 seconds Continuous	DTC Type Federal & California D GVW => 15.000 Lbs D
Trans Fluid Temp. Sensor Circuit - High Input (Low Temperature)	P0713	0.13671875 V to 4.94140625 V The DTC detects a continuous open or short to voltage in the TFT signal circuit or the TFT sensor	Raw TFT => 4.94140625 Volts (=> 252 A/D counts)	Ignition is On	400.0 seconds Continuous	DTC Type Federal & California D GVW => 15.000 Lbs D