



Department of the Environment
Vehicle Emissions Inspection Program

Training Class Information

Course Descriptions for November 2012 Training

The **FREE** 8-hour training class “*Advanced Diagnostics Strategies and Procedures Workshop*” will be taught by Joe Thomas, Will Carroll and Will Speigle of Utah’s Weber State University on Friday, November 9 and Saturday, November 10. The workshop will be taught from 9:00 AM— 5:00 PM at the Hampton Inn and Suites in Frederick, MD. **Both of the training sessions will cover the same material.**

This 8 hour workshop reviews multiple diagnostic strategies and repair procedures for successful diagnosis of difficult electrical and drivability concerns. Advanced diagnostic skills are crucial in the diagnosis of today’s advance technology vehicles. Duplicating intermittent symptoms or associated fault code during diagnostic evaluations can be challenging and frustrating. Associated faults codes are frequently present even if the symptoms are intermittent in nature. This workshop will also discuss in detail various diagnostic strategies used by vehicle manufacturers. Demonstrations and on-vehicle exercises are used to reinforce classroom discussions and are designed to increase diagnostic and repair effectiveness.

- Electrical wiring diagrams (schematics) utilization for system and component operation determination
- Digital Multimeter (DMM) and Digital Storage Oscilloscope (DSO) usage for dynamic circuit measurements
- Use of DMM and DSO to capture intermittent faults
- Voltage signal pattern discussions and demonstrations
- Comparison between scan tool data and live circuit measurements
- Switched On/Off Controls
- PWM Controls
- Strategies to prevent inadvertent creation of an intermittent condition
- Repair of wiring to meet OE standards
- Connector intermittent connection repair
- Duplication of intermittent concerns

Please contact Margie Wise with MDE to register for this course. She may be reached at (410) 537-3197 or by e-mail mwise@mde.state.md.us. **Both of the training sessions will cover the same material.** For directions to the Hampton Inn and Suites at 1565 Opossumtown Pike in Frederick , MD, call 301-696-1565 or please visit the following website .

http://hamptoninn.hilton.com/en/hp/hotels/maps_directions.jhtml?ctyhocn=FDRHSHX