



# Air Resources Board



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Mail-Out #MSO 2013-07

TO: Diesel Emission Control Strategy End Users and Other Interested Parties

SUBJECT: INSTALLATION AND MAINTENANCE OF YOUR DIESEL EMISSION CONTROL STRATEGY

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On August 23, 2012, the Air Resources Board (ARB or Board) approved amendments to 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 through 2711 (Procedure). The amendments were approved by the Office of Administrative Law in August 2013 and became effective on October 1, 2013. The amendments include additional requirements for manufacturers of diesel emission control strategies<sup>1</sup> (DECS or particulate matter (PM) filters) or their authorized installers. The purpose of this mail-out is to alert PM filter owners to the additional requirements for installation of a PM filter and to remind them of the importance of performing critical PM filter and engine maintenance.

### Use a DECS Manufacturer's Authorized Installer

As of October 1, 2013, the new amendments to the regulation clarify that only a manufacturer's authorized installer can install a PM filter or DECS on a diesel engine.

"Installer" or "Authorized Installer" means any individual or entity that equips any vehicle, engine or equipment with a DECS and has the authorization of the party that holds the verification for the DECS (typically the DECS manufacturer).

An authorized installer can be an end-user, a dealer, or an installation company that meets the criteria set in the Procedure. To identify an authorized installer, contact the

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<sup>1</sup> Diesel emission control strategies (DECS or PM filters) are verified by ARB to reduce diesel particulate matter (PM) and/or nitrogen oxides emissions from the exhaust of a diesel engine. A variety of technologies can be used to meet emission reduction requirements. To ensure that the technology you are evaluating is verified to reduce emissions, go to ARB's "currently verified" website at <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>.

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

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PM filter manufacturer for the most current list. A list is also provided on ARB's website at <http://www.arb.ca.gov/msprog/decsinstall/decsinstall.htm>.

### Pre-Installation Compatibility Assessment Criteria

Before installing a PM filter, the PM filter manufacturer or authorized installer must be able to demonstrate that the engine is compatible with the PM filter and in a proper state of maintenance. Conducting this pre-installation compatibility (PIC) assessment has been required for several years now.

As of October 1, 2013, the PM filter manufacturer must also establish specific criteria to determine if the engine's condition is appropriate for the PM filter. These criteria include a smoke opacity limit, oil consumption limits, fuel inspection requirements, visual inspections, and other criteria that may be used to determine that the candidate engine is in a proper state of maintenance and operating within the engine manufacturer's specifications. (Data logging is an additional test required for some PM filters to determine if the engine's exhaust temperature is adequate.)

A copy of the PIC assessment for your engine should be provided to you at the time of installation of your PM filter. You must maintain your engine within these parameters to maintain the health of your PM filter, to ensure your PM filter's warranty will be honored, and to avoid additional costs and non-compliance with the California Anti-Tampering Law, *Vehicle Code* Sections 27156 and 38391.

If your engine does not meet the PIC criteria prior to installation, the PM filter cannot be installed on your engine until you repair your engine and the criteria are satisfied. Having an engine that does not meet the maintenance criteria does not qualify you for any fleet rule exemptions that are based on lack of available technology. See Mail-Out MSC 08-28 (<http://www.arb.ca.gov/msprog/mailouts/msc0828/msc0828.pdf>) or visit ARB's web page at <http://www.arb.ca.gov/msprog/decsinstall/decsinstall.htm> for more information.

### Owner's Manual and End-User Training

The PM filter manufacturer must provide a copy of the PM filter owner's manual to the end-user at the time of installation. The owner's manual must clearly specify the warranty, installation, and maintenance requirements for the PM filter, and the contact information for replacement parts, cleaning agents, and ways to dispose of waste generated by the PM filter. The information provided should enable you, the end-user, to conduct proper routine maintenance on the PM filter. You must complete the filter system maintenance required by the filter manufacturer to maintain the health of your filter, to ensure your PM filter's warranty will be honored, and to avoid additional costs

and non-compliance with the California Anti-Tampering Law, *Vehicle Code* Sections 27156 and 38391.

As of October 1, 2013, new training requirements in the Procedure take effect. The PM filter manufacturer is responsible for developing training to ensure that end-users can safely operate and maintain their PM filters. This training must include, at a minimum: a review of the PIC assessment results, the effects of engine maintenance on the PM filter's performance, identification of all warning and/or fault alarms and appropriate end-user responses, and the cleaning and maintenance information for the PM filter. The training must be presented to the end-user by either the PM filter manufacturer or the authorized installer and be made available to the end-user on an on-going basis (e.g., online training materials).

### **Maintaining Your PM Filter**

A PM filter is not a "fit and forget" device. As an owner-operator of a PM filter, you need to ensure that you conduct proper maintenance of your filter and engine. If you are unaware of the specific maintenance or cleaning practices for your filter, contact the manufacturer or its authorized installer to make sure you conduct the manufacturer's approved cleaning or maintenance practices. If you or an unauthorized service provider does maintenance without following the PM filter manufacturer's procedures, this can lead to a damaged filter that may not be covered by the manufacturer's warranty, costly repairs, and potential non-compliance with the California Anti-Tampering Law, *Vehicle Code* Sections 27156 and 38391.

Know your PM filter's maintenance and cleaning requirements and make sure whoever conducts the service is following the proper procedures. To help educate you on the general type of maintenance required, ARB has developed a reference document entitled "*A Truck Driver's Guide to Care and Maintenance of Diesel Particulate Filters (DPFs)*" which can be found along with other maintenance-related assistance at <http://www.arb.ca.gov/msprog/decsinstall/engineaintenance.htm>.

If you have any questions regarding PM filter maintenance, authorized installer requirements, pre-installation compatibility assessment criteria or training, please contact Ms. Kathleen Mead, Retrofit Implementation Advocate, at (916) 324-9550 or by e-mail at [kmead@arb.ca.gov](mailto:kmead@arb.ca.gov).

All Interested Parties  
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Sincerely,

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