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)	P0602	Transmission Control Module Not Programmed	Non-Programmed TECHM Failure	=	TRUE	None					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

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: None						
Transmission Range Switch (Neutral Safety Back Up Switch NSBU)	P0705	NSBU ABCP inputs indicate illegal position	ABCP Inputs	= 0000 or 0001					>=	60	sec	Two Trips
					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: None ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391						
Transmission Range Switch (Neutral Safety Back Up Switch NSBU)	P0706	NSBU Performance	NSBU state	= CeTRGR_PRNDL_Neutral					>=	3	Sec	Two Trips
			or NSBU state	= CeTRGR_PRNDL_Transitional2								
			or NSBU state	= CeTRGR_PRNDL_Transitional11								
					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		
					Output speed	>=	50	RPM		
					Throttle position	>=	10.001	PCT		
					Engine Torque	>=	45	Nm		
					Engine Torque	<=	1492	Nm		
					Trans Temp	>=	20	Deg C		
					Ratio	>=	1.993	Ratio		
					Ratio	<=	2.2928	Ratio		
					PSM state	=	Revers			
					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, P1816, P1817, P1818, P1759, P175A, P175B, P175C, P0705.	ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306,	ECM: P0307, 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.
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°			
			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)	

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
					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	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		
					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		

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: ECM: P0716, P0208, P0717, P0300, P0722, P0301, P0723, P0302, P0742 P0303, P0304, ECM: P0305, P0101, P0306, P0102, P0307, P0103, P0308, P0106, P0335, P0107, P0336, P0108, P0340, P0116, P0345, P0117, P0346, P0118, P0365, P0125, P0366, P0128, P0390, P0171, P0391, P0172, P0401, P0174, P042E P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207,		
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 >= 65.625 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					

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: ECM: P0717, P0302, P0722, P0303, P0723, P0304, P0752, P0305, P0973, P0306, P0974 P0307, P0308, ECM: P0335, P0101, P0336, P0102, P0340, P0103, P0345, P0106, P0346, P0107, P0365, P0108, P0366, P0171, P0390, P0172, P0391, P0174, P0401, P0175, P042E P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301,		
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			

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: P0722, P0723 ECM: P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304,		
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 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.
					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, P0208, P0300, P0301, P0302,	ECM: P0303, P0304, P0305, P0306, P0307, 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.
Transmission Output Speed Sensor (TOSS)	P0723	Output Speed Sensor Circuit Intermittent	Output Speed Drop Δ	> 393.5 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	> 327.75 RPM		
					Raw Output Speed > min for	>= 2 Sec		
					Positive Output Speed Δ	<= 163.75 RPM		
					Positive Output Speed Δ <max for	>= 2 Sec		
				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			>= 8 Sec >= 2 Count	Two Trips

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
					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	>=	50	N*m		
					Engine Torque	<=	1492	N*m		
					Throttle Position	>=	8.0002	%		
					Throttle Position	<=	89.999	%		
					2nd Gear Ratio	>=	1.5122	Ratio		
					2nd Gear Ratio	<=	1.7397	Ratio		
					3rd Gear Ratio	>=	0.9301	Ratio		
					3rd Gear Ratio	<=	1.0699	Ratio		
					4th Gear Ratio	>=	0.6333	Ratio		
					4th Gear Ratio	<=	0.7288	Ratio		
					TFT	>=	20	C		
					TFT	<=	130	C		
					TCC Capacity	>=	64.999	%		
					TCC Capacity Timer	>=	2	sec		
					TCC Mode	=	On or Lock			
					PTO Active	=	FALSE			
					Engine Torque Status Valid	=	TRUE			
					Throttle Position Signal Valid	=	TRUE			
					If 4L80E Cmd Gear	≠	4th			

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, P0722, P0723, P0742, P0842, P0843, P2763, P2764, P2769, P2770 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, 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					=	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	>=	50	N*m				
							Engine Torque	<=	1492	N*m				
							TFT	>=	20	C				
							TFT	<=	130	C				
							Throttle Position	>=	8.0002	%				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
					Throttle Position	<=	89.999	%		
					Vehicle Speed	>=	16	KPH		
					Vehicle Speed	<=	511	KPH		
					Engine Speed	>=	500	RPM		
					Engine Speed	<=	6500	RPM		
					Gear Ratio	>=	0.6333	Ratio		
					Gear Ratio	<=	1.739	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, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206,	ECM: P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, 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.
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					

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, P0722, P0723, P0973, P0974, P0976, P0977, P1915, P182A, P182C, P182D, P182E, P182F, P0741, P0742, P2763, P2764, P2769, P2770	ECM: P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308,	ECM: P0366, P0390, P0391, P0401, P042E				
							ECM: P0101, P0102, P0103, P0106, P0107, P0108,	P0335, P0336, P0340, P0345, P0346, P0365,					
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				

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			
					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			

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: ECM: ECM: P0716, P0172, P0391, P0717, P0174, P0401, P0722, P0175, P042E P0723, P0201, P0973, P0202, P0974, P0203, P0976, P0204, P0977, P0205, P1915, P0206, P182A, P0207, P182C, P0208, P182D, P0300, P182E, P0301, P182F, P0302, P0741, P0303, P0742, P0304, P2763, P0305, P2764, P0306, P2769, P0307, P2770 P0308, P0335, ECM: P0336, P0101, P0340, P0102, P0345, P0103, P0346, P0106, P0365, P0107, P0366, P0108, P0390, P0171,		
Shift solenoid B Performance	P0756	Shift Solenoid Valve B Stuck On 4-3-3-4	<u>Fail Case 1</u> 1st gear low ratio multiplier	>= 0.949951172 Pct			= 2 Sec	One Trip
			1st gear high ratio multiplier	<= 1.050048828 Pct				
			<u>Fail Case 2</u> 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		

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			
					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			

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: ECM: ECM: P0716, P0171, P0366, P0717, P0172, P0390, P0722, P0174, P0391, P0723, P0175, P0401, P0973, P0201, P042E P0974, P0202, P0976, P0203, P0977, P0204, P1915, P0205, P182A, P0206, P182C, P0207, P182D, P0208, P182E, P0300, P182F, P0301, P0741, P0302, P0742, P0303, P2763, P0304, P2764, P0305, P2769, P0306, P2770 P0307, P0308, ECM: P0335, P0101, P0336, P0102, P0340, P0103, P0345, P0106, P0346, P0107, P0365, P0108,		
Shift solenoid B Performance	P0757	Shift Solenoid Valve B Stuck Off 1-2-2-1	Fail Case 1 3rd gear low ratio multiplier 3rd gear high ratio multiplier	>= 0.949951172 Pct <= 1.050048828 Pct			= 2 Sec	One Trip
			Fail Case 2 4th gear low ratio multiplier 4th gear high ratio multiplier	>= 0.949951172 Pct <= 1.050048828 Pct			= 2 Sec	
							= 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		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS		TIME REQUIRED	MIL ILLUM.
					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		

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: ECM: ECM: P0716, P0171, P0365, P0717, P0172, P0366, P0722, P0174, P0390, P0723, P0175, P0391, P0973, P0201, P0401, P0974, P0202, P042E P0976, P0203, P0977, P0204, P1915, P0205, P182A, P0206, P182C, P0207, P182D, P0208, P182E, P0300, P182F, P0301, P0741, P0302, P0742, P0303, P2763, P0304, P2764, P0305, P2769, P0306, P2770 P0307, P0308, ECM: P0335, P0101, P0336, P0102, P0340, P0103, P0345, P0106, P0346, P0107, P0108,		
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				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 Neutral Enabled	= 0 Boolean				
			Tap Up Switch Stuck in the Up Position in Park 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 Reverse Enabled	=	0	Boolean								
			TUTD Up Input	=	TRUE						>=	0	Sec	
			<u>Fail Case 2</u> Tap Up Switch Stuck in the Up Position in Gear 1 Enabled	=	0	Boolean								
			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 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								
			TUTD Up Input	=	TRUE						>=	0	Sec	
							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					

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: P0826, P1761 ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391		
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				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 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				
				TUTD Down Input	=	TRUE			>= 0 Sec	
			Fail Case 2	Tap Down Switch Stuck in the Down Position in Gear 1 Enabled	=	0 Boolean				
				Tap Down Switch Stuck in the Down Position in Gear 2 Enabled	=	0 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 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 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								
			TUTD Down Input	=	TRUE						>=	0	Sec	
							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: P0826, P1761 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.
Tap Up Tap Down Switch (TUTD)	P0826	Up and Down Shift Switch Circuit	TUTD/MUMD switch voltage invalid	= TRUE					>=	0	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: P1761 ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391							
Transmission Fluid Pressure Switch	P0842	TCC release switch circuit low voltage	TCC release switch state	= Closed					>=	8	Sec	Two Trips
									>=	2	count	
					Engine Speed	>=	500	RPM				
					Engine Speed	<=	6500	RPM				
					Engine speed between min/max for	>=	5	Sec				
					TFT	>=	20	C				
					TFT	<=	130	C				
					Vehicle Speed	>=	16	KPH				
					Vehicle Speed	<=	511.99	KPH				
					Engine Torque	>=	50	Nm				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
					Engine Torque	<=	1492	Nm				
					TCC Slip	>=	100	RPM				
					TCC Mde	=	OFF					
					Torque Validity Flag	=	Valid					
					Engine Speed Status Valid	=	TRUE					
				Disable Conditions:	**MIL not Illuminated for DTC's:** TCM: ECM: P0716, P0206, P0717, P0207, P0741, P0208, P0742, P0300, P0843, P0301, P0894, P0302, P2763, P0303, P2764, P0304, P2769, P0305, P2770 P0306, P0307, ECM: P0308, P0101, P0335, P0102, P0336, P0103, P0340, P0106, P0345, P0107, P0346, P0108, P0365, P0171, P0366, P0172, P0390, P0174, P0391, P0175, P0401, P0201, P042E P0202, P0203, P0204, P0205,							
Transmission Fluid Pressure Switch	P0843	TCC release switch circuit high voltage	TCC release switch state = Open						>=	6	Sec	Two Trips
									>=	2	count	
					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.
					TFT	>=	20	C		
					TFT	<=	130	C		
					TCC Pressure	>=	90	Kpa		
					TCC Pressure	<=	830	Kpa		
					Engine Torque	>=	50	Nm		
					Engine Torque	<=	1492	Nm		
					TCC Slip	>=	-20	RPM		
					TCC Slip	<=	60	RPM		
					TCC Mde	=	On or Lock			
					Engine Torque Status Valid	=	TRUE			
					Engine Speed Status Valid	=	TRUE			
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0741, P0742, P0843, P0894, P2763, P2764, P2769, P2770 ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206,	ECM: P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, 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.
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			
					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)	

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				
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391					
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				

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			
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				
					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.
Transmission Fluid Pressure Switch (TFP)	P1810	TFP state is illegal	TFP Illegal (switch B & C low)	= TRUE			>= 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		
					PTO Active	= FALSE		
				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			>= 0 sec	Two Trips
					Ignition Voltage	>= 8 volts		
					Ignition Voltage	<= 18 volts		
					Engine Speed	>= 0 RPM		
					Power Mode	= Crank		
					Crank request	<= 0 Sec		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: None ECM: None		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
Transmission Fluid Pressure Switch (TFP)	P1816	TFP indicates Park or Neutral (P/N) with drive ratio	TFP indication	= P/N			>= 12 Sec	Two Trips
			1st gear ratio low	>= 2.752807617 Ratio				
			1st gear ratio High	<= 3.167236328 Ratio				
			2nd gear ratio low	>= 1.512207031 Ratio				
			2nd gear ratio High	<= 1.739746094 Ratio				
			3rd gear ratio low	>= 0.930053711 Ratio				
			3rd gear ratio High	<= 1.069946289 Ratio				
			4th gear ratio low	>= 0.633300781 Ratio				
			4th gear ratio High	<= 0.728637695 Ratio				
					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	>= 82 RPM		
					Throttle position	>= 8.0002 PCT		
					Engine Torque	>= 50 Nm		
					Engine Torque	<= 1492 Nm		
					Engine Torque Signal Valid	= TRUE		
					Throttle Position Signal Valid	= TRUE		
					Engine Speed Status Valid	= TRUE		
					PTO Active	= FALSE		

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, P0722, P0723, P0751, P0752, P0756, P0757, P0787, P0788, P0973, P0974, P0976, P0977, P1810, P1817, P1818 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		
Transmission Fluid Pressure Switch (TFP)	P1818	TFP indicates Park or Neutral (P/N) with reverse ratio	TFP indication = P/N Ratio >= 1.993041992 Ratio Ratio <= 2.29284668 Ratio		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 Engine Torque Signal Valid = TRUE Throttle Position Signal Valid = TRUE Engine Speed Status Valid = TRUE		>= 3 Sec	Two Trips

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, P0722, P0723, P0751, P0752, P0756, P0757, P0787, P0788, P0973, P0974, P0976, P0977, P1810, P1815, P1816, P1817, P1825. ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, ECM: P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, ECM: P0366, P0390, P0391, P0401, P042E		
Tap Up Tap Down Enable Switch (TUTD)	P1876	Tap Up and Down Enable Switch Closed	TUTD enable switch = Closed Trans Range ≠ CeTRGR_PRNDL_Drive3				>= 0 Sec >= 0 Count	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: P0705, P0815, P0816, P0826, P1761, P1810, P1816, P1817, P1818, P182A, P182C, P182D, P182E, P182F, P1877, P1915, U0100 ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391		
Tap Up Tap Down Enable Switch (TUTD)	P1877	Tap Up and Down Enable Switch Open	TUTD enable switch = Open Trans Range = CeTRGR_PR NDL_Drive3				>= 0 Sec >= 0 Count	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: ECM: P0705, P0335, P0815, P0336, P0816, P0340, P0826, P0345, P1761, P0346, P1810, P0365, P1816, P0366, P1817, P0390, P1818, P0391 P182A, P182C, P182D, P182E, P182F, P1876, P1915, U0100		
Ignition 1 Circuit Low Voltage	P2534	No Ignition Voltage at the TCM	Ignition 1 (run/crank) input	<= 2 volt			>= 200 Fail Count (25ms loop) Out of 220 Sample Count (25ms loop)	One Trip
					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

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED		MIL ILLUM.
									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				
				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)	

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS		ENABLE CONDITIONS		TIME REQUIRED		MIL ILLUM.
					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					
Communication	U0073	Controller Area Network Bus Communication Error	CAN Bus Detects Invalid Message Error = TRUE Boolean						>= 5	Fail Count (1000m s loop)	Two Trips
									Out of 5	Sample Counts (1000m s loop)	
					Ignition 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: 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				
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: U0073 ECM: None			

Supporting Tables

Table 1

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

Units

Table 2

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	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	Kpa

Units

Table 3

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

Units

Table 4

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

Units

Table 5

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

Units