



Department of the Environment  
Vehicle Emissions Inspection Program

# Training Class Information

## Advanced Diagnostics Strategies and Procedures Training — June 2015

This 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 advanced 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. This class will be taught by instructors from Utah's Weber State University. Some discussion topics are:

- 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
- Connector intermittent connection repair
- Duplication of intermittent concerns
- Repair of wiring to meet OE standards

### Dates:

Friday June 26, 2015 9 AM - 5 PM or  
Saturday June 27, 2015 9 AM - 5 PM  
(The same class is taught on both days)

Please contact Margie Wise with MDE to register. She may be reached at (410) 537-3197 or by e-mail [mwise@mde.state.md.us](mailto:mwise@mde.state.md.us). The training sessions will be held at the Homer S. Gudelsky Institute for Technical Education of the Rockville Campus of Montgomery College. For directions to the Homer S. Gudelsky Institute for Technical Education of the Rockville Campus of Montgomery College, call 240-567-5000 or please visit the following website. <http://cms.montgomerycollege.edu/edu/maps.spx?id=23746>