

INSITE 8.7.0 Features Notes

The latest INSITE information can be found on the website:

<https://www.cummins.com/support/digital-products-and-services-support>

For technical support, please either call 1-800-CUMMINS or send an email to

servicetoolsupport@cummins.com.

To locate the nearest distributor, visit this website:

<https://locator.cummins.com>

Table of Contents

1. General Information	2
1.1 Upgrade Capability	2
2. New Base Features	2
2.1 Calibration Security	2
3. New Diagnostic Tests	2
3.1 Aftertreatment Diesel Exhaust Fluid Doser Accuracy Test	2
4. New Advanced ECM Data	2
4.1 Engine Protection Main Bearing Temperature	2
4.2 Engine Protection Intake Manifold Temperature	2
4.3 Engine Protection ECM Internal Temperature	2
4.4 Engine Protection High Temperature Coolant Level Low	3
5. New Features and Parameters	3
5.1 Door Open Switch Multiplexing	3
5.2 Brake Vacuum Low Warning Signal (not in J1939 Mux)	3
5.3 Aftertreatment Diesel Exhaust Fluid Doser Air Pressure Sensor Rationality	3
5.4 Aftertreatment Diesel Exhaust Fluid Doser Pressure Sensor Rationality	3
5.5 OEM Load Based Control	3
5.6 DCDC Low Voltage Output	3
5.7 Hybrid System Protection Override Switch Multiplexing	3
5.8 Momentary Start Switch Multiplexing	3
5.9 Oil Quality Sensor	3
6. New Product Support	4

1. General Information

1.1 Upgrade Capability

Upgrade from INSITE 8.6.x

2. New Base Features

2.1 Calibration Security

In December 2020, new calibrations will be released using current industry standard encryption. This will require use of INSITE 8.7.0 or greater when using these calibrations downloaded from Quickserve Online (QSOL) or using the ECM Code Search feature within INSITE.

3. New Diagnostic Tests

NOTE: These will only display if supported and enabled in the calibration

3.1 Aftertreatment Diesel Exhaust Fluid Doser Accuracy Test

Performs a check of the complete dosing system by commanding the doser to dose at a fixed rate for a fixed amount of time.

4. New Advanced ECM Data

NOTE: These will only display if supported and enabled in the calibration

4.1 Engine Protection Main Bearing Temperature

Provides the ability to derate torque or speed (RPM) to prevent damage when the temperature of any of the main bearings surge above its threshold. A record of the last five speed and/or torque derate events and information about the configuration of the derates and shutdowns is maintained.

4.2 Engine Protection Intake Manifold Temperature

Provides the ability to derate speed or torque and shutdown the engine to prevent damage when an extreme condition is detected. A record of the last five speed and/or torque derate events and information about the configuration of the derates and shutdowns is maintained.

4.3 Engine Protection ECM Internal Temperature

Provides capability to initiate time-based torque derates and time-based torque shutdowns when internal temperature of ECM goes above its threshold. A record of the last five speed and/or torque derate events and information about the configuration of the derates and shutdowns is maintained.

4.4 Engine Protection High Temperature Coolant Level Low

Provides ability to derate torque and shutdown the engine to prevent damage. A record of the last five speed and/or torque derate events and information about the configuration of the derates and shutdowns is maintained.

5. New Features and Parameters

NOTE: These will only display if supported and enabled in the calibration

5.1 Door Open Switch Multiplexing

Allows configuration to use switch input and set source address via the datalink instead of a physical ECM input.

5.2 Brake Vacuum Low Warning Signal

Allows configuration to use switch input and set source address via the datalink instead of a physical ECM input.

5.3 Aftertreatment Diesel Exhaust Fluid Doser Air Pressure Sensor Rationality

Provides the ability to monitor the pressure rationality of air pressure sensor in DEF dosing system.

5.4 Aftertreatment Diesel Exhaust Fluid Doser Pressure Sensor Rationality

Provides the ability to monitor the pressure rationality of DEF pressure sensor in DEF dosing system.

5.5 OEM Load Based Control

Allows configuration of either a single speed breakpoint setup or a dual speed breakpoints setup which is designed to keep the engine from operating in regions that are not beneficial to engine performance.

5.6 DCDC Low Voltage Output

Provides the ability for the system to accurately compensate various low voltage outputs.

5.7 Hybrid System Protection Override Switch Multiplexing

Allows configuration to use switch input and set source address via the datalink instead of a physical ECM input.

5.8 Momentary Start Switch Multiplexing

Allows configuration to use switch input and set source address via the datalink instead of a physical ECM input.

5.9 Oil Quality Sensor

Provides several monitors for data provided by the oil quality sensor.

6. New Product Support

B3.9 CM2620 B171C

B6.7 CM2670 EUVI

F4.0 CM2620 NSVI

QSB6.7 CM2450 KT4

QSL8.9 CM2450 KT4

QSZ14 CM2670 CSIV