## 310SE and 315SE Backhoe Loaders Operation and Test

# TECHNICAL MANUAL TM1608 20SEP06 (ENGLISH)

#### For complete service information also see:

310SE and 315SE Backhoe Loader Repair	
(Complete)	TM160
310E and 315SE Backhoe Loader Operation	
and Test (Complete)	TM160
310SE Backhoe Loader and 315SE Sideshift	
Backhoe Loader O	MT18437
POWERTECH® 4.5L (4045) and 6.8L (6068)	
Engine	CTM10
PowerTech® 4.5L & 6.8L Diesel Engines	
Mechanical Fuel Systems	CTM20
Alternators and Starting Motors	CTM7
Front Wheel Drive Axles APL-2025	CTM450



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 Operation and Test manual includes the following sections:

- Section 9000 General Information
- Section 9005 Operational Checkout Procedure
- Section 9010 Engine
- Section 9015 Electrical System
- Section 9020 Power Train
- Section 9025 Hydraulics
- Section 9031 Air Conditioning

TX,INTR,RR7339 -19-15FEB00-1/1

TM1608 (20SEP06) 310SE and 315SE Backhoe Loaders

PN=2



#### Introduction

#### 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 sectionalize manuals were revised to include the following changes

1. Section 9000:

To include any specifications, oil capacity and safety updates.

2. Section 9005:

To include miscellaneous updates.

3. Section 9010:

To include miscellaneous updates.

4. Section 9015:

To include serial number for tachometer, updates for selective flow control valve harness, timer relay updates, and miscellaneous updates.

5. Section 9020:

To add keys and legend to foldout pages and control valves in theory of operation section. To add miscellaneous updates.

6. Section 9025:

To update cycle times, change ride control accumulator specifications and miscellaneous updates.

7. Section 9031:

To update miscellaneous nomenclature.

CED,TX03399,5915 -19-10FEB00-1/1

TM1608 (20SEP06) 310SE and 315SE Backhoe Loaders

PN=3



in	tro	ar i	rti.	าก

Technical Ir	formation Feed	back Fo	rm					
publications. Pl	help to continually in ease copy this page as and improvements	and FAX						
SEND TO:	John Deere Dubuque W P.O. Box 538 Attn: Publications Super Dubuque, IA 52004-053	visor, Dept. 3	803					
FAX NUMBER:	563-589-5800							
Ideas, Comments	(Please State Page Num	ber):						
OVERALL, how v	vould you rate the quality	of this public	ation? (Check o	ne)				
Poor 1	Fai 2 3	r 4	God 5	od 6	Very Go	od 8	Exce 9	llent 10
Company Name:								
Technician Name	:							
Address:								
Phone:								
Fax No.:								
Dealer Acct. No.:								
THANK YOU!								
							TX,II,FAX	-19-10JUL01-1/1

TM1608 (20SEP06)

310SE and 315SE Backhoe Loaders

PN=4

## Contents

	J
SECTION 9000—General Information Group 01—Safety Information Group 02—General Specifications Group 03—Torque Values Group 04—Fuels and Lubricants	9000
SECTION 9005—Operational Checkout Procedure Group 10—Operational Checkout Procedure	
SECTION 9010—ENGINE Group 05—Theory of Operation Group 15—Diagnostic Information Group 20—Adjustments Group 25—Tests	9010
SECTION 9015—Electrical System Group 05—System Information Group 10—System Diagrams Group 15—Sub-System Diagnostics Group 20—References	9015
SECTION 9020—Power Train Group 05—Theory of Operation Group 15—System Diagnostic Information Group 20—Adjustments Group 25—Tests	9020
Group 05—Hydraulic System Group 05—Theory of Operation Group 15—Diagnostic Information Group 20—Adjustments Group 25—Tests	9025
SECTION 9031—Heating And Air Conditioning Group 05—Theory Of Operation Group 10—System Operational Checks Group 15—Diagnostic Information Group 20—Adjustments	9031
Group 25—Test	INDX
All information, illustrations and specifications in this 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.  COPYRIGHT * 2006 DEERE & COMPANY	
Moline, Illinois All rights reserved A John Deere ILLUSTRUCTION® Manual Previous Editions Copyright ® 1997, 1998, 2000	

310SE and 315SE Backhoe Loaders

092006
PN=1 TM1608 (20SEP06)



Thank you very much for your reading.

Please click here to get more information.