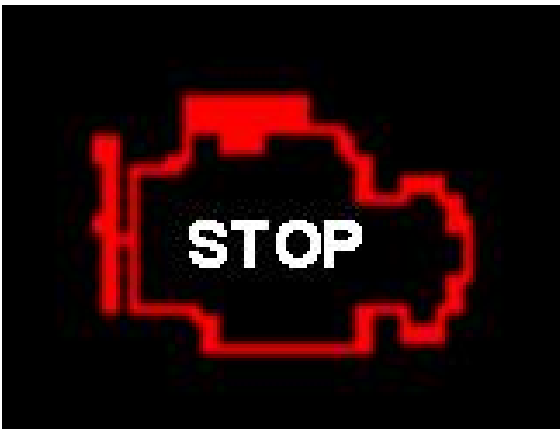


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FAULT CODES



SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
27	2	Amber	Solid	Engine Exhaust Gas Recirculation 1 Valve Position Data Erratic, Intermittent Or Incorrect	1228	EGR Valve Position - Data erratic, intermittent or incorrect	X	X	X	X
27	4	Amber	Solid	Engine Exhaust Gas Recirculation 1 Valve Position Voltage Below Normal, Or Shorted To Low Source	2272	EGR Valve Position Circuit - Voltage below normal, or shorted to low source	X	X	X	X
51	2	Amber	Solid	Engine Throttle Valve 1 Position Data Erratic, Intermittent Or Incorrect	3542	Engine Intake Throttle Actuator Position Sensor - Data erratic, intermittent or incorrect			X	X
51	3	Amber	Solid	Engine Throttle Valve 1 Position Voltage Above Normal, Or Shorted To High Source	3539	Engine Intake Throttle Actuator Position Sensor Circuit - Voltage above normal, or shorted to high source			X	X
51	4	Amber	Solid	Engine Throttle Valve 1 Position Voltage Below Normal, Or Shorted To Low Source	3541	Engine Intake Throttle Actuator Position Sensor Circuit - Voltage below normal, or shorted to low source			X	X
81	16	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Intake Pressure (use SPN 3609) Data Valid But Above Normal Operating Range - Moderately Severe Level	2754	Engine Diesel Particulate Filter Intake Pressure - Data Valid But Above Normal Operating Range - Moderately Severe Level				X
84	2	None	Solid	Wheel-Based Vehicle Speed Data Erratic, Intermittent Or Incorrect	241	Wheel-Based Vehicle Speed - Data erratic, intermittent or incorrect	X	X	X	X
84	9	Amber	Solid	Wheel-Based Vehicle Speed Abnormal Update Rate	3526	Wheel-Based Vehicle Speed - Abnormal update rate	X	X	X	X
84	10	Amber	None	Wheel-Based Vehicle Speed Abnormal Rate Of Change	242	Wheel-Based Vehicle Speed Sensor Circuit tampering has been detected - Abnormal rate of change	X	X	X	X
84	19	Amber	Solid	Wheel-Based Vehicle Speed Received Network Data In Error	3525	Wheel-Based Vehicle Speed - Received Network Data In Error	X	X	X	X
91	2	Red	Solid	Accelerator Pedal Position 1 Data Erratic, Intermittent Or Incorrect	1242	Accelerator Pedal or Lever Position Sensor 1 - Data erratic, intermittent or incorrect	X	X	X	X
91	3	Red	Solid	Accelerator Pedal Position 1 Voltage Above Normal, Or Shorted To High Source	131	Accelerator Pedal or Lever Position Sensor 1 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
91	4	Red	Solid	Accelerator Pedal Position 1 Voltage Below Normal, Or Shorted To Low Source	132	Accelerator Pedal or Lever Position Sensor 1 Circuit - Voltage below normal, or shorted to low source	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
91	8	Red	Solid	Accelerator Pedal Position 1 Abnormal Frequency Or Pulse Width Or Period	4289	Accelerator Pedal or Lever Position Sensor 1 Circuit Frequency - Abnormal frequency or pulse width or period	X	X	X	X
91	9	Red	Solid	Accelerator Pedal Position 1 Abnormal Update Rate	3326	SAE J1939 Multiplexed Accelerator Pedal or Lever Sensor System - Abnormal update rate	X	X	X	X
91	19	Amber	None	Accelerator Pedal Position 1 Received Network Data In Error	287	SAE J1939 Multiplexed Accelerator Pedal or Lever Sensor System - Received Network Data In Error	X	X		
91	19	Red	Solid	Accelerator Pedal Position 1 Received Network Data In Error	1515	SAE J1939 Multiplexed Accelerator Pedal or Lever Sensor System - Received Network Data In Error	X	X	X	X
95	16	Amber	None	Engine Fuel Filter Differential Pressure Data Valid But Above Normal Operating Range - Moderately Severe Level	2372	Fuel Filter Differential Pressure - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
97	3	Amber	None	Water In Fuel Indicator Voltage Above Normal, Or Shorted To High Source	428	Water in Fuel Indicator Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
97	4	Amber	None	Water In Fuel Indicator Voltage Below Normal, Or Shorted To Low Source	429	Water in Fuel Indicator Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
97	15	Maintenance	None	Water In Fuel Indicator Data Valid But Above Normal Operating Range - Least Severe Level	418	Water in Fuel Indicator - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
97	16	Amber	None	Water In Fuel Indicator Data Valid But Above Normal Operating Range - Moderately Severe Level	1852	Water in Fuel Indicator - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X		
100	1	Red	None	Engine Oil Pressure Data Valid But Below Normal Operational Range - Most Severe Level	415	Engine Oil Rifle Pressure - Data valid but below normal operational range - Most Severe Level	X	X	X	X
100	2	None	Solid	Engine Oil Pressure Data Erratic, Intermittent Or Incorrect	435	Engine Oil Rifle Pressure - Data erratic, intermittent or incorrect	X	X	X	
100	3	None	Solid	Engine Oil Pressure Voltage Above Normal, Or Shorted To High Source	135	Engine Oil Rifle Pressure 1 Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	
100	4	None	Solid	Engine Oil Pressure Voltage Below Normal, Or Shorted To Low Source	141	Engine Oil Rifle Pressure 1 Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
100	18	Amber	None	Engine Oil Pressure Data Valid But Below Normal Operating Range - Moderately Severe Level	143	Engine Oil Rifle Pressure - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	
101	0	Red	None	Engine Crankcase Pressure Data Valid But Above Normal Operational Range - Most Severe Level	556	Crankcase Pressure - Data valid but above normal operational range - Most Severe Level	X	X	X	X
101	2	None	Solid	Engine Crankcase Pressure Data Erratic, Intermittent Or Incorrect	1942	Crankcase Pressure - Data erratic, intermittent or incorrect	X	X	X	X
101	3	None	Solid	Engine Crankcase Pressure Voltage Above Normal, Or Shorted To High Source	1843	Crankcase Pressure Circuit - Voltage above normal, or shorted to high source	X	X	X	X
101	4	None	Solid	Engine Crankcase Pressure Voltage Below Normal, Or Shorted To Low Source	1844	Crankcase Pressure Circuit - Voltage below normal, or shorted to low source	X	X	X	X
101	15	Maintenance	None	Engine Crankcase Pressure Data Valid But Above Normal Operating Range - Least Severe Level	1974	Crankcase Pressure - Data Valid But Above Normal Operating Range - Least Severe Level			X	X
101	16	Amber	None	Engine Crankcase Pressure Data Valid But Above Normal Operating Range - Moderately Severe Level	555	Crankcase Pressure - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
102	2	None	Solid	Engine Intake Manifold #1 Pressure Data Erratic, Intermittent Or Incorrect	2973	Intake Manifold 1 Pressure - Data erratic, intermittent or incorrect	X	X	X	X
102	3	None	Solid	Engine Intake Manifold #1 Pressure Voltage Above Normal, Or Shorted To High Source	122	Intake Manifold 1 Pressure Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
102	4	None	Solid	Engine Intake Manifold #1 Pressure Voltage Below Normal, Or Shorted To Low Source	123	Intake Manifold 1 Pressure Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
102	10	Amber	Solid	Engine Intake Manifold #1 Pressure Abnormal Rate Of Change	3361	Intake Manifold 1 Pressure - Abnormal rate of change	X	X	X	X
102	16	None	Solid	Engine Intake Manifold #1 Pressure Data Valid But Above Normal Operating Range - Moderately Severe Level	124	Intake Manifold 1 Pressure - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X		
102	17	Amber	Solid	Engine Intake Manifold #1 Pressure Data Valid But Below Normal Operating Range - Least Severe Level	4616	Intake Manifold 1 Pressure - Data Valid But Below Normal Operating Range - Least Severe Level	X	X		

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
102	18	Amber	Solid	Engine Intake Manifold #1 Pressure Data Valid But Below Normal Operating Range - Moderately Severe Level	125	Intake Manifold 1 Pressure - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X		
103	2	Amber	None	Engine Turbocharger 1 Speed Data Erratic, Intermittent Or Incorrect	686	Turbocharger 1 Speed - Data erratic, intermittent or incorrect	X	X		
103	15	None	None	Engine Turbocharger 1 Speed Data Valid But Above Normal Operating Range - Least Severe Level	2288	Turbocharger 1 Speed - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
103	16	Amber	Solid	Engine Turbocharger 1 Speed Data Valid But Above Normal Operating Range - Moderately Severe Level	595	Turbocharger 1 Speed - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
103	18	Amber	Solid	Engine Turbocharger 1 Speed Data Valid But Below Normal Operating Range - Moderately Severe Level	687	Turbocharger 1 Speed - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
105	0	Red	None	Engine Intake Manifold 1 Temperature Data Valid But Above Normal Operational Range- Most Severe Level	155	Intake Manifold 1 Temperature - Data valid but above normal operational range - Most Severe Level	X	X	X	X
105	2	None	Solid	Engine Intake Manifold 1 Temperature Data Erratic, Intermittent Or Incorrect	436	Intake Manifold 1 Temperature - Data erratic, intermittent or incorrect	X	X	X	X
105	3	None	Solid	Engine Intake Manifold 1 Temperature Voltage Above Normal, Or Shorted To High Source	153	Intake Manifold 1 Temperature Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
105	4	None	Solid	Engine Intake Manifold 1 Temperature Voltage Below Normal, Or Shorted To Low Source	154	Intake Manifold 1 Temperature Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
105	15	None	None	Engine Intake Manifold 1 Temperature Data Valid But Above Normal Operating Range - Least Severe Level	2964	Intake Manifold 1 Temperature - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
105	18	Amber	Solid	Engine Intake Manifold 1 Temperature Data Valid But Below Normal Operating Range - Moderately Severe Level	3385	Intake Manifold 1 Temperature - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X		X
108	2	None	Solid	Barometric Pressure Data Erratic, Intermittent Or Incorrect	295	Barometric Pressure - Data erratic, intermittent or incorrect	X	X	X	X
108	3	None	Solid	Barometric Pressure Voltage Above Normal, Or Shorted To High Source	221	Barometric Pressure Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
108	4	None	Solid	Barometric Pressure Voltage Below Normal, Or Shorted To Low Source	222	Barometric Pressure Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
110	0	Red	None	Engine Coolant Temperature Data Valid But Above Normal Operational Range - Most Severe Level	151	Engine Coolant Temperature - Data valid but above normal operational range - Most Severe Level	X	X	X	X
110	2	None	Solid	Engine Coolant Temperature Data Erratic, Intermittent Or Incorrect	334	Engine Coolant Temperature - Data erratic, intermittent or incorrect	X	X	X	X
110	3	None	Solid	Engine Coolant Temperature Voltage Above Normal, Or Shorted To High Source	144	Engine Coolant Temperature 1 Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
110	4	None	Solid	Engine Coolant Temperature Voltage Below Normal, Or Shorted To Low Source	145	Engine Coolant Temperature 1 Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
110	15	None	None	Engine Coolant Temperature Data Valid But Above Normal Operating Range - Least Severe Level	2963	Engine Coolant Temperature - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
110	16	Amber	None	Engine Coolant Temperature Data Valid But Above Normal Operating Range - Moderately Severe Level	146	Engine Coolant Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
110	18	None	None	Engine Coolant Temperature Data Valid But Below Normal Operating Range - Moderately Severe Level	2789	Engine Coolant Temperature - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X		
110	31	Amber	None	Engine Coolant Temperature Condition Exists	2646	Engine Coolant Temperature - Condition Exists	X	X	X	X
110	31	None	None	Engine Coolant Temperature Condition Exists	2659	Engine Coolant Temperature - Condition Exists	X	X		
111	1	Red	None	Engine Coolant Level 1 Data Valid But Below Normal Operational Range - Most Severe Level	235	Coolant Level - Data valid but below normal operational range - Most Severe Level	X	X		
111	3	None	Solid	Engine Coolant Level Voltage Above Normal, Or Shorted To High Source	195	Coolant Level Sensor 1 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
111	4	None	Solid	Engine Coolant Level Voltage Below Normal, Or Shorted To Low Source	196	Coolant Level Sensor 1 Circuit - Voltage below normal, or shorted to low source	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
111	17	Maintenance	None	Engine Coolant Level Data Valid But Below Normal Operating Range - Least Severe Level	2448	Coolant Level - Data Valid But Below Normal Operating Range - Least Severe Level	X	X	X	X
111	18	Amber	None	Engine Coolant Level Data Valid But Below Normal Operating Range - Moderately Severe Level	197	Coolant Level - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
111	18	None	Solid	Engine Coolant Level 1 Data Valid But Below Normal Operating Range - Moderately Severe Level	3366	Coolant Level - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
157	0	Red	None	Engine Injector Metering Rail 1 Pressure Data Valid But Above Normal Operational Range - Most Severe Level	449	Injector Metering Rail 1 Pressure - Data valid but above normal operational range - Most Severe Level			X	X
157	2	Amber	None	Engine Injector Metering Rail 1 Pressure Data Erratic, Intermittent Or Incorrect	554	Injector Metering Rail 1 Pressure - Data erratic, intermittent or incorrect	X	X	X	X
157	3	Amber	Solid	Engine Injector Metering Rail 1 Pressure Voltage Above Normal, Or Shorted To High Source	451	Injector Metering Rail 1 Pressure Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
157	4	Amber	Solid	Engine Injector Metering Rail 1 Pressure Voltage Below Normal, Or Shorted To Low Source	452	Injector Metering Rail 1 Pressure Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
157	7	Amber	Solid	Engine Injector Metering Rail 1 Pressure Mechanical System Not Responding Or Out Of Adjustment	755	Injector Metering Rail 1 Pressure - Mechanical system not responding or out of adjustment	X	X	X	X
157	15	Amber	Solid	Engine Injector Metering Rail 1 Pressure Data Valid But Above Normal Operating Range - Least Severe Level	4727	Injector Metering Rail 1 Pressure - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
157	16	Amber	Solid	Engine Injector Metering Rail 1 Pressure Data Valid But Above Normal Operating Range - Moderately Severe Level	553	Injector Metering Rail 1 Pressure - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
157	18	Amber	Solid	Engine Injector Metering Rail 1 Pressure Data Valid But Below Normal Operating Range - Moderately Severe Level	559	Injector Metering Rail 1 Pressure - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
167	1	Red	None	Charging System Potential (Voltage) Data Valid But Below Normal Operational Range - Most Severe Level	598	Electrical Charging System Voltage - Data valid but below normal operational range - Most Severe Level	X	X	X	X
167	16	Amber	None	Charging System Potential (Voltage) Data Valid But Above Normal Operating Range - Moderately Severe Level	596	Electrical Charging System Voltage - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
167	18	Amber	None	Charging System Potential (Voltage) Data Valid But Below Normal Operating Range - Moderately Severe Level	597	Electrical Charging System Voltage - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
168	16	Amber	None	Battery Potential / Power Input 1 Data Valid But Above Normal Operating Range - Moderately Severe Level	442	Battery 1 Voltage - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
168	17	Amber	Solid	Battery Potential / Power Input 1 Data Valid But Below Normal Operating Range - Least Severe Level	3724	Battery 1 Voltage - Data Valid But Below Normal Operating Range - Least Severe Level	X	X		
168	18	Amber	None	Battery Potential / Power Input 1 Data Valid But Below Normal Operating Range - Moderately Severe Level	441	Battery 1 Voltage - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
171	2	None	Solid	Ambient Air Temperature Data Erratic, Intermittent Or Incorrect	2398	Ambient Air Temperature - Data erratic, intermittent or incorrect	X	X	X	X
171	3	None	Solid	Ambient Air Temperature Voltage Above Normal, Or Shorted To High Source	249	Ambient Air Temperature Sensor 1 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
171	4	None	Solid	Ambient Air Temperature Voltage Below Normal, Or Shorted To Low Source	256	Ambient Air Temperature Sensor 1 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
171	9	Amber	Solid	Ambient Air Temperature Abnormal Update Rate	3531	Ambient Air Temperature - Abnormal update rate			X	X
171	19	Amber	None	Ambient Air Temperature Received Network Data In Error	3532	Ambient Air Temperature - Received Network Data In Error			X	X
173	18	Amber	Solid	Engine Exhaust Gas Temperature Data Valid But Below Normal Operating Range - Moderately Severe Level	4611	Engine Exhaust Gas Temperature - Data Valid But Below Normal Operating Range - Moderately Severe Level				X
174	2	Amber	Solid	Engine Fuel Temperature 1 Data Erratic, Intermittent Or Incorrect	535	Engine Fuel Temperature - Data erratic, intermittent or incorrect	X	X		
175	0	Red	None	Engine Oil Temperature 1 Data Valid But Above Normal Operational Range - Most Severe Level	214	Engine Oil Temperature - Data valid but above normal operational range - Most Severe Level	X	X		
175	2	None	Solid	Engine Oil Temperature 1 Data Erratic, Intermittent Or Incorrect	425	Engine Oil Temperature - Data erratic, intermittent or incorrect	X	X		

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
175	3	None	Solid	Engine Oil Temperature 1 Voltage Above Normal, Or Shorted To High Source	212	Engine Oil Temperature Sensor 1 Circuit - Voltage above normal, or shorted to high source	X	X		
175	4	None	Solid	Engine Oil Temperature 1 Voltage Below Normal, Or Shorted To Low Source	213	Engine Oil Temperature Sensor 1 Circuit - Voltage below normal, or shorted to low source	X	X		
175	16	Amber	None	Engine Oil Temperature 1 Data Valid But Above Normal Operating Range - Moderately Severe Level	421	Engine Oil Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X		
188	16	Amber	Solid	Engine Speed At Idle, Point 1 (Engine Configuration) Data Valid But Above Normal Operating Range - Moderately Severe Level	3715	Engine Speed At Idle - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
188	18	Amber	Solid	Engine Speed At Idle, Point 1 (Engine Configuration) Data Valid But Below Normal Operating Range - Moderately Severe Level	3716	Engine Speed At Idle - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
190	0	Red	None	Engine Speed Data Valid But Above Normal Operational Range - Most Severe Level	234	Engine Crankshaft Speed/Position - Data valid but above normal operational range - Most Severe Level	X	X	X	X
190	2	None	Solid	Engine Speed Data Erratic, Intermittent Or Incorrect	689	Engine Crankshaft Speed/Position - Data erratic, intermittent or incorrect	X	X	X	X
190	2	None	Solid	Engine Speed Data Erratic, Intermittent Or Incorrect	2321	Engine Crankshaft Speed/Position - Data erratic, intermittent or incorrect	X	X	X	X
190	16	Amber	None	Engine Speed Data Valid But Above Normal Operating Range - Moderately Severe Level	2468	Engine Crankshaft Speed/Position - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
191	9	None	Solid	Transmission Output Shaft Speed Abnormal Update Rate	3328	Transmission Output Shaft Speed - Abnormal update rate	X	X	X	X
191	19	None	Solid	Transmission Output Shaft Speed Received Network Data In Error	3418	Transmission Output Shaft Speed - Received Network Data In Error	X	X	X	X
237	13	Amber	Solid	Vehicle Identification Number Out Of Calibration	4517	Vehicle Identification Number - Out of Calibration	X	X	X	X
251	2	Maintenance	Solid	Time Data Erratic, Intermittent Or Incorrect	319	Real Time Clock - Data erratic, intermittent or incorrect				X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
251	10	Amber	Solid	Time Abnormal Rate Of Change	3492	Real Time Clock - Abnormal rate of change	X	X	X	X
411	2	None	Solid	Engine Exhaust Gas Recirculation 1 Differential Pressure Data Erratic, Intermittent Or Incorrect	1866	Exhaust Gas Recirculation Differential Pressure - Data erratic, intermittent or incorrect	X	X	X	X
411	3	Amber	Solid	Engine Exhaust Gas Recirculation 1 Differential Pressure Voltage Above Normal, Or Shorted To High Source	2273	Exhaust Gas Recirculation Differential Pressure Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
411	4	Amber	Solid	Engine Exhaust Gas Recirculation 1 Differential Pressure Voltage Below Normal, Or Shorted To Low Source	2274	Exhaust Gas Recirculation Differential Pressure Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
412	2	None	Solid	Engine Exhaust Gas Recirculation 1 Temperature Data Erratic, Intermittent Or Incorrect	1867	Exhaust Gas Recirculation Temperature - Data erratic, intermittent or incorrect	X	X	X	X
412	3	None	Solid	Engine Exhaust Gas Recirculation 1 Temperature Voltage Above Normal, Or Shorted To High Source	2375	Exhaust Gas Recirculation Temperature Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
412	4	None	Solid	Engine Exhaust Gas Recirculation 1 Temperature Voltage Below Normal, Or Shorted To Low Source	2376	Exhaust Gas Recirculation Temperature Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
412	15	None	None	Engine Exhaust Gas Recirculation 1 Temperature Data Valid But Above Normal Operating Range - Least Severe Level	2961	Exhaust Gas Recirculation Temperature - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
412	16	Amber	None	Engine Exhaust Gas Recirculation 1 Temperature Data Valid But Above Normal Operating Range - Moderately Severe Level	2962	Exhaust Gas Recirculation Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
521	12	Amber	None	Brake Pedal Position Data erratic, intermittent, or incorrect	4526	Brake Pedal Position Data erratic, intermittent, or incorrect	X	X	X	X
558	9	Red	Solid	Accelerator Pedal 1 Low Idle Switch Abnormal Update Rate	3528	Accelerator Pedal or Lever Idle Validation Switch - Abnormal update rate	X	X	X	X
558	19	Red	Solid	Accelerator Pedal 1 Low Idle Switch Received Network Data In Error	3527	Accelerator Pedal or Lever Idle Validation Switch - Received Network Data In Error	X	X	X	X
563	9	Amber	None	Anti-Lock Braking (ABS) Active Abnormal Update Rate	3488	Anti-Lock Braking (ABS) Controller - Abnormal update rate	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
563	31	None	None	Anti-Lock Braking (ABS) Active Condition Exists	4215	Anti-Lock Braking (ABS) Active - Condition Exists	X	X	X	X
597	9	Amber		Brake Switch Abnormal Update Rate	3327	Brake Switch Circuit - Abnormal update rate	X	X		
612	2	Red	Solid	System Diagnostic Code #2 Data Erratic, Intermittent Or Incorrect	115	Engine Magnetic Speed/Position Lost Both of Two Signals - Data erratic, intermittent or incorrect	X	X	X	X
626	3	Amber	None	Engine Start Enable Device 1 Voltage Above Normal, Or Shorted To High Source	2738	Start Enable Device 1 Circuit (Ether Injection) - Voltage above normal, or shorted to high source	X	X		
626	4	Amber	None	Engine Start Enable Device 1 Voltage Below Normal, Or Shorted To Low Source	2739	Start Enable Device 1 Circuit (Ether Injection) - Voltage below normal, or shorted to low source	X	X		
629	12	Red	Solid	Controller #1 Bad Intelligent Device Or Component	111	Engine Control Module Critical Internal Failure - Bad intelligent device or component	X	X	X	X
629	12	None	Solid	Controller #1 Bad Intelligent Device Or Component	343	Engine Control Module Warning Internal Hardware Failure - Bad intelligent device or component	X	X	X	X
630	12	Amber	None	Calibration Memory Bad Intelligent Device Or Component	346	Engine Control Module Calibration Memory Software - Bad intelligent device or component	X	X	X	X
630	12	Red	Solid	Calibration Memory Bad Intelligent Device Or Component	3697	Engine Control Module Calibration Memory - Bad intelligent device or component	X	X	X	X
633	31	Amber	Solid	Engine Fuel Actuator 1 Control Command Condition Exists	2311	Electronic Fuel Injection Control Valve Circuit - Condition Exists	X	X	X	X
639	9	Amber	None	J1939 Network #1, Primary Vehicle Network (previously SAE J1939 Data Link) Abnormal Update Rate	285	SAE J1939 Multiplexing PGN Timeout Error - Abnormal update rate	X	X	X	X
639	9	None	None	J1939 Network #1, Primary Vehicle Network (previously SAE J1939 Data Link) Abnormal Update Rate	427	SAE J1939 Datalink - Abnormal update rate	X	X	X	X
639	13	Amber	None	J1939 Network #1, Primary Vehicle Network (previously SAE J1939 Data Link) Out Of Calibration	286	SAE J1939 Multiplexing Configuration Error - Out of Calibration	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
641	7	Amber	Solid	Engine Variable Geometry Turbocharger Actuator #1 Mechanical System Not Responding Or Out Of Adjustment	2387	VGT Actuator Driver Circuit (Motor) - Mechanical system not responding or out of adjustment	X	X	X	X
641	9	Red	Solid	Engine Variable Geometry Turbocharger Actuator #1 Abnormal Update Rate	2636	VGT Actuator Driver Circuit - Abnormal update rate	X	X	X	X
641	11	Amber	Solid	Engine Variable Geometry Turbocharger Actuator #1 Root Cause Not Known	2198	VGT Actuator Driver Circuit - Root Cause Not Known	X	X	X	X
641	12	Red	Solid	Engine Variable Geometry Turbocharger Actuator #1 Bad Intelligent Device Or Component	2634	VGT Actuator Controller - Bad intelligent device or component	X	X	X	X
641	13	Amber	Solid	Engine Variable Geometry Turbocharger Actuator #1 Out Of Calibration	1898	VGT Actuator Controller - Out of Calibration	X	X	X	X
641	13	Red	Solid	Engine Variable Geometry Turbocharger Actuator #1 Out Of Calibration	2449	VGT Actuator Controller - Out of Calibration	X	X	X	X
641	15	Amber	None	Engine Variable Geometry Turbocharger Actuator #1 Data Valid But Above Normal Operating Range - Least Severe Level	1962	VGT Actuator Driver Over Temperature (Calculated) - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
641	31	Red	Solid	Engine Variable Geometry Turbocharger Actuator #1 Condition Exists	2635	VGT Actuator Driver Circuit - Condition Exists	X	X	X	X
647	3	None	None	Engine Fan Clutch 1 Output Device Driver Voltage Above Normal, Or Shorted To High Source	2377	Fan Control Circuit - Voltage above normal, or shorted to high source	X	X	X	X
647	4	None	None	Engine Fan Clutch 1 Output Device Driver Voltage Below Normal, Or Shorted To Low Source	245	Fan Control Circuit - Voltage below normal, or shorted to low source	X	X	X	X
651	5	None	Solid	Engine Injector Cylinder #01 Current Below Normal Or Open Circuit	322	Injector Solenoid Driver Cylinder 1 Circuit - Current below normal or open circuit	X	X	X	X
651	7	Amber	Solid	Engine Injector Cylinder #01 Mechanical System Not Responding Or Out Of Adjustment	1139	Injector Solenoid Driver Cylinder 1 - Mechanical system not responding or out of adjustment	X	X	X	X
652	5	None	Solid	Engine Injector Cylinder #02 Current Below Normal Or Open Circuit	331	Injector Solenoid Driver Cylinder 2 Circuit - Current below normal or open circuit	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
652	7	Amber	Solid	Engine Injector Cylinder #02 Mechanical System Not Responding Or Out Of Adjustment	1141	Injector Solenoid Driver Cylinder 2 - Mechanical system not responding or out of adjustment	X	X	X	X
653	5	None	Solid	Engine Injector Cylinder #03 Current Below Normal Or Open Circuit	324	Injector Solenoid Driver Cylinder 3 Circuit - Current below normal or open circuit	X	X	X	X
653	7	Amber	Solid	Engine Injector Cylinder #03 Mechanical System Not Responding Or Out Of Adjustment	1142	Injector Solenoid Driver Cylinder 3 - Mechanical system not responding or out of adjustment	X	X	X	X
654	5	None	Solid	Engine Injector Cylinder #04 Current Below Normal Or Open Circuit	332	Injector Solenoid Driver Cylinder 4 Circuit - Current below normal or open circuit	X	X	X	X
654	7	Amber	Solid	Engine Injector Cylinder #04 Mechanical System Not Responding Or Out Of Adjustment	1143	Injector Solenoid Driver Cylinder 4 - Mechanical system not responding or out of adjustment	X	X	X	X
655	5	None	Solid	Engine Injector Cylinder #05 Current Below Normal Or Open Circuit	323	Injector Solenoid Driver Cylinder 5 Circuit - Current below normal or open circuit	X	X	X	X
655	7	Amber	Solid	Engine Injector Cylinder #05 Mechanical System Not Responding Or Out Of Adjustment	1144	Injector Solenoid Driver Cylinder 5 - Mechanical system not responding or out of adjustment	X	X	X	X
656	5	None	Solid	Engine Injector Cylinder #06 Current Below Normal Or Open Circuit	325	Injector Solenoid Driver Cylinder 6 Circuit - Current below normal or open circuit	X	X	X	X
656	7	Amber	Solid	Engine Injector Cylinder #06 Mechanical System Not Responding Or Out Of Adjustment	1145	Injector Solenoid Driver Cylinder 6 - Mechanical system not responding or out of adjustment	X	X	X	X
677	3	Amber	None	Engine Starter Motor Relay Voltage Above Normal, Or Shorted To High Source	584	Starter Relay Driver Circuit - Voltage above normal, or shorted to high source	X	X	X	X
677	4	Amber	None	Engine Starter Motor Relay Voltage Below Normal, Or Shorted To Low Source	585	Starter Relay Driver Circuit - Voltage below normal, or shorted to low source	X	X	X	X
723	2	None	Solid	Engine Speed 2 Data Erratic, Intermittent Or Incorrect	778	Engine Camshaft Speed / Position Sensor - Data erratic, intermittent or incorrect	X	X	X	X
723	2	None	Solid	Engine Speed 2 Data Erratic, Intermittent Or Incorrect	2322	Engine Camshaft Speed / Position Sensor - Data erratic, intermittent or incorrect	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
723	7	Amber	Solid	Engine Speed 2 Mechanical System Not Responding Or Out Of Adjustment	731	Engine Speed / Position Camshaft and Crankshaft Misalignment - Mechanical system not responding or out of adjustment	X	X	X	X
729	3	Amber	Solid	Engine Intake Air Heater Driver #1 Voltage Above Normal, Or Shorted To High Source	2555	Engine Intake Air Heater 1 Circuit - Voltage above normal, or shorted to high source			X	X
729	4	Amber	Solid	Engine Intake Air Heater Driver #1 Voltage Below Normal, Or Shorted To Low Source	2556	Engine Intake Air Heater 1 Circuit - Voltage below normal, or shorted to low source			X	X
729	5	Amber	Solid	Engine Intake Air Heater Driver #1 Current Below Normal Or Open Circuit	383	Engine Intake Air Heater 1 Circuit - Current below normal or open circuit			X	X
748	9	Amber	None	Transmission Output Retarder Abnormal Update Rate	3641	Transmission Output Retarder - Abnormal update rate				X
862	3	Amber	None	Heater Circuit #09 Voltage Above Normal, Or Shorted To High Source	3733	Crankcase Breather Filter Heater Circuit - Voltage above normal, or shorted to high source	X	X		
862	4	Amber	None	Heater Circuit #09 Voltage Below Normal, Or Shorted To Low Source	3734	Crankcase Breather Filter Heater Circuit - Voltage below normal, or shorted to low source	X	X		
974	3	Red	None	Remote Accelerator Pedal Position Voltage Above Normal, Or Shorted To High Source	133	Remote Accelerator Pedal or Lever Position Sensor 1 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
974	4	Red	None	Remote Accelerator Pedal Position Voltage Below Normal, Or Shorted To Low Source	134	Remote Accelerator Pedal or Lever Position Sensor 1 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
974	19	Red	None	Remote Accelerator Pedal Position Received Network Data In Error	288	SAE J1939 Multiplexing Remote Accelerator Pedal or Lever Position Sensor System - Received Network Data In Error	X	X		
1072	3	Amber	None	Engine (Compression) Brake Output #1 Voltage Above Normal, Or Shorted To High Source	2182	Engine Brake Actuator Driver 1 Circuit - Voltage above normal, or shorted to high source	X	X	X	
1072	4	Amber	None	Engine (Compression) Brake Output #1 Voltage Below Normal, Or Shorted To Low Source	2183	Engine Brake Actuator Driver 1 Circuit - Voltage below normal, or shorted to low source	X	X	X	
1073	3	Amber	None	Engine (Compression) Brake Output #2 Voltage Above Normal, Or Shorted To High Source	2367	Engine Brake Actuator Driver Output 2 Circuit - Voltage above normal, or shorted to high source	X	X	X	

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
1073	4	Amber	None	Engine (Compression) Brake Output #2 Voltage Below Normal, Or Shorted To Low Source	2363	Engine Brake Actuator Driver Output 2 Circuit - Voltage below normal, or shorted to low source	X	X	X	
1075	3	Amber	None	Engine Electric Lift Pump for Engine Fuel Supply Voltage Above Normal, Or Shorted To High Source	2265	Electric Lift Pump for Engine Fuel Supply Circuit - Voltage above normal, or shorted to high source	X	X	X	
1075	4	Amber	None	Engine Electric Lift Pump for Engine Fuel Supply Voltage Below Normal, Or Shorted To Low Source	2266	Electric Lift Pump for Engine Fuel Supply Circuit - Voltage below normal, or shorted to low source	X	X	X	
1081	7	Amber	Solid	Engine Wait to Start Lamp Mechanical System Not Responding Or Out Of Adjustment	3494	Engine Wait to Start Lamp - Mechanical system not responding or out of adjustment			X	X
1081	9	Amber	Solid	Engine Wait to Start Lamp Abnormal Update Rate	3555	Engine Wait to Start Lamp - Abnormal update rate			X	X
1081	19	Amber	Solid	Engine Wait to Start Lamp Received Network Data In Error	3556	Engine Wait to Start Lamp - Received Network Data In Error			X	X
1081	31	Amber	Solid	Engine Wait to Start Lamp Condition Exists	4252	Engine Wait to Start Lamp - Condition Exists			X	X
1136	2	None	None	Engine ECU Temperature Data Erratic, Intermittent Or Incorrect	699	Engine ECU Temperature - Data erratic, intermittent or incorrect	X	X		
1136	3	None	None	Engine ECU Temperature Voltage Above Normal, Or Shorted To High Source	697	Engine ECU Temperature Sensor Circuit - Voltage above normal, or shorted to high source	X	X		
1136	4	None	None	Engine ECU Temperature Voltage Below Normal, Or Shorted To Low Source	698	Engine ECU Temperature Sensor Circuit - Voltage below normal, or shorted to low source	X	X		
1172	2	None	Solid	Engine Turbocharger 1 Compressor Intake Temperature Data Erratic, Intermittent Or Incorrect	693	Turbocharger 1 Compressor Intake Temperature - Data erratic, intermittent or incorrect	X	X		
1172	3	None	Solid	Engine Turbocharger 1 Compressor Intake Temperature Voltage Above Normal, Or Shorted To High Source	691	Turbocharger 1 Compressor Intake Temperature Circuit - Voltage above normal, or shorted to high source	X	X		
1172	4	None	Solid	Engine Turbocharger 1 Compressor Intake Temperature Voltage Below Normal, Or Shorted To Low Source	692	Turbocharger 1 Compressor Intake Temperature Circuit - Voltage below normal, or shorted to low source	X	X		

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
1176	1	Red	Solid	Engine Turbocharger 1 Compressor Intake Pressure Data Valid But Below Normal Operational Range - Most Severe Level	3348	Turbocharger 1 Compressor Intake Pressure - Data valid but below normal operational range - Most Severe Level	X	X		X
1176	18	Amber	None	Engine Turbocharger 1 Compressor Intake Pressure Data Valid But Below Normal Operating Range - Moderately Severe Level	629	Turbocharger 1 Compressor Intake Pressure - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X		
1209	2	None	Solid	Engine Exhaust Gas Pressure Data Erratic, Intermittent Or Incorrect	2554	Exhaust Gas Pressure 1 - Data erratic, intermittent or incorrect	X	X	X	X
1209	3	None	Solid	Engine Exhaust Gas Pressure Voltage Above Normal, Or Shorted To High Source	2373	Exhaust Gas Pressure Sensor 1 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
1209	4	None	Solid	Engine Exhaust Gas Pressure Voltage Below Normal, Or Shorted To Low Source	2374	Exhaust Gas Pressure Sensor 1 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
1209	16	Amber	None	Engine Exhaust Gas Pressure Data Valid But Above Normal Operating Range - Moderately Severe Level	2764	Exhaust Gas Pressure 1 - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X		
1209	18	Amber	Solid	Engine Exhaust Gas Pressure 1 Data Valid But Below Normal Operating Range - Moderately Severe Level	4728	Exhaust Gas Pressure - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
1213	9	Amber	None	Malfunction Indicator Lamp Abnormal Update Rate	3535	Malfunction Indicator Lamp - Abnormal update rate				X
1239	16	Amber	Solid	Engine Fuel Leakage 1 Data Valid But Above Normal Operating Range - Moderately Severe Level	4726	Engine Fuel Leakage - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
1267	3	Amber	None	Idle Shutdown Vehicle Accessories Relay Driver Circuit Voltage Above Normal, Or Shorted To High Source	338	Idle Shutdown Vehicle Accessories Relay Driver Circuit - Voltage above normal, or shorted to high source	X	X	X	X
1267	4	Amber	None	Idle Shutdown Vehicle Accessories Relay Driver Circuit Voltage Below Normal, Or Shorted To Low Source	339	Idle Shutdown Vehicle Accessories Relay Driver Circuit - Voltage below normal, or shorted to low source	X	X	X	X
1322	31	Amber	Solid	Engine Misfire for Multiple Cylinders Condition Exists	1718	Engine Misfire for Multiple Cylinders - Condition Exists	X	X	X	X
1323	31	Amber	Solid	Engine Misfire Cylinder #1 Condition Exists	1654	Engine Misfire Cylinder 1 - Condition Exists	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
1324	31	Amber	Solid	Engine Misfire Cylinder #2 Condition Exists	1655	Engine Misfire Cylinder 2 - Condition Exists	X	X	X	X
1325	31	Amber	Solid	Engine Misfire Cylinder #3 Condition Exists	1656	Engine Misfire Cylinder 3 - Condition Exists	X	X	X	X
1326	31	Amber	Solid	Engine Misfire Cylinder #4 Condition Exists	1657	Engine Misfire Cylinder 4 - Condition Exists	X	X	X	X
1327	31	Amber	Solid	Engine Misfire Cylinder #5 Condition Exists	1658	Engine Misfire Cylinder 5 - Condition Exists	X	X	X	X
1328	31	Amber	Solid	Engine Misfire Cylinder #6 Condition Exists	1659	Engine Misfire Cylinder 6 - Condition Exists	X	X	X	X
1347	3	None	Solid	Engine Fuel Pump Pressurizing Assembly #1 Voltage Above Normal, Or Shorted To High Source	272	Engine Fuel Pump Pressurizing Assembly 1 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
1347	4	None	Solid	Engine Fuel Pump Pressurizing Assembly #1 Voltage Below Normal, Or Shorted To Low Source	271	Engine Fuel Pump Pressurizing Assembly 1 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
1347	7	Amber	None	Engine Fuel Pump Pressurizing Assembly #1 Mechanical System Not Responding Or Out Of Adjustment	281	Engine Fuel Pump Pressurizing Assembly 1 - Mechanical system not responding or out of adjustment	X	X	X	X
1349	3	Amber	Solid	Engine Injector Metering Rail 2 Pressure Voltage Above Normal, Or Shorted To High Source	483	Injector Metering Rail 2 Pressure Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
1349	4	Amber	Solid	Engine Injector Metering Rail 2 Pressure Voltage Below Normal, Or Shorted To Low Source	484	Injector Metering Rail 2 Pressure Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
1378	31	Maintenance	None	Engine Oil Change Interval Condition Exists	649	Engine Oil Change Interval - Condition Exists	X	X	X	X
1569	31	Amber	None	Engine Protection Torque Derate Condition Exists	3714	Engine Protection Torque Derate - Condition Exists	X	X	X	X
1590	2	None	None	Adaptive Cruise Control Mode Data Erratic, Intermittent Or Incorrect	784	Adaptive Cruise Control Mode - Data erratic, intermittent or incorrect	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
1623	9	None	None	Tachograph output shaft speed Abnormal Update Rate	3186	Tachograph Output Shaft Speed - Abnormal update rate	X	X	X	X
1623	19	None	None	Tachograph output shaft speed Received Network Data In Error	3213	Tachograph Output Shaft Speed - Received Network Data In Error	X	X	X	X
1632	14	Amber	Solid	Engine Torque Limit Feature Special Instructions	2998	Engine Torque Limit Feature - Special Instructions				X
1634	13	Amber	None	Calibration Verification Number Out Of Calibration	2416	Engine Control Module Calibration Memory Checksum - Out of Calibration	X	X		
1675	31	None	None	Engine Starter Mode Condition Exists	3737	Engine Starter Mode Overcrank Protection - Condition Exists	X	X	X	X
1761	1	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Data Valid But Below Normal Operational Range - Most Severe Level	1673	Aftertreatment 1 Diesel Exhaust Fluid Tank Level - Data valid but below normal operational range - Most Severe Level	X	X	X	X
1761	3	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Voltage Above Normal, Or Shorted To High Source	1669	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
1761	4	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Voltage Below Normal, Or Shorted To Low Source	1668	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
1761	5	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Current Below Normal Or Open Circuit	4679	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Sensor Circuit - Current below normal or open circuit	X	X		X
1761	6	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Current Above Normal Or Grounded Circuit	4738	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Sensor Circuit - Current above normal or grounded circuit	X	X	X	X
1761	10	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Abnormal Rate Of Change	4769	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Sensor - Abnormal Rate of Change	X	X		
1761	11	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Root Cause Not Known	4739	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Sensor - Root Cause Not Known	X	X	X	X
1761	13	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Out Of Calibration	4732	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Sensor - Out of Calibration	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
1761	17	Maintenance	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Data Valid But Below Normal Operating Range - Least Severe Level	3497	Aftertreatment 1 Diesel Exhaust Fluid Tank Level - Data Valid But Below Normal Operating Range - Least Severe Level	X	X	X	X
1761	18	Maintenance	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Level Data Valid But Below Normal Operating Range - Moderately Severe Level	3498	Aftertreatment 1 Diesel Exhaust Fluid Tank Level - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
1818	31	None	None	ROP Brake Control active Condition Exists	3374	Roll Over Protection Brake Control Active - Condition Exists	X	X	X	X
2623	3	Amber	Solid	Accelerator Pedal #1 Channel 2 Voltage Above Normal, Or Shorted To High Source	1239	Accelerator Pedal or Lever Position Sensor 2 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
2623	4	Amber	Solid	Accelerator Pedal #1 Channel 2 Voltage Below Normal, Or Shorted To Low Source	1241	Accelerator Pedal or Lever Position Sensor 2 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
2623	8	Amber	Solid	Accelerator Pedal #1 Channel 2 Abnormal Frequency Or Pulse Width Or Period	4149	Accelerator Pedal or Lever Position Sensor 2 Circuit Frequency - Abnormal frequency or pulse width or period	X	X	X	X
2629	15	None	None	Engine Turbocharger 1 Compressor Outlet Temperature Data Valid But Above Normal Operating Range - Least Severe Level	2347	Turbocharger Compressor Outlet Temperature (Calculated) - Data Valid But Above Normal Operating Range - Least Severe Level	X	X		
2633	7	None	None	Engine Variable Geometry Turbocharger (VGT) 1 Nozzle Position Mechanical System Not Responding Or Out Of Adjustment	3616	Engine VGT Nozzle Position - Mechanical system not responding or out of adjustment	X	X	X	X
2634	3	Amber	Solid	Power Relay Voltage Above Normal, Or Shorted To High Source	1776	Power Relay Driver Circuit - Voltage above normal, or shorted to high source				X
2634	4	Amber	Solid	Power Relay Voltage Below Normal, Or Shorted To Low Source	1777	Power Relay Driver Circuit - Voltage below normal, or shorted to low source				X
2789	15	None	None	Engine Turbocharger 1 Calculated Turbine Intake Temperature Data Valid But Above Normal Operating Range - Least Severe Level	2346	Turbocharger Turbine Intake Temperature - Data Valid But Above Normal Operating Range - Least Severe Level	X	X		
2789	16	None	None	Engine Turbocharger 1 Calculated Turbine Intake Temperature Data Valid But Above Normal Operating Range - Moderately Severe Level	2451	Turbocharger Turbine Intake Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X		
2791	5	Amber	Solid	Engine Exhaust Gas Recirculation 1 (EGR1) Valve Control Current Below Normal Or Open Circuit	2349	EGR Valve Control Circuit - Current below normal or open circuit	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
2791	6	Amber	Solid	Engine Exhaust Gas Recirculation 1 (EGR1) Valve Control Current Above Normal Or Grounded Circuit	2353	EGR Valve Control Circuit - Current above normal or grounded circuit	X	X	X	X
2791	7	Amber	None	Engine Exhaust Gas Recirculation 1 (EGR1) Valve Control Mechanical System Not Responding Or Out Of Adjustment	2357	EGR Valve Control Circuit - Mechanical system not responding or out of adjustment			X	X
2791	13	Amber	Solid	Engine Exhaust Gas Recirculation 1 (EGR1) Valve Control Out Of Calibration	1896	EGR Valve Controller - Out of Calibration	X	X	X	X
2791	15	Amber	Solid	Engine Exhaust Gas Recirculation 1 (EGR1) Valve Control Data Valid But Above Normal Operating Range - Least Severe Level	1961	EGR Valve Control Circuit Over Temperature - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
2797	13	None	None	Engine Injector Group 1 Out Of Calibration	2765	Engine Injector Bank 1 Barcodes - Out of Calibration	X	X	X	
2978	9	Amber	None	Estimated Engine Parasitic Losses - Percent Torque Abnormal Update Rate	3838	Estimated Engine Parasitic Losses - Percent Torque - Abnormal update rate			X	X
3031	2	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Data Erratic, Intermittent Or Incorrect	1679	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature - Data erratic, intermittent or incorrect	X	X	X	X
3031	3	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Voltage Above Normal, Or Shorted To High Source	1678	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Sensor - Voltage above normal, or shorted to high source	X	X	X	X
3031	4	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Voltage Below Normal, Or Shorted To Low Source	1677	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Sensor - Voltage below normal, or shorted to low source	X	X	X	X
3031	5	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Current Below Normal Or Open Circuit	4682	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Sensor Circuit - Current below normal or open circuit	X	X		X
3031	6	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Current Above Normal Or Grounded Circuit	4736	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Sensor Circuit - Current above normal or grounded circuit	X	X	X	X
3031	9	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Abnormal Update Rate	4572	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature - Abnormal Update Rate	X	X	X	X
3031	11	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Root Cause Not Known	4737	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature - Root Cause Not Known	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3031	13	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Out Of Calibration	4731	Aftertreatment 1 Diesel Exhaust Fluid Tank Temperature Sensor - Out of Calibration	X	X	X	X
3058	10	Amber	Solid	EGR System Monitor Abnormal Rate Of Change	3389	Engine Exhaust Gas Recirculation (EGR) System - Abnormal rate of change				X
3058	16	Amber	Solid	EGR System Monitor Data Valid But Above Normal Operating Range - Moderately Severe Level	3383	Engine Exhaust Gas Recirculation (EGR) System - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
3058	18	Amber	Solid	EGR System Monitor Data Valid But Below Normal Operating Range - Moderately Severe Level	3382	Engine Exhaust Gas Recirculation (EGR) System - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
3060	18	None	Solid	Engine Cooling System Monitor Data Valid But Below Normal Operating Range - Moderately Severe Level	3243	Engine Cooling System Monitor - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
3216	2	None	Solid	Aftertreatment 1 Intake NOx Data Erratic, Intermittent Or Incorrect	3228	Aftertreatment 1 Intake NOx Sensor - Data erratic, intermittent or incorrect	X	X	X	X
3216	4	None	Solid	Aftertreatment 1 Intake NOx Voltage Below Normal, Or Shorted To Low Source	1885	Aftertreatment 1 Intake NOx Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3216	9	Amber	Solid	Aftertreatment 1 Intake NOx Abnormal Update Rate	3232	Aftertreatment 1 Intake NOx Sensor - Abnormal update rate	X	X	X	X
3216	10	Amber	Solid	Aftertreatment 1 Intake NOx Abnormal Rate Of Change	3725	Aftertreatment 1 Intake NOx Sensor - Abnormal rate of change	X	X	X	X
3216	13	Amber	None	Aftertreatment 1 Intake NOx Out Of Calibration	3718	Aftertreatment 1 Intake NOx - Out of Calibration	X	X	X	X
3216	16	Amber	Solid	Aftertreatment 1 Selective Catalytic Reduction Intake NOx Data Valid But Above Normal Operating Range - Moderately Severe Level	3726	Aftertreatment 1 Intake NOx - Data Valid But Above Normal Operating Range - Moderately Severe Level				X
3216	20	Amber	Solid	Aftertreatment 1 Intake NOx Data Drifted High	3748	Aftertreatment 1 Intake NOx Sensor - Data not Rational - Drifted High	X	X	X	X
3218	2	None	Solid	Aftertreatment 1 Intake Gas Sensor Power Status Data Erratic, Intermittent Or Incorrect	3682	Aftertreatment 1 Intake NOx Sensor Power Supply - Data erratic, intermittent or incorrect	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3226	2	None	Solid	Aftertreatment 1 Outlet NOx Data Erratic, Intermittent Or Incorrect	1694	Aftertreatment 1 Outlet NOx Sensor - Data erratic, intermittent or incorrect	X	X	X	X
3226	4	None	Solid	Aftertreatment 1 Outlet NOx Voltage Below Normal, Or Shorted To Low Source	1887	Aftertreatment 1 Outlet NOx Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3226	9	None	Solid	Aftertreatment 1 Outlet NOx Abnormal Update Rate	2771	Aftertreatment 1 Outlet NOx Sensor - Abnormal update rate	X	X	X	X
3226	10	Amber	Solid	Aftertreatment 1 Outlet NOx Abnormal Rate Of Change	3545	Aftertreatment 1 Outlet NOx Sensor - Abnormal rate of change	X	X	X	X
3226	13	Amber	None	Aftertreatment 1 Outlet NOx Out Of Calibration	3717	Aftertreatment 1 Outlet NOx Sensor - Out of Calibration	X	X	X	X
3226	20	Amber		Aftertreatment 1 Outlet NOx Data Drifted High	3749	Aftertreatment 1 Outlet NOx Sensor - Data not Rational - Drifted High	X	X	X	X
3228	2	None	Solid	Aftertreatment 1 Outlet Gas Sensor Power Status Data Erratic, Intermittent Or Incorrect	3681	Aftertreatment 1 Outlet NOx Sensor Power Supply - Data erratic, intermittent or incorrect	X	X	X	X
3242	0	Red	None	Aftertreatment 1 Diesel Particulate Filter Intake Gas Temperature Data Valid But Above Normal Operational Range - Most Severe Level	3311	Aftertreatment 1 Diesel Particulate Filter Intake Temperature - Data valid but above normal operational range - Most Severe Level	X	X	X	X
3242	2	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Intake Gas Temperature Data Erratic, Intermittent Or Incorrect	3318	Aftertreatment 1 Diesel Particulate Filter Intake Temperature - Data erratic, intermittent or incorrect	X	X	X	X
3242	3	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Intake Gas Temperature Voltage Above Normal, Or Shorted To High Source	3317	Aftertreatment 1 Diesel Particulate Filter Intake Temperature Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3242	4	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Intake Gas Temperature Voltage Below Normal, Or Shorted To Low Source	3316	Aftertreatment 1 Diesel Particulate Filter Intake Temperature Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3242	15	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Intake Gas Temperature Data Valid But Above Normal Operating Range - Least Severe Level	3254	Aftertreatment 1 Diesel Particulate Filter Intake Temperature - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
3242	16	Red	None	Aftertreatment 1 Diesel Particulate Filter Intake Gas Temperature Data Valid But Above Normal Operating Range - Moderately Severe Level	3253	Aftertreatment 1 Diesel Particulate Filter Intake Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3246	0	Red	None	Aftertreatment 1 Diesel Particulate Filter Outlet Gas Temperature Data Valid But Above Normal Operational Range - Most Severe Level	3312	Aftertreatment 1 Diesel Particulate Filter Outlet Temperature - Data valid but above normal operational range - Most Severe Level	X	X	X	X
3246	2	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Outlet Gas Temperature Data Erratic, Intermittent Or Incorrect	3322	Aftertreatment 1 Diesel Particulate Filter Outlet Temperature - Data erratic, intermittent or incorrect	X	X	X	X
3246	3	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Outlet Gas Temperature Voltage Above Normal, Or Shorted To High Source	3319	Aftertreatment 1 Diesel Particulate Filter Outlet Temperature Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3246	4	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Outlet Gas Temperature Voltage Below Normal, Or Shorted To Low Source	3321	Aftertreatment 1 Diesel Particulate Filter Outlet Temperature Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3246	15	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Outlet Gas Temperature Data Valid But Above Normal Operating Range - Least Severe Level	3256	Aftertreatment 1 Diesel Particulate Filter Outlet Temperature - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
3246	16	Red	None	Aftertreatment 1 Diesel Particulate Filter Outlet Gas Temperature Data Valid But Above Normal Operating Range - Moderately Severe Level	3255	Aftertreatment 1 Diesel Particulate Filter Outlet Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
3251	0	Red	None	Aftertreatment 1 Diesel Particulate Filter Differential Pressure Data Valid But Above Normal Operational Range - Most Severe Level	1922	Aftertreatment Diesel Particulate Filter Differential Pressure - Data valid but above normal operational range - Most Severe Level	X	X	X	X
3251	2	None	Solid	Aftertreatment 1 Diesel Particulate Filter Differential Pressure Data Erratic, Intermittent Or Incorrect	1883	Aftertreatment Diesel Particulate Filter Differential Pressure Sensor - Data erratic, intermittent or incorrect	X	X	X	X
3251	3	None	Solid	Aftertreatment 1 Diesel Particulate Filter Differential Pressure Voltage Above Normal, Or Shorted To High Source	1879	Aftertreatment Diesel Particulate Filter Differential Pressure Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3251	4	None	Solid	Aftertreatment 1 Diesel Particulate Filter Differential Pressure Voltage Below Normal, Or Shorted To Low Source	1881	Aftertreatment Diesel Particulate Filter Differential Pressure Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3251	15	None	None	Aftertreatment 1 Diesel Particulate Filter Differential Pressure Data Valid But Above Normal Operating Range - Least Severe Level	2639	Aftertreatment Diesel Particulate Filter Differential Pressure - Data Valid But Above Normal Operating Range - Least Severe Level	X	X	X	X
3251	16	Amber	None	Aftertreatment 1 Diesel Particulate Filter Differential Pressure Data Valid But Above Normal Operating Range - Moderately Severe Level	1921	Aftertreatment Diesel Particulate Filter Differential Pressure - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
3361	2	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Data Erratic, Intermittent Or Incorrect	2976	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Temperature - Data erratic, intermittent or incorrect	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3361	3	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Voltage Above Normal, Or Shorted To High Source	3558	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit - Voltage above normal, or shorted to high source	X	X	X	X
3361	4	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Voltage Below Normal, Or Shorted To Low Source	3559	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit - Voltage below normal, or shorted to low source	X	X	X	X
3361	12	None		Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Bad Intelligent Device Or Component	1681	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit - Bad intelligent device or component	X	X		
3362	31	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Input Lines Condition Exists	1682	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Input Lines - Condition Exists	X	X	X	X
3363	3	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater Voltage Above Normal, Or Shorted To High Source	1683	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater - Voltage above normal, or shorted to high source	X	X	X	X
3363	4	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater Voltage Below Normal, Or Shorted To Low Source	1684	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater - Voltage below normal, or shorted to low source	X	X	X	X
3363	7	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater Mechanical System Not Responding Or Out Of Adjustment	3242	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater - Mechanical system not responding or out of adjustment	X	X	X	X
3363	16	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater Data Valid But Above Normal Operating Range - Moderately Severe Level	1713	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
3363	18	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater Data Valid But Below Normal Operating Range - Moderately Severe Level	1712	Aftertreatment 1 Diesel Exhaust Fluid Tank Heater - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
3364	0	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Data Valid But Above Normal Operational Range - Most Severe Level	3879	Aftertreatment Diesel Exhaust Fluid Quality - Data valid but above normal operational range - Most Severe Level	X	X	X	X
3364	1	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Data Valid But Below Normal Operational Range - Most Severe Level	3866	Aftertreatment Diesel Exhaust Fluid Quality - Data valid but below normal operational range - Most Severe Level	X	X	X	X
3364	2	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Data Erratic, Intermittent Or Incorrect	3878	Aftertreatment Diesel Exhaust Fluid Quality - Data erratic, intermittent or incorrect	X	X	X	X
3364	3	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Voltage Above Normal, Or Shorted To High Source	1686	Aftertreatment Diesel Exhaust Fluid Quality Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3364	4	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Voltage Below Normal, Or Shorted To Low Source	1685	Aftertreatment Diesel Exhaust Fluid Quality Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3364	5	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Current Below Normal Or Open Circuit	4741	Aftertreatment Diesel Exhaust Fluid Quality Sensor Circuit - Current below normal or open circuit	X	X	X	X
3364	6	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Current Above Normal Or Grounded Circuit	4742	Aftertreatment Diesel Exhaust Fluid Quality Sensor Circuit - Current above normal or grounded circuit	X	X	X	X
3364	7	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Mechanical System Not Responding Or Out Of Adjustment	3876	Aftertreatment Diesel Exhaust Fluid Quality Sensor - Mechanical system not responding or out of adjustment	X	X	X	X
3364	9	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Abnormal Update Rate	3868	Aftertreatment Diesel Exhaust Fluid Quality - Abnormal update rate	X	X	X	X
3364	10	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Abnormal Rate Of Change	4277	Aftertreatment Diesel Exhaust Fluid Quality - Abnormal Rate of Change	X	X		
3364	11	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Root Cause Not Known	1715	Aftertreatment Diesel Exhaust Fluid Quality - Root Cause Not Known	X	X		
3364	12	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Bad Intelligent Device Or Component	3877	Aftertreatment Diesel Exhaust Fluid Quality Sensor - Bad intelligent device or component	X	X	X	X
3364	13	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Out Of Calibration	1714	Aftertreatment Diesel Exhaust Fluid Quality - Out of Calibration	X	X	X	X
3364	18	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Data Valid But Below Normal Operating Range - Moderately Severe Level	3867	Aftertreatment Diesel Exhaust Fluid Quality - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
3364	19	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Tank Quality Received Network Data In Error	4241	Aftertreatment Diesel Exhaust Fluid Quality - Received Network Data In Error	X	X	X	X
3464	3	Red	Solid	Engine Throttle Actuator 1 Control Command Voltage Above Normal, Or Shorted To High Source	175	Electronic Throttle Control Actuator Driver Circuit - Voltage above normal, or shorted to high source	X		X	X
3464	4	Red	Solid	Engine Throttle Actuator 1 Control Command Voltage Below Normal, Or Shorted To Low Source	176	Electronic Throttle Control Actuator Driver Circuit - Voltage below normal, or shorted to low source	X		X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3464	7	Red	Solid	Engine Throttle Actuator 1 Control Command Mechanical System Not Responding Or Out Of Adjustment	177	Electronic Throttle Control Actuator - Mechanical system not responding or out of adjustment	X		X	X
3480	2	Amber	Solid	Aftertreatment 1 Fuel Pressure 1 Data Erratic, Intermittent Or Incorrect	1926	Aftertreatment Fuel Pressure Sensor - Data erratic, intermittent or incorrect	X	X		
3480	3	None	Solid	Aftertreatment 1 Fuel Pressure 1 Voltage Above Normal, Or Shorted To High Source	1927	Aftertreatment Fuel Pressure Sensor Circuit - Voltage above normal, or shorted to high source	X	X		
3480	4	None	Solid	Aftertreatment 1 Fuel Pressure 1 Voltage Below Normal, Or Shorted To Low Source	1928	Aftertreatment Fuel Pressure Sensor Circuit - Voltage below normal, or shorted to low source	X	X		
3480	17	None	Solid	Aftertreatment 1 Fuel Pressure 1 Data Valid But Below Normal Operating Range - Least Severe Level	2881	Aftertreatment Fuel Pressure Sensor - Data Valid But Below Normal Operating Range - Least Severe Level	X	X		
3481	16	Amber	None	Aftertreatment 1 Fuel Rate Data Valid But Above Normal Operating Range - Moderately Severe Level	2778	Aftertreatment Fuel Rate - Data Valid But Above Normal Operating Range - Moderately Severe Level				X
3482	2	None	Solid	Aftertreatment 1 Fuel Enable Actuator Data Erratic, Intermittent Or Incorrect	1925	Aftertreatment Fuel Shutoff Valve 1 - Data erratic, intermittent or incorrect	X	X		
3482	3	None	Solid	Aftertreatment 1 Fuel Enable Actuator Voltage Above Normal, Or Shorted To High Source	1923	Aftertreatment Fuel Shutoff Valve 1 Circuit - Voltage above normal, or shorted to high source	X	X		
3482	4	None	Solid	Aftertreatment 1 Fuel Enable Actuator Voltage Below Normal, Or Shorted To Low Source	1924	Aftertreatment Fuel Shutoff Valve 1 Circuit - Voltage below normal, or shorted to low source	X	X		
3482	7	Amber	Solid	Aftertreatment 1 Fuel Enable Actuator Mechanical System Not Responding Or Out Of Adjustment	1963	Aftertreatment Fuel Shutoff Valve 1 - Mechanical system not responding or out of adjustment	X	X		
3482	16	Amber	Solid	Aftertreatment 1 Fuel Enable Actuator Data Valid But Above Normal Operating Range - Moderately Severe Level	4568	Aftertreatment Fuel Shutoff Valve - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X		
3490	3	Amber	Solid	Aftertreatment 1 Purge Air Actuator Voltage Above Normal, Or Shorted To High Source	3224	Aftertreatment Purge Air Actuator Circuit - Voltage above normal, or shorted to high source	X	X		
3490	4	Amber	Solid	Aftertreatment 1 Purge Air Actuator Voltage Below Normal, Or Shorted To Low Source	3223	Aftertreatment Purge Air Actuator Circuit - Voltage below normal, or shorted to low source	X	X		

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3490	7	Amber	Solid	Aftertreatment 1 Purge Air Actuator Mechanical System Not Responding Or Out Of Adjustment	3225	Aftertreatment Purge Air Actuator - Mechanical system not responding or out of adjustment	X	X		
3509	3	None	Solid	Sensor supply voltage 1 Voltage Above Normal, Or Shorted To High Source	386	Sensor Supply 1 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3509	4	None	Solid	Sensor supply voltage 1 Voltage Below Normal, Or Shorted To Low Source	352	Sensor Supply 1 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3510	3	None	Solid	Sensor supply voltage 2 Voltage Above Normal, Or Shorted To High Source	227	Sensor Supply 2 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3510	4	None	Solid	Sensor supply voltage 2 Voltage Below Normal, Or Shorted To Low Source	187	Sensor Supply 2 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3511	3	None	Solid	Sensor supply voltage 3 Voltage Above Normal, Or Shorted To High Source	239	Sensor Supply 3 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3511	4	None	Solid	Sensor supply voltage 3 Voltage Below Normal, Or Shorted To Low Source	238	Sensor Supply 3 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3512	3	None	Solid	Sensor supply voltage 4 Voltage Above Normal, Or Shorted To High Source	2185	Sensor Supply 4 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3512	4	None	Solid	Sensor supply voltage 4 Voltage Below Normal, Or Shorted To Low Source	2186	Sensor Supply 4 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3513	3	None	Solid	Sensor supply voltage 5 Voltage Above Normal, Or Shorted To High Source	1695	Sensor Supply 5 - Voltage above normal, or shorted to high source	X	X	X	X
3513	4	None	Solid	Sensor supply voltage 5 Voltage Below Normal, Or Shorted To Low Source	1696	Sensor Supply 5 - Voltage below normal, or shorted to low source	X	X	X	X
3514	3	None	Solid	Sensor supply voltage 6 Voltage Above Normal, Or Shorted To High Source	515	Sensor Supply 6 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3514	4	None	Solid	Sensor supply voltage 6 Voltage Below Normal, Or Shorted To Low Source	516	Sensor Supply 6 Circuit - Voltage below normal, or shorted to low source	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3515	2	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Data Erratic, Intermittent Or Incorrect	4242	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 - Data erratic, intermittent or incorrect				X
3515	3	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Voltage Above Normal, Or Shorted To High Source	4233	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 - Voltage above normal, or shorted to high source	X	X	X	X
3515	4	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Voltage Below Normal, Or Shorted To Low Source	4234	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 - Voltage below normal, or shorted to low source	X	X	X	X
3515	5	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Current Below Normal Or Open Circuit	4743	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Sensor Circuit - Current below normal or open circuit	X	X	X	X
3515	6	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Current Above Normal Or Grounded Circuit	4744	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Sensor Circuit - Current above normal or grounded circuit	X	X	X	X
3515	10	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Abnormal Rate Of Change	4243	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 - Abnormal Rate of Change	X	X	X	X
3515	11	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 Root Cause Not Known	4745	Aftertreatment 1 Diesel Exhaust Fluid Temperature 2 - Root Cause Not Known	X	X	X	X
3521	11	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Property Root Cause Not Known	4768	Aftertreatment 1 Diesel Exhaust Fluid Property - Root Cause Not Known	X	X		
3521	31	Red	None	Aftertreatment 1 Diesel Exhaust Fluid Property Condition Exists	4235	Aftertreatment 1 Diesel Exhaust Fluid Type - Condition Exists	X	X	X	X
3555	17	None	None	Ambient Air Density Data Valid But Below Normal Operating Range - Least Severe Level	1943	Ambient Air Density - Data Valid But Below Normal Operating Range - Least Severe Level	X	X		
3556	2	Amber	Solid	Aftertreatment 1 Hydrocarbon Doser Data Erratic, Intermittent Or Incorrect	1932	Aftertreatment Doser - Data erratic, intermittent or incorrect	X	X		
3556	5	None	Solid	Aftertreatment 1 Hydrocarbon Doser Current Below Normal Or Open Circuit	1977	Aftertreatment Doser Circuit - Current below normal or open circuit.	X	X		
3556	18	Amber	Solid	Aftertreatment 1 Hydrocarbon Doser Data Valid But Below Normal Operating Range - Moderately Severe Level	3167	Aftertreatment Doser - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X		

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3597	2	None	None	ECU Power Output Supply Voltage #1 Data Erratic, Intermittent Or Incorrect	1117	Power Supply Lost With Ignition On - Data erratic, intermittent or incorrect	X	X	X	X
3597	3	Amber	Solid	ECU Power Output Supply Voltage #1 Voltage Above Normal, Or Shorted To High Source	1939	ECU Power Output Supply Voltage 1 - Voltage above normal, or shorted to high source	X	X		
3597	4	Amber	Solid	ECU Power Output Supply Voltage #1 Voltage Below Normal, Or Shorted To Low Source	1941	ECU Power Output Supply Voltage 1 - Voltage below normal, or shorted to low source	X	X	X	X
3597	12	Amber	Solid	ECU Power Output Supply Voltage #1 Bad Intelligent Device Or Component	351	Injector Power Supply - Bad intelligent device or component	X	X	X	X
3597	18	None	Solid	ECU Power Output Supply Voltage #1 Data Valid But Below Normal Operating Range - Moderately Severe Level	1938	ECU Power Output Supply Voltage 1 - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
3610	2	None	Solid	Diesel Particulate Filter Outlet Pressure 1 Data Erratic, Intermittent Or Incorrect	3135	Aftertreatment 1 Diesel Particulate Filter Outlet Pressure - Data erratic, intermittent or incorrect	X	X	X	X
3610	3	Amber	Solid	Diesel Particulate Filter Outlet Pressure 1 Voltage Above Normal, Or Shorted To High Source	3133	Aftertreatment 1 Diesel Particulate Filter Outlet Pressure Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3610	4	Amber	Solid	Diesel Particulate Filter Outlet Pressure 1 Voltage Below Normal, Or Shorted To Low Source	3134	Aftertreatment 1 Diesel Particulate Filter Outlet Pressure Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3667	3	Amber	None	Engine Air Shutoff Status Voltage Above Normal, Or Shorted To High Source	3139	Engine Air Shutoff Circuit - Voltage above normal, or shorted to high source	X	X	X	X
3667	4	Amber	None	Engine Air Shutoff Status Voltage Below Normal, Or Shorted To Low Source	3141	Engine Air Shutoff Circuit - Voltage below normal, or shorted to low source	X	X	X	X
3695	2	Amber	None	Diesel Particulate Filter Regeneration Inhibit Switch Data Erratic, Intermittent Or Incorrect	4213	Aftertreatment Diesel Particulate Filter Regeneration Inhibit Switch - Data erratic, intermittent or incorrect	X	X	X	X
3703	31	Maintenance	None	Diesel Particulate Filter Active Regeneration Inhibited Due to Inhibit Switch Condition Exists	2777	Particulate Trap Active Regeneration Inhibited Due to Inhibit Switch - Condition Exists	X	X	X	X
3711	31	None	Solid	Diesel Particulate Filter Active Regeneration Inhibited Due to Low Exhaust Gas Temperature Condition Exists	3495	Diesel Particulate Filter Active Regeneration Inhibited Due to Low Exhaust Gas Temperature - Condition Exists	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
3713	31	None	None	Diesel Particulate Filter Active Regeneration Inhibited Due to System Timeout Condition Exists	3753	Diesel Particulate Filter Active Regeneration Inhibited Due to System Timeout - Condition Exists	X	X	X	X
3750	31	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Conditions Not Met for Active Regeneration Condition Exists	3396	Diesel Particulate Filter 1 Conditions Not Met for Active Regeneration - Condition Exists	X	X		X
3826	18	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Average Consumption Data Valid But Below Normal Operating Range - Moderately Severe Level	4573	Aftertreatment 1 Diesel Exhaust Fluid Average Consumption - Data Valid But Below Normal Operating Range - Moderately Severe Level				X
3936	2	Amber	Solid	Aftertreatment Diesel Particulate Filter System Data Erratic, Intermittent Or Incorrect	2692	Aftertreatment 1 Diesel Particulate Filter System - Data erratic, intermittent or incorrect			X	X
3936	7	Amber	None	Aftertreatment Diesel Particulate Filter System Mechanical System Not Responding Or Out Of Adjustment	3245	Aftertreatment 1 Diesel Particulate Filter System - Mechanical system not responding or out of adjustment	X	X		
3936	14	Red	Solid	Aftertreatment Diesel Particulate Filter System Special Instructions	4584	Aftertreatment Diesel Particulate Filter System - Special Instructions	X	X	X	X
3936	15	Amber	Solid	Aftertreatment Diesel Particulate Filter System Data Valid But Above Normal Operating Range - Least Severe Level	1981	Aftertreatment 1 Diesel Particulate Filter System - Data Valid But Above Normal Operating Range - Least Severe Level	X	X		
3936	16	Amber	Solid	Aftertreatment Diesel Particulate Filter System Data Valid But Above Normal Operating Range - Moderately Severe Level	3168	Aftertreatment 1 Diesel Particulate Filter System - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
4094	31	Amber	None	NOx limits exceeded due to Insufficient Diesel Exhaust Fluid Quality Condition Exists	3543	NOx limits exceeded due to Insufficient Reagent Quality - Condition Exists	X	X	X	X
4096	31	None	None	NOx limits exceeded due to Empty Diesel Exhaust Fluid Tank Condition Exists	3547	Aftertreatment Diesel Exhaust Fluid Tank Empty - Condition Exists	X	X	X	X
4331	18	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Actual Dosing Quantity Data Valid But Below Normal Operating Range - Moderately Severe Level	4658	Aftertreatment SCR Actual Dosing Reagent Quantity - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
4334	2	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Doser Absolute Pressure Data Erratic, Intermittent Or Incorrect	3596	Aftertreatment 1 Diesel Exhaust Fluid Pressure Sensor - Data erratic, intermittent or incorrect	X	X	X	X
4334	3	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Doser Absolute Pressure Voltage Above Normal, Or Shorted To High Source	3571	Aftertreatment 1 Diesel Exhaust Fluid Pressure Sensor - Voltage above normal, or shorted to high source	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
4334	4	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Doser Absolute Pressure Voltage Below Normal, Or Shorted To Low Source	3572	Aftertreatment 1 Diesel Exhaust Fluid Pressure Sensor - Voltage below normal, or shorted to low source	X	X	X	X
4334	16	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Doser Absolute Pressure Data Valid But Above Normal Operating Range - Moderately Severe Level	3575	Aftertreatment 1 Diesel Exhaust Fluid Pressure Sensor - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
4334	18	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Doser Absolute Pressure Data Valid But Below Normal Operating Range - Moderately Severe Level	3574	Aftertreatment 1 Diesel Exhaust Fluid Pressure Sensor - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
4337	2	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Temperature Data Erratic, Intermittent Or Incorrect	4244	Aftertreatment 1 Diesel Exhaust Fluid Dosing Temperature - Data erratic, intermittent or incorrect	X	X	X	X
4337	10	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Temperature Abnormal Rate Of Change	4249	Aftertreatment 1 Diesel Exhaust Fluid Dosing Temperature - Abnormal Rate of Change	X	X	X	X
4340	3	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 1 State Voltage Above Normal, Or Shorted To High Source	3237	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 1 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
4340	4	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 1 State Voltage Below Normal, Or Shorted To Low Source	3238	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 1 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
4340	5	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 1 State Current Below Normal Or Open Circuit	3258	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 1 Circuit - Current below normal or open circuit	X	X	X	X
4342	3	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 2 State Voltage Above Normal, Or Shorted To High Source	3239	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 2 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
4342	4	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 2 State Voltage Below Normal, Or Shorted To Low Source	3241	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 2 Circuit - Voltage below normal, or shorted to low source	X	X	X	X
4342	5	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 2 State Current Below Normal Or Open Circuit	3261	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 2 Circuit - Current below normal or open circuit	X	X	X	X
4344	3	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 3 State Voltage Above Normal, Or Shorted To High Source	3422	Aftertreatment Diesel Exhaust Fluid Line Heater 3 Circuit - Voltage above normal, or shorted to high source	X	X	X	X
4344	4	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 3 State Voltage Below Normal, Or Shorted To Low Source	3423	Aftertreatment Diesel Exhaust Fluid Line Heater 3 Circuit - Voltage below normal, or shorted to low source	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
4344	5	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater 3 State Current Below Normal Or Open Circuit	3425	Aftertreatment Diesel Exhaust Fluid Line Heater 3 Circuit - Current below normal or open circuit	X	X	X	X
4360	0	Red	None	Aftertreatment 1 SCR Catalyst Intake Gas Temperature Data Valid But Above Normal Operational Range - Most Severe Level	3229	Aftertreatment 1 SCR Intake Temperature - Data valid but above normal operational range - Most Severe Level	X	X	X	X
4360	2	None	Solid	Aftertreatment 1 SCR Catalyst Intake Gas Temperature Data Erratic, Intermittent Or Incorrect	3144	Aftertreatment 1 SCR Intake Temperature Sensor - Data erratic, intermittent or incorrect	X	X	X	X
4360	3	None	Solid	Aftertreatment 1 SCR Catalyst Intake Gas Temperature Voltage Above Normal, Or Shorted To High Source	3142	Aftertreatment 1 SCR Intake Temperature Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
4360	4	None	Solid	Aftertreatment 1 SCR Catalyst Intake Gas Temperature Voltage Below Normal, Or Shorted To Low Source	3143	Aftertreatment 1 SCR Intake Temperature Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
4360	10	Amber		Aftertreatment 1 SCR Catalyst Intake Gas Temperature Abnormal Rate Of Change	3145	Aftertreatment 1 SCR Intake Temperature Sensor - Abnormal rate of change	X	X		
4360	15	None	None	Aftertreatment 1 SCR Catalyst Intake Gas Temperature Data Valid But Above Normal Operating Range - Least Severe Level	3164	Aftertreatment 1 SCR Intake Temperature - Data Valid But Above Normal Operating Range - Least Severe Level	X	X		
4360	16	Red	None	Aftertreatment 1 SCR Catalyst Intake Gas Temperature Data Valid But Above Normal Operating Range - Moderately Severe Level	3231	Aftertreatment 1 SCR Intake Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
4363	0	Red	None	Aftertreatment 1 SCR Catalyst Outlet Gas Temperature Data Valid But Above Normal Operational Range - Most Severe Level	3165	Aftertreatment 1 SCR Outlet Temperature - Data valid but above normal operational range - Most Severe Level	X	X	X	X
4363	2	Amber	Solid	Aftertreatment 1 SCR Catalyst Outlet Gas Temperature Data Erratic, Intermittent Or Incorrect	3148	Aftertreatment 1 SCR Outlet Temperature Sensor - Data erratic, intermittent or incorrect	X	X	X	X
4363	3	Amber	Solid	Aftertreatment 1 SCR Catalyst Outlet Gas Temperature Voltage Above Normal, Or Shorted To High Source	3146	Aftertreatment 1 SCR Outlet Temperature Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
4363	4	Amber	Solid	Aftertreatment 1 SCR Catalyst Outlet Gas Temperature Voltage Below Normal, Or Shorted To Low Source	3147	Aftertreatment 1 SCR Outlet Temperature Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
4363	10	Amber		Aftertreatment 1 SCR Catalyst Outlet Gas Temperature Abnormal Rate Of Change	3149	Aftertreatment 1 SCR Outlet Temperature Sensor - Abnormal rate of change	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
4363	15	Amber		Aftertreatment 1 SCR Catalyst Outlet Gas Temperature Data Valid But Above Normal Operating Range - Least Severe Level	3236	Aftertreatment 1 SCR Outlet Temperature - Data Valid But Above Normal Operating Range - Least Severe Level	X	X		
4363	16	Red	None	Aftertreatment 1 SCR Catalyst Outlet Gas Temperature Data Valid But Above Normal Operating Range - Moderately Severe Level	3235	Aftertreatment 1 SCR Outlet Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
4364	18	None	Solid	Aftertreatment 1 SCR Conversion Efficiency Data Valid But Below Normal Operating Range - Moderately Severe Level	3582	Aftertreatment SCR Catalyst Conversion Efficiency - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
4376	3	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Return Valve Voltage Above Normal, Or Shorted To High Source	3577	Aftertreatment Diesel Exhaust Fluid Return Valve - Voltage above normal, or shorted to high source	X	X	X	X
4376	4	None	Solid	Aftertreatment 1 Diesel Exhaust Fluid Return Valve Voltage Below Normal, Or Shorted To Low Source	3578	Aftertreatment Diesel Exhaust Fluid Return Valve - Voltage below normal, or shorted to low source	X	X	X	X
4376	7	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Return Valve Mechanical System Not Responding Or Out Of Adjustment	4157	Aftertreatment Diesel Exhaust Fluid Return Valve - Mechanical system not responding or out of adjustment	X	X	X	X
4377	4	Amber	Solid	Aftertreatment 1 Outlet NH3 Voltage Below Normal, Or Shorted To Low Source	3899	Aftertreatment 1 Outlet NH3 Sensor - Voltage below normal, or shorted to low source	X	X	X	X
4377	10	Amber	Solid	Aftertreatment 1 Outlet NH3 Abnormal Rate Of Change	3937	Aftertreatment 1 Outlet NH3 Sensor - Abnormal rate of change	X	X	X	X
4377	12	Amber	Solid	Aftertreatment 1 Outlet NH3 Bad Intelligent Device Or Component	3936	Aftertreatment 1 Outlet NH3 Sensor - Bad intelligent device or component	X	X	X	X
4377	13	Amber	Solid	Aftertreatment 1 Outlet NH3 Out Of Calibration	3935	Aftertreatment 1 Outlet NH3 Sensor - Out of Calibration	X	X	X	X
4380	2	Amber	Solid	Aftertreatment 1 Outlet NH3 Gas Sensor Power In Range Data Erratic, Intermittent Or Incorrect	3934	Aftertreatment Outlet NH3 Gas Sensor Power Supply - Data erratic, intermittent or incorrect	X	X	X	X
4380	16	Amber	Solid	Aftertreatment 1 Outlet NH3 Gas Sensor Power In Range Data Valid But Above Normal Operating Range - Moderately Severe Level	3932	Aftertreatment Outlet NH3 Gas Sensor Power Supply - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
4380	18	Amber	Solid	Aftertreatment 1 Outlet NH3 Gas Sensor Power In Range Data Valid But Below Normal Operating Range - Moderately Severe Level	3933	Aftertreatment Outlet NH3 Gas Sensor Power Supply - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
4382	10	Amber	Solid	Aftertreatment 1 Outlet NH3 Gas Sensor Heater Preliminary FMI Abnormal Rate Of Change	3912	Aftertreatment 1 Outlet NH3 Gas Sensor Heater - Abnormal rate of change	X	X	X	X
4752	18	Amber	Solid	Engine Exhaust Gas Recirculation 1 (EGR1) Cooler Efficiency Data Valid But Below Normal Operating Range - Moderately Severe Level	3342	Engine Exhaust Gas Recirculation Cooler Efficiency - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
4765	2	Amber	Solid	Aftertreatment 1 Diesel Oxidation Catalyst Intake Gas Temperature Data Erratic, Intermittent Or Incorrect	3315	Aftertreatment 1 Diesel Oxidation Catalyst Intake Temperature - Data erratic, intermittent or incorrect	X	X	X	X
4765	3	Amber	Solid	Aftertreatment 1 Diesel Oxidation Catalyst Intake Gas Temperature Voltage Above Normal, Or Shorted To High Source	3314	Aftertreatment 1 Diesel Oxidation Catalyst Intake Temperature Sensor Circuit - Voltage above normal, or shorted to high source	X	X	X	X
4765	4	Amber	Solid	Aftertreatment 1 Diesel Oxidation Catalyst Intake Gas Temperature Voltage Below Normal, Or Shorted To Low Source	3313	Aftertreatment 1 Diesel Oxidation Catalyst Intake Temperature Sensor Circuit - Voltage below normal, or shorted to low source	X	X	X	X
4765	16	Red	None	Aftertreatment 1 Diesel Oxidation Catalyst Intake Gas Temperature Data Valid But Above Normal Operating Range - Moderately Severe Level	3251	Aftertreatment 1 Diesel Oxidation Catalyst Intake Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
4766	18	Amber	Solid	Aftertreatment 1 Diesel Oxidation Catalyst Outlet Gas Temperature Data Valid But Below Normal Operating Range - Moderately Severe Level	3394	Aftertreatment 1 Diesel Oxidation Catalyst Outlet Gas Temperature - Data Valid But Below Normal Operating Range - Moderately Severe Level				X
4792	7	None	None	Aftertreatment 1 SCR Catalyst System Mechanical System Not Responding Or Out Of Adjustment	3751	Aftertreatment SCR Catalyst System - Mechanical system not responding or out of adjustment	X	X	X	X
4792	14	Red	Solid	Aftertreatment 1 SCR Catalyst System Special Instructions	4585	Aftertreatment 1 SCR Catalyst System - Special Instructions	X	X	X	X
4794	31	None	Solid	Aftertreatment 1 SCR Catalyst System Missing Condition Exists	3151	Aftertreatment 1 SCR Catalyst System Missing - Condition Exists	X	X	X	X
4795	31	None	Solid	Aftertreatment 1 Diesel Particulate Filter Missing Condition Exists	1993	Aftertreatment 1 Diesel Particulate Filter Missing - Condition Exists	X	X	X	X
4796	31	None	Solid	Aftertreatment 1 Diesel Oxidation Catalyst Missing Condition Exists	1664	Aftertreatment 1 Diesel Oxidation Catalyst Missing - Condition Exists	X	X	X	X
5018	11	None	Solid	Aftertreatment 1 Diesel Oxidation Catalyst System Root Cause Not Known	2637	Aftertreatment 1 Diesel Oxidation Catalyst Face Plugged - Root Cause Not Known				X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
5019	2	None	Solid	Engine Exhaust Gas Recirculation 1 Outlet Pressure Data Erratic, Intermittent Or Incorrect	3138	Engine Exhaust Gas Recirculation Outlet Pressure - Data erratic, intermittent or incorrect	X	X		
5019	3	None	Solid	Engine Exhaust Gas Recirculation 1 Outlet Pressure Voltage Above Normal, Or Shorted To High Source	3136	Engine Exhaust Gas Recirculation Outlet Pressure Sensor Circuit - Voltage above normal, or shorted to high source	X	X		
5019	4	None	Solid	Engine Exhaust Gas Recirculation 1 Outlet Pressure Voltage Below Normal, Or Shorted To Low Source	3137	Engine Exhaust Gas Recirculation Outlet Pressure Sensor Circuit - Voltage below normal, or shorted to low source	X	X		
5024	10	None	Solid	Aftertreatment 1 Intake Gas NOx Sensor Heater Ratio Abnormal Rate Of Change	3649	Aftertreatment 1 Intake NOx Sensor Heater - Abnormal rate of change	X	X	X	X
5031	10	None	Solid	Aftertreatment 1 Outlet Gas NOx Sensor Heater Ratio Abnormal Rate Of Change	3583	Aftertreatment Outlet NOx Sensor Heater - Abnormal rate of change	X	X	X	X
5097	3	Amber	Solid	Engine Brake Active Lamp Data Voltage Above Normal, Or Shorted To High Source	4293	Engine Brake Active Lamp - Voltage Above Normal, or Shorted to High Source	X	X	X	X
5097	4	Amber	Solid	Engine Brake Active Lamp Data Voltage Below Normal, Or Shorted To Low Source	4294	Engine Brake Active Lamp - Voltage below normal, or shorted to low source	X	X	X	X
5125	3	Amber	Solid	Sensor supply voltage 7 Voltage Above Normal, Or Shorted To High Source	3419	Sensor Supply 7 Circuit - Voltage above normal, or shorted to high source				X
5125	4	Amber	Solid	Sensor supply voltage 7 Voltage Below Normal, Or Shorted To Low Source	3421	Sensor Supply 7 Circuit - Voltage below normal, or shorted to low source				X
5246	0	Red	None	Aftertreatment SCR Operator Inducement Severity Data Valid But Above Normal Operational Range - Most Severe Level	3712	Aftertreatment SCR Operator Inducement - Data valid but above normal operational range - Most Severe Level	X	X	X	X
5285	18	Amber	Solid	Engine Charge Air Cooler 1 Efficiency Data Valid But Below Normal Operating Range - Moderately Severe Level	3343	Engine Charge Air Cooler Efficiency - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
5298	17	None	Solid	Aftertreatment 1 Diesel Oxidation Catalyst Conversion Efficiency Data Valid But Below Normal Operating Range - Least Severe Level	2638	Aftertreatment Diesel Oxidation Catalyst Conversion Efficiency - Data Valid But Below Normal Operating Range - Least Severe Level	X	X	X	X
5298	18	None	Solid	Aftertreatment 1 Diesel Oxidation Catalyst Conversion Efficiency Data Valid But Below Normal Operating Range - Moderately Severe Level	1691	Aftertreatment 1 Diesel Oxidation Catalyst Conversion Efficiency - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
5302	18	Amber	Solid	Aftertreatment 1 Post SCR NH3 Conversion Efficiency Data Valid But Below Normal Operating Range - Moderately Severe Level	4454	Aftertreatment 1 Post SCR NH3 Conversion Efficiency - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
5319	31	None	Solid	Aftertreatment 1 Diesel Particulate Filter Incomplete Regeneration Condition Exists	3376	Aftertreatment Diesel Particulate Filter Incomplete Regeneration - Condition Exists	X	X	X	X
5394	2	None	None	Aftertreatment Diesel Exhaust Fluid Dosing Valve Data Erratic, Intermittent Or Incorrect	3755	Aftertreatment Diesel Exhaust Fluid Dosing Valve - Data erratic, intermittent or incorrect	X	X	X	X
5394	5	None	Solid	Aftertreatment Diesel Exhaust Fluid Dosing Valve Current Below Normal Or Open Circuit	3567	Aftertreatment Diesel Exhaust Fluid Dosing Valve - Current below normal or open circuit	X	X	X	X
5394	7	None	Solid	Aftertreatment Diesel Exhaust Fluid Dosing Valve Mechanical System Not Responding Or Out Of Adjustment	3568	Aftertreatment Diesel Exhaust Fluid Dosing Valve - Mechanical system not responding or out of adjustment	X	X	X	X
5395	16	Amber	Solid	Engine Idle Fuel Quantity Data Valid But Above Normal Operating Range - Moderately Severe Level	3337	Engine Idle Fuel Quantity - Data Valid But Above Normal Operating Range - Moderately Severe Level				X
5395	18	Amber	Solid	Engine Idle Fuel Quantity Data Valid But Below Normal Operating Range - Moderately Severe Level	3338	Engine Idle Fuel Quantity - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
5396	31	Amber	Solid	Engine Crankcase Ventilation Hose Disconnected Condition Exists	3377	Engine Crankcase Ventilation Hose Disconnected - Condition Exists				X
5397	31	Amber	Solid	Aftertreatment 1 Diesel Particulate Filter Regeneration too Frequent Condition Exists	3375	Aftertreatment Diesel Particulate Filter Regeneration too Frequent - Condition Exists	X	X	X	X
5491	3	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater Relay Voltage Above Normal, Or Shorted To High Source	3562	Aftertreatment Diesel Exhaust Fluid Line Heater Relay - Voltage above normal, or shorted to high source	X	X	X	X
5491	4	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Line Heater Relay Voltage Below Normal, Or Shorted To Low Source	3563	Aftertreatment Diesel Exhaust Fluid Line Heater Relay - Voltage below normal, or shorted to low source	X	X	X	X
5571	0	Amber	Solid	High Pressure Common Rail Fuel Pressure Relief Valve Data Valid But Above Normal Operational Range - Most Severe Level	3741	High Pressure Common Rail Fuel Pressure Relief Valve - Data valid but above normal operational range - Most Severe Level	X	X	X	X
5571	7	None	None	High Pressure Common Rail Fuel Pressure Relief Valve Mechanical System Not Responding Or Out Of Adjustment	3727	High Pressure Common Rail Fuel Pressure Relief Valve - Mechanical system not responding or out of adjustment	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
5585	18	Amber	Solid	Engine Injector Metering Rail 1 Cranking Pressure Data Valid But Below Normal Operating Range - Moderately Severe Level	4691	Engine Injector Metering Rail 1 Cranking Pressure - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
5603	9	None	None	Cruise Control Disable Command Abnormal Update Rate	3843	Cruise Control Disable Command - Abnormal update rate	X	X	X	X
5603	31	None	None	Cruise Control Disable Command Condition Exists	3845	Cruise Control Disable Command - Condition Exists	X	X	X	X
5605	31	None	None	Cruise Control Pause Command Condition Exists	3844	Cruise Control Pause Command - Condition Exists	X	X	X	X
5741	3	Amber	Solid	Aftertreatment 1 Outlet Soot Voltage Above Normal, Or Shorted To High Source	4143	Aftertreatment 1 Outlet Soot Sensor - Voltage Above Normal, or Shorted to High Source	X	X	X	X
5741	4	Amber	Solid	Aftertreatment 1 Outlet Soot Voltage Below Normal, Or Shorted To Low Source	4144	Aftertreatment 1 Outlet Soot Sensor - Voltage below normal, or shorted to low source	X	X	X	X
5742	3	Amber	Solid	Aftertreatment Diesel Particulate Filter Temperature Sensor Module Voltage Above Normal, Or Shorted To High Source	4161	Aftertreatment Diesel Particulate Filter Temperature Sensor Module - Voltage Above Normal, or Shorted to High Source	X	X	X	X
5742	4	Amber	Solid	Aftertreatment Diesel Particulate Filter Temperature Sensor Module Voltage Below Normal, Or Shorted To Low Source	4162	Aftertreatment Diesel Particulate Filter Temperature Sensor Module - Voltage below normal, or shorted to low source	X	X	X	X
5742	9	Amber	Solid	Aftertreatment Diesel Particulate Filter Temperature Sensor Module Abnormal Update Rate	4151	Aftertreatment Diesel Particulate Filter Temperature Sensor Module - Abnormal update rate	X	X	X	X
5742	11	Amber	Solid	Aftertreatment Diesel Particulate Filter Temperature Sensor Module Root Cause Not Known	4259	Aftertreatment Diesel Particulate Filter Temperature Sensor Module - Root Cause Not Known	X	X	X	X
5742	12	Amber	Solid	Aftertreatment Diesel Particulate Filter Temperature Sensor Module Bad Intelligent Device Or Component	4158	Aftertreatment Diesel Particulate Filter Temperature Sensor Module - Bad intelligent device or component	X	X	X	X
5742	16	Amber	None	Aftertreatment Diesel Particulate Filter Temperature Sensor Module Data Valid But Above Normal Operating Range - Moderately Severe Level	4163	Aftertreatment Diesel Particulate Filter Temperature Sensor Module- Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
5743	3	Amber	Solid	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module Voltage Above Normal, Or Shorted To High Source	4164	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module - Voltage Above Normal, or Shorted to High Source	X	X	X	X

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SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
5743	4	Amber	None	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module Voltage Below Normal, Or Shorted To Low Source	4165	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module - Voltage below normal, or shorted to low source	X	X	X	X
5743	9	Amber	Solid	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module Abnormal Update Rate	4152	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module - Abnormal update rate	X	X	X	X
5743	11	Amber	Solid	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module Root Cause Not Known	4261	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module - Root Cause Not Known	X	X	X	X
5743	12	Amber	Solid	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module Bad Intelligent Device Or Component	4159	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module - Bad intelligent device or component	X	X	X	X
5743	16	Amber	None	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module Data Valid But Above Normal Operating Range - Moderately Severe Level	4166	Aftertreatment Selective Catalytic Reduction Temperature Sensor Module - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X	X	X
5745	3	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Voltage Above Normal, Or Shorted To High Source	4168	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater - Voltage Above Normal, or Shorted to High Source	X	X	X	X
5745	4	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Voltage Below Normal, Or Shorted To Low Source	4169	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater - Voltage below normal, or shorted to low source	X	X	X	X
5745	18	Amber	None	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Data Valid But Below Normal Operating Range - Moderately Severe Level	4171	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater - Data Valid But Below Normal Operating Range - Moderately Severe Level	X	X	X	X
5746	3	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Relay Voltage Above Normal, Or Shorted To High Source	4155	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Relay - Voltage Above Normal, or Shorted to High Source	X	X	X	X
5746	4	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Relay Voltage Below Normal, Or Shorted To Low Source	4156	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Relay - Voltage below normal, or shorted to low source	X	X	X	X
5747	3	Amber	Solid	Aftertreatment 1 Outlet Soot Sensor Heater Voltage Above Normal, Or Shorted To High Source	4153	Aftertreatment 1 Outlet Soot Sensor Heater - Voltage Above Normal, or Shorted to High Source	X	X	X	X
5747	4	Amber	Solid	Aftertreatment 1 Outlet Soot Sensor Heater Voltage Below Normal, Or Shorted To Low Source	4154	Aftertreatment 1 Outlet Soot Sensor Heater - Voltage below normal, or shorted to low source	X	X	X	X
5798	2	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Temperature Data Erratic, Intermittent Or Incorrect	4245	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Temperature - Data erratic, intermittent or incorrect	X	X	X	X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
5798	10	Amber	Solid	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Temperature Abnormal Rate Of Change	4251	Aftertreatment 1 Diesel Exhaust Fluid Dosing Unit Heater Temperature - Abnormal Rate of Change	X	X	X	X
5848	2	Amber	Solid	Aftertreatment 1 SCR Intermediate NH3 Data Erratic, Intermittent Or Incorrect	4281	Aftertreatment 1 SCR Intermediate NH3 - Data erratic, intermittent or incorrect	X	X	X	X
5848	9	Amber	Solid	Aftertreatment 1 SCR Intermediate NH3 Abnormal Update Rate	3911	Aftertreatment 1 SCR Intermediate NH3 Sensor - Abnormal update rate	X	X	X	X
5848	20	Amber	None	Aftertreatment 1 SCR Intermediate NH3 Data Drifted High	4278	Aftertreatment 1 SCR Intermediate NH3 - Data not Rational - Drifted High	X	X	X	X
5848	21	Amber	None	Aftertreatment 1 SCR Intermediate NH3 Data Drifted Low	4279	Aftertreatment 1 SCR Intermediate NH3 - Data not Rational - Drifted Low	X	X	X	X
5862	0	Red	None	Aftertreatment 1 SCR Intermediate Gas Temperature Data Valid But Above Normal Operational Range - Most Severe Level	4524	Aftertreatment 1 SCR Intermediate Gas Temperature - Data valid but above normal operational range - Most Severe Level	X	X		
5862	2	Amber	Solid	Aftertreatment 1 SCR Intermediate Gas Temperature Data Erratic, Intermittent Or Incorrect	4521	Aftertreatment 1 SCR Intermediate Gas Temperature Sensor - Data erratic, intermittent or incorrect	X	X		
5862	3	Amber	Solid	Aftertreatment 1 SCR Intermediate Gas Temperature Voltage Above Normal, Or Shorted To High Source	4518	Aftertreatment 1 SCR Intermediate Gas Temperature Sensor Circuit - Voltage above normal, or shorted to high source	X	X		
5862	4	Amber	Solid	Aftertreatment 1 SCR Intermediate Gas Temperature Voltage Below Normal, Or Shorted To Low Source	4519	Aftertreatment 1 SCR Intermediate Gas Temperature Sensor Circuit - Voltage below normal, or shorted to low source	X	X		
5862	16	Red	None	Aftertreatment 1 SCR Intermediate Gas Temperature Data Valid But Above Normal Operating Range - Moderately Severe Level	4525	Aftertreatment 1 SCR Intermediate Gas Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level	X	X		
520325	31	Amber	Solid	Manufacturer Assignable SPN Condition Exists	2718	Brake and Throttle Conflict - Condition Exists	X	X	X	X
520595	3	Amber	Solid	Manufacturer Assignable SPN Voltage Above Normal, Or Shorted To High Source	4286	Closed Crankcase Ventilation System Pressure Sensor - Voltage Above Normal, or Shorted to High Source				X
520595	4	Amber	Solid	Manufacturer Assignable SPN Voltage Below Normal, Or Shorted To Low Source	4287	Closed Crankcase Ventilation System Pressure Sensor - Voltage below normal, or shorted to low source				X

SA 0 SAE Diagnostic Trouble Codes and Cummins Fault Codes

SAE J1939 SPN	SAE J1939 FMI	Lamp Color	MIL Lamp Status	J1939 SPN/FMI Description	Fault Code	Cummins Description	2013 ISX15	2013 ISX12	2013 ISL9	2013 ISB6.7
520668	31	Amber	Solid	Manufacturer Assignable SPN Condition Exists	4452	Aftertreatment 1 Outlet NOx Sensor Closed Loop Operation - Condition Exists	X	X	X	X
520669	31	Amber	Solid	Manufacturer Assignable SPN Condition Exists	4453	Aftertreatment 1 Outlet NH3 Sensor Closed Loop Operation - Condition Exists	X	X	X	X
520680	11	Amber	None	Accelerator Brake Override – Condition Exists.	4527	Accelerator Brake Override – Condition Exists.	X	X	X	X
520701	31	Amber	Solid	Manufacturer Assignable SPN Condition Exists	4612	Air Handling Feedback Control - Condition Exists	X	X	X	X