

Cummins ISM CM875 (2003-2006)

PID	SPN	FMI	Description
SID 254	629	12	ECM Critical Internal Failure - Bad Intelligent Device or Component. Error internal to the ECM related to memory hardware failures or internal ECM voltage supply circuits.
102	102	3	Intake Manifold Pressure Sensor Circuit - Voltage Above Normal or Shorted to High Source. High signal voltage detected at the intake manifold pressure circuit.
102	102	4	Inake Manifold Pressure Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at the intake manifold pressure circuit.
91	91	3	Accelerator Pedal or Lever Position Sensor Circuit - Voltage Above Normal, or Shorted to High Source. High voltage detected at accelerator pedal or lever position circuit.
91	91	4	Accelerator Pedal or Lever Position Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low voltage detected at accelerator pedal position signal circuit.
29	974	3	Remote Accelerator Pedal or Lever Position Sensor Circuit - Voltage Above Normal, or Shorted to High Source. High signal voltage detected at remote accelerator position signal circuit.
29	974	4	Remote Accelerator Pedal or Lever Position Sensor Circuit - Voltage Below Normal, or Shorted to Low Source. Low signal voltage detected at remote accelerator pedal or lever position signal circuit.
100	100	3	Oil Pressure Sensor Circuit - Voltage Above Normal, or Shorted to High Source. High signal voltage detected at the engine oil pressure circuit.
100	100	4	Oil Pressure Sensor Circuit - Voltage Below Normal, or Shorted to Low Source. Low signal voltage detected at the engine oil pressure circuit.
100	100	1	Engine Oil Pressure Low - Data Valid but Below Normal Operational Range - Moderately Severe Level. Engine oil pressure signal indicates engine oil pressure is below the engine protection warning limit.
110	110	3	Coolant Temperature Sensor Circuit - Voltage Above Normal or Shorted to High Source. High signal voltage detected at engine coolant temperature circuit.

100	110	4	Engine Coolant Temperature Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at engine coolant temperature circuit.
110	110	0	Engine Coolant Temperature High -Data Valid but Above Normal Operational Range - Most Severe Level . Engine coolant temperature signal indicates engine coolant temperature above engine protection critical limit.
105	105	3	Intake Manifold Air Temperature Sensor Circuit - Voltage Above Normal or Shorted to High Source. High signal voltage detected at intake manifold air temperature circuit.
105	105	4	Intake Manifold Air Temperature Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at intake manifold air temperature circuit.
105	105	0	Intake Manifold Air Temperature High - Data Valid but Above Normal Operational Range - Most Severe Level. Intake manifold air temperature signal indicates intake manifold air temperature above engine protection critical limit.
SID 232	108 0	4	Sensor Supply Voltage Number 2 Circuit - Voltage Below Normal, or Shorted to Low Source. Low voltage detected at the sensor supply number 2 circuit.
111	111	3	Coolant Level Sensor Circuit - Voltage Above Normal or Shorted to High Source. High signal voltage detected at engine coolant level circuit.
111	111	3	Coolant Level Sensor 1 Circuit - Voltage Above Normal or Shorted to High Source. High signal voltage detected at engine coolant level circuit.
111	111	4	Engine Coolant Level Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at the engine coolant level circuit.
111	111	4	Engine Coolant Level Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at the engine coolant level circuit.
111	111	1	Engine Coolant Level Low - Data Valid but Below Normal Operational Range - Moderately Severe Level. Low engine coolant level detected.
175	175	3	Engine Oil Temperature Sensor Circuit - Voltage Above Normal, or Shorted to High Source. High signal voltage detected at engine oil temperature circuit.
175	175	4	Oil Temperature Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at engine oil temperature circuit.
175	175	0	Engine Oil Temperature High - Data Valid but Above Normal Operational Range - Most Severe Level. Engine oil temperature signal indicates engine oil temperature above engine protection critical limit.

17	1380	1	Engine Oil Level Number 2 (Remote) Low - maintenance. Low oil level detected in the Centinel™ makeup oil tank.
108	108	3	Barometric Pressure Sensor Circuit - Voltage Above Normal, or Shorted to High Source. High signal voltage detected at barometric pressure circuit.
108	108	4	Barometric Pressure Sensor Circuit - Voltage Below Normal, or Shorted to Low Source. Low signal voltage detected at barometric pressure circuit.
SID 85	1265	4	Oil Burn Valve Solenoid Circuit - Voltage Below Normal, or Shorted to Low Source. Low signal voltage detected at Centinel™ oil control valve circuit.
SID 85	1265	3	Oil Burn Valve Solenoid Circuit - Voltage Above Normal, or Shorted to High Source. Open circuit or high signal voltage detected at Centinel™ oil control valve circuit.
SID 232	620	3	Sensor Supply Voltage Number 2 Circuit - Voltage Above Normal, or Shorted to High Source. High voltage detected at sensor supply number 2 circuit.
190	190	0	Engine Speed High - Data Valid but Above Normal Operational Range - Most Severe Level. Engine speed signal indicates engine speed above engine protection limit.
111	111	1	Coolant Level Low - Data Valid but Below Normal Operational Range - Most Severe Level. Low engine coolant level detected.
84	84	2	Vehicle Speed Sensor Circuit - Data Erratic, Intermittent or Incorrect. The ECM lost the vehicle speed signal.
84	84	10	Vehicle Speed Sensor Circuit Tampering Has Been Detected - Abnormal Rate of Change. Invalid or inappropriate vehicle speed signal. Signal indicates an intermittent connection or VSS tampering.
SID 33	647	41733	Fan Control Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at the fan control circuit when commanded on.
171	171	3	Ambient Air Temperature Sensor Circuit - Voltage Above Normal, or Shorted to High Source. High signal voltage detected at ambient air temperature circuit.
SID 17	632	4	Engine Fuel Shutoff Valve Circuit - Voltage Below Normal, or Shorted to Low Source. Low voltage detected at fuel shutoff valve circuit.
SID 17	632	3	Engine Fuel Shutoff Valve Circuit - Voltage Above Normal, or Shorted to High Source. Open circuit or short to voltage source detected at fuel shutoff valve circuit.
171	171	4	Ambient Air Temperature Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low voltage detected at ambient air temperature circuit.

SID 17	632	7	Ambient Air Temperature Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low voltage detected at ambient air temperature circuit.
SID 231	639	9	SAE J1939 Multiplexing PGN Timeout Error - Abnormal Update Rate. The Cummins® ECM did not receive a multiplexed message from an OEM VECU within the time limit or did not receive it at all.
SID 231	639	13	SAE J1939 Multiplexing Configuration Error - Out of Calibration. The ECM expected information from a multiplexed device but only received a portion of the necessary information.
91	91	19	SAE J1939 Multiplexing Accelerator Pedal or Lever Sensor System Error - Received Network Data Error. The OEM vehicle electronic control unit (VECU) detected a fault with its accelerator pedal.
29	974	19	SAE J1939 Multiplexing Remote Accelerator Pedal or Lever Data Error - Received Network Data Error. The OEM vehicle electronic control unit (VECU) detected a fault with the remote accelerator.
108	108	2	Barometric Air Pressure Sensor Circuit - Data Erratic, Intermittent, or Incorrect. An error in the barometric pressure sensor signal was detected by the ECM.
SID 01	651	6	Injector Solenoid Cylinder Number 1 Circuit - Current Above Normal, or Grounded Circuit. Current detected at injector Number 1 when voltage is turned off.
SID 05	655	6	Injector Solenoid Cylinder Number 5 Circuit - Current Above Normal, or Grounded Circuit. Current detected at injector Number 5 when the voltage is turned off.
SID 03	653	6	Injector Solenoid Cylinder Number 3 Circuit - Current Above Normal, or Grounded Circuit. Current detected at the injector Number 3 circuit when voltage is turned off.
SID 06	656	6	Injector Solenoid Cylinder Number 6 Circuit - Current Above Normal, or Grounded Circuit. Current detected at the injector Number 6 circuit when voltage is turned off.
SID 02	652	6	Injector Solenoid Cylinder Number 2 Circuit - Current Above Normal, or Grounded Circuit. Current detected at injector Number 2 circuit when voltage is turned off.
SID 04	654	6	Injector Solenoid Cylinder Number 4 Circuit - Current Above Normal, or Grounded Circuit. Current detected at injector Number 4 circuit when voltage is turned off.
SID 06	656	5	Injector Solenoid Driver Cylinder 1 Circuit - Current Below Normal, or Open Circuit. Current detected at injector number 1 when voltage is turned off.

SID 06	656	5	Injector Solenoid Driver Cylinder 5 Circuit - Current Below Normal, or Open Circuit. Current detected at injector number 5 when voltage is turned off.
SID 06	656	5	Injector Solenoid Driver Cylinder 3 Circuit - Current Below Normal, or Open Circuit. Current detected at injector number 3 when voltage is turned off.
SID 06	656	5	Injector Solenoid Driver Cylinder 6 Circuit - Current Below Normal or Open Circuit. Current detected at injector number 6 when voltage is turned off.
SID 06	656	5	Injector Solenoid Driver Cylinder 2 Circuit - Current Below Normal, or Open Circuit. Current detected at injector number 2 when voltage is turned off.
SID 06	656	5	Injector Solenoid Driver Cylinder 4 Circuit - Current Below Normal, or Open Circuit. Current detected at injector number 4 when voltage is turned off.
SID 87	126 7	3	Idle Shutdown Vehicle Accessories Relay Circuit - shorted high. Open circuit or short to voltage source detected at the idle shutdown vehicle accessory/ignition bus relay circuit.
SID 87	126 7	4	Idle Shutdown Vehicle Accessories Relay Driver Circuit - shorted low. Low voltage detected at the idle shutdown vehicle accessory/ignition bus relay circuit when commanded on.
SID 253	630	2	Electronic Control Module (ECM) - data lost.
SID 254	629	12	Electronic Control Module Warning Internal Hardware Failure - Bad Intelligent Device or Component. Internal ECM error.
SID 232	107 9	4	Sensor Supply Voltage Number 1 Circuit - Voltage Below Normal or Shorted to Low Source. Low voltage detected at sensor supply number 1 circuit.
SID 232	107 9	3	Sensor Supply Voltage Number 1 Circuit - Voltage Above Normal or Shorted to High Source. High voltage detected at sensor supply number 1 circuit.
SID 221	104 3	3	Accelerator Pedal or Lever Position Sensor Supply Voltage Circuit - Voltage Above Normal or Shorted to High Source. High voltage detected at sensor supply circuit for the accelerator pedal position sensor.
100	100	1	Oil Pressure Low - Data Valid but Below Normal Operational Range - Most Severe Level. Engine oil pressure signal indicates engine oil pressure below the engine protection critical limit.
97	97	0	Water-In-Fuel Indicator High - Data Valid But Above Normal Operating Range - Least Severe Level. Water has been detected in the fuel filter.
97	97	3	Water-in-Fuel Sensor Circuit - Voltage Above Normal or Shorted to High Source. High voltage detected at the water-in-fuel circuit.

97	97	4	Water-in-Fuel Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low voltage detected at the water-in-fuel circuit.
SID 230	558	2	Accelerator Pedal Idle Validation Circuit - data incorrect. Voltage detected simultaneously on both idle validation and off-idle validation switches.
SID 230	558	2	Accelerator Pedal Idle Validation Circuit - data incorrect. Voltage detected simultaneously on both idle validation and off-idle validation switches.
SID 230	558	2	Accelerator Pedal Idle Validation Circuit - data incorrect. Voltage detected simultaneously on both idle validation and off-idle validation switches.
SID 230	558	13	Accelerator Pedal Idle Validation Circuit - out of calibration. Voltage at idle validation on-idle and off-idle circuit does not match accelerator pedal position.
102	102	2	Intake Manifold Pressure Sensor Circuit - Data Erratic, Intermittent, or Incorrect. Voltage signal at intake manifold pressure circuit indicates high intake manifold pressure but other engine characteristics indicate intake manifold pressure must be low.
SID 251	627	2	Power Lost without Ignition Off - Data Erratic, Intermittent, or Incorrect. Supply voltage to the ECM fell below 6.2-VDC momentarily, or the ECM was not allowed to power down correctly (retain battery voltage for 30 seconds after key OFF).
100	100	2	Oil Pressure Sensor circuit - Data Erratic, Intermittent, or Incorrect. An error in the engine oil pressure sensor signal was detected by the ECM.
SID 221	104 3	4	Accelerator Pedal or Lever Position Sensor Supply Voltage Circuit - Voltage Below Normal or Shorted to Low Source. Low voltage detected at sensor supply circuit to the accelerator pedal position sensor.
SID 230	558	4	Accelerator Pedal or Lever Idle Validation Circuit - Voltage Below Normal or Shorted to Low Source. No voltage detected simultaneously on both the idle validation and off-idle and on-idle switches.
SID 230	558	4	Accelerator Pedal or Lever Idle Validation Circuit - Voltage Below Normal or Shorted to Low Source. No voltage detected simultaneously on both the idle validation off-idle and on-idle circuits.
SID 230	558	4	Accelerator Pedal or Lever Idle Validation Circuit - Voltage Below Normal or Shorted to Low Source. No voltage detected simultaneously on both the idle validation off-idle and on-idle circuits.
SID 39	677	3	Starter Relay Circuit - Voltage Above Normal or Shorted to High Source. Open circuit or high voltage detected at starter lockout circuit.

SID 39	677	4	Starter Relay Circuit - Voltage Below Normal or Shorted to Low Source. Low voltage detected at starter lockout circuit.
103	103	0	Turbocharger Number 1 Speed High - Data Valid but Above Normal Operational Range - Moderately Severe Level. High turbocharger speed has been detected.
167	167	0	Electrical Charging System Voltage High - Data Valid But Above Normal Operating Range - Moderately Severe Level. High battery voltage detected by the battery voltage monitor feature.
167	167	1	Electrical Charging System Voltage Low - Data Valid But Below Normal Operating Range - Moderately Severe Level. Low battery voltage detected by the battery voltage monitor feature.
167	167	1	Electrical Charging System Voltage Low - Data Valid But Below Normal Operating Range - Most Severe Level. Very low battery voltage detected by the battery voltage monitor feature.
SID 153	137 8	11	Change Lubricating Oil and Filter - Condition Exists. Change engine oil and filter.
103	103	1	Turbocharger Number 1 Speed Low - Data Valid but Below Normal Operational Range - Moderately Severe Level. Low turbocharger speed detected by the electronic control module (ECM).
190	190	2	Primary Engine Speed Sensor Error - Data Erratic, Intermittent, or Incorrect. Loss of signal from camshaft engine position sensor Number 1.
	117 2	3	Turbocharger Number 1 Compressor Inlet Temperature Sensor Circuit - Voltage Above Normal or Shorted to High Source. High signal voltage detected at the turbocharger compressor inlet air temperature circuit.
	117 2	4	Turbocharger Number 1 Compressor Inlet Temperature Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at the turbocharger compressor inlet air temperature sensor circuit.
SID 64	723	2	Engine Speed Sensor (Camshaft) Error - Data Erratic, Intermittent, or Incorrect. Loss of signal from camshaft engine position sensor number 2 (backup).
	159 0	2	Loss of communication with adaptive cruise control.
166	166	2	Cylinder Power Imbalance Between Cylinders. A power imbalance between cylinders was detected by the electronic control module (ECM).
110	110	0	Engine Coolant Temperature - Data Valid but Above Normal Operating Range - Moderately Severe Level. Engine coolant temperature signal

			indicates engine coolant temperature above engine protection warning limit.
SID 152	611	11	Hall effect speed sensors connected incorrectly - condition exists. Engine position sensor number 1 and engine position sensor number 2 connectors swapped.
27	27	2	EGR valve position sensor circuit - data erratic, intermittent, or incorrect.
	355 5	1	Low ambient air density has been calculated by the electronic control module.
441	411	11	(OEM Temperature Sensor) Engine Protection Warning - Root Cause Not Known
27	27	3	Exhaust Gas Recirculation Valve Position Sensor Circuit - Voltage Above Normal or Shorted to High Source. High signal voltage detected at EGR valve position sensor circuit.
27	27	4	EGR Valve Position Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at EGR valve position sensor circuit.
411	411	3	Exhaust Gas Recirculation Valve Delta Pressure Sensor Circuit - Voltage Above Normal or Shorted to High Source
411	411	4	Exhaust Gas Recirculation Valve Delta Pressure Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at EGR differential pressure sensor circuit.
	278 9	0	Turbocharger Turbine Inlet Temperature (Calculated) - Data Above Normal Operational Range - Least Severe Level.
	279 0	0	Turbocharger Compressor Outlet Temperature (Calculated) - Data Valid but Above Normal Range - Least Severe Level
27	27	13	EGR Valve Position Failed Automatic Calibration Procedure - Out of Calibration
SID 146	279 1	3	EGR Valve Control Circuit - Current Below Normal or Open Circuit. High voltage or open circuit detected at the EGR valve motor circuit.
SID 146	279 1	4	EGR Valve Control Circuit - Voltage Below Normal or Shorted to Low Source. Low voltage detected at the EGR valve motor circuit.
SID 146	279 1	3	EGR Valve Control Circuit - Voltage Above Normal or Shorted to High Source. High voltage detected at the EGR valve motor circuit.
SID 146	279 1	6	Exhaust Gas Recirculation (EGR) Valve Control Circuit - Current Above Normal, or Grounded Circuit. Excessive current detected at the EGR valve motor circuit.

SID 146	279 1	7	EGR Valve Control - Mechanical System Not Responding Properly or Out of Adjustment. EGR valve not responding or slow to respond.
411	411	0	EGR Differential Pressure Sensor - Data Valid but Above Normal Operating Range - Moderately Severe Level. EGR differential pressure sensor failed automatic calibration procedure or EGR differential pressure reading not valid for engine operating conditions.
SID 28	107 2	4	Engine Brake Actuator Circuit Number 1 Voltage Below Normal, or Shorted to Low Source. Low voltage detected at the engine brake solenoid number 1 signal circuit.
SID 29	107 3	4	Engine Brake Actuator Circuit Number 2 Voltage Below Normal, or Shorted to Low Source. Low voltage detected at the engine brake solenoid number 2 signal circuit.
SID 28	107 2	3	Engine Brake Actuator Circuit Number 1 Voltage Above Normal, or Shorted to High Source. Open circuit or high voltage detected at the engine brake solenoid number 1 signal circuit.
SID 29	107 3	3	Engine Brake Actuator Circuit Number 2 Voltage Above Normal, or Shorted to High Source. Open circuit or high voltage detected at the engine brake solenoid number 2 signal circuit.
95	120 9	3	Exhaust Gas Recirculation Valve Delta Pressure Sensor Circuit - Voltage Above Normal or Shorted to High Source. High signal voltage detected at exhaust gas pressure circuit.
95	120 9	4	Exhaust Pressure Sensor Circuit - Voltage Below Normal, or Shorted to Low Source. Low signal voltage detected at exhaust pressure circuit.
412	412	3	EGR Temperature Sensor Circuit - Voltage Above Normal, or shorted to High Source. High signal voltage detected at EGR temperature circuit.
412	412	4	Exhaust Gas Recirculation Temperature Sensor Circuit - Voltage Below Normal or Shorted to Low Source. Low signal voltage detected at EGR temperature sensor circuit.
SID 33	647	3	Fan Control Circuit - Voltage Above Normal or Shorted to High Source. Open circuit or high voltage detected at the fan control circuit.
SID 27	641	4	VGT Actuator - Voltage Below Normal or Shorted to Low Source. Low voltage detected at turbocharger control valve circuit.
SID 27	641	3	Variable Geometry Turbocharger Actuator Driver Circuit - Voltage Above Normal or Shorted to High Source. Open circuit or high voltage detected at turbocharger control valve circuit.

95	120 9	2	Exhaust Pressure Sensor Circuit - Data Erratic, Intermittent, or Incorrect. An error in the exhaust gas pressure sensor signal was detected by the ECM.
412	412	0	EGR Temperature - Data Valid but Above Normal Operating Range - Least Severe Level.
412	412	0	EGR Temperature - Data Valid But Above Normal Operating Range - Moderately Severe Level.
110	110	0	Engine Coolant Temperature High - Data Valid but Above Normal Operational Range - Least Severe Level. Engine coolant temperature signal indicates engine coolant temperature above engine protection warning limit.
105	105	0	Intake Manifold Temperature High - Data Valid but Above Normal Operational Range - Least Severe Level. Intake manifold air temperature signal indicates intake manifold air temperature above engine protection warning limit.
102	102	2	Intake Manifold Pressure Sensor Circuit - data erratic, intermittent, or incorrect. The ECM has detected an intake manifold pressure signal that is too high or low for current engine operating condition.
SID 146	279 1	0	EGR Valve Actuator Over Temperature (Calculated) - Data Above Normal Range - least severe level.