

# 300 Series OEM Engines



## TECHNICAL MANUAL 300 Series OEM Engines

TM1190 (01DEC84) English



John Deere Engine Works  
TM1190 (01DEC84)

LITHO IN U.S.A.  
ENGLISH





## 300 SERIES OEM ENGINES

Technical Manual  
TM-1190 (Dec-84)

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*The specifications and design information contained in this manual were correct at the time it was printed. It is John Deere's Policy to continually improve and update our machines. Therefore, the specifications and design information are subject to change without notice. Wherever applicable, specifications and design information are in accordance with SAE and ICED standards.*

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## INTRODUCTION



Use FOS Manuals for Reference

This technical manual is part of a twin concept of service:

The two kinds of manuals work as a team to give you both the general background and technical details of shop service.

### •FOS Manuals—for reference

*Fundamentals of Service (FOS) Manuals* cover basic theory of operation, *fundamentals* of trouble shooting, *general* maintenance, and *basic* types of failures and their causes. FOS Manuals are for training new personnel and for reference by experienced service technicians.



When a service technician should refer to a FOS Manual for more information, a FOS symbol like the one at the left is used in the TM to identify the reference.

### •Technical Manuals—for actual service

*Technical Manuals* are concise service guides for a *specific* machine. Technical manuals are on-the-job guides containing only the vital information needed by an experienced service technician.



Use Technical Manuals for Actual Service

This technical manual was planned and written for you—an experienced service technician. Keep it in a permanent binder in the shop where it is handy. Refer to it whenever in doubt about correct service procedures or specifications.

Some features of this manual:

- Inside front cover - "Table of Contents".
- Section I - Contents
- Sections 4 through 40 - Removal, repair, testing (components removed), installation, and adjustment.
- Section 90 - Detailed explanation of system operation, diagnosis, visual inspection, testing, and adjustments.
- Specifications grouped and illustrated at the end of each section.

## SECTION AND GROUP CONTENTS OF THIS MANUAL

### SECTION I - GENERAL INFORMATION

Group I - Contents

### SECTION 4 - ENGINE

Group 0400 - Removal and Installation  
Group 0401 - Crankshaft and Main Bearings  
Group 0402 - Camshaft and Valve Actuating Means  
Group 0403 - Connecting Rods and Pistons  
Group 0404 - Cylinder Block  
Group 0407 - Oiling System  
Group 0408 - Ventilating System  
Group 0409 - Cylinder Head and Valves  
Group 0410 - Exhaust Manifold  
Group 0413 - Fuel Injection System  
Group 0414 - Intake Manifold  
Group 0415 - Engine Balancer  
Group 0416 - Turbocharger  
Group 0417 - Water Pump  
Group 0418 - Thermostats, Housing and Piping  
Group 0419 - Engine Oil Cooler  
Group 0420 - Fuel Filter  
Group 0421 - Fuel Transfer Pump  
Group 0422 - Starting Motor and Fastening  
Group 0423 - Alternator and Generator Mountings  
Group 0429 - Fan Drive  
Group 0433 - Flywheel, Housing and Fastenings  
Group 0499 - Specifications and Special Tools

### SECTION 5 - ENGINE AUXILIARY SYSTEMS

Group 0510 - Cooling Systems  
Group 0515 - Speed Controls  
Group 0520 - Intake Systems  
Group 0599 - Specifications and Special Tools

### SECTION 16 - ELECTRICAL SYSTEMS

Group 1672 - Alternator, Regulator and Charging System Wiring  
Group 1674 - Wiring Harness and Switches  
Group 1676 - Instruments and Indicators  
Group 1699 - Specifications and Special Tools

### SECTION 19 - SHEET METAL AND STYLING

Group 1910 - Hood or Engine Enclosure

### SECTION 40 - PTO DRIVE

Group 4052 - PTO Clutch  
Group 4099 - Specifications and Special Tools

### SECTION 90 - SYSTEM TESTING

Group 9010 - Engine  
Group 9015 - Electrical System  
Group 9035 - Specifications and Special Tools

## OEM ENGINES SERVICED BY THIS TECHNICAL MANUAL

**3-164D**

**3-179D**

**4-219D**

**4-239D**

**4-239T**

**4-276D**

**4-276T**

**6-329D**

**6-359D**

**6-359T**

**6-414D**

**6-414T**



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