

410E Backhoe Loader Repair

TECHNICAL MANUAL

TM1611 22JUL10 (ENGLISH)

For complete service information also see:

410E Backhoe Loader Repair (Complete)	TM1611
410E Backhoe Loader Operation and Test (Complete)	TM1610
POWERTECH® 4.5 L (4045) Engine	CTM104
Alternators and Starting Motors	CTM107
Front Wheel Drive Axles APL-2025	



**Worldwide Construction
And Forestry Division**
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 operation and tests. Repair sections tell how to repair the components. 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.

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

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.

See DB1990 Service Publications Catalog to order a complete Technical Manual (TM) or a Technical Manual Section (TMS). A complete Repair manual includes the following sections:

- TMS161100 Section 00 General Information
- TMS161101 Sections 01—02 Wheels and Axles
- TMS161103 Sections 03—06 Transmission and Engine
- TMS161109 Sections 09—11 Steering and Brakes
- TMS161116 Sections 16—17 Electrical System and Frame
- TMS161118 Sections 18—20 Operator's Station and Sheet Metal
- TMS161121 Sections 21, 31, 33 Main Hydraulics

TX,INTR,SS3531 -19-11DEC96-1/1

John Deere Dealers

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

Listed below is a brief explanation of “WHAT” was change and “WHY” it was changed.

These sectionalized manuals were revised to include the following changes:

1. Section 00:
To include any specifications, oil capacity and miscellaneous changes.
2. Section 01—02:
Miscellaneous wheel specification changes and service brake check added.
3. Section 03—06:
Transmission clutch pack bottom of gear to top of drum distance specification change, miscellaneous changes in charge pump and manifold plate solenoids procedures.
4. Engine flywheel turning tool number change. Fan cap screw torque added.
5. Section 09—11:
Steering valve manual check valve change. Miscellaneous brake valve changes.
6. Section 16—17:
Torque added to engine coolant temperature switch.
7. Section 18—20:
Cab side window torque and thread lock and sealer added. Bushings added to guide on upper rear window. Air suspension seat procedure added.
8. Section 21, 31 and 33:
Torque added to hydraulic pump unloader relief valve. Cooler options added. Multi-purpose bucket and lines added. Shim as required added to bucket links-to-cylinder. Loader control relief valves torques, graphics and procedure changes. Loader cylinder miscellaneous changes.
Backhoe linkage changes. Backhoe boom swing lock arms and locking pin added. Stabilizer valve linkage updates and serial number breaks. Miscellaneous changes to extensible dipperstick and sideshift frame locking pistons. Backhoe control relief valves torques, graphics and procedure changes. Backhoe cylinders serial number breaks and procedure changes. Extendible dipperstick disassemble and assemble procedure added.

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*Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication.
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