GHG14 ACM2.1 Fault Codes

- Circuit Fault
- Rationality Fault
- Engine Protection Fault
- Component Broadcasted Fault
- Communication Data Fault
- Information Fault

SPN	FMI	ACM2.1 FAULT CODE DESCRIPTION GHG14
108	13	Ambient Air Pressure Signal Not Available via CAN
110	9	Coolant Temperature Signal Not Available via CAN
158	7	ACM Power Down - Key Off Purge Cycle
168	0	Battery Voltage High
168	1	Battery Voltage Low
171	13	Ambient Air Temperature Signal Not Available via CAN
190	9	Engine Speed Signal Not Available via CAN
513	9	Actual Torque Signal Not Available via CAN
625	2	CPC Message not Received or Stopped Arriving
625	9	PT-CAN Heartbeat Missing
1033	2	ACM2.1 engine hours data erratic, intermittent or incorrect
1761	1	DEF Tank Level 0 - Empty (Speed Limited)
1761	3	DEF Tank Level Sensor Circuit Failed High
1761	4	DEF Tank Level Sensor Circuit Failed Low
1761	9	DEF tank level signal not available
1761	18	DEF Tank Level 1 - Empty
1761	31	DEF Tank Level 3 - Low
3031	3	DEF Tank Temperature Sensor Circuit Failed High
3031	4	DEF Tank Temperature Sensor Circuit Failed Low
3031	9	DEF Tank Temperature Signal Not Available via CAN
3031	10	Reductant Tank Temperature Sensor Circuit Range/Performance
3031	19	DEF Tank Temperature Error (CAN)
3056	2	SCR Inlet NOX Sensor - Error

SPN	FMI	ACM2.1 FAULT CODE DESCRIPTION GHG14
3057	2	SCR Outlet NOX Sensor - Error
3216	3	SCR Inlet NOX Sensor Circuit Failed High
3216	4	SCR Inlet NOX Sensor Circuit Failed Low
3216	13	SCR Inlet NOX Sensor Signal Not Available
3223	7	NOX RAW Sensor not ready after dewpoint enable check
3226	2	SCR Outlet NOX Sensor - Drift
3226	3	SCR Outlet NOX Sensor Circuit Failed High
3226	4	SCR Outlet NOX Sensor Circuit Failed Low
3226	13	SCR Outlet NOX Sensor Signal Not Available
3226	20	NOX Outlet Sensor Drift Low
3226	21	NOX Outlet Sensor Drift High
3236	9	Exhaust Mass Signal Not Available via CAN
3242	3	DOC Inlet Temperature Circuit Failed High
3242	4	DOC Inlet Temperature Circuit Failed Low
3242	8	DOC Inlet Temperature - Signal Spike
3242	17	Diesel Oxidation Catalyst (DOC) Inlet Temperature Out Of Range Low Preventing HC Dosing
3242	20	DOC Temperature Drift - Inlet High or Outlet Low
3246	0	DPF Outlet Temperature Very High
3246	3	DPF Outlet Temperature Circuit Failed High
3246	4	DPF Outlet Temperature Circuit Failed Low
3246	8	DPF Outlet Temperature - Signal Spike
3246	15	DPF Outlet Temperature - High
3246	20	DPF Outlet/SCR Inlet Temperature - Abnormal
3246	21	DOC Outlet Temperature Sensor - Plausibility Error
3250	0	DOC Outlet Temperature Very High
3250	3	DOC Outlet Temperature Circuit Failed High
3250	4	DOC Outlet Temperature Circuit Failed Low

GHG14 ACM2.1 Fault Codes

SPN	FMI	ACM2.1 FAULT CODE DESCRIPTION GHG14
3250	7	DOC Outlet Temperature Response Error
3250	8	DOC Outlet Temperature - Signal Spike
3250	15	DOC Outlet Temperature - High
3250	20	DOC Temperature Drift - Inlet Low or Outlet High
3250	31	Abnormal DOC Temperature Rise 1
3251	0	DPF Pressure Out of Range Very High
3251	20	DOC Inlet Pressure Sensor - Not Plausible
3251	21	DOC Inlet / Outlet Pressure Not Plausible
3361	3	DEF Dosing Valve Circuit Failed High
3361	4	DEF Dosing Valve Circuit Failed Low
3361	5	DEF Dosing Valve Circuit Failed Open
3361	31	Dosing Unit Error
3363	0	DEF Tank Temperature - High
3363	1	DEF Tank Temperature - Low
3363	3	DEF Coolant Valve Circuit Failed High
3363	4	DEF Coolant Valve Circuit Failed Low
3363	5	DEF Coolant Valve Circuit Failed Open
3364	2	Improper DEF Quality
3490	3	DEF Purge Lamp Circuit Failed High
3490	4	DEF Purge Lamp Circuit Failed Low
3490	5	DEF Purge Lamp Circuit Failed Open
3509	3	ACM Sensor Supply 1 Short to Battery
3509	4	ACM Sensor Supply 1 Short to Ground
3510	3	ACM Sensor Supply 2 Short to Battery
3510	4	ACM Sensor Supply 2 Short to Ground
3517	19	DEF Tank Signal Erratic via CAN
3556	0	Regen Temperature - Out of Range High
3556	1	Regen Temperature - Out of Range Low
3556	18	DOC Outlet Temp Low (Low Temp Regen)
3597	3	High Side Digital Output 1 Circuit Failed High
3597	4	High Side Digital Output 1 Circuit Failed Low
3599	3	High Side Digital Output 3 Circuit Failed High
3599	4	High Side Digital Output 3 Circuit Failed Low
3609	3	DOC Inlet Pressure Circuit Failed High

GHG14 ACM2.1 Fault Codes

SPN	FMI	ACM2.1 FAULT CODE DESCRIPTION GHG14
3609	4	DOC Inlet Pressure Circuit Failed Low
3610	2	DPF Outlet Pressure Sensor - Not Plausible
3610	3	DPF Outlet Pressure Circuit Failed High
3610	4	DPF Outlet Pressure Circuit Failed Low
3711	31	Parked Regen Failed - DOC Temp In Low Preventing Dosing
3713	31	Parked Regen Failed - DOC Temp Out, Not Reaching Target Temp
3719	0	Soot Level Very High
3719	15	DPF Zone 3 Condition
3719	16	Soot Level High
3719	31	DPF Zone 2 Condition
3720	15	DPF Ash Clean Request
3936	18	DPF Pressure - Out of Range Low
4332	31	DOC inlet temperature out of range low preventing HC dosing
4334	3	DEF Pressure Sensor Circuit Failed High
4334	4	DEF Pressure Sensor Circuit Failed Low
4354	3	SCR Line Heater #1 Circuit Failed High
4354	4	SCR Line Heater #1 Circuit Failed Low
4354	5	SCR Line Heater #1 Open Circuit
4355	3	SCR Line Heater #2 Circuit Failed High
4355	4	SCR Line Heater #2 Circuit Failed Low
4355	5	SCR Line Heater #2 Circuit Failed Open
4356	3	SCR Line Heater #3 Circuit Failed High
4356	4	SCR Line Heater #3 Circuit Failed Low
4356	5	SCR Line Heater #3 Circuit Failed Open
4357	3	SCR Line Heater #4 Circuit Failed High
4357	4	SCR Line Heater #4 Circuit Failed Low
4357	5	SCR Line Heater #4 Circuit Failed Open
4360	3	SCR Inlet Temperature Sensor Circuit Failed High
4360	4	SCR Inlet Temperature Sensor Circuit Failed Low
4360	8	SCR Inlet Temperature - Signal Spike
4360	10	SCR Inlet Temperature Sensor - Rationality Error
4360	15	SCR Inlet Temperature High

GHG14 ACM2.1 Fault Codes

SPN	FMI	ACM2.1 FAULT CODE DESCRIPTION GHG14
4360	20	SCR Inlet Temperature Sensor Drift High in Range
4363	0	SCR Outlet Temperature High
4363	3	SCR Outlet Temperature Sensor Circuit Failed High
4363	4	SCR Outlet Temperature Sensor Circuit Failed Low
4363	8	SCR Outlet Temperature - Signal Spike
4363	20	SCR Temperature Drift - Inlet Low/Outlet High
4364	1	SCR NOX Conversion Efficiency Very Low
4364	18	SCR NOX Conversion Efficiency Low
4374	0	Under pressurized DEF system
4374	1	Over pressurized DEF system
4374	3	pump speed signal over measurement range
4374	4	pump speed signal below measurement range
4374	19	DEF system is not being controlled as expected
4375	3	DEF Pump Circuit Failed High
4375	4	DEF Pump Circuit Failed Low
4375	5	DEF Pump Circuit Failed Open
5016	3	High Side Digital Output 4 Circuit Failed High
5016	4	High Side Digital Output 4 Circuit Failed Low
5017	3	High Side Digital Output 5 Circuit Failed High
5017	4	High Side Digital Output 5 Circuit Failed Low
5246	0	Regulatory Fault Ignored - Final Action (Speed Limit)
5246	15	Regulatory Fault Ignored - Derate On
5246	16	Regulatory Fault Ignored - Final Action Pending
5298	14	SCR Abnormal Temperature Rise
5397	31	DPF Regen Too Often
5435	7	Non DEF flow situation
5443	0	DPF HC Absorption Very High
5443	15	DPF HC Absorption Warning
5443	16	DPF HC Absorption High
5488	3	SCR Line Heater #5 Circuit Failed High
5488	4	SCR Line Heater #5 Circuit Failed Low

SPN	FMI	ACM2.1 FAULT CODE DESCRIPTION GHG14
5488	5	SCR Line Heater #5 Circuit Failed Open
520232	9	NOX Mass Signal Not Available via CAN
520323	3	High Side Digital Output Supply Voltage Circuit Failed High
520323	4	High Side Digital Output UV_DOS Circuit Failed Low
520326	3	Under pressurized DEF system
520326	4	Over pressurized DEF system
520327	3	Under pressurized DEF system
520327	4	Over pressurized DEF system
520328	7	DEF system has been over pressurized
520329	31	Non DEF flow situation
520332	17	Selective Catalyst Reduction (SCR) Inlet Temperature Too Low

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
70	2	Park Brake Status Not Plausible (Vehicle Moving)
70	13	J1939 Park Brake Switch Signal from Sources #1, #2, or #3 is missing or not available
70	19	J1939 Park Brake Switch Signal from Sources #1, #2, or #3 is erratic
84	0	Vehicle Speed Above Programmable Threshold While Driving
84	3	Vehicle Speed Sensor Circuit Failed High
84	4	Vehicle Speed Sensor Circuit Failed Low
84	5	Vehicle Speed Sensor Open Circuit
84	6	VSS Anti-Tamper Detection via ABS Vehicle Speed Comparison
84	7	Hall effect VSS wiring mismatch, rationality fault
84	11	Vehicle Speed Above Programmable Threshold2 While Driving
84	13	J1939 Wheel-Based Vehicle Speed Signal from Sources #1, #2, or #3 is missing or not available
84	14	Hall effect VSS supply voltage out of range
84	19	J1939 Wheel-Based Vehicle Speed Signal from Sources #1, #2, or #3 is erratic
84	20	Vehicle Speed Sensor Drifted High Error (VSS signal not plausible)
84	21	Vehicle Speed Failure
91	0	Accelerator Pedal Circuit Failed High
91	2	Accelerator Pedal Learn Error
91	4	Accelerator Pedal Circuit Failed Low
91	7	2-Channel Accelerator Pedal Idle Not Recognized
91	8	2 Channel Accelerator Pedal Signal 1 Missing
91	10	Throttle pedal rationality check failed
91	13	J1939 EEC2 Message is missing or not available
91	14	2-Channel Accelerator Pedal Not Learned
91	31	2-Channel Accelerator Pedal Learned Range to Large
98	0	Oil Level High

GHG14 CPC4 Fault Codes

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
98	1	Oil Level Very Low
98	18	Oil Level Low
100	1	Oil Pressure Very Low
100	10	PMC Level 2 fault
100	18	Oil Pressure Low
107	0	Air Filter Restriction High
110	0	Coolant Temperature Very High
110	16	Coolant Temperature High
111	1	Coolant Level Very Low
111	3	Coolant Level Circuit Failed High
111	4	Coolant Level Circuit Failed Low
111	6	Coolant Level Sensor Circuit Failed Low
111	18	Coolant Level Low
120	13	J1939 Retarder Fluid Message is missing
158	2	KI15 ignition switch status of CPC2 and MCM do not match
168	0	Battery Voltage High
168	1	Battery Voltage Very Low
168	7	Opt Idle Detected Charging System or Battery Failure
168	9	Main battery connection lost
168	14	ECU powerdown not completed (Main Battery Terminal Possibly Floating)
168	18	Battery Voltage Low
171	2	Ambient Temperature Sensor Data Erratic
171	9	J1587 Ambient Air Temp Sensor Data Message Stopped Arriving
171	14	J1587 Ambient Air Temp Sensor Data Not Received This Ign Cycle
191	9	J1939 ETC1 Message is missing
191	13	J1939 Transmission Output Shaft Speed Signal is missing or not available
191	19	J1939 Transmission Output Shaft Speed Signal is erratic
247	0	MCM Engine Hours Data higher than expected
247	1	MCM Engine Hours Data lower than expected
247	9	MCM Engine Hours Data not received or stopped arriving
247	10	MCM Engine Hours Data increasing at an implausible rate

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
247	14	ACM Reported Ash Mileage is Lower than the CPC Stored Value
523	13	J1939 Transmission Current Gear Signal is missing or not available
523	19	J1939 Transmission Current Gear Signal is erratic
524	9	J1939 ETC2 Message is missing
525	7	Transmission gear selection switch reports internal error.
525	9	J1939 Powertrain Message (transfer case / PTO) is missing
525	19	Transmission gear selection switch reports non-plausible engine brake stage requests.
527	9	J1939 CCVS Message is missing
556	9	J1939 RC Message from Transmission Retarder is missing
558	2	Idle Validation Switch Inputs Reversed
558	3	Idle Validation Switch 1 Circuit Failed High
558	4	Idle Validation Switch 1 Circuit Failed Low
558	5	Idle Validation Switch 2 Circuit Failed Low
558	6	Idle Validation Switch 2 Circuit Failed High
571	4	Engine Brake Disable push-button shorted to Ground or pressed too long
596	13	J1939 Cruise Control Enable Switch Signal from Sources #1, #2, or #3 is missing or not available.
596	19	J1939 Cruise Control Enable Switch Signal from Sources #1, #2, or #3 is erratic
597	2	Service Brake Status Not Plausible
597	13	J1939 Service Brake Switch Signal from Sources #1, #2, or #3 is missing
597	19	J1939 Service Brake Switch Signal from Sources #1, #2, or #3 is erratic
598	2	Clutch switch status not plausible
599	4	Cruise Control SET and RESUME Circuits Failed Low
600	13	J1939 Cruise Control Coast Switch Signal from Source #1, #2, or #3 is missing or not available

GHG14 CPC4 Fault Codes

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
600	19	J1939 Cruise Control Coast Switch Signal from Sources #1, #2, or #3 is erratic
602	13	J1939 Cruise Control Coast Switch Signal from Source #1, #2, or #3 is missing or not available
602	19	J1939 Cruise Control Accelerate Switch Signal from Sources #1, #2, or #3 is erratic
608	14	J1708 Data Link Failure
609	12	CPC2 Hardware Failure
609	13	CPC Software Diagnostics
609	16	Internal temperature of CPC4 too high.
625	2	PTCAN Incorrect MCM System ID Received
625	4	ECAN Link Circuit Failure
625	8	MCM PT-CAN DM1 Message Not Received or has Stopped Arriving
625	9	ACM PT-CAN DM1 Message Not Received or has Stopped Arriving
625	13	TCM System IDs Not Received or Stopped Arriving
625	14	MCM System ID Not Received or Stopped Arriving
628	2	EEPROM Checksum Failure
628	12	EEPROM Checksum Failure for the SCR Block
628	14	XFLASH Static Fault Code Memory Page Read Write Failure
628	17	1000ms ECU OS Task Timed out Prior to Completion
629	2	CPC Hardware/Software Mismatch
629	12	DDEC Data Xflash Write Error. Replace CPC.
630	13	SCR Number Out of Range
639	9	J1939 PROP11 message is missing
639	13	HDMS Fan is configured and the J1939 message was not received or has stopped arriving.
639	14	J1939 Data Link Failure
667	3	Starter Pin 1 18 Circuit Failed High
701	3	Digital Output 3 07 Circuit Failed High
701	4	Digital Output 3 07 Circuit Failed Low
701	5	Digital Output 3 07 Circuit Open
702	3	Digital Output 3 08 Circuit Failed High
702	4	Digital Output 3 08 Circuit Failed Low

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
702	5	Digital Output 3 08 Circuit Open
703	3	Digital Output 3 09 Circuit Failed High
703	4	Digital Output 3 09 Circuit Failed Low
703	5	Digital Output 3 09 Circuit Open
704	3	Digital Output 4 07 Circuit Failed High
704	4	Digital Output 4 07 Circuit Failed Low
704	5	Digital Output 4 07 Circuit Open
705	3	Digital Output 1 13 Circuit Failed High
705	4	Digital Output 1 13 Circuit Failed Low
705	5	Digital Output1 13 Circuit Open
706	3	Digital Output 3 10 Circuit Failed High
706	4	Digital Output 3 10 Circuit Failed Low
706	5	Digital Output 3 10 Circuit Open
707	3	Digital Output 2 10 Circuit Failed High (CEL / AWL Lamp)
707	4	Digital Output 2 10 Circuit Failed Low (CEL / AWL Lamp)
707	5	Digital Output 2 10 Circuit Open (CEL / AWL Lamp)
708	3	Digital Output 3 12 Circuit Failed High
708	4	Digital Output 3 12 Circuit Failed Low
708	5	Digital Output 3 12 Circuit Open
709	3	Digital Output 3 16 Circuit Failed High
709	4	Digital Output 3 16 Circuit Failed Low
709	5	Digital Output 3 16 Circuit Open
710	3	Digital Output 4 06 Circuit Failed High
710	4	Digital Output 4 06 Circuit Failed Low
710	5	Digital Output 4 06 Circuit Open
711	3	Digital Output 1 05 Circuit Failed High
711	4	Digital Output 1 05 Circuit Failed Low
711	5	Digital Output 1 05 Circuit Open
712	3	Digital Output 1 04 Circuit Failed High
712	4	Digital Output 1 04 Circuit Failed Low
712	5	Digital Output 1 04 Circuit Open
713	7	TOP2 Shift Failure
714	3	Digital Output 4 10 Circuit Failed High
714	4	Digital Output 4 10 Circuit Failed Low
714	5	Digital Output 4 10 Circuit Open
715	3	Frequency Output 4 12 Circuit Failed High
715	4	Frequency Output 4 12 Circuit Failed Low
715	5	Frequency Output 4 12 Circuit Open
716	3	Frequency Output 1 09 Circuit Failed High

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
716	4	Frequency Output 1 09 Circuit Failed Low
716	5	Frequency Output 1 09 Circuit Open
904	9	J1939 EBC2 Message from ABS is missing
904	13	J1939 Front Axle Speed Signal is missing or not available
904	19	J1939 Front Axle Speed Signal is erratic
924	3	Digital Output 4 09 Circuit Failed High
924	4	Digital Output 4 09 Circuit Failed Low
924	5	Digital Output 4 09 Circuit Open
925	3	Digital Output 3 17 Circuit Failed High
925	4	Digital Output 3 17 Circuit Failed Low
925	5	Digital Output 3 17 Circuit Open
926	3	Digital Output 4 01 Circuit Failed High
926	4	Digital Output 4 01 Circuit Failed Low
926	5	Digital Output 4 01 Circuit Open
972	2	Throttle inhibit switch signal not plausible due to excess vehicle speed
973	2	EVOBus 5stage retarder level position not plausible
973	9	J1939 EBC1 Message is missing
973	13	J1939 Engine Retarder Selection Signal Missing or not available
973	19	J1939 Engine Retarder Selection Signal Erratic
974	2	Remote Accelerator Pedal Supply Voltage Out of Range
974	3	Remote Accelerator Pedal Circuit Failed High
974	4	Remote Accelerator Pedal Circuit Failed Low
979	9	J1939 PTO Message Not Received This Ignition Cycle
986	9	J1939 CM1 Message is missing
986	13	J1939 CM1 SPN986 Signal from source #1 or #2 is missing or not available
986	19	J1939 Service Brake Switch Signal from EBC1 is erratic
1089	9	J1939 AIR1 Message (Air Supply Pressure) is missing from first source address

GHG14 CPC4 Fault Codes

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
1089	13	J1939 AIR1 Message (Air Supply Pressure) is missing from second source address
1121	2	J1939 Powertrain Message (AMT - Detroit transmission) is missing
1121	13	J1939 Service Brake Switch Signal from EBC1 is missing or not available
1121	19	J1939 Service Brake Switch Signal from EBC1 is erratic
1237	4	Stop Engine Override Switch Short Circuit to Ground
1243	14	ABS fault restricts automatic gear selection functionality. Check ABS for proper function.
1482	9	J1939 TC1 Message (Transmission Mode) is missing
1484	9	J1939 Message was lost (message counter error)
1484	13	J1939 Message was lost (CRC error)
1590	9	Adaptive Cruise Control Message Not Received
1590	19	Adaptive Cruise Control Device - General Error
1592	9	J1939 HRW Message from ABS is missing
1592	13	J1939 HRW Wheel Speed Signal Missing
1592	19	J1939 HRW Wheel Speed Signal Erroneous
1623	9	J1939 Tachograph Output shaft speed Signal is erratic
1623	13	J1939 Tachograph Output shaft speed Signal is missing or not available
1624	9	J1939 TCO1 Message is missing
1624	13	J1939 Tachograph Vehicle Speed Signal is missing or not available
1624	19	J1939 Tachograph Vehicle Speed Signal is erratic
1663	7	Optimized Idle Safety Loop Faulted
1681	9	J1939 BM Message (Battery Main Switch) is missing
1716	9	J1939 ERC1 Message is missing
1716	13	EVOBus 5stage retarder level calibration not plausible
1814	9	VDC1 Message was not received or has stopped arriving.

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
1845	9	J1939 TCFG2 Message is missing
2003	9	J1939 Message is missing from source address 3 (dec)
2011	9	J1939 Message is missing from source address 11 (dec)
2017	9	J1939 Message is missing from source address 17 (dec)
2023	9	J1939 Message is missing from source address 23 (dec)
2025	9	J1939 Message is missing from source address 25 (dec)
2033	9	J1939 Message is missing from source address 33 (dec)
2042	9	J1939 Message is missing from source address 42 (dec)
2049	9	J1939 Message is missing from source address 49 (dec)
2596	9	J1939 CM1 Message (Maximum Vehicle Speed Limit) is Missing or Not Available
2623	2	Accelerator pedal "in-range" fault.
2623	8	2 Channel Accelerator Pedal Signal 2 Missing
2623	14	2-Channel Accelerator Pedal GAS1 and GAS2 Signal Missing
2646	3	Digital Output 4 02 Circuit Failed High
2646	4	Digital Output 4 02 Circuit Failed Low
2646	5	Digital Output 4 02 Circuit Open
2882	13	Off-Highway Engine Configuration Selection message on J1939 was not received or has stopped arriving.
2900	9	J1939 ETC7 Message is missing
3187	9	Transmission Shift Console Datalink (LIN)
3353	2	Generator (Charging System) D+ terminal failure
3510	4	Accelerator Pedal Supply Voltage Circuit Failed Low
3510	7	Accelerator Pedal Supply Voltage Circuit Failed High
3510	8	2-Channel Accelerator Pedal Supply Voltage Missing
3511	3	Remote Accelerator Pedal Supply Voltage Circuit Failed High
3511	4	Remote Accelerator Pedal Supply Voltage Circuit Failed Low

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
3606	9	J1939 ESS Message is missing
3695	9	DPF Regen Inhibit MUX Switch Message Stopped Arriving
3695	13	DPF Regen Inhibit MUX Switch Message Contains SNV Indicator
3695	14	DPF Regen Inhibit MUX Switch Message Not Received this Ign Cycle
3695	19	DPF Regen Inhibit MUX Switch Message Contains Data Error Indicator
3696	4	DPF Regeneration Switch Short Circuit to Ground
3696	9	DPF Regen Force MUX Switch Message Stopped Arriving
3696	13	DPF Regen Force MUX Switch Message Contains SNV Indicator
3696	14	DPF Regen Force MUX Switch Message Not Received this Ign Cycle
3696	19	DPF Regen Force MUX Switch Message Contains Data Error Indicator
3840	3	Frequency Output 4 15 Circuit Failed High
3840	4	Frequency Output 4 15 Circuit Failed Low
3840	5	Frequency Output 4 15 Circuit Open
3841	3	Frequency Output 4 11 Circuit Failed High
3841	4	Frequency Output 4 11 Circuit Failed Low
3841	5	Frequency Output 4 11 Circuit Open
3842	3	Analog Ground 3 02 Circuit Failed High
3842	4	Analog Ground 3 02 Circuit Failed Low
3842	5	Analog Ground 3 02 Circuit Open
3843	3	Digital Input 1 01 Circuit Failed High
3843	4	Digital Input 1 01 Circuit Failed Low
3844	3	Digital Input 1 02 Circuit Failed High
3844	4	Digital Input 1 02 Circuit Failed Low
3845	3	Digital Input 1 12 Circuit Failed High
3845	4	Digital Input 1 12 Circuit Failed Low
3846	3	Digital Input 1 14 Circuit Failed High
3846	4	Digital Input 1 14 Circuit Failed Low
3847	3	Digital Input 1 15 Circuit Failed High
3847	4	Digital Input 1 15 Circuit Failed Low
3848	3	Digital Input 1 16 Circuit Failed High
3848	4	Digital Input 1 16 Circuit Failed Low
3849	3	Digital Input 1 17 Circuit Failed High
3849	4	Digital Input 1 17 Circuit Failed Low

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
3850	3	Digital Input 1 11 Circuit Failed High
3850	4	Digital Input 1 11 Circuit Failed Low
3851	3	Digital Input 2 09 Circuit Failed High
3851	4	Digital Input 2 09 Circuit Failed Low
3852	3	Digital Input 2 11 Circuit Failed High
3852	4	Digital Input 2 11 Circuit Failed Low
3853	3	Digital Input 2 12 Circuit Failed High
3853	4	Digital Input 2 12 Circuit Failed Low
3854	3	Digital Input 2 13 Circuit Failed High
3854	4	Digital Input 2 13 Circuit Failed Low
3855	3	Digital Input 2 14 Circuit Failed High
3855	4	Digital Input 2 14 Circuit Failed Low
3856	3	Digital Input 2 15 Circuit Failed High
3856	4	Digital Input 2 15 Circuit Failed Low
3857	3	Digital Input 2 07 Circuit Failed High
3857	4	Digital Input 2 07 Circuit Failed Low
3858	3	Digital Input 2 08 Circuit Failed High
3858	4	Digital Input 2 08 Circuit Failed Low
3859	3	Digital Input 4 16 Circuit Failed High
3859	4	Digital Input 4 16 Circuit Failed Low
3860	3	Digital Input 4 18 Circuit Failed High
3860	4	Digital Input 4 18 Circuit Failed Low
3861	3	Digital Input 4 13 Circuit Failed High
3861	4	Digital Input 4 13 Circuit Failed Low
3862	3	Digital Input 1 10 Circuit Failed High
3862	4	Digital Input 1 10 Circuit Failed Low
3863	3	Digital Input 4 17 Circuit Failed High
3863	4	Digital Input 4 17 Circuit Failed Low
3864	3	Digital Input 3 18 Circuit Failed High
3864	4	Digital Input 3 18 Circuit Failed Low
3865	3	Digital Input 4 08 Circuit Failed High
3865	4	Digital Input 4 08 Circuit Failed Low
3866	3	Digital Input 4 04 Circuit Failed High
3866	4	Digital Input 4 04 Circuit Failed Low
3867	3	Digital Input 4 05 Circuit Failed High
3867	4	Digital Input 4 05 Circuit Failed Low
3868	3	Digital Input 4 03 Circuit Failed High
3868	4	Digital Input 4 03 Circuit Failed Low
3869	3	Digital Input 4 01 Circuit Failed High
3869	4	Digital Input 4 01 Circuit Failed Low
3870	3	Digital Input 4 02 Circuit Failed High
3870	4	Digital Input 4 02 Circuit Failed Low
3871	2	Transmission Speed Failure
3871	3	Transmission Speed Sensor 4 04 or 3 13 Circuit Failed High

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
3871	4	Transmission Speed Sensor 4 04 or 3 13 Circuit Failed Low
3871	5	Transmission Speed Sensor Open Circuit
3872	3	Analog Output 01 Failed High
3872	4	Analog Output 01 Failed Low or Open Circuit
3873	3	Analog Output 02 Failed High
3873	4	Analog Output 02 Failed Low or Open Circuit
3948	9	J1939 PTODE Message (PTO Drive Engagement) is missing
4041	0	20ms ECU OS Task Locked in an Endless Loop
4041	9	20ms ECU OS Task Timed out Prior to Completion
4041	16	1000ms ECU OS Task Locked in an Endless Loop
4206	2	TSC1 Message Counter indicates lost Messages
4207	2	TSC1 Message Checksum wrong
511403	0	J1939 PROP B06 Message is missing
511403	1	J1939 PROP B07 Message is missing
511403	2	J1939 BM Message is missing
511403	3	J1939 TCI Message is missing
511403	4	J1939 AIR1 Message is missing from first source address
511403	5	J1939 AIR1 Message is missing from second source address
511403	6	J1939 EAC1 Message is missing
511403	8	J1939 TC1 Message is missing
511403	9	Generator terminal W - allocation error (pulse/rev signal)
511403	10	Generator terminal W - Open circuit, short circuit to UB+ or short to ground, V-belt slipping
511403	11	Generator D+ terminal failure
511403	12	J1939 PROP B50 Message is missing
511403	13	J1939 PTODE Message is missing
511403	14	J1939 CM1 Message for SPN2596 is missing
524280	2	Remote Accelerator Pedal Idle Validation Switch Inputs Reversed
524280	3	Remote Accelerator Pedal Idle Validation Switch 1 Circuit Failed High

GHG14 CPC4 Fault Codes

SPN	FMI	CPC4 FAULT CODE DESCRIPTION GHG14
524280	4	Remote Accelerator Pedal Idle Validation Switch 1 Circuit Failed Low
524280	5	Remote Accelerator Pedal Idle Validation Switch 2 Circuit Failed Low
524280	6	Remote Accelerator Pedal Idle Validation Switch 2 Circuit Failed High
524281	9	J1939 Powertrain Message (engine droop control) is missing
524283	2	Generator (Charging System) terminal W - Low Voltage
524283	14	Generator (Charging System) terminal W - allocation error (pulse/rev signal)
524284	14	PMC Level 2 fault
524284	19	PMC Level 3 General Protection Fault
524285	4	CM1 DPF Regeneration Switch Short Circuit to Ground
524286	1	Automatic gear selection: automatic mode is not available
524286	2	Automatic gear selection: incompatible or missing dataset
524286	3	Automatic gear selection: EcoRoll is not available
524286	4	Automatic gear selection: Gear shift not plausible
524286	5	Automatic gear selection: No gear shiftable. Check TCM for proper function.
524286	6	ITPM error: vehicle calibration is inconsistent
524286	7	ITPM error: drivetrain speed signal is inconsistent
524287	1	EVObus cruise control lever position not plausible
524287	9	Predictive Cruise Control Message Not Received
524287	19	Predictive Cruise Control Device Reporting Error

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
51	2	Intake Throttle Position Deviation Error
51	3	Intake Air Throttle Circuit Failed High
51	4	Intake Air Throttle Circuit Failed Low
51	10	Intake Throttle Position Deviation Error
51	18	Intake Throttle Position Rationality Error
84	3	Vehicle Speed Sensor Circuit Failed High
84	4	Vehicle Speed Sensor Circuit Failed Low
84	13	J1939 Wheel-Based Vehicle Speed Signal from Source#1 is Missing
84	19	J1939 Wheel-Based Vehicle Speed Signal from Source#2 is Erratic
84	21	Vehicle Speed Sensor Erratic
94	2	Low Side Fuel Pressure Not Plausible
94	3	Low Side Fuel Pressure Sensor Circuit Failed High
94	4	Low Side Fuel Pressure Sensor Circuit Failed Low
94	15	Fuel Filter Service Warning
94	16	Fuel Filter Replacement Required
96	2	Fuel Tank Level Sensor Stuck in Position
97	3	Water in Fuel Circuit Failed High
97	4	Water in Fuel Circuit Failed Low
97	14	Water-in-Fuel (WIF) Warning – Ignored
97	15	Water-in-Fuel (WIF) Warning
97	16	Water-in-Fuel (WIF) Warning
97	31	Water-in-Fuel (WIF) Warning – Ignored
100	0	Engine Oil Pressure Stuck
100	1	Engine Oil Pressure Very Low
100	3	Engine Oil Pressure Circuit Failed High
100	4	Engine Oil Pressure Circuit Failed Low
100	10	Low Oil PSI Derate
100	17	Engine Oil Pressure Low
102	16	Intake Manifold Pressure too High
102	18	Intake Manifold Pressure too Low
103	0	Turbo Charger Speed Above Threshold (Low Box)
103	1	Turbo Charger Speed Below Threshold (High Box)
103	2	Turbocharger Speed Out of Range High
108	3	Barometric Pressure Circuit Failed High

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
108	4	Barometric Pressure Circuit Failed Low
110	0	Coolant Temperature High
110	3	Engine Coolant Outlet Temperature Circuit Failed High
110	4	Engine Coolant Outlet Temperature Circuit Failed Low
110	14	Coolant Temperature / Engine Oil Temperature Plausibility Fault
110	15	Coolant Temperature High Pre-warning
110	16	Coolant Temperature High Alarm
157	10	Under capacity in High Pressure Circuit
157	15	Fuel Rail pressure too low - Low Pressure Circuit
157	16	Fuel Rail Pressure too Low
157	17	Minimum Rail Pressure for Injection Not Achieved
157	18	Fuel Rail Pressure too High
158	2	Ignition Switch Not Plausible
164	2	Rail Pressure Fuel Trim Lower Limit
164	3	Rail Pressure Sensor Circuit Failed High
164	4	Rail Pressure Sensor Circuit Failed Low
164	5	Rail Pressure Sensor Circuit Failed Open
164	15	Fuel Rail pressure too low - High Pressure Circuit
164	20	Rail Pressure Sensor, Signal Drift (High)
164	21	Rail Pressure Sensor, Signal Drift (Low)
168	0	Battery Voltage High
168	1	Battery Voltage Low
174	0	Fuel Temperature Before High Pressure Pump too High
174	3	Fuel Temperature Circuit Failed High
174	4	Fuel Temperature Circuit Failed Low
174	17	Fuel Temperature Sensor, Minimum Temperature Plausibility
175	0	Oil Temperature High Warning
175	3	Engine Oil Temperature Circuit Failed High
175	4	Engine Oil Temperature Circuit Failed Low
175	14	Engine Oil Temperature Sensor Plausibility Fault

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
175	15	Oil Temperature High Pre Warning
175	18	Oil Temperature Sensor, Minimum Temperature Plausibility
188	31	Idle Speed Out of Range
190	0	Engine Speed High
190	14	Engine Overspeed while Driving
190	15	Engine Overspeed Pre-warning
190	16	Engine Overspeed while Stationary
191	13	J1939 Transmission Output Shaft Speed Signal is Missing
191	19	J1939 Transmission Output Shaft Speed Signal is Erratic
411	0	EGR Differential Pressure Failed (Low Box)
411	1	EGR Differential Pressure Failed (High Box)
411	2	EGR Delta Pressure Sensor Out of Calibration Low
411	3	EGR Delta Pressure Sensor Circuit High
411	4	EGR Delta Pressure Sensor Circuit Low
411	13	EGR Delta Pressure Sensor Out of Calibration High
523	13	J1939 Transmission Current Gear Signal is Missing
523	19	J1939 Transmission Current Gear Signal is Erratic
625	8	MCM UDS DM1 Message Not Received or has Stopped Arriving
625	9	No Data Received from Engine CAN Link
625	14	ACM UDS DM1 Message Not Received or has Stopped Arriving
625	17	No ACM2 Communication - Pre Warning
625	18	No ACM2 Communication - Warning
636	1	Crankshaft Position Sensor Short to Ground
636	2	No Match of Camshaft and Crankshaft Signals
636	3	Crankshaft Position Sensor Open Circuit
636	8	Crankshaft Position Sensor Time Out
636	10	Crankshaft Position Sensor Signal Erratic

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
636	11	Crankshaft Position Sensor Failure
641	3	Turbo Control Circuit Failed High
641	4	Turbo Control Circuit Failed Low
641	5	Turbo Control Circuit Open
647	3	Fan Stage 1 Circuit Failed High
647	4	Fan Stage 1 Circuit Failed Low
647	5	Fan Stage 1 Circuit Failed Open
651	3	Injector Cylinder #1 Needle Control Valve, Abnormal Operation (MAX)
651	4	Injector Cylinder #1 Needle Control Valve, Abnormal Operation (MIN)
651	5	Injector Cylinder #1 Needle Control Valve, Circuit Open
651	6	Injector Cylinder #1 Needle Control Valve, Valve Shorted Circuit
651	7	Injector Cylinder #1 Needle Control Valve, Stuck Open
652	3	Injector Cylinder #2 Needle Control Valve, Abnormal Operation (MAX)
652	4	Injector Cylinder #2 Needle Control Valve, Abnormal Operation (MIN)
652	5	Injector Cylinder #2 Needle Control Valve, Circuit Open
652	6	Injector Cylinder #2 Needle Control Valve, Valve Shorted Circuit
652	7	Injector Cylinder #2 Needle Control Valve, Stuck Open
653	3	Injector Cylinder #3 Needle Control Valve, Abnormal Operation (MAX)
653	4	Injector Cylinder #3 Needle Control Valve, Abnormal Operation (MIN)
653	5	Injector Cylinder #3 Needle Control Valve, Circuit Open
653	6	Injector Cylinder #2 Needle Control Valve, Valve Shorted Circuit
653	7	Injector Cylinder #3 Needle Control Valve, Stuck Open
654	3	Injector Cylinder #4 Needle Control Valve, Abnormal Operation (MAX)
654	4	Injector Cylinder #4 Needle Control Valve, Abnormal Operation (MIN)
654	5	Injector Cylinder #4 Needle Control Valve, Circuit Open
654	6	Injector Cylinder #4 Needle Control Valve, Valve Shorted Circuit

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
654	7	Injector Cylinder #4 Needle Control Valve, Stuck Open
655	3	Injector Cylinder #5 Needle Control Valve, Abnormal Operation (MAX)
655	4	Injector Cylinder #5 Needle Control Valve, Abnormal Operation (MIN)
655	5	Injector Cylinder #5 Needle Control Valve, Circuit Open
655	6	Injector Cylinder #5 Needle Control Valve, Valve Shorted Circuit
655	7	Injector Cylinder #5 Needle Control Valve, Stuck Open
656	3	Injector Cylinder #6 Needle Control Valve, Abnormal Operation (MAX)
656	4	Injector Cylinder #6 Needle Control Valve, Abnormal Operation (MIN)
656	5	Injector Cylinder #6 Needle Control Valve, Circuit Open
656	6	Injector Cylinder #6 Needle Control Valve, Valve Shorted Circuit
656	7	Injector Cylinder #6 Needle Control Valve, Stuck Open
677	2	Starter Switch Inconsistent
677	3	Engine Starter Relay Shorted to High Source
677	4	Engine Starter Relay Circuit Failed Low
677	5	Engine Starter Relay Open Circuit
677	7	Engine Starter Relay - Starter Does Not Engage
705	3	Digital Output 1 13 Circuit Failed High
705	4	Digital Output 1 13 Circuit Failed Low
710	3	Digital Output 4 06 Circuit Failed High
710	4	Digital Output 4 06 Circuit Failed Low
723	8	Camshaft Position Sensor Time Out
723	10	Camshaft Position Sensor Signal Erratic
723	11	Camshaft Position Sensor Failure
723	31	Backwards Running Engine Detected
961	2	CPC Clock Data Invalid
1033	15	MCM Engine Run Timer Plausibility
1033	17	MCM Engine Off Timer Plausibility
1071	3	Fan Stage 2 Circuit Failed High
1071	4	Fan Stage 2 Circuit Failed Low
1071	5	Fan Stage 2 Circuit Failed Open
1072	3	Jake Brake Stage 1 Circuit Failed High
1072	4	Jake Brake Stage 2 Circuit Failed Low

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
1072	5	Jake Brake Stage 1 Circuit Failed Open
1073	3	Jake Brake Stage 2 Circuit Failed High
1073	4	Jake Brake Stage 2 Circuit Failed Low
1073	5	Jake Brake Stage 2 Circuit Failed Open
1077	3	Quantity Control Valve (Low Side) Error
1077	4	Quantity Control Valve (High Side) Error
1077	5	Quantity Control Valve Error, Current too Low
1077	6	Quantity Control Valve, Desired Current Doesn't Match Actual Current
1077	14	Leakage in High Pressure Fuel System too High (Leak Down Test)
1172	3	Turbo Charger Compressor Inlet Temperature Circuit Failed High
1172	4	Turbo Charger Compressor Inlet Temperature Circuit Failed Low
1231	9	ACM Message Not Received or has Stopped Arriving
1322	31	Multiple Cylinder Misfire Detected at Idle
1323	31	Idle Smoothness Control / Cylinder #1 Misfire at Idle
1324	31	Idle Smoothness Control / Cylinder #2 Misfire at Idle
1325	31	Idle Smoothness Control / Cylinder #3 Misfire at Idle
1326	31	Idle Smoothness Control / Cylinder #4 Misfire at Idle
1327	31	Idle Smoothness Control / Cylinder #5 Misfire at Idle
1328	31	Idle Smoothness Control / Cylinder #6 Misfire at Idle
1636	0	Charge Air Cooler Low Efficiency
1636	2	Difference Intake Manifold and Icooler Temperature Out Less Than Threshold (Low Box)
1636	3	Intake Manifold Temperature Circuit Failed High
1636	4	Intake Manifold Temperature Circuit Failed Low
1639	2	Fan Speed Error
1659	1	Thermostat Error

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
2630	2	Difference Intake Manifold and Icooler Temperature Out Less Than Threshold (High Box)
2630	3	Charge Air Cooler Outlet Temperature Circuit Failed High
2630	4	Charge Air Cooler Outlet Temperature Circuit Failed Low
2630	16	Charge Air Cooler Performance Monitor
2631	1	Low Air Flow
2659	0	EGR Flow Target Error Diagnostic - High Flow
2659	18	EGR Flow Target Error Diagnostic - Low Flow
2791	0	EGR Valve Actuator, Temperature Alert
2791	2	EGR Valve Actuator, Position Deviation Error
2791	7	EGR Valve Actuator, Failsafe Mode, Motor Off
2791	11	EGR Valve Actuator, Motor Off
2791	12	EGR Valve Actuator, Frozen
2791	14	EGR Valve Actuator, CAN Error
2791	15	EGR Valve Actuator, Temperature Warning
2791	16	EGR Valve Actuator, Learn Cycle Too Large
2791	18	EGR Valve Actuator, Learn Cycle Too Small
2791	31	Exhaust Gas Recirculation (EGR) valve actuator (unknown error code)
2797	3	Injector Needle Control Valve Cylinder #1, #2, #3, Shorted to Battery
2797	4	Injector Needle Control Valve Cylinder #1, #2, #3, Shorted to Ground
2798	3	Injector Needle Control Valve Cylinder #4, #5, #6, Shorted to Battery
2798	4	Injector Needle Control Valve Cylinder #4, #5, #6, Shorted to Ground
3058	9	EGR Slow Response Low Box
3058	10	Exhaust Gas Recirculation Slow Response
3216	2	NOX Inlet Sensor Plausibility Error
3216	10	NOX Inlet Sensor Plausibility Error
3216	16	NOx inlet sensor plausibility error high
3216	18	NOx inlet sensor plausibility error low

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
3216	21	SCR NOX Inlet Sensor Drift Low
3464	3	IAT Motor Circuit Shorted to Battery
3464	4	IAT Motor Circuit Shorted to Ground
3464	5	IAT Motor Short Circuit/Over Current
3464	16	Intake Manifold Pressure too High
3464	18	Intake Manifold Pressure too Low
3464	31	H Bridge 1 IAT Circuit Open Load
3471	3	HC Doser Circuit Failed High
3471	4	HC Doser Circuit Failed Low
3471	5	HC Doser Circuit Failed Open
3480	0	Fuel Compensation Pressure High
3480	1	Doser Fuel Supply Pressure Abnormal
3480	2	Doser Fuel Line Pressure Low
3480	3	Fuel Compensation Pressure Sensor Circuit Failed High
3480	4	Fuel Compensation Pressure Sensor Circuit Failed Low
3480	14	Doser FLP Sensors Failed Self Test
3480	21	Fuel Cut Off Valve Pressure Not Plausible
3482	3	Fuel Cut Off Valve Circuit Failed High
3482	4	Fuel Cut Off Valve Circuit Failed Low
3482	5	Fuel Cut Off Valve Circuit Failed Open
3509	3	5V Sensor Supply Bank 1 Circuit Failed High
3509	4	5V Sensor Supply Bank 1 Circuit Failed Low
3510	3	5V Sensor Supply Bank 2 Circuit Failed High
3510	4	5V Sensor Supply Bank 2 Circuit Failed Low
3511	3	3V Sensor Supply Bank 1 Circuit Failed High
3511	4	3V Sensor Supply Bank 1 Circuit Failed Low
3512	3	3V Sensor Supply Bank 2 Circuit Failed High
3512	4	3V Sensor Supply Bank 2 Circuit Failed Low
3563	3	Intake Manifold Pressure Circuit Failed High
3563	4	Intake Manifold Pressure Circuit Failed Low
3563	20	Ambient and Inlet Manifold Pressure Difference (Low Box)

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
3563	21	Ambient and Inlet Manifold Pressure Difference (High Box)
3597	3	Proportional Valve Bank 1 Circuit Failed High
3597	4	Proportional Valve Bank 1 Circuit Failed Low
3598	3	Proportional Valve Bank 2 Circuit Failed High
3598	4	Proportional Valve Bank 2 Circuit Failed Low
3599	3	MCM Internal Injector Power Supply Failed High
3599	4	MCM Internal Injector Power Supply Failed Low
3659	3	Injector Cylinder #1 Spill Control Valve ("Amplifier"), Abnormal Operation (MAX)
3659	4	Injector Cylinder #1 Spill Control Valve ("Amplifier"), Abnormal Operation (MIN)
3659	5	Injector Cylinder #1 Spill Control Valve ("Amplifier"), Circuit Open
3659	6	Injector Cylinder #1 Spill Control Valve ("Amplifier"), Valve Shorted Circuit
3660	3	Injector Cylinder #2 Spill Control Valve ("Amplifier"), Abnormal Operation (MAX)
3660	4	Injector Cylinder #2 Spill Control Valve ("Amplifier"), Abnormal Operation (MIN)
3660	5	Injector Cylinder #2 Spill Control Valve ("Amplifier"), Circuit Open
3660	6	Injector Cylinder #2 Spill Control Valve ("Amplifier"), Valve Shorted Circuit
3661	3	Injector Cylinder #3 Spill Control Valve ("Amplifier"), Abnormal Operation (MAX)
3661	4	Injector Cylinder #3 Spill Control Valve ("Amplifier"), Abnormal Operation (MIN)
3661	5	Injector Cylinder #3 Spill Control Valve ("Amplifier"), Circuit Open
3661	6	Injector Cylinder #3 Spill Control Valve ("Amplifier"), Valve Shorted Circuit
3662	3	Injector Cylinder #4 Spill Control Valve ("Amplifier"), Abnormal Operation (MAX)
3662	4	Injector Cylinder #4 Spill Control Valve ("Amplifier"), Abnormal Operation (MIN)

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
3662	5	Injector Cylinder #4 Spill Control Valve ("Amplifier"), Circuit Open
3662	6	Injector Cylinder #4 Spill Control Valve ("Amplifier"), Valve Shorted Circuit
3663	3	Injector Cylinder #5 Spill Control Valve ("Amplifier"), Abnormal Operation (MAX)
3663	4	Injector Cylinder #5 Spill Control Valve ("Amplifier"), Abnormal Operation (MIN)
3663	5	Injector Cylinder #5 Spill Control Valve ("Amplifier"), Circuit Open
3663	6	Injector Cylinder #5 Spill Control Valve ("Amplifier"), Valve Shorted Circuit
3664	3	Injector Cylinder #6 Spill Control Valve ("Amplifier"), Abnormal Operation (MAX)
3664	4	Injector Cylinder #6 Spill Control Valve ("Amplifier"), Abnormal Operation (MIN)
3664	5	Injector Cylinder #6 Spill Control Valve ("Amplifier"), Circuit Open
3664	6	Injector Cylinder #6 Spill Control Valve ("Amplifier"), Valve Shorted Circuit
3716	31	High Idle Regeneration (HIR) aborted - Low Coolant Temp
4077	0	Doser Fuel Line Pressure High
4077	3	Doser Fuel Line Pressure Sensor Circuit Failed High
4077	4	Doser Fuel Line Pressure Sensor Circuit Failed Low
4077	14	Doser Fuel Line Pressure Failed Self Test
4193	2	Coolant Inlet Temperature Not Plausible
4193	3	Engine Coolant Inlet Temperature Circuit Failed High
4193	4	Engine Coolant Inlet Temperature Circuit Failed Low
4193	17	Coolant Outlet Temperature Sensor, Minimum Temperature Plausibility
4257	3	Injector Amplifier Control Valve Cylinder #1, #2, #3, Shorted to Battery
4257	4	Injector Amplifier Control Valve Cylinder #1, #2, #3, Shorted to Ground
4258	3	Injector Amplifier Control Valve Cylinder #4, #5, #6, Shorted to Battery

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
4258	4	Injector Amplifier Control Valve Cylinder #4, #5, #6, Shorted to Ground
4752	0	EGR Cooler Low Efficiency
4752	15	EGR Cooler Performance Monitor
4765	0	Exhaust Temperature Out of Range High
4814	3	Water Pump Circuit Failed High
4814	4	Water Pump Circuit Failed Low
4814	5	Water Pump Circuit Failed Open
5312	7	Intake Manifold Pressure Very Low
5323	13	Excessive Time to Enter Closed Loop Fuel Pressure Control
5357	16	Total Injected Fuel Mass too High
5357	18	Total Injected Fuel Mass too Low
5395	15	Idle Fuel Quantity Out of Range
5418	3	FMU High Side Short-Circuit to Battery
5418	4	FMU Low Side Short-Circuit to Ground
5444	1	Engine Crankcase Breather Oil Separator Speed too Low
5571	7	Pressure Limiting Valve, Failed to Close
5588	9	CAN3 Communication Error
5927	2	Electronically Controlled Water Pump Limp Home Mode
5927	7	Electronically Controlled Water Pump Mechanical Defect Detected
520253	14	Software Reset Detected
520253	31	Software Reset Detected
520261	31	Speed Limitation Fault
520267	2	CPC Clock Data Invalid
520267	15	MCM Engine Run Timer Plausibility
520267	17	MCM Engine Off Timer Plausibility
520268	16	Fuel Rail Pressure Too High, Similar Condition
520268	18	Fuel Rail Pressure Too Low, Similar Condition
520279	7	Starter Inhibit due to Improper Condition
520280	7	Engine Brake High Inhibit due to Improper Condition
520281	7	Engine Brake Inhibit due to JB1 Improper Condition
520282	7	Engine Brake Inhibit due to JB2 Improper Condition
520286	31	Software Reset Detected
520287	7	MCM Hardware Reset

GHG14 MCM2.1 Fault Codes

SPN	FMI	MCM2.1 FAULT CODE DESCRIPTION GHG14
520287	13	MCM Software Reset
520287	14	MCM missing VIN
520296	3	EGR Valve Actuator, Low Supply Voltage
520296	13	EGR Valve Actuator, Error
520296	19	EGR Valve Actuator, Communication Error
520296	31	EGR Valve Actuator, Learn Cycle Incomplete
520305	3	Injector Cylinder #1 Needle Control Valve, Abnormal Operation (MAX) Cold
520305	4	Injector Cylinder #1 Needle Control Valve, Abnormal Operation (MIN) Cold
520306	3	Injector Cylinder #2 Needle Control Valve, Abnormal Operation (MAX) Cold
520306	4	Injector Cylinder #2 Needle Control Valve, Abnormal Operation (MIN) Cold
520307	3	Injector Cylinder #3 Needle Control Valve, Abnormal Operation (MAX) Cold
520307	4	Injector Cylinder #3 Needle Control Valve, Abnormal Operation (MIN) Cold
520308	3	Injector Cylinder #4 Needle Control Valve, Abnormal Operation (MAX) Cold
520308	4	Injector Cylinder #4 Needle Control Valve, Abnormal Operation (MIN) Cold
520309	3	Injector Cylinder #5 Needle Control Valve, Abnormal Operation (MAX) Cold
520309	4	Injector Cylinder #5 Needle Control Valve, Abnormal Operation (MIN) Cold
520310	3	Injector Cylinder #6 Needle Control Valve, Abnormal Operation (MAX) Cold
520310	4	Injector Cylinder #6 Needle Control Valve, Abnormal Operation (MIN) Cold

EPA10 ACM Fault Codes

SPN	FMI	ACM FAULT CODE DESCRIPTION EPA10
51	4	Intake Air Throttle Circuit Failed Low
108	13	Ambient Air Pressure Signal Not Available via CAN
110	9	Coolant Temperature Signal Not Available via CAN
158	7	ACM Power Down - Key Off Purge Cycle
168	0	Battery Voltage High
168	1	Battery Voltage Low
171	3	Ambient Air Temperature Circuit Failed High
171	4	Ambient Air Temperature Circuit Failed Low
171	8	Ambient Air Temp Signal Spike
171	13	Ambient Air Temperature Signal Not Available via CAN
190	9	Engine Speed Signal Not Available via CAN
354	3	Relative Humidity Sensor Circuit Failed High
354	4	Relative Humidity Sensor Circuit Failed Low
513	9	Actual Torque Signal Not Available via CAN
628	14	ECU Software Error
629	12	ACM Internal Error
1037	0	DPF HC Absorption Very High
1037	15	DPF HC Absorption Warning
1037	16	DPF HC Absorption High
1119	31	Nox Signal Not Plausible
1172	3	Turbo Compressor Inlet Temperature Circuit Failed High
1172	4	Turbo Compressor Inlet Temperature Circuit Failed Low
1761	1	DEF Tank Level 0 - Empty(Speed Limited)
1761	2	DEF Level Sensor Error
1761	3	DEF Tank Level Sensor Circuit Failed High
1761	4	DEF Tank Level Sensor Circuit Failed Low
1761	17	DEF Tank Level 2 - Very Low
1761	18	DEF Tank Level 1 - Empty
1761	31	DEF Tank Level 3 - Low
1908	3	DEF Air Lock Valve Circuit Failed High
1908	4	DEF Air Lock Valve Circuit Failed Low

SPN	FMI	ACM FAULT CODE DESCRIPTION EPA10
1908	5	DEF Air Lock Valve Circuit Failed Open
3031	0	SCR Temperature of Tank is Too High
3031	2	DEF Tank Temperature - Drift
3031	3	DEF Tank Temperature Sensor Circuit Failed High
3031	4	DEF Tank Temperature Sensor Circuit Failed Low
3031	13	DEF Tank Temperature Signal Not Available via CAN
3050	0	Engine Air Flow Out of Range Low
3050	1	Active Regen Temp Out of Range Low
3056	2	SCR Inlet NOx Sensor - Error
3057	2	SCR Outlet NOx Sensor - Error
3064	13	DPF System Parametrization Failure
3216	3	SCR Inlet NOx Sensor Circuit Failed High
3216	4	SCR Inlet NOx Sensor Circuit Failed Low
3216	13	SCR Inlet NOx Sensor Signal Not Available
3226	2	SCR Outlet NOx Sensor - Drift
3226	3	SCR Outlet NOx Sensor Circuit Failed High
3226	4	SCR Outlet NOx Sensor Circuit Failed Low
3226	13	SCR Outlet NOx Sensor Signal Not Available
3226	20	NOx Outlet Sensor Drift Low
3226	21	NOx Outlet Sensor Drift High
3236	9	Exhaust Mass Signal Not Available via CAN
3242	3	DOC Inlet Temperature Circuit Failed High
3242	4	DOC Inlet Temperature Circuit Failed Low
3242	8	DOC Inlet Temperature - Signal Spike
3242	10	DOC Inlet Temperature Sensor Stuck
3242	20	DOC Temperature Drift - Inlet High or Outlet Low
3242	21	DOC Inlet Temperature Sensor - Plausibility Error
3242	31	DOC Inlet Temperature Stuck (high box)
3246	0	DPF Outlet Temperature - Very High
3246	3	DPF Outlet Temperature Circuit Failed High

SPN	FMI	ACM FAULT CODE DESCRIPTION EPA10
3246	4	DPF Outlet Temperature Circuit Failed Low
3246	8	DPF Outlet Temperature - Signal Spike
3246	10	DPF Outlet Temperature Sensor Stuck
3246	14	Abnormal DPF Temperature Rise 2
3246	15	DPF Outlet Temperature - High
3246	20	DPF Temperature Drift - Inlet Low or Outlet High
3246	21	DPF Outlet Temperature Sensor - Not Plausible
3246	31	Abnormal DPF Temperature Rise 1
3250	0	DOC Outlet Temperature - Very High
3250	3	DOC Outlet Temperature Circuit Failed High
3250	4	DOC Outlet Temperature Circuit Failed Low
3250	8	DOC Outlet Temperature - Signal Spike
3250	14	Abnormal DOC Temperature Rise 2
3250	15	DOC Outlet Temperature - High
3250	20	DOC Temperature Drift - Inlet Low or Outlet High
3250	21	DOC Outlet Temperature Sensor - Plausibility Error
3250	31	Abnormal DOC Temperature Rise
3251	0	DPF Pressure - Out of Range Very High
3251	1	DPF Pressure Out of Range Low
3251	2	DOC Inlet Pressure Sensor - Not Plausible
3251	16	DPF Pressure - Out of Range High
3280	0	DPF Outlet Temperature High (Bank 2)
3284	0	DOC Outlet Temperature High (Bank 2)
3284	3	DOC Outboard Outlet Temperature Circuit Failed High
3284	4	DOC Outboard Outlet Temperature Circuit Failed Low
3284	8	DOC Outboard Outlet Temperature - Signal Spike
3284	10	DOC Outboard Outlet Temperature Sensor Stuck
3284	21	DOC Outboard Outlet Temperature Sensor - Plausibility Error
3361	0	DEF Pressure Duty Cycle High
3361	1	DEF Pressure Duty Cycle Low

SPN	FMI	ACM FAULT CODE DESCRIPTION EPA10
3361	3	DEF Dosing Valve Circuit Failed High
3361	4	DEF Dosing Valve Circuit Failed Low
3361	5	DEF Dosing Valve Circuit Failed Open
3361	7	DEF Unit - Unable to clear Restriction
3361	8	DEF Metering Unit - Exceeded Unclog Attempts
3363	0	DEF Tank Temperature - High
3363	1	DEF Tank Temperature - Low
3363	3	DEF Coolant Valve Circuit Failed High
3363	4	DEF Coolant Valve Circuit Failed Low
3363	5	DEF Coolant Valve Circuit Failed Open
3364	1	Improper DEF Quality Final Warning
3364	2	Improper DEF Quality
3364	17	Improper DEF Quality Warning
3490	3	DEF Purge Lamp Circuit Failed High
3490	4	DEF Purge Lamp Circuit Failed Low
3490	5	DEF Purge Lamp Circuit Failed Open
3509	3	ACM Sensor Supply 1 Short to Battery
3509	4	ACM Sensor Supply 1 Short to Ground
3510	3	ACM Sensor Supply 2 Short to Battery
3510	4	ACM Sensor Supply 2 Short to Ground
3523	8	Regen Frequency Error
3556	0	Regen Temperature - Out of Range High
3556	1	Regen Temperature - Out of Range Low
3556	18	DOC Outlet Temp Low (Low Temp Regen)
3597	3	High Side Digital Output 1 Circuit Failed High
3597	4	High Side Digital Output 1 Circuit Failed Low
3598	3	High Side Digital Output 2 Circuit Failed High
3598	4	High Side Digital Output 2 Circuit Failed Low
3599	3	High Side Digital Output 3 Circuit Failed High
3599	4	High Side Digital Output 3 Circuit Failed Low
3609	3	DOC Inlet Pressure Circuit Failed High
3609	4	DOC Inlet Pressure Circuit Failed Low
3609	8	DOC Inlet Pressure Signal Spike
3609	10	DOC Inlet Pressure Sensor Stuck
3610	0	DPF System Back Pressure Too High

EPA10 ACM Fault Codes

SPN	FMI	ACM FAULT CODE DESCRIPTION EPA10
3610	2	DPF Outlet Pressure Sensor - Not Plausible
3610	3	DPF Outlet Pressure Circuit Failed High
3610	4	DPF Outlet Pressure Circuit Failed Low
3610	8	DPF Outlet Pressure Signal Spike
3610	10	DPF Outlet Pressure Sensor Stuck
3711	31	Parked Regen Failed - DOC Temp In Low Preventing Dosing
3713	31	Parked Regen Failed - DOC Temp Out, Not Reaching Target Temp
3719	0	Soot Level Very High
3719	15	DPF Zone 3 Condition
3719	16	Soot Level High
3719	31	DPF Zone 2 Condition
3720	15	DPF Ash Clean Request
3720	16	DPF Ash Derate Request
3936	0	DPF Pressure Drop High
3936	1	DPF Pressure Drop Low
3936	18	DPF Pressure - Out of Range Low
4100	13	MCM/ACM Software Not Compatable
4334	2	DEF Pressure Sensor - Drift
4334	3	DEF Pressure Sensor Circuit Failed High
4334	4	DEF Pressure Sensor Circuit Failed Low
4334	7	DEF Pressure Low
4334	8	DEF Pressure Signal Spike
4334	17	DEF Purge Pressure High
4335	1	DEF Air Pressure Not Detected (from vehicle supply)
4335	2	DEF Air Pressure Sensor - Drift
4335	3	DEF Air Pressure Sensor Circuit Failed High
4335	4	DEF Air Pressure Sensor Circuit Failed Low
4335	5	DEF Air Pressure Sensor not Plausible
4335	7	DEF Air Pressure Low
4335	8	DEF Air Pressure Signal Spike
4335	14	DEF - Information Only
4335	31	DEF - Information Only
4336	3	Pressure Limiting Unit Circuit Failed High
4336	4	Pressure Limiting Unit Circuit Failed Low

SPN	FMI	ACM FAULT CODE DESCRIPTION EPA10
4336	5	Pressure Limiting Unit Circuit Failed Open
4337	1	SCR_ADS system Frozen
4337	2	DEF Dosing Unit Temperature - Drift
4337	3	DEF Temperature Sensor Circuit Failed High
4337	4	DEF Temperature Sensor Circuit Failed Low
4353	3	Diffuser Heater Circuit Failed High
4353	4	Diffuser Heater Circuit Failed Low
4353	5	Diffuser Heater Open Circuit
4354	3	SCR Line Heater #1 Circuit Failed High
4354	4	SCR Line Heater #1 Circuit Failed Low
4354	5	SCR Line Heater #1 Open Circuit
4355	3	SCR Line Heater #2 Circuit Failed High
4355	4	SCR Line Heater #2 Circuit Failed Low
4355	5	SCR Line Heater #2 Circuit Failed Open
4356	3	SCR Line Heater #3 Circuit Failed High
4356	4	SCR Line Heater #3 Circuit Failed Low
4356	5	SCR Line Heater #3 Circuit Failed Open
4357	3	SCR Line Heater #4 Circuit Failed High
4357	4	SCR Line Heater #4 Circuit Failed Low
4357	5	SCR Line Heater #4 Circuit Failed Open
4358	3	DEF General Heater Circuit Failed High
4358	4	DEF General Heater Circuit Failed Low
4358	5	DEF General Heater Circuit Failed Open
4360	3	SCR Inlet Temperature Sensor Circuit Failed High
4360	4	SCR Inlet Temperature Sensor Circuit Failed Low
4360	8	SCR Inlet Temperature - Signal Spike
4360	20	SCR Inlet Temperature Sensor Drift High in Range
4360	21	SCR Inlet Temperature Drift in Range
4363	0	SCR Outlet Temperature High
4363	3	SCR Outlet Temperature Sensor Circuit Failed High
4363	4	SCR Outlet Temperature Sensor Circuit Failed Low
4363	8	SCR Outlet Temperature - Signal Spike

EPA10 ACM Fault Codes

SPN	FMI	ACM FAULT CODE DESCRIPTION EPA10
4363	20	SCR Outlet Temperature Sensor Drift High in Range
4363	21	SCR Oulet Temperature Drift in Range
4364	1	SCR NOX Conversion Efficiency Very Low
4364	18	SCR NOX Conversion Efficiency Low
4375	3	DEF Pump Circuit Failed High
4375	4	DEF Pump Circuit Failed Low
4375	5	DEF Pump Circuit Failed Open
4375	6	DEF Pump Supply Current High
4792	14	SCR Catalyst Aged Level 1
4792	31	SCR Catalyst Aged Level 2
4795	31	DPF Pressure Differential
5016	3	Coolant Valve Supply Voltage Failed High
5016	4	Coolant Valve Supply Voltage Failed Low
5017	3	High Side Digital Output 5 Circuit Failed High
5017	4	High Side Digital Output 5 Circuit Failed Low
5246	0	Regulatory Fault Ignored - Final Action (Speed Limit)
5246	15	Regulatory Fault Ignored - Derate On
5246	16	Regulatory Fault Ignored - Final Action Pending
5298	14	SCR Abnormal Temperature Rise
5397	31	DPF Regen Too Often
50230	4	Def Acumulator Failure
520231	13	Fuel Mass Signal Not Available via CAN
520232	9	NOx Mass Signal Not Available via CAN
520234	13	DEF Dosing Correction Factor Not Available via CAN
520249	4	SCR Inlet Temperature High
520252	14	DEF Tank Zone 4 Condition
520252	31	DEF Tank Zone 5 Condition
520279	3	EDU Temperature Sensor Signal Failed High
520279	4	EDU Temperature Sensor Signal Failed Low
520280	3	EDU Pressure Sensor Signal Failed High
520280	4	EDU Pressure Sensor Signal Failed Low

SPN	FMI	ACM FAULT CODE DESCRIPTION EPA10
520282	3	EDU Dosing Valve Signal Failed High
520282	4	EDU Dosing Valve Signal Failed Low
520282	5	EDU Dosing Valve Signal Failed Open
520287	9	ACM DM1 Message Not Received at Dash Cluster

EPA10 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA10
51	2	Intake Throttle Position Deviation Error
51	3	Intake Air Throttle Circuit Failed High
51	4	Intake Air Throttle Circuit Failed Low
84	3	Vehicle Speed Sensor Circuit Failed High
84	4	Vehicle Speed Sensor Circuit Failed Low
94	3	Low Side Fuel Pressure Sensor Circuit Failed High
94	4	Low Side Fuel Pressure Sensor Circuit Failed Low
94	15	Fuel Filter Service Warning
94	16	Fuel Filter Replacement Required
96	2	Fuel Tank Level Sensor Stuck in Position
97	15	Water in Fuel
97	16	Water in Fuel Ignored - Derate
97	31	Water in Fuel Sensor - Defect
100	1	Engine Oil Pressure Low
100	3	Engine Oil Pressure Circuit Failed High
100	4	Engine Oil Pressure Circuit Failed Low
100	5	Oil Pressure Sensor Stuck High - low speed
100	17	Oil Pressure Low - Engine Start
103	2	Turbocharger Speed Not Plausible
108	3	Barometric Pressure Circuit Failed High
108	4	Barometric Pressure Circuit Failed Low
110	0	Coolant Temperature High
110	2	Coolant Outlet Temperature Not Plausible
110	3	Engine Coolant Outlet Temperature Circuit Failed High
110	4	Engine Coolant Outlet Temperature Circuit Failed Low
110	14	Coolant Temperature / Engine Oil Temperature Plausibility Fault
111	19	Coolant Level Low (CAN)
157	16	Fuel Rail Pressure Low
157	18	Fuel Rail Pressure High
158	2	Ignition Switch Not Plausible
164	3	Rail Pressure Sensor Circuit Failed High
164	4	Rail Pressure Sensor Circuit Failed Low

EPA10 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA10
164	5	Rail Pressure Sensor Circuit Failed Open
164	20	Rail Pressure Sensor - Drift High
164	21	Rail Pressure Sensor - Drift Low
168	0	Battery Voltage High
168	1	Battery Voltage Low
174	0	Fuel Temperature Too High
174	3	Fuel Temperature Circuit Failed High
174	4	Fuel Temperature Circuit Failed Low
175	0	Oil Temperature High Warning
175	3	Engine Oil Temperature Circuit Failed High
175	4	Engine Oil Temperature Circuit Failed Low
175	14	Engine Oil Temperature Sensor Plausibility Fault
175	15	Oil Temperature High Pre-Warning
190	0	Engine Speed High
191	13	J1939 Transmission Output Shaft Speed Signal is missing
191	19	J1939 Transmission Output Shaft Speed Signal is erratic
411	0	EGR Differential Pressure Too High (Low Box)
411	1	EGR Differential Pressure Too Low (High Box)
411	2	EGR Delta Pressure Sensor Out Of Calibration
411	3	EGR Delta Pressure Sensor Circuit High
411	4	EGR Delta Pressure Sensor Circuit Low
411	13	EGR Delta Pressure Sensor Out Of Calibration
523	13	J1939 Transmission Current Gear Signal is missing
523	19	J1939 Transmission Current Gear Signal is erratic
625	2	Invalid Data on Engine CAN Link
625	8	MCM UDS DM1 Message Not Received or has Stopped Arriving
625	9	No Data Received from Engine CAN Link
625	14	ACM UDS DM1 Message Not Received or has Stopped Arriving
625	17	No ACM Communication - Pre Warning

EPA10 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA10
625	18	No ACM Communication - Warning
636	1	Crankshaft Position Sensor Signal Voltage Too Low
636	2	No Match of Camshaft and Crankshaft Signals
636	3	Crankshaft Position Sensor Open Circuit
636	8	Crankshaft Position Sensor Time Out
636	10	Crankshaft Position Sensor Signal Erratic
636	11	Crankshaft Position Sensor Failure
647	3	Fan Stage 1 Circuit Failed High
647	4	Fan Stage 1 Circuit Failed Low
647	5	Fan Stage 1 Circuit Failed Open
651	3	Injector Cylinder #1 Needle Control Valve Abnormal Operation (MAX)
651	4	Injector Cylinder #1 Needle Control Valve Abnormal Operation (MIN)
651	6	Injector Cylinder #1 Needle Control Valve, Valve Shorted Circuit
652	3	Injector Cylinder #2 Needle Control Valve Abnormal Operation (MAX)
652	4	Injector Cylinder #2 Needle Control Valve Abnormal Operation (MIN)
652	6	Injector Cylinder #2 Needle Control Valve, Valve Shorted Circuit
653	3	Injector Cylinder #3 Needle Control Valve Abnormal Operation (MAX)
653	4	Injector Cylinder #3 Needle Control Valve Abnormal Operation (MIN)
653	6	Injector Cylinder #3 Needle Control Valve, Valve Shorted Circuit
654	3	Injector Cylinder #4 Needle Control Valve Abnormal Operation (MAX)
654	4	Injector Cylinder #4 Needle Control Valve Abnormal Operation (MIN)
654	6	Injector Cylinder #4 Needle Control Valve, Valve Shorted Circuit
655	3	Injector Cylinder #5 Needle Control Valve Abnormal Operation (MAX)
655	4	Injector Cylinder #5 Needle Control Valve Abnormal Operation (MIN)
655	6	Injector Cylinder #5 Needle Control Valve, Valve Shorted Circuit
656	3	Injector Cylinder #6 Needle Control Valve Abnormal Operation (MAX)

EPA10 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA10
656	4	Injector Cylinder #6 Needle Control Valve Abnormal Operation (MIN)
656	6	Injector Cylinder #6 Needle Control Valve, Valve Shorted Circuit
677	2	Starter Switch Inconsistent
677	3	Engine Starter Relay Shorted to High Source
677	4	Engine Starter Relay Circuit Failed Low
677	5	Engine Starter Relay Open Circuit
677	7	Engine Starter Relay - Starter Does Not Engage
679	7	Pressure Limiting Valve, Failed to Close
705	3	Digital Output 1 13 Circuit Failed High
705	4	Digital Output 1 13 Circuit Failed Low
710	3	Digital Output 4 06 Circuit Failed High
710	4	Digital Output 4 06 Circuit Failed Low
723	8	Camshaft Position Sensor Time Out
723	10	Camshaft Position Sensor Signal Erratic
723	11	Camshaft Position Sensor Failure
1071	3	Fan Stage 2 Circuit Failed High
1071	4	Fan Stage 2 Circuit Failed Low
1071	5	Fan Stage 2 Circuit Failed Open
1072	3	Jake Brake Stage 1 Circuit Failed High
1072	4	Jake Brake Stage 1 Circuit Failed Low
1072	5	Jake Brake Stage 1 Circuit Failed Open
1073	3	Jake Brake Stage 2 Circuit Failed High
1073	4	Jake Brake Stage 2 Circuit Failed Low
1073	5	Jake Brake Stage 2 Circuit Failed Open
1077	5	Quantity Control Valve Error, Current Too Low
1077	6	Quantity Control Valve, Current Too High
1077	14	Leakage in High Pressure Fuel System Too High (Leak Down Test)
1231	9	ACM Message Not Received or has Stopped Arriving
1636	0	Charge Air Cooler Low Efficiency
1636	2	Engine Air Temperature - Plausibility Fault Out of Range (Low Box)
1636	3	Intake Manifold Temperature Circuit Failed High

EPA10 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA10
1636	4	Intake Manifold Temperature Circuit Failed Low
1639	2	Fan Speed Fault
2630	3	Charge Air Cooler Outlet Temperature Circuit Failed High
2630	4	Charge Air Cooler Outlet Temperature Circuit Failed Low
2630	16	Charge Air Cooler Performance Monitor
2631	1	Low Air Flow
2659	0	EGR Flow Target Error Diagnostic - High Flow
2659	18	EGR Flow Target Error Diagnostic - Low Flow
2791	7	EGR Valve Actuator, Failsafe Mode, Motor On
2791	9	EGR Valve Actuator, Failsafe Mode, Motor Off
2791	14	EGR Valve Actuator, No Failsafe Mode, Motor Off
2791	16	EGR Valve Actuator, Temperature Fault
2797	3	Injector Needle Control Valve Cylinder 1,2,3 Shorted to Battery
2797	4	Injector Needle Control Valve Cylinder 1, 2, 3 Shorted to Ground
2798	3	Injector Needle Control Valve Cylinder 4,5,6, Shorted to Battery
2798	4	Injector Needle Control Valve Cylinder 4, 5, 6 Shorted to Ground
3464	3	H Bridge 1 Circiut Shorted to Battery
3464	4	H Bridge 1 Circuit Shorted to Ground
3464	5	H Bridge 1 Circuit Open Load
3464	31	Intake Air Throttle Control Electrical Fault
3471	3	HC Doser Circuit Failed High
3471	4	HC Doser Circuit Failed Low
3471	5	HC Doser Circuit Failed Open
3480	0	Fuel Compensation Pressure High
3480	1	Doser Fuel Supply Pressure Abnormal
3480	2	Doser Fuel Line Pressure Low
3480	3	Fuel Compensation Pressure Sensor Circuit Failed High
3480	4	Fuel Compensation Pressure Sensor Circuit Failed Low
3480	14	Doser FLP Sensors Failed Self Test

EPA10 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA10
3480	31	Fuel Cut Off Valve Pressure Not Plausible
3482	3	Fuel Cut Off Valve Circuit Failed High
3482	4	Fuel Cut Off Valve Circuit Failed Low
3482	5	Fuel Cut Off Valve Circuit Failed Open
3509	3	5V Sensor Supply Bank 1 Circuit Failed High
3509	4	5V Sensor Supply Bank 1 Circuit Failed Low
3510	3	5V Sensor Supply Bank 2 Circuit Failed High
3510	4	5V Sensor Supply Bank 2 Circuit Failed Low
3511	3	3V Sensor Supply Bank 1 Circuit Failed High
3511	4	3V Sensor Supply Bank 1 Circuit Failed Low
3512	3	3V Sensor Supply Bank 2 Circuit Failed High
3512	4	3V Sensor Supply Bank 2 Circuit Failed Low
3563	3	Intake Manifold Pressure Circuit Failed High
3563	4	Intake Manifold Pressure Circuit Failed Low
3563	18	Inlet Manifold Pressure Failed Low
3563	20	Ambient and Inlet Manifold Pressure Difference (Low Box)
3597	3	Proportional Valve Bank 1 Circuit Failed High
3597	4	Proportional Valve Bank 1 Circuit Failed Low
3598	3	Proportional Valve Bank 2 Circuit Failed High
3598	4	Proportional Valve Bank 2 Circuit Failed Low
3599	3	MCM Internal Injector Power Supply Failed High
3599	4	MCM Internal Injector Power Supply Failed Low
3659	3	Injector Cylinder #1 Amplifier Control Valve Abnormal Operation (MAX)
3659	4	Injector Cylinder #1 Amplifier Control Valve Abnormal Operation (MIN)
3659	6	Injector Cylinder #1 Amplifier Control Valve, Valve Shorted Circuit

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA10
3660	3	Injector Cylinder #2 Amplifier Control Valve Abnormal Operation (MAX)
3660	4	Injector Cylinder #2 Amplifier Control Valve Abnormal Operation (MIN)
3660	6	Injector Cylinder #2 Amplifier Control Valve, Valve Shorted Circuit
3661	3	Injector Cylinder #3 Amplifier Control Valve Abnormal Operation (MAX)
3661	4	Injector Cylinder #3 Amplifier Control Valve Abnormal Operation (MIN)
3661	6	Injector Cylinder #3 Amplifier Control Valve, Valve Shorted Circuit
3662	3	Injector Cylinder #4 Amplifier Control Valve Abnormal Operation (MAX)
3662	4	Injector Cylinder #4 Amplifier Control Valve Abnormal Operation (MIN)
3662	6	Injector Cylinder #4 Amplifier Control Valve, Valve Shorted Circuit
3663	3	Injector Cylinder #5 Amplifier Control Valve Abnormal Operation (MAX)
3663	4	Injector Cylinder #5 Amplifier Control Valve Abnormal Operation (MIN)
3663	6	Injector Cylinder #5 Amplifier Control Valve, Valve Shorted Circuit
3664	3	Injector Cylinder #6 Amplifier Control Valve Abnormal Operation (MAX)
3664	4	Injector Cylinder #6 Amplifier Control Valve Abnormal Operation (MIN)
3664	6	Injector Cylinder #6 Amplifier Control Valve, Valve Shorted Circuit
3716	31	High Idle Regen - Low Temperature
4077	0	Doser Fuel Line Pressure High
4077	3	Doser Fuel Line Pressure Sensor Circuit Failed High
4077	4	Doser Fuel Line Pressure Sensor Circuit Failed Low
4077	14	Doser Fuel Line Pressure Failed Self Test
4193	2	Coolant Inlet Temperature Not Plausible
4193	3	Engine Coolant Inlet Temperature Circuit Failed High
4193	4	Engine Coolant Inlet Temperature Circuit Failed Low
4257	3	Injector Amplifier Control Valve Cylinder 1, 2, 3 Shorted to Battery

EPA10 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA10
4257	4	Injector Amplifier Control Valve Cylinder 1, 2, 3 Shorted to Ground
4258	3	Injector Amplifier Control Valve Cylinder 4, 5, 6 Shorted to Battery
4258	4	Injector Amplifier Control Valve Cylinder 4, 5, 6 Shorted to Ground
4752	0	EGR Cooler Low Efficiency
4752	31	EGR Cooler Performance Monitor
5418	3	Quantity Control Valve (Low Side) Error
5418	4	Quantity Control Valve (High Side) Error
65279	15	Water-In-Fuel (WIF) ignored – derate
65279	16	Water-In-Fuel (WIF) ignored - shutdown
520250	4	Quantity Control Valve (QCV) low side driver error

EPA10 CPC Fault Codes

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA10
70	2	Park Brake Status Not Plausible (Vehicle Moving)
70	13	J1939 Park Brake Switch Signal from Sources #1, #2, or #3 is missing
70	19	J1939 Park Brake Switch Signal from Sources #1, #2, or #3 is erratic
84	0	Vehicle Speed Above Programmable Threshold1 While Driving
84	3	Vehicle Speed Sensor Circuit Failed High
84	4	Vehicle Speed Sensor Circuit Failed Low
84	6	VSS Anti-Tamper Detection via ABS Vehicle Speed Comparison
84	11	Vehicle Speed Above Programmable Threshold2 While Driving
84	13	J1939 Wheel-Based Vehicle Speed Signal from Sources #1, #2, or #3 is missing
84	19	J1939 Wheel-Based Vehicle Speed Signal from Sources #1, #2, or #3 is erratic
84	20	Vehicle Speed Sensor Drifted High Error (VSS signal not plausible)
84	21	Vehicle Speed Failure
91	0	Accelerator Pedal Circuit Failed High
91	2	Accelerator Pedal Learn Error
91	3	Accelerator Pedal Signal Circuit Failed High
91	4	Accelerator Pedal Circuit Failed Low
91	7	Pwm Accelerator Pedal Idle Not Recognized
91	8	Pwm Accelerator Pedal Signal 1 Frequency Out Of Range
91	13	J1939 EEC2 Message is missing
91	14	Pwm Accelerator Pedal Not Learned
91	31	Pwm Accelerator Pedal Learned Range to Large
98	0	Oil Level High
98	1	Oil Level Very Low
98	18	Oil Level Low
100	1	Oil Pressure Very Low
100	18	Oil Pressure Low
107	0	Air Filter Restriction High
110	0	Coolant Temperature Very High
110	16	Coolant Temperature High

EPA10 CPC Fault Codes

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA10
111	1	Coolant Level Very Low
111	3	Coolant Level Circuit Failed High
111	4	Coolant Level Circuit Failed Low
111	18	Coolant Level Low
120	13	J1939 Retarder Fluid Message is missing
158	2	KI15 ignition switch status of CPC2 and MCM do not match
168	0	Battery Voltage High
168	1	Battery Voltage Very Low
168	7	Opt Idle Detected Charging System or Battery Failure
168	14	ECU powerdown not completed (Main Battery Terminal Possibly Floating)
168	18	Battery Voltage Low
171	2	Ambient Temperature Sensor Data Erratic
171	9	J1587 Ambient Air Temp Sensor Data Message Stopped Arriving
171	14	J1587 Ambient Air Temp Sensor Data Not Received This Ign Cycle
191	9	J1939 ETC1 Message is missing
191	13	J1939 Transmission Output Shaft Speed Signal is missing
191	19	J1939 Transmission Output Shaft Speed Signal is erratic
247	0	MCM Engine Hours Data higher than expected
247	1	MCM Engine Hours Data lower than expected
247	9	MCM Engine Hours Data not received or stopped arriving
247	10	MCM Engine Hours Data increasing at an implausible rate
247	14	ACM Reported Ash Mileage is Lower then the CPC Stored Value
523	13	J1939 Transmission Current Gear Signal is missing
523	19	J1939 Transmission Current Gear Signal is erratic
524	9	J1939 ETC2 Message is missing
527	9	J1939 CCVS Message is missing
556	9	J1939 RC Message from Transmission Retarder is missing
558	2	Idle Validation Switch Inputs Reversed

EPA10 CPC Fault Codes

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA10
558	3	Idle Validation Switch 1 Circuit Failed High
558	4	Idle Validation Switch 1 Circuit Failed Low
558	5	Idle Validation Switch 2 Circuit Failed Low
558	6	Idle Validation Switch 2 Circuit Failed High
596	13	J1939 Cruise Control Enable Switch Signal from Sources #1, #2, or #3 is missing
596	19	J1939 Cruise Control Enable Switch Signal from Sources #1, #2, or #3 is erratic
597	2	Service Brake Status Not Plausible
597	13	J1939 Service Brake Switch Signal from Sources #1, #2, or #3 is missing
597	19	J1939 Service Brake Switch Signal from Sources #1, #2, or #3 is erratic
599	4	Cruise Control SET and RESUME Circuits Failed Low
600	13	J1939 Cruise Control Coast Switch Signal from Sources #1, #2, or #3 is missing
600	19	J1939 Cruise Control Coast Switch Signal from Sources #1, #2, or #3 is erratic
602	13	J1939 Cruise Control Accelerate Switch Signal from Sources #1, #2, or #3 is missing
602	19	J1939 Cruise Control Accelerate Switch Signal from Sources #1, #2, or #3 is erratic
608	14	J1708 Data Link Failure
609	12	CPC2 Hardware Failure
625	2	Incorrect MCM System ID Received
625	4	ECAN Link Circuit Failure
625	8	MCM PT-CAN DM1 Message Not Received or has Stopped Arriving
625	9	ACM PT-CAN DM1 Message Not Received or has Stopped Arriving
625	14	MCM System ID Not Received or Stopped Arriving
628	2	EEPROM Checksum Failure
628	12	EEPROM Checksum Failure for the SCR Block

EPA10 CPC Fault Codes

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA10
628	14	XFLASH Static Fault Code Memory Page Read Write Failure
628	17	1000ms ECU OS Task Timed out Prior to Completion
629	2	CPC Hardware/Software Mismatch
629	12	DDEC Data Xflash Write Error. Replace CPC2.
630	13	SCR Number Out of Range
639	9	J1939 PROP11 message is missing
639	13	HDMS Fan is configured and the J1939 message was not received or has stopped arriving.
639	14	J1939 Data Link Failure
701	3	Digital Output 4 09 Circuit Failed High
701	4	Digital Output 4 09 Circuit Failed Low
702	3	Digital Output 3 17 Circuit Failed High
702	4	Digital Output 3 17 Circuit Failed Low
703	3	Digital Output 3 09 Circuit Failed High
703	4	Digital Output 3 09 Circuit Failed Low
704	3	Digital Output 4 07 Circuit Failed High
704	4	Digital Output 4 07 Circuit Failed Low
705	3	Digital Output 1 13 Circuit Failed High
705	4	Digital Output 1 13 Circuit Failed Low
706	3	Digital Output 3 10 Circuit Failed High
706	4	Digital Output 3 10 Circuit Failed Low
707	3	Digital Output 2 10 Circuit Failed High (CEL / AWL Lamp)
707	4	Digital Output 2 10 Circuit Failed Low (CEL / AWL Lamp)
708	3	Digital Output 3 12 Circuit Failed High
708	4	Digital Output 3 12 Circuit Failed Low
709	3	Digital Output 3 16 Circuit Failed High
709	4	Digital Output 3 16 Circuit Failed Low
710	3	Digital Output 4 06 Circuit Failed High
710	4	Digital Output 4 06 Circuit Failed Low
711	3	Digital Output 1 05 Circuit Failed High
711	4	Digital Output 1 05 Circuit Failed Low
712	3	Digital Output 1 04 Circuit Failed High
712	4	Digital Output 1 04 Circuit Failed Low
713	3	Digital Output 3 07 Circuit Failed High
713	4	Digital Output 3 07 Circuit Failed Low
713	5	Digital Output 3 07 Open Circuit
713	7	TOP2 Shift Failure
714	3	Digital Output 3 08 Circuit Failed High
714	4	Digital Output 3 08 Circuit Failed Low
714	5	Digital Output 3 08 Open Circuit

EPA10 CPC Fault Codes

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA10
715	3	Digital Output 4 10 Circuit Failed High
904	9	J1939 EBC2 Message from ABS is missing
904	13	J1939 Front Axle Speed Signal is missing
904	19	J1939 Front Axle Speed Signal is erratic
972	2	Throttle inhibit switch signal not plausible due to excess vehicle speed
973	2	Evobus 5stage retarder level position not plausible
973	9	J1939 EBC1 Message is missing
973	13	J1939 Engine Retarder Selection Signal Missing
973	19	J1939 Engine Retarder Selection Signal Erratic
974	2	Remote Accelerator Pedal Supply Voltage Out of Range
974	3	Remote Accelerator Pedal Circuit Failed High
974	4	Remote Accelerator Pedal Circuit Failed Low
979	9	J1939 PTO Message Not Received This Ignition Cycle
986	9	J1939 CM1 Message is missing
986	13	J1939 CM1 SPN986 Signal from source #1 or #2 is missing
986	19	J1939 CM1 SPN986 Signal from source #1 or #2 is erratic
1267	3	Digital Output 4 10 Circuit Failed Open
1267	4	Digital Output 4 10 Circuit Failed Low
1590	9	Adaptive Cruise Control Message Not Received
1590	19	Adaptive Cruise Control Device Reporting Error
1624	9	J1939 TCO1 Message is missing
1624	13	J1939 Tachograph Vehicle Speed Signal is missing
1624	19	J1939 Tachograph Vehicle Speed Signal is erratic
1663	7	Optimized Idle Safety Loop Faulted
1716	9	J1939 ERC1 Message is missing
1716	13	Evobus 5stage retarder level calibration not plausible
1814	9	VDC1 Message was not received or has stopped arriving.

EPA10 CPC Fault Codes

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA10
1845	9	J1939 TCFG2 Message is missing
2003	9	J1939 Message is missing from source address 3 (dec)
2017	9	J1939 Message is missing from source address 17 (dec)
2023	9	J1939 Message is missing from source address 23 (dec)
2025	9	J1939 Message is missing from source address 25 (dec)
2033	9	J1939 Message is missing from source address 33 (dec)
2042	9	J1939 Message is missing from source address 42 (dec)
2049	9	J1939 Message is missing from source address 49 (dec)
2623	8	Pwm Accelerator Pedal Signal 2 Frequency Out Of Range
2623	14	Pwm Accelerator Pedal GAS1 and GAS2 Signal Missing
2900	9	J1939 ETC7 Message is missing
3510	3	Accelerator Pedal Supply Voltage Circuit Failed High
3510	4	Accelerator Pedal Supply Voltage Circuit Failed Low
3510	7	Accelerator Pedal Supply Voltage Circuit Failed High
3510	8	Pwm Accelerator Pedal Supply Voltage Missing
3606	9	J1939 ESS Message is missing
3695	9	DPF Regen Inhibit MUX Switch Message Stopped Arriving
3695	13	DPF Regen Inhibit MUX Switch Message Contains SNV Indicator
3695	14	DPF Regen Inhibit MUX Switch Message Not Received this Ign Cycle
3695	19	DPF Regen Inhibit MUX Switch Message Contains Data Error Indicator
3696	9	DPF Regen Force MUX Switch Message Stopped Arriving
3696	13	DPF Regen Force MUX Switch Message Contains SNV Indicator
3696	14	DPF Regen Force MUX Switch Message Not Received this Ign Cycle
3696	19	DPF Regen Force MUX Switch Message Contains Data Error Indicator

EPA10 CPC Fault Codes

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA10
4041	0	20ms ECU OS Task Locked in an Endless Loop
4041	9	20ms ECU OS Task Timed out Prior to Completion
4041	16	1000ms ECU OS Task Locked in an Endless Loop
524287	1	Evobus cruise control lever position not plausible
524287	9	Predictive Cruise Control Message Not Received
524287	19	Predictive Cruise Control Device Reporting Error

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA07
70	2	Park Brake Status Not Plausible (Vehicle Moving)
70	13	J1939 Park Brake Switch Signal from Source #1 is missing
70	13	J1939 Park Brake Switch Signal from Source #2 is missing
70	13	J1939 Park Brake Switch Signal from Source #3 is missing
70	19	J1939 Park Brake Switch Signal from Source #1 is erratic
70	19	J1939 Park Brake Switch Signal from Source #2 is erratic
70	19	J1939 Park Brake Switch Signal from Source #3 is erratic
84	0	Vehicle Speed Above Programmable Threshold1 While Driving
84	2	VSS Anti Tamper Detection via Virtual Gear Ratio
84	3	Vehicle Speed Sensor Circuit Failed High
84	4	Vehicle Speed Sensor Circuit Failed Low
84	6	VSS Anti-Tamper Detection via ABS Vehicle Speed Comparison
84	8	VSS Anti Tamper Detection via Fixed Frequency Device
84	11	Vehicle Speed Above Programmable Threshold2 While Driving
84	13	J1939 Wheel-Based Vehicle Speed Signal from Source#1 is missing
84	13	J1939 Wheel-Based Vehicle Speed Signal from Source#2 is missing
84	13	J1939 Wheel-Based Vehicle Speed Signal from Source#3 is missing
84	19	J1939 Wheel-Based Vehicle Speed Signal from Source#1 is erratic
84	19	J1939 Wheel-Based Vehicle Speed Signal from Source#2 is erratic
84	19	J1939 Wheel-Based Vehicle Speed Signal from Source#3 is erratic
84	20	Vehicle Speed Sensor Drifted High Error (VSS signal not plausible)
84	21	Vehicle Speed Failure
91	3	Accelerator Pedal Circuit Failed High
91	3	Accelerator Pedal Signal Circuit Failed High

EPA07 CPC Fault Codes

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA07
91	4	Accelerator Pedal Circuit Failed Low
91	7	2-Channel Accelerator Pedal Idle Not Recognized
91	8	2-Channel Accelerator Pedal Signal 1 Missing
91	9	J1939 Retarder Fluid Message is missing
91	9	J1939 EEC2 Message is missing
91	13	Accelerator Pedal Learn Error
91	14	2-Channel Accelerator Pedal Not Learned
91	31	2-Channel Accelerator Pedal Learned Range to Large
98	0	Oil Level High
98	1	Oil Level Very Low
98	18	Oil Level Low
100	1	Oil Pressure Very Low
100	18	Oil Pressure Low
107	0	Air Filter Restriction High
110	0	Coolant Temperature Very High
110	16	Coolant Temperature High
111	1	Coolant Level Very Low
111	3	Coolant Level Circuit Failed High
111	4	Coolant Level Circuit Failed Low
111	18	Coolant Level Low
158	2	KI15 ignition switch status of CPC2 and MCM do not match
168	0	Battery plausibility error or Cascadia main battery switch off while key on
168	0	Battery Voltage High
168	14	Opt Idle Detected Charging System or Battery Failure
168	14	ECU powerdown not completed (Main Battery Terminal Possibly Floating)
168	18	Battery Voltage Low
171	2	Ambient Temperature Sensor Data Erratic
171	9	J1587 Ambient Air Temp Sensor Data Message Stopped Arriving
171	14	J1587 Ambient Air Temp Sensor Data Not Received This Ign Cycle
191	9	J1939 ETC1 Message is missing
191	13	J1939 Transmission Output Shaft Speed Signal is missing
191	19	J1939 Transmission Output Shaft Speed Signal is erratic

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA07
247	0	MCM Engine Hours Data higher than expected
247	1	MCM Engine Hours Data lower than expected
247	9	MCM Engine Hours Data not received or stopped arriving
247	10	MCM Engine Hours Data increasing at an implausible rate
247	14	MCM Reported Ash Mileage is Lower then the CPC Stored Value
523	13	J1939 Transmission Current Gear Signal is missing
523	19	J1939 Transmission Current Gear Signal is erratic
524	9	J1939 ETC2 Message is missing
527	9	J1939 CCVS Message from Source #1 is missing
527	9	J1939 CCVS Message from Source #2 is missing
527	9	J1939 CCVS Message from Source #3 is missing
558	2	Idle Validation Switch Inputs Reversed
558	3	Idle Validation Switch 1 Circuit Failed High
558	4	Idle Validation Switch 1 Circuit Failed Low
558	5	Idle Validation Switch 2 Circuit Failed Low
558	6	Idle Validation Switch 2 Circuit Failed High
596	13	J1939 Cruise Control Enable Switch Signal from Source #1 is missing
596	13	J1939 Cruise Control Enable Switch Signal from Source #2 is missing
596	13	J1939 Cruise Control Enable Switch Signal from Source #3 is missing
596	19	J1939 Cruise Control Enable Switch Signal from Source #1 is erratic
596	19	J1939 Cruise Control Enable Switch Signal from Source #2 is erratic
596	19	J1939 Cruise Control Enable Switch Signal from Source #3 is erratic
597	2	Service Brake Status Not Plausible
597	13	J1939 Service Brake Switch Signal from Source #1 is missing

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA07
597	13	J1939 Service Brake Switch Signal from Source #2 is missing
597	13	J1939 Service Brake Switch Signal from Source #3 is missing
597	19	J1939 Service Brake Switch Signal from Source #1 is erratic
597	19	J1939 Service Brake Switch Signal from Source #2 is erratic
597	19	J1939 Service Brake Switch Signal from Source #3 is erratic
599	4	Cruise Control SET and RESUME Circuits Failed Low
600	13	J1939 Cruise Control Coast Switch Signal from Source #1 is missing
600	13	J1939 Cruise Control Coast Switch Signal from Source #2 is missing
600	13	J1939 Cruise Control Coast Switch Signal from Source #3 is missing
600	19	J1939 Cruise Control Coast Switch Signal from Source #1 is erratic
600	19	J1939 Cruise Control Coast Switch Signal from Source #2 is erratic
600	19	J1939 Cruise Control Coast Switch Signal from Source #3 is erratic
602	13	J1939 Cruise Control Accelerate Switch Signal from Source #1 is missing
602	13	J1939 Cruise Control Accelerate Switch Signal from Source #2 is missing
602	13	J1939 Cruise Control Accelerate Switch Signal from Source #3 is missing
602	19	J1939 Cruise Control Accelerate Switch Signal from Source #1 is erratic
602	19	J1939 Cruise Control Accelerate Switch Signal from Source #2 is erratic
602	19	J1939 Cruise Control Accelerate Switch Signal from Source #3 is erratic
608	14	J1708 Data Link Failure
609	12	CPC2 Hardware Failure
625	2	ECAN ID_1629 Diagnostic Message Reporting Data Not Available
625	4	ECAN Link Circuit Failure
625	9	ECAN ID_1629 Diagnostic Message No Longer Being Received

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA07
625	9	Incorrect MCM System ID Received
625	9	MCM System ID Not Received or Stopped Arriving
625	10	ECAN ID_1629 Reporting Inconsistent Number of Frames
625	13	ECAN ID_1629 Diagnostic Message Not Received This Ignition Cycle
625	14	ECAN ID_1629 Diagnostic Message Reporting an Unknown MUID
628	13	20ms ECU OS Task Locked in an Endless Loop
628	13	20ms ECU OS Task Timed out Prior to Completion
628	13	1000ms ECU OS Task Locked in an Endless Loop
628	13	1000ms ECU OS Task Timed out Prior to Completion
628	14	XFLASH Static Fault Code Memory Page Read Write Failure
629	2	CPC Hardware/Software Mismatch
629	12	DDEC Data Xflash Write Error. Replace CPC2
630	2	EEPROM Checksum Failure
630	2	EEPROM Checksum Failure for the SCR Block
630	13	SCR Number Out of Range
630	14	MCM Fault Codes Unavailable via J1939 and J1587
630	14	MCM Fault Code Table Inconsistant - Upgrade MCM Software
630	14	Insufficient Static Fault Code Storrage Memory - Upgrade CPC Software
630	14	MCM Fault Code Table Inconsistant - Upgrade MCM Software
639	9	J1939 PROP11 message is missing
639	14	J1939 Data Link Failure
639	14	HDMS Fan is configured and the J1939 message was not received or has stopped arriving.
701	3	Digital Output 4 09 Circuit Failed High
701	4	Digital Output 4 09 Circuit Failed Low
702	3	Digital Output 3 17 Circuit Failed High
702	4	Digital Output 3 17 Circuit Failed Low
703	3	Digital Output 3 09 Circuit Failed High
703	4	Digital Output 3 09 Circuit Failed Low
704	3	Digital Output 4 07 Circuit Failed High

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA07
704	4	Digital Output 4 07 Circuit Failed Low
705	3	Digital Output 1 13 Circuit Failed High
705	4	Digital Output 1 13 Circuit Failed Low
706	3	Digital Output 3 10 Circuit Failed High
706	4	Digital Output 3 10 Circuit Failed Low
707	3	Digital Output 2 10 Circuit Failed High (CEL / AWL Lamp)
707	4	Digital Output 2 10 Circuit Failed Low (CEL / AWL Lamp)
708	3	Digital Output 3 12 Circuit Failed High
708	4	Digital Output 3 12 Circuit Failed Low
709	3	Digital Output 3 16 Circuit Failed High
709	4	Digital Output 3 16 Circuit Failed Low
710	3	Digital Output 4 06 Circuit Failed High
710	4	Digital Output 4 06 Circuit Failed Low
711	3	Digital Output 1 05 Circuit Failed High
711	4	Digital Output 1 05 Circuit Failed Low
712	3	Digital Output 1 04 Circuit Failed High
712	4	Digital Output 1 04 Circuit Failed Low
713	3	Digital Output 3 07 Circuit Failed High
713	4	Digital Output 3 07 Circuit Failed Low
713	5	Digital Output 3 07 Open Circuit
713	7	TOP2 Shift Failure
714	3	Digital Output 3 08 Circuit Failed High
714	4	Digital Output 3 08 Circuit Failed Low
714	5	Digital Output 3 08 Open Circuit
715	3	Digital Output 4 10 Circuit Failed High
904	9	J1939 EBC2 Message from ABS is missing
904	13	J1939 Front Axle Speed Signal is missing
904	19	J1939 Front Axle Speed Signal is erratic
972	2	Throttle inhibit switch signal not plausible due to excess vehicle speed
973	2	Evobus 5stage retarder lever position not plausible
973	9	J1939 EBC1 Message is missing
973	13	J1939 Engine Retarder Selection Signal Missing
973	19	J1939 Engine Retarder Selection Signal Erratic
974	2	Remote Accelerator Pedal Supply Voltage Out of Range
974	3	Remote Accelerator Pedal Circuit Failed High

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA07
974	4	Remote Accelerator Pedal Circuit Failed Low
979	9	J1939 PTO Message Not Received This Ignition Cycle
986	9	J1939 CM1 from FAN request SA1 (see 001/045) is missing
986	9	J1939 CM1 from FAN request SA2 (see 001/047) is missing
1267	3	Digital Output 4 10 Circuit Failed Open
1267	4	Digital Output 4 10 Circuit Failed Low
1590	9	Adaptive Cruise Control Message Not Received
1590	19	Adaptive Cruise Control Device Reporting Error
1624	9	J1939 TCO1 Message is missing
1624	13	J1939 Tachograph Vehicle Speed Signal is missing
1624	19	J1939 Tachograph Vehicle Speed Signal is erratic
1663	7	Optimized Idle Safety Loop Faulted
1716	9	J1939 ERC1 Message is missing
1716	13	Evobus 5stage retarder lever calibration not plausible
1814	9	VDC1 Message was not received or has stopped arriving.
1845	9	J1939 TCFG2 Message is missing
2623	8	2-Channel Accelerator Pedal Signal 2 Missing
2623	14	2-Channel Accelerator Pedal Signals 1 And 2 Missing
2900	9	J1939 ETC7 Message is missing
3510	3	Accelerator Pedal Supply Voltage Circuit Failed High
3510	3	Special Function Pin 7 Supply Voltage Circuit Failed High
3510	4	Accelerator Pedal Supply Voltage Circuit Failed Low
3510	4	2-Channel Accelerator Pedal Supply Voltage Missing
3606	9	J1939 ESS Message is missing
3695	9	DPF Regen Inhibit MUX Switch Message Stopped Arriving
3695	9	J1939 CM1 Message for DPF switches for SA (see param 001/046) is missing
3695	13	DPF Regen Inhibit MUX Switch Message Contains SNV Indicator

EPA07 CPC Fault Codes

SPN	FMI	CPC FAULT CODE DESCRIPTION EPA07
3695	14	DPF Regen Inhibit MUX Switch Message Not Received this Ign Cycle
3695	19	DPF Regen Inhibit MUX Switch Message Contains Data Error Indicator
3696	9	DPF Regen Force MUX Switch Message Stopped Arriving
3696	13	DPF Regen Force MUX Switch Message Contains SNV Indicator
3696	14	DPF Regen Force MUX Switch Message Not Received this Ign Cycle
3696	19	DPF Regen Force MUX Switch Message Contains Data Error Indicator
524287	9	Predictive Cruise Control Message Not Received
524287	19	Predictive Cruise Control Device Reporting Error

EPA07 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA07
51	2	Intake Throttle Position Deviation Error
51	3	Intake Air Throttle Circuit Failed High
51	4	Intake Air Throttle Circuit Failed Low
94	3	Fuel Compensation Pressure Sensor Circuit Failed High
94	4	Fuel Compensation Pressure Sensor Circuit Failed Low
94	15	Fuel Filter Service Warning
94	16	Fuel Filter Replacement Required
97	3	Water in Fuel Circuit Failed High
97	4	Water in Fuel Circuit Failed Low
97	15	Water in Fuel
97	16	Water in Fuel Ignored - Derate
100	1	Engine Oil Pressure Low
100	2	Oil Pressure Plausibility - Engine Running
100	2	Oil Pressure Plausibility - Stop
100	3	Engine Oil Pressure Circuit Failed High
100	4	Engine Oil Pressure Circuit Failed Low
103	0	Turbo Charger Speed Above Threshold (Low Box)
103	1	Turbo Charger Speed Below Threshold (High Box)
103	2	Turbocharger Speed Not Plausible
108	3	Barometric Pressure Circuit Failed High
108	4	Barometric Pressure Circuit Failed Low
108	20	Ambient Pressure Plausibility Fault (High Box)
110	0	Coolant Temperature High
110	2	Coolant Outlet Temperature Not Plausible
110	3	Engine Coolant Outlet Temperature Circuit Failed High
110	4	Engine Coolant Outlet Temperature Circuit Failed Low
110	14	Coolant Temperature / Engine Oil Temperature Plausibility Fault
132	1	Air Mass Flow Too Low
157	1	Fuel Rail Pressure Too High
157	2	Fuel Rail Pressure Sensor Signal Erratic
158	2	Ignition Switch Not Plausible
164	0	Quantity Control Valve High Side Driver Error.

EPA07 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA07
164	1	Quantity Control Valve Low Side Driver Error.
164	2	Rail Pressure Sensor Drift
164	3	Rail Pressure Sensor Circuit Failed High
164	4	Rail Pressure Sensor Circuit Failed Low
164	5	Rail Pressure Sensor Circuit Failed Open
164	7	High Pressure Pump, Leakage or TDC Position Wrong
168	0	Battery Voltage High
168	1	Battery Voltage Low
171	3	Ambient Temperature Circuit Failed High
171	4	Ambient Temperature Circuit Failed Low
174	0	Fuel Temperature Too High
174	2	Fuel Temperature Sensor, General Temp. Plausibility
174	3	Fuel Temperature Circuit Failed High
174	4	Fuel Temperature Circuit Failed Low
175	0	Oil Temperature High Warning
175	2	Engine Oil Temperature Sensor, General Temp. Plausibility
175	3	Engine Oil Temperature Circuit Failed High
175	4	Engine Oil Temperature Circuit Failed Low
175	14	Engine Oil Temperature Sensor Plausibility Fault
175	15	Oil Temperature High Pre-Warning
190	0	Engine Speed High
411	0	EGR differential pressure too high (low box)
411	1	EGR differential pressure too low (high box)
411	3	EGR Delta Pressure Sensor Circuit High
411	4	EGR Delta Pressure Sensor Circuit Low
412	0	EGR Temperature Very High
412	2	EGR Temperature Sensor, General Temp. Plausibility Error
412	3	EGR Temperature Sensor Circuit Failed High

EPA07 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA07
412	4	EGR Temperature Sensor Circuit Failed Low
412	16	EGR Temperature Sensor / Temperature Too High
412	20	EGR Temperature Drift (High Box)
412	21	EGR Temperature Drift (Low Box)
615	3	APT Air Seal Pressure Regulator Valve Circuit Failed High
615	4	APT Air Seal Pressure Regulator Valve Circuit Failed Low
615	5	APT Air Seal Pressure Regulator Valve Circuit Failed Open
615	9	J1939 DM1 message from the transmission is missing.
615	14	Rail Pressure Leakage
625	2	Invalid Data on Engine CAN Link
625	9	No Data Received from Engine CAN Link
628	14	CPC Software Error
630	14	Communication Interruption between the Common Powertrain Controller (CPC) and Motor Control Module (MCM).
636	1	Crankshaft Position Sensor Signal Voltage Too Low
636	2	No Match of Camshaft and Crankshaft Signals
636	3	Crankshaft Position Sensor Open Circuit
636	8	Crankshaft Position Sensor Time Out
636	10	Crankshaft Position Sensor Signal Erratic
636	14	Crankshaft Position Sensor Pins Swapped
636	31	Crankshaft Positon Sensor Error Detected
641	3	Turbo Control Circuit Failed High
641	4	Turbo Control Circuit Failed Low
641	5	Turbo Control Circuit Open
647	3	Fan Stage 1 Circuit Failed High
647	4	Fan Stage 1 Circuit Failed Low
647	5	Fan Stage 1 Circuit Failed Open
651	14	Injector Cylinder #1 Needle Control Valve Abnormal Operation
652	14	Injector Cylinder #2 Needle Control Valve Abnormal Operation

EPA07 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA07
653	14	Injector Cylinder #3 Needle Control Valve Abnormal Operation
654	14	Injector Cylinder #4 Needle Control Valve Abnormal Operation
655	14	Injector Cylinder #5 Needle Control Valve Abnormal Operation
656	14	Injector Cylinder #6 Needle Control Valve Abnormal Operation
677	2	Starter Switch Inconsistent
677	3	Engine Starter Relay Shorted to High Source
677	4	Engine Starter Relay Circuit Failed Low
677	5	Engine Starter Relay Open Circuit
677	7	Engine Starter Relay Jammed
677	14	Starter Electronic Fault / MCM Internal Failure
677	31	Starter Jammed (Tooth to Tooth Jam)
679	7	Pressure Limiting Valve (PLV) staying open
698	5	Gridheater Circuit Failed Open
723	3	Camshaft Position Sensor Open Circuit
723	4	Camshaft Position Sensor Short to Ground
723	8	Camshaft Position Sensor Time Out
723	10	Camshaft Position Sensor Signal Erratic
723	11	Camshaft Position Sensor Failure
723	14	Camshaft Position Sensor Pins Swapped
723	31	No match of camshaft and crankshaft signals.
729	0	Grid Heater Permanently On
729	4	Grid Heater Circuit Failed Low
729	7	Grid Heater Defect
1037	0	DPF HC absorption very high
1037	15	DPF HC Absorption Warning
1037	16	DPF HC absorption high
1071	3	Fan Stage 2 Circuit Failed High
1071	4	Fan Stage 2 Circuit Failed Low
1071	5	Fan Stage 2 Circuit Failed Open
1072	3	Jake Brake Stage 1 Circuit Failed High
1072	4	Jake Brake Stage 1 Circuit Failed Low
1072	5	Jake Brake Stage 1 Circuit Failed Open
1073	3	Jake Brake Stage 2 Circuit Failed High
1073	4	Jake Brake Stage 2 Circuit Failed Low

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA07
1073	5	Jake Brake Stage 2 Circuit Failed Open
1077	5	quantity control valve current too low.
1077	7	Fuel Rail Pressure Too High
1077	14	Rail Pressure Leakage in High Pressure System Too High
1077	15	internal or external leakage of the high pressure fuel system
1077	31	rail pressure deviation
1172	2	Coolant Temp/Compressor Inlet Temp Plausibility Error
1172	3	Turbocharger Compressor Inlet Temperature Circuit Failed High
1172	4	Turbocharger Compressor Inlet Temperature Circuit Failed Low
1323	31	Cylinder 1 Misfire detected
1324	31	Cylinder 2 Misfire detected
1325	31	Cylinder 3 Misfire detected
1326	31	Cylinder 4 Misfire detected
1327	31	Cylinder 5 Misfire detected
1328	31	Cylinder 6 Misfire Detected
1636	3	Intake Manifold Temperature Circuit Failed High
1636	4	Intake Manifold Temperature Circuit Failed Low
1636	20	Intake Manifold Temperature Drift (Low Box)
2630	2	air temperature plausibility fault out of range (high box).
2630	3	intake air temperature circuit failed high.
2630	4	intake air temperature circuit failed low.
2630	20	Charge Air Outlet Temperature Drift (Low box)
2630	21	Charge Air Outlet Temperature Drift (High box)
2631	1	Low Air Flow
2631	3	intake manifold pressure sensor circuit failed high.
2631	4	intake manifold pressure sensor circuit failed low.
2659	1	EGR Flow Target Error Diagnostic - Low Flow
2791	3	EGR Valve Circuit Failed High
2791	4	EGR Valve Circuit Failed Low
2791	5	EGR Valve Circuit Failed Open

EPA07 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA07
2791	7	EGR Valve Actuator, Failsafe Mode, Motor On
2791	8	EGR Valve Actuator, Failsafe Mode, Motor Off
2791	9	Exhaust Gas Recirculation (EGR) actuator slow response.
2791	11	Exhaust Gas Recirculation (EGR) actuator (restricted operability).
2791	14	EGR Valve Actuator, No Failsafe Mode, Motor Off
2791	15	EGR Valve Actuator, high load operation in high ambient temperatures
2791	16	EGR Valve Actuator, Temperature Fault
2791	31	Exhaust Gas Recirculation (EGR) valve actuator (unknown error code).
3058	13	EGR System Parametrization Failure
3064	13	DPF System Parametrization Failure
3242	2	DOC Inlet Temperature Sensor - Plausibility Error
3242	3	DOC Inlet Temperature Circuit Failed High
3242	4	DOC Inlet Temperature Circuit Failed Low
3242	10	DOC Inlet Temperature Sensor Stuck
3246	0	DPF Outlet Temperature Very High
3246	2	DPF Outlet Sensor, General Temp. Plausibility
3246	3	DPF Oulet Temperature Circuit Failed High
3246	4	DPF Oulet Temperature Circuit Failed Low
3246	8	DPF Outlet Temperature Sensor Spike
3246	10	DPFOutlet Temperature - Signal Stuck
3246	14	Abnormal DPF Temperature Rise
3246	16	DPF Outlet Temperature High
3250	0	DOC Outlet Temperature High
3250	2	DOC Outlet Temperature Sensor - Plausibility Error
3250	3	DOC Outlet Temperature Circuit Failed High
3250	4	DOC Outlet Temperature Circuit Failed Low
3250	8	DOC Outlet Temperature Sensor Spike
3250	10	DOC Outlet Temperature - Signal Stuck

EPA07 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA07
3250	14	Abnormal DOC Temperature Rise
3250	16	DOC Outlet Temperature Too High
3250	31	Abnormal DOC Temperature Rise
3251	0	DPF Pressure - Out of Range Very High
3251	1	DPF Pressure - Out of Range Low
3251	16	DPF Pressure - Out of Range High
3464	14	Intake Air Throttle Control Electrical Fault
3471	1	EDV Failed Self Test
3471	3	HC Doser Circuit Failed High
3471	4	HC Doser Circuit Failed Low
3471	5	HC Doser Circuit Failed Open
3480	1	Hydrocarbon (HC) doser fuel supply pressure abnormal.
3480	2	Hydrocarbon (HC) doser fuel line pressure low.
3480	3	Fuel Compensation Pressure (FCP) sensor circuit failed high.
3480	4	Fuel Compensation Pressure (FCP) sensor circuit failed low.
3480	14	Doser FLP Sensors Failed Self Test
3480	16	Hydrocarbon (HC) doser Fuel Line Pressure (FLP) sensor - Failed self-test.
3480	31	Fuel Cut Off Valve Pressure Not Plausible
3482	3	Fuel Cut Off Valve Circuit Failed High
3482	4	Fuel Cut Off Valve Circuit Failed Low
3482	5	Fuel Cut Off Valve Circuit Failed Open
3482	7	FCV Failed Self Test
3509	3	5V Sensor Supply Bank 1 Circuit Failed High
3509	4	5V Sensor Supply Bank 1 Circuit Failed Low
3510	3	5V Sensor Supply Bank 2 Circuit Failed High
3510	4	5V Sensor Supply Bank 2 Circuit Failed Low
3511	3	3V Sensor Supply Bank 1 Circuit Failed High
3511	4	3V Sensor Supply Bank 1 Circuit Failed Low
3512	3	3V Sensor Supply Bank 2 Circuit Failed High

EPA07 MCM Fault Codes

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA07
3512	4	3V Sensor Supply Bank 2 Circuit Failed Low
3556	0	Regen Temperature - Out of Range High
3556	1	Regen Temperature - Out of Range Low
3563	3	Intake Manifold Pressure Circuit Failed High
3563	4	Intake Manifold Pressure Circuit Failed Low
3563	20	Ambient and Inlet Manifold Pressure Difference (Low Box)
3563	21	Ambient and Inlet Manifold Pressure Difference (High Box)
3597	4	Proportional Valve Bank 1 Circuit Failed Low
3598	3	Proportional Valve Bank 2 Circuit Failed High
3598	4	Proportional Valve Bank 2 Circuit Failed Low
3609	2	DPF Inlet Pressure Sensor Drifted High In Range Fault (High Box)
3609	3	DPF Inlet Pressure Circuit Failed High
3609	4	DPF Inlet Pressure Circuit Failed Low
3609	8	DPF Inlet Pressure Sensor Drifted
3609	10	DPF Inlet Pressure Sensor Stuck
3609	20	DPF Inlet Pressure Sensor Drifted High In Range Fault (Low Box)
3609	21	DPF Inlet Pressure Sensor Drifted Low In Range Fault (Low Box)
3610	2	DPF Pressure Sensors - Plausibility Error
3610	3	DPF Outlet Pressure Circuit Failed High
3610	4	DPF Outlet Pressure Circuit Failed Low
3610	10	DPF Outlet Pressure Sensor Stuck
3610	14	DPF Outlet Pressure Sensor Drifted High In Range Fault (High Box)
3610	20	DPF Outlet Pressure Sensor Drifted High In Range Fault (Low Box)
3659	14	Injector Cylinder #1 Spill Control Valve Abnormal Operation
3660	14	Injector Cylinder #2 Spill Control Valve Abnormal Operation
3661	14	Injector Cylinder #3 Spill Control Valve Abnormal Operation

SPN	FMI	MCM FAULT CODE DESCRIPTION EPA07
3662	14	Injector Cylinder #4 Spill Control Valve Abnormal Operation
3663	14	Injector Cylinder #5 Spill Control Valve Abnormal Operation
3664	14	Injector Cylinder #6 Spill Control Valve Abnormal Operation
3711	31	HIR Regen (aborted) – Low Exhaust Temp
3716	31	HIR Regen (aborted) – Low Coolant Temp
3719	0	Soot Level Very High
3719	15	DPF Zone 3 Condition
3719	16	Soot Level High
3719	31	DPF Zone 2 Condition
3720	15	DPF Ash Clean Request
3720	16	DPF Ash Clean Request - Derate
4076	3	Engine Coolant Inlet Temperature Circuit Failed High
4076	4	Engine Coolant Inlet Temperature Circuit Failed Low
4077	0	Doser Fuel Line Pressure High
4077	1	Doser Fuel Line Pressure Abnormal
4077	3	Doser Fuel Line Pressure Sensor Circuit Failed High
4077	4	Doser Fuel Line Pressure Sensor Circuit Failed Low
4077	14	Doser Fuel Line Pressure Failed Self Test
4259	3	Injector Spill Control Valve Cylinder 4,5,6, Shorted to Battery
4259	4	Injector Spill Control Valve Cylinder 4, 5, 6 Shorted to Ground

Amber Warning Lamp (AWL) - Indicates a fault with the engine controls. Vehicle can be driven to end of shift. Call for service.

Red Stop Lamp (RSL) - Indicates a major engine fault that may result in engine damage. Move the vehicle to the nearest safe location and shutdown the engine. Call for service

DPF Regeneration Lamp - Lamp Solid indicates that a parked regeneration is required. Lamp Flashing indicates that a parked regeneration required immediately.

High Exhaust System Temperature Lamp (HEST) - Indicates exhaust temperature is above a preset limit and the unit is operating at low vehicle speed. Vehicle can be driven. When rpm is elevated for a parked regen, the lamp will flash once every ten seconds.

Malfunction Indicator Lamp (MIL) - Indicates a failure of an Emission Control device. Vehicle can be driven to end of the shift. Call for service

Unable to initiate Parked Regen via Regen Request Switch

To perform a Parked Regen, the following conditions must be met. Connect DDDL 7.0 to monitor these inputs:

- VSS must be 0 mph
- Clutch switch must be cycled ON/OFF/ON (manual trans)
- Parking Brake must be cycled ON/OFF/ON
- J1939 Gear Selected must be neutral be cycled ON/OFF/ON
- J1939 Gear Actual must be neutral be cycled ON/OFF/ON
- Must be on idle governor, not PTO Mode
- DPF Zone must not be 0

Regen Request Switch must be held for 5 seconds