08 GRP07 All Transmissions

SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE AND RATIONALITY	PRIMARY MALF DETECTION PARAMETERS	SECONDARY MONITORING PARAMETERS AND CONDITIONS	MONITORING TIME LENGTH & FREQUENCY OF CHECK	DTC TYPE
TCM ROM Test	P0601	This DTC detects an error in the flash memory containing the program and calibration.	Checksum calculation algorithm of flash memory, fail counter >= 5 counts	Ignition is On	Continuous	A
TCM Not programmed	P0602	This DTC indicates the flash memory has not been programmed.	KbINFD_NoStartCal = TRUE	Ignition is On	Continuous	A
Power up copy of NVM to RAM	P0603	This DTC detects an error in the RAM copy of NVM @ power up	Checksum calculation algorithm of NVM copy	Ignition is On	Continuous	A
RAM Test	P0604	This DTC tests the read/write capability of each RAM location	Read and write each RAM location	Ignition is On	Continuous	A
Power down copy of NVM to RAM	P062F	This DTC detects an error in the RAM copy of NVM @ power down	Checksum calculation algorithm of NVM copy	Ignition is On	Continuous	A
Transmission Range Switch Circuit	P0705	TCM detects invalid PRNDL (NSBU) range	PRNDL range = Illegal	8.0 < Ignition Voltage < 18.0 V 500 < Engine RPM < 6500 for 5.0 sec, not in fuel cutoff	60.0 sec Type C	Special Type C

Common engine speed enable: 500 RPM <= engine speed <= 6500 RPM for time >= 5.0 seconds
Common ignition voltage enable: 8.0 volts <= ignition voltage <= 18.0 volts
Common vehicle speed enable: 5.0 KPH <= vehicle speed for time >= 5.0 seconds

SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE AND RATIONALITY	PRIMARY MALF DETECTION PARAMETERS	SECONDARY MONITORING PARAMETERS AND CONDITIONS	MONITORING TIME LENGTH & FREQUENCY OF CHECK	DTC TYPE
Trans Fluid Temp Sensor Circuit Range/ Performance	P0711	The DTC detects two failure modes of the TFT: 1) A sensor that remains at a value. (Stuck Sensor) 2) A sensor that remains at a value. (Stuck Sensor) 3) An unrealistically large change in Transmission Temperature. 4) Transmission Temperature remains at a constant value below 20° C for a calibrated time dependant on startup transmission temperature.	Fail Case 1 ΔTFT < 2° C. TCC Slip ≥ 120 RPM for 300 sec cumul. -40° C. ≤ TFT at startup ≤ 20° C. Fail Case 2 ΔTFT < 2° C. 129° C ≤ TFT at startup ≤ 149° C. Fail Case 3 ΔTFT ≥ 20° C Loop to Loop. Fail Case 4 TFT ≤ 20° C after a calibrated amount of time based on a 2D lookup table.	For fail case 1, 2, and 4: Common ignition voltage enable, Common engine speed enable, No Engine Coolant DTC's, No OSS P0722, P0723 DTCs, No ISS P0716, P0717 DTCs, P0711 has not passed this ignition cycle, -40 deg C <= trans fluid temp <= 150 deg C Fail case 1: -40 deg C <= trans fluid temp <= +20 C at startup, Engine coolant => 70 deg C, Engine Coolant has changed => 55 deg C since startup, Vehicle speed since startup => 8 KPH for time => 300 seconds (cumulative timer) Fail case 2: +129 deg C <= trans fluid temp <= +149 C at startup, Engine coolant => 70 deg C, Engine Coolant has changed => 55 deg C since startup, Vehicle speed since startup => 8 KPH for time => 300 seconds (cumulative timer) Fail case 3: System Voltage is between 8 – 18 Volts. Engine Speed 450-7500 for 5 seconds. Fail case 4: Valid TPS, Torque signal, and Crank Signals. 50 ≤ Engine Torque ≤ 1492 8 ≤ Throttle Position ≤ 90 8 ≤ Vehicle Speed ≤ 511 500 ≤ Engine Speed ≤ 6500 -39 ≤ Coolant Temperature ≤ 149	Fail case 1: Time => 80.0 seconds Continuous Fail case 2: Time => 80.0 seconds Continuous Fail case 3: Time => 7.0 seconds	Special Type C
Trans Fluid Temp Sensor Circuit - Low Input (High Temperature)	P0712	0 ohms to 134217728 ohms The DTC detects a low resistance in the transmission fluid temperature sensor circuit.	Transmission fluid temperature sensor circuit resistance <= 43.18 ohms	Common ignition voltage enable, Common engine speed enable	12 seconds	Special Type C
Trans Fluid Temp. Sensor Circuit - High Input (Low Temperature)	P0713	0 ohms to 134217728 ohms The DTC detects a high resistance in the transmission fluid temperature sensor circuit.	Transmission fluid temperature sensor circuit resistance >= 171862 ohms	Common ignition voltage enable, Common engine speed enable, Transmission output speed >= 200 RPM for time >= 200 seconds, Transmission torque converter slip >= 120 RPM for time >= 200 seconds, No P0716, P0717, P0722, P0723 DTCs active	80 seconds	Special Type C

Common engine speed enable: 500 RPM <= engine speed <= 6500 RPM for time >= 5.0 seconds
Common ignition voltage enable: 8.0 volts <= ignition voltage <= 18.0 volts
Common vehicle speed enable: 5.0 KPH <= vehicle speed for time >= 5.0 seconds

SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE AND RATIONALITY	PRIMARY MALF DETECTION PARAMETERS	SECONDARY MONITORING PARAMETERS AND CONDITIONS	MONITORING TIME LENGTH & FREQUENCY OF CHECK	DTC TYPE
Input Speed Sensor Circuit-Range/PERF	P0716	0 RPM TO 8192 RPM The DTC detects an unrealistically large change in the Input Speed Circuit Input	Input Speed changes => 1000 RPM	Common ignition voltage enable, Common engine speed enable, No ISS P0717 DTC, Input speed raw >= 1050 RPM for time >= 2 seconds, Input speed delta < 500 RPM for time >= 2 seconds, Throttle position >= 8 % and throttle position valid from ECM, Vehicle speed >= 16 KPH, No OSS P0722, P0723 DTCs, No P0757, P0973, P0974 SSA Sol. DTCs, Engine torque >= 50 Nm and toque valid from ECM	Fail time >= 3.25 seconds Continuous	B
Input Speed Sensor Circuit-No Signal	P0717	0 RPM TO 8192 RPM The DTC detects a Low Input Speed when the vehicle has large Vehicle and Engine Speeds	Input Speed < 50 RPM	Common ignition voltage enable, Common engine speed enable, Vehicle speed >= 16 KPH, Engine torque >= 50 Nm and toque valid from ECM, No OSS P0722 P0723 DTCs, No ISS P0717	Fail timer >= 4.5 seconds Continuous	B
Transmission Tow Haul Switch Circuit	P071A GMT900 & GMT610 Only	Continuous low voltage state of Tow Mode switch circuit	Tow Mode switch closed (low voltage)	No P1762 DTC 8.0 $\leq$ Ignition Voltage $\leq$ 18.0 V 500 $\leq$ Engine RPM $\leq$ 6500 for 5.0 sec	600 sec Continuous	Special Type C
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 driving gear range with a high Engine Torque value.	Output Speed <= 50 RPM	Common ignition voltage enable, Comon engine speed enable, PRNDL Range is not Park/Neutral, Power Take Off (PTO) is not active, -40 DegC <= transmission temperature <= 150 DegC, 50 Nm <= Engine Torque <= 1492 Nm and toque valid from ECM, Throttle Position => 8%, 1500 <= Input Speed <= 6500 RPM, TCC slip speed >= -20 RPM, No OSS P0722, P0723 DTCs, No ISS P0716, P0717 DTCs, No PSA P1810, P1815, P1816, P1818 DTCs	Fail timer >= 4.5 seconds Continuous	B
Output Speed Sensor - Drop	P0723	0 RPM to 8192 RPM This DTC detects an unrealistic large DROP in Output Shaft speed.	Output Speed DROP => 1200 RPM	Common ignition voltage enable, Comon engine speed enable, PRNDL range change timer >= 6 seconds, 4WD range change timer >= 6 seconds, N0 P0716, P0717, P0974 DTCs Input speed delta < 500 RPM for time >= 2 seconds, Output speed raw >= 1200 RPM for time >= 2 seconds, Output speed change <= 500 RPM for time >= 2 seconds	Fail timer >= 3.25 seconds Continuous	B

Common engine speed enable: 500 RPM <= engine speed <= 6500 RPM for time >= 5.0 seconds
Common ignition voltage enable: 8.0 volts <= ignition voltage <= 18.0 volts
Common vehicle speed enable: 5.0 KPH <= vehicle speed for time >= 5.0 seconds

SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE AND RATIONALITY	PRIMARY MALF DETECTION PARAMETERS	SECONDARY MONITORING PARAMETERS AND CONDITIONS	MONITORING TIME LENGTH & FREQUENCY OF CHECK	DTC TYPE
TCC System Stuck OFF	P0741	This DTC detects high torque converter slip when the TCC is commanded ON in 2nd, 3rd and/or 4th Gear.	TCC slip speed => 100 RPM (GMT610 & GMT900 only) TCC slip speed => 150 RPM (GMT345/55 & GMT360 only) Fail counter >= 2 counts	Common ignition voltage enable, Comon engine speed enable, Throttle position 8-90% and throttle valid from ECM, 50 Nm <= enginre torque <= 1492 Nm and toque valid from ECM, Transmission fluid tmperature 20-130 DegC, No TCC electrical P1866 or P1867 DTCs, Power Take Off (PTO) is not active, No ISS P0716, P0717 DTC's, No OSS P0722, P0723 DTC's, No TCC stuck on P0742 DTC, 1.544 <= gear ratio <= 1.706 (2nd gear), 0.95 <= gear ratio <= 1.05 (3rd gear) and 0.663 <= gear ratio <= 0.733 (4TH Gear) TCC on or locked, TCC capacity (PWM duty cycle) => 65 % TCC on time => 0.1 second	Fail timer >= 5.0 seconds Continuous	B
TCC System Stuck ON	P0742	This DTC detects low torque converter slip when the TCC is commanded off.	-20 RPM <= TCC slip speed <= 40 RPM Fail counter >= 3 counts	Common ignition voltage enable, Comon engine speed enable, Throttle position 8-90 % and throttle valid from ECM, 50 Nm <= enginre torque <= 1492 Nm and toque valid from ECM, 20 <= Transmission fluid tmperature <= 130 DegC, Power Take Off (PTO) is not active, No ISS P0716, P0717 DTC's, No OSS P0722, P0723 DTC's, No TCC electrical P1866 or P1867 DTCs, No TCC stuck off P0741 DTC, 500 RPM <= engine speed <= 6500 RPM, 16 KPH <= vehicle speed <= 511 KPH, 0.663 <= gear ratio <= 1.706 (2nd, 3rd , 4th gear), commanded gear > 1st and TCC commanded off	Fail timer >= 6 second Continuous	B

Common engine speed enable: 500 RPM <= engine speed <= 6500 RPM for time >= 5.0 seconds
Common ignition voltage enable: 8.0 volts <= ignition voltage <= 18.0 volts
Common vehicle speed enable: 5.0 KPH <= vehicle speed for time >= 5.0 seconds

SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE AND RATIONALITY	PRIMARY MALF DETECTION PARAMETERS	SECONDARY MONITORING PARAMETERS AND CONDITIONS	MONITORING TIME LENGTH & FREQUENCY OF CHECK	DTC TYPE
Shift Solenoid A Performance Normal shift pattern 1234 Failure mode shift pattern 2233	P0751	This DTC detects incorrect gear ratios when 1st gear and 4th gear are commanded.	Fail case 1 AND Fail case 2 Are TRUE, increment fail counter P0751 set when fail counter >= 2 counts	Common ignition voltage enable, Comon engine speed enable, Throttle position valid from ECM, Engine torque valid from ECM, No ISS P0716, P0717 DTC's, No OSS P0722, P0723 DTC's, No P0973, P0974, P0976, P0977 DTCs, No P0742 or P0894 DTCs, 20 DegC <= transmission fluid temperature <= 130 DegC, 150 RPM <= input speed <= 6500 RPM Transmission output speed >= 150 RPM Power Take Off (PTO) is not active, Throttle position => 8%, 50 Nm <= engine torque <= 1492 Nm <u>Fail case 1:</u> Command gear = 1st 1.544 <= measured gear ratio <= 1.706 (2nd gear) <u>Fail case 2:</u> Command gear = 4th 0.95 <= measured gear ratio <= 1.05 (3rd gear) 2 Counts	<u>Fail case 1:</u> Fail timer >= 2 seconds continuous <u>Fail case 2:</u> Fail timer >= 3.0 seconds continuous	B
Shift Solenoid A Performance Normal shift pattern 1234 Failure mode shift pattern 1144	P0752	This DTC detects incorrect gear ratio when 2nd gear is commanded.	Fail case 3 fail counter >= 2 counts	Common ignition voltage enable, Comon engine speed enable, Throttle position valid from ECM, Engine torque valid from ECM, No ISS P0716, P0717 DTC's, No OSS P0722, P0723 DTC's, No P0973, P0974, P0976, P0977 DTCs, No P0742 or P0894 DTCs, 20 DegC ≥ transmission fluid temperature < 130 DegC, 150 RPM ≤ input speed <= 6500 RPM Transmission output speed >= 150 RPM Power Take Off (PTO) is not active, Throttle position => 8%, 50 Nm <= engine torque <= 1492 Nm <u>Fail case 3:</u> Command gear = 2nd 2.906 <= measured gear ratio <= 3.212 (1st gear) <u>Fail case 4:</u> Command gear = 3rd .663 <= measured gear ratio <= .733 (4th gear)	<u>Fail case 3:</u> Fail Count 2.0 Fail timer >= 2.25 seconds continuous <u>Fail case 4:</u> Fail Count 2.0 Fail timer >= 3.0 seconds continuous	B

Common engine speed enable: 500 RPM <= engine speed <= 6500 RPM for time >= 5.0 seconds
Common ignition voltage enable: 8.0 volts <= ignition voltage <= 18.0 volts
Common vehicle speed enable: 5.0 KPH <= vehicle speed for time >= 5.0 seconds

SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE AND RATIONALITY	PRIMARY MALF DETECTION PARAMETERS	SECONDARY MONITORING PARAMETERS AND CONDITIONS	MONITORING TIME LENGTH & FREQUENCY OF CHECK	DTC TYPE
Shift Solenoid B Performance Normal shift pattern 1234 Failure mode shift pattern 4334	P0756	This DTC detects incorrect gear ratios when 1st gear and 2nd gear are commanded.	Fail case 1 AND Fail case 2 Are TRUE, increment fail counter P0756 set when fail counter >= 2 counts	Common ignition voltage enable, Comon engine speed enable, Throttle position valid from ECM, Engine torque valid from ECM, No ISS P0716, P0717 DTC's, No OSS P0722, P0723 DTC's, No P0973, P0974, P0976, P0977 DTCs, No P0742 or P0894 DTCs, 20 DegC <= transmission fluid temperature <= 130 DegC, 150 RPM ≥ input speed ≤ 6500 RPM Transmission output speed >= 150 RPM Power Take Off (PTO) is not active, Throttle position => 8%, 50 Nm <= engine torque <= 1492 Nm <u>Fail case 5:</u> Command gear = 1st 0.663 <= measured gear ratio <= .733 (4th gear) <u>Fail case 6:</u> Command gear = 2nd 0.95 <= measured gear ratio <= 1.05 (3rd gear)	<u>Fail case 5:</u> Fail timer >= 2.0 seconds continuous <u>Fail case 6:</u> Fail timer >= 3.0 seconds continuous	A
Shift Solenoid B Performance Normal shift pattern 1234 Failure mode shift pattern 1221	P0757	This DTC detects incorrect gear ratio when 3rd gear is commanded.	Fail Case 7 AND Fail Case 8 Are TRUE, increment fail counter P0757 set when fail counter >= 2 counts	Common ignition voltage enable, Comon engine speed enable, Throttle position valid from ECM, Engine torque valid from ECM, No ISS P0716, P0717 DTC's, No OSS P0722, P0723 DTC's, No P0973, P0974, P0976, P0977 DTCs, No P0742 or P0894 DTCs, 20 DegC <= transmission fluid temperature <= 130 DegC, 150 RPM <= input speed <= 6500 RPM Transmission output speed >= 150 RPM Power Take Off (PTO) is not active, Throttle position => 8%, 50 Nm <= engine torque <= 1492 Nm <u>Fail case 7:</u> Command gear = 3rd 1.544 <= measured gear ratio <= 1.706 (1st gear) <u>Fail case 8:</u> Command gear = 4th 2.906 <= measured gear ratio <= 3.212 (1st gear) Fail Case 8 torque is 10 nm.	<u>Fail case 7:</u> Fail timer >= 2.0 seconds continuous <u>Fail case 8:</u> Fail timer >= 2.0 seconds continuous 2 Counts	A
3-2 Downshift Solenoid Circuit Low Voltage (Short to Ground or Open)	P0787	0V to 12V This DTC detects a continuous open or short to ground in the 3-2 DS circuit or the 3-2 DS solenoid.	Output State is invalid	Engine RPM between 475 & 6200 for 5 sec.System Voltage is between 8 & 18 Vehicle Speed less than 200 KPH	44 out of 50 counts. Continuous	B

Common engine speed enable: 500 RPM <= engine speed <= 6500 RPM for time >= 5.0 seconds
Common ignition voltage enable: 8.0 volts <= ignition voltage <= 18.0 volts
Common vehicle speed enable: 5.0 KPH <= vehicle speed for time >= 5.0 seconds

SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE AND RATIONALITY	PRIMARY MALF DETECTION PARAMETERS	SECONDARY MONITORING PARAMETERS AND CONDITIONS	MONITORING TIME LENGTH & FREQUENCY OF CHECK	DTC TYPE
3-2 Downshift Solenoid Circuit High Voltage (Short to 12 Volts)	P0788	0V to 12V This DTC detects a continuous short to battery in the 3-2 DS circuit or the 3-2 DS solenoid.	Output State is invalid	Engine RPM between 475 & 6200 for 5 sec.System Voltage is between 8 & 18 Vehicle Speed less than 200 KPH	44 out of 50 counts. Continuous	B
Shift Solenoid A Electrical (1-2 Shift Solenoid)	P0973	0V to 12V This DTC detects a continuous open or ground short in the SSA circuit or the SSA solenoid.	Hardware detects output state is invalid	Common ignition voltage enable, Comon engine speed enable,	44 out of 50 counts. Continuous	B
Shift Solenoid A Electrical (1-2 Shift Solenoid)	P0974	0V to 12V This DTC detects a continuous short to power in the SSA circuit or the SSA solenoid.	Hardware detects output state is invalid	Common ignition voltage enable, Comon engine speed enable,	44 out of 50 counts. Continuous	B
Shift Solenoid B Electrical (2-3 Shift Solenoid)	P0976	0V to 12V This DTC detects a continuous open or ground short in the SSB circuit or the SSB solenoid.	Hardware detects output state is invalid	Common ignition voltage enable, Comon engine speed enable,	44 out of 50 counts. Continuous	A
Shift Solenoid B Electrical (2-3 Shift Solenoid)	P0977	0V to 12V This DTC detects a continuous short to power in the SSB circuit or the SSB solenoid.	Hardware detects output state is invalid	Common ignition voltage enable, Comon engine speed enable,	44 out of 50 counts. Continuous	A
Transmission Mode Switch Signal Circuit	P1762 GMT900 & GMT610 Only	TCM Alive Rolling Count value does not match expected value sent from BCM	Alive Rolling Count errors detected	500 $\leq$ Engine RPM $\leq$ 6500 for 5.0 sec	3 error counts out of 10 samples For 10 sec Continuous	Special Type C
PSA Circuit Malfunction – PSA indcates an illegal range value	P1810	0V to 12V This DTC detects an invalid state of the PSA sensor or the PSA circuit by deciphering the PSA inputs.	PSA range = illegal value	Common ignition voltage enable,Common engine speed enable, Power Take Off (PTO) is not active, No PSA P1810 DTC	60 seconds Continuous	B
PSA Start in Wrong Range	P1815	0V to 12V This DTC detects an invalid state of the PSA sensor or the PSA circuit by deciphering the PSA inputs.	PSA indicates D2 (ONLY) before and after Engine Start-up (625 RPM)	System Voltage is between 8.0 & 18.0 No VSS DTC's Engine Speed Transition: Below 50 RPM for => 0.25 sec. then, between 50 and 480 RPM > 0.069 sec. then => 525 RPM. (RPM must remain above the 525 RPM cal) Output Speed <= 250 RPM	3.25 seconds Continuous	B
PSA Circuit Malfunction – PSA indicates P/N with drive gear ratio	P1816	0V to 12V This DTC detects an invalid state of the PSA sensor or the PSA circuit by deciphering the PSA inputs.	PSA range = P/N And 1.739 >= gear ratio >= 0.649 NOTE: Ratio is measured NI/NO	Common ignition voltage enable, Common engine speed enable, Power Take Off (PTO) is not active, Throttle position valid from ECM, Engine torque valid from ECM, No ISS P0716, P0717 DTC's, No OSS P0722, P0723 DTC's, No P0973, P0974, P0976, P0977 DTCs, No P0751, P0752, P0756, P0757 DTCs, No P1810, P1815, P1816, or P1818 DTCs, Transmission output speed >= 350 RPM, Throttle position => 8%, 50 Nm <= engine torque <= 1492 Nm	6 seconds Continuous	B

Common engine speed enable: 500 RPM <= engine speed <= 6500 RPM for time >= 5.0 seconds
Common ignition voltage enable: 8.0 volts <= ignition voltage <= 18.0 volts
Common vehicle speed enable: 5.0 KPH <= vehicle speed for time >= 5.0 seconds

08 GRP07 All Transmissions

SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE AND RATIONALITY	PRIMARY MALF DETECTION PARAMETERS	SECONDARY MONITORING PARAMETERS AND CONDITIONS	MONITORING TIME LENGTH & FREQUENCY OF CHECK	DTC TYPE
PSA Circuit Malfunction – PSA indicates drive range with measured reverse gear ratio	P1818	0V to 12V This DTC detects an invalid state of the PSA sensor or the PSA circuit by deciphering the PSA inputs.	PSA range = D4, D3, D2, D1, or P/N and 3.273 >= gear ratio >= 0.649 NOTE: Ratio is measured NI/NO	Common ignition voltage enable, Common engine speed enable, Engine torque valid from ECM, No OSS P0722, P0723 DTC's, No P1810, P1815, P1816, or P1818 DTCs, Vehicle speed >= 50 RPM, 20 Nm <= engine torque <= 1492 Nm Throttle position => 8 %	5 seconds Continuous	B
Ign. Switch Run Crank Circuit	P2534	Detcts a continuous open in the Ignition 1 switch circuit	The Fail counter is incremented every 25ms if an open is detected.	Engine Running	Fail Counts = 200 out of 220 counts	A
TCC PWM Solenoid Electrical	P2763	0V to 12V This DTC detects a continuous short to power in the TCC PWM circuit or the TCC PWM solenoid.	Hardware detects output state is invalid	Common ignition voltage enable, Comon engine speed enable,	44 out of 50 counts. Continuous	B
TCC PWM Solenoid Electrical	P2764	0V to 12V This DTC detects a continuous open or ground short in TCC PWM circuit or the TCC PWM solenoid.	Hardware detects output state is invalid	Common ignition voltage enable, Comon engine speed enable,	44 out of 50 counts. Continuous	B
TCC Enable Solenoid Circuit Low Voltage Short to Ground or Open	P2769	0V to 12V This DTC detects a continuous open or short to ground in the TCC Enable Solenoid circuit or the TCC Enable Solenoid.	Output State is invalid	Engine RPM between 475 & 6200 for 5 sec.System Voltage is between 8 & 18 Vehicle Speed less than 200 KPH	44 out of 50 counts. Continuous	B
TCC Enable Solenoid Circuit High Voltage Short to 12 Volts (Sol with very low res)	P2770	0V to 12V This DTC detects a continuous short to battery in the TCC Enable Solenoid circuit or the TCC Enable Solenoid.	Output State is invalid	Engine RPM between 475 & 6200 for 5 sec.System Voltage is between 8 & 18 Vehicle Speed less than 200 KPH	44 out of 50 counts. Continuous	B
CAN Bus Error ECU	U0073	This DTC detects a communication problem between the TCM and ECU	Fail Count = 5 out of 5 (Time ≈ 5 sec)	Common ignition voltage enable	Continuous	B
CAN Bus Error ECU	U0100	This DTC detects a communication problem between the TCM and ECU	No valid ECU CAN message for 12 Counts	Common ignition voltage enable	Continuous	B

REVISION LEVEL	DATE	COMMENT
01	18-DEC-06	Based off of 2008 Technical Diagnostic Matrix

- ***NOTE:*** **Author reserves the right to make changes and/or modifications without notice to use.**

Common engine speed enable: 500 RPM <= engine speed <= 6500 RPM for time >= 5.0 seconds
Common ignition voltage enable: 8.0 volts <= ignition voltage <= 18.0 volts
Common vehicle speed enable: 5.0 KPH <= vehicle speed for time >= 5.0 seconds