

**Conditions for Swapping for the Johnson Matthey, Incorporated (JM),
Continuously Regenerating Technology (CRT®) System
Relating to EO Series DE-08-008
November 19, 2015**

Component Swapping means the movement of designated parts among different vehicles/applications utilizing the same diesel emission control strategy (DECS) as defined in the *Verification Procedure, Warranty, and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines* (the verification procedure or procedure) in Section 2701, Title 13, California Code of Regulations.

Swapping only applies to the diesel particulate filter (DPF) component of the CRT® system.

No party shall advertise, sell, lease, or offer for sale or lease a used verified CRT® system.

Swapping of a JM CRT® system is permitted only under the following terms and conditions:

The owner of the DECS must have the swapping work performed by a JM authorized party that is approved by JM to swap DPFs. All parties engaged in DPF swapping must follow the requirements of the *Verification Procedure, Warranty, and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines*, Title 13, *California Code of Regulations*, Sections 2700-2711 (Procedure), the governing Executive Order series, Johnson Matthey's swapping procedures, and must maintain detailed information regarding the swapped DPF, vehicles, and systems with swapped components. Records must be provided to JM per its requirements.

JM must provide detailed written instructions in the owner's manual and installation manual to the authorized party on how to swap and install the DPF component of the CRT® system. JM must not include any prohibitions or limitations to the required warranty (Sections 2706(i) and 2707) nor can the instructions direct the owner of the DECS to conduct any activity which violates the terms of the governing Executive Order Series or any other applicable regulation. JM is responsible for ensuring parties conducting swapping have the training and/or information to:

1. Accurately keep records on the systems, DPFs, and vehicles
2. Determine the DPF is fully functional, in the verified configuration, compliant with the Procedure, and compliant with the governing Executive Order series
3. Correctly install the DPF on an appropriate engine/vehicle
4. Correctly clean and service the DPF and/or system if JM authorizes that as part of the swapping practice

Within ten days of a written request by Air Resources Board (ARB), JM must provide an exact copy of these instructions in their entirety.

The swapped DPF system is identical in all respects and part of the same DECS having the same DECS Family Name.

The swapped CRT[®] system DPF belongs to verified configurations covered under Executive Order Series DE-08-008 for the CRT[®] system. Recipient engines/vehicles must be fitted with the same DECS.

The installer must verify that the new recipient vehicle/engine meets the terms of the original verification.

CRT[®] system DPFs cannot be swapped across verification categories (e.g., a part of a verified off-road technology cannot be used in an on-road system).

The donor vehicle/engine whose component has been moved must remain in compliance with the terms and conditions of the applicable Executive Order and have all DECS components present and functional.

The swapped CRT[®] system DPF must be installed by the procedure described within the CRT[®] system installation manual.

If the installer of the swapped component of the CRT[®] system is not the same as the installer who did the original installation of the DECS, the new installer must assume the installation warranty responsibilities defined in Section 2707 for the remainder of the original warranty period or until another installer swaps the component or re-designates the system. If the original installation warranty has expired or has less than 1 year remaining, the installer must issue a new warranty to guard against potential installation defects. The new installation warranty must meet the requirements of Section 2707 except that the minimum period is reduced to 1 year from the date of installation. Any transfer of a DECS or component by an installer that does not offer this installation warranty is not considered a valid installation.

JM must ensure systems can be tracked for in-use compliance, warranty, and recall purposes. JM must ensure that accurate records of the vehicles, fleets, party responsible for swapping, and systems subject to the swapping policy are maintained. The information must allow for easy identification of the DPF and both the history of the system and DPF. This must include:

- Fleet information including name, telephone number and address of all vehicles with swapped cores
- Complete contact information for party responsible for swapping
- System serial number on the DPF or other unique identifier of the individual core being swapped
- Unique system serial number or other unique identification of the donor system the filter was removed from and recipient vehicle on which the DPF was installed
- Vehicle Identification Number (VIN) for the donor vehicle and recipient vehicle
- Date installed
- Mileage at installation

- Date of removal
- Mileage at removal
- Date of cleaning(s)
- Date re-installed
- Mileage at re-installation
- These records apply to all swapped DPFs regardless of location

**Conditions for Re-designation for the Johnson Matthey, Incorporated (JMI),
Continuously Regenerating Technology (CRT®) Diesel Particulate Filter (DPF)**

September 6, 2012

Re-designation means the removal, within the same common ownership fleet, of a complete used verified Diesel Emission Control Strategy (DECS) from an appropriate engine in a vehicle/application and installation to another appropriate engine in a vehicle/application that meets the terms and conditions of the DECS Executive Order as defined in the *Verification Procedure, Warranty, and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines* (the verification procedure or procedure) in Section 2701, Title 13, *California Code of Regulations*. Re-designation of a JMI CRT® filter system is permitted only under the following terms and conditions:

All re-designations must be performed by an authorized JMI distributor.

On behalf of the user, the authorized JMI distributor must request formal approval for the re-designation from JMI. This request is to be sent to:

Mr. Marty Lassen in care of Johnson Matthey
900 Forge Avenue, Suite 100
Audubon, Pennsylvania 19403

or by email at lassem@jmusa.com

If all the conditions for the re-designation are met, JMI may issue a written letter of approval.

This letter must include the following information:

- User contact information (Name, Company, Address, Phone, Email, etc.)
- Donor Vehicle information
 - Vehicle Identification Number (VIN)
 - Engine Family Number (EFN) and Serial Number (SN)
 - Date CRT® filter was installed
 - Mileage when installed
 - DECS Serial Number
- Vehicle to be re-designated to
 - VIN
 - EFN and SN

Re-designation may only occur within a same common ownership fleet.

The re-designated system must not be more than seven years old. Re-designation may only be done if it will meet all the requirements of the CRT® filter Executive Order. The user/installer must confirm in writing that all of the conditions of the Executive Order are met.

All components of the CRT® filter may be re-designated except for the following:

Table 1 List of exception components for re-designation

System with CRTdm G4 or earlier	
Description	Part Number
CRTdm Data Monitoring Device	JM P/N – 12464 – Includes the CRTdm and pressure sensor and CRTdm Installation Manual.
CRTdm Installation Kit	JM P/N – 12457 – Includes thermocouple, backpressure sampling tube and wiring.
CRTdm Remote Display Module (RDM)	JM P/N – 9363
CRT Installation Manual	JM P/N - 10587
System with CRTdm G5	
Description	Part Number
CRTdm Remote Display Module (RDM)	JM P/N – 9363
Exhaust back pressure sensor	JM P/N - 10106
CRTdm Installation Kit	JM P/N – 12457 – Includes thermocouple, backpressure sampling tube and wiring.
10' Backpressure Signal Wire Extension	JM P/N – 12441
¼" NPT x ¼" Tube Fitting	JM P/N - 12456
CRTdm Installation Manual	JM P/N - 12481
CRT Installation Manual	JM P/N - 10587
CRTdm Sensor Mounting Bracket Kit	JM P/N - 12463

These components allowed for re-designation must be purchased from JMI as a CRT® Filter Re-Designation Kit ((Part Number 12647 for CRTdm G4 or earlier, and Part Number 12646 for CRTdm G5).

The DECS engine label from the donor vehicle must be removed and relocated to the recipient vehicle. If it is too badly damaged, a DECS Replacement Label will be issued by JMI.

The distributor, with direction from JMI, must confirm that the CRT® filter is still able to achieve its verified emissions levels. Prior the DPF installation, a visual inspection must be performed. A post-DPF field opacity test must be conducted. The opacity reading must be 1.49 percent or lower for the filter to be considered as a good component. Readings between 1.5 and 3 percent will be assessed individually, and readings greater than 3 percent indicate a failed filter which will have to be replaced. The Distributor must report the opacity value to JMI within 1 week of the opacity test and must maintain a physical record of the opacity test for the duration of the warranty period.

The Distributor will, in the end, report to JMI that all conditions of the Executive Order were met and will provide JMI with the date of installation and the mileage when the re-designation was completed.

If all these conditions are not met, the re-designation will be considered to be illegal. JMI may not hold warranty responsibility, and the user/distributor may be liable for any and all fines that the Air Resources Board may issue for installation of a non-verified system.