COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
Transmission Control Module (TCM)	P0601	Transmission Control Module Read Only Memory (ROM)	Incorrect program/calibrations checksum	= TRUE	None		> 5 Rom Test Fail Counter	One Trip
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: None		
Transmission Control Module (TCM)	P0603	Transmission Control Module Long-Term Memory Reset	Non-volatile memory (static or dynamic) checksum failure	= TRUE	None			One Trip
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: None		
Transmission Control Module (TCM)	P0604	Transmission Control Module Random Access Memory	RAM Read/Write Failure (Single Word)	= TRUE	None		>= 5 Count	One Trip
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: None		
Transmission Control Module (TCM)	P062F	Transmission Control Module Long Term Memory Performance	TCM Non-Volatile Memory bit Incorrect flag	= TRUE	None			One Trip
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: None		
Transmission Range Switch (Neutral Safety Back Up Switch NSBU)	P0706	NSBU Performance	NSBU state	= CeTRGR_PRN DL_Neutral			>= 3 Sec	Two Trips

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
			or NSBU state =	CeTRGR_PRN DL_Transitional 2						
			or NSBU state =	CeTRGR_PRN DL_Transitional 11						
					Ignition Voltage	>=	8	volts		
					Ignition Voltage	<=	18	volts		
					Engine Speed	>=	500	RPM		
					Engine Speed	<=	6500	RPM		
					Engine speed between min/max for	>=	5	Sec		
					Output speed	>=	50	RPM		
					Throttle position	>=	10.001	PCT		
					Engine Torque	>=	45	Nm		
					Engine Torque	<=	1492	Nm		
					Trans Temp	>=	20	Deg C		
					Ratio	>=	2.184	Ratio		
					Ratio	<=	2.4041	Ratio		
					PSM state	=	Reverse			
					Engine Torque Signal Valid	=	TRUE			
					Throttle Position Signal Valid	=	TRUE			
					Engine Speed Status Valid	=	TRUE			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P0751, P0752, P0756, P0757, P0787, P0788, P0973, P0974, P0976, P0977, P1810, P1815,	ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206,	ECM: P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
							P1816, P0207, P1817, P0208, P1818, P0300, P1759, P0301, P175A, P0302, P175B, P0303, P175C, P0304, P0705. P0305, P0306, P0307,					
Transmission Fluid Temperature Sensor (TFT)	P0711	Trans Fluid Temp Sensor Circuit Range/Performance	Fail Case 1 TFT Delta from Startup	<=	2	C°					>= 80	Fail Time (Sec)	Special No Trip
							Vehicle Speed	>=	8	Kph			
							Vehicle Speed Above min for	>=	300	Sec			
							TCC Slip	>=	120	RPM			
							TCC Slip above min for	>=	300	Sec			
							Transmission Fluid Temperature Lo	>=	-39	C°			
							Transmission Fluid Temperature High	<=	20	C°			
							Engine Coolant Temp	>=	70	C°			
							Engine Coolant Temp Delta	>=	55	C°			
			Fail Case 2 TFT Delta from startup	<	2	C°					>= 80	Fail Time (Sec)	
							Vehicle Speed	>=	8	Kph			
							Vehicle Speed Above min for	>=	300	Sec			
							TCC Slip	>=	-20	RPM			
							TCC Slip above min for	>=	0	Sec			
							Transmission Fluid Temperature	>=	129	C°			
							Transmission Fluid Temperature	<=	149	C°			
							Engine Coolant Temp	>=	70	C°			
							Engine Coolant Temp Delta from startup	>=	55	C°			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
			Fail Case 3　　TFT Delta	>=	20	C°					>=	14	Fail Counts (100ms loop)
											<	7	Sample Time (Sec)
			Fail Case 4　Transmission Fluid Temperature	<=	20	C°					>=	Refer to Table 1	Fail Time (Sec)
							Engine Torque Lo	>=	50	N*m			
							Engine Torque Hi	<=	1492	N*m			
							Throttle Position Lo	>=	8.0002	Pct			
							Throttle Position Hi	<=	89.999	Pct			
							Vehicle Speed Lo	>=	8	Kph			
							Vehicle Speed Hi	<=	511.99	Kph			
							Engine Speed Lo	>=	500	RPM			
							Engine Speed Hi	<=	6500	RPM			
							Engine Coolant Lo	>=	-39	C°			
							Engine Coolant Hi	<=	149	C°			
							Engine Torque Signal Valid	=	TRUE				
							Throttle Position Signal Valid	=	TRUE				
							Engine Speed Status Valid	=	TRUE				
							P0711 Common Enable Conditions						
							Transmission Fluid Temperature Lo	>=	-39	C°			
							Transmission Fluid Temperature Hi	<=	149	C°			
							Ignition Voltage	>=	8	V			
							Ignition Voltage	<=	18	V			
							Engine speed	>=	Refer to Table 4	RPM			
							Engine speed above min for	>=	Refer to Table 5	Sec			
							Engine speed above min for	>=	5	Sec			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS		TIME REQUIRED	MIL ILLUM.
					Engine Speed	>=	500 RPM		
					Engine Speed	<=	6500 RPM		
					Engine speed between min/max for	>=	5 Sec		
					Engine Speed Status Valid	=	TRUE		
					Engine Coolant Sensor Signal Valid	=	TRUE Boolean		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P0742 ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0116, P0117, P0118, P0125, P0128, P0171, P0172, P0174, P0175, P0201, P0202, P0203,	ECM: P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E		
Transmission Fluid Temperature Sensor (TFT)	P0712	Transmission fluid temperature thermistor failed at a high temperature (short to ground).	TFT resistance <=	48 Ω				>= 12 Fail Time (Sec)	Special No Trip
					Ignition Voltage	>=	8 V		
					Ignition Voltage	<=	18 V		
					Engine Speed	>=	500 RPM		
					Engine Speed	<=	6500 RPM		
					Engine speed between min/max for	>=	5 Sec		
					Engine Speed Status Valid	=	TRUE		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391		
Transmission Fluid Temperature Sensor (TFT)	P0713	Transmission fluid temperature thermistor failed at a low temperature (open or short to power).	TFT resistance >=	97292 Ω			>= 80 Fail Time (Sec)	Special No Trip
					Output Speed >= 200 RPM			
					Output Speed above min for >= 200 Sec			
					TCC Slip speed >= 120 RPM			
					TCC Slip Speed above min for >= 200 sec			
					Ignition Voltage >= 8 V			
					Ignition Voltage <= 18 V			
					Engine Speed >= 500 RPM			
					Engine Speed <= 6500 RPM			
					Engine speed between min/max for >= 5 Sec			
					Engine Speed Status Valid = TRUE			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717 ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
Transmission Input Speed Sensor (TISS)	P0716	Input Speed Sensor Performance	Input speed drop Δ	>=	1000	RPM					>=	3.25	sec	Two Trips
							Ignition Voltage	>=	8	volts				
							Ignition Voltage	<=	18	volts				
							Engine Speed	>=	500	RPM				
							Engine Speed	<=	6500	RPM				
							Engine speed between min/max for	>=	5	Sec				
							Engine Speed Status Valid	=	TRUE					
							Engine Torque	>=	50	N*m				
							Engine Torque	<=	1492	N*m				
							Engine Torque Signal Valid	=	TRUE					
							Vehicle Speed	>=	16	KPH				
							Input Speed min	>	1050	RPM				
							Input Speed above min for	>=	2	Sec				
							Positive ISS Δ	<	500	RPM				
							Positive ISS Δ less than min for	>=	2	Sec				
							Throttle	>=	8.0002	Pct				
							Throttle Position Signal Valid	=	TRUE					
					Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0717, P0722, P0723, P0752, P0973, P0974	ECM: P0206, P0207, P0208 P0300, P0301, P0302, P0303, P0304,					
								ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203,	P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391,					

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
						P0204, P0401, P0205, P042E		
Transmission Input Speed Sensor (TISS)	P0717	Input Speed Sensor Circuit Low Voltage	input speed	< 50 RPM			>= 4.5 Sec	Two Trips
					Ignition Voltage	>= 8 volts		
					Ignition Voltage	<= 18 volts		
					Engine Speed	>= 500 RPM		
					Engine Speed	<= 6500 RPM		
					Engine speed between min/max for	>= 5 Sec		
					Engine Speed Status Valid	= TRUE		
					Engine Torque	>= 50 N*m		
					Engine Torque	<= 1492 N*m		
					Engine Torque Signal Valid	= TRUE		
					Vehicle Speed	>= 16 Kph		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0722, P0723		
						ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303,		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
						P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E		
Tow Haul Switch	P071A	Tow Haul switch circuit low	Tow Haul switch circuit low (switch closed)	= TRUE			>= 600 sec	Special No Trip
					Ignition Voltage >= 8 volts			
					Ignition Voltage <= 18 volts			
					Engine Speed >= 500 RPM			
					Engine Speed <= 6500 RPM			
					Engine speed between min/max for >= 5 Sec			
					Engine Speed Status Valid = TRUE			
				Disable Conditions:	**MIL not Illuminated for DTC's:** TCM: P1762			
					ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391			
Transmission Output Speed Sensor (TOSS)	P0722	Output Speed Sensor Circuit Low Voltage	TOSS <= 50 rpm				>= 4.5 Sec	Two Trips
					Ignition Voltage >= 8 volts			
					Ignition Voltage <= 18 volts			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
					Engine Speed	>=	500	RPM		
					Engine Speed	<=	6500	RPM		
					Engine speed between min/max for	>=	5	Sec		
					Engine Speed Status Valid	=	TRUE			
					Engine Torque min & Range= R or D	>=	50	N*m		
					Engine Torque max & Range= R or D	<=	1492	N*m		
					Engine Torque min & Range= P/N	>=	1492	N*m		
					Engine Torque max & Range= P/N	<=	1492	N*m		
					Engine Torque Signal Valid	=	TRUE			
					Throttle Position	>=	8.0002	%		
					Throttle Position Signal Valid	=	TRUE			
					Input Speed	>=	1500	RPM		
					Input Speed	<=	6500	RPM		
					TCC Slip	>=	-20	RPM		
					Trans Temp	>=	-40	C		
			Disable Conditions:	**MIL not Illuminated for DTC's:**		TCM: P0716, P0717, P0722				
						ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207,				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E			
Transmission Output Speed Sensor (TOSS)	P0723	Output Speed Sensor Circuit Intermittent	Output Speed Drop Δ	> 1200 RPM			>= 3.25 Sec	Two Trips
					Ignition Voltage	>= 8 volts		
					Ignition Voltage	<= 18 volts		
					Engine Speed	>= 500 RPM		
					Engine Speed	<= 6500 RPM		
					Engine speed between min/max for	>= 5 Sec		
					Engine Speed Status Valid	= TRUE		
					Range Change Timer	>= 6 Sec		
					4WD Range Timer	>= 6 Sec		
					Input Speed Δ	< 500 RPM		
					Input Speed Δ <max for	>= 2 Sec		
					Raw Output Speed min	> 1000 RPM		
					Raw Output Speed > min for	>= 2 Sec		
					Positive Output Speed Δ	<= 500 RPM		
					Positive Output Speed Δ <max for	>= 2 Sec		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0974 ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391						
Torque Converter Clutch (TCC)	P0741	TCC System Stuck OFF	TCC Slip Error	>= Refer to table 3 RPM					>=	5	Sec	Two Trips
									>=	3	Count	
					Ignition Voltage	>=	8	V				
					Ignition Voltage	<=	18	V				
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	6500	RPM				
					Engine speed between min/max for	>=	5	Sec				
					Engine Speed Status Valid	=	TRUE					
					Engine Torque	>=	80	N*m				
					Engine Torque	<=	400	N*m				
					Throttle Position	>=	10.001	%				
					Throttle Position	<=	89.999	%				
					2nd Gear Ratio	>=	1.511	Ratio				
					2nd Gear Ratio	<=	1.739	Ratio				
					3rd Gear Ratio	>=	0.9301	Ratio				
					3rd Gear Ratio	<=	1.0699	Ratio				
					4th Gear Ratio	>=	0.647	Ratio				
					4th Gear Ratio	<=	0.745	Ratio				
					TFT	>=	20	C				
					TFT	<=	130	C				
					TCC Capacity	>=	64.999	%				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					TCC Capacity Timer	>=	1.00E-01 sec		
					TCC Mode	= On or Lock		
					PTO Active	= FALSE		
					Engine Torque Status Valid	= TRUE		
					Throttle Position Signal Valid	= TRUE		
					If 4L80E Cmd Gear	≠ 4th		
				Disable Conditions:	**MIL not Illuminated for DTC's:** TCM: P0716, P0717, P0722, P0723, P0742, P0842, P0843, P2763, P2764, P2769, P2770 ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203,	ECM: P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E		
Torque Converter Clutch (TCC)	P0742	TCC System Stuck ON	TCC Slip Speed	>= -20 RPM			>= 6 Sec	Two Trips
			TCC Slip Speed	<= 20 RPM			= 5 Count	
					Ignition Voltage	>= 8 V		
					Ignition Voltage	<= 18 V		
					Engine Speed	>= 500 RPM		
					Engine Speed	<= 6500 RPM		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
					Engine speed between min/max for	>=	5	Sec		
					Engine Speed Status Valid	=	TRUE			
					Engine Torque	>=	90	N*m		
					Engine Torque	<=	1492	N*m		
					TFT	>=	20	C		
					TFT	<=	130	C		
					Throttle Position	>=	10.001	%		
					Throttle Position	<=	89.998	%		
					Vehicle Speed	>=	16	KPH		
					Vehicle Speed	<=	511	KPH		
					Engine Speed	>=	500	RPM		
					Engine Speed	<=	6500	RPM		
					Gear Ratio	>=	0.642	Ratio		
					Gear Ratio	<=	1.787	Ratio		
					Commanded Gear	≠	1st Gear			
					TCC Mode	=	Off			
					Engine Torque Status Valid	=	TRUE			
					Throttle Position Signal Valid	=	TRUE			
					PTO Active	=	FALSE			
			Disable Conditions:	MIL not Illuminated for DTC's:		TCM: P0716, P0717, P0722, P0723, P0741, P2762, P2763, P2764, P2769, P2770 ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171,	ECM: P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346,			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
						P0172, P0365, P0174, P0366, P0175, P0390, P0201, P0391, P0202, P0401, P0203, P042E						
Shift solenoid A Performance	P0751	Shift Solenoid Valve A Stuck Off 2-2-3-3	**Fail Case 1** 1st gear low ratio multiplier	>= 0.949951172 Pct					=	2	Sec	Two Trips
			1st gear high ratio multiplier	<= 1.050048828 Pct								
			Fail Case 2 4th gear low ratio multiplier	>= 0.949951172 Pct					=	2	Sec	
			4th gear high ratio multiplier	<= 1.050048828 Pct								
									=	2	counts	
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	6500	RPM				
					Engine speed between min/max for	>=	5	Sec				
					Engine Speed Status Valid	=	TRUE					
					Gear Slip	>=	150	RPM				
					Gear Slip Fail Time	>=	0.5	Sec				
					Throttle	>=	8.0002	Pct				
					Engine Torque	>=	50	N*m				
					Output Speed	>=	50	RPM				
					Input Speed	>=	50	RPM				
					4WD Range Timer	>=	6	Sec				
					Range Change Timer	>=	6	Sec				
					PTO Active	=	FALSE					
					Trans Temp	>=	20	C				
					Trans Temp	<=	130	C				
					Engine Torque Signal Valid	=	TRUE					
					Throttle Position Signal Valid	=	TRUE					
					Disable Conditions: **MIL not Illuminated for DTC's:**	TCM: P0716, P0717,	ECM: P0108, P0171,	ECM: P0346, P0365,				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA		THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
									P0722, P0172, P0366, P0723, P0174, P0390, P0973, P0175, P0391, P0974, P0201, P0401, P0976, P0202, P042E P0977, P0203, P1915, P0204, P182A, P0205, P182C, P0206, P182D, P0207, P182E, P0208, P182F, P0300, P0741, P0301, P0742, P0302, P2763, P0303, P2764, P0304, P2769, P0305, P2770 P0306, P0307, ECM: P0308, P0101, P0335, P0102, P0336, P0103, P0340, P0106, P0345, P0107,						
Shift solenoid A Performance	P0752	Shift Solenoid Valve A Stuck On 1-1-4-4	Fail Case 1	2nd gear low ratio multiplier	>=	0.949951172	Pct					=	2	Sec	Two Trips
				2nd gear high ratio multiplier	<=	1.050048828	Pct								
			Fail Case 2	3rd gear low ratio multiplier	>=	0.949951172	Pct					=	2	Sec	
				3rd gear high ratio multiplier	<=	1.050048828	Pct								
												=	2	counts	
								Ignition Voltage	>=	8	volts				
								Ignition Voltage	<=	18	volts				
								Engine Speed	>=	500	RPM				
								Engine Speed	<=	6500	RPM				
								Engine speed between min/max for	>=	5	Sec				
								Engine Speed Status Valid	=	TRUE					
								Gear Slip	>=	150	RPM				
								Gear Slip Fail Time	>=	0.5	Sec				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					Throttle >= 8.0002 Pct			
					Engine Torque >= 50 N*m			
					Output Speed >= 50 RPM			
					Input Speed >= 50 RPM			
					4WD Range Timer >= 6 Sec			
					Range Change Timer >= 6 Sec			
					PTO Active = FALSE			
					Trans Temp >= 20 C			
					Trans Temp <= 130 C			
					Engine Torque Signal Valid = TRUE			
					Throttle Position Signal Valid = TRUE			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: ECM: ECM: P0716, P0108, P0336, P0717, P0171, P0340, P0722, P0172, P0345, P0723, P0174, P0346, P0973, P0175, P0365, P0974, P0201, P0366, P0976, P0202, P0390, P0977, P0203, P0391, P1915, P0204, P0401, P182A, P0205, P042E P182C, P0206, P182D, P0207, P182E, P0208, P182F, P0300, P0741, P0301, P0742, P0302, P2763, P0303, P2764, P0304, P2769, P0305, P2770 P0306, P0307, ECM: P0308, P0101, P0335, P0102, P0103, P0106, P0107,		
Shift solenoid B Performance	P0756	Shift Solenoid Valve B Stuck On 4-3-3-4	Fail Case 1	1st gear low ratio multiplier >= 0.949951172 Pct			= 2 Sec	One Trip

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
			1st gear high ratio multiplier	<= 1.050048828 Pct				
			Fail Case 2 2nd gear low ratio multiplier	>= 0.949951172 Pct			= 2 Sec	
			2nd gear high ratio multiplier	<= 1.050048828 Pct				
							= 2 counts	
					Ignition Voltage	>= 8 volts		
					Ignition Voltage	<= 18 volts		
					Engine Speed	>= 500 RPM		
					Engine Speed	<= 6500 RPM		
					Engine speed between min/max for	>= 5 Sec		
					Engine Speed Status Valid	= TRUE		
					Gear Slip	>= 150 RPM		
					Gear Slip Fail Time	>= 0.5 Sec		
					Throttle	>= 8.0002 Pct		
					Engine Torque	>= 50 N*m		
					Output Speed	>= 50 RPM		
					Input Speed	>= 50 RPM		
					4WD Range Timer	>= 6 Sec		
					Range Change Timer	>= 6 Sec		
					PTO Active	= FALSE		
					Trans Temp	>= 20 C		
					Trans Temp	<= 130 C		
					Engine Torque Signal Valid	= TRUE		
					Throttle Position Signal Valid	= TRUE		
					Disable Conditions: **MIL not Illuminated for DTC's:**	TCM: ECM: P0716, P0171, P0717, P0172, P0722, P0174, P0723, P0175, P0973, P0201, P0974, P0202, P0976, P0203, P0977, P0204, P1915, P0205, P182A, P0206, P182C, P0207, P182D, P0208, P182E, P0300,		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
						P182F, P0301, ECM: P0741, P0302 P0345, P0742, P0303 P0346, P2763, P0304 P0365, P2764, P0305 P0366, P2769, P0306 P0390, P2770 P0307 P0391, P0308, P0401, ECM: P0335, P042E P0101, P0336, P0102, P0340, P0103, P0106, P0107, P0108,						
Shift solenoid B Performance	P0757	Shift Solenoid Valve B Stuck Off 1-2-2-1	**Fail Case 1** 3rd gear low ratio multiplier	>= 0.949951172 Pct					=	2	Sec	One Trip
			3rd gear high ratio multiplier	<= 1.050048828 Pct								
			Fail Case 2 4th gear low ratio multiplier	>= 0.949951172 Pct					=	2	Sec	
			4th gear high ratio multiplier	<= 1.050048828 Pct								
									=	2	counts	
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	6500	RPM				
					Engine speed between min/max for	>=	5	Sec				
					Engine Speed Status Valid	=	TRUE					
					Gear Slip	>=	150	RPM				
					Gear Slip Fail Time	>=	0.5	Sec				
					Throttle	>=	8.0002	Pct				
					Engine Torque	>=	50	N*m				
					Output Speed	>=	50	RPM				
					Input Speed	>=	50	RPM				
					4WD Range Timer	>=	6	Sec				
					Range Change Timer	>=	6	Sec				
					PTO Active	=	FALSE					

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
					Trans Temp	>=	20	C			
					Trans Temp	<=	130	C			
					Engine Torque Signal Valid	=	TRUE				
					Throttle Position Signal Valid	=	TRUE				
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P0973, P0974, P0976, P0977, P1915, P182A, P182C, P182D, P182E, P182F, P0741, P0742, P2763, P2764, P2769, P2770 ECM: P0101, P0102, P0103, P0106,	ECM: P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307,	ECM: P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E			
Shift Solenoid	P0973	Shift Solenoid A Control Circuit Low Voltage	hardware circuitry detects open or short to ground	= TRUE					>= 44	Fail Count (100ms loop)	Two Trips
									Out of 50	Sample Counts (100ms loop)	
					Ignition Voltage	>=	8	volts			
					Ignition Voltage	<=	18	volts			
					Engine Speed	>=	500	RPM			
					Engine Speed	<=	6500	RPM			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED		MIL ILLUM.
					Engine speed between min/max for	>= 5 Sec			
					Engine Speed Status Valid	= TRUE			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None			
						ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391			
Shift Solenoid	P0974	Shift Solenoid A Control Circuit High Voltage	hardware circuitry detects a short to voltage	= TRUE			>= 44	Fail Count (100ms loop)	Two Trips
							Out of 50	Sample Counts (100ms loop)	
					Ignition Voltage	>= 8 volts			
					Ignition Voltage	<= 18 volts			
					Engine Speed	>= 500 RPM			
					Engine Speed	<= 6500 RPM			
					Engine speed between min/max for	>= 5 Sec			
					Engine Speed Status Valid	= TRUE			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None			
						ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
Shift Solenoid	P0976	Shift Solenoid B Control Circuit Low Voltage	hardware circuitry detects open or short to ground	= TRUE					>= 44	Fail Count (100ms loop)	One Trip
									Out of 50	Sample Counts (100ms loop)	
					Ignition Voltage	>=	8	volts			
					Ignition Voltage	<=	18	volts			
					Engine Speed	>=	500	RPM			
					Engine Speed	<=	6500	RPM			
					Engine speed between min/max for	>=	5	Sec			
					Engine Speed Status Valid	=	TRUE				
			Disable Conditions:	**MIL not Illuminated for DTC's:**		TCM: None ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391					
Shift Solenoid	P0977	Shift Solenoid B Control Circuit High Voltage	hardware circuitry detects a short to voltage	= TRUE					>= 44	Fail Count (100ms loop)	One Trip
									Out of 50	Sample Counts (100ms loop)	
					Ignition Voltage	>=	8	volts			
					Ignition Voltage	<=	18	volts			
					Engine Speed	>=	500	RPM			
					Engine Speed	<=	6500	RPM			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
					Engine speed between min/max for	>=	5	Sec				
					Engine Speed Status Valid	=	TRUE					
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391						
Transmission Range Switch (Neutral Safety Back Up Switch NSBU)	P175A	NSBU-Circuit A Low	NSBU circuit A low	= TRUE					>= 8 sec >= 1 count			Two Trips
					Engine Torque	>=	50	N*m				
					Engine Torque	<=	1492	N*m				
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	6500	RPM				
					Engine speed between min/max for	>=	5	Sec				
					Engine Speed Status Valid	=	TRUE					
					Engine Torque Signal Valid	=	TRUE					
					Range = Park for	>=	1	sec				
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171,	ECM: P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390,					

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
						P0172, P0391, P0174, P0401, P0175, P042E P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306,		
Transmission Range Switch (Neutral Safety Back Up Switch NSBU)	P175B	NSBU-Circuit B High	NSBU circuit B High = TRUE				>= 8 sec >= 1 count	Two Trips
					Engine Torque >= 50 N*m Engine Torque <= 1492 N*m Ignition Voltage >= 8 volts Ignition Voltage <= 18 volts Engine Speed >= 500 RPM Engine Speed <= 6500 RPM Engine speed between min/max for >= 5 Sec Engine Speed Status Valid = TRUE Engine Torque Signal Valid = TRUE Range = Park for >= 1 sec			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: ECM: None P0300, P0301, ECM: P0302, P0101, P0303, P0102, P0304, P0103, P0305, P0106, P0306, P0107, P0307, P0108, P0308, P0171, P0335,		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
						P0172, P0336, P0174, P0340, P0175, P0345, P0201, P0346, P0202, P0365, P0203, P0366, P0204, P0390, P0205, P0391, P0206, P0401, P0207, P042E P0208,						
Transmission Range Switch (Neutral Safety Back Up Switch NSBU)	P175C	NSBU-Circuit C High	NSBU circuit C High	= TRUE					>= 8 sec			Two Trips
									>= 1 count			
					Engine Torque	>=	50	N*m				
					Engine Torque Signal Valid	=	TRUE					
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				
					Vehicle Speed	>=	16	kph				
					1st gear ratio low	>=	2.8448	Ratio				
					1st gear ratio High	<=	3.274	Ratio				
					2nd gear ratio low	>=	1.511	Ratio				
					2nd gear ratio High	<=	1.74	Ratio				
					3rd gear ratio low	>=	0.9301	Ratio				
					3rd gear ratio High	<=	1.0699	Ratio				
					4th gear ratio low	>=	0.65	Ratio				
					4th gear ratio High	<=	0.7469	Ratio				
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0722, P0723	ECM: P0205, P0206, P0207,					
						ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174,	P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308,					

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
						P0175, P0201, P0401, P0202, P042E P0203, P0204,		
Transmission Range Switch (Neutral Safety Back Up Switch NSBU)	P1759	NSBU-Circuit P Low	NSBU circuit P Low	= TRUE			>= 8 sec >= 1 count	Two Trips
					Engine Torque	>= 50 N*m		
					Engine Torque	<= 1492 N*m		
					Ignition Voltage	>= 8 volts		
					Ignition Voltage	<= 18 volts		
					Engine Speed	>= 500 RPM		
					Engine Speed	<= 6500 RPM		
					Engine speed between min/max for	>= 5 Sec		
					Engine Speed Status Valid	= TRUE		
					Engine Torque Signal Valid	= TRUE		
					Range = Park for	>= 1 sec		
				Disable Conditions:	MIL not Illuminated for DTC's:	TCM: None ECM: P0300, P0301, ECM: P0302, P0101, P0303, P0102, P0304, P0103, P0305, P0106, P0306, P0107, P0307, P0108, P0308, P0171, P0335, P0172, P0336, P0174, P0340, P0175, P0345, P0201, P0346, P0202, P0365, P0203, P0366, P0204, P0390, P0205, P0391, P0206, P0401, P0207, P042E P0208,		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
Transmission Mode Switch	P1762	Trans mode switch signal circuit (BCM to TCM Rolling Count check)	Rolling count value received from BCM does not match expected value	= TRUE					>=	3	cont	Special No Trip
									=	10	sec	
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	6500	RPM				
					Engine speed between min/max for	>=	5	Sec				
					Engine Speed Status Valid	=	TRUE					
			Disable Conditions:		**MIL not Illuminated for DTC's:**	TCM: None						
						ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391						
Transmission Range Switch (Neutral Safety Back Up Switch NSBU)	P1815	Transmission Range Switch-Start in Wrong Range	Range= Park or Neutral	= FALSE					>=	2	sec	Two Trips
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				
					Engine Speed	>=	560	RPM				
					Power Mode	=	Crank					
					Crank request	<=	409	Sec				
			Disable Conditions:		**MIL not Illuminated for DTC's:**	TCM: None						
						ECM: None						
Internal Mode Switch (IMS)	P182A	Internal Mode Switch-Circuit A	IMS circuit A low	= TRUE					>=	8	sec	Two Trips
									>=	1	count	
					Engine Torque	>=	50	N*m				
					Engine Torque	<=	1492	N*m				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	6500	RPM				
					Engine speed between min/max for	>=	5	Sec				
					Engine Speed Status Valid	=	TRUE					
					Engine Torque Signal Valid	=	TRUE					
					Range = Park for	>=	1	sec				
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208,	ECM: P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E					
Internal Mode Switch (IMS)	P182C	Internal Mode Switch-Circuit B	IMS circuit B High	= TRUE					>=	8	sec	Two Trips
									>=	1	count	
					Engine Torque	>=	50	N*m				
					Engine Torque	<=	1492	N*m				
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	6500	RPM				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
					Engine speed between min/max for	>=	5	Sec				
					Engine Speed Status Valid	=	TRUE					
					Engine Torque Signal Valid	=	TRUE					
					Range = Park for	>=	1	sec				
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None	ECM: , P0301, P0302,					
					ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300	P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E						
Internal Mode Switch (IMS)	P182D	Internal Mode Switch-Circuit P	IMS circuit P Low	= TRUE					>= 8 sec			Two Trips
									>= 1 count			
					Engine Torque	>=	50	N*m				
					Engine Torque	<=	1492	N*m				
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	6500	RPM				
					Engine speed between min/max for	>=	5	Sec				
					Engine Speed Status Valid	=	TRUE					
					Engine Torque Signal Valid	=	TRUE					
					Range = Park for	>=	1	sec				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, ECM: P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E		
Internal Mode Switch (IMS)	P182E	Internal Mode Switch-Invalid	IMS Range Illegal = TRUE				>= 8 sec	Two Trips
					Ignition Voltage	>= 8 volts		
					Ignition Voltage	<= 18 volts		
					Engine Speed	>= 500 RPM		
					Engine Speed	<= 6500 RPM		
					Engine speed between min/max for	>= 5 Sec		
					Engine Speed Status Valid	= TRUE		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
Internal Mode Switch (IMS)	P182F	Internal Mode Switch-Circuit C	IMS circuit C High	= TRUE					>=	8	sec	Two Trips
									>=	1	count	
					Engine Torque	>=	50	N*m				
					Engine Torque Signal Valid	=	TRUE					
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				
					Vehicle Speed	>=	16	kph				
					1st gear ratio low	>=	2.8448	Ratio				
					1st gear ratio High	<=	3.274	Ratio				
					2nd gear ratio low	>=	1.511	Ratio				
					2nd gear ratio High	<=	1.74	Ratio				
					3rd gear ratio low	>=	0.9301	Ratio				
					3rd gear ratio High	<=	1.0699	Ratio				
					4th gear ratio low	>=	0.65	Ratio				
					4th gear ratio High	<=	0.7469	Ratio				
			Disable Conditions:	**MIL not Illuminated for DTC's:**		TCM: P0722, P0723 ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204	ECM: , P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0401, P042E					
Internal Mode Switch (IMS)	P1915	Internal Mode Switch-Start in Wrong Range	Range= Park or Neutral	= FALSE TRUE					>=	2	sec	Two Trips
					Ignition Voltage	>=	8	volts				
					Ignition Voltage	<=	18	volts				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
							Engine Speed	>=	560	RPM			
							Power Mode	=	Crank				
							Crank request	<=	409	Sec			
				Disable Conditions:			**MIL not Illuminated for DTC's:**	TCM: None					
								ECM: None					
Ignition 1 Circuit Low Voltage	P2534	No Ignition Voltage at the TCM	Ignition 1 (run/crank) input	<=	2	volt					>=	200	Fail Count (25ms loop)	One Trip
											Out of	220	Sample Count (25ms loop)	
							Engine running state from ECM	=	Running				
							Power Mode	=	Acc or Run				
				Disable Conditions:			**MIL not Illuminated for DTC's:**	TCM: None					
								ECM: None					
TCC PWM Solenoid	P2763	TCC PWM Solenoid circuit high voltage	Hardware circuitry detects a short to voltage	=	TRUE						>=	44	Fail Count (100ms loop)	Two Trips
											Out of	50	Sample Counts (100ms loop)	
							Ignition Voltage	>=	8	V			
							Ignition Voltage	<=	18	V			
							Engine Speed	>=	500	RPM			
							Engine Speed	<=	6500	RPM			
							Engine speed between min/max for	>=	5	Sec			
							Engine Speed Status Valid	=	TRUE				
							TCC PWM command	=	ON				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391		
TCC PWM Solenoid	P2764	TCC PWM Solenoid circuit low voltage	Hardware circuitry detects open or short to ground	= TRUE			>= 44 Fail Count (100ms loop)	Two Trips
							Out of 50 Sample Counts (100ms loop)	
					Ignition Voltage >= 8 V			
					Ignition Voltage <= 18 V			
					Engine Speed >= 500 RPM			
					Engine Speed <= 6500 RPM			
					Engine speed between min/max for >= 5 Sec			
					Engine Speed Status Valid = TRUE			
					TCC PWM command = OFF			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
TCC Enable Solenoid	P2769	TCC enable solenoid circuit low voltage	Hardware circuitry detects open or short to ground	= TRUE					>= 44	Fail Count (100ms loop)	Two Trips
									Out of 50	Sample Counts (100ms loop)	
					Ignition Voltage	>=	8	V			
					Ignition Voltage	<=	18	V			
					Engine Speed	>=	500	RPM			
					Engine Speed	<=	6500	RPM			
					Engine speed between min/max for	>=	5	Sec			
					Engine Speed Status Valid	=	TRUE				
					TCC Enable solenoid command	=	OFF				
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391					
TCC Enable Solenoid	P2770	TCC enable solenoid circuit high voltage	Hardware circuitry detects a short to voltage	= TRUE					>= 44	Fail Count (100ms loop)	Two Trips
									Out of 50	Sample Counts (100ms loop)	
					Ignition Voltage	>=	8	V			
					Ignition Voltage	<=	18	V			
					Engine Speed	>=	500	RPM			
					Engine Speed	<=	6500	RPM			
					Engine speed between min/max for	>=	5	Sec			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS		TIME REQUIRED		MIL ILLUM.
						Engine Speed Status Valid	=	TRUE			
						TCC Enable solenoid command	=	ON			
				Disable Conditions:		**MIL not Illuminated for DTC's:**	TCM: None				
							ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391				
Communication	U0073	Controller Area Network Bus Communication Error	CAN Bus Detects Invalid Message Error	= TRUE	Boolean				>= 5	Fail Count (1000ms loop)	Two Trips
									Out of 5	Sample Counts (1000ms loop)	
						Ignition On					
				Disable Conditions:		**MIL not Illuminated for DTC's:**	TCM: None				
							ECM: None				
Communication	U0100	Lost Communications with Engine Control System	Comm. Message Invalid Between ECU and TCM	= TRUE	Boolean				>= 12	Fail Count (1000ms loop)	Two Trips
									Out of 12	Sample Counts (1000ms loop)	
						Ignition Voltage Lo	>=	11 Volt			
						Ignition Voltage Hi	<=	18 Volt			
						Power Mode	=	Run			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: U0073 ECM: None		

T42 Supporting Tables

Table 1

						Units
Axis	-40	-25	-10	5	20	Sec
Curve	1900	1000	800	520	200	Sec

Table 2

																	Units
Axis	0	6.248474	12.49695	18.74542	24.9939	31.24237	37.49084	43.73932	49.98779	56.23627	62.48474	68.73322	74.98169	81.23016	87.47864	93.72711	99.97559	PCT
Curve	0	60	120	180	280	392	480	552	600	624	624	624	624	624	624	624	624	Kpa

Table 3

										Units
Axis	0	64	128	192	256	320	384	448	512	Nm
Curve	100	100	100	100	100	100	150	150	150	RPM

Table 4

										Units
Axis	-40	-16.25	7.5	31.25	55	78.75	102.5	126.25	150	Deg C
Curve	600	400	400	400	400	400	400	400	400	RPM

Table 5

						Units
Axis	-40	7.5	55	102.5	150	Deg C
Curve	0.1	0.15	0.2	0.3	0.3	Sec

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA		THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
Transmission Control Module (TCM)	P0634	Transmission Electro-Hydraulic Control Module Internal Temperature Too High	Fail Case 1 Substrate Temperature	>=	142.1015625	ºC					>=	5	Fail Time (Sec)	One Trip
			Fail Case 2 Substrate Temperature	>=	50	ºC					>=	2	Fail Time (Sec)	
			Ignition Voltage	>=	18	Volts								
							Substrate Temp Lo	>=	0	ºC				
							Substrate Temp Hi	<=	170	ºC				
							Substrate Temp Between Temp Range for Time	>=	0.25	Sec				
					Disable Conditions:		**MIL not Illuminated for DTC's:**	TCM: P0634						
								ECM: None						
HWIO	P0658	Actuator Supply Voltage Circuit Low	Open or ground short is detected by hardware circuitry	=	TRUE	Boolean					>=	3	Fail Counts	One Trip
											=	5	Sample Counts	
							Ignition Voltage Lo	>=	8.5996	Volts				
							Ignition Voltage Hi	<=	18	Volts				
							Engine Speed Lo	>=	500	RPM				
							Engine Speed Hi	<=	7500	RPM				
							Engine Speed is within the allowable limits for	>=	5	Sec				
							HSD #1 Enabled	=	True	Boolean				
					Disable Conditions:		**MIL not Illuminated for DTC's:**	TCM: P0658						
								ECM: None						

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED			MIL ILLUM.
Transmission Fluid Temperature Sensor (TFT)	P0667	TCM internal temperature thermistor failed at a constant value or toggling at high frequency.	**Fail Case 1**									Special No Trip
			Enable Vehicle Speed	>=	8	Kph			>=	300	Vehicle Speed Enable Time (Sec)	
			Enable TCC Slip	>	150	RPM			>=	150	TCC Slip Enable Time (Sec)	
			Enable Transmission Fluid Temperature	>=	70	ºC						
			Enable Transmission Fluid Temperature Delta from startup	>=	55	ºC						
			Enable Substrate Temp Delta	<	2	ºC			>=	100	Temp Delta Enable Time (Sec)	
			Startup Substrate Temperature Lo Enable	>=	-55	ºC						
			Startup Substrate Temperature HI Enable	<=	21	ºC						
			When Above FC1 Enable Conditions have been Met, Increment Fail Timer						>	100	Fail Timer (Sec)	
			Fail Case 2									
			Vehicle Speed	>=	8	RPM			>=	300	Vehicle Speed Enable Time (Sec)	
			TCC Slip	>	-12	RPM			>=	-12	TCC Slip Enable Time (Sec)	
			Transmission Fluid Temperature	>=	70	ºC						

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
			Transmission Fluid Temperature Delta from startup	>=	55	ºC								
			Enable Substrate Temp Delta	<	2	ºC					>=	100	Temp Delta Enable Time (Sec)	
			Startup Substrate Temperature Lo Enable	>=	120	ºC								
			Startup Substrate Temperature HI Enable	<=	150	ºC								
			When Above FC2 Enable Conditions have been Met, Increment Fail Timer								>	100	Fail Timer (Sec)	
		Fail Case 3	TCM Internal temp delta	>=	20	ºC					>=	14	Fail Counts	
											>=	7	Sample Time (Sec)	
							TCM Internal Temp Lo	>=	-55	ºC				
							TCM Internal Temp Hi	<=	150	ºC				
							Ignition Voltage Lo	>=	8.5996	Volts				
							Ignition Voltage Hi	<=	18	Volts				
							Engine Speed Lo	>=	500	RPM				
							Engine Speed Hi	<=	7500	RPM				
							Engine Speed is within the allowable limits for	>=	5	Sec				
						Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0667, P0716, P0717, P0722, P0723 ECM: None						

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
Transmission Control Module (TCM)	P0668	TCM internal temperature thermistor failed at a high temperature (short to Ground).	TCM Substrate Temp	>=	-249	ºC					>= 12.75	Fail Timer (Sec)	Special No Trip
							Ignition Voltage Lo	>=	8.5996	Volts			
							Ignition Voltage Hi	<=	18	Volts			
							Engine Speed Lo	>=	500	RPM			
							Engine Speed Hi	<=	7500	RPM			
							Engine Speed is within the allowable limits for	>=	5	Sec			
				Disable Conditions:			**MIL not Illuminated for DTC's:**	TCM: P0668 ECM: None					
Transmission Control Module (TCM)	P0669	TCM internal temperature thermistor failed at a low temperature (open or short to power).	TCM Substrate Temp	<=	249	ºC					>= 4	Fail Timer (Sec)	Special No Trip
							TOSS Speed	>=	200	RPM			
							Toss Speed greater than above cal for	>=	200	Sec			
							TCC Slip	>=	-12	RPM			
							TCC Slip greater than above cal for	>=	0	Sec			
							Ignition Voltage Lo	>=	8.5996	Volts			
							Ignition Voltage Hi	<=	18	Volts			
							Engine Speed Lo	>=	500	RPM			
							Engine Speed Hi	<=	7500	RPM			
							Engine Speed is within the allowable limits for	>=	5	Sec			
				Disable Conditions:			**MIL not Illuminated for DTC's:**	TCM: P0669, P0716, P0717, P0722, P0723 ECM: None					

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
Mode 2 Multiplex Valve	P0751	Shift Solenoid Valve A Stuck Off	Commanded Gear Slip	>=	200	RPM					≠	0	Neutral Timer (Sec)	Two Trips
			Commanded Gear	=	1st Lock	rpm								
			Closest Gear Ratio	=	4th	Gear					>=	1.1	Fail Timer (Sec)	
							Ignition Voltage Lo	>=	8.5996	Volts			
							Ignition Voltage Hi	<=	18	Volts			
							Engine Speed Lo	>=	500	RPM			
							Engine Speed Hi	<=	7500	RPM			
							Engine Speed is within the allowable limits for	>=	5	Sec			
							TPS	>=	0.5005	%			
							Shift is Complete						
							AND						
							Transmission Fluid Temperature	>=	0	°C			
							OR						
							Output Speed	>=	0	RPM			
							Throttle Position Signal Valid from ECM	=	TRUE	Boolean			
							Engine Torque Signal Valid from ECM, High side driver is enabled	=	TRUE	Boolean			
							High-Side Driver is Enabled	=	TRUE	Boolean			
						Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P182E					
								ECM: P0121, P0122, P0123					

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
Mode 2 Multiplex Valve	P0752	Shift Solenoid Valve A Stuck On	Gear Box Slip	>=	200	Rpm					Please Refer to Table 7 in Supporting Documents >= Neutral Timer (Sec)	One Trip
			Attained Gear	≠	3rd	Gear						
			Commanded Gear	=	3rd	Gear						
			Commanded Gear has Achieved 1st Locked OR 1st Free-Wheel OR 2nd	=	TRUE	Boolean						
			C456/CBR1 Pressure Switch Error	=	TRUE	Boolean						
							Ignition Voltage Lo	>=	8.5996	Volts		
							Ignition Voltage Hi	<=	18	Volts		
							Engine Speed Lo	>=	500	RPM		
							Engine Speed Hi	<=	7500	RPM		
							Engine Speed is within the allowable limits for	>=	5	Sec		
							High-Side Driver is Enabled	=	TRUE	Boolean		
							Throttle Position Signal Valid from ECM	=	TRUE	Boolean		
							Output Speed	>=	0	RPM		
							OR					
							TPS	>=	0.5005	%		
							Shift is Complete					
							Transmission Fluid Temperature	>=	0	ºC		
					Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P182E					
								ECM: P0121, P0122, P0123				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
Mode 2 Multiplex Valve	P0756	Shift Solenoid Valve B Stuck Off	**Fail Case 1** Commanded Gear	=	1st Locked or 1st FW					Please Refer to Table 7 in Supporting Documents	One Trip
			Gear Box Slip	>=	200 RPM					>= Neutral Timer (Sec)	
			Fail Case 2 Commanded Gear	=	2nd Gear						
			Gear Box Slip	<=	200 RPM						
			Closest Gear Ratio	=	2nd Gear						
						Ignition Voltage Lo	>=	8.5996	Volts		
						Ignition Voltage Hi	<=	18	Volts		
						Engine Speed Lo	>=	500	RPM		
						Engine Speed Hi	<=	7500	RPM		
						Engine Speed is within the allowable limits for	>=	5	Sec		
						Output Speed	>=	0	RPM		
						OR					
						TPS	>=	0.5005	%		
						Shift is Complete					
						Transmission Fluid Temperature	>=	0	°C		
						High-Side Driver is Enabled	=	TRUE	Boolean		
						Throttle Position Signal Valid from ECM	=	TRUE	Boolean		
					Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P182E ECM: P0121, P0122, P0123				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED		MIL ILLUM.
Variable Bleed Solenoid (VBS)	P0776	Pressure Control (PC) Solenoid B Stuck Off [C35R]	**Fail Case 1** Case: Steady State 3rd Gear							One Trip
			Commanded Gear	=	3rd Gear					
			Gearbox Slip	>=	200 Rpm			>=	Please Refer to Table 7 in Supporting Documents Neutral Timer (Sec)	
			Intrusive Test: Command 4th Gear							
			If attained Gear=4th gear for Time	>=	Table Based Time Please Refer to Table 4 in supporting documents Enable Time (Sec)					
			It the above conditions are true, Increment Sum and Fail counters					>=	2 3rd Gear Fail Counts	
								>=	14 3-5R Clutch Fail Counts	
			Fail Case 2 Case: Steady State 5th Gear							
			Commanded Gear	=	5th Gear					
			Gearbox Slip	>=	200 Rpm			>=	Please Refer to Table 7 in Supporting Documents Neutral Timer (Sec)	
			Intrusive Test: Command 6th Gear							

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
			If attained Gear=6th gear Time	>= Table Based Time Please Refer to Table 4 in supporting documents Enable Time (Sec)				
			It the above conditions are true, Increment Sum and Fail counters				>= 2 5th Gear Fail Counts >= 14 3-5R Clutch Fail Counts	
					PRNDL State defaulted	= FALSE Boolean		
					inhibit RVT	= FALSE Boolean		
					IMS fault pending indication	= FALSE Boolean		
					TPS validity flag	= TRUE Boolean		
					Hydraulic System Pressurized	= TRUE Boolean		
					Minimum output speed for RVT	>= 0 RPM		
					A OR B			
					(A) Output speed enable	>= 16 RPM		
					(B) Accelerator Pedal enable	>= 0.5005 Pct		
					Ignition Voltage Lo	>= 8.5996 Volts		
					Ignition Voltage Hi	<= 18 Volts		
					Engine Speed Lo	>= 500 RPM		
					Engine Speed Hi	<= 7500 RPM		
					Engine Speed is within the allowable limits for	>= 5 Sec		
					Throttle Position Signal valid	= TRUE Boolean		
					HSD Enabled	= TRUE Boolean		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723,P 182E ECM: P0121,		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED			MIL ILLUM.
								P0122, P0123				
Variable Bleed Solenoid (VBS)	P0777	Pressure Control (PC) Solenoid B Stuck On [C35R] (Steady State)	Fail Case 1 Case: Steady State 1st Lock									One Trip
			Commanded Gear slip	<=	33	RPM						
			If the Above is True for Time	>=	Table Based Time Please Refer to Table 6 in supporting documents	Enable Time (Sec)						
			Intrusive test: (CBR1 clutch exhausted)									
			3rd closest gear	=	TRUE				>=	1.1	Fail Timer (Sec)	
			Fail Case 2 Case: Steady State 2nd gear									
			Closest Gear Ratio	=	3rd	Gear						
			Neutral Time	≠	0	Sec						
			Intrusive test: (CB26 clutch exhausted)									
			3rd closest gear	=	TRUE				>=	1.1	Fail Timer (Sec)	
			Fail Case 3 Case: Steady State 4th gear									
			Closest Gear Ratio	=	3rd	Gear						
			Neutral Time	≠	0	Sec						
			Intrusive test: (C456 clutch exhausted)									
			3rd closest gear	=	TRUE				>=	1.1	Fail Timer (Sec)	
			Fail Case 4 Case: Steady State 6th gear									
			Closest Gear Ratio	=	5th	Gear						
			Neutral Time	≠	0	Sec						

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
			Intrusive test: (CB26 clutch exhausted)							
			5th closest gear	= TRUE					>= 1.1 Fail Timer (Sec)	
					PRNDL State defaulted	=	FALSE			
					inhibit RVT	=	FALSE			
					IMS fault pending indication	=	FALSE			
					output speed	>=	0	RPM		
					TPS validity flag	=	TRUE			
					Hydraulic_System_Pressurized	=	TRUE			
					Minimum output speed for RVT	>=	0	Nm		
					A OR B					
					(A) Output speed enable	>=	16	Nm		
					(B) Accelerator Pedal enable	>=	0.5005	Nm		
					Ignition Voltage Lo	>=	8.5996	Volts		
					Ignition Voltage Hi	<=	18	Volts		
					Engine Speed Lo	>=	500	RPM		
					Engine Speed Hi	<=	7500	RPM		
					Engine Speed is within the allowable limits for	>=	5	Sec		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P182E ECM: None				
Variable Bleed Solenoid (VBS)	P0777	Pressure Control (PC) Solenoid B StuckOn [C35R]	Primary Offgoing Clutch is exhausted (See Table 14 in Supporting Documents for Exhaust Delay Timers)	= TRUE Boolean						One Trip
			Primary Oncoming Clutch Pressure Command Status	= Maximum pressurized						
			Primary Offgoing Clutch Pressure Command Status	= Clutch exhaust command						
			Range Shift Status	≠ Initial Clutch Control						

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
			Attained Gear Slip	<=	40	RPM				
			Fail 1 Timers Below:							
			fail timer 1 (3-1 shifting with Closed Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (3-2 shifting with Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (3-2 shifting with Closed Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (3-4 shifting with Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (3-4shifting with Closed Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (3-5 shifting with Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (3-5 shifting with Closed Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (5-3 shifting with Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (5-3 shifting with Closed Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (5-4 shifting with Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (5-4 shifting with Closed Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (5-6 shifting with Throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (5-6 shifting with Closed Throttle)	>=	1.200195313	Fail Time (Sec)				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
			If Attained Gear Slip is Less than Above Cal Increment Fail Timers						Total Fail Time = (Fail 1 + Fail 2) See Enable Timers for Fail >= Timer sec 1, and Reference Supporting Table 17 for Fail Timer 2	
					Trans oil temperature	>	0	ºC		
					Input Speed Sensor FA or TFTKO	=	FALSE	Boolean		
					output speed sensor fault	=	FALSE	Boolean		
					Command / Attained Gear	≠	1st FW	Boolean		
					High Side Driver ON	=	TRUE	Boolean		
					output speed limit for TUT	>=	350	RPM		
					input speed limit for TUT	>=	200	RPM		
					TUT Enable temperature	>=	0	ºC		
					PRNDL state defaulted	=	FALSE	Boolean		
					IMS Fault Pending	=	FALSE	Boolean		
					Service Fast Learn Mode	=	FALSE	Boolean		
					HSD Enabled	=	TRUE	Boolean		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P182E ECM: None				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
Variable Bleed Solenoid (VBS)	P0796	Pressure Control (PC) Solenoid C Stuck Off [C456] (Steady State)	<u>Fail Case 1</u> Case: Steady State 4th Gear					One Trip
			Gear slip	>= 200 RPM			>= Please See Table 7 For Neutral Time Cal Neutral Timer (Sec)	
			Intrusive test: commanded 5th gear					
			If attained Gear ≠5th for time	>= Table Based Time Please Refer to Table 4 in supporting documents Enable Time (Sec)				
			Increment 4th Gear Fail Counter and C456 Fail Counters				>= 2 4th Gear Fail Count	
							>= 14 C456 Fail Counts	
			<u>Fail Case 2</u> Case: Steady State 5th Gear					
			Gear slip	>= 200 RPM			>= Please See Table 7 For Neutral Time Cal Neutral Timer (Sec)	
			Intrusive test: commanded 6th gear					
			If attained Gear ≠ 6th for time	>= Table Based Time Please Refer to Table 4 in supporting documents Enable Time (Sec)				
			Increment 5th Gear Fail Counter and C456 Fail Counters				>= 2 5th Gear Fail Count	

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
							>= 14 C456 Fail Counts	
			Fail Case 3 Case: Steady State 6th Gear					
			Gear slip >=	200 RPM			>= Please See Table 7 For Neutral Time Cal Neutral Timer (Sec)	
			Intrusive test: commanded 5th gear					
			If attained Gear ≠ 5th for time >=	Table Based Time Please Refer to Table 4 in supporting documents Enable Time (Sec)				
			Increment 6th Gear Fail Counter and C456 Fail Counters				>= 2 6th Gear Fail Count	
							>= 14 C456 Fail Counts	
					PRNDL State defaulted	= FALSE Boolean		
					inhibit RVT	= FALSE Boolean		
					IMS fault pending indication	= FALSE Boolean		
					TPS validity flag	= TRUE Boolean		
					Hydraulic System Pressurized	= TRUE Boolean		
					Minimum output speed for RVT	>= 0 RPM		
					A OR B			
					(A) Output speed enable	>= 16 RPM		
					(B) Accelerator Pedal enable	>= 0.5005 Pct		
					Common Enable Criteria			
					Ignition Voltage Lo	>= 8.5996 Volts		
					Ignition Voltage Hi	<= 18 Volts		
					Engine Speed Lo	>= 500 RPM		
					Engine Speed Hi	<= 7500 RPM		
					Engine Speed is within the allowable limits for	>= 5 Sec		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
							Throttle Position Signal valid	=	TRUE	Boolean				
							HSD Enabled	=	TRUE	Boolean				
				Disable Conditions:			**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P182E						
								ECM: P0121, P0122, P0123						
Variable Bleed Solenoid (VBS)	P0797	Pressure Control (PC) Solenoid C Stuck On [C456] (Steady State)	Fail Case 1 Case: Steady State 1st Lock											One Trip
			Commanded Gear slip	<=	33	RPM								
			If the Above is True for Time	>=	Table Based Time Please Refer to Table 6 in supporting documents	Enable Time (Sec)								
			Intrusive test: (CBR1 clutch exhausted)											
			4th closest gear	=	TRUE						>=	1.1	Fail Timer (Sec)	
			Fail Case 2 Case Steady State 2nd											
			4th closest gear	=	TRUE	Boolean								
			Neutral Time	≠	0	Sec								
			Intrusive test: (CB26 clutch exhausted)								>=	1.1	Fail Timer (Sec)	
			4th closest gear	=	TRUE	Boolean								
			Fail Case 3 Case Steady State 3rd											
			4th closest gear	=	TRUE	Boolean								
			Closest Gear Ratio	=	3rd	Gear								

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
			Neutral Time	≠	0	Sec							
			Intrusive test: (C35R clutch exhausted)										
			4th closest gear	=	TRUE	Boolean					>=	1.1 Fail Timer (Sec)	
							PRNDL State defaulted	=	FALSE	Boolean			
							inhibit RVT	=	FALSE	Boolean			
							IMS fault pending indication	=	FALSE	Boolean			
							output speed	>=	0	RPM			
							Crank Enable Criteria is met	=	TRUE	Boolean			
							TPS validity flag	=	TRUE	Boolean			
							Hydraulic_System_Pressurized	=	TRUE	Boolean			
							Minimum output speed for RVT	>=	0	RPM			
							A OR B						
							(A) Output speed enable	>=	16	RPM			
							(B) Accelerator Pedal enable	>=	0.5005	Pct			
						Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P182E					
								ECM: None					
Variable Bleed Solenoid (VBS)	P0797	Pressure Control (PC) Solenoid C Stuck On [C456]	Primary Offgoing Clutch is exhausted (See Table 13 in Supporting Documents for Exhaust Delay Timers)	=	TRUE	Boolean							One Trip
			Primary Oncoming Clutch Pressure Command Status	=	Maximum pressurized								
			Primary Offgoing Clutch Pressure Command Status	=	Clutch exhaust command								
			Range Shift Status	≠	Initial Clutch Control								
			Attained Gear Slip	<=	40	RPM							
			Fail 1 Timers Below:										

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
			fail timer 1 (4-1 shifting without throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (4-1 shifting with throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (4-2 shifting without throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (4-2 shifting with throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (4-3 shifting without throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (4-3 shifting with throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (5-3 shifting without throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (5-3 shifting with throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (6-2 shifting without throttle)	>=	1.200195313	Fail Time (Sec)				
			fail timer 1 (6-2 shifting with throttle)	>=	1.200195313	Fail Time (Sec)				
			If Attained Gear Slip is Less than Above Cal Increment Fail Timers						Total Fail Time = (Fail Timer 1 + Fail Timer 2) See >= Below sec Enable Timers for Fail Timer 1, and Reference	

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA		THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
												Support ing Table 17 for Fail Timer 2	
								Trans oil temperature	>	0	ºC		
								Input Speed Sensor FA or TFTKO	=	FALSE	Boolean		
								output speed sensor fault	=	FALSE	Boolean		
								Command / Attained Gear	≠	1st FW	Boolean		
								High Side Driver ON	=	TRUE	Boolean		
								output speed limit for TUT	>=	350	RPM		
								input speed limit for TUT	>=	200	RPM		
								TUT Enable temperature	>=	0	ºC		
								PRNDL state defaulted	=	FALSE	Boolean		
								IMS Fault Pending	=	FALSE	Boolean		
								Service Fast Learn Mode	=	FALSE	Boolean		
								HSD Enabled	=	TRUE	Boolean		
							Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P182E ECM: None				
Tap Up Tap Down Switch (TUTD)	P0815	Upshift Switch Circuit	Fail Case 1	Tap Up Switch Stuck in the Up Position in Gear 1 Enabled	=	0	Boolean	Time Since Last Range Change	>=	1	Enable Time (Sec)		Special No Trip
				Tap Up Switch Stuck in the Up Position in Gear 2 Enabled	=	0	Boolean						
				Tap Up Switch Stuck in the Up Position in Gear 3 Enabled	=	0	Boolean						
				Tap Up Switch Stuck in the Up Position in Gear 4 Enabled	=	0	Boolean						
				Tap Up Switch Stuck in the Up Position in Gear 5 Enabled	=	0	Boolean						

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS		TIME REQUIRED		MIL ILLUM.
			Tap Up Switch Stuck in the Up Position in Gear 6 Enabled	=	0 Boolean						
			Tap Up Switch Stuck in the Up Position in Neutral Enabled	=	1 Boolean						
			Tap Up Switch Stuck in the Up Position in Park Enabled	=	1 Boolean						
			Tap Up Switch Stuck in the Up Position in Reverse Enabled	=	0 Boolean						
			Tap Down Switch ON	=	TRUE Boolean				>= 1	Fail Time (Sec)	
			Fail Case 2 Tap Up Switch Stuck in the Up Position in Gear 1 Enabled	=	1 Boolean	Time Since Last Range Change	>= 1	Enable Time (Sec)			
			Tap Up Switch Stuck in the Up Position in Gear 2 Enabled	=	1 Boolean						
			Tap Up Switch Stuck in the Up Position in Gear 3 Enabled	=	1 Boolean						
			Tap Up Switch Stuck in the Up Position in Gear 4 Enabled	=	1 Boolean						
			Tap Up Switch Stuck in the Up Position in Gear 5 Enabled	=	1 Boolean						
			Tap Up Switch Stuck in the Up Position in Gear 6 Enabled	=	1 Boolean						
			Tap Up Switch Stuck in the Up Position in Neutral Enabled	=	0 Boolean						
			Tap Up Switch Stuck in the Up Position in Park Enabled	=	0 Boolean						
			Tap Up Switch Stuck in the Up Position in Reverse Enabled	=	0 Boolean						
			Tap Down Switch ON	=	TRUE Boolean				>= 600	Fail Time (Sec)	

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA		THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
			NOTE: Both Failcase1 and Failcase 2 Must Be Met										
								Ignition Voltage Lo	>=	8.5996	Volts		
								Ignition Voltage Hi	<=	18	Volts		
								Engine Speed Lo	>=	500	RPM		
								Engine Speed Hi	<=	7500	RPM		
						Disable Conditions:		**MIL not Illuminated for DTC's:**	TCM: P0826, P0815, P182E, P1761　　ECM: None				
Tap Up Tap Down Switch (TUTD)	P0816	Downshift Switch Circuit	Fail Case 1	Tap Down Switch Stuck in the Down Position in Gear 1 Enabled	=	0	Boolean	Time Since Last Range Change	>=	1	Sec		Special No Trip
				Tap Down Switch Stuck in the Down Position in Gear 2 Enabled	=	0	Boolean						
				Tap Down Switch Stuck in the Down Position in Gear 3 Enabled	=	0	Boolean						
				Tap Down Switch Stuck in the Down Position in Gear 4 Enabled	=	0	Boolean						
				Tap Down Switch Stuck in the Down Position in Gear 5 Enabled	=	0	Boolean						
				Tap Down Switch Stuck in the Down Position in Gear 6 Enabled	=	0	Boolean						
				Tap Down Switch Stuck in the Down Position in Gear Neutral Enabled	=	1	Boolean						

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
			Tap Down Switch Stuck in the Down Position in Gear Park Enabled	=	1	Boolean								
			Tap Down Switch Stuck in the Down Position in Gear Reverse Enabled	=	0	Boolean								
			Tap Down Switch ON	=	TRUE	Boolean					>=	1	sec	
			<u>Fail Case 2</u> Tap Down Switch Stuck in the Down Position in Gear 1 Enabled	=	1	Boolean	Time Since Last Range Change	>=	1	Sec				
			Tap Down Switch Stuck in the Down Position in Gear 2 Enabled	=	1	Boolean								
			Tap Down Switch Stuck in the Down Position in Gear 3 Enabled	=	1	Boolean								
			Tap Down Switch Stuck in the Down Position in Gear 4 Enabled	=	1	Boolean								
			Tap Down Switch Stuck in the Down Position in Gear 5 Enabled	=	1	Boolean								
			Tap Down Switch Stuck in the Down Position in Gear 6 Enabled	=	1	Boolean								
			Tap Down Switch Stuck in the Down Position in Neutral Enabled	=	0	Boolean								
			Tap Down Switch Stuck in the Down Position in Park Enabled	=	0	Boolean								
			Tap Down Switch Stuck in the Down Position in Reverse Enabled	=	0	Boolean								
			Tap Down Switch ON	=	TRUE	Boolean					>=	600	sec	

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
			NOTE: Both Failcase1 and Failcase 2 Must Be Met										
							Ignition Voltage Lo	>=	8.5996	Volts			
							Ignition Voltage Hi	<=	18	Volts			
							Engine Speed Lo	>=	500	RPM			
							Engine Speed Hi	<=	7500	RPM			
							Engine Speed is within the allowable limits for	>=	5	Sec			
				Disable Conditions:			**MIL not Illuminated for DTC's:**	TCM: P0826, P0816, P182E, P1761 ECM: None					
Tap Up Tap Down Switch (TUTD)	P0826	Up and Down Shift Switch Circuit	TUTD Circuit Reads Invalid Voltage	=	TRUE	Boolean					>=	60	Fail Time (Sec)	Special No Trip
							Ignition Voltage Lo	>=	8.5996	Volts			
							Ignition Voltage Hi	<=	18	Volts			
							Engine Speed Lo	>=	500	RPM			
							Engine Speed Hi	<=	7500	RPM			
							Engine Speed is within the allowable limits for	>=	5	Sec			
				Disable Conditions:			**MIL not Illuminated for DTC's:**	TCM: P0826, P1761 ECM: None					
Transmission Fluid Pressure Switch	P0872	Transmission Fluid Pressure (TFP) Sensor C Circuit Low Voltage	CB26 Hydraulic pressure	<=	50	KPa							Special No Trip
			Hydraulic Delay Timer (Table Based)	>=	See Table 9 for Delay Timer Cal	Sec							
			Check for Switch to be in Exhausted Position after delay, If so then Increment Fail Counter								>=	18	Fail Counts

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
					Transmission Fluid Temperature Lo	>=	0	ºC		
					Transmission Fluid Temperature Hi	<=	120	ºC		
					Ignition Voltage Lo	>=	8.5996	Volts		
					Ignition Voltage Hi	<=	18	Volts		
					Engine Speed Lo	>=	500	RPM		
					Engine Speed Hi	<=	7500	RPM		
					Engine Speed is within the allowable limits for	>=	5	Sec		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0711, P0712, P0713, P0973, P0974, P0976, P0977, P1915, P182E ECM: None				
Transmission Fluid Pressure Switch	P0877	Transmission Fluid Pressure (TFP) Sensor D Circuit Low Voltage	C1234 Hydraulic pressure	<= 50 KPa						Special No Trip
			Hydraulic Delay Timer (Table Based)	>= See Table 8 for Delay Timer Cal Sec						
			Check for Switch to be in Exhausted Position after delay, If so then Increment Fail Counter						>= 5 Fail Counts	
					Transmission Fluid Temperature Lo	>=	0	ºC		
					Transmission Fluid Temperature Hi	<=	120	ºC		
					Ignition Voltage Lo	>=	8.5996	Volts		
					Ignition Voltage Hi	<=	18	Volts		
					Engine Speed Lo	>=	500	RPM		
					Engine Speed Hi	<=	7500	RPM		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					Engine Speed is within the allowable limits for	>=　5　Sec		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0711, P0712, P0713, P0973, P0974, P0976, P0977, P1915, P182E ECM: None		
Variable Bleed Solenoid (VBS)	P0962	Pressure Control (PC) Solenoid A Control Circuit Low Voltage	Hardware circuitry detects ground short	=　TRUE　Boolean			>=　0.3　Fail Time (Sec) =　0.375　Sample Time (Sec)	One Trip
					P0962 Test Enabled	=　TRUE　Boolean		
					Ignition Voltage Lo	>=　8.5996　Volts		
					Ignition Voltage Hi	<=　18　Volts		
					Engine Speed Lo	>=　500　RPM		
					Engine Speed Hi	<=　7500　RPM		
					Engine Speed is within the allowable limits for	>=　5　Sec		
					Line Pressure Control Solenoid Enabled	=　TRUE　Boolean		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0962 ECM: None		
Variable Bleed Solenoid (VBS)	P0966	Pressure Control (PC) Solenoid B Control Circuit Low Voltage	Hardware circuitry detects ground short	=　TRUE　Boolean			>=　0.3　Fail Time (Sec) =　0.375　Sample Time (Sec)	One Trip
					P0966 Test Enabled	=　TRUE　Boolean		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					Ignition Voltage Lo	>= 8.5996 Volts		
					Ignition Voltage Hi	<= 18 Volts		
					Engine Speed Lo	>= 500 RPM		
					Engine Speed Hi	<= 7500 RPM		
					Engine Speed is within the allowable limits for	>= 5 Sec		
					Line Pressure Control Solenoid Enabled	= TRUE Boolean		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0966 ECM: None		
Variable Bleed Solenoid (VBS)	P0967	Pressure Control (PC) Solenoid B Control Circuit High Voltage	Hardware circuitry detects open circuit or power short	= TRUE Boolean			>= 0.3 Fail Time (Sec) = 0.375 Sample Time (Sec)	One Trip
					P0967 Test Enabled	= TRUE Boolean		
					Ignition Voltage Lo	>= 8.5996 Volts		
					Ignition Voltage Hi	<= 18 Volts		
					Engine Speed Lo	>= 500 RPM		
					Engine Speed Hi	<= 7500 RPM		
					Engine Speed is within the allowable limits for	>= 5 Sec		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0967 ECM: None		
Variable Bleed Solenoid (VBS)	P0970	Pressure Control (PC) Solenoid C Control Circuit Low Voltage	Hardware circuitry detects ground short	= TRUE Boolean			>= 0.3 Fail Time (Sec) = 0.375 Sample Time (Sec)	One Trip
					P0970 Test Enabled	= TRUE Boolean		
					Ignition Voltage Lo	>= 8.5996 Volts		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
							Ignition Voltage Hi	<=	18	Volts			
							Engine Speed Lo	>=	500	RPM			
							Engine Speed Hi	<=	7500	RPM			
							Engine Speed is within the allowable limits for	>=	5	Sec			
						Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0970 ECM: None					
Variable Bleed Solenoid (VBS)	P0971	Pressure Control (PC) Solenoid C Control Circuit High Voltage	Hardware circuitry detects open circuit or power short	=	TRUE	Boolean					>= 0.3 = 0.375	Fail Time (Sec) Sample Time (Sec)	One Trip
							P0971 Test Enabled	=	TRUE	Boolean			
							Ignition Voltage Lo	>=	8.5996	Volts			
							Ignition Voltage Hi	<=	18	Volts			
							Engine Speed Lo	>=	500	RPM			
							Engine Speed Hi	<=	7500	RPM			
							Engine Speed is within the allowable limits for	>=	5	Sec			
						Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0971 ECM: None					
Mode 2 Multiplex Valve	P1751	Shift valve 1 performance	Attained Gear Slip is If Slip is Greater than the Above Cal Increment Fail Counter If Slip is Greater than the Above Cal Increment Fail Sample	>=	100	RPM					= 5 = 5	Fail Counts Fail Samples	Two Trips
							Once this evaluation is complete the system will allow the valve to get back into position by delaying the next test for	=	1	Seconds			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS		TIME REQUIRED	MIL ILLUM.
					Attained Gear Slip	>=	100		
					M2 Solenoid is Commanded On	=	TRUE Boolean		
					Current Gear ≠ 2nd Gear	≠	2nd Gear Gear		
					Calculated line pressure is	>=	1300 kPa		
					The test can begin when the M2 valve is verified to be in place because absolute value of attained gear slip and commanded gear slip is	<=	110 RPM		
					Test is delayed by a calibrated amount of time to allow the M2 valve to get into position	=	0.5 Sec		
					Upshift is In Progress	=	FALSE Boolean		
					Input Speed Sensor Signal	>=	1175 RPM		
					The torque converter clutch has transition from Locked to Unlocked.	=	TRUE Boolean		
					TCC Stuck On Enable Criteria:				
					Gear Ratio	<=	1.6393 Ratio		
					Gear Ratio	>=	0.6204 Ratio		
					Engine Speed Hi	<=	6500 RPM		
					Engine Speed Lo	>=	500 RPM		
					Vehicle Speed Hi	<=	511 KPH		
					Vehicle Speed Lo	>=	16 KPH		
					Stuck On During Upshift Enabled	=	0 Boolean		
					If Stuck On During Upshift is enabled (See Above), Engine Torque Must be	>=	8191 Nm		
					Down Shift In Progress	=	FALSE Boolean		
					Current Gear ≠ 1st Gear Locked	≠	1st Gear Locked Boolean		
					Engine Torque Hi	<=	1492 Nm		
					Engine Torque Lo	>=	115 Nm		
					Current Range ≠ Reverse	≠	Reverse Range		
					Transmission Sump Temperature	<=	130 ºC		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
					Transmission Sump Temperature	>=	20	ºC				
					PTO Active	=	FALSE	Boolean				
					Common Enables:							
					Vehicle Speed Calculated from TOSS	<=	511	KPH				
					Ignition Voltage	>=	8.5996	V				
					Ignition Voltage	<=	18	V				
					Vehicle Speed	<=	511	KPH				
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	7500	RPM				
					Engine Speed is within the allowable limits for	>=	5	Sec				
					Engine Torque Signal Valid	=	TRUE	Boolean				
					Throttle Position Signal Valid	=	TRUE	Boolean				
			Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P0741, P0742, P1751,P 2763, P2764 ECM: P0101, P0102, P0103, P0121, P0122, P0123							
Tap Up Tap Down Switch (TUTD)	P1761	Tap Up and Down switch signal circuit	Serial Data Signal is Corrupted or Missing	= TRUE Boolean					>=	3	Fail Counter	Special No Trip
									<=	10	Sample Timer (Sec)	
					Rolling Count Diagnostic Enabled	=	TRUE	Boolean				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
						Tap Up Tap Down Message Health	=	TRUE	Boolean				
						Ignition Voltage Lo	>=	8.5996	Volts				
						Ignition Voltage Hi	<=	18	Volts				
						Engine Speed Lo	>=	500	RPM				
						Engine Speed Hi	<=	7500	RPM				
						Engine Speed is within the allowable limits for	>=	5	Sec				
				Disable Conditions:		**MIL not Illuminated for DTC's:**	TCM: None						
							ECM: None						
Internal Mode Switch (IMS)	P182E	Internal Mode Switch - Circuit A Low Reported as Internal Mode Switch-Invalid Range	<u>Fail Case 1</u> Current range	=	"Transitional 1"	Range State							One Trip
			Previous range	!=	CeTRGR_PRNDL_Drive6	Range State							
			Previous range	!=	CeTRGR_PRNDL_Drive4	Range State							
			Either the S1 or S3 Pressure Switch indicates "Pressure Present"	=	TRUE	Boolean							
			Steady State Engine Torque	>=	-50	Nm							
			Steady State Engine Torque	<=	1492	Nm							
			If the above conditions are present Increment Fail Timer	>=	0.225	Seconds							
			If Fail Timer has Expired then Increment Fail Counter								>=	15	Fail Counts	
			<u>Fail Case 2</u> Current range	=	"Transitional 1"	Range State							
			S3 Pressure Switch indicates "Pressure Present"	=	FALSE	Boolean							
			Commanded Gear	=	1st Locked	Gear							

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS		TIME REQUIRED		MIL ILLUM.
			If the above conditions are present Increment Fail Timer	>=	0.225 Seconds						
			If Fail Timer has Expired then Increment Fail Counter						>=	15 Fail Counts	
			Fail Case 3								
			Current range	=	"Transitional 13"	Previous range	!=	CeTR GR_P RNDL_ Drive2			
			Either the S1 or S3 Pressure Switch indicates "Pressure Present"	=	TRUE Boolean	Previous range	!=	CeTR GR_P RNDL_ Drive1			
			Engine Torque	>=	-1492 Nm						
			Engine Torque	<=	1492 Nm	If the "IMS 7 Position" = 1 then the "previous range" criteria above must also be satisfied when the "current range" = "Transitional 13"					
			If the above conditions are present Increment Fail Timer	>=	0.225 Seconds						
			If Fail Timer has Expired then Increment Fail Counter						>=	15 Fail Counts	
			Fail Case 4								
			Current range	=	"Transitional 2" or "Transitional 8"						
			Either the S1 or S3 Pressure Switch indicates "Pressure Present"	=	TRUE Boolean						
			Steady State Engine Torque	>=	-50 Nm						
			Steady State Engine Torque	<=	1492 Nm						
			The above conditions are present for	>=	0.225 Seconds						
			If the above Conditions have been met, Increment Fail Counter						>=	15 Fail Counts	
			Fail Case 5								
			Current range	=	"Illegal"	A Open Circuit Definition:					

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA			THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
			or					Last Valid Range State	≠	"Neutral, Transitional 8, or Transitional					
			ECM Park/Neutral Message	=		"Park/Neutral"		and							
			and					Previous transitional state	≠	"Illegal"					
			Current Range	≠		Park or Neutral		and							
			or					PRNDL Circuit A	=	Open Circuit					
			ECM Park/Neutral Message	≠		"Park/Neutral"		PRNDL Circuit B	=	Closed Circuit					
			and					PRNDL Circuit C	=	Open Circuit					
			Current range	=		Park, Neutral, Reverse, Transitional 8, or Transitional 11		PRNDL Circuit P	=	Open Circuit					
			and												
			A Open Circuit (See Definition)	=		FALSE	Boolean								
			If the above Conditions are present, Increment Fail timer									>=	2	Seconds	
		Fail Case 6	Current PRNDL State	=		"Reverse"									
			and												
			Last Previous valid state	=		"Drive 4"	Range								
			If the above Conditions are present, Increment Fail timer									>=	2	Seconds	
								Ignition Voltage Lo	>=	8.5996	Volts				
								Ignition Voltage Hi	<=	18	Volts				
								Vehicle Speed Lo	<=	511	KPH				
								Engine Speed Lo	>=	500	RPM				
								Engine Speed Hi	<=	7500	RPM				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					Engine Speed is within the allowable limits for **Disable Conditions:**	>= 5 Sec **MIL not Illuminated for DTC's:** TCM: P182E, P0722, P0723 ECM: P0101, P0102, P0103, P0121, P0122, P0123		
Variable Bleed Solenoid (VBS)	P2714	Pressure Control (PC) Solenoid D Stuck Off [CB26]	<u>Fail Case 1</u> Case: Steady State 2nd Gear					One Trip
			Gear slip >= 200 RPM				Please See Table 7 For Neutral Time Cal Neutral Timer (Sec) >=	
			Intrusive test: commanded 3rd gear If attained Gear = 3rd for Time >=	Table Based Time Please see Table 4 in Supporting Documents Enable Time (Sec)				
			If Above Conditions have been met, Increment Fail Counter and Sum Counters				>= 2 2nd Gear Fail Count CB26 >= 14 Fail Count	
			<u>Fail Case 2</u> Case: Steady State 6th Gear					
			Gear slip >= 200 RPM				Please See Table 7 For Neutral Time Cal Neutral Timer (Sec) >=	

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
			Intrusive test: commanded 5th gear										
			If attained Gear = 5th For Time	Table Based Time Please see Table 4 in Supporting Documents >=	Enable Time (Sec)								
			If Above Conditions have been met, Increment Fail Counter and Sum Counters							>=	2	5th Gear Fail Count	
										>=	14	Total Fail Count	
						PRNDL State defaulted	=	FALSE	Boolean				
						inhibit RVT	=	FALSE	Boolean				
						IMS fault pending indication	=	FALSE	Boolean				
						TPS validity flag	=	TRUE	Boolean				
						Hydraulic System Pressurized	=	TRUE	Boolean				
						Minimum output speed for RVT	>=	0	RPM				
						A OR B							
						(A) Output speed enable	>=	16	RPM				
						(B) Accelerator Pedal enable	>=	0.5005	Pct				
						Common Enable Criteria							
						Ignition Voltage Lo	>=	8.5996	Volts				
						Ignition Voltage Hi	<=	18	Volts				
						Engine Speed Lo	>=	500	RPM				
						Engine Speed Hi	<=	7500	RPM				
						Engine Speed is within the allowable limits for	>=	5	Sec				
						Throttle Position Signal Valid	=	TRUE	Boolean				
					Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722,, P0723, P182E ECM: P0121, P0122, P0123						

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
Variable Bleed Solenoid (VBS)	P2715	Pressure Control (PC) Solenoid D Stuck On [CB26] (Dynamic)	Primary Offgoing Clutch is exhausted (See Table 15 in Supporting Documents for Exhaust Delay Timers)	=	TRUE Boolean				One Trip
			Primary Oncoming Clutch Pressure Command Status	=	Maximum pressurized				
			Primary Offgoing Clutch Pressure Command Status	=	Clutch exhaust command				
			Range Shift Status	≠	Initial Clutch Control				
			Attained Gear Slip	<=	40 RPM				
			Fail 1 Timers Below:						
			fail timer 1 (2-1 shifting with throttle)	>=	1.200195313 Fail Time (Sec)				
			fail timer 1 (2-1 shifting without throttle)	>=	1.200195313 Fail Time (Sec)				
			fail timer 1 (2-3 shifting with throttle)	>=	1.200195313 Fail Time (Sec)				
			fail timer 1 (2-3 shifting without throttle)	>=	1.200195313 Fail Time (Sec)				
			fail timer 1 (2-4 shifting with throttle)	>=	1.200195313 Fail Time (Sec)				
			fail timer 1 (2-4 shifting without throttle)	>=	1.200195313 Fail Time (Sec)				
			fail timer 1 (6-4 shifting with throttle)	>=	1.200195313 Fail Time (Sec)				
			fail timer 1 (6-4 shifting without throttle)	>=	1.200195313 Fail Time (Sec)				
			fail timer 1 (6-5 shifting with throttle)	>=	1.200195313 Fail Time (Sec)				
			fail timer 1 (6-5 shifting without throttle)	>=	1.200195313 Fail Time (Sec)				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
			If Attained Gear Slip is Less than Above Cal Increment Fail Timers				Total fail timer (fail timer1 + fail timer2) See Below Enable Timers for Fail Timer 1, and Reference Supporting Table 17 for Fail Timer 2 >= sec	
					Trans oil temperature	> 0 ºC		
					Input Speed Sensor FA or TFTKO	= FALSE Boolean		
					output speed sensor fault	= FALSE Boolean		
					Command / Attained Gear	≠ 1st FW Boolean		
					High Side Driver ON	= TRUE Boolean		
					output speed limit for TUT	>= 350 RPM		
					input speed limit for TUT	>= 200 RPM		
					TUT Enable temperature	>= 0 ºC		
					PRNDL state defaulted	= FALSE Boolean		
					IMS Fault Pending	= FALSE Boolean		
					Service Fast Learn Mode	= FALSE Boolean		
					HSD Enabled	= TRUE Boolean		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P182E ECM: None		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA		THRESHOLD VALUE		SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
Variable Bleed Solenoid (VBS)	P2715	Pressure Control (PC) Solenoid D Stuck On [CB26] (Steady State)	<u>Fail Case 1</u>	Case: Steady State 1st										One Trip
				Commanded Gear slip	<=	33 MPH								
				If Above is True for Time	>=	Table Based Time Please see Table 6 in Supporting Documents	Enable Time (Sec)							
				Intrusive test: (Exhaust CBR1)										
				If closest gear	=	2nd Gear					>=	1.1	sec	
			<u>Fail Case 2</u>	Case: Steady State 3rd Gear										
				If Closet gear	=	2nd gear								
				Intrusive test: (Exhaust C35R)										
				If Closet gear	=	2nd gear					>=	1.1	sec	
			<u>Fail Case 3</u>	Case: Steady State 4rd Gear										
				If Closet gear	=	6th gear								
				Intrusive test: (Exhaust C1234)										
				If Closet gear	=	6th gear					>=	1.1	sec	
			<u>Fail Case 4</u>	Case: Steady State 5th Gear										
				If Closet gear	=	6th gear								
				Neutral Time	≠	0 sec								
				Intrusive test: (Exhaust C35R)										
				If Closet gear	=	6th gear					>=	1.1	sec	
							Trans oil temperature	>	0	°C				
							Input Speed Sensor FA or TFTKO	=	FALSE	Boolean				
							output speed sensor fault	=	FALSE	Boolean				
							Command / Attained Gear	≠	1st FW	Boolean				
							High Side Driver ON	=	TRUE	Boolean				
							output speed limit for TUT	>=	350	RPM				
							input speed limit for TUT	>=	200	RPM				
							TUT Enable temperature	>=	0	°C				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					PRNDL state defaulted = FALSE Boolean			
					IMS Fault Pending = FALSE Boolean			
					Service Fast Learn Mode = FALSE Boolean			
					HSD Enabled = TRUE Boolean			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P182E ECM: None		
Variable Bleed Solenoid (VBS)	P2720	Pressure Control (PC) Solenoid D Control Circuit High	Hardware Circuitry Detects a High Pressure Error	= TRUE Boolean			>= 0.3 Fail Time (Sec) = 0.375 Sample Time (Sec)	One Trip
					Ignition Voltage Lo >= 8.5996 Volts			
					Ignition Voltage Hi <= 18 Volts			
					Engine Speed Lo >= 500 RPM			
					Engine Speed Hi <= 7500 RPM			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P2720 ECM: None		
Variable Bleed Solenoid (VBS)	P2721	Pressure Control (PC) Solenoid D Control Circuit Low	Hardware Circuitry Detects a Low Pressure Error	= TRUE Boolean			>= 0.3 Fail Time (Sec) = 0.375 Sample Time (Sec)	One Trip
					Ignition Voltage Lo >= 8.5996 Volts			
					Ignition Voltage Hi <= 18 Volts			
					Engine Speed Lo >= 500 RPM			
					Engine Speed Hi <= 7500 RPM			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P2721 ECM: None		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED		MIL ILLUM.
Variable Bleed Solenoid (VBS)	P2723	Pressure Control (PC) Solenoid E Stuck Off	**Fail Case 1** Case: Steady State 1st Gear						Please See Table 7 For Neutral Time Cal	Neutral Timer (Sec)	One Trip
			Gear slip	>=	200	RPM			>=		
			Intrusive test: commanded 2nd gear								
			If attained Gear ≠ 2nd for Time	>=	Table based Timer, Please See Table 4 in Supporting Documents	Enable Time (Sec)					
			If Above Conditions have been met, Increment Fail Counter and Sum Counters						>=	2	1st Gear Fail Count
									>=	14	C1234 Clutch Fail Count
			Fail Case 2 Case: Steady State 2nd Gear						Please See Table 7 For Neutral Time Cal	Neutral Timer (Sec)	
			Gear slip	>=	200	RPM			>=		
			Intrusive test: commanded 3rd gear								
			If attained Gear ≠ 3rd for Time	>=	Table based Timer, Please See Table 4 in Supporting Documents	Enable Time (Sec)					
			If Above Conditions have been met, Increment Fail Counter and Sum Counters						>=	2	2nd Gear Fail Count
									>=	14	Total Fail Count

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED		MIL ILLUM.
			Fail Case 3 Case: Steady State 3rd Gear								
			Gear slip	>=	200	RPM			>=	Please See Table 7 For Neutral Time Cal Neutral Timer (Sec)	
			Intrusive test: commanded 4th gear								
			If attained Gear ≠ 4th for time	>=	Table based Timer, Please See Table 4 in Supporting Documents	Enable Time (Sec)					
			If Above Conditions have been met, Increment Fail Counter and Sum Counters						>=	2 3rd Gear Fail Count C1234	
									>=	14 Total Fail Count	
			Fail Case 4 Case: Steady State 4th Gear								
			Gear slip	>=	200	RPM			>=	Please See Table 7 For Neutral Time Cal Neutral Timer (Sec)	
			Intrusive test: commanded 5th gear								
			If attained Gear = 5th For Time	>=	Table based Timer, Please See Table 4 in Supporting Documents	Enable Time (Sec)					
			If Above Conditions have been met, Increment Fail Counter and Sum Counters						>=	2 4th Gear Fail Count	
									>=	14 Total Fail Count	

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					PRNDL State defaulted	= FALSE Boolean		
					inhibit RVT	= FALSE Boolean		
					IMS fault pending indication	= FALSE Boolean		
					TPS validity flag	= TRUE Boolean		
					Hydraulic System Pressurized	= TRUE Boolean		
					Minimum output speed for RVT	>= 0 RPM		
					A OR B			
					(A) Output speed enable	>= 16 RPM		
					(B) Accelerator Pedal enable	>= 0.5005 Pct		
					Common Enable Criteria			
					Ignition Voltage Lo	>= 8.5996 Volts		
					Ignition Voltage Hi	<= 18 Volts		
					Engine Speed Lo	>= 500 RPM		
					Engine Speed Hi	<= 7500 RPM		
					Engine Speed is within the allowable limits for	>= 5 Sec		
					Throttle Position Signal Valid	= TRUE Boolean		
			Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P182E ECM: P0121, P0122, P0123		
Variable Bleed Solenoid (VBS)	P2724	Pressure Control (PC) Solenoid E Stuck On (Dynamic)	Primary Offgoing Clutch is exhausted (See Table 12 in Supporting Documents for Exhaust Delay Timers)	= TRUE Boolean				One Trip
			Primary Oncoming Clutch Pressure Command Status	= Maximum pressurized				
			Primary Offgoing Clutch Pressure Command Status	= Clutch exhaust command				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
			Range Shift Status ≠	Initial Clutch Control						
			Attained Gear Slip <=	40	RPM					
			fail timer 1 (2-6 shifting with throttle) >=	1.200195313	sec					
			fail timer 1 (2-6 shifting without throttle) >=	1.200195313	sec					
			fail timer 1 (3-5 shifting with throttle) >=	1.200195313	sec					
			fail timer 1 (3-5 shifting without throttle) >=	1.200195313	sec					
			fail timer 1 (4-5 shifting with throttle) >=	1.200195313	sec					
			fail timer 1 (4-5 shifting without throttle) >=	1.200195313	sec					
			fail timer 1 (4-6 shifting with throttle) >=	1.200195313	sec					
			fail timer 1 (4-6 shifting without throttle) >=	1.200195313	sec					
			If attained gear has been met then increment fail timers						Total fail timer (fail timer1 + fail timer2) See Below Enable Timers for Fail Timer 1, and Reference Supporting Table >= sec	

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
							19 for Fail Timer 2	
					Trans oil temperature	> 0 ºC		
					Input Speed Sensor FA or TFTKO	= FALSE		
					output speed sensor fault	= FALSE		
					Command / Attained Gear	≠ 1st FW		
					High Side Driver ON	= TRUE		
					output speed limit for TUT	>= 350 RPM		
					input speed limit for TUT	>= 200 RPM		
					TUT Enable temperature	>= 0 ºC		
					PRNDL state defaulted	= FALSE		
					IMS Fault Pending	= FALSE		
					Service Fast Learn Mode	= FALSE		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P182E ECM: None		
Variable Bleed Solenoid (VBS)	P2724	Pressure Control (PC) Solenoid E Stuck On	Case: 5th Gear					One Trip
			Closest Gear = 4th gear					
			Neutral Time ≠ 0 Sec					
			Fail Case 1 Intrusive test: (C35R clutch exhausted)					
			If closest gear = 4th Gear				>= 1.1 sec	
			Case: 6th Gear					
			Closest Gear = 4th gear					
			Neutral Time ≠ 0 Sec					
			Fail Case 2 Intrusive test: (CB26 clutch exhausted)					
			If closest gear = 4th Gear				>= 1.1 sec	
					output speed	>= 0 RPM		
					PRNDL State defaulted	= FALSE Boolean		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
							inhibit RVT	=	FALSE	Boolean		
							IMS fault pending indication	=	FALSE	Boolean		
							TPS validity flag	=	TRUE	Boolean		
							output speed	>=	0	RPM		
							Ignition Voltage Lo	>=	8.5996	Volts		
							Ignition Voltage Hi	<=	18	Volts		
							Engine Speed Lo	>=	500	RPM		
							Engine Speed Hi	<=	7500	RPM		
							Engine Speed is within the allowable limits for	>=	5	Sec		
				Disable Conditions:			**MIL not Illuminated for DTC's:**	TCM: P182E ECM: None				
Variable Bleed Solenoid (VBS)	P2729	Pressure Control (PC) Solenoid E Control Circuit High	Hardware Circuitry Detects a High Pressure Error	=	TRUE	Boolean					>= 0.3 Fail Time (Sec) = 0.375 Sample Time (Sec)	One Trip
							Ignition Voltage Lo	>=	8.5996	Volt		
							Ignition Voltage Hi	<=	18	Volt		
							Engine Speed Lo	>=	500	RPM		
							Engine Speed Hi	<=	7500	RPM		
							Engine Speed is within the allowable limits for	>=	5	Sec		
				Disable Conditions:			**MIL not Illuminated for DTC's:**	TCM: P2729 ECM: None				
Variable Bleed Solenoid (VBS)	P2730	Pressure Control (PC) Solenoid E Control Circuit Low	Hardware Circuitry Detects a Low Pressure Error	=	TRUE	Boolean					>= 0.3 Fail Time (Sec) = 0.375 Sample Time (Sec)	One Trip
							Ignition Voltage Lo	>=	8.5996	Volt		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
					Ignition Voltage Hi	<=	18	Volt		
					Engine Speed Lo	>=	500	RPM		
					Engine Speed Hi	<=	7500	RPM		
					Engine Speed is within the allowable limits for	>=	5	Sec		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P2730				
						ECM: None				

T43 Supporting Tables

Table 1

Axis	-40	-0.00781	40	80	120	°C	Units
Curve	2500	1000	800	520	200	Sec	

Table 2

Axis	0	6.249905	12.49981	18.74971	24.99962	31.24952	37.49943	43.74933	49.99924	56.24914	62.49905	68.74895	74.99886	81.24876	87.49866	93.74857	99.99847	PCT
Curve	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	800	Kpa

Units

Table 3

Axis	0	64	128	192	256	320	384	448	512	Nm
Curve	50	50	50	50	50	50	50	50	50	RPM

Units

Table 4

Axis	-0.00781	0	40	°C	Units
Curve	409.5938	2	2	Sec	

Table 5

Axis	-0.00781	0	40	°C	Units
Curve	409.5938	5.5	5.5	Sec	

Table 6

Axis	-0.00781	0	40	°C	Units
Curve	409.5938	2	2	Sec	

Table 7

Axis	-0.00781	0	40	°C	Units
Curve	409.5938	5	5	Sec	

Table 8

Axis	-40	-0.00781	40	80	120	°C	Units
Curve	409	409	1.6	1.4	1.4	Sec	

Table 9

Axis	-40	-0.00781	40	80	120	°C	Units
Curve	409	409	1.4	1.3	1.2	Sec	

Table 10

Axis	-40	-0.00781	40	80	120	ºC
Curve	409	409	1.6	1.5	1.4	Sec

Units

Table 11

Axis	-40	-0.00781	40	80	120	ºC
Curve	409	409	1.3	1.2	1.1	Sec

Units

Table 12

Axis	-40	-20	0	30	110	ºC
Curve	3.029297	1.857422	1.00293	0.754883	0.583984	Sec

Units

Table 13

Axis	-40	-20	0	30	110	ºC
Curve	1.720703	1.108398	0.595703	0.359375	0.21582	Sec

Units

Table 14

Axis	-40	-20	0	30	110	ºC
Curve	2.121094	1.393555	0.841797	0.642578	0.332031	Sec

Units

Table 15

Axis	-40	-20	0	30	110	ºC
Curve	2.507813	0.952148	0.499023	0.292969	0.126953	Sec

Units

Table 16

Axis	-40	-20	0	30	110	ºC
Curve	2.972656	0.818359	0.47168	0.204102	0.132813	Sec

Units

Table 17

Axis	-40	-30	-20	-10	0	10	20	30	40	ºC
Curve	0	0	0	0	0	0	0	0	0	Sec

Units