Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
TCM, Internal Fault	P0605	ROM checksum or RAM error	Calculated checksum differs from stored	Number of failed calculations: 2	Ignition	ON	Immediately Continuous	Immediately
Lost communication with ECM (Engine)	U0100	Frame missing from ECM	Detect no Status CAN frame from ECM		DS_Active_CAN[1] InRpm or EgRpm detected by the TCM Ignition Emergency mode	TRUE > 500rpm ON >3sec FALSE	4 sec Continuous	Immediately
Invalid data from ECM	P1895	Engine Torque signal is indicated invalid	Invalid Torque data from ECM		DS_Active_CAN[1] Ignition Emergency mode No DTC set	TRUE ON >3sec FALSE U0100	4 sec Continuous	Immediately
Solenoid S1	P0985 P0986	Circuit continuity check	Short-cut ground Not connected or short-cut Ubatt		DS_Active[2] Emergency mode Time after solenoid output change	TRUE FALSE > 25 ms	500 msec Continuous	Immediately
Solenoid S2	P0973 P0974	Circuit continuity check	Short-cut ground Not connected or short-cut Ubatt		DS_Active[2] Emergency mode Time after solenoid output change	TRUE FALSE > 25 ms	500 msec Continuous	Immediately
Solenoid S3	P0976 P0977	Circuit continuity check	Short-cut ground Not connected or short-cut Ubatt		DS_Active[2] Emergency mode Time after solenoid output change	TRUE FALSE > 25 ms	500 msec Continuous	Immediately
Solenoid S4	P0979 P0980	Circuit continuity check	Short-cut ground Not connected or short-cut Ubatt		DS_Active[2] Emergency mode Time after solenoid output change	TRUE FALSE > 25 ms	500 msec Continuous	Immediately
Solenoid S5	P0982 P0983	Circuit continuity check	Short-cut ground Not connected or short-cut Ubatt		DS_Active[2] Emergency mode Time after solenoid output change	TRUE FALSE > 25 ms	500 msec Continuous	Immediately

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters / Enable Conditions		Time Required	MIL Illumin.
Torque Converter Clutch Slips	P0741	Comparison of engine speed and transmission input speed	(Engine Speed - Transmission Input speed)	> 100rpm	No Shifting Control[5]		12 sec	Immediately
					Throttle	> 20%	Continuous	
					abs(1-SpeedABS/Trans Output	< 10%		
					abs(1-SpeedABS/Trans. Input	< 10%		
					Shift Position	RANGE_D, 4, 3, 2, M (defined)		
					Engine speed	< 4000 rpm		
					SLU target current	>= 1000mA		
					Time after shifting	> 0,5 sec		
					Battery voltage	> 10,5 V		
					DS_Active[2]	TRUE		
					Emergency mode	FALSE		
					Lock-up	TRUE		
					No DTC set	P0705		
						P0711		
						P0712		
						P0713		
						P0716		
						P0717		
						P0721		
						P0722		
						P0725		
						P0786		
						P0787		
						P0788		
						P0961		
						P0962		
						P0963		
						P0973		
						P0974		
						P0976		
						P0977		
						P0979		
						P0980		
						P0982		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
					P0983			
					P0985			
					P0986			
					P1820			
					P1895			
					P2762			
					P2763			
					P2764			
					U0001			
					U0100			
					U0121			
Pressure solenoid SLU	P2764	Circuit continuity check	Short-cut ground or open		DS_Active[2]	TRUE	12,5 sec	Immediately
			Current	<92 mA	Emergency mode	FALSE	Continuous	
			(AD	< 68)				
	P2762		Terminal short		Emergency mode	FALSE	2,75 sec	Immediately
			Error current	> 80 mA	Oil temperature	> 20°C	Continuous	
					System voltage	11 -16 V		
					System voltage change	< 0,2V		
					Output current target	> 835mA and not changed during detection		
					DS_Active[2]	TRUE		
					No DTC set	P0711		
						P0712		
						P0713		
	P2763		Short-cut Ubatt		DS_Active[2]	TRUE	2 sec	Immediately
			Measured Current	> 1356 mA				
			(AD	> 1000)	Emergency mode	FALSE	Continuous	
Pressure solenoid SLT	P0962	Circuit continuity check	Short-cut ground or open		DS_Active[2]	TRUE	12 5 sec	Immediately
			Current	<92 mA				
			(AD	< 68)	Emergency mode	FALSE	Continuous	
	P0961		Terminal short		Emergency mode	FALSE	2 75 sec	Immediately
			Error current	> 80 mA	Oil temperature	> 20°C	Continuous	

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
					System voltage	11 -16 V		
					System voltage change	< 0,2V		
					Output current target	> 835mA and not changed during detection		
					DS_Active[2]	TRUE		
					No DTC set	P0711		
						P0712		
						P0713		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
	P0963		Short-cut Ubatt		DS_Active[2]	TRUE	2 sec	Immediately
			Measured Current	> 1356 mA				
			(AD	> 1000)	Emergency mode	FALSE	Continuous	
Timing solenoid SLS	P0787	Circuit continuity check	Short-cut ground or open		DS_Active[2]	TRUE	12 5 sec	Immediately
			Current	<92 mA				
			(AD	< 68)	Emergency mode	FALSE	Continuous	
	P0786		Terminal short	Error current > 80 mA	Emergency mode	FALSE	2 75 sec	Immediately
					Oil temperature	> 20°C	Continuous	
					System voltage	11 -16 V		
					System voltage change	< 0,2V		
					Output current target	> 835mA and not changed during detection		
					DS_Active[2]	TRUE		
					No DTC set	P0711		
						P0712		
						P0713		
	P0788		Short-cut Ubatt		DS_Active[2]	TRUE	2 sec	Immediately
			Measured Current	> 1356 mA				
			(AD	> 1000)	Emergency mode	FALSE	Continuous	
Shift Malfunction	P0780	Shift time check	Shift time is too long, too short or "tie up" occurs		No Multiplex Shifting[6]		5 times detection during DCY	Immediately
					Oil temperature	> 60°C		
					Emergency mode	FALSE		
					DS_Active[2]	TRUE	Continuous	
					Shifter position	D, 4, 3, L, or M		
					No DTC set	P0705		
						P0711		
						P0712		
						P0713		
						P0716		
						P0717		
						P0721		
						P0722		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
					P0725			
					P0786			
					P0787			
					P0788			
					P0961			
					P0962			
					P0963			
					P0973			
					P0974			
					P0976			
					P0977			
					P0979			
					P0980			
					P0982			
					P0983			
					P0985			
					P0986			
					P1820			
					P1895			
					P2762			
					P2763			
					P2764			
					U0001			
					U0100			
					U0121			
CAN Bus Off Counter Overrun	U0001	CAN controller continuity check	CAN controller Bus Off is detected		DS_Active_CAN[1]	TRUE	12,7sec (9-5)	Immediately
			Counter reaches	7	Time after Ignition ON or a reset of the controller	>3 sec	28sec (9-3) Continuous	
Transmission input speed sensor	P0717	Circuit continuity check	**Condition 1 (no pulse)** No of pulses from input sensor No of pulses from output sensor	0 3000	No Shifting Control[5] Not garage shifting control[7] (N-D) B1 not released outRpm*GearRatioExpected Shifter position	> 600 rpm D,4,3,2,M Range(defined)	Speed dependent (e g 4 sec at 100 km/h) Continuous	Immediately
			Condition 2 (no pulse) Transmission Input Speed	0	CurrentGear Time since changed from P, R or N	>= 2 >10 sec	30sec Continuous	

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
			SpeedABS	>20km/h	Time since changed from P, R or N	>2,5 sec		
					DS_Active[2]	TRUE		
					Emergency mode	FALSE		
					No DTC set	P0705		
						P0722 (only condition 1)		
			Condition 3 (no pulse)		DS_Active[2]	TRUE	30sec	
			NCIM-voltage (AD-value)	AD<45 or AD>545	Emergency mode	FALSE	Continuous	
Invalid signal from ECM	P1820	Accelerator pedal position signal is invalid	Data from ECM indicated as invalid		DS_Active[2]	TRUE	4 sec	Immediately
					Time after Ignition ON or reset of	>3 sec	Continuous	
					Emergency mode	FALSE		
					No DTC set	U0100		
Trans Output speed sensor	P0722	Circuit continuity check	Condition 1 (No pulse)		Not in Neutral control[8]		6000 pulses	Immediately
			No of pulses from output sensor	0	No Shifting Control[5]			
			No of pulses from input sensor	6000	Not garage shifting control[7] (N-D)		Continuous	
					DS_Active[2]	TRUE		
					Out Rpm calculated from ABS	>300rpm		
			Condition 2 (No pulse)		Selected gear	D, 4, 3, 2, M	2 30 sec	Immediately
					Time since changed from P, R or N	>10 sec	Continuous	
					Time since changed from P, R or N	>2,5 sec		
					Emergency mode	FALSE		
			Transmission Output Speed	0				
			SpeedABS	>20km/h	No DTC set	U0121		
						P0705		
						P0716 (only Condition 1)		
						P0717 (only Condition 1)		
			Short to Ubatt or GND		DS_Active[2]	TRUE	30sec	Immediately
					Emergency mode	FALSE	Continuous	
Gear error, hydraulic fault	P0730	Rationality, (Calculation of actual gear ratio is not correct)	**Condition 1**		No Shifting Control[5]		12 sec	Immediately
					Not garage shifting control[7] (N-D)			
			Driving on 4th gear and abs(1-GRCurrent/GRExpected)	> 20%	Transmission Output Speed	>= 500rpm		
					Time after changing to Shift position	>8 0 sec	Continuous	
					Time after shifting control	>0 5 sec		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
					Oil temperature	>= 20°C		
					Shift position	RANGE_D,4,3,2(defined)		
					Engine speed	> 400 rpm		
					IG voltage	>= 10 5 V		
					Brake	OFF		
					Spinning[10]	FALSE		
					DS_Active[2]	TRUE		
					Emergency mode	FALSE		
			Condition 2		abs(1 - SpeedABS / Transmission	< 10 %		
					Throttle	> 10 %		
			Driving on 5th gear - Gear Ratio	1 504 ± 4%				
					No DTC set	P0705		
						P0711		
						P0712		
						P0713		
						P0716		
						P0717		
						P0721		
						P0722		
						P0725		
						P0786		
						P0787		
						P0961		
						P0962		
						P0963		
						P0973		
						P0974		
						P0976		
						P0977		
						P0979		
						P0980		
						P0982		
						P0983		
						P0985		
						P0986		
						P1820		
						P1895		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
					P2762 P2763 P2764 U0001 U0100 U0121			
Transmission range switch	P0705	Check of switch output pattern	Failure combination of signals from Gear Selector range switch		DS_Active[2]	TRUE	5 sec Continuous	Immediately
Transmission oil temperature sensor	P0711	Rationality	Oil temperature change less than	Oil temperature at initialization = the highest Oil temperature during 15 min± 5 C	Oil temp sensor Oil temp at initialization Selected gear DS_Active[2] Emergency mode Vehicle speed No DTC set	10< AD < 1000 < 20 °C R, D, 4, 3, 2 TRUE FALSE > 40 km/h once P0705	15 min Once / DCY	Two DCY
	P0712	Circuit continuity check	Short-cut ground Voltage (AD	< 50 mV < 10)	DS_Active[2] Emergency mode	TRUE FALSE	5 min Continuous	Two DCY
	P0713	Circuit continuity check	Short-cut Ubat or open circuit AD	> 1000	ECT signal valid DS_Active[2] Emergency mode Engine Coolant Temperature Driving time	TRUE FALSE > 50°C >15 min	12 sec + 15 min Continuous	Two DCY
Gear error, hydraulic fault	P0731	Rationality	(Transmission Input Speed - Transmission Output Speed X GRExpected) (Transmission Input Speed - Transmission Output Speed X GRExpected(2nd))	>300rpm >100rpm	Not garage shifting control[7] (N-D) IG voltage Engine speed InTorqe_noACC[9] T/M input rev T/M output rev	>= 10 5V >(T/M input rev + 150) for 150msec continuously 30Nm <= InTorq_noACC < 200Nm >Table1[4] >Table1[4]	10 sec Continuous	Immediately

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters / Enable Conditions		Time Required	MIL Illumin.
					current Gear	1		
					Time after changing to shift position == RANGE_D,4,3,2	>8 0sec		
					Time after shifting control[5]	>0 5 sec		
					Oil temperature	>= 20°C		
					Engine speed	>400rpm		
					Shiftposition	RANGE_D,4,3,2(defined) or RANGE_D,4,3,2(undefined) for 75sec		
					DS_Active[2]	TRUE		
					Emergency mode	FALSE		
					No DTC set	P0705		
						P0711		
						P0712		
						P0713		
						P0716		
						P0717		
						P0721		
						P0722		
						P0725		
						P0786		
						P0787		
						P0788		
						P0961		
						P0962		
						P0963		
						P0973		
						P0974		
						P0976		
						P0977		
						P0979		
						P0980		
						P0982		
						P0983		
						P0985		
						P0986		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters / Enable Conditions		Time Required	MIL Illumin.
						P1820		
						P1895		
						P2762		
						P2763		
						P2764		
						U0001		
						U0100		
						U0121		
	P0732	Rationality	Calculated ratio for 2nd gear difference from expected	>20%	No Shifting Control[5]		12 sec	Immediately
					Not garage shifting control[7] (N-D)		Continuous	
					Throttle	> 10%		
					Time after shifting control done	0,5 sec		
					Current gear	2		
					Time after changing to Shift position == RANGE_D,4,3,2(defined)	>8 0 sec		
					Time after shifting control[5]	>0 5 sec		
					Oil temperature	>= 20°C		
					Shift position	RANGE_D,4,3,2(defined)		
					Engine speed	> 400 rpm		
					IG voltage	>= 10 5 V		
					brake	OFF		
					Spinning[10]	FALSE		
					DS_Active[2]	TRUE		
					Emergency mode	FALSE		
					abs(1 - SpeedABS / Trans Output	< 10 %		
					Transmission Output Speed	>= 500rpm		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters / Enable Conditions		Time Required	MIL Illumin.
					No DTC set	P0705		
						P0711		
						P0712		
						P0713		
						P0716		
						P0717		
						P0721		
						P0722		
						P0725		
						P0786		
						P0787		
						P0788		
						P0961		
						P0962		
						P0963		
						P0973		
						P0974		
						P0976		
						P0977		
						P0979		
						P0980		
						P0982		
						P0983		
						P0985		
						P0986		
						P1820		
						P1895		
						P2762		
						P2763		
						P2764		
						U0001		
						U0100		
						U0121		
	P0733	Rationality	Calculated ratio for 3rd gear difference from expected	>20%	No Shifting Control[5] Not garage shifting control[7] (N-D)		12 sec Continuous	Immediately

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters / Enable Conditions		Time Required	MIL Illumin.
					Throttle	> 10%		
					Time after shifting control done	0,5 sec		
					Current gear	3		
					Time after changing to Shift position == RANGE_D,4,3,2(defined)	>8 0 sec		
					Time after shifting control[5]	>0 5 sec		
					Oil temperature	>= 20°C		
					Shift position	RANGE_D,4,3,2(defined)		
					Engine speed	> 400 rpm		
					IG voltage	>= 10 5 V		
					Brake	OFF		
					Spinning[10]	FALSE		
					DS_Active[2]	TRUE		
					Emergency mode	FALSE		
					abs(1 - SpeedABS / Trans Output	< 10 %		
					Transmission Output Speed	>= 500rpm		
					No DTC set	P0705		
						P0711		
						P0712		
						P0713		
						P0716		
						P0717		
						P0721		
						P0722		
						P0725		
						P0786		
						P0787		
						P0788		
						P0961		
						P0962		
						P0963		
						P0973		
						P0974		
						P0976		
						P0977		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters / Enable Conditions		Time Required	MIL Illumin.
					P0979			
					P0980			
					P0982			
					P0983			
					P0985			
					P0986			
					P1820			
					P1895			
					P2762			
					P2763			
					P2764			
					U0001			
					U0100			
					U0121			
	P0734	Rationality	Calculated ratio for 4th gear differendes from expected	>20%	No Shifting Control[5]		12 sec Continuous	Immediately
					Not garage shifting control[7] (N-D)			
					Throttle	> 10%		
					Time after shifting control done	0,5 sec		
					Current gear	4		
					Time after changing to Shift position == RANGE_D,4,3,2(defined)	>8 0 sec		
					Time after shifting control[5]	>0 5 sec		
					Oil temperature	>= 20°C		
					Shift position	RANGE_D,4,3,2(defined)		
					Engine speed	> 400 rpm		
					IG voltage	>= 10 5 V		
					Brake	OFF		
					Spinning[10]	FALSE		
					DS_Active[2]	TRUE		
					Emergency mode	FALSE		
					abs(1 - SpeedABS / Trans Output	< 10 %		
					Transmission Output Speed	>= 500rpm		
					No DTC set	P0705		
						P0711		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters / Enable Conditions		Time Required	MIL Illumin.
					P0712			
					P0713			
					P0716			
					P0717			
					P0721			
					P0722			
					P0725			
					P0786			
					P0787			
					P0788			
					P0961			
					P0962			
					P0963			
					P0973			
					P0974			
					P0976			
					P0977			
					P0979			
					P0980			
					P0982			
					P0983			
					P0985			
					P0986			
					P1820			
					P1895			
					P2762			
					P2763			
					P2764			
					U0001			
					U0100			
					U0121			
	P0735	Rationality	Calculated ratio for 5th gear difference from expected	>20%	No Shifting Control[5]		12 sec Continuous	Immediately
					Not garage shifting control[7] (N-D)			
					Throttle	> 10%		
					Time after shifting control done	0,5 sec		
					Current gear	5		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters / Enable Conditions		Time Required	MIL Illumin.
					Time after changing to Shift position == RANGE_D,4,3,2(defined)	>8 0 sec		
					Time after shifting control[5]	>0 5 sec		
					Oil temperature	>= 20°C		
					Shift position	RANGE_D,4,3,2(defined)		
					Engine speed	> 400 rpm		
					IG voltage	>= 10 5 V		
					Brake	OFF		
					Spinning[10]	FALSE		
					DS_Active[2]	TRUE		
					Emergency mode	FALSE		
					abs(1 - SpeedABS / Trans Output	< 10 %		
					Transmission Output Speed	>= 500rpm		
					No DTC set	P0705		
						P0711		
						P0712		
						P0713		
						P0716		
						P0717		
						P0721		
						P0722		
						P0725		
						P0786		
						P0787		
						P0788		
						P0961		
						P0962		
						P0963		
						P0973		
						P0974		
						P0976		
						P0977		
						P0979		
						P0980		
						P0982		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
						P0983		
						P0985		
						P0986		
						P1820		
						P1895		
						P2762		
						P2763		
						P2764		
						U0001		
						U0100		
						U0121		
	P0736	Rationality	Calculated ratio for Reverse gear difference from expected	>20%	No Shifting Control[5]		6 sec Continuous	Immediately
					Not garage shifting control[7] (N-R)			
					abs(1 - SpeedABS / Trans Output ~)	< 10 %		
					Selected gear	R		
					A/T oil temp	> 20°C		
					Throttle	> 10%		
					Engine speed	> 400 rpm		
					Time after N-R shift	8 sec		
					IG voltage	> 10,5 V		
					Transmission Output Speed	>= 500rpm		
					Brake	OFF		
					DS_Active[2]	TRUE		
					Emergency mode	FALSE		
					No DTC set	P0705		
						P0711		
						P0712		
						P0713		
						P0716		
						P0717		
						P0721		
						P0722		
						P0725		
						P0786		
						P0787		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters /	Enable Conditions	Time Required	MIL Illumin.
						P0788		
						P0961		
						P0962		
						P0963		
						P0973		
						P0974		
						P0976		
						P0977		
						P0979		
						P0980		
						P0982		
						P0983		
						P0985		
						P0986		
						P1820		
						P1895		
						P2762		
						P2763		
						P2764		
						U0001		
						U0100		
						U0121		
Battery voltage	P0562	Voltage low	Battery voltage	< 8,68 V	Emergency mode	FALSE	20 sec	Immediately
	P0563	Voltage high	Battery voltage	> 18 V	Transmission input speed	> 800 rpm	Continuous	
					Ignition	ON		
					No DTC set	P0717		
Lockup Mechanical Failure	P1743	Lockup shudder	Transmission Output Shudder Amplitude	>=25rpm	DS_Active[2]	TRUE	400ms	
					No DTC set	P0705		
						P0711		
						P0712		
						P0713		
						P0716		
						P0717		

Component/ System	Fault Code	Monitor Strategy Description	Malfunction Criteria	Threshold Value	Secondary Parameters / Enable Conditions		Time Required	MIL Illumin.
					P0721			
					P0722			
					P0780			
					P0786			
					P0787			
					P0788			
					P0961			
					P0962			
					P0963			
					P0973			
					P0974			
					P0976			
					P0977			
					P0979			
					P0980			
					P0982			
					P0983			
					P0985			
					P0986			
					P1895			
					P2762			
					P2763			
					P2764			
Engine speed signal	P0725	Signal from ECM stated as unreliable	Engine Speed Validity	Invalid	Not lost communication with ECM		4 sec	Immediately
					Ignition	ON > 3 sec		
					DS_Active_CAN[1]	TRUE	Continuous	
					Emergency mode	FALSE		
					Battery voltage	> 10,2 V		

Note: All components/system (DTCs) have a test frequency of 30~60ms

[1] DS_Active_CAN

DS_Active_CAN = TRUE when the start condition for CAN failure detection is fulfilled for 2.0 sec continously.

DS_Active_CAN = FALSE when the permission condition for CAN failure detection is not fulfilled.

Start Condition for CAN failure detection:

Ignition ON and

10.2V < Battery Voltage < 15.5V and

Not in service mode   and

Reading EEPROM finish

Permission condition for CAN failure detection:

Ignition ON   and

9.0V < Battery Voltage < 16.0V   and

Not in service mode

[2)] DS_Active

DS_Active = TRUE when the start condition for failure detection is fulfilled for 2.0 sec continously.

DS_Active = FALSE when the permission condition for failure detection is not fulfilled.

Start Condition for failure detection:

Ignition ON and

10.2V < Battery Voltage < 15.5V and

Not in service mode   and

Reading EEPROM finish   and

Egrpm > 400rpm

Permission condition for failure detection:

Ignition ON and

9.0V < Battery Voltage < 16.0V   and

Not in service mode   and

Egrpm > 400rpm

[4)] Table1:

InTorque(Nm)	<=190	230	>=270
InRpm(Rpm)	400	600	800
OutRpm(Rpm)	200	300	400

[5)] Shifting Control

"Shifting Control" is activated when the transmission is in between two gears (undefined gear ratio), until applied pressure has reached to full

[6)] "Multiplex Shifting"

If "BestGear" changes in shift control, that shift control is stopped and a new shift control is started.

For example: If "BestGear" changes to 3rd in a 3-4 shift control,the 3-4 shift control is stopped and a 4-3 shift control is started.

7) "Garage Shifting"

"Garage Shifting Control" is activated when the range selector changes from N to D or R until appropriate Gear Ratio is detected.

8) "Neutral Control"

Neutral Control is activated if the vehicle is at stand still and in range D with the brake pressed for 2 seconds until the brake is released.

9) "InTorque_noACC"

Engine output torque, acceleration inertia torque not included.

10) Spinning

Spinning = 1 if Transversal acceleration > 0.7G (input from ABS signal)
Spinning = 0 if Transversal acceleration parameter < 0.7G for 2sec. Continously. (input from ABS signal)