

PowerTech™ 8.1L Diesel Engines

Level 9 Electronic Fuel System With Denso High Pressure Common Rail



TECHNICAL MANUAL POWERTECH™ 8.1 L Diesel Engines Level 9 Electronic Fuel System With HPCR

CTM255 19OCT06 (ENGLISH)

For complete service information also see:

PowerTech™ 8.1 L Diesel Engines Base
Engine CTM255
OEM Engine Accessories ...
Alternators and Starter Motors...



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Introduction

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This manual (CTM 255) is written for an experienced technician. Essential tools required in performing certain service work are identified in this manual and are recommended for use.


This manual covers only Level 9 (Tier II) Electronic Fuel System (200,000—). The following four companion manuals cover other aspects of the 8.1L engine:

- CTM68—Electronic Fuel Injection Systems
- CTM86—PowerTech® 8.1L Diesel Engines Base Engine
- CTM243—PowerTech® 8.1L Diesel Engines Mechanical Fuel Systems
- CTM134—PowerTech® 6.8L and 8.1L Diesel Engines Level 3 Electronic Fuel Systems with Bosch In-Line Pump (—199,999 engines)

Other manuals will be added in the future to provide additional information on electronic fuel systems as needed.

A complete set of all these manuals covering 8.1 L engines, excluding CTM68, is available in a binder by ordering CTM 450 Binder Set.

Live with safety: Read the safety messages in the introduction of this manual and the cautions presented throughout the text of the manual.

 This is the safety-alert symbol. When you see this symbol on the machine or in this manual, be alert to the potential for personal injury.

Use this component technical manual in conjunction with the machine technical manual. An application

listing in Section 01, Group 001 identifies product-model/component type-model relationship. See the machine technical manual for information on component removal and installation, and gaining access to the components.

Information is organized in sections and groups for the various components requiring service instruction. At the beginning of each group are summaries of the upcoming group.

Before beginning repair on an engine, clean the engine.

This manual contains SI Metric units of measure followed immediately by the U.S. customary units of measure. Most hardware on these engines are metric sized.

Some components of this engine may be serviced without removing the engine from the machine. Refer to the specific machine technical manual for information on components that can be serviced without removing the engine from the machine and for engine removal and installation procedures.

Read each block of material completely before performing service to check for differences in procedures or specifications. Follow only the procedures that apply to the engine model number you are working on. If only one procedure is given, that procedure applies to all the engines in the manual.

CALIFORNIA PROPOSITION 65 WARNING: Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

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