ETT- Expert Technician Training

COURSE NAME:	**CUMMINS 2010-2017 ISX** Engine and Aftertreatment Diagnostics (4 days)
COURSE LOCATION:	TRITECH Expert Technician Training Center, New Braunfels TX
COURSE TIMES:	Tues-Thurs 8:00am-6:00pm and Fridays 8:00am-1:00pm (See training calendar)
ACCOMMODATION:	All courses include hotel and lunch each day
# OF PARTICIPANTS:	6-12 Technicians (6 minimum from all customers combined)
TRAINER:	Michael Foster- Certified Cummins Trainer ett@tritechent.com
PREREQUISITES:	Fluke Digital Multimeter Basics https://user.fact.fluke.com/index

COURSE DESCRIPTION

This class is designed for Technicians who have already completed the Digital Multimeter Basics Certification online class. In this class, students will be instructed in theory and hands-on operation for troubleshooting of the Engine Control Systems, Aftertreatment Systems, Fuel Systems and repair procedures on the Cummins EPA 2010-2017 ISX15 2250 & 2350 Engine family.

COURSE OBJECTIVES

After completing this class, the Technician will be able to demonstrate the use of QuickServe, Insite, and troubleshooting procedures for the Aftertreatment and Electronic Controls associated with the ISX engine.

COURSE INCLUDES

- **Navigate QuickServe Online**
  - How to look up Parts and Service Information
  - Locating the Engine number when the engine tag has been removed
  - Troubleshooting, Repair Manuals and Wiring Diagrams
  - TRP's, Campaigns, Service Bulletins and Related Information
  - Service Tools needed for repairs
- **Navigate Cummins Insite**
  - Proper procedures to use Insite and capabilities
  - How Insite is utilized for engine diagnostics and repair
  - How to make changes in the ECM using Insite
  - How to save ECM information and templates
  - Subscription management and levels
  - Where to go for additional information/help
- **Visual and Read Functions**
  - Data Monitoring/ Logger/ Trip Information
  - Feature and Parameter Settings
  - Engine Data Plate
  - Fault Codes
  - Circuit Diagrams
  - Troubleshooting Steps
  - Valve, engine brake and injector adjustment

COURSE INCLUDES (cont.)

- **Write Functions**
  - Reset Trip Information or Clear Fault Codes
  - Adjust Features, Parameters and create Templates
  - Create Work Orders (ECM Images)
  - Create/Change/Clear ECM Passwords (Zap It)
  - Perform special diagnostic tests
  - Perform ECM code calibrations

- **Aftertreatment**
  - Describe Exhaust flow and Components of the Aftertreatment Systems
  - Describe Maintenance Guidelines and Purpose of the SCR System
  - Identify Components associated with the SCR System and their function
  - Describe Derates and Fault Codes associated with the SCR system
  - Demonstrate Diagnostic Functions using Insite and other special tooling
  - Removing and installing Aftertreatment Systems
  - Perform Aftertreatment Diagnostics

- **Electronic Control Systems**
  - Identify the difference between the CM2250 and CM2350 circuits
  - Demonstrate the ability to interpret the wiring diagrams regarding CM2250 and CM2350
  - Describe specific control circuit differences between the control systems
  - Identify and Demonstrate the available ECM Diagnostic Test
  - Demonstrate the repair for the 96 pin Connector

- **Skills Assessment**
  - 25 Question Test
  - Hands on skills will be scored during classroom activities
  - Follow Procedures
  - Follow Clean Care recommendations
  - Participation during class

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 Enrollment Form to reserve a slot in the requested class. Registration forms can be requested by emailing us at 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 the Company sending their Technician(s) to be trained.

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 ETT training center. Please plan on arriving the Monday prior to class starting on Tuesday and departing Fridays 3:00pm or after.