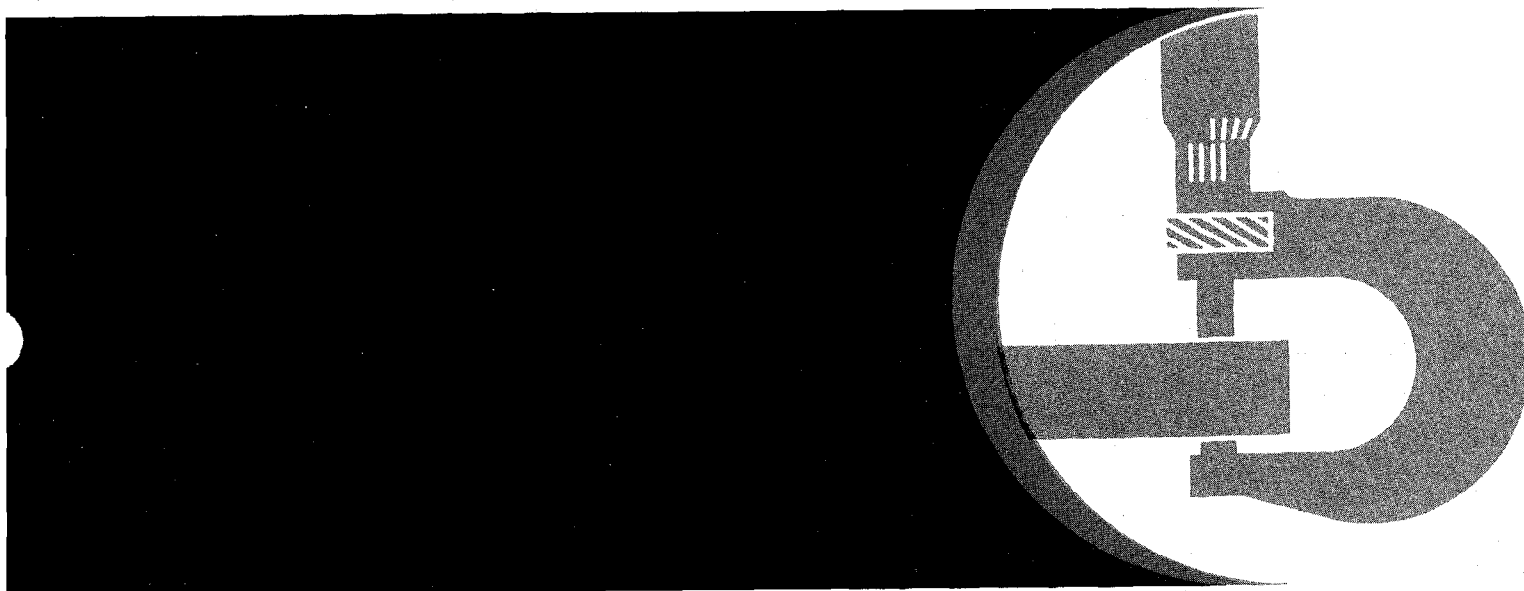


John Deere JD300-B Loader and Backhoe Loader



TECHNICAL **MANUAL**



TM-1087
Litho in U.S.A.

JD300-B LOADER AND BACKHOE LOADER

Technical Manual
TM-1087 (Dec-78)

CONTENTS

Section 10 - GENERAL

- Group 5 Specifications
- Group 10 Predelivery, Delivery, and After-Sale Services
- Group 15 Lubrication

Section 20 - ENGINE

- Group 5 Engine Removal and Installation
- Group 10 Basic Engine
- Group 15 Engine Lubrication System
- Group 20 Engine Cooling System
- Group 25 Fuel System
- Group 30 Speed Control Linkage
- Group 35 Air Intake System
- Group 40 Specifications and Special Tools

Section 30 - ELECTRICAL SYSTEM

- Group 5 Batteries
- Group 10 Charging System
- Group 15 Starting System
- Group 20 Ignition System
- Group 25 Gauges and Switches
- Group 30 Specifications and Special Tools

Section 40 - POWER TRAIN

- Group 5 Clutch Assemblies
- Group 10 Transmission
- Group 15 Reverser
- Group 20 Continuous Running PTO
- Group 25 Differential and Parking Brake
- Group 30 Final Drives
- Group 35 Specifications and Special Tools

Section 50 - HYDRAULIC SYSTEM

- Group 5 Transmission Pump
- Group 10 Main Hydraulic Pump
- Group 15 Reverser Clutch Control Valve
- Group 20 Pressure Control Valve
- Group 25 Steering Valve
- Group 30 Brake Valve
- Group 35 Loader Control Valve
- Group 40 Backhoe Control Valve
- Group 45 Selective Control Valve
- Group 50 Rockshaft System
- Group 55 Miscellaneous Hydraulic Components
- Group 60 Hydraulic Cylinders
- Group 65 Specifications and Special Tools

Section 60 - MISCELLANEOUS COMPONENTS

- Group 5 Front End Assembly
- Group 10 Loader Frame, Boom and Bucket
- Group 15 Backhoe Frame, Boom, Dipperstick, and Bucket
- Group 20 3-Point Hitch
- Group 25 Specifications and Special Tools

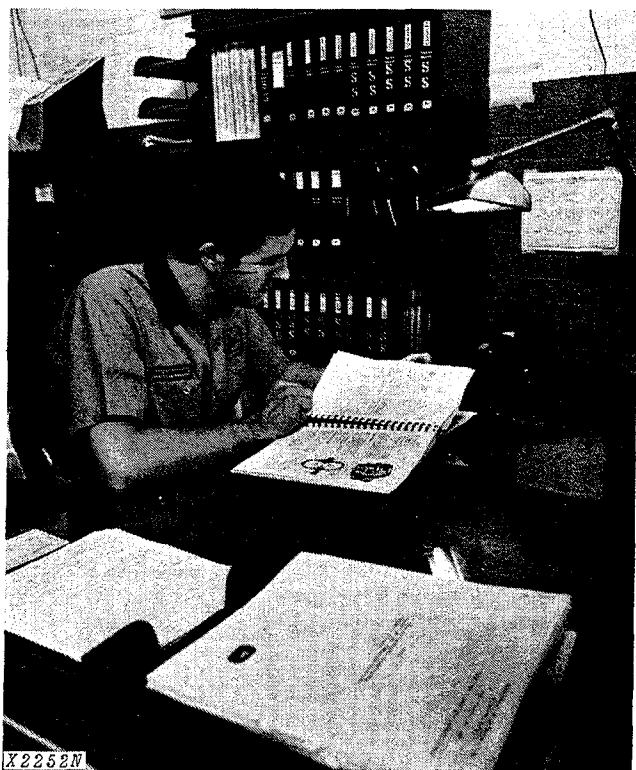
Section 70 - SYSTEM TESTING

- Group 5 General Information
- Group 10 Engine
- Group 15 Electrical System
- Group 20 Power Train
- Group 25 Hydraulic System
- Group 26 Hydraulic System (Analyzer)
- Group 30 Miscellaneous Components
- Group 35 Specifications and Special Tools

INDEX

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.

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 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" and "Maintenance Without Accident".
- Section 10 - General specifications and services.
- Sections 20 through 60 - Removal, repair, testing (components removed), installation, and adjustment.
- Section 70 - Detailed explanation of system operation, diagnosis, visual inspection, testing, and adjustments.
- Specifications grouped and illustrated at the end of each section.

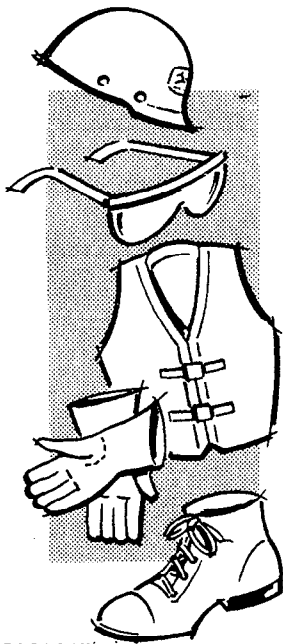
MAINTENANCE WITHOUT ACCIDENT WORK SAFELY



T27999N

 This safety alert symbol identifies important safety messages in this manual and on the loader and loader backhoe. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

**EVERY EMPLOYER HAS A
SAFETY PROGRAM. KNOW
WHAT IT IS!**



T27501N

Consult your shop foreman for specific instructions on a job, and the safety equipment required.

For instance, you may need: Hard hat, safety shoes, safety goggles, heavy gloves, reflector vests, ear protectors, respirators.

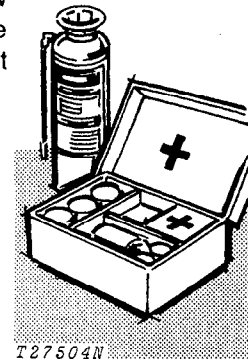
Litho in U.S.A.



T27502N

BE ALERT!

Plan ahead—work safely—know how to use a first-aid kit and a fire extinguisher—and where to get aid and assistance.



T27504N

Maintenance Area

Make sure the maintenance area is adequately vented.

Keep maintenance area **CLEAN AND DRY**. Oily and wet floors are slippery; greasy rags are a fire hazard; wet spots are dangerous when working with electrical equipment.

Store starting aids in a cool and well-ventilated place, out of the reach of unauthorized personnel.



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