

Powerstroke 6.4L and 6.7L Operation and Diagnosis

Day One:

This course begins with a roundtable discussion of technicians bringing their take on day-to-day dealings with these vehicles. Tony will introduce service information available using Ford Installer Support, Motorcraftservice.com, Alldata and Identifix. Introduction of the IDS scan tool and the use of other aftermarket scan tools are discussed in this course.

Powerstroke 6.7L will be introduced. The subsystems that will be taught are:

Piezo common rail fuel injection system, the components, the differences between the low pressure side, the high pressure side and the return systems.

Turbocharger used, variable vane style, variances between the wastegate equipped models and the non-wastegate equipped models.

Aftertreatment System which varies between the cab chassis models and the Super-Duty models. Discussion will cover the use of Reductant (DEF Fluid). Common issues will be covered such as reductant injector clogging, sending unit level sensor issues and other common complaints.

Engine design and variances from older models will be shown and instructed.

The following 2 days instruction will continue with the Powerstroke 6.7L and the Powerstroke 6.4L.

The 6.4L introduced the aftertreatment system in the Powerstroke families. Technicians need to address the issues and causes of premature engine failure which can be caused by oil dilution. The term regeneration will be defined and instructed.

In this portion of the course, instruction will be on:

Introduction to the 6.4L engine design, subsystems and repair

The common rail piezoelectric fuel injection system. The components, the operation and common diagnostic techniques.

Low pressure fuel system, testing and how it is plumbed with the return system.

Use of Diagnostic information already available.

Aftertreatment system, explanation of the diesel oxidation catalyst (DOC) and the Diesel Particulate Filter (DPF).

Regeneration defined and explained. Common issues and diagnostic approach to ensure an accurate diagnosis.

EGR system - the common issues and techniques to use when removing coolers and the EGR itself. Review diagnostic tests to test the EGR valve.

All instruction will focus on information needed to aid you in diagnosing these trucks. Our goal is to instruct technicians with techniques and skills needed to repair these engines.

There are many technicians who become frustrated with the lack of information and procedures when dealing with these trucks. Tony trains you to gain the skills to become competent and knowledgeable to make you more efficient and profitable!

*** Training will include hands-on demonstrations on engines and on vehicles! ***

Fee includes books and materials. We highly recommend attendees bring a laptop or tablet compatible with Internet Explorer installed.