CALIFORNIA AIR RESOURCES BOARD

FREQUENTLY ASKED QUESTIONS New Aftermarket Catalytic Converters Installation Requirements

- Q. When can an aftermarket catalytic converter be legally installed?
- A. When the vehicle is beyond its warranty period and a legitimate need for a replacement of the existing catalytic converter is established and documented. If replacement is related to the SmogCheck program, the need for a replacement can be established through a diagnosis by a licensed emission repair technician. If replacement is not related to the SmogCheck program, a legitimate need for replacement (e.g., the converter is malfunctioning, damaged by accident, has an exhaust leak, is melted or has a cracked substrate, etc.) must still be established and documented by the installer.
- Q. How is the need for catalytic converter replacement documented?
- A. On the warranty card. There is a space on the warranty card statement that requires the installer to state the reasons for replacement of the existing catalytic converter. The warranty card also includes a line for the signature of the vehicle owner or customer stating that he or she understands the reasons for the replacement of the catalytic converter. The installer also needs to document the need for replacement on the repair invoice.
- Q. Should an installer request to see the result from the smog check inspection?
- A. The installer should ask for evidence of the diagnosis by a licensed smog check technician that the catalyst needs replacement. The results of a smog check inspection do not, by themselves, provide sufficient evidence that a catalyst needs to be replaced. The installer has to keep a copy together with the repair invoice and other documents relating to the installation.
- Q. Is it acceptable for aftermarket catalytic converter installers to keep required records in electronic format?
- A. Yes, provided all required documentation is included. Documents that require the customer's signature (including the warranty card) may be scanned so that they can be included in the electronic file. Information that is stored electronically should be backed up regularly.
- Q. Should the warranty card be filled out or can installer's receipt and invoice be enough?
- A. The regulations require that the warranty card be filled out completely in triplicate. The original copy is given to the customer, a second copy is kept by the installer, and the third copy with the postage free permit and the manufacturer's address should be mailed.

- Q. In cases where an emission-repair shop sublets a catalytic converter replacement to another business (e.g., a muffler shop), which repair shop is responsible for having the vehicle owner sign the warranty card and for distributing the copies.
- A. Proper processing of the warranty card will result in a signed copy provided to the vehicle owner, the shop that installs the converter, and the converter manufacturer. Options to achieve that result include:
 - 1. If the emission-repair shop has a supply of warranty cards, the customer can sign a blank card before the vehicle goes to the sublet shop for the converter replacement. The sublet shop can then complete the remainder of the card, keep a copy for itself, and send the remaining two copies back with the vehicle to the emission-repair shop. The repair shop would send the postage paid copy to the manufacturer, and provide the remaining copy to the owner. The emission-repair shop should make a fourth copy for its records in keeping with normal practices for Automotive Repair Dealerships (ARDs).
 - 2. Upon picking up the vehicle from the shop that installs the converter, the emission-repair shop representative may sign or initial the warranty card (as the customer) provided that space is reserved for the vehicle owner to also sign when the vehicle is ready to be returned. The installation shop should retain its copy (with the signature of the emission-repair shop representative). Once the vehicle owner has signed the remaining two copies, the postage page copy should be sent to the manufacturer, and the remaining copy should be provided to the owner after a fourth copy is made for the records of the emission-repair shop.
- Q. If a converter replacement is sublet, which repair shop is responsible for diagnosis of the existing catalytic converter to determine if it is in need of replacement?
- A. The repair dealership that performs the catalytic converter replacement/installation is responsible for ensuring that the conditions under which aftermarket catalytic converter installation is permitted have been satisfied. A representation by another shop that an aftermarket catalytic converter may be legally installed is not by itself an adequate basis upon which to conduct the replacement.
- Q. How can I find out if the vehicle is still under warranty?
- A. Installers may reference the vehicle owner's manual/warranty booklet or contact the vehicle manufacturer or its representative to verify the applicable OEM converter warranty. The vehicle's odometer reading can then be compared to the mileage covered under warranty.
- Q. Federal vehicles are not listed in California application catalog. How do I determine what catalytic converter to install on a federal vehicle?
- A. Find a catalytic converter exempted for a California vehicle that is of the same make, model, and model year as the federal vehicle, except for the engine family. Install the catalytic converter on the federal vehicle and make a note on your invoice and warranty card that it is a federal vehicle.

- Q. If I have a catalytic converter model that has been exempted for various vehicles, why can't I install it on other vehicles regardless of the different part numbers listed for each vehicle, if it can fit?
- A. Part numbers are assigned by catalytic converter manufacturers based on several factors, which may include location of the oxygen sensor, pipe size, size and shape of the exhaust system, catalyst model/series, etc. Where the physical differences are not significant, a manufacturer may assign several vehicle makes and models the same part number. However, occasionally, installers may have to rely on distributors to get the part they need when the vehicle comes in the shop, rather than try to stock for all vehicles. Also, they should not rely on a particular manufacturer to allow for flexibility in finding the right catalytic converter when they need it.
- Q. How do I find the correct catalytic converter before purchasing one?
- A. CARB has a summary list of exempted aftermarket catalytic converters at www.arb.ca.gov/msprog/aftermktcat/aftermktcat.htm. Once you open the list, you can quickly scan the rightmost column for the vehicle make and class. The Executive Order (EO) number for the vehicle can then be identified on the left column. The EO hyperlink provides access to the pdf copy for that particular EO number, which also contain the vehicle application list. From the vehicle application list, you can check if your specific vehicle is listed and the corresponding part number assigned for it. You can search for other manufacturers if the vehicle is not listed in the EO you first searched.
- Q. The EO# that I'm checking on ARB's web site does not come up?
- A. A newly issued EO is not uploaded to ARB's web site automatically. However, the summary list is updated as soon as the EO is issued. If the EO is not shown on the web site, you can call the manufacturer and ask if your vehicle is listed under the EO, for OBD II application, if you know the engine family number of your vehicle.
- Q. A customer came in with a missing catalytic converter on a vehicle that is still under warranty. Can I install an aftermarket catalytic converter for this vehicle?
- A. No, because the converter is still within its warranty period. Non-OEM aftermarket catalytic converters can be legally installed only on vehicles that are beyond their warranty period.
- Q. What if the engine family number is no longer available under the hood?
- A. Use the make, model, and model year information to locate similar vehicles in ARB's summary list and determine the appropriate catalytic converter.
- Q. Can aftermarket catalytic converters exempted under this new regulations be used to replace one for my customer's diesel truck?
- A. No. ARB's regulations for non-OEM aftermarket catalytic converters apply only to gasoline powered vehicles. Similar provisions currently do not exist to allow lower performing non-OEM catalytic converters for use on diesel powered vehicles. Therefore, replacement

catalytic converters intended for use on diesel vehicles, like all other emission control devices, must be functionally identical to the component originally installed by the vehicle or engine manufacturer.

- Q. Can an installer adjust the converter installation in cases where the size of the inlet and outlet pipes don't match the exhaust system (for example, by welding in pipe size adaptors)?
- A. No. The fact that the pipe sizes don't match is an indication that the catalytic converter part number is not approved for use on the specific vehicle model in question. Therefore, the installation would not be legal, and the vehicle would be subject to failing visual inspection results during a Smog Check.

ARB staff understands that requiring different part numbers for converters with different pipe sizes (when the converters are otherwise comparable) may result in an installation shop having to stock an excessively large number of different parts to service its customer base. To address this issue, the staff has discussed with converter manufacturers the possibility of approving multiple part numbers for the same application where the difference between the parts is only the inlet and outlet pipe sizes. This would permit installers to stock fewer unique parts and to use adaptors to match the inlet and outlet pipes to the exhaust system without misapplication of the parts. However, converter manufacturers stated that having this approach may be confusing to the installers; since installers differ in their capabilities to use adaptors, having multiple part numbers could cause some to order parts that do not fit the vehicle(s). In any event, the requirement that the specific part number of the catalytic converter must be approved for use on the vehicle model in question would remain unchanged, and is a key element in determining if an installation is legal.

- Q. What if none of the manufacturers makes the catalytic converter for the vehicle of interest?
- A. This is becoming rare; however, in a worst case scenario, the owner can apply for a waiver from BAR, if nothing is available and the vehicle is due for registration.
- Q. If a converter designed to meet the requirements that applied before January 1, 2009, fails under warranty, an equivalent replacement would no longer be legal for installation, and an upgrade to a converter meeting the new requirements would be necessary. How is the cost difference to be handled?
- A. The manufacturer would have two options in honoring the warranty:
 - Provide a catalytic converter designed to meet the new requirements at its own cost.
 - Provide a credit to the vehicle owner equivalent to the cost of the failed aftermarket converter that could be applied to the purchase of a converter meeting the new requirements.
- Q. What are the conditions under which the manufacturer must honor the warranty?
- A. Aftermarket catalytic converters must be warranted for 5 years or 50,000 miles from defects in materials or workmanship. The warranty covers loss of conversion efficiency, detection of a malfunction within the converter by the vehicle's OBD system, corrosion of the converter shell and end-pipes, and faulty welding that occurs during the course of normal

usage. Abnormal engine operation, including overfueling, the presence of engine misfire, of excessive oil consumption would not constitute normal use, nor would physical damage to a converter caused by road debris or vehicle accidents.

Should an installer or vehicle owner believe that their warranty claim was unreasonably denied by the converter manufacturer, the ARB staff is available to investigate and possibly mediate such a claim.

- Q. Is the warranty transferrable?
- A. Yes, transfer of ownership does not void the required warranty provided the new owner is also given the warranty card and/or other necessary information to document the converters purchase and installation.
- Q. Is there a requirement to physically retain the replaced catalytic converter for a period of time?
- A. The United States Environmental Protection Agency (USEPA) requires installers of aftermarket catalytic converters to retain the replaced converter for a period of 15 days. This requirement is enforced by the USEPA. The following link provides additional information on USEPA requirements: http://www.epa.gov/otaq/cert/factshts/catcvrts.pdf.
- Q. What is the penalty for a violation of the law?
- A. Catalytic converter falls under California anti-tampering law. The law is designed to prevent tampering with pollution control devices on California vehicles. The anti-tampering law is Vehicle Code Section 27156 and covers all pollution related systems and devices on a motor vehicle. A violation of this law may also include a parallel violation of California Business and Professions Code Sections 17200 and 17500. Judges usually impose penalty based on the severity of the offence and whether a repeat offender is involved, and a fine of up to \$2,500 for each violation may be assessed, as well as some jail time.
- Q. What if the installer down the street is not following the law and I keep losing customers to his shop, what do I do?
- A. You can call ARB's 800 number and provide as much information as possible to enable inspectors to visit the shop and conduct investigation of the shop's practices. The information you provided will be kept confidential.

Common Abbreviations

PC = Passenger car

LDT1 = Light-duty truck 1, e.g. Toyota RAV4, Honda CVX, Suzuki Swift, etc

LDT2 = Light-duty truck 2, e.g. Astro Van, Toyota Sienna, Nissan Quest, Frontier, 4Runner

MDV = Medium-duty vehicle, e.g. Chevy Tahoe, Nissan Titan, Ford F-150, etc.

- PC-1 = Pre-OBD II passenger cars with one catalytic converter per exhaust bank
- PC-2 = Pre-OBD II passenger cars with more than one catalytic converters per exhaust bank
- T-1 = Trucks with one catalytic converter per exhaust bank
- T-2 = Trucks with more than one catalytic converters per exhaust bank