

2013 TECHNICIAN TRAINING

Tuesdays, NAPA Training Room, Gettysburg, PA Dinner: 5:00 pm

Training: 5:30 pm - 9:30 pm

Cost: \$396 per person, billed \$33 per person monthly

Classes include:

February 19- No Start, No Code Diagnostics

Goal: Educate technicians on diagnosing a driveability problem or no start problem in today's high tech automobiles. Technicians will also learn how to:

- Develop a diagnostics strategy when no codes are present
- Establish a diagnostic baseline and display an understanding of how the PCM "thinks"
- Identify what PIDs to expect @ KOEO & KOEC
- Identify fuel quality issues and how to test for them
- Identify what is required to create spark and what causes f-**-looding and incorrect timing issues.

NAPA AUTORIAS

March 19 - Direct Injection Driveability

Goal: Equip technician with the ability to know what direct injection is and how it boosts fuel economy and decreases emissions. Technicians will also learn how to:

- Master diagnostics from the fuel tank through the high pressure fuel pump, pressure regulator and injector
- Identify and service new direct injection systems
- Display the understanding of Piezo Electric fuel injectors
- Display an understanding of electronically controlled fuel pressure regulation and to diagnose fuel supply requirement deficiencies

April 16 – New Technologies for 2013

Goal: Our New Technologies Class sheds light on where the automobile industry is going. In this class, we cover the latest in hybrid technology, EVs, EREVs, CNG, fuel cell, the new clean diesels, split cycle and we'll even cover the latest in air conditioning changes with the latest information on HFO-1234yf. This class is a must for those who want to stay on the cutting edge. This is a four hour class presented in a classroom format. Upon completion of this course, the technician will be able to:

- Differentiate between a hybrid, an EREV and an EV
- Display an understanding of fuel cell technology
- Display an understanding of CNG technology
- Display and understanding of the split cycle engine
- Gather the latest information on HFO-1234yf

May 7- Ford 6.7 PowerStroke Diesel

Goal: Equip technicians with the skills to diagnose, repair and maintain the new Ford manufactured 6.7 PowerStroke Engine

- B20 compliance
- Duel coolant systems
- Engine control module changes (Bosch E86)
- Emission reduction fluid pump and injection system
- Reflashing tips
- Exhaust after treatment systems
- New turbo charger system
- This engine is all NEW

October 1 – Misfire III

Goal: Equip technicians with the ability to quickly differentiate mechanical, electrical and fuel related misfires using their scan tool, pressure waveforms and a misfire detector. Technicians will also learn how to:

- Diagnose COP operation and testing procedures using a low amp probe
- Apply current ramp diagnostics
- Identify how throttle position affects compression readings, perform injector balance testing, identify a faulty injector using fuel pressure pulse

testing, display the understanding of exhaust pressure pulse testing

 Identify how worn piston or ring leaks affect crankcase pressure pulses, display the understanding of cylinder pressure and apply lambda readings to misfire diagnostics

October 29– Engine Dynamics VE III

Goal: Equip technicians with a better understanding of torque and horsepower. Learn how mechanical and thermal efficiency affect engine operation and power. This course places significant emphasis on forced induction. Technicians will also learn how to:

- Assess the effect forced induction has on cylinder pressure, cylinder temperature and timing
- Calculate the final compression ratio
- Define compression and cylinder pressure and identify how they are affected by temperature and altitude
- Understand how PCM determines how much fuel to deliver and at what time

- Thoroughly understand engine operation
- Diagnose cylinder pressure and what affects it
- Display an understanding of mechanical and thermal power losses
- Differentiate torque from horsepower and how to calculate each
- Differentiate static, dynamic and final compression ratios
- Display an understanding of the R/S Ratio

Sponsored by NAPA of Gettysburg, Hanover and Taneytown Call or email Gail to sign up for the class 717-334-0071 gbixler@napagettysburg.com