

GOVERNMENT REGULATION OF EMISSIONS-RELATED AFTERMARKET PARTS



A GUIDE TO COMPLIANCE

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If you manufacture emissions-related aftermarket parts for highway vehicles, the parts will likely need to be tested to confirm that the vehicles will still meet applicable clean air standards after the part has been installed. Emissions-related parts are regulated under our nation's clean air laws and are primarily enforced by two government agencies: the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB).

Since California enacted its own clean air law several years before the federal Clean Air Act, Congress granted it the right to establish stricter emissions standards than under federal law. Many other states have adopted those tougher CARB standards.

Enforcement agencies search for aftermarket parts that can take a motor vehicle out of compliance with clean air laws ("tampering" devices). Generally, any product that affects air flow into or out of the engine, impacts the containment or delivery of fuel or affects the functionality of an emissions control system or device must demonstrate emissions compliance to be considered legal for street use. That includes but is not limited to intake systems, exhaust components, tuning products, intercoolers, turbos and superchargers.

SEMA wants to give you all the tools necessary to comply with the law in a cost-effective manner. That includes explaining the law and providing an option to test your products.

HERE IS WHAT YOU NEED TO KNOW:

WHAT ARE "EMISSIONS-RELATED AFTERMARKET PARTS"?

They include any specialty part that interacts with the vehicle's emissions system and changes the performance levels of the equipment being replaced or supplemented. They are commonly called "add-on" or "modified" parts. The product may be "emissions-related" if it is installed anywhere between the air intake and the outlet end of the catalytic converter. The term does not include ordinary replacement parts.

WHY DO THE PARTS NEED TO BE TESTED?

Under both California and federal law, it is illegal to knowingly market a product that takes a highway vehicle out of compliance. "I didn't know..." is not a legal defense. For California, manufacturers are required to submit test data and have the part approved by CARB, which then assigns an Executive Order (EO) number to the part. The EPA does not require submission of test data. It relies on manufacturer self-certification that a part is street legal. However, if the EPA later questions whether the part is legal, it requires the manufacturer to have enough test data to demonstrate that the part is compliant. A CARB EO is therefore the most direct approach for the industry to demonstrate compliance in all 50 states.

WHAT IS THE CARB EO TEST PROCEDURE?

Here is a quick overview: A product is tested on a worst-case vehicle configuration. If the product can be installed

on many different vehicles, CARB may require that it be tested on more than one vehicle. If the test results demonstrate that the vehicle(s) remains compliant, the part will be issued a CARB EO number to be displayed on an underhood label and referenced in packaging and advertising materials.

WHAT HAPPENS IF I DON'T TEST AND RECEIVE AN EO FOR MY PRODUCT?

Nothing—at first. Rather, potential liability hangs over your head. At some point, a regulator may knock at your door and ask to see the EOs for products you manufacture and sell. That's when you are at risk of civil penalties (and potential criminal penalties if the violation was blatant).

DO I NEED TO TEST THE PRODUCT TWICE, FOR CALIFORNIA AND FEDERAL AUTHORITIES?

No, you just need to perform tests for a CARB EO, because they apply in all 50 states.

WHAT IF I DON'T SELL IN CALIFORNIA? CAN I CLAIM THAT THE PART IS 49-STATE LEGAL?

The "49-state legal disclaimer" is essentially meaningless if a company doesn't intend to pursue product testing. Same with the terms "for off-road use only" or "for racing use only" if the part can be installed on a highway vehicle. If EPA officials investigate, they will want to see your CARB EO number or other test data that would provide a reasonable basis for demonstrating compliance.

WHAT IS A "REASONABLE BASIS" FOR DEMONSTRATING EPA COMPLIANCE?

In 1974, the EPA issued its Memo 1A policy, which explained how the Clean Air Act's anti-tampering prohibition applied to aftermarket parts. For years, there were just two pathways for demonstrating Clean Air Act compliance: with a CARB EO or via EPA certification and durability testing. The EPA now recognizes two more ways to demonstrate a reasonable basis for 49-state self-certification: 1) having submitted test documents and a CARB EO application for the product, or 2) performing independent emissions tests that would form the basis for a CARB EO application. The EPA approach provides a little more flexibility, since it allows companies to market their products while awaiting CARB EO approval or have test results that would be required if seeking CARB EO approval. However, neither of the two latter approaches by the EPA will satisfy CARB requirements to sell products in California that do not have an EO.

DOES CARB HAVE TO ISSUE AN EO BEFORE PRODUCTS MAY BE SOLD IN CALIFORNIA?

Presently, an EO must have been issued before a product may be sold in California. That has been a problem, since CARB has historically been slow in processing EO applications. SEMA is working with agency officials to develop a fast-track program to streamline the process and create separate test categories and requirements for various types of equipment. CARB is also developing an application fee structure to help fund the hiring of additional staff to process the EO paperwork.

DOES THE COMPLIANCE TESTING ISSUE APPLY ONLY TO MANUFACTURERS?

No. The requirements apply to everyone in the supply chain: distributor, retailer, installer, etc. It is illegal to market a noncompliant product. If the manufacturer's product has an EO number, downstream companies in the supply chain can rely on that number for demonstrating that the product is legal for sale.

HOW IS COMPLIANCE BEING ENFORCED?

Both CARB and EPA have enforcement staff that search for noncompliant products. Since they can't police the entire marketplace, enforcement can be selective. It may also come in different forms. Enforcement officials may appear at a manufacturing or distribution facility unannounced and request information. Alternatively, they may monitor websites and advertisements and send an investigation letter in the mail.

HOW DO I RESPOND TO AN ENFORCEMENT INVESTIGATION?

SEMA recommends that you work with an attorney to respond. SEMA staff is available to assist member companies in understanding the investigative process and connect you with an attorney if needed. If there is an unannounced on-site visit, be courteous and request business cards, but let the officials know that it is company policy to first confer with top management and legal counsel and then respond to written requests for information being sought. As a rule, both EPA and CARB will indicate a specific timetable for a company to supply any requested information. The agencies typically identify those products believed to be in violation of compliance rules and request data on the quantities of products sold and the time over which such sales occurred.

WHAT ARE THE POTENTIAL CONSEQUENCES OF ENFORCEMENT?

Both the EPA and CARB can impose fines against manufacturers, sellers and installers of products that do not comply with clean air laws. Fines are generally determined based on the number of noncompliant products that have been sold. Beyond manufacturers, recent agency activities have subjected warehouse distributors, jobbers and some retail outlets to investigations and fines, based on the extent of their violation. In fact, distributors and retailers may be easier targets, since they are visibly marketing a variety of products and may not be as knowledgeable as the manufacturer about EOs and certification obligations.

WHERE DO I FIND MORE INFORMATION ABOUT CARB'S EO PROGRAM?

SEMA has compiled an Emissions Compliance Handbook to guide the industry on the process for securing an EO. It walks through the procedures for obtaining an EO step by step. The Emissions Compliance Handbook also provides useful background information on the lab test procedures used to demonstrate compliance. To obtain a copy, visit www.sema.org/ECH.

HOW DO I OBTAIN AN EO?

There are test laboratories around the country, including one at SEMA's headquarters in Diamond Bar, California. The SEMA Garage is a one-stop shop for product testing and receiving assistance in submitting an EO application for CARB review and approval. SEMA has experts and resources available to help members navigate the process at an affordable cost. For more information, visit www.SEMAGarage.com

REPLACEMENT vs. ADD-ON OR MODIFIED PARTS

CARB and EPA distinguish between replacement parts and add-on or modified parts. Replacement parts are “functionally identical” to the original-equipment manufacturer (OEM) parts they replace. They are tested and certified in a similar fashion to the OEM equipment. Replacement part product categories include (but are not limited to): air cleaners, camshafts, carburetors, catalytic converters, coils and ignition wires, evaporative emissions canisters, ignition components, distributors, fuel injection, fuel tanks, heads, headers, intake manifolds, replacement internal engine parts and transmissions.

Note: “Replacement parts” that are advertised as providing a performance gain may require compliance testing similar to that used for add-on or modified parts. CARB determines if parts/systems qualify as “replacement” at the time an EO application is submitted. Typically, an advertised performance gain on the order of 10% will cause CARB to seek additional emissions performance information.



RACE VEHICLES

Vehicles and equipment used solely for competition (race vehicles) are not regulated by CARB or EPA. However, in 2015, the EPA took the position that under the Clean Air Act a street vehicle is still subject to regulation even after having been converted into a dedicated race vehicle and only purpose-built race vehicles are exempt from regulation. SEMA is seeking passage of the Recognizing the Protection of Motorsports (RPM) Act by the U.S. Congress to ensure that converted vehicles and parts installed on the vehicles are excluded from regulation. California recognizes the exemption and directs companies to mark product “for racing use only” or by using some similar designation.



CLEAN AIR LAWS

Under the law, when a company is marketing an emissions-related product for a street-driven vehicle, it is presumed to have received the required CARB EOs for such products or enough test data to demonstrate a reasonable basis for self-certification to the EPA. EPA and CARB authority for requiring emissions compliance is based on the anti-tampering provisions of the U.S. Clean Air Act and the California Vehicle Code as follows:



U.S. EPA’s Anti-Tampering Provision:

Clean Air Act Section 203(a)(3)(B) [42 U.S.C. §7522(a)(3)(B)] prohibits manufacturing or selling, or offering to sell, or install, a part for a motor vehicle, where:

- A principle effect of the part or component is to bypass, defeat, or render inoperative any emission control device, and
- The person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.



California’s Anti-Tampering Provision:

Section 27156 of the California Vehicle Code prohibits the marketing or use of uncertified vehicles and devices. Subsection (c) specifically applies to aftermarket parts:

(c) No person shall install, sell, offer for sale, or advertise any device, apparatus, or mechanism intended for use with, or as a part of, any required motor vehicle pollution control device or system which alters or modifies the original design or performance of any such motor vehicle pollution control device or system.





SEMA GARAGE

The SEMA Garage (www.SEMAGarage.com) in Diamond Bar, California, is available to help auto parts manufacturers develop products from start to finish. It is a 15,000-square-foot facility filled with nearly \$2 million of equipment. It includes two vehicle lifts, a portable coordinate measuring machine (CMM) for 3D scanning, a 3D printer for fast prototyping, digital racecar scales for the most precise vehicle weight measurements, a dynamometer for precise emissions measurements and more. Services include:



EMISSION TESTING

To help demonstrate that parts are emissions-compliant, the SEMA Garage makes experts and resources available to help members navigate the compliance process. Services include:

- Evaluation of products and recommendations for compliance procedures
- Assistance with the California Air Resources Board's (CARB) Executive Order (EO) process
- Interaction with CARB staff on your behalf
- Review and evaluation of test data
- A laboratory where members can have their products tested at an affordable cost. The lab capabilities cover all tests (except evap) that may be required by CARB for the purposes of obtaining an EO for both gasoline and diesel vehicles.



TECH TRANSFER

Computer-aided design (CAD) files provided by original-equipment manufacturers minimize or eliminate the necessity for reverse engineering.



MEASURING SESSIONS

Hands-on access to new vehicles for designing and developing prototypes, including global vehicles popularly customized abroad but not sold in the U.S. (CAD files available).



CUSTOM SCANNING

State-of-the-art FaroArm/CMM scanning system (SEMA membership required).



3D PRINTING

3D PRINTING: Rapid prototyping using cutting-edge technology to create a physical model of your product.



INSTALLATION CENTER

Fully equipped center for test-fitting product prototypes or installing components on a project vehicle.



TRAINING CENTER

Host an impressive product reveal or conduct a full training session for your new product.



VEHICLE DYNAMICS

Ensure that your products and modifications can be successfully integrated with the latest and emerging vehicle dynamics technologies and comply with federal motor vehicle safety regulations.



VEHICLE ELECTRONICS

Integrate your products with the latest automotive and consumer electronics technologies and leverage emerging opportunities with connected vehicles.



GARAGE



SEMA

1575 S. Valley Vista Drive
Diamond Bar, CA 91765

909-610-2030

www.sema.org

www.semagarage.com

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