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SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE and RATIONALITY	PRIMARY MALFUNCTION DETECTION PARAMETERS	SECONDARY MALFUNCTION PARAMETERS and CONDITIONS	MONITORING TIME LENGTH and DTC TYPE A (MIL), B (MIL NIC), C (No MIL)
System Voltage Low	P0562		Ignition voltage < 8.68 V Ignition ON for 1000 msec Count = 20 @ 1.0 sec	Input speed > 800 RPM Ignition ON Not in Emergency mode **No faults:** P0717	1.0 sec FATKO Type A
System Voltage High	P0563		Ignition voltage > 18.0 V Ignition ON for 1000 msec Count = 20 @ 1.0 sec	Input speed > 800 RPM Ignition ON Not in Emergency mode **No faults:** P0717	1.0 sec FATKO Type A
Checksum Error	P0601	Calculated checksum differs from actual checksum in ROM	Count = 2		2 counts FATKO Type A
RAM Read/Write Error	P0604	Error in accessing Random Access Memory			2 counts FATKO Type A
Gear Selector Fault	P0705	Failure combination of A, B, C, and PA signals (see below)	Count = 5 @ 1.0 sec		Illegal state $\geq$ 1.0 sec FATKO Type A

Failure Modes for Selector Position Switch

A	B	C	PA
X	X	X	X
X	X	X	O
O	X	X	X
X	X	O	X
O	O	O	X
X	O	X	X

X = OFF   O = ON

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D   page 1
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03

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SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE and RATIONALITY	PRIMARY MALFUNCTION DETECTION PARAMETERS	SECONDARY MALFUNCTION PARAMETERS and CONDITIONS	MONITORING TIME LENGTH and DTC TYPE A (MIL), B (MIL NIC), C (No MIL)
Transmission Temperature Stuck	P0711	Detects a Transmission Temperature which remains constant for period of time in which a measurable change is expected	Highest temperature = Oil temperature at initialization time $\pm$ 5° C.	Oil temperature at initialization < 0° C. 10 < A/D of Oil temp sensor < 1000 Range = D, I, L, R DS_Active = TRUE RANGE = Q_NORMAL Not in Emergency mode	900 sec Continuous FATKO Type A
Transmission Temperature Sensor Circuit: Low Input	P0712	Detects A/D < 10	Count = 30 @ 10.0 sec	Not in Emergency mode DS_Active = TRUE	10.0 sec. Continuous FATKO Type A
Transmission Temperature Sensor Circuit: High Input	P0713	Detects A/D > 1000	Count = 12 @ 1.0 sec	No Engine Coolant codes DS_Active = TRUE Drive time > 900 sec Engine coolant temperature > 50° C. Not in Emergency mode	1000 msec Continuous FATKO Type A

Input Speed Sensor Circuit: No Signal	P0717	Detects no Input Speed sensor pulses while detecting pulses from Output Speed sensor	FAIL CASE 1
			Detect no pulse from Input Speed sensor while detecting 6 pulses from Output Speed sensor
			
			Count = 500
			
			FAIL CASE 2
			Digital signal < 45 or > 545 counts from Input Speed Sensor
			
			Count = 300
				FAIL CASE 1
				Range = D, I, or L
				Output speed * expected gear ratio > 600 RPM
				IF
				  Vehicle speed > 66 km/hr
				      OR
				  Trans Oil Temp > 20° C.
				THEN
				  Range from P, R, N to Drive: > 2.5 sec.
				ELSE
				  Range from P, R, N to Drive: > 8.0 sec.
				END IF
				Not shifting
				DS_Active = TRUE
				Not in Emergency mode
				Gear $\geq$ 2nd
				Not in B1 release control
				No faults: P0705, P0711, P0712, P0713, P0722
				
				FAIL CASE 2
				DS_Active = TRUE
				Not in Emergency mode
					FAIL CASE 1
					N/A
					
					FAIL CASE 2
					100 msec continuously
					
					FATKO
					Type A

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D   page 2
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03

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SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE and RATIONALITY	PRIMARY MALFUNCTION DETECTION PARAMETERS	SECONDARY MALFUNCTION PARAMETERS and CONDITIONS	MONITORING TIME LENGTH and DTC TYPE A (MIL), B (MIL NIC), C (No MIL)

Output Speed Sensor: Low Voltage	P0722	Detects no vehicle speed when Input Speed signal is present	FAIL CASE 1
			Detect no pulse from output speed sensor while detecting 12 pulses from input speed sensor
			
			Count = 500
			
			FAIL CASE 2
			Digital signal < 45 or > 545 counts from Output Speed Sensor
			
			Count = 300 @ 100 msec
				FAIL CASE 1
				Range = D, I, or L
				IF
				  Vehicle speed > 66 km/hr
				       OR
				  Trans Oil Temp > 20° C.
				THEN
				  Range from P, R, N to Drive: > 2.5 sec.
				ELSE
				  Range from P, R, N to Drive: > 8.0 sec.
				END IF
				Not in Neutral control, not shifting
				DS_Active = TRUE
				Not in Emergency mode
				
				No faults: P0705, P0711, P0712, P0713,
				          P0722
				
				FAIL CASE 2
				DS_Active = TRUE
				Not in Emergency mode
					FAIL CASE 1
					15 sec. at 2000 RPM input speed
					 5 sec. at 6000 RPM input speed
					
					FAIL CASE 2
					
					100 msec continuously
					
					FATKO
					Type A

Engine Speed Circuit Malfunction	P0727	Engine speed information failure on CAN bus	TCM receives Engine Speed Validity = FALSE Count = 1	3.0 sec. after Ignition On OR Reset of counter DS_ACTIVE_CAN = TRUE Not in Emergency mode No faults: U2105	4.0 sec. continuously FATKO Type A
Gear 1 Manual Low fault (S5 Off, SLU Off)	P0730	Compares Expected Ratio to Actual Ratio	Current Gear = 1st engine braking Absolute value(1-Current Ratio/Expected Ratio) > 20% Count = 12 @ 1.0 sec.	500 ≤ Output RPM ≤ 1260 Throttle = 0.0% 8.0 sec. after changing to D, I, L 0.5 sec. after shifting control Oil temperature ≥ 20.0° C. Shift position = L Engine speed > 400 RPM Ignition voltage ≥ 10.5 V Not shifting, not in ND control DS_Active = TRUE No faults: P0705, P0711, P0712, P0713, P0717, P0722, P0727, P0741, P0962, P0963, P0966, P0967, P0970, P0971, P0973, P0974, P0976, P0977, P0979, P0980, P0982, P0983, P0985, P0986, P1781, P1791	1.0 sec. continuously FATKO Type A

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D   page 3
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03

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SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE and RATIONALITY	PRIMARY MALFUNCTION DETECTION PARAMETERS	SECONDARY MALFUNCTION PARAMETERS and CONDITIONS	MONITORING TIME LENGTH and DTC TYPE A (MIL), B (MIL NIC), C (No MIL)
Gear 1 ratio fault	P0731	Compares (Input speed/Output speed) to Commanded ratio	Current Gear = 1st Gear ratio = 2.22 ± 4% Count = 5 @ 1.0 sec	500 ≤ Output RPM ≤ 1260 Throttle ≥ 40.0% Engine acceleration > 0 for 1.0 sec. 8.0 sec. after changing to D, I, L 0.5 sec. after shifting control Oil temperature ≥ 20.0° C. Shift position = D, I, L Engine speed ≥ 400 RPM Ignition voltage ≥ 10.5 V Not shifting, not garage shifting Brake off, spinning = FALSE DS_Active = TRUE No faults: See P0730 + U2104, U2105	1.0 sec. continuously FATKO Type A
Gear 2 ratio fault	P0732	Compares (Input speed/Output speed) to Commanded ratio	Current gear = 2nd Absolute value(1-Current Gear/Expected Gear) > 20% Count = 12 @ 1.0 sec	Output RPM ≥ 500 Throttle ≥ 10% 0.5 sec. after B1 clutch apply control finished 8.0 sec. after changing to D, I, L 0.5 sec. after shifting control Oil temperature ≥ 20.0° C. Shift position = D, I, L Engine speed ≥ 400 RPM Ignition voltage ≥ 10.5 V Not shifting, not garage shifting Brake off, spinning = False DS_Active = TRUE No faults: See P0730 + U2104, U2105	1.0 sec. continuously FATKO Type A
Gear 3 ratio fault	P0733	Compares (Input speed/Output speed) to Commanded ratio	Current gear = 3rd Absolute value(1-Current Gear/Expected Gear) > 20% for 1.0 sec. continuously Count = 12 @ 1.0 sec	Output RPM ≥ 500 Throttle ≥ 10% 8.0 sec. after changing to D, I, L 0.5 sec. after shifting control Oil temperature ≥ 20.0° C. Shift position = D, I, L Engine speed ≥ 400 RPM Ignition voltage ≥ 10.5 V Not shifting, not garage shifting Brake off, spinning = False DS_Active = TRUE No faults: See P0730 + U2104, U2105	1.0 sec. continuously FATKO Type A

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03

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SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE and RATIONALITY	PRIMARY MALFUNCTION DETECTION PARAMETERS	SECONDARY MALFUNCTION PARAMETERS and CONDITIONS	MONITORING TIME LENGTH and DTC TYPE A (MIL), B (MIL NIC), C (No MIL)
Gear 4 ratio fault	P0734	Compares (Input speed/Output speed) to Commanded ratio	Current gear = 4th Absolute value(1-Current Gear/Expected Gear) > 20% x4thFail_SLT = ON Current Gear ≠ 3rd gear ratio ± 4% Count = 12 @ 1.0 sec	Output RPM ≥ 500 Throttle ≥ 10% 8.0 sec. after changing to D, I, L 0.5 sec. after shifting control Oil temperature ≥ 20.0° C. Shift position = D, I, L Engine speed ≥ 400 RPM Ignition voltage ≥ 10.5 V Not shifting, not garage shifting Brake off, spinning = False DS_Active = TRUE No faults: See P0730 + U2104, U2105	1.0 sec. continuously FATKO Type A
Gear 5 ratio fault	P0735	Compares (Input speed/Output speed) to Commanded ratio	Current gear = 5th Absolute value(1-Current Gear/Expected Gear) > 20% Count = 12 @ 1.0 sec	Output RPM ≥ 500 Throttle ≥ 10% 8.0 sec. after changing to D, I, L 0.5 sec. after shifting control Oil temperature ≥ 20.0° C. Shift position = D, I, L Engine speed ≥ 400 RPM Ignition voltage ≥ 10.5 V Not shifting, not garage shifting Brake off, spinning = False DS_Active = TRUE No faults: See P0730 + U2104, U2105	1.0 sec. continuously FATKO Type A
Reverse Gear ratio fault	P0736	Compares (Input speed/Output speed) to Commanded ratio	Current gear = Reverse Absolute value(1-Current Gear/Expected Gear) > 20% Count = 12 @ 0.5 sec	Output RPM ≥ 500 8.0 sec. after changing to R 0.5 sec. after shifting control Oil temperature ≥ 20.0° C. Shift position = R Engine speed ≥ 400 RPM Ignition voltage ≥ 10.5 V Not in NR control Brake off DS_Active = TRUE Not in Emergency mode No faults: See P0730 + P0562, P0563, P0601, U2104, U2105	0.5 sec. continuously FATKO Type A

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D   page 5
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03

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SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE and RATIONALITY	PRIMARY MALFUNCTION DETECTION PARAMETERS	SECONDARY MALFUNCTION PARAMETERS and CONDITIONS	MONITORING TIME LENGTH and DTC TYPE A (MIL), B (MIL NIC), C (No MIL)
Torque Converter Clutch System Performance: Slipping	P0741	Detects high Torque Converter slip when TCC commanded on (Lock-Up Slipping)	Engine RPM – Input speed > 100 RPM Count = 6 @ 2.0 sec	Throttle $\geq$ 20% 0.5 sec. after shifting control Engine speed $\leq$ 4000 RPM Shift position = D, I, L Not shifting Ignition voltage $\geq$ 10.5 V SLU (TCC PCS) target current $\geq$ 1000 mA Lock-up ON DS_Active = TRUE Not in Emergency mode No faults: See P0730 + U2104, U2105	$\geq$ 2.0 sec. continuously FATKO Type A
Shift Solenoid C Stuck On	P0762	Hydraulic failure	Current gear = 5th Current gear ratio = 1.451 $\pm$ 4% Absolute value(1-Current Gear/Expected Gear) > 20% Current gear = 4th for 1.0 sec continuously Increase SLT pressure IF Current Ratio = 3rd ratio $\pm$ 4% Count = 12 @1.0 sec	Output RPM $\geq$ 500 Throttle $\geq$ 10% 8.0 sec. after changing to D, I, or L 0.5 sec. after shifting control Oil temperature $\geq$ 20.0° C. Shift position = D, I, or L Engine speed $\geq$ 400 RPM Ignition voltage $\geq$ 10.5 V Not shifting, not garage shifting Brake off, spinning = FALSE DS_Active = TRUE Not in Emergency mode No faults: P0562, P0563, P0601, P0705, P0711, P0712, P0713, P0717, P0722, P0727, P0741, P0744, P0962, P0963, P0966, P0967, P0970, P0971, P0973, P0974, P0976, P0977, P0979, P0980, P0982, P0983, P0985, P0986, P1719, P1781, P1791, U2104, U2105 checksum	1.0 sec. continuously FATKO Type A
Line Pressure PCS (SLT) Short to Ground, Open	P0962	Detects very low current through solenoid	Detects Input A/D < 68 (92 mA) Count = 25 @ 0.5 sec	Not in Emergency mode DS_Active = TRUE	$\geq$ 500 msec. Continuous FATKO Type A
Line Pressure PCS (SLT) B+ Short	P0963	Detects very high current through solenoid	Detects Input A/D > 1000 (1356 mA) Count = 4 @ 0.5 sec	Not in Emergency mode DS_Active = TRUE	$\geq$ 500 msec. Continuous FATKO Type A

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D   page 6
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03

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SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE and RATIONALITY	PRIMARY MALFUNCTION DETECTION PARAMETERS	SECONDARY MALFUNCTION PARAMETERS and CONDITIONS	MONITORING TIME LENGTH and DTC TYPE A (MIL), B (MIL NIC), C (No MIL)
Torque Converter Clutch (TCC) PCS (SLU) Short to Ground, Open	P0966	Detects very low current through solenoid	Detects Input A/D < 68 (92 mA) Count = 25 @ 0.5 sec	Not in Emergency mode DS_Active = TRUE	≥ 500 msec. Continuous FATKO Type A
Torque Converter Clutch (TCC) PCS (SLU) B+ Short	P0967	Detects very high current through solenoid	Detects Input A/D > 1000 (1356 mA) Count = 4 @ 0.5 sec	Not in Emergency mode DS_Active = TRUE	≥ 500 msec. Continuous FATKO Type A
Shift Pressure PCS (SLS) Short to Ground, Open	P0970	Detects very low current through solenoid	Detects Input A/D < 68 (92 mA) Count = 25 @ 0.5 sec	Not in Emergency mode DS_Active = TRUE	≥ 500 msec. Continuous FATKO Type A
Shift Pressure PCS (SLS) B+ Short	P0971	Detects very high current through solenoid	Detects Input A/D > 1000 (1356 mA) Count = 4 @ 0.5 sec.	Not in Emergency mode DS_Active = TRUE	≥ 500 msec. Continuous FATKO Type A
Shift Solenoid A Short to Ground	P0973	Detects Short to Ground	Detects OFF signal of S1 monitor, when S1 driver outputs ON signal Count =1	Not in Emergency mode DS_Active = TRUE 25 msec. after solenoid S1 output changes	≥ 500 msec. Continuous FATKO Type A
Shift Solenoid A B+ Short, Open	P0974	Detects Short to Power or Open	Detects ON signal of S1 monitor, when S1 driver outputs OFF signal Count =1	Not in Emergency mode DS_Active = TRUE 25 msec. after solenoid S1 output changes	≥ 500 msec. Continuous FATKO Type A

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D   page 7
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03

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SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE and RATIONALITY	PRIMARY MALFUNCTION DETECTION PARAMETERS	SECONDARY MALFUNCTION PARAMETERS and CONDITIONS	MONITORING TIME LENGTH and DTC TYPE A (MIL), B (MIL NIC), C (No MIL)
Shift Solenoid B Short to Ground	P0976	Detects Short to Ground	Detects OFF signal of S2 monitor, when S2 driver outputs ON signal Count = 1	Not in Emergency mode DS_Active = TRUE 25 msec. after solenoid S2 output changes	≥ 500 msec. Continuous FATKO Type A
Shift Solenoid B B+ Short, Open	P0977	Detects Short to Power or Open	Detects ON signal of S2 monitor, when S2 driver outputs OFF signal Count = 1	Not in Emergency mode DS_Active = TRUE 25 msec. after solenoid S2 output changes	≥ 500 msec. Continuous FATKO Type A
Shift Solenoid C Short to Ground	P0979	Detects Short to Ground	Detects OFF signal of S3 monitor, when S3 driver outputs ON signal Count = 1	Not in Emergency mode DS_Active = TRUE 25 msec. after solenoid S3 output changes	≥ 500 msec. Continuous FATKO Type A
Shift Solenoid C B+ Short, Open	P0980	Detects Short to Power or Open	Detects ON signal of S3 monitor, when S3 driver outputs OFF signal Count = 1	Not in Emergency mode DS_Active = TRUE 25 msec. after solenoid S3 output changes	≥ 500 msec. Continuous FATKO Type A
Shift Solenoid D Short to Ground	P0982	Detects short to ground	Detects OFF signal of S4 monitor, when S4 driver outputs ON signal Count = 1	not in Emergency mode DS_Active = TRUE 25 msec. after solenoid output changes	≥ 500 msec. Continuous FATKO Type A
Shift Solenoid D B+ Short, Open	P0983	Detects Short to Power or Open	Detects ON signal of S4 monitor, when S4 driver outputs OFF signal Count = 1	Not in Emergency mode DS_Active = TRUE 25 msec. after solenoid S4 output changes	≥ 500 msec. Continuous FATKO Type A

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D   page 8
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03

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SENSED PARAMETER	FAULT CODE	ACCEPTABLE OPERATING RANGE and RATIONALITY	PRIMARY MALFUNCTION DETECTION PARAMETERS	SECONDARY MALFUNCTION PARAMETERS and CONDITIONS	MONITORING TIME LENGTH and DTC TYPE A (MIL), B (MIL NIC), C (No MIL)
Shift Solenoid E Short to Ground	P0985	Detects Short to Ground	Detects OFF signal of S5 monitor, when S5 driver outputs ON signal	Not in Emergency mode DS_Active = TRUE 25 msec. after solenoid S5 output changes Count = 1	$\geq$ 500 msec. Continuous FATKO Type A
Shift Solenoid E B+ Short, Open	P0986	Detects Short to Power or Open	Detects ON signal of S5 monitor, when S5 driver outputs OFF signal Count = 1	Not in Emergency mode DS_Active = TRUE 25 msec. after solenoid S5 output changes	$\geq$ 500 msec. Continuous FATKO Type A

Incorrect Shifting	P1719	Detects tie-up, engine flare, long shift time, or rapid shifting	Shift position = D, I, L
			Oil temperature $\geq$ 60° C.
			No multiplex shifting
			Condition A (tie-up)
			   OR
			Condition B (engine flare)
			   OR
			Condition C (long shift time)
			   OR
			Condition D (rapid shifting)
				No multiplex shifting
				DS_Active = TRUE
				Not in Emergency mode
				
				No faults: P0711, P0712, P0713, P0722, P0727, P1781
					Count = 5
					
					FATKO
					Type A

Driver-Requested Torque CAN Signal Error	P1779	Driver-requested torque signal failure on CAN bus	TCM receives Driver-Requested Torque validity = FALSE Count = 1 @ 4.0 sec	3.0 sec. after Ignition On OR Controller reset DS_ACTIVE_CAN = TRUE Not in Emergency mode No faults: U2105	4.0 sec. continuously FATKO Type A
CAN Torque Reduction Signal Error	P1780	CAN torque reduction information failure on CAN bus	TCM receives Engine Torque Reduction validity = FALSE Count = 5 @ 4.0 sec	3.0 sec. after Ignition On OR Controller reset DS_ACTIVE_CAN = TRUE Not in Emergency mode No faults: U2105	4.0 sec. continuously FATKO Type A
Engine Torque Circuit Malfunction	P1781	Engine torque information failure on CAN bus	TCM receives Engine Torque validity = FALSE Count = 1	3.0 sec. after Ignition On OR Controller reset DS_ACTIVE_CAN = TRUE Not in Emergency mode No faults: U2105	4.0 sec. continuously FATKO Type A

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D   page 9
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B   EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03

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Pedal Position Circuit Malfunction	P1791	Pedal Position information failure on CAN bus	TCM receives Pedal Position validity = FALSE Count =1	3.0 sec. after Ignition On OR Controller reset DS_ACTIVE_CAN = TRUE Not in Emergency mode No faults U2105	4.0 sec. continuously FATKO Type A
Engine Coolant Temperature CAN Signal Error	P1792	Engine coolant temperature signal failure on CAN bus	TCM receives Engine Coolant Temperature validity = FALSE Count = 1	3.0 sec. after Ignition On OR Controller reset DS_ACTIVE_CAN = TRUE Not in Emergency mode No faults: U2105	4.0 sec. continuously FATKO Type A
CAN Bus Off Counter Overrun Error	U2104	CAN Bus Off Counter Overrun error	TCM receives "BUS OFF" state from CAN controller a number of times Count = 1	3.0 sec after Ignition On OR Controller reset DS_Active_CAN = TRUE	Count = 1 FATKO Type A
CAN Error: Lost Communication to ECM	U2105	Lost communication with ECM	TCM cannot detect frame of GENERAL STATUS ECM Count = 1	3.0 sec after Ignition On OR Controller reset DS_Active_CAN = TRUE Not in Emergency Mode	4.0 sec. continuously FATKO Type A
CAN Error: Lost Communication to BCM	U2107	Lost communication with BCM	TCM cannot detect frame of GENERAL STATUS BCM Count = 1	3.0 sec after Ignition On OR Controller reset DS_Active_CAN = TRUE Not in Emergency Mode	4.0 sec. continuously FATKO Type A
CAN Error: Lost Communication to ABS/TC Control Module	U2108	Lost communication with ABS	TCM cannot detect frame of GENERAL STATUS ABS Count = 1	3.0 sec after Ignition On OR Controller reset DS_Active_CAN = TRUE Not in Emergency Mode	4.0 sec. continuously FATKO Type A

Emergency Mode 1 = 5th gear in D: 2nd in L range   EM2 = 3rd gear in D   EM3 = 4th gear in D, no Engine Braking   EM4 = 5th gear only in D   page 10
EM5 = 4th gear in D, no E/B   EM6 = 3rd gear in D, no E/B EM7 = 5th gear in D: 2nd in L range   EM8 = 5th gear in D: 4th in L range
EM9 = 5th gear in D: 2nd in L range   GMT315MATRIX03.DOC   3/25/03