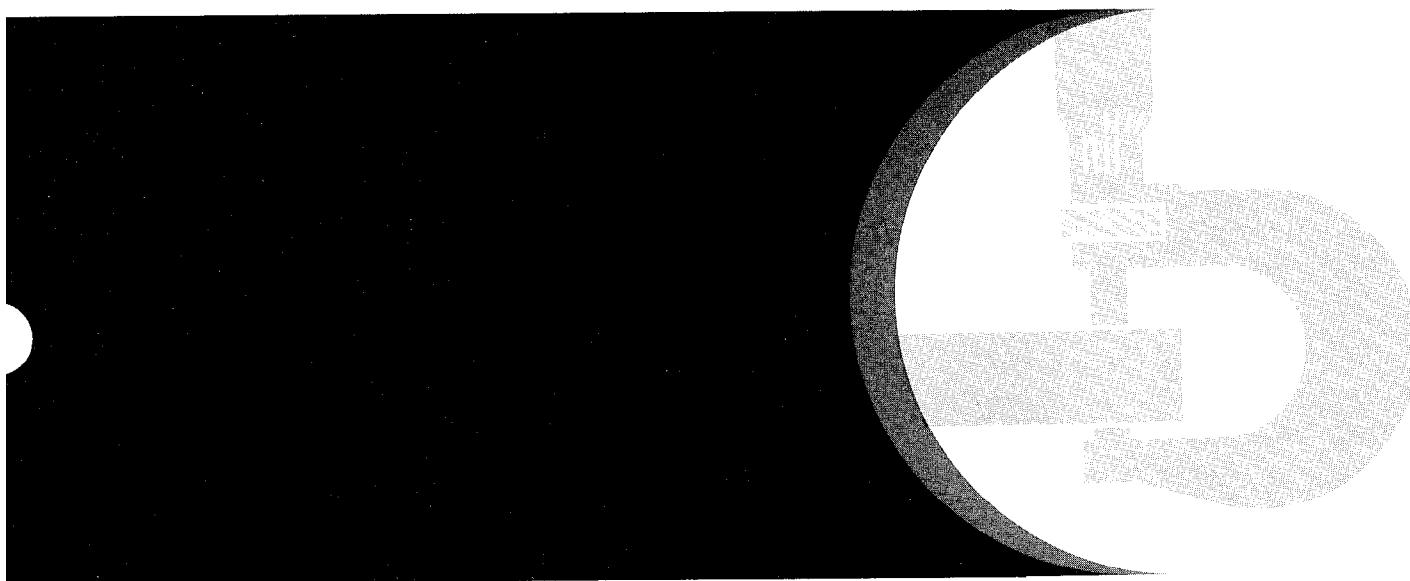


**John Deere  
540D Skidder  
548D Grapple Skidder  
Repair**



**TECHNICAL MANUAL**

**TM-1438 (Apr-88)**

LITHO IN U.S.A.

# 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.**

Technical manuals are divided in two parts: repair and diagnostics. Repair sections tell how to repair the components. Diagnostic 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.

Binders, binder labels, and tab sets can be ordered by John Deere dealers direct from the John Deere Distribution Service Center.

This manual is part of a total product support program.

## FOS Manuals-reference

### Technical Manuals-machine service

### Component Manuals-component service

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

*Technical Manuals* are concise guides for specific machines. Technical manuals are on-the-job guides containing only the vital information needed for diagnosis, analysis, testing, and repair.

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

## JOHN DEERE DEALERS

**IMPORTANT: Please remove this page and route through your service department.**

This is a complete revision for TM-1438, 540D Skidder and 548D Grapple Skidder.

Binder and tabs from old manual may be saved and used with this bound manual.

The new pages are dated (Apr-88). Listed below is a brief explanation of "WHAT" was changed and "WHY" it was changed.

This manual was revised:

1. Inspection procedure group added in Section I.
2. Repair story for seals in oscillating support.
3. Cross section drawing of planetary pack added.
4. Engine repair story is removed. For complete repair information, see the component technical manual.
5. Repair story for new park brake seals and installation of seals with brake on unit.
6. Main pump repair story is removed. For complete repair information see the component technical manual.
7. Artwork for blade and grapple control valve revised to include external seal design for the spools.
8. Pressure control valve (priority valve) setting change to  $8600 \pm 345$  kPa ( $85 \pm 3.4$  bar) ( $1250 \pm 50$  psi).
9. General updating.

**540D SKIDDER  
548D GRAPPLE SKIDDER  
TECHNICAL MANUAL  
TM-1438 (APR-88)**

**SECTION AND GROUP CONTENTS**

*NOTE: This manual covers repair. For operation and tests, see TM-1439, Operation and Tests.*

**SECTION I—GENERAL INFORMATION**

- Group I—Safety Information
- Group II—General Specifications
- Group III—Torque Values
- Group IV—Fuels and Lubricants
- Group V—Inspection Procedure

**SECTION 01—WHEELS**

- Group 0110—Powered Wheels and Fastenings

**SECTION 02—AXLES AND SUSPENSION SYSTEMS**

- Group 0200—Removal and Installation
- Group 0210—Differential or Bevel Drive
- Group 0225—Input Drive Shafts and U-Joints
- Group 0250—Axle Shafts, Bearings and Reduction Gears
- Group 0260—Hydraulic System
  - Differential Lock Valve, Accumulator
  - Return Oil Screen, Air Assisted
  - Differential Lock Oil Return System

**SECTION 03—TRANSMISSION**

- Group 0300—Removal and Installation
- Group 0315—Controls Linkage
- Group 0350—Gears, Shafts, Bearings and Power Shift Clutch

**SECTION 03—TRANSMISSION—Continued**

- Group 0360—Hydraulic System
  - Suction Screen, Transmission Filter, Filter Relief Valve, Pressure Regulating Valve, Cooler Relief Valve, Oil Cooler, Transmission Control Valve C1-C2 Accumulator, and Oil Pump.

**SECTION 04—ENGINE**

- Group 0400—Removal and Installation

**SECTION 05—ENGINE AUXILIARY SYSTEMS**

- Group 0505—Cold Weather Starting Aids
- Group 0510—Cooling System
- Group 0515—Speed Controls
- Group 0520—Intake System
- Group 0530—External Exhaust System
- Group 0560—External Fuel Supply System

**SECTION 07—DISCONNECT CLUTCH**

- Group 0715—Controls Linkage
- Group 0752—Elements

*Continued on next page*

*All information, illustrations and specifications contained in this technical 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 09—STEERING SYSTEM**

- Group 0930—Secondary Steering
  - Check Valve, Pressure Switch,
  - Control Valve, Accumulator
- Group 0960—Hydraulic System
  - Steering Valve, Cylinders,
  - Port Mounted Crossover Relief Valve with Check Valve

## **SECTION 10—SERVICE BRAKES**

- Group 1011—Active Elements
- Group 1060—Hydraulic System
  - Brake Valve, Accumulator

## **SECTION 11—PARK BRAKE**

- Group 1111—Active Elements
- Group 1115—Controls Linkage
- Group 1160—Hydraulic System
  - Brake Valve, Accumulator,
  - Orifice

## **SECTION 16—ELECTRICAL SYSTEMS**

- Group 1671—Batteries, Support and Cables
- Group 1672—Alternator, Regulator and Charging System Wiring
- Group 1673—Lighting System
- Group 1674—Wiring Harness and Switches
- Group 1676—Instruments and Indicators

## **SECTION 17—FRAME, CHASSIS, OR SUPPORTING STRUCTURE**

- Group 1740—Frame Installation
  - Pivot Repair
- Group 1746—Frame Bottom Guards

## **SECTION 18—OPERATOR'S STATION**

- Group 1800—Removal and Installation
- Group 1810—Operator Enclosure
  - Wiper Motor, Windshield Washer, and Windows
- Group 1821—Seat and Seat Belt
- Group 1830—Heating and Air Conditioning

## **SECTION 19—SHEET METAL AND STYLING**

- Group 1910—Hood or Engine Enclosure
- Group 1921—Grille and Grille Housing

## **SECTION 20—SAFETY, CONVENIENCE AND MISCELLANEOUS**

- Group 2004—Horn and Warning Devices

## **SECTION 21—MAIN HYDRAULIC SYSTEM**

- Group 2160—Hydraulic System
  - Hydraulic Manifold (Surge Relief Valve, Priority Valve, System Relief Valve), Pump Drive, Filter, System Check Valve, Hydraulic System Oil Filter

## **SECTION 30—WINCH**

- Group 3000—Removal and Installation
- Group 3050—Drive and Clutches
- Group 3060—Hydraulic System
  - Winch Valve, Winch Warm-Up Valve, Check Valve

## **SECTION 32—BULLDOZER (STACKING BLADE)**

- Group 3200—Removal and Installation
- Group 3215—Controls Linkage
- Group 3260—Hydraulic System
  - Blade Valve, Cylinders

## **SECTION 37—ARCH OR BOOM**

- Group 3740—Frames

## **SECTION 38—GRAPPLE**

- Group 3803—Grapple Mechanism
- Group 3815—Controls Linkage
- Group 3840—Frames
- Group 3860—Hydraulic System
  - Grapple Valve, Crossover Relief Valve, Rotate Motor, Rotary Manifold, Grapple and Boom Cylinders

## **SECTION 40—PTO OR WINCH DRIVE**

- Group 4025—Input Drive Shafts

## **SECTION 99—DEALER FABRICATED TOOLS**

- Group 9900—Dealer Fabricated Tools

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