

# Series 400 6076 Diesel Engines Serial Number (500000- )



JOHN DEERE

## COMPONENT TECHNICAL MANUAL Series 400 6076 Diesel Engines Serial Number (500000- )

CTM42 (24MAR95) English



Deere Power Systems Group  
CTM42 (24MAR95)

LITHO IN U.S.A.  
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.



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 the introduction 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.

This manual is divided in two parts: repair and operation and tests. Repair sections contain

necessary instructions to repair the component. Operation and tests sections help you identify the majority of routine failures quickly.

Information is organized in groups for the various components requiring service instruction. At the beginning of each 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. Component technical manuals 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 type of failures and their causes.

**JOHN DEERE ENGINE OWNER:**

Don't wait until you need warranty or other service to meet your local John Deere Engine Distributor or Service Dealer.

Learn who he is and where he is. At your first convenience, go meet him. He'll want to get to know you and to learn what your needs might be.

**UTILISATEURS DE MOTEURS JOHN DEERE:**

N'attendez pas d'être obligé d'avoir recours à votre Concessionnaire ou Point de Service le plus proche pour vous adresser à lui.

Renseignez-vous dès que possible pour l'identifier et le localiser. A la première occasion, prenez contact avec lui et faites-vous connaître. Il sera lui aussi heureux de faire votre connaissance et de savoir que vous pourrez compter sur lui le moment venu.

**AN DEN BESITZER DES JOHN DEERE MOTORS:**

Warten Sie nicht auf einen evt. Reparaturfall um den nächstgelegenen John Deere Händler kennen zu lernen.

Machen Sie sich bei ihm bekannt und nutzen Sie sein "Service Angebot".

**PROPRIETARIO DEL MOTORE JOHN DEERE:**

Non aspetti fino a quando ha bisogno della garanzia o di un altro tipo di assistenza per incontrarsi con il Suo Concessionario che fornisce l'assistenza tecnica.

Impari a conoscere chi è e dove si trova. Alla Sua prima occasione cerchi d'incontrarlo. Egli desidera farsi conoscere e conoscere le Sue necessità.

**PROPIETARIO DE EQUIPO JOHN DEERE:**

No espere hasta necesitar servicio de garantía o de otro tipo para conocer a su Distribuidor de Motores John Deere o al Concesionario de Servicio.

Entérese de quién es, y dónde está situado. Cuando tenga un momento, vaya a visitarlo. A él le gustará conocerlo, y saber cuáles podrían ser sus necesidades.

**JOHN DEERE MOTORÄGARE:**

Vänta inte med att besöka Din John Deere återförsäljare till dess att Du behöver service eller garanti reparation.

Bekanta Dig med var han är och vem han är. Tag första tillfälle att besöka honom. Han vill också träffa Dig för att få veta vad Du behöver och hur han kan hjälpa Dig.



# Dealer Presentation Sheet

## JOHN DEERE DEALERS

**IMPORTANT: The changes listed below make your current CTM obsolete. Discard CTM42, dated 02 NOV 92. Please copy this page and route through your service department.**

- Engine application charts updated to include the latest product models. See ENGINE APPLICATION CHART in Group 01.
- Engine coolant information revised. See ENGINE COOLANT RECOMMENDATIONS in Group 02.
- Recommendation to use ONLY JDG23 Lifting Sling and Deere provided lifting straps for lifting engines. Also recommend the use of SAE Grade 8 or higher grade cap screws and Loctite 242 when installing engine lifting straps added to Group 03.
- New “TORQUE-TO-YIELD” instructions for tightening cylinder head cap screws marked “SPECIAL” added to Group 05.
- Valve lift specifications revised in Group 05 and Group 16.
- Piston ring end gap specifications for new pistons have been added to Group 10.
- A revised (longer) JDG681A Tap for cleaning deeper tapped cylinder head cap screw holes in block added to Group 10.
- Use of JDG796 Alignment Tool for installing crankshaft rear oil seal housing added to Group 15.
- Detailed instructions for inspection of the vibration damper and the crankshaft dowel pin added to Group 15.
- Timing gear cover and rear oil seal housing replacement procedures for 6076HRW33, 34, and 35 Engines (equipped with structural front frame/oil sump), with engine installed in vehicle added to Group 15.
- Camshaft lobe lift specifications and valve lift specifications revised in Group 16.
- Recommendation against disassembly of the engine oil pump added to Group 20.
- Instructions for installation of structural front frame/oil sump on engines used in 8000 series tractors added to Group 20.
- Information and specifications for fan drive assembly with press-fit fan spacer added to Group 25.
- Torque specifications for turbocharger oil inlet line added to Group 30.
- Information to help identify A-Series and P-Series fuel injection pumps and fuel supply pumps added to Group 35.
- Instructions for disassembly and assembly of the fuel check valve deleted from Group 35. The check valve has been replaced by a non-serviceable assembly.
- In Group 100 — Engine Tune-Up and Break-In, the paragraph titled ALTITUDE COMPENSATION GUIDELINE changed to EFFECTS OF TEMPERATURE AND ALTITUDE ON ENGINE PERFORMANCE.
- In Group 105, the recommended temperatures and engine speeds for checking engine oil pressure revised. The procedure to pressure test the cooling system and radiator cap also revised.
- Dynamic timing procedure using TIME TRAC® timing kit to accurately check and adjust (rotary) injection pump-to-engine timing added to Group 115.
- Instructions and specifications for check and adjustment of the fuel shut-off solenoid added to Group 115.
- Instructions for changing 6076 generator set engines with mechanical governor from rated speed of 1800 RPM (60 Hz) to 1500 RPM (50 Hz) added to Group 115.

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for your reading.  
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to get more information.