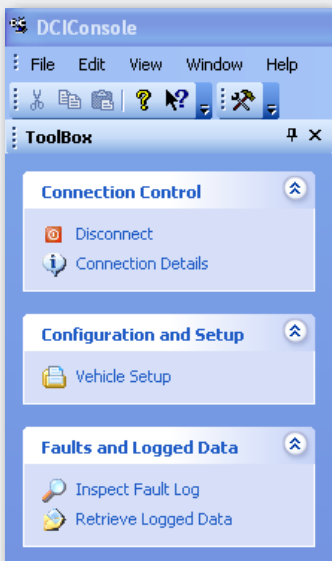
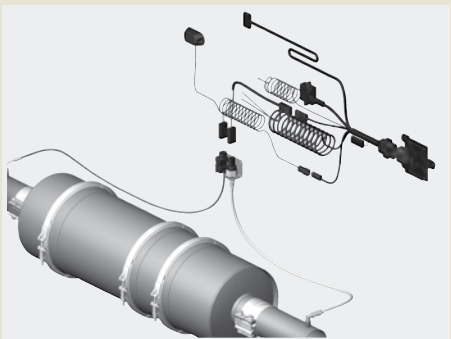




RETROFIT EMISSIONS IN-CAB EMISSIONS DEVICE MONITOR









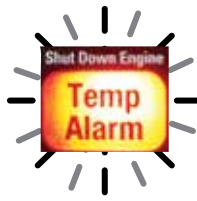

The Donaldson Emissions Device Monitor (EDM) is an integral part of our filter-based diesel emission control systems (DECS). The EDM continuously records and monitors exhaust system temperature and backpressure. The EDM sends alerts to the vehicle operator via the In-Cab Display when abnormal or undesirable conditions are detected or when routine filter maintenance is required. The recorded information aids in troubleshooting and analyzing vehicle operating trends.

The EDM offers the following upgrades over the previous Filter Service Monitor:

- Date & time functionality on some versions
- Dual temperature sensing on some versions
- "Freeze Frame" Fault tracking (included in versions with new software)
- 4 ft temperature sensor extension harness
- 50 ft dual temp sensor extension harness (for use on dual temp systems)
- "Real Time" display of back pressure & temperature
- Sensor rationality functionality

EDM Light Descriptions & Required Actions

Ignoring lights may result in damage to your filter and may void your warranty.

Description	Light Actions	Required Operator Actions & Instructions
<p>Self-Test @ Start-up</p> 	<p>All Lights will illuminate solid for 3 Seconds</p>	<p>A self-test is performed by the system at key-up – all lights will illuminate solid for three seconds. On older systems all lights will flash on key-up.</p> <p>When completed, the operators display will indicate any fault conditions detected or activated prior to engine shutdown.</p>
<p>Service Soon</p>  <p>8 Hours</p> 	<p>Steady Yellow</p>	<p>The emissions device requires service within 8 hours of activation. This light activates when the exhaust system backpressure exceeds the initial preset limit. The filter and/or engine require servicing to prevent filter damage or degraded engine performance.</p> <p>This light will turn off automatically upon next key-up. On older systems the light will only illuminate while back pressure exceeds the preset limit.</p>
<p>Service Now</p>  <p>2 Hours</p> 	<p>Steady Red</p>	<p>The emissions device requires service within 2 hours of activation. This light activates when the exhaust system backpressure exceeds the final limit. The filter and/or engine require servicing to prevent filter and/or engine damage.</p> <p>Reset the Service Now light after filter service. This light must be turned off using a computer Link-Up Cable or Diagnostic Reset Tool by vehicle maintenance personnel.</p>
<p>Temp Alarm</p>  <p>CAUTION!</p> 	<p>Flashing</p>	<p>Safely shut down engine immediately.</p> <p>This light activates when the exhaust temperatures exceeds the preset limit. The filter may be damaged due to an engine failure or uncontrolled filter regeneration. The filter and/or engine require service to resolve the issue. The filter is likely damaged and may need to be replaced.</p> <p>Reset Temp Alarm light after filter service. This light must be turned off using a computer Link-Up Cable or Diagnostic Reset Tool by vehicle maintenance personnel after servicing the filter and engine.</p>
<p>Electrical Problem</p> 	<p>Alternate Flashing</p>	<p>Alternate flashing of the Service Soon and Service Now lights indicate a problem with the wiring and/or connections. To diagnose, use the Diagnostic Reset Tool to retrieve specific fault codes for troubleshooting, use the Link-Up Cable to connect the EDM to a laptop.</p>

EDM Training

Your local Retrofit Emissions Dealer will provide training on your new retrofit emissions device and EDM. They will review the complete package of materials that ship with the product; installation, operation, and maintenance manuals; your warranty; and the EDM quick reference guide for operators.

Pocket Reference for Operators

Our trifold pocket reference (F111244) ships in the documentation package with all filter-based retrofit emissions devices. For your free pocket reference, contact your certified Donaldson Retrofit Emissions Dealer.

Only applies to latest EDM systems.



Diagnostics for Service Technicians

Donaldson offers two different diagnostic tools to that allow a technician to identify the fault conditions detected by the EDM.

- 1) The Diagnostic Reset Tool (DRT) offers a low-cost approach to identifying the fault conditions. This push-button tool allows the technician to clear red lights that may be activated. It also identifies a two-digit code that corresponds to the fault condition that caused the lights to be activated. Service is required by a technician to resolve the issues identified.
- 2) The Software/Link-up Cable offers a more complete approach to identifying the fault conditions. This approach requires a link-up cable and laptop with the Donaldson software loaded on it to interrogate the memory of the EDM. Typically the technician would download the data stored in memory, including time-stamped backpressure, temperature and recorded faults. This information is then used to assess historical trends and fault codes stored within the EDM memory, and helps guide the technician toward understanding the issue.

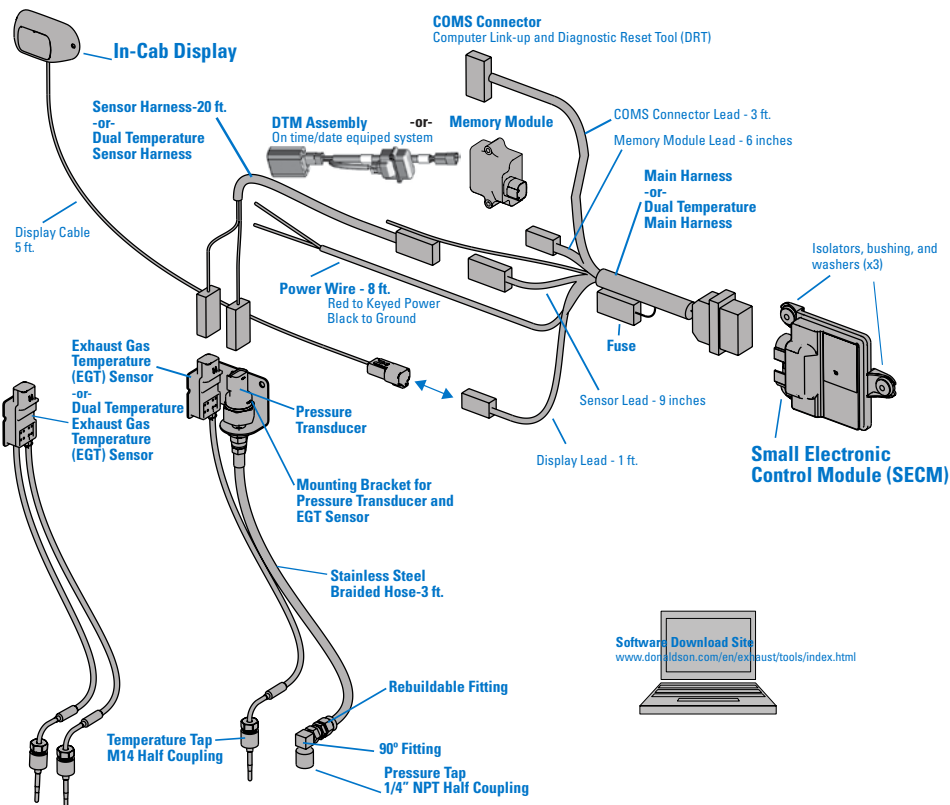
Neither approach will tell the technician exactly what the issue is, but Donaldson expects our certified Emissions Dealers would perform the work of troubleshooting EDM fault conditions.

For Fleets that are self-sufficient in the operation and maintenance of their retrofit devices, they may prefer to purchase the diagnostic tools to conduct their own service and analysis. This may provide them a quicker response and more flexibility than waiting for a dealer to become available for the service.



The EDM owner's manual includes: Pre-Installation tips, Installation instructions, In-Cab Display Alerts and Actions, Software & Service Tool, Diagnostic Tool Uses, Fault Explanation Table, Sensor Troubleshooting and even more.

EDM System



Optional Parts (sold separately)

50 ft. Sensor Harness
(ideal for rear engine vehicles)
Part No. P231739

50 ft. Dual Temp Sensor Harness
(ideal for "dual temp" rear engine vehicles)
Part No. P236776

24-12V DC Converter
Part No. P232038

50 ft. Display Extension Harness
(ideal when SECM is mounted in rear of vehicle)
Part No. P236736

4 ft. Temp Sensor Extension Harness
(ideal when the temperature sensor needs to be mounted more than 4 ft from pressure sensor)
Part No. P236497



Technician Service Tools (sold separately)

Diagnostic Reset Tool (DRT)
Part No. P231740



Service Tool Link-up Cable
Part No. X007999



Diagnostic Reset Tool & Link-up Cable
Part No. X009649



Frequently Asked Questions

What should I do if lights are activated on the In-Cab Display?	Follow the instructions provided on this sheet, the pocket guide and/or the Installation manual. Failure to follow the instructions may result in filter damage, engine performance degradation and/or void the warranty for your emissions device.
Who do I contact if my lights go on?	Operators – notify your Fleet Manager as indicated on the pocket guide. Fleet Managers – work with your local Certified Emissions Dealer to clean the filter and/or resolve engine/duty cycle issues.
Who do I contact if the service soon or service now lights are steady after power-up?	Contact your Fleet Maintenance Manager immediately for instructions. There's an operating window of 2-8 hours before you will have to shut down the vehicle. Depending on your route length, your maintenance department may want to service the emissions filter BEFORE you leave.
I drive a bus, what do I need to do if the Temp Alarm light comes on during my route?	Safely move the bus off the road, shut down the engine and contact your maintenance department. Always follow established safety procedures.
Does the EDM require maintenance?	<ul style="list-style-type: none">• Inspect the In-Cab Display daily to ensure lights are not activated and the system is operating properly. Ensure that all lights illuminate solid for three seconds after key-up to confirm the system is operating properly.• On DTM versions the battery should be replaced on an annual basis.
Can I upgrade my software?	Yes, contact Donaldson for software.
Can I upgrade my hardware to include dual temperature or date/time functionality?	Contact Donaldson.



Donaldson Company, Inc.
Minneapolis, MN

www.donaldson.com
www.donaldson.com/emissions

Brochure No. F111276 ENG (8/13)

© 2013 Donaldson Company, Inc. All rights reserved. Printed in the U.S.A. Donaldson Company, Inc. reserves the right to change or discontinue any model or specification at any time and without notice.

North America

Sales: 866-675-2847
Email: emissionssales@donaldson.com

Technical Support: 866-817-8733
Email: emissions@donaldson.com