

PowerTech™ Plus 4.5L and 6.8L Diesel Engines Level 14 Electronic Fuel System With Denso HPCR



DCT

COMPONENT TECHNICAL MANUAL PowerTech Plus 4.5 L and 6.8 L Diesel Engines—Level 14 Electronic Fuel System with Denso HPCR

CTM320 17JUL09 (ENGLISH)

For complete service information also see:

| | |
|--|--------|
| PowerTech Plus 4.5 L and 6.8 L Diesel Engines—Base Engine | CTM104 |
| Alternators and Starter Motors | CTM77 |
| OEM Engine Accessories | CTM67 |

(English only)



John Deere Power Systems
LITHO IN U.S.A.



CTM320

Introduction

Forward


This manual 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 (CTM320) covers only Level 14 Electronic Fuel System with the Denso High Pressure Common Rail (HPCR). It is one of six volumes on 4.5 L and 6.8 L engines. The following companion manual covers the base engine and mechanical fuel system. Each manual covers repair, operation, and diagnostics.

- CTM104—Base Engine

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

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 up coming 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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Record of Changes

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| Section / Group | Block Title | Comment | Update Date |
|-----------------|--|---|-------------|
| 05/170 | Repair and Adjustment Tools | Added Cylinder Leak-Down Test Kit | 3/17/2009 |
| 04/150 | Observable Diagnostic | Added Cylinder Leak-Down Test Kit | 3/17/2009 |
| 04/160 | Trouble Code Diagnostics and Tests | Added 002004.09 Code | 3/20/2009 |
| 06/200 | Electronic Engine Control Repair and Adjustment Specifications | Corrected Torque Value for EGR Temperature Sensor | 4/09/2009 |

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Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

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Thank you very much
for your reading.
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to get more information.