NEW REQUIREMENTS FOR AFTERMARKET CATALYTIC CONVERTERS

APRIL 9, 2009
Agenda

- Background
- Review Changes to the Regulations
- Installation Guidelines
- Enforcement
Background

- Aftermarket catalytic converters must be exempted in California
- New regulations adopted in October 2007
- All converters must meet the new regulations starting January 1, 2009
Changes to the Regulations Affecting Installers

- Catalytic Converter Performance Criteria
- Warranty
- Labeling Requirements
- Vehicle Application Catalog
- Installation Requirements
Catalytic Converter Performance Criteria

- Converters shown to meet certification emission standards
- Durability extended from 25,000 miles to 50,000 miles
- Demonstrated to be OBD II compatible
Catalytic Converter Performance Criteria (cont.)

• Pre-OBD II Vehicle Coverage Based on OBD II converters

• Demonstrated using four vehicle categories
  – (PC-1): passenger car single configuration
  – (T-1): truck single configuration
  – (PC-2): passenger car dual configuration
  – (T-2): truck dual configuration
PC-1 and T-1 Configurations

(PC-1): (Passenger Car Single Configuration)
Passenger cars with single or dual exhaust systems with one catalytic converter per exhaust bank.

(T-1): (Truck Single Configuration)
Light-duty or medium-duty trucks with single or dual exhaust systems with one catalytic converter per exhaust system.
PC-2 and T-2 Configurations

(PC-2): (Passenger Car Dual Configuration)
Passenger cars with single or dual exhaust systems with two or more catalytic converters per exhaust bank.

(T-2): (Truck Dual Configuration)
Light-duty or medium-duty trucks with single or dual exhaust systems with two or more catalytic converters per exhaust bank.
Catalytic Converter Performance Criteria (cont.)

• OBD II vehicle coverage identified by converter manufacturer, based on adequate performance and fit

• Test vehicles selected by ARB

• Difficult to get broad coverage
  – Substantial differences in OEM configuration and catalyst composition
Warranty Requirements

• Warranty valid for 5 years or 50,000 miles from date of installation.

Covers:

– Defects in catalyst, external shell, end pipes, etc.
– Catalyst malfunctions detected by OBD II or Smog Check
– Parts and labor costs
Labeling Requirements

Why change the labeling requirements?

• Label on converter is key item needed to improve enforcement
  – Needed to make Smog Check inspection viable
  – Needed to simplify ARB/BAR inspection

• Previous label did not provide sufficient information

• Previous label was not always visible/readable after installation
Labeling Requirements (cont.)

• Executive Order number (D-XXX-XX)
  – Identifies specific EO that applies
  – Harmonizes with Smog Check visual inspection of add-on/modified parts (verify based on EO)

• Part number
  – Specific part number needed to identify exact part within a series that is installed
  – Series number insufficient because it includes various shapes, inlet/outlet configurations and O2 sensor locations

• Date (MMYY) of manufacture
Labeling Requirements (cont.)

- Label must be permanent and indestructible
- Label must be placed in a location easily visible after installation
- Letters/numbers at least one-half inch in height and must be readable within 5 feet of distance
- All converters must be stamped with a directional flow arrow
- Samples of labels/stamps must be submitted by the manufacturer to ARB for approval
Vehicle Application Catalog (VAC)

- Must be specific to California applications
- Must be divided in two sections for OBD II and pre-OBD II vehicles
- Listing organized to allow look-up of catalytic converter by specific vehicle application
  - Vehicle make, model year, model, displacement, engine family and emission standards
Vehicle Application Catalog (cont.)

• For multiple OEM converters in series, catalog must identify which converter to use for each of the OEM converters

• User instructions in the catalog
  – Provide instructions on how to identify appropriate converter for the vehicle
  – Illegal to select converter solely on vehicle weight and engine size, shape, size, configuration or pipe diameter
Installation Requirements

- Section (h) of the evaluation procedures
- Specify conditions for proper installation
- Require installers to maintain records of the installation for 4 years from date of sale/installation
- Manufacturer must make information on installation requirements available to installers
Installation Guidelines

Know the conditions you have to meet in order to install a catalytic converter

- The converter is exempted for the vehicle and is specifically included in the vehicle application list
- The vehicle is beyond the warranty period of the vehicle
- Legitimate need for replacement of the existing converter has been established
- The new catalytic converter is installed in the same location as the OEM converter it is replacing (front face +/- 3 inches of OEM front face)
- Cannot relocate or change orientation of O2 sensors
- Installed on one-for-one basis and with all other required converters
- Warranty card is filled out by the installer, signed by the customer, attached to the repair invoice and a copy returned to the manufacturer
- Maintain records
Installation Guidelines

Make sure warranty card is properly filled out.

• Correct information on:
  - Converter part number
  - Vehicle year, make, model, VIN and odometer reading
  - Date of installation
  - Name of the installation shop

• Warranty card w/ customer’s signature

• Warranty card filled out in triplicate
  – Original copy to the customer, one copy to the installer to keep, one copy sent back to the manufacturer
Installation Guidelines

• Identify the correct converter for the vehicle
  – the part number is listed for that particular vehicle (use VAC)
  – has the correct label format
  – EO # on the label covers the vehicle in the application list
Installation Guidelines
(Using ARB Website Information)

- Look up the summary of exempted aftermarket catalytic converters at: www.arb.ca.gov/msprog/aftermktcat/aftermktcat.htm
- From the list, view the vehicle make and class on the rightmost column. The Executive Order (EO) for the vehicle can then be identified on the left column.
- Go to: www.arb.ca.gov/msprog/aftermkt/devices/amquery.php
  View the EO and scroll down to the list of vehicles to see if the vehicle of interest is listed.
- Search for EOs with similar vehicle make and class from other manufacturers
Enforcement

• Smog Check inspection on the vehicle
• ARB may inspect manufacturer and installer facilities and records
• ARB may randomly select and test production units
• Violations of Vehicle Code 27156 or 38391
  – ARB can revoke Executive Order
  – Manufacturer may be required to perform recalls
  – Monetary penalties
  – Business and Professions Code sections 17200 and 17500 violations
More Information/Updates

- Aftermarket catalytic converter webpage: www.arb.ca.gov/msprog/aftermktcat/aftermktcat.htm

- Subscribe to e-mail list (“aftermktcat”): www.arb.ca.gov/listserv/listserv.php
Comments (online):
www.arb.ca.gov/lispub/comm2/bcsurveyform.php?listname=aftermktcat-ws&comm_period=1

Contacts:
Public Information Office  (800) 242-4450