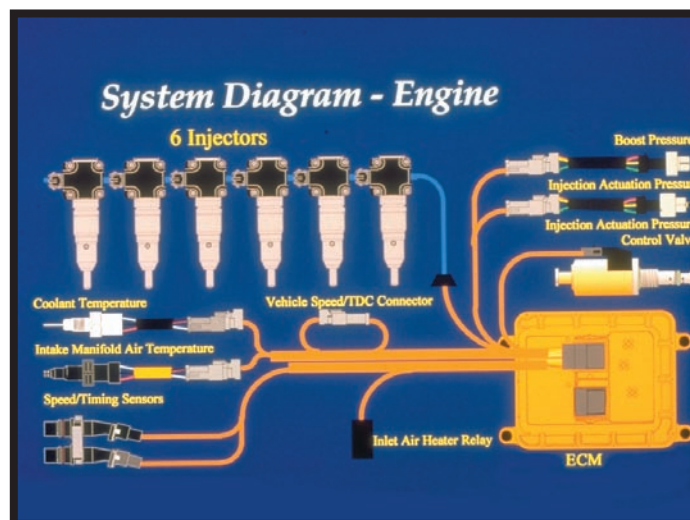


# Caterpillar® Engine Service Training



## Introduction to the 3126 HEUI System: Electronic ESTMG

serial number prefixes: 1WM, 8WL



## HEUI System - Electronic ESTMG Introduction

**Audience:** Level II and III – Service personnel who are familiar with diesel engine operation, diagnostic equipment and procedures for testing and adjusting.

**Background:** This package contains information on electronic features and system operation.

**Objectives:** After learning the information in this presentation, the service technician will be able to:

1. Identify component locations for 3126 HEUI engines
2. Identify electronic components for new electronics package
3. Identify new features on 3126 HEUI
4. Understand fuel system operation on 3126 HEUI
5. Understand differences between 3100 MUI and HEUI

**References:** 3100 HEUI Service Manual                      SENR6555

**Approximate Time:** 8 hours

**Hardware Needed:** 3126 HEUI engine with any live lab demos



## *Agenda*

- **Electronic Overview**
- **Hardware**
- **Software Features**
- **Servicing**
- **Troubleshooting**
- **Hands On .....**

No. 1

## *Medium Duty Competition*

- **Caterpillar Introduces the first Hydraulic Electronic Unit Injected Engine to this market.**
- **Most Extensive List of Customer Features**
  - Electronic Cruise, Vehicle Speed Limiting, Idle Control, etc....
- **Market Leader in Emission Reduction**
  - No Catalytic Converter
- **Building Blocks in Place for Compliance with 1998 Emissions**

No. 2

*Comparison w/ Cat H.D. Electronic Engine's*

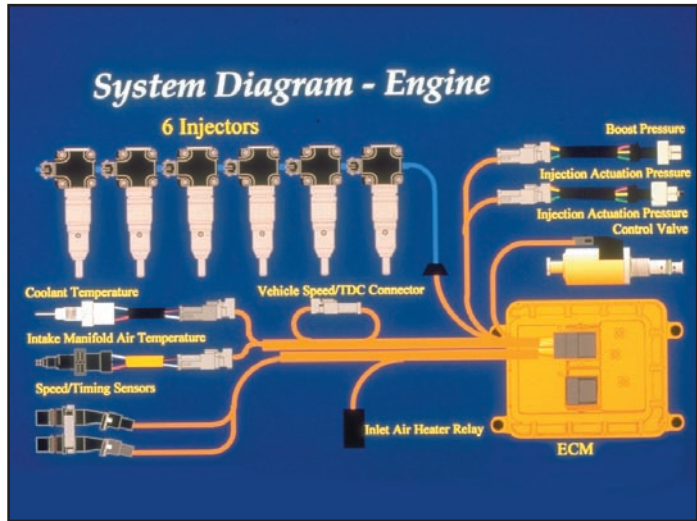
- **3100 HEUI uses Proven Hardware for Components**
- **Components Designed w/ H.D. Requirements**
- **Customer Driven Feature Set**
  - Optimized Features for Medium Duty Market

No. 3

*Electronic Hardware - Engine*

- **Agenda**
  - System Diagram
  - Component Location
  - Component Function

No. 4

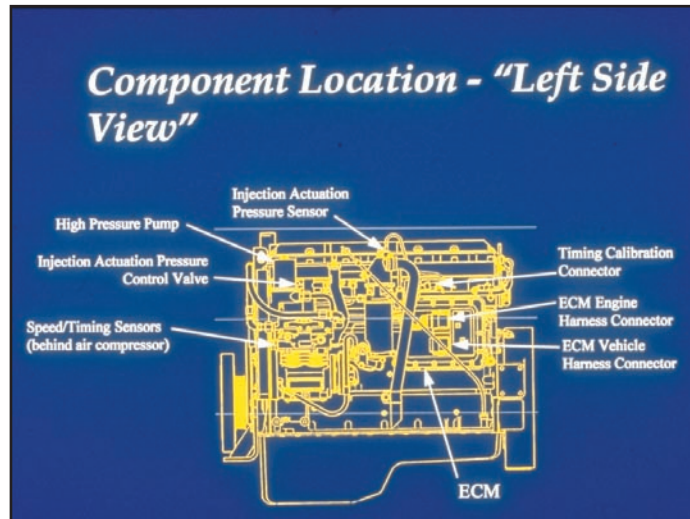


No. 5

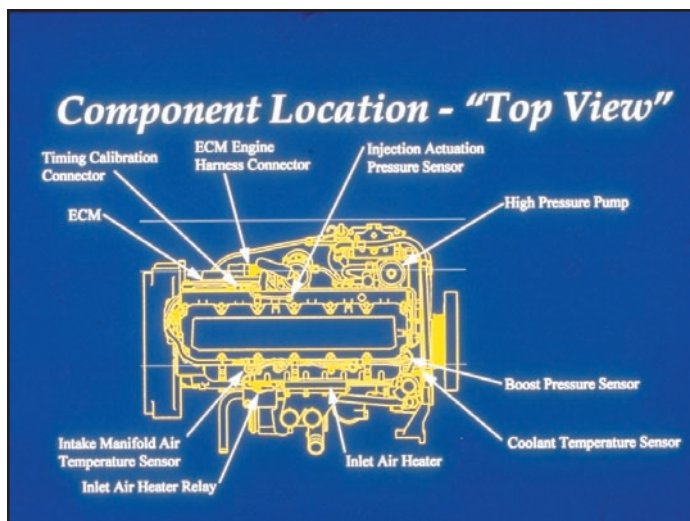
***"More" Comparison w/ Cat H.D. Electronic Engine's***

- **Sensors:**
  - Atmospheric Pressure Sensor Not Required
  - Fuel Temperature Sensor Not Available
    - No Fuel Temperature Power or Fuel Burned Correction
- **Modular Engine Harness**
  - No Valve Cover Base Connector
- **Fully Redundant Speed Sensors**

No. 6



No. 7



No. 8