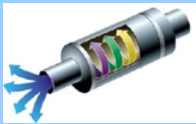
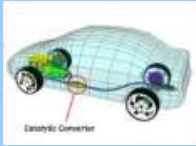


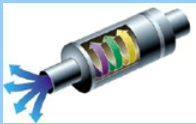
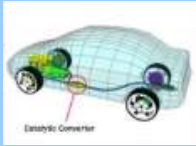
# NEW REQUIREMENTS FOR AFTERMARKET CATALYTIC CONVERTERS



APRIL 9, 2009

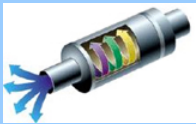
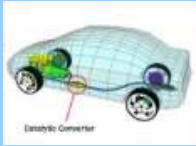
## Agenda

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



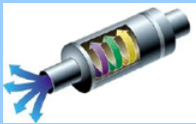
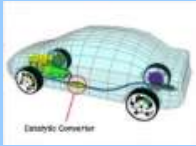
## Background

- 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



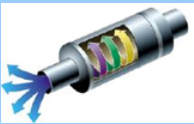
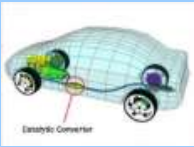
# Changes to the Regulations Affecting Installers

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



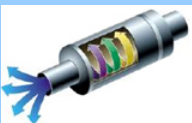
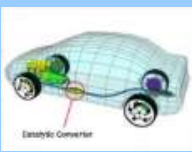
# Catalytic Converter Performance Criteria

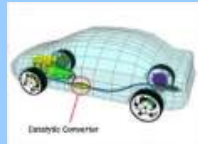
- Converters shown to meet certification emission standards
- Durability extended from 25,000 miles to 50,000 miles
- Demonstrated to be OBD II compatible



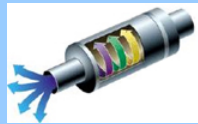
# Catalytic Converter Performance Criteria (cont.)

- 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

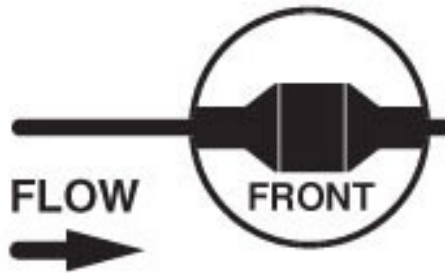




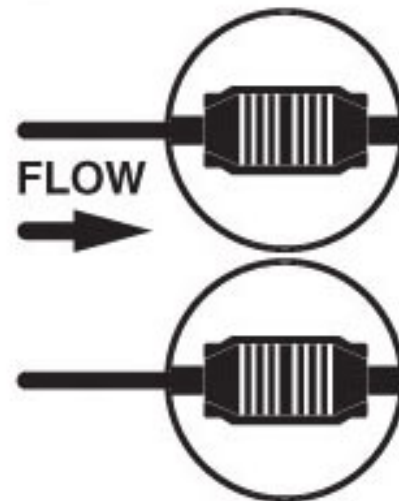
## PC-1 and T-1 Configurations

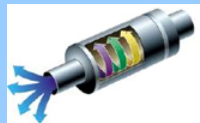
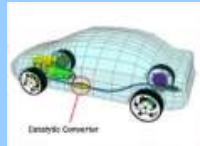


**(PC-1):** (Passenger Car Single Configuration)  
Passenger cars with single or dual exhaust systems with one catalytic converter per exhaust bank.



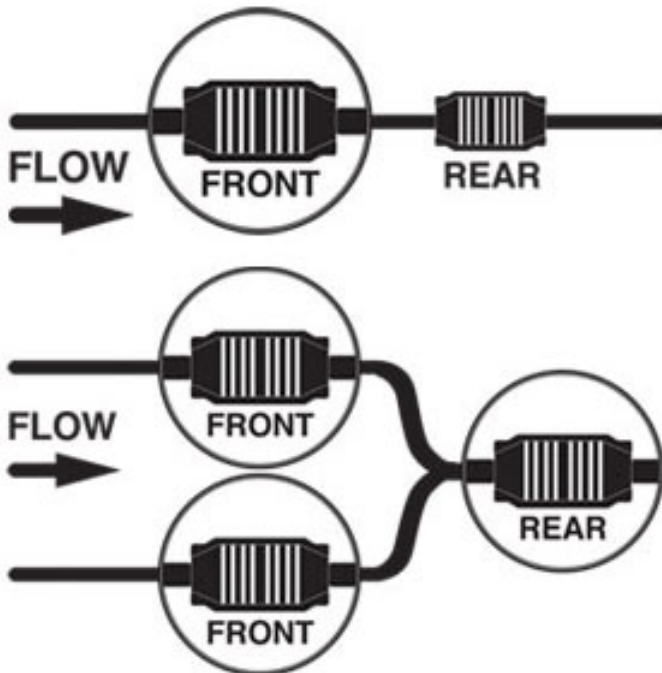
**(T-1):** (Truck Single Configuration)  
Light-duty or medium-duty trucks with single or dual exhaust systems with one catalytic converter per exhaust system.



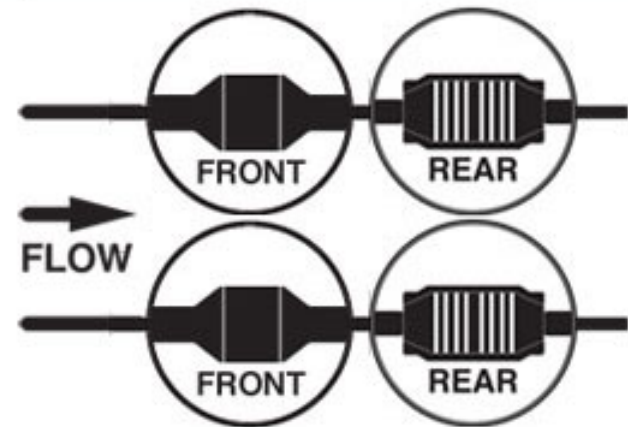


## PC-2 and T-2 Configurations

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



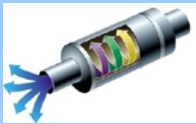
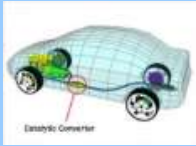
**(T-2): (Truck Dual Configuration)**  
Light-duty or medium-duty trucks with single or dual exhaust systems with two or more catalytic converters per exhaust bank.





## 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

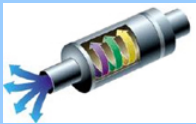
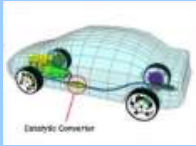


## Warranty Requirements

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

Covers:

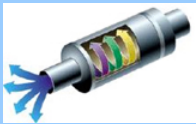
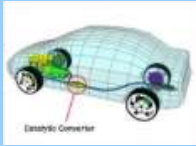
- Defects in catalyst, external shell, end pipes, etc.
- Catalyst malfunctions detected by OBD II or Smog Check
- Parts and labor costs



## Labeling Requirements

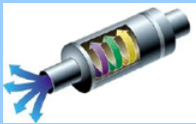
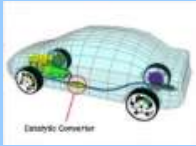
Why change the labeling requirements?

- 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



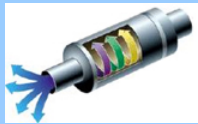
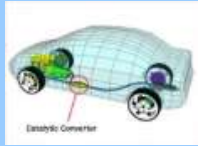
## Labeling Requirements (cont.)

- 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



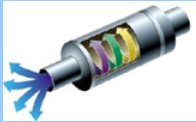
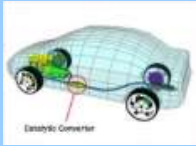
## Labeling Requirements (cont.)

- 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



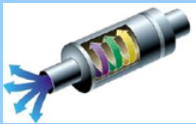
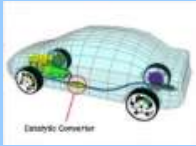
# Vehicle Application Catalog (VAC)

- 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



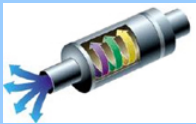
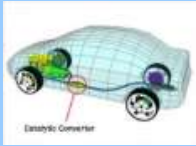
## Vehicle Application Catalog (cont.)

- 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

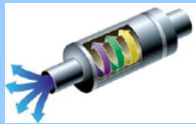
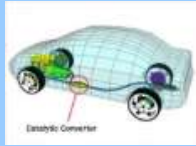




## Installation Guidelines

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

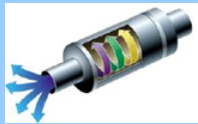
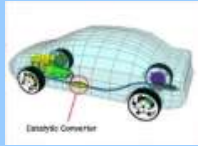
- The converter is exempted for the vehicle and is specifically included in the vehicle application list
- The vehicle is beyond the warranty period of the vehicle
- Legitimate need for replacement of the existing converter has been established
- The new catalytic converter is installed in the same location 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

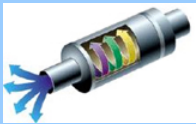
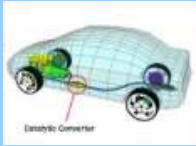
Make sure warranty card is properly filled out.

- 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

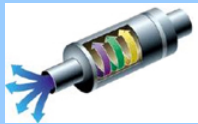
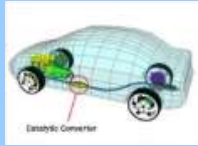


## Installation Guidelines

- 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



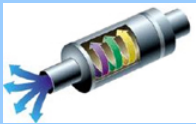
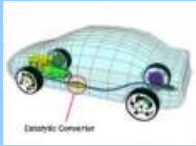
## Installation Guidelines (Using ARB Website Information)



- Look up the summary of exempted aftermarket catalytic converters at:  
[www.arb.ca.gov/msprog/aftermktcat/aftermktcat.htm](http://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](http://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

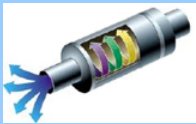
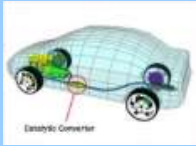
## Enforcement

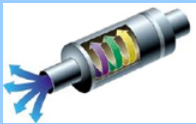
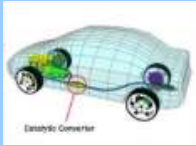
- Smog Check inspection on the vehicle
- ARB may inspect manufacturer and installer facilities and records
- ARB may randomly select and test production units
- Violations of Vehicle Code 27156 or 38391
  - ARB can revoke Executive Order
  - Manufacturer may be required to perform recalls
  - Monetary 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](http://www.arb.ca.gov/msprog/aftermktcat/aftermktcat.htm)
- Subscribe to e-mail list (“aftermktcat”):  
[www.arb.ca.gov/listserv/listserv.php](http://www.arb.ca.gov/listserv/listserv.php)





## Comments (online):

[www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=aftermktcat-ws&comm\\_period=1](http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=aftermktcat-ws&comm_period=1)

## Contacts:

Public Information Office (800) 242-4450