



Aftermarket Catalytic Converter Efficiency

By: Jeff Myers from The Car Doctor Inc. in Schaumburg

We recently had a 1998 Ford Escort come to our repair facility with a reject issue. The vehicle originally failed with a P0420 CAT code in April, and repairs were done shortly after by an independent repair shop. The repair shop used an aftermarket catalyst for this repair. After several rejects for the CAT monitor not running, he was directed to a Ford dealer to complete the repairs. It cost \$700 at the first shop and \$900 at the dealer and was still getting rejected.

This very frustrated customer then brought the car to our shop. I explained to him that I would diagnose the problem and give him an estimate on what repairs needed to be made. I also gave him our guarantee that his vehicle would pass the test, or he gets his money back. Since the vehicle was still hot, I immediately jumped in the car with a scanner and ran down the highway observing the downstream O2 sensor. The temperature and all other values looked good, but the O2 sensor was fluctuating more rapidly than what it should have been. Our test of the downstream O2 sensor showed no problems. That led me to a possible solution. The aftermarket CAT just wasn't good enough to set the monitor. In the old days of I/M 240, a propane test would work well to determine CAT efficiency, but with OBD, you have to rely on the PCM. CATs are expensive, and it is hard to sell a manufacturer's CAT especially on an 11 year old car. There are a few direct fit CATs that can do the trick, but you really don't know until you bolt it on. A replacement direct fit CAT was installed and the car fully trained within 6 miles on the highway and passed the emissions test within 3 hours of the customer dropping off the car.

The moral of the story is to remember that even though you replaced a part, it does not always mean that particular part is a good one--especially when dealing with aftermarket converters. If you are not setting a code for CAT, and there are no other pending codes present, but the monitor will not run, make sure to watch the efficiency of the CAT.

[back to top](#)

When My Phone Rings

By: Dave Alder from ApplusTechnologies, Inc.



This is the first of many articles for eAir Repair. For those of you who do not know me, I work for Applus Technologies as the Repair Industry Outreach Coordinator. I frequently receive phone calls related to repairing emissions systems. For the most part, when my phone rings, there is usually someone having an emission's repair problem on the other end of the line. Let me share a couple of interesting calls. The first came from a shop owner who just saw the newly printed REPORT CARD booklet and felt that an error had been made when calculating his shop's grade. You should know that at the end of every quarter, shop owners are responsible for logging on to the DASHBOARD website and verify all of their grade details. If there is a discrepancy, shop owners need to call the Illinois Vehicle Emissions Outreach Program at (847)758-3434. Unfortunately, if you are calling after the booklet is printed, it is way too late to make changes. (Please mark your calendar NOW to check your score on October 1, 2009.) After the REPORT CARD booklet has been printed, there is nothing that can be done about a score. I explained to the owner how to verify his data on the DASHBOARD. He felt that there was no way that his shop's grade could only be a "C." After a brief review, I saw that their shop made repairs on a car that subsequently failed the test and worked on cars that ended up with four monitor rejects. I explained that since February 1, 2009, after a repair EACH monitor REJECT counts the same as a FAIL.

The second call I want to share was about readiness monitors. A shop called me after completing a repair and clearing the codes on one of those difficult to set 1997 cars. He had been driving the car for days, and there were two monitors still not set to "ready" status. I asked which two monitors did not set. He said they were the CAT and EVAP monitors. After a brief discussion, I found out that the technician had no idea what was required to get this car to pass, and I am sure he is not alone. The "MIL" must be commanded off with no active power train fault codes (more on that next month) and from 1996-2000, all but 2 non-continuous monitors must run unless the car is on the monitor exception table (see past Air Review issue). Vehicle model years 2001 and newer need all but one monitor. The exception to this is a CAT code. If there was a CAT code, the CAT monitor must run. Please feel free to call me at any time with your questions. If it is a good one, it might wind up in a future article.

Please call if you have any questions: (847)616-6064

[back to top](#)

The Chicago Automotive Networking (C.A.N.) Conference

From: Automotive Service Association of Illinois

ASA is hosting the Chicago Area Networking (CAN) Conference on October 17th and 18th in Rosemont, Illinois. A variety of topics will be covered for both technicians and shop managers.

For details and registration information, [download the event flyer](#).

[back to top](#)

Dashboard tip of the month

From: the Illinois EPA Repair Industry Outreach Team

FORGOT YOUR USER NAME AND/OR PASSWORD?

You need both your user name and password to utilize the functions on the **Dashboard** website, such as: looking up a vehicle's test history, finding the registration status of a vehicle, entering repair data, registering for seminars, etc.

While logging in, if you forgot your USER NAME, it's not a problem! Just email us at epa.repair.outreach@illinois.gov or call us at Repair Industry Outreach: (847)758-3434.

If you remember your user name but can't remember your PASSWORD, just click on the line "Forgot your password?" and it will be immediately sent to your e-mail address.

By the way, you won't need your user name or password to receive copies of the eAir Repair Newsletter. They are automatically sent to your e-mail address.

[back to top](#)

September, October 2009 Seminar Schedule

All Seminars are from 6-10 pm on dates below.

They are sponsored by the Illinois EPA for the repair industry and they are free!

- [2009 Complete Seminar Schedule](#)

Communication Protocol Testing for OBD Failures

This seminar will review proper testing techniques for communication issues with the PCM and various modules as it relates to OBD failures. The communication topology that will be discussed will focus on GM, Ford, and Chrysler systems. This is a "must attend seminar" for serious OBD repair technicians.

ID	Date	Location
K204	Oct. 5, Monday	Morton College
K205	Oct. 8, Thursday	Truman College

Waveform Analysis

The emphasis of this seminar is on real world application of labsopes and graphing scan tools for driveability diagnostics. Discussion topics will include scope features that aid diagnosis, waveform capture and storage techniques, graphing scan tool and scope analysis case studies, and a live demonstration using PowerPoint to build a case study. Creating repair files using PowerPoint is one of the best ways to build a repair database for later review or for in-shop technician training.

ID	Date	Location
S504	Oct. 15, Thursday	College of DuPage

OBD Code Repair Using Lab Scopes

This seminar is devoted to helping technicians develop a plan for successfully repairing OBD emission failures using labscope testing strategies. OBDII testing will be reviewed and actual failure case studies will be looked at to help understand the test capabilities of scopes and probes. Using computerized information systems and code charts will be discussed to make diagnosing OBD code problems easier.

ID	Date	Location
S102	Sept. 23, Wednesday	Joliet Junior College
S103	Oct. 27, Tuesday	Kennedy-King College

OBD Repairs Using Scan Tools

This seminar will show repair technicians the capabilities and enhanced functions of a variety of aftermarket and factory scan tools for system testing and OBD vehicle repair. Emphasis will be placed on bi-directional controls for testing and diagnosis found in many of the scan tools available today. Graphing scan data analysis and testing strategies will be discussed. The goal is to get the most from these tools and shorten diagnostic times. Actual vehicle case studies will be shown to illustrate these points.

ID	Date	Location
S202	Sept. 24, Thursday	Joliet Junior College
S203	Oct. 28, Wednesday	Kennedy-King College

[back to top](#)

Articles needed for eAir Repair

From: the Illinois EPA Repair Industry Outreach Team

We are always looking for short articles of interest for eAir Repair. We all have information and tips on successful emissions repairs. It is time to share them with your fellow technicians. Please help us all out by writing a brief story (a couple of paragraphs) about your success or fix. Don't worry about grammar or punctuation.

Those tips can be e-mailed to epa.repair.outreach@illinois.gov.

[back to top](#)

In This Issue

[Aftermarket Catalytic Converter Efficiency](#)

[When My Phone Rings](#)

[C.A.N. Conference](#)

[Dashboard tip of the Month](#)

[Up Coming Seminars](#)

[Articles needed for eAir Repair](#)