



INFORMATION RELEASE MEMO

Electronics

CAT® FUEL CONSUMPTION MONITORING RETROFIT KIT NOW MONITORS IDLE FUEL USED AND IDLE HOURS

The Cat® Fuel Consumption Monitoring retrofit kit available for monitoring fuel consumption on equipment now monitors idle fuel used and idle hours for more accurate asset management. This system can be retrofitted to Caterpillar and other OEMs either mechanical or electrical equipment, providing true engine fuel usage. Fuel usage data provided as better than 2% accuracy and supports integration with Cat Product Link™ through both Cat Data Link and public J1939 data links (includes PL321, PLVIMS, PL421, PL522, PL523, PL631/641, and PLE631/641 hardware). This Caterpillar designed technology utilizes a positive displacement volumeter with bi-directional capability, temperature compensation, and is compact for easy installation.

The Cat Fuel Consumption Monitoring kit can be installed on any diesel engine (12 or 24V), including 0.5 – 30 L/minute flow rate. When paired with the Product Link remote monitoring solution, total fuel, total idle fuel and idle hour values are reported off board to enable display of lifetime and daily fuel information in Product Link's user interface. Cat Electronic Technician (Cat ET) can be utilized to retrieve data through a wired connection for equipment without remote monitoring capabilities. When connected to Cat ET, the display will show total fuel consumed, supply and return (if dual flow fuel system) fuel temperatures and flow rates. A threshold can be set via CAT ET's configuration screen, to accurately monitor the idle versus working mode of operation.

Where an engine ECM is not present, the system can be directly connected into the main data link (Cat Data Link or public J1939) for accurate display through Product Link or Cat ET wired download. Integration of fuel data provided by the kit when installed on an asset with an engine ECM is supported through Product Link firmware.

The Fuel Consumption Monitoring System

The retrofit kit part numbers for the Fuel Consumption Monitoring system are listed below,

Fuel Type System	Kit Part Number
Dual Flow (Supply and Return)	442-2377
Single Flow (Supply only)	458-8325

The Fuel Consumption Monitoring kit includes an ECM with J1939 and Cat Data Link for data communication, two robust flow transducers (installed on supply side and return side of engine), a complete harness, and ECM mounting hardware.

How to Update Systems Previously Installed

Updating a system that is currently installed in the field requires ET connection. Once connected with ET, you will need to select the Configuration Parameter icon. Within this section, select the Engine Idle Fuel Rate Threshold. The Flash File in SIS is 4591819-00 will be required to update your system.

Required Fittings

Due to the large range of engines that this system may be used on, there is no universal fitting available. The inlet and outlet of each flow transducer is a #12 STOR, female thread. This will need to be adapted to the correct size fuel line tubing required for each engine. It is likely that the supply and return fuel lines will be of different sizes, thus the installer should predetermine the fittings needed for each installation.

Ordering Information

Retrofit field installation kits for the Fuel Consumption Monitoring system are available via dealer direct ship to Cat dealers.

Orders should be placed through Caterpillar Parts Distribution System using the ANTARESSM Parts Ordering or DBS/DBSi systems.

Dealer Direct Ship (DDS) - The system will show no on hand inventory for DDS, rather the dealer will place the order and receive an Order Acknowledgement of the Estimated Ship Date (ESD) and a "sourced from". To inquire on DDS orders, call the DDS hotline 1-800-566-7782, Option 4.

Required documents:

REHS8848 Special Instructions- Fuel Consumption Monitoring System

Contact Information:

Global Dealer Solutions Network
Parts Technical Support Team
Toll Free - North America: 1-877-228-2420
International: +1-309-266-4421
Electronic Requests:
Send via Microsoft Customer Relationship Management (MSCRM)
For access and tutorial information: <https://gdsn.cat.com/mscrm>

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