

DTC #	failure mode description	fail enable criteria	fail criteria	pass enable criteria	pass criteria	default actions	DTC type
P0218	TFT has not failed, but has been at a high value for an extended period of time.	ignition voltage enable, -39 <=TFT <= 149 for time >= 5.0 seconds	TFT >= 140 DegC for time >= 60 seconds	same as fail	TFT < 132 DegC, for time >= 5.0 seconds	CeTRND_FreezeAdaptsAction, (FA)	C
P0562	Ignition voltage at the TCM is low for an extended period of time.	ignition voltage enable, engine speed >= 1200 RPM	11.0<=ignition voltage for time >= 10 seconds	same as fail	ignition voltage > 11.0 V for time >= 12 seconds	none	C
P2534	No Ignition Voltage at the TCM	ignition voltage enable, engine running flag	ignition voltage >= 8 V for time >= 10 seconds (200/240 counts)	same as fail	ignition voltage > 11.0 V for time >= 12 seconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (FTKO)	A
P0563	Ignition voltage at the TCM is high for an extended period of time.	ignition voltage enable	ignition voltage >= 18.0 V for time >= 10 seconds	none	ignition voltage < 18.0 V for time >= 12 seconds	none	C
P0572	BASS brake signal stuck off	ignition voltage enable, 500<= Engine Speed<=6500, Brake serial data valid, TCM indicated Brake State OFF for >= 5 seconds, BAS indicated Brake state is ON	Must see serial data Brake state OFF to ON, Fail Counts 170 out of 200 samples (4.25 sec out of 5.0 sec)	none	TCM indicates Brake State = ON for 200 counts (5.0 sec)	none	C
P0573	BASS brake signal stuck on	ignition voltage enable, 500<=engine speed<=6500, brake serial data valid, TCM indicated Brake State ON for >=5 seconds, BAS indicated Brake state is OFF	Must see serial data Brake state ON to OFF, Fail Counts 170 out of 200 samples (4.25 sec out of 5.0 sec)	none	TCM indicates Brake State = OFF for 200 counts (5 sec)	none	C
P0601	Checksum error in ROM	None	Checksum calculation must have 5 errors in a key cycle to Fail	none	Checksum calculation algorithm of flash memory	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (FTKO)	A
P0602	TCM not programmed with application calibration.	None	KeMEMD_b_NoStartCal=FALSE			None	A
P0603	NVM error at TCM power-up.	None	Checksum calculation of NVM copy	None		CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (FTKO)	A
P0604	RAM read/write error.	Ignition is ON	RAM Location Wrong	Ignition is ON	RAM Location Read/Write	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (FTKO)	A
P0634	TCM internal temperature high for an extended period of time.	ignition voltage enable, (-40 DegC <= TCM internal temperature <= 160 DegC for time > 0.25 seconds), P0634 not fault active or test fail this key on	TCM internal temperature >= 142.1 DegC for time >= 5.0 seconds	transmission common enable, (-40 DegC <= TCM internal temperature <= 160 DegC for time > 0.25 seconds)	TCM internal temperature < 142.1 DegC for time >= 0.0 seconds	CeTRND_DSG_DfltGearOpt1Action, CeTRND_DSG_TCM_ShutdownAction, (FA)	A
P0667	TCM internal temperature thermistor failed at a constant value or toggling at high frequency.		fail case 1 or fail case 2 or fail case 3 independently fail	ignition voltage enable, -39 DegC <= TCM internal temperature <= 149 DegC	TCM internal temperature delta >= 3.0 DegC for time >= 5.0 seconds and P0667 fail case 3 delta fail counter = 0	CeTRND_SubTempFitAction (FA)	C

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	fail case 1	P0667, P0716, P0717, P0722, P0723 not FA or TFTKO, P0711, P0712, P0713 not FA, Ignition voltage enable, engine speed enable, P0667 test not passed this key on, -39 DegC <= TCM internal temperature <= 149 DegC	fail case 1: vehicle speed >= 8 KPH for time >= 300 seconds cumulative, TCC slip > 120 RPM for time >= 300 seconds cumulative, (-40.0 DegC <= TCM internal temperature <= 21.0 DegC), transmission fluid temperature >= 70.0 DegC, transmission fluid temp				
	fail case 2	P0667, P0716, P0717, P0722, P0723 not fault active or test fail this key on, P0711, P0712, P0713 not fault active, ignition voltage enable, engine speed enable, P0667 test not passed this key on, -39 DegC <= TCM internal temperature <= 149 DegC	fail case 2: vehicle speed >= 8 KPH for time >= 300 seconds cumulative, TCC slip > 120 RPM for time >= 300 seconds cumulative, (120 DegC <= TCM internal temperature <= 150 DegC), transmission fluid temperature >= 70.0 DegC, transmission fluid temperature				
	fail case 3	ignition voltage enable, engine speed enable	fail case 3: TCM internal temperature delta >= 20 DegC, delta occurs 14 times over a 7 second sample period				
P0668	TCM internal temperature thermistor failed at a high temperature (short to power).	ignition voltage enable, engine speed enable, P0668 not fault active or test fail this key on	TCM substrate temperature >= 161 DegC for time >= 4.0 seconds	none	TCM substrate temperature < 150 DegC for time >= 2.0 seconds	CeTRND_SubTempFitAction (FA)	C
P0669	TCM internal temperature thermistor failed at a low temperature (open or short to ground).	ignition voltage enable, engine speed enable, P0716, P0717, P0722, P0723 not fault active or test fail this key on, TOSS speed >= 200 RPM for time >= 200 seconds, TCC slip >= 120 RPM for time >= 200 seconds, P0669 not fault active or test fail this key	TCM substrate temperature <= -61 DegC for time >= 10 seconds	none	TCM substrate temperature > -40 DegC for time >= 5.0 seconds	CeTRND_SubTempFitAction (FA)	C
P0711	Transmission fluid temperature thermistor failed at a constant value or toggling at high frequency.		fail case 1 or fail case 2 or fail case 3 or fail case 4 independently fail	ignition voltage enable, -39 DegC <= TFT <= 149 DegC		CeTRND_FreezeAdaptsAction, CeTRND_TransTempFitAction, (FA)	C
	fail case 1	P0711, P0716, P0717, P0722, P0723 not FA or TFTKO, engine coolant temperature valid, ignition voltage enable, engine speed enable, P0711 test not passed this key on, -39 DegC <= TCM internal temp. <= 149 DegC	fail case 1: vehicle speed >= 8 KPH for time >= 300 seconds cumulative, TCC slip > 120 RPM for time >= 300 seconds cumulative, -40.0 <= TFT <= 21.0 DegC, engine coolant temperature >= 70.0 DegC, engine coolant temperature delta from start up >= 55.0 D		TFT delta >= 3.0 DegC for time >= 5.0 seconds		

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	fail case 2	P0711, P0716, P0717, P0722, P0723 not FA or TFTKO, engine coolant temperature valid, ignition voltage enable, engine speed enable, P0711 test not passed this key on, -39 <= TCM internal temperature <= 149 DegC	fail case 2: vehicle speed >= 8 KPH for time >= 300 seconds cumulative, TCC slip > 120 RPM for time >= 300 seconds cumulative, 129 DegC <= TFT <= 150 DegC, engine coolant temperature >= 70.0 DegC, engine coolant temperature delta from start up >= 55.0		TFT delta >= 3.0 DegC for time >= 5.0 seconds		
	fail case 3		fail case 3: TFT delta >= 20 DegC, Delta occurs 14 times over a 7 second sample period		TFT delta >= 3.0 DegC for time >= 5.0 seconds		
	fail case 4	P0711, P0716, P0717, P0722, P0723, P0742 not FA or TFTKO, engine coolant temperature valid, ignition voltage enable, engine speed enable, P0711 test not passed this key on, -39 <= TCM internal temperature <= 149 DegC, Acceleration position valid, e	Lookup Table: Time for Trans.temperature to reach 20 DegC. Time exceeds the lookup table		Transmission Temperature Reaches 20 Deg C before the lookup table time.		
P0712	Transmission fluid temperature thermistor failed at a high temperature (open or short to power).	ignition voltage enable, engine speed enable, P0712 not FA or TFTKO	transmission fluid temperature >= 180 DegC for time >= 10 seconds	none	transmission fluid temperature <= 150 DegC for time >= 2 seconds	CeTRND_FreezeAdaptsAction, CeTRND_TransTempFitAction, (FA)	C
P0713	Transmission fluid temperature thermistor failed at a low temperature (short to ground).	ignition voltage enable, engine speed enable, TOSS speed >= 200 RPM for time >= 200 seconds, TCC slip >= 120 RPM for time >= 200 seconds, P0713 not FA or TFTKO	transmission fluid temperature <= 80 DegC for time >= 25 seconds	none	transmission fluid temperature >= 40 DegC for time >= 5 seconds	CeTRND_FreezeAdaptsAction, CeTRND_TransTempFitAction, (FA)	C
P0716	Transmission input speed signal drops abruptly.	ignition voltage enable, engine speed enable, engine torque valid, 1492 >=engine torque >= 50 Nm, throttle position is valid from ECM, throttle position >= 8 %, no P0717 P0722 P0723 FA or TFTKO, vehicle speed >= 16 KPH	P0716 is not FA or TFTKO, 0 < input speed delta < 500 RPM for time >= 2 seconds, Raw input speed >= 1050 RPM for time >= 2 seconds, Input speed drops more than 1000 RPM and does not recover for time >= 3.25 seconds	ignition voltage enable, No P0717 FA orTFTKO	input speed delta <= 500 RPM and input speed >= 500 RPM for time >= 3 seconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P0717	Transmission input speed signal no activity.	ignition voltage enable, engine speed enable, engine torque valid from ECM, vehicle speed >= 16 KPH, engine torque >= 50 Nm, P0722 P0723 not FA or TFTKO	P0717 is not FA or TFTKO, TISS < 100 RPM for time >= 4.5 seconds	none	transmission input speed > 500 RPM for time >= 3 seconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A

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P0722	Transmission output speed signal no activity.	ignition voltage enable, engine speed enable, engine torque valid from ECM, 1492>=engine torque >= 50 Nm, throttle position valid from ECM, throttle position >= 8 %, P0716 P0717 P0723 not FA or TFTKO, PRNDL is not park/neutral, 500 <= input speed <	transmission output speed <= 70 RPM for time >= 4.5 seconds	P0723 not test fail this key on	transmission output speed >= 500 RPM for time >= 3 seconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P0723	Transmission output speed signal drops abruptly.	ignition voltage enable, engine speed enable, no P0716 P0717 P0722 FA or TFTKO, range change timer >= 6 seconds	P0723 is not fault active or test fail this key on, input speed delta < 500 RPM for time >= 2 seconds, 0 < output speed delta < 500 RPM for time >= 2 seconds, raw output speed >= 1000 RPM for time >= 2 seconds, output speed drops more than 1200 RPM and do	ignition voltage enable, no P0722 fault active or test fail this key on	output speed delta <= 500 RPM and output speed >= 500 RPM for time >= 3 seconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P0736	Incorrect R gear ratio	C35R is Primary Oncoming Clutch, Commanded Gear = Reverse	C35R pressure switch error present, Attained Gear Slip >= 75 RPM for 2.25 seconds	same as fail	Attained Gear Slip <= 60 RPM for 0.333 seconds	None	A
P0741	TCC stuck off.	ignition voltage enable, no P0716, P0717, P0722, P0723, P2762, P2763, P2764, P0741, P0742 FA or TFTKO, 20 DegC <= TFT <= 130 DegC, engine torque valid from ECM, engine torque >= 50 Nm, throttle position valid from ECM, 8 % <= throttle position <= 10	TCC Pressure >=800 Kpa for 5 seconds, When TCC slip error >= 50 (Table based)rpm for time >= 6 seconds Increment fail counter by one, Set P0741 when fail counter >= 4 counts	same as fail	-20 <= TCC slip error <= 55 rpm for time >= 4 seconds	CeTRND_MaxGearHotInhbAction, CeTRND_ForceTCC_OffAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	B
P0742	TCC stuck on.	ignition voltage enable, No P0716, P0717, P0722, P0723, P1751, P2762, P2763, P2764, P0741, P0742 FA or TFTKO, 20 DegC <=TFT <= 130 DegC, engine torque valid from ECM, 115 <=engine torque <= 1492 Nm, Throttle position valid from ECM, 8 % <= throttle position	-10 <= TCC slip speed <= 13 RPM for time >= 3.0 seconds Increment fail counter by one, failure counter >= 5 counts	same as fail	125 RPM <= TCC slip speed <= 3500 RPM for time >= 1.875 seconds	CeTRND_FreezeAdaptsAction, CeTRND_ForceTCC_ApplyAction, (TFTKO)	C
P0752	M2 Valve Stuck On	In 1st Locked set delay time to 0.25 seconds, In 1st Freewheel or higher gear count down delay timer	If (Delay time <=0 AND C456/CBR1 pressure switch Error) Then (Set test Pending--Limit Max Gear to 3rd). If (Commanded Gear = 3rd Attained Gear Slip >= 75 RPM for >= 2 seconds) Then (Set P0752) Else (IF 3rd is Achieved Set C456/CBR1 Pressure Switch Failur	In 1st Locked set delay time to 0.25 seconds, In 1st Freewheel or higher gear count down delay timer	Delay Timer >=0 AND No C456/CBR1 Pressure Switch Error Attained gear = 3rd Command gear slip <= 75 rpm	CeTRND_FreezeAdaptsAction, CeTRND_DSG_DfltGearOpt6Action (TFTKO)	A
P0756	M3 Valve Stuck Off	IF (In 1st Locked And Attained Gear Slip >=75 RPM AND Neutral slip time >= 2 seconds) Then (Force 1-2 Upshift), 2nd Is Commanded for >= 4 seconds	If (2nd Gear Ratio is Achieved) Then (Set P0756), Else (Set P2723: C1234 INT)	1st Locked Commanded	(At 1st Lock gear) Attained gear slip <= 75 RPM, and Neutral Time =0 seconds	CeTRND_FreezeAdaptsAction, CeTRND_DSG_DfltGearOpt2Action (TFTKO)	A

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P0776	Neutral when on-coming clutch C35R is enabled.	No P0716, P0717, P0722, P0723, P1915, P1825, turbine speed >= 60 RPM, C35R is on-coming clutch and C35R on coming control is complete.	High speed mode: TOSS >= 60 rpm High speed mode: command gear slip >= 75 RPM for time >= 2.25 seconds. Low speed mode: TOSS < 60 rpm Low speed mode: turbine speed >= ((60 rpm x Commanded gear ratio) + 75 rpm) for time >= 2.25 seconds.	same as fail	High speed mode: TOSS >= 60 rpm. High speed mode: command gear slip < 75 rpm for time >= 0.333 sec Low speed mode: TOSS < 60 rpm. Low speed mode: turbine speed < ((60 rpm x Commanded gear ratio) + 75 rpm) for time >= 0.333 sec	CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_DSG_DfltGearOpt3Action, (TFTKO)	A
P0777	Tie-up when off-going clutch is C35R.	No P0716, P0717, P0722, P0723, P1915, P1825, TOSS >= 200 RPM, Turbine Speed >= 200 RPM. C35R is off-going clutch.	C35R clutch command pressure = 0 kPa for time >= C35R zero capacity delay time, where C35R zero capacity delay time = f(transmission fluid temperature) and {[on-coming clutch delta transition pressure > 50 kPa and 300 kPa < on-coming command clutch comman	same as fail enable criteria	Attained gear slip > 40 RPM for time >= 50 milliseconds.	CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_DSG_DfltGearOpt1Action, (TFTKO)	A
P0796	Neutral when on-coming clutch C456/CBR1 is enabled.	No P0716, P0717, P0722, P0723, P1915, P1825, turbine speed >= 60 RPM, C456/CBR1 is on-coming clutch and C456/CBR1 on coming control is complete.	High speed mode: TOSS >= 60 RPM. High speed mode: command gear slip >= 75 RPM for time >= 2.25 seconds. Low speed mode: TOSS < 60 RPM. Low speed mode: turbine speed >= ((60 RPM * commanded gear ratio) + 75 RPM) for time >= 2.25 seconds.	same as fail	High speed mode: TOSS >= 60 RPM. High speed mode: command gear slip < 75 RPM for time >= 0.333 seconds. Low speed mode: TOSS < 60 RPM. Low speed mode: turbine speed < ((60 RPM * commanded gear ratio) + 75 RPM) for time >= 0.333 seconds.	CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_DSG_DfltGearOpt2Action, (TFTKO)	A
P0797	Tie-up when off-going clutch is C456/CBR1.	No P0716, P0717, P0722, P0723, P1915, P1825, TOSS >= 200 RPM, Turbine Speed >= 200 RPM. C456/CBR1 is off-going clutch.	C456 clutch command pressure = 0 kPa for time >= C456/CBR1 zero capacity delay time, where C456/CBR1 zero capacity delay time = f(transmission fluid temperature) and {[on-coming clutch delta transition pressure > 50 kPa and 300 kPa < on-coming command clu	same as fail enable criteria	Attained gear slip > 40 RPM for time >= 50 milliseconds.	CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_DSG_DfltGearOpt3Action, (TFTKO)	A

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P0815	TUTD upshift switch error.	500<=Engine Speed<=6500 for at least 5 seconds, Ignition voltage, No IMS Failures, No P0826 Failure, Range Change Timer >6 seconds,	Fail Case 1: Switch stuck ON in D6 N P or R for at least 3 seconds. Fail Case 2: Switch stuck ON in D2 D4 D6 N P or R for 600 seconds Fail Case 1 & 2 are true:	Fail Case 1 & 2 are not TRUE	TUTD upshift circuit not active for 10 seconds	CeTRND_TUTD_InhAction (TFTKO)	C
P0816	TUTD downshift switch error.	500<=Engine Speed<=6500 for at least 5 seconds, Ignition voltage, No IMS Failures, No P0826 Set, Range Change Timer >6 seconds,	Fail Case 1: Switch stuck ON in D6 N P or R for at least 3 seconds. Fail Case 2: Switch stuck ON in D2 D4 D6 N P or R for 600 seconds Fail Case 1 & 2 are true:	Fail Case 1 & 2 are not TRUE	TUTD upshift circuit not active for 10 seconds	CeTRND_TUTD_InhAction (TFTKO)	C
P0826	TUTD up/down shift switch error.	500<=Engine Speed<=6500 for at least 5 seconds, Ignition voltage	TUTD Circuit Invalid voltage for 5 seconds	Same as Fail	TUTD circuit valid for 4 seconds	CeTRND_TUTD_InhAction (TFTKO)	C
P0842	C35R pressure switch circuit low voltage.	Engine speed enable, Ignition voltage enable, P1915,P1825, P0711, P0712, P0713, P0965, P0966, P0967, P0969, P0970, P0971, P0973, P0974, P0976, P0977, P2719, P2720, P2721, P2728, P2729, P2730 not FA or TFTKO, 20 DegC <= TFT <= 150 DegC, Engine speed >=	start up test: not enabled normal test: TCM shutdown not in process, C35R hydraulic pressure <= 100 kPa for stable time >= 0.45 seconds and pressure switch remains closed for time >= 5 seconds	same as fail	start up test: not enabled normal test: TCM shutdown not in process, C35R hydraulic pressure <= 100 kPa for stable time >= 0.45 seconds and pressure switch open for time >= (5 sec * 0.3333)	CeTRND_FreezeAdaptsAction (TFTKO)	C
P0843	C35R pressure switch circuit high voltage.	Engine speed enable, Ignition voltage enable, P1915,P1825, P0711, P0712, P0713, P0965, P0966, P0967, P0969, P0970, P0971, P0973, P0974, P0976, P0977, P2719, P2720, P2721, P2728, P2729, P2730 not FA or TFTKO, 20 DegC <= TFT <= 150 DegC, Engine speed >=	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, C35R hydraulic pressure >= 600 kPa for stable time >= 1 second and pressure switch remains open for time >= 5 seconds	same as fail	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, C35R hydraulic pressure >= 600 kPa for stable time >= 1 second and pressure switch closed for time >= (5 sec * 0.3333)	CeTRND_FreezeAdaptsAction (TFTKO)	C
P0872	CB26 pressure switch circuit low voltage.	Engine speed enable, Ignition voltage enable, P1915,P1825, P0711, P0712, P0713, P0965, P0966, P0967, P0969, P0970, P0971, P0973, P0974, P0976, P0977, P2719, P2720, P2721, P2728, P2729, P2730 not FA or TFTKO, 20 DegC <= TFT <= 150 DegC, Engine speed >=	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, CB26 hydraulic pressure <= 100 kPa for stable time >= 0.45 seconds and pressure switch remains closed for time >= 5 seconds	same as fail	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, CB26 hydraulic pressure >= 100 kPa for stable time >= 1 second and pressure switch closed for time >= (5 seconds * 0.3333)	CeTRND_FreezeAdaptsAction (TFTKO)	C
P0873	CB26 pressure switch circuit high voltage.	Engine speed enable, Ignition voltage enable, P1915,P1825, P0711, P0712, P0713, P0965, P0966, P0967, P0969, P0970, P0971, P0973, P0974, P0976, P0977, P2719, P2720, P2721, P2728, P2729, P2730 not FA or TFTKO, 20 DegC <= TFT <= 150 DegC, Engine speed >=	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, CB26 hydraulic pressure >= 600 kPa for stable time >= 1 second and pressure switch remains open for time >= 5 seconds	same as fail	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, CB26 hydraulic pressure >= 600 kPa for stable time >= 1 second and pressure switch closed for time >= (5 seconds * 0.3333)	CeTRND_FreezeAdaptsAction (TFTKO)	C

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P0877	C1234 pressure switch circuit low voltage.	Engine speed enable, Ignition voltage enable, P1915,P1825, P0711, P0712, P0713, P0965, P0966, P0967, P0969, P0970, P0971, P0973, P0974, P0976, P0977, P2719, P2720, P2721, P2728, P2729, P2730 not FA or TFTKO, 20 DegC <= TFT <= 150 DegC, Engine speed >=	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, C1234 hydraulic pressure <= 100 kPa for stable time >= 0.45 seconds and pressure switch remains closed for time >= 5 seconds	same as fail	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, C1234 hydraulic pressure >= 100 kPa for stable time >= 1 second and pressure switch closed for time >= (5 seconds * 0.3333)	CeTRND_FreezeAdaptsAction (TFTKO)	C
P0878	C1234 pressure switch circuit high voltage.	Engine speed enable, Ignition voltage enable, P1915,P1825, P0711, P0712, P0713, P0965, P0966, P0967, P0969, P0970, P0971, P0973, P0974, P0976, P0977, P2719, P2720, P2721, P2728, P2729, P2730 not FA or TFTKO, 20 DegC <= TFT <= 150 DegC, Engine speed >=	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, C1234 hydraulic pressure >= 600 kPa for stable time >= 1 second and pressure switch remains open for time >= 5 seconds	same as fail	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, C1234 hydraulic pressure >= 600 kPa for stable time >= 1 second and pressure switch closed for time >= (5 seconds * 0.3333)	CeTRND_FreezeAdaptsAction (TFTKO)	C
P0961	Line pressure control solenoid electrical rationality test.	ignition voltage enable, engine speed enable, line pressure control solenoid enabled	P0961 is not fault active or test fail this key on, hardware circuitry detects out of range error is true for 4.4 sec. in a 5.0 second sample	same as fail enable criteria	hardware circuitry detects out of range error is false for 1.5 seconds in a 5.0 second sample	CeTRND_FreezeAdaptsAction (TFTKO)	C
P0962	Line pressure control solenoid exhausted, electrically failed to result in low pressure.	ignition voltage enable, engine speed enable, line pressure control solenoid enabled	P0962 is not fault active or test fail this key on, hardware circuitry detects low pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects low pressure error is false for 250 milliseconds in a 375 millisecond sample	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P0963	Line pressure control solenoid pressurized, electrically fail to result in high pressure.	ignition voltage enable, engine speed enable, line pressure control solenoid enabled	P0963 is not fault active or test fail this key on, hardware circuitry detects high pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects high pressure error is false for 250 milliseconds in a 375 millisecond sample	CeTRND_PCA_InhbAction, CeTRND_FreezeAdaptsAction, (TFTKO)	C
P0965	C35R control solenoid electrical rationality test.	ignition voltage enable, engine speed enable	P0965 is not fault active or test fail this key on, hardware circuitry detects out of range error is true for 4.4 seconds in 5.0 second sample	same as fail enable criteria	hardware circuitry detects out of range error is false for 1.5 seconds in 5.0 second sample	CeTRND_FreezeAdaptsAction (TFTKO)	C
P0966	C35R control solenoid exhausted, electrically failed to result in low pressure, C35R not available.	ignition voltage enable, engine speed enable	P0966 is not fault active or test fail this key on, hardware circuitry detects low pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects low pressure error is false for 250 milliseconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P0967	C35R control solenoid pressurized, electrically fail to result in high pressure, C35R stuck on.	ignition voltage enable, engine speed enable	P0967 is not fault active or test fail this key on, hardware circuitry detects high pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects high pressure error is false for 250 milliseconds	CeTRND_FreezeAdaptsAction, CeTRND_DSG_DfitGearOpt1Action, (TFTKO)	A
P0969	C456/CBR1 control solenoid electrical rationality test.	ignition voltage enable, engine speed enable	P0969 is not fault active or test fail this key on, hardware circuitry detects out of range error is true for 4.4 seconds in 5.0 second sample	same as fail enable criteria	hardware circuitry detects out of range error is false for 1.5 seconds in 5.0 second sample	CeTRND_FreezeAdaptsAction (TFTKO)	C

DTC #	failure mode description	fail enable criteria	fail criteria	pass enable criteria	pass criteria	default actions	DTC type
P0970	C456/CBR1 control solenoid exhausted, electrically failed to result in low pressure, C456/CBR1 is not available.	ignition voltage enable, engine speed enable	P0970 is not fault active or test fail this key on, hardware circuitry detects low pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects low pressure error is false for 250 milliseconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, test fail this key on	A
P0971	C456/CBR1 control solenoid pressurized, electrically fail to result in high pressure.	ignition voltage enable, engine speed enable	P0971 is not fault active or test fail this key on, hardware circuitry detects high pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects high pressure error is false for 250 milliseconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P0973	Solenoid 2 (A) ground short.	ignition voltage enable, engine speed enable	P0973 is not fault active or test fail this key on, hardware circuitry detects ground short error is true for 1.2 seconds in 1.5 second sample	same as fail enable criteria	hardware circuitry detects ground short error is false for 1.0 seconds in 1.5 second sample	CeTRND_FreezeAdaptsAction, CeTRND_DSG_DfltGearOpt6Action	A
P0974	Solenoid 2 (A) open/power short.	ignition voltage enable, engine speed enable	P0974 is not fault active or test fail this key on, hardware circuitry detects open or power short error is true for 1.2 seconds in 1.5 second sample	same as fail enable criteria	hardware circuitry detects ground short error is false for 1.0 seconds in 1.5 second sample	none	B
P0976	Solenoid 3 (B) ground short.	ignition voltage enable, engine speed enable	P0976 is not fault active or test fail this key on, hardware circuitry detects open or power short error is true for 1.2 seconds in 1.5 second sample	same as fail enable criteria	hardware circuitry detects ground short error is false for 1.0 seconds in 1.5 second sample	none	C
P0977	Solenoid 3 (B) open/power short.	ignition voltage enable, engine speed enable	P0977 is not fault active or test fail this key on, hardware circuitry detects open or power short error is true for 1.2 seconds in 1.5 second sample	same as fail enable criteria	hardware circuitry detects ground short error is false for 1.0 seconds in 1.5 second sample	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P0989	CBR1/C456 pressure switch circuit low voltage.	Engine speed enable, Ignition voltage enable, P1915,P1825, P0711, P0712, P0713, P0965, P0966, P0967, P0969, P0970, P0971, P0973, P0974, P0976, P0977, P2719, P2720, P2721, P2728, P2729, P2730 not FA or TFTKO, 20 DegC <= TFT <= 150 DegC, Engine speed >=	start up test: not enabled normal test: TCM shutdown not in process, CBR1/C456 hydraulic pressure <= 100 kPa for stable time >= 0.45 seconds and pressure switch remains closed for time >= 5 seconds	same as fail	start up test: not enabled normal test: TCM shutdown not in process, CBR1/C456 hydraulic pressure >= 100 kPa for stable time >= 1 second and pressure switch closed for time >= (5 seconds * 0.3333)	CeTRND_FreezeAdaptsAction (TFTKO)	B
P0990	CBR1/C456 pressure switch circuit high voltage.	Engine speed enable, Ignition voltage enable, P1915,P1825, P0711, P0712, P0713, P0965, P0966, P0967, P0969, P0970, P0971, P0973, P0974, P0976, P0977, P2719, P2720, P2721, P2728, P2729, P2730 not FA or TFTKO, 20 DegC <= TFT <= 150 DegC, Engine speed >=	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, CBR1/C456 hydraulic pressure >= 600 kPa for stable time >= 1 second and pressure switch remains open for time >= 5 seconds	same as fail	start up test: not enabled normal test: TCM shutdown not in process, engine speed enable, CBR1/C456 hydraulic pressure >= 600 kPa for stable time >= 1 second and pressure switch closed for time >= (5 seconds * 0.3333)	CeTRND_FreezeAdaptsAction (TFTKO)	bb
P1621	NVM error at TCM power-down.	None	TCM Non-Volatile Memory Incorrect flag (Dynamic and Static) = 1	None	TCM Non-Volatile Memory Incorrect flag (Dynamic and Static) = 0	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A

DTC #	failure mode description	fail enable criteria	fail criteria	pass enable criteria	pass criteria	default actions	DTC type
P1684	TCM power-up thermistor failed at a constant value or toggling at high frequency.		fail case 1 or fail case 2 or fail case 3 independently fail	ignition voltage enable, -39 DegC ≤ TCM internal temperature ≤ 149 DegC	TCM power-up temperature delta ≥ none 3.0 DegC for time ≥ 5.0 seconds and P1684 fail case 3 delta fail counter = 0		C
	fail case 1	P1684, P0716, P0717, P0722, P0723 not FA or TFTKO, P0711, P0712, P0713 not FA or TFTKO, ignition voltage enable, engine speed enable, P1684 test not passed this key on, -39 DegC ≤ TCM power-up temperature ≤ 149 DegC	fail case 1: vehicle speed ≥ 8 KPH for time ≥ 300 seconds cumulative, TCC slip > 120 RPM for time ≥ 300 seconds cumulative, (-40.0 DegC ≤ TCM power-up temperature ≤ 21.0 DegC), transmission fluid temperature ≥ 70.0 DegC, transmission fluid temperat				
	fail case 2	P1684, P0716, P0717, P0722, P0723 not FA or TFTKO, P0711, P0712, P0713 not FA or TFTKO, ignition voltage enable, engine speed enable, P1684 test not passed this key on, -39 DegC ≤ TCM power-up temperature ≤ 149 DegC	fail case 2: vehicle speed ≥ 8 KPH for time ≥ 300 seconds cumulative, TCC slip > 120 RPM for time ≥ 300 seconds cumulative, (120 DegC ≤ TCM internal temperature ≤ 150 DegC), transmission fluid temperature ≥ 70.0 DegC, transmission fluid temperature				
	fail case 3	ignition voltage enable, engine speed enable	fail case 3: TCM power-up temperature delta ≥ 20 DegC, delta occurs 14 times over a 7 second sample period				
P1685	TCM power-up temperature failed at a low temperature (open or short to ground).	ignition voltage enable, engine speed enable, P0716, P0717, P0722, P0723 not fault active or test fail this key on, TOSS speed ≥ 200 RPM for time ≥ 200 seconds, TCC slip ≥ 120m RPM for time ≥ 200 seconds, P1685 not fault active or test fail this key	TCM power-up thermistor temperature ≤ -61 DegC for time ≥ 10 seconds	none	TCM power-up thermistor temperature ≥ -40 DegC for time ≥ 5 seconds	none	C
P1686	TCM power-up temperature failed at a high temperature (short to power).	ignition voltage enable, engine speed enable, P1686 not fault active or test fail this key on	TCM power-up thermistor temperature ≥ 161 DegC for time ≥ 10 seconds	none	TCM power-up thermistor temperature ≤ 150 DegC for time ≥ 5 seconds	none	C
P1729	Replicated TOSS Error	6 V ≤ ignition voltage ≤ 18 V,	An open, ground short, or power short fault is indicated by HWIO for 12 out of 14 Samples	same as fail	Fault not present 14 samples	none	C
P1751	TCC Control Valve Performance	P0742 Is Enabled, M2 Solenoid Commanded ON, No Upshift/Downshift in process, P0742 has not already passed/failed for the current TCC Cycle	Attained Gear Slip ≥ 70 RPM, 5 Fail Counts out of 5 Sample Counts	same as fail	Attained Gear Slip < 70 RPM for 5 Sample Counts	(TFTKO)	C
P1915	Internal mode switch not park or neutral during engine start.	6 V ≤ ignition voltage ≤ 18 V, P0722, P0723 not fault active or test fail this key on, transmission output speed ≤ 90 RPM,	PRNDL <> park or neutral, Sequentially: engine speed < 50 RPM for time ≥ 250 ms, 50 RPM ≤ engine speed ≤ 480 RPM for time ≥ 70 ms, engine speed ≥ 525 RPM for time ≥ 3.25 sec. input shaft speed ≥ 200 RPM	same as fail	PRNDL = park or neutral, Sequentially: engine speed < 50 RPM for time ≥ 250 ms, 50 RPM ≤ engine speed ≤ 480 RPM for time ≥ 70 ms, engine speed ≥ 525 RPM for time ≥ 0.2 sec Input shaft speed ≥ 200 RPM	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P1820 Reports P1825	Internal mode switch circuit A low voltage.	ignition voltage enable, engine speed enable,	Fail Case 1: PRNDL=Transition 1, Engine Torque valid, 20 Nm≤Torque, PS 1 = Pressure or PS 3=Pressure for time ≥8 seconds	same as fail	PRNDL=D6, Engine Torque Accurate, 20Nm≤Torque for ≥2.67 seconds	See P1825	

DTC #	failure mode description	fail enable criteria	fail criteria	pass enable criteria	pass criteria	default actions	DTC type
		ignition voltage enable, engine speed enable,	Fail Case 2: PRNDL=Trans1, Pressure Switch 3 = Exhausted, Commanded Shift=1st locked	same as fail	PRNDL=D6, Engine Torque Accurate, 20<=Torque, for time>=2.67 seconds		
P1822 Reports P1825	Internal mode switch circuit B high voltage.	ignition voltage enable, engine speed enable,	PRNDL=Transitio 13, Engine Torque valid, 20 Nm<=Torque, PS 1 = Pressure or PS 3=Pressure for >=8 seconds	same as fail	PRNDL=D6, Engine Torque Accurate, 20Nm <=Torque for >=2.67 seconds	See P1825	
P1823 Reports P1825	Internal mode switch circuit P low voltage.	ignition voltage enable, engine speed enable, NOT(PRNDL=Transition 8 & Previous PRNDL=D6)	PRNDL=Transition 13 or 8, Engine Torque valid, 20 Nm <=Torque, PS 1 = Pressure or PS 3=Pressure for >=8 seconds	same as fail	PRNDL=D6, Engine Torque Accurate, 20Nm <=Torque, for time>=2.67 seconds	See P1825	
P1825	Internal mode switch illegal value.	ignition voltage enable, engine speed enable,	Fail case 1: IMS state = illegal for >= 3.25 seconds	same as fail	IMS state <> illegal for time >= 1.08 seconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
		ignition voltage enable, engine speed enable,	Fail Case 2: Park/Neut Sw = P/N & PRNDL <> P or N; OR Park/Neut Sw != P/N & PRNDL = P or N for time >= 3.25 seconds	same as fail	IMS state <> illegal for time >= 1.08 seconds		
P1826 Reports P1825	Internal mode switch circuit C high voltage.	ignition voltage enable, engine speed enable, P0722, P0723 not fault active or test fail this key on,	PRNDL = Trans11, Engine Torque is accurate, Torque >= 20 nm, PS 1 = Pressure or PS 3 = Pressure for 8 seconds	same as fail	PRNDL=D6, Engine Torque Accurate, Torque>=20 Nm for 2.67 sec	See P1825	
P1831	High side driver #1 open or short to ground.	ignition voltage enable, engine speed enable, high side driver #1 enabled, P1831 not fault active or test fail this key on	open or ground short is detected by hardware circuitry, fail counter >= 3 counts out of 5 count sample (3 sec out of 5 sec)	same as fail	open or ground short is not detected by hardware circuitry, pass counter >= 2 counts out of 5 count sample (2 sec out of 5 sec)	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P1832	High side driver #1 short to voltage.	P1832 not fault active or test fail this key on	power short is detected by hardware circuitry, fail counters >= 3 out of 5 counts sample (3 sec out of 5 sec)	same as fail	power short is not detected by hardware circuitry. pass counter >= 2 counts out of 5 count sample (2 sec out of 5 sec)	none	C
P1876	TUTD Shift Switch Enabled while not in TUTD Range	500<=Engine Speed<=6500 rpm for at least 5 seconds; Ignition voltage enabled; No U0100, P0815, P0816, P0826, P1915, P1825 FA or TFTKO	range is not TUTD range enable while switch indicates enable for 3 counts of 2 seconds	same as fail	range is = TUTD range enable while switch indicates enable for 2 counts of 1 second	CeTRND_TUTD_InhAction (TFTKO)	C
P2714	Neutral when on-coming clutch CB26 is enabled.	No P0716, P0717, P0722, P0723, P1815, P1820, P1822, P1823, P1825, P1826, turbine speed >= 60 RPM, CB26 is on-coming clutch and CB26 on coming control is complete.	High speed mode: TOSS >= 60 RPM. High speed mode: command gear slip >= 75 RPM for time >= 2.25 seconds. Low speed mode: TOSS < 60 RPM. Low speed mode: turbine speed >= ((60 RPM * commanded gear ratio) + 75 RPM) for time >= 2.25 seconds.	same as fail	High speed mode: TOSS >= 60 RPM. High speed mode: command gear slip < 75 RPM for time >= 0.333 seconds. Low speed mode: TOSS < 60 RPM. Low speed mode: turbine speed < ((60 RPM * commanded gear ratio) + 75 RPM) for time >= 0.333 seconds.	CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_DSG_DfitGearOpt3Action, (TFTKO)	A

DTC #	failure mode description	fail enable criteria	fail criteria	pass enable criteria	pass criteria	default actions	DTC type
P2715	Tie-up when off-going clutch is CB26 .	No P0716, P0717, P0722, P0723, P1815, P1820, P1822, P1823, P1825, P1826. TOSS >= 200 RPM, Turbine Speed >= 200 RPM. CB26 is off-going clutch.	CB26 clutch command pressure = 0 kPa for time >= CB26 zero capacity delay time, where CB26 zero capacity delay time = f(transmission fluid temperature) and {(on-coming clutch delta transition pressure > 50 kPa and 300 kPa < on-coming command clutch comman	same as fail enable criteria	Attained gear slip > 40 RPM for time >= 50 milliseconds.	CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_DSG_DfltGearOpt4Action, (TFTKO)	A
P2719	CB26 control solenoid electrical rationality test.	ignition voltage enable, engine speed enable	P2719 is not fault active or test fail this key on, hardware circuitry detects out of range error is true for 4.4 seconds in 5 second sample	same as fail enable criteria	hardware circuitry detects out of range error is false for 1.5 seconds in 5 seconds sample	CeTRND_FreezeAdaptsAction (TFTKO)	C
P2720	CB26 control solenoid exhausted, electrically failed to result in low pressure.	ignition voltage enable, engine speed enable	P2720 is not fault active or test fail this key on, hardware circuitry detects low pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects low pressure error is false for 250 milliseconds	CeTRND_FreezeAdaptsAction, CeTRND_DSG_DfltGearOpt3Action, (TFTKO)	A
P2721	CB26 control solenoid pressurized, electrically fail to result in high presure.	ignition voltage enable, engine speed enable	P2720 is not fault active or test fail this key on, hardware circuitry detects high pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects high pressure error is false for 250 milliseconds	CeTRND_FreezeAdaptsAction, CeTRND_DSG_DfltGearOpt4Action, (TFTKO)	A
P2723	Neutral when on-coming clutch C1234 is enabled.	No P0716, P0717, P0722, P0723, P1815, P1820, P1822, P1823, P1825, P1826, turbine speed >= 60 RPM, C1234 is on-coming clutch and C1234 on coming control is complete.	High speed mode: TOSS >= 60 RPM. High speed mode: command gear slip >= 75 RPM for time >= 2.25 seconds. Low speed mode: TOSS < 60 RPM. Low speed mode: turbine speed >= ((60 RPM * commanded gear ratio) + 75 RPM) for time >= 2.25 seconds.	same as fail	High speed mode: TOSS >= 60 RPM. High speed mode: command gear slip < 75 RPM for time >= 0.333 seconds. Low speed mode: TOSS < 60 RPM. Low speed mode: turbine speed < ((60 RPM * commanded gear ratio) + 75 RPM) for time >= 0.333 seconds.	CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_DSG_DfltGearOpt5Action, (TFTKO)	A
P2724	Tie-up when off-going clutch is C1234 .	No P0716, P0717, P0722, P0723, P1815, P1820, P1822, P1823, P1825, P1826. TOSS >= 200 RPM, Turbine Speed >= 200 RPM. C1234 is off-going clutch.	C1234 clutch command pressure = 0 kPa for time >= C1234 zero capacity delay time, where C1234 zero capacity delay time = f(transmission fluid temperature) and {(on-coming clutch delta transition pressure > 50 kPa and 300 kPa < on-coming command clutch com	same as fail enable criteria	Attained gear slip > 40 RPM for time >= 50 milliseconds.	CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_DSG_DfltGearOpt3Action, (TFTKO)	A
P2728	C1234 control solenoid electrical rationality test.	ignition voltage enable, engine speed enable	P2728 is not fault active or test fail this key on, hardware circuitry detects out of range error is true for 4.4 seconds in 5 second sample	same as fail enable criteria	hardware circuitry detects out of range error is false for 1.5 seconds in 5 seconds sample	CeTRND_FreezeAdaptsAction (TFTKO)	C
P2729	C1234 control solenoid exhausted, electrically failed to result in low pressure.	ignition voltage enable, engine speed enable	P2729 is not fault active or test fail this key on, hardware circuitry detects low pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects low pressure error is false for 250 milliseconds	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
P2730	C1234 control solenoid pressurized, electrically fail to result in high presure.	ignition voltage enable, engine speed enable	P2730 is not fault active or test fail this key on, hardware circuitry detects high pressure error is true for 300 milliseconds in a 375 millisecond sample	same as fail enable criteria	hardware circuitry detects high pressure error is false for 250 milliseconds	CeTRND_FreezeAdaptsAction, CeTRND_DSG_DfltGearOpt3Action, (TFTKO)	A

DTC #	failure mode description	fail enable criteria	fail criteria	pass enable criteria	pass criteria	default actions	DTC type
P2762	TCC PWM control solenoid electrical rationality test.	ignition voltage enable, engine speed enable	P2762 is not fault active or test fail this key on, hardware circuitry detects out of range error is true for 4.4 seconds in 5 second sample	same as fail enable criteria	hardware circuitry detects out of range error is false for 1.5 seconds in 5 seconds sample	none	C
P2763	TCC PWM control solenoid exhausted, electrically failed to result in low pressure.	ignition voltage enable, engine speed enable, high side driver is enabled and P1833/P1834 is not fault active or test fail this key on	P2763 is not fault active or test fail this key on, hardware circuitry detects low pressure error is true for 4.4 seconds in 5 second sample	same as fail enable criteria	hardware circuitry detects low pressure error is false for 1.5 seconds in 5 seconds sample	CeTRND_ForceTCC_ApplyAction (TFTKO)	B
P2764	TCC PWM control solenoid pressurized, electrically fail to result in high pressure.	ignition voltage enable, engine speed enable, high side driver is enabled and P1833/P1834 is not fault active or test fail this key on	P2764 is not fault active or test fail this key on, hardware circuitry detects high pressure error is true for 4.4 seconds in 5 second sample	same as fail enable criteria	hardware circuitry detects high pressure error is false for 1.5 seconds in 5 seconds sample	CeTRND_ForceTCC_OffAction, CeTRND_MaxGearHotInhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	B
U0073	TCM can not communicate on CAN BUS.	Ignition voltage enable	GetCNDD_b_BusOffSt=TRUE for 5 counts (about 5 sec)	same as fail enable criteria	GetCNDD_b_BusOffSt=False for 5 counts (about 5 sec)	None	A
U0100	This DTC detects a communication problem between the TCM and the ECM.	Ignition voltage enable	No valid ECM CAN message for 12 counts (about 12 sec)	same as fail enable criteria	Valid ECM CAN Message for 12 counts (about 12 sec)	CeTRND_ForceHSD1_OffAction, CeTRND_ForceHSD2_OffAction, CeTRND_ForceTCC_OffAction, CeTRND_FreezeAdaptsAction, CeTRND_PCA_InhbAction, CeTRND_TCC_SlndInhbAction, (TFTKO)	A
		ignition voltage enable: 8.0 <= ignition voltage <= 18.0 V engine speed enable: 500 <= engine speed <= 6500 rpm for >= 5.0 sec					

P0711 Fail Case 4 Table

Start-Up Transmission Temperature (DegC)	Time for Transmission Temp to reach 20 DegC (sec)
-40	1900
-25	1000
-10	800
-5	520
20	200

P0741 Torque Vs TCC Slip Error Table

Torque (n-m)	TCC Slip Error (RPM)
0	50
64	50
128	50
192	50
256	50
320	50
384	50
448	50
512	50

SLEW Notes:

Clutch Name	Clutch Pressure SW Var	Clutch Pressure Slew
C1234 (D)	VeRSCC_p_Clutch1_Cmdpress	IsRSCC_C1_Pressure
C456 (B)	VeRSCC_p_Clutch2_Cmdpress	IsRSCC_C2_Pressure
C35R (A)	VeRSCC_p_Clutch3_Cmdpress	IsRSCC_C3_Pressure
CB26 (C)	VeRSCC_p_Clutch4_Cmdpress	IsRSCC_C4_Pressure
CBR1 (B)	VeRSCC_p_Clutch5_Cmdpress	IsRSCC_C5_Pressure
TCC (E)	VITCCC_p_TCC	IsTCCC_p_TCC (TCC Mode != Off)

Description	Software Variable Name
Mode 2 Slew	IsRSCC_h_M2_SlndDesiredState
Mode 3 Slew	IsRSCC_h_M3_SlndDesiredState