

[Table Of Contents](#)

Preface

Acknowledgments

About the Author

Chapter 1: Introduction to Diesel Engines

Diesel Internal Combustion Engine Terms

Combustion Chambers

Engine Operation

Valve Timing

Combustion Process

Power and Speed Control

Fuel Injection Timing

Chapter 2: Tools, History, and Engine Systems

Special Service Tools

Engine History

Construction

The Fuel System

Evaluating and Diagnosing the Fuel System

Engine Noise Diagnosis

Glow Plug Systems

Injection Pump Timing

Compression Testing

Checking Turbo Boost Pressure

Cooling System Issues

Chapter 3: Engine Removal

Chapter 4: Engine Disassembly

Chapter 5: Stanadyne DB2 Pump Service

Pump Operation

Injection Pump Disassembly and Assembly

Transfer Pump Service

Optional Inspections and Adjustments

Injection Pump Rotor

Pump Reassembly

Injection Pump Test Stand

Chapter 6: Engine Inspection, Cleaning, and Machining

Engine Block Inspection and Service

Chapter 7: Assembly and Installation

Bottom-End Build

Installation

Chapter 8: Diagnostics and Modifications

Mechanical System Diagnosis

Automatic Transmission TPC/VRV DB2 Systems

6.5L DS4 EFI Diagnosis

DS4 Pump Fuel Flow

6.5L EFI Diagnostics

6.5L Diagnostic Issues

Early 5.7L Olds Diesel Engines

Performance Upgrades

Appendix

Source Guide