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
				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 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)	
								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			

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
					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: P0716, P0717, P0722, P0723, P0742, ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0116, P0117, P0118, P0125, P0128, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345,		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
						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 <=	43.1875 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			
			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 >=	171862 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			

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 ECM: P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391						
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: P0717, P0722, P0723, P0752, P0973, P0974 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, 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 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: 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, 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		

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					
				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				
					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				

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 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, 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		Ignition Voltage >= 8 volts Ignition Voltage <= 18 volts		>= 3.25 Sec	Two Trips

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					
					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				
			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
									>= 4 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				
					Trottle Position	>=	8.0002	%				
					Trottle Position	<=	89.999	%				
					2nd Gear Ratio	>=	1.408	Ratio				
					2nd Gear Ratio	<=	1.556	Ratio				
					3rd Gear Ratio	>=	0.95	Ratio				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
					3rd Gear Ratio	<=	1.05	Ratio		
					4th Gear Ratio	>=	0	Ratio		
					4th Gear Ratio	<=	0	Ratio		
					TFT	>=	20	C		
					TFT	<=	130	C		
					TCC Capacity	>=	64.999	%		
					TCC Capacity Timer	>=	3	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, P0205, P0206, P0207, P0208, P0300, P0301, P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
								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	<=	15	RPM					=	4	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				
							Trottle Position	>=	8.0002	%				
							Trottle Position	<=	89.999	%				
							Vehicle Speed	>=	16	KPH				
							Vehicle Speed	<=	511	KPH				
							Engine Speed	>=	500	RPM				
							Engine Speed	<=	6500	RPM				
							Gear Ratio	>=	0.95	Ratio				
							Gear Ratio	<=	1.556	Ratio				
							Commanded Gear	≠	1st Gear					
							TCC Mode	=	Off					
							Engine Torque Status Valid	=	TRUE					
							Throttle Position Signal 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, P0741, P2762, P2763, P2764, P2769, P2770 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, P0307, P0308, P0335, P0336, P0340, P0345		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA		THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
									P0346, P0365, P0366, P0390, P0391, P0401, 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					

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: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301,		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA		THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
Shift solenoid A Performance	P0752	Shift Solenoid Valve A Stuck On 1-1-4-4							P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E						Two Trips
			Fail Case 1	2nd gear low ratio multiplier	>=	0.949951172	Pct					=	2	Sec	
				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								
												=	5	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: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300,		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E			
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
			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				
							= 7 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: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301		

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							
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						
								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: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
								P0302, P0303, P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E				
Torque Converter Clutch (TCC)	P0894	TCC or Overdrive unit has excessive slip	Fail Case 1									Two Trips
			TCC Slip Speed	>=	100	RPM						
			TCC Slip Speed	<=	1500	RPM						
			TCC Slip Fail Timer	>=	10	Sec						
			Fail Counter	>=	3	count						
			Fail Case 2 TCC Slip Speed 1	>=	100	RPM						
			TCC Slip Speed 1	<=	1500	RPM						
			TCC Slip Fail Timer1	>=	10	Sec						
			TCC Slip Speed 2	>=	100	RPM						
			TCC Slip Speed 2	<=	1500	RPM						
			TCC Slip Fail Timer 2	>=	10	Sec						
			TCC Slip Speed 3	>=	100	RPM						
			TCC Slip Speed 3	<=	1500	RPM						
			TCC Slip Fail Timer 3	>=	10	Sec						
							gear ratio	<=	2.25	Ratio		
							gear ratio	>=	0.7	Ratio		
							transmission fluid temperature	>=	20	C		
							transmission fluid temperature	>=	130	C		
							engine torque	>=	108	N*m		
							engine torque	>=	1492	N*m		
							Engine Torque Status Valid	=	TRUE			
							TCC Pressure	>=	64.999	Kpa		
							TCC Pressure Enable Fail Time	>=	5	Sec		
							Vehicle Speed	>=	48	KPH		
							Vehicle Speed	<=	511	KPH		
							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			
					Throttle Position	<=	8.0002	Pct		
					Throttle Position	>=	89.999	Pct		
				Disable Conditions:	**MIL not Illuminated for DTC's:**	TCM: P0716, P0717, P0722, P0723, P0751, P0752, P0756, P0757, P0973, P0974, P0976, P0977, P2763, P2764, P0742, P1810, P1816, P1818				
						ECM: P0101, P0102, P0103, P0106, P0107, P0108, P0171, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301,				

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
Shift Solinoid	P0973	Shift Solenoid A Control Circuit Low Voltage				P0304, P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E		
			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		

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 Solinoid	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 Solinoid	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 Solinoid	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		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED			MIL ILLUM.
					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						
Transmission Fluid Pressure Switch (TFP)	P1810	TFP state is illegal	TFP Illegal (switch B & C low)	= TRUE					>=	60	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 Fluid Pressure Switch (TFP)	P1816	TFP indicates Park or Neutral (P/N) with drive ratio	TFP indication = P/N Ratio >= 2.420043945 Ratio						>=	12	Sec	Two Trips

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS			TIME REQUIRED	MIL ILLUM.
			Ratio	<=	2.520019531	Ratio						
			Ratio	>=	1.407958984	Ratio						
			Ratio	<=	1.520019531	Ratio						
			Ratio	>=	0.949951172	Ratio						
			Ratio	<=	1.050048828	Ratio						
			Ratio	>=	0.713012695	Ratio						
			Ratio	<=	0.787963867	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, P0301, P0302, P0303,		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE	SECONDARY PARAMETERS	ENABLE CONDITIONS	TIME REQUIRED	MIL ILLUM.
					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				>= 5 Sec	Two Trips
			Ratio >= 2.064941406 Ratio					
			Ratio <= 2.094848633 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 >= 8.0002 PCT Engine Torque >= 100 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			

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, P0172, P0174, P0175, P0201, P0202, P0203, P0204, P0205, P0206, P0207, P0208, P0300, P0301, P0302.		

COMPONENT/ SYSTEM	FAULT CODE	MONITOR STRATEGY DESCRIPTION	MALFUNCTION CRITERIA	THRESHOLD VALUE			SECONDARY PARAMETERS	ENABLE CONDITIONS		TIME REQUIRED		MIL ILLUM.
								P0305, P0306, P0307, P0308, P0335, P0336, P0340, P0345, P0346, P0365, P0366, P0390, P0391, P0401, P042E				
Ignition 1 Circuit Low Voltage	P2534	No Ignition Voltage at the TCM	Ignition 1 (run/crank) input	<=	2	volt				>= Out of	200 220	Fail Count (25ms loop) 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
										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	=	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)	
					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				

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		
Communication	U0073	Controller Area Network Bus Communication Error	CAN Bus Detects Invalid Message Error	= TRUE Boolean			>= 5 Fail Count (1000ms loop) Out of 5 Sample Counts (1000ms loop)	Two Trips
					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) Out of 12 Sample Counts (1000ms loop)	Two Trips
					Ignition Voltage Lo Ignition Voltage Hi Power Mode	>= 11 Volt <= 18 Volt = 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		

Supporting Tables

Table 1

					Units
Axis	-40	-25	-10	5	20	C°
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	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	624	Kpa

Table 3

									Units
Axis	0	64	128	192	256	320	384	448	512	Nm
Curve	125	125	125	125	125	125	125	125	125	RPM

Table 4

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

Table 5

					Units
Axis	-40	7.5	55	102.5	150	C°
Curve	0.55	0.55	0.55	0.55	0.55	Sec