

*Location: Barrie, On*

| <i>Course #</i>    | <i>Course Name and Description</i>   | <i>Hours</i>    | <i>Dates</i>        |
|--------------------|--|-----------------|---------------------|
| <b>AD-513</b>      | <b>Pressure Signature Analysis</b><br>Many times during the history of the automobile revolutionary diagnostic techniques have come along that changed the way we diagnose and verify the systems on the vehicle in our bay. Pressure Signature Analysis is the latest technique that can save you time and make you money when servicing any vehicle that rolls in the shop. This course covers the use of pressure transducers and flow devices that present a graphic representation of the pressures in the intake manifold, fuel rail or exhaust stream. By understanding the dynamics of these signatures you will be able to pinpoint problems in seconds that may have taken hours or days in the past. Coupled with scan data analysis, this information will take your diagnostic skills to new heights. | <b>2 Nights</b> | <b>9,10 Nov 09</b>  |
| <b>Instructor:</b> | <b>Scott Weatherall</b>  |                 |                     |
| <b>AD-514</b>      | <b>Vehicle Data Network Diagnosis</b><br>Vehicle data networks, which have been around for decades, allow multiple modules in an automobile to share information through the use of a one or two-wire data bus. When communication between modules breaks down, the results can sometimes be confusing. This course uses real world examples to illustrate the logical diagnostic process needed to solve complex network communication faults on modern vehicles.   | <b>2 Nights</b> | <b>18,19 Jan 10</b> |
| <b>Instructor:</b> | <b>Scott Weatherall</b>  |                 |                     |
| <b>EE-101</b>      | <b>CTI Specialized Electronics Training Module One</b><br>This is the first of three modules designed to give technicians the skills to properly apply the fundamentals of electronics in today's vehicles. Module 1 focuses on the fundamentals of electricity with particular interest in relating them to real world situations. Each student will learn to apply the basics of testing such as voltage drop through the use of wiring diagrams and basic test equipment on various types of circuits. The goal of this course is to establish a foundation for those new to electronics and to provide an up to date review of electronic principles to those who have been in the business before moving on to more complex topics in Modules 2 & 3.  | <b>2 Nights</b> | <b>8,9 Mar 10</b>   |
| <b>Instructor:</b> | <b>Scott Weatherall</b>  |                 |                     |
| <b>NVT-300</b>     | <b>Gasoline Direct Injection Diagnosis</b><br>Gasoline Direct Injection (GDI) systems are becoming common place on late model cars and light trucks. This variation of fuel injection delivers the fuel charge directly into the combustion chamber much like a diesel using a common rail system. The potential benefits of GDI are increased fuel efficiency and power. Of course the GDI fuel control strategies are different than normal MPFI systems and maintenance opportunities present new challenges to the aftermarket repair facility. This class will cover these topics which will enable you to effectively service and maintain GDI systems found on GM, Toyota, Isuzu, Mitsubishi, VW/Audi, Saturn and Mazdas  | <b>2 Nights</b> | <b>26,27 Apr 10</b> |
| <b>Instructor:</b> | <b>Scott Weatherall</b>  |                 |                     |
| <b>EE-201</b>      | <b>Battery Starting &amp; Charging System Diagnosis</b><br>What should be a staple in your diagnostic arsenal has changed over the past several years because of new technologies. Diagnosis of batteries, starter and alternators now include scan tool and capacitance testing coupled with the essential electronic skills you should possess. This course focuses first on the essential skills of testing a battery followed by a review of current starting and charging system technologies. Then you'll follow a detailed diagnostic process to accurately diagnose and service these common complex systems.  | <b>2 Nights</b> | <b>17,18 May 10</b> |
| <b>Instructor:</b> | <b>Scott Weatherall</b>  |                 |                     |

*Check with your local CARQUEST Store for changes and/or updates.*