

## **ETT- Expert Technician Training**

<b>COURSE NAME:</b>	<b>DETROIT DD13-16</b> Troubleshooting, Inspection, Rebuild & Overhaul (4 days)
<b>COURSE LOCATION:</b>	TRITECH Expert Technician Training Center, New Braunfels, TX
<b>COURSE TIMES:</b>	Tues-Thurs 8:00am-5:00pm and Fridays 8:00am-1:00pm (See Training Calendar)
<b># OF PARTICIPANTS:</b>	12 Technicians (10 minimum from all customers combined or a dedicated class)
<b>PREREQUISITES:</b>	Fluke Digital Multimeter Basics <a href="https://www.fluke.com/en-us/learn/online-courses">https://www.fluke.com/en-us/learn/online-courses</a>
<b>OPTIONAL:</b>	Company or personal Laptops are welcome, WIFI will be provided

### **COURSE DESCRIPTION**

This class is designed to provide the proper skills needed to organize, tear down, overhaul, inspect, repair, maintain or replace all components on the DETROIT DD13-16. **Hotel and Lunch Included.**

### **COURSE OBJECTIVES**

After completing this class, the Technician will be able to perform maintenance and repairs on the gear train, valve and injector set, injection pump inspection and replacement of all mechanical items associated with the DD13-16 engine.

### **COURSE INCLUDES**

- **Navigate DTNA Online**
  - How to look up Parts and Service Information
  - Locating the Engine number when the tag has been removed
  - Troubleshooting, Fault Codes, Repair Manuals and Wiring Diagrams
  - TRP's, Campaigns, Service Bulletins and Related Information
  - Service Tools needed for overhaul and repairs
- **Navigate Detroit DDDL**
  - Proper procedures to use DDDL and capabilities
  - How DDDL is utilized for engine diagnostics and repair
  - How to make changes in the ECM using DDDL
  - How to save ECM information and templates
  - Subscription Management and where to go for additional information/help
- **Overhaul, Parts Inspection, R&R, Adjustments and Organization**
  - Engine Walk Around and complete tear down
  - Identify Location and Function of Specific Engine and Aftertreatment Components
  - Identify the front gear train configurations
  - Demonstrate set up procedures on gear train configurations
  - How to remove and install the cylinder head
  - Explain head bolt stretch
  - Checking the power cylinder after an EGR cooler failure
  - Measure cylinder liner protrusion
  - Understand the difference in liners and block liner bores
  - Proper installation and configuring gear train timing of DD13-16 engine
  - Explain different type of engine brakes
  - Valve, engine brake and injector adjustment

## **COURSE INCLUDES (cont.)**

- **Understanding the Fuel System**
  - Common rail and injection pump
  - Identify DD13-16 Engine fuel system components
  - Describe fuel system component's function
  - Describe fuel flow through both fuel systems
  - Demonstrate fuel pump disassembly and assembly procedures
  - Demonstrate fuel system diagnostics
  - Remove/ Install, Inspection and repair Injectors and injector sleeves
  
- **Inspection, Diagnostics, Troubleshooting, Repair or Replacement of**
  - Aftertreatment System
  - Cooling System
  - CAC System
  - Oil System
  - Air System
  - Fuel System
  - Exhaust System
  
- **Skills Assessment**
  - 20 Question Test
  - Hands on skills will be scored during classroom activities.
  - Follow Procedures
  - Follow Clean Care recommendations
  - Participation
  - Certificate of class completion
  - Uniform patch
  - USB drive with all class information

## **SAFETY FIRST**

Technicians must bring appropriate Personal Protective Equipment (PPE), safety shoes, eye protection and ear protection. All safety procedures and warnings must be followed. High pressure fuel and temperature warning. Exposure to rotating components. Always watch out for each other and if you see any liquid spills, please clean up immediately. **(See attached Covid 19 protocol when registering for class).**

## **REGISTRATION**

Please complete the registration form to reserve a slot in the requested class. Registration forms can be requested by emailing us at [ett@tritechent.com](mailto:ett@tritechent.com) or by calling TRITECH at 830-743-9720. Registrations will be accepted up to 5 days prior to start date of a class and are subject to open seats in selected classes.

## **ACCOMMODATIONS**

Hotel room and lunch are included in the training class pricing. Hotel information and confirmation will be sent upon completion of registration. Flights, rental car and transportation are the responsibility of Company sending Technician(s) to training.

## **TRAVEL RECOMMENDATIONS**

TRITECH Expert Technician Training Center is in New Braunfels, TX. The San Antonio, TX airport (SAT) is 27 miles from training center while the Austin, TX airport (AUS) is 47 miles from training center. Please plan on arriving the Monday prior to class starting on Tuesday and departing Fridays 2:00pm or after.