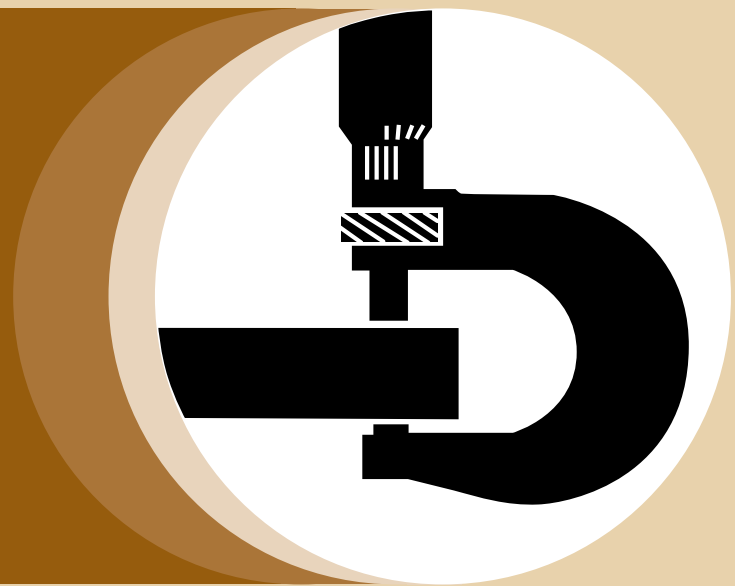


Alternators and Starter Motors

COMPONENT TECHNICAL MANUAL



Deere Power Systems Group
CTM77 (30OCT00)

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ENGLISH



Introduction

Foreword

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.

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



CAUTION: 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.

This Component Technical Manual (CTM) contains the latest available instructions necessary to repair engine alternators and starter motors. It includes theory of operation, and diagnostic and testing procedures to help troubleshoot and understand potential failure modes.

The information is organized in sections and groups by various suppliers. At the beginning of each repair group are summary listings of all applicable essential tools, service equipment and tools, other materials needed to do the job, service parts kits, specifications, wear tolerances, and torque values.

Component Technical Manuals are concise service guides for specific components. They are written as stand-alone manuals covering multiple machine applications.

Fundamental service information is available from other sources covering basic theory of operation, fundamentals of troubleshooting, general maintenance, and basic types of failures and their causes.

This manual covers alternator and starter motor applications for all John Deere diesel engines—both older 300/400/500-Series and newer POWERTECH® 2.9 L—12.5 L engines. This manual covers components for both Deere OEM engines and Deere machine engine applications.

NOTE: Remanufactured alternators and starter motors are available for replacement on most applications listed in this manual. Refer to John Deere's "Remanufactured Components" catalogs to cross-reference your original equipment part number and obtain a suitable remanufactured replacement starter or alternator.

John Deere Dealers

IMPORTANT: Please copy this page listing changes and route it through your service department.

This CTM is a complete revision of CTM77, Alternators and Starter Motors, dated 15 MAR 97.

This manual covers alternators and starter motors on most John Deere applications manufactured since 1972, except 40, 50 and 55 Series Utility Tractors.

New information added to this manual includes:

- Section 45—Leece-Neville Alternators
- Section 50—Prestolite Alternators

Revised information includes:

1. Updated specifications for all current alternators and starter motors, including those adopted since the 15 MAR 97 edition.
2. Added new applications and specifications for all current alternators and starter motors.

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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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Section 05

Introduction and Safety Information

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