



# NJ-CERT Module 7:

Aftermarket Catalytic Converters

A course made for New Jersey's Certified Emission Repair Technician (ERT)

Presented by the NJ Department of Environmental Protection (NJDEP)

Bureau of Mobile Sources



- Note: If you have not printed out the <u>Master Acronym List</u>, please do so now *OR* have it open while viewing these Modules.
- For detailed rules and regulations, please visit <u>Section 2</u> on the NJ-CERT homepage.

Thank you

#### Introduction

- The catalytic converter is the single most important emission control device invented for gasoline vehicles. As such, we give this device some special emphasis and attention in this course.
- As you are probably aware, there are generally three sources for replacement catalytic converters. They are arranged below in order of typical cost, from highest to lowest:
  - 1. Original equipment manufacturer or OEM (i.e., vehicle dealership)
    - As effective and durable as original converter
    - Warranted by the dealership or manufacturer (often only one year)
  - 2. Aftermarket CARB-approved (meets California requirements)
    - As effective as original converter
    - Warranted to 5 years or 50,000 miles and testing shows little deterioration during that interval
  - 3. Aftermarket federally-approved (meets US EPA requirements)
    - Can be effective when new, but often deteriorates rapidly
    - Warranted to 5 years or 25,000 miles

## When can I use an aftermarket catalytic converter?

- An aftermarket catalytic converter may only be installed once the emission warranty covering the catalytic converter has expired.
  - At a minimum, the catalytic converter is covered for 8 years or 80,000 miles and may be covered for up to 15 years or 150,000 miles depending upon the vehicle certification.
  - Please refer to Section 8 for more information on emission warranties.
- Aftermarket catalytic converters may not be installed for performance upgrades until after the warranty period.
- If a vehicle is still in warranty, but the vehicle manufacturer is out of business or no longer providing OEM replacement parts for some reason, then an aftermarket part may be used.

# Cost Effectiveness



 Remember, catalytic converters contain precious metals, like platinum, palladium and rhodium, that convert pollutants into less harmful exhaust gases.

• A converter with a higher precious metal content will often cost more but will also be more effective.

 Going cheap is not always a good solution for a durable repair when it comes to catalytic converters.

#### Frequent Issues

- One problem frequently encountered is that motorists try to save some money by installing the least expensive federally-approved catalytic converter and it is not effective enough to comply with the OBD system on their vehicle.
- If a vehicle initially fails inspection with a catalyst-related DTC, then the catalyst readiness monitor will have to be ready upon reinspection.
- If, after repair, the catalyst readiness monitor refuses to set, or it sets and then throws another catalyst DTC, the new catalytic converter may not be effective. We are placed in the position of telling the motorist that they need to pay for another, better quality, more expensive, repair.

## What aftermarket catalytic converters can I use?

- NJ currently allows both federal and CARB-approved aftermarket catalytic converters to be used.
- As of December 2019, the DEP has initiated a rulemaking that would require all aftermarket converters to be CARB-approved or OEM.
  - Federal converters would be allowed only under very limited circumstances where no OEM or CARB converter is available or can be modified to fit the application.
  - Used converters of any type would be prohibited.
  - A waiver would need to be obtained for any use of a non-CARB or non-OEM converter.
  - Even with a catalytic converter waiver, if the vehicle failed OBD inspection, it must still pass reinspection. The replacement converter must be able to set the catalyst monitor and not cause any catalyst DTCs before it will pass.
  - We will be conducting industry outreach on these important changes.
  - Please feel free to check this course module for updates (you can view the module without retaking the course).