X300 Select Series Tractors Serial Number 150001-



TECHNICAL MANUAL

Select Series™ Tractors X330, X350, X354, X370, X380, ,X384, X390, X394

TM175819 11SEP24 (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.

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.

DX,TMIFC -19-20SEP22-1/1



TM175819 (11SEP24)

Contents

Section 10—General Information

Group 10—Safety

Group 20—General Specifications

Group 30—O-Ring Seal Service Recommendations

Group 40—Fuels and Lubricants

Group 50—Machine Specifications

Section 20—Engine Repair — Common

Group 05—General Information

Section 20A—Engine Repair - X330

Group 05—General Information

Group 10—Remove and Install

Group 20—Disassemble and Assemble

Group 30—Inspect

Section 20B—Engine Repair - X350, X354, X370

Group 05—General Information

Group 10—Remove and Install

Group 20—Disassemble and Assemble

Group 30—Inspect

Section 20C—Engine Repair - X380, X384, X390, and X394

Group 05—General Information

Group 10—Remove and Install

Group 20—Disassemble and Assemble

Group 30—Inspect

Section 40—Electrical Repair

Group 05—General Information

Group 10—Remove and Install

Group 20—Disassemble and Assemble

Group 30—Inspect

Section 50—Drivetrain Repair

Group 05—General Information

Group 10—Remove and Install

Group 20—Disassemble and Assemble

Section 60—Steering and Brake Repair

Group 05—General Information

Group 10—Remove and Install

Group 20—Disassemble and Assemble

Section 70—Hydraulic Repair

Group 05—General Information

Group 10—Remove and Install

Group 20—Disassemble and Assemble

Section 80—Attachment and Machine-Specific Repair

Group 05—General Information

Group 10—Remove and Install

Section 90—Operator Station Repair

Group 05—General Information

Group 10—Remove and Install

Section 210—General Information -Diagnostics

Group 05—General Information

Section 211—Diagnostic Trouble Codes

Group 01—Control Unit ICC

Section 212—System Diagnostics Access

Group 220—Engine System Diagnostics

Group 240—Electrical System Diagnostics

Group 245—Electrical Control Unit Diagnostics Group 250—Drivetrain System Diagnostics Group 260—Steering and Brake System Diagnostics

Group 270—Hydraulic System Diagnostics

Group 280—Attachments and Machine-Specific **System Diagnostics**

Section 220A—Engine System Diagnostics - X33Ŏ

Group 05—General Information

Group 10—Operational and Preliminary Checks

Group 20—Theory of Operation

Group 50—Tests and Adjustments

Group 50A—Diagnostics

Section 220B—Engine System Diagnostics - X350, X354, X370

Group 05—General Information

Group 10—Operational and Preliminary Checks

Group 20—Theory of Operation

Group 50—Tests and Adjustments

Group 50A—Diagnostics

Continued on next page

Original Instructions. 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 © 2024 DEERE & COMPANY Moline, Illinois
>
> All rights reserved.
>
> A John Deere ILLUSTRUCTION ™ Manual
> Previous Editions
>
> Copyright © 2023, 2022, 2021, 2020, 2019, 2018, 2017, 2016

Section 220C—Engine System Diagnostics - X380, X384, X390, X394

Group 05—General Information

Group 10—Operational and Preliminary Checks

Group 20—Theory of Operation

Group 50—Tests and Adjustments

Group 50A—Diagnostics

Section 240—Electrical System Diagnostics

Group 05—General Information

Group 20—Theory of Operation

Group 30—Schematics

Group 50A—Diagnostics

Group 50—Test and Adjustments

Section 245—Electrical Control Unit Diagnostics

Group 05—General Information

Group 20—Theory of Operation

Group 50A—Diagnostics

Section 249—Electrical Connectors

Group 05—General Information

Group 40A—Electrical Assembly Connectors

Group 40B—Sensor Connectors

Group 40E—Light Connectors

Group 40F—Fuse Connectors

Group 40S—Switch Connectors

Group 40W—Terminals

Group 40Y—Solenoid Connectors

Section 250—Drivetrain Diagnostics

Group 05—General Information

Group 20—Theory of Operation

Group 50—Test and Adjustments

Group 50A—Diagnostics

Section 259—Drivetrain Systems - Component Information

Group 05—General Information

Group 40—Components

Section 260—Steering and Brake System Diagnostics

Group 05—General Information

Group 20—Theory of Operation

Group 50—Test and Adjustments

Group 50A—Diagnostics

Section 269—Steering and Brake Systems - Component Information

Group 05—General Information

Group 40—Components

Section 270—Hydraulic System Diagnostics

Group 05—General Information

Group 10—Operational and Preliminary Checks

Group 20—Theory of Operation

Group 30—Schematics

Group 50—Test and Adjustments Group 50A—Diagnostics

Section 279—Hydraulic Systems - Component Information

Group 05—General Information

Group 40—Components

Section 280—Attachment and Machine-Specific Diagnostics

Group 05—General Information

Group 50—Test and Adjustments

Group 50A—Diagnostics

Section 289—Attachment and Machine-Specific Systems - Component Information

Group 05—General Information

Group 40—Components

Section 300—Tools, Equipment, and Other Material

Group 10—Service Tools

Section 10 General Information

Contents

	Page		
Group 10 Safaty			Page
Group 10—Safety	10 10 1	Work in Clean Area	10 10 16
Live With SafetyFollow Safety Instructions		Work in Clean Area	
Avoid Harmful Asbestos Dust		Work in Ventilated Area	10-10-10
Avoid Heating Near Pressurized	10-10-1	Group 20 Ganaral Specifications	
	10 10 2	Group 20—General Specifications	
Fluid Lines Avoid High-Pressure Fluids		Metric Bolt and Screw Torque Values	10 20 1
Avoid Hot Exhaust			10-20-1
Avoid Static Electricity Risk When	10-10-2	Metric Cap Screw Torque Values—Grade 7	10 20 2
Pofueling	10 10 2	Unified Inch Polt and Scrow Torque	10-20-2
Refueling Construct Dealer-Made Tools	10-10-3	Unified Inch Bolt and Screw Torque	10 20 2
Constituct Dealer-Made 100is	10 10 2	ValuesGasket Sealant Application	
Safely	10-10-3	Gasket Sediant Application	10-20-4
Decommissioning — Proper		Croup 20 O Bing Soal Samios Book	mmandationa
Recycling and Disposal of Fluids	10 10 4	Group 30—O-Ring Seal Service Reco	mmendations
and Components	10-10-4	Face Seal Fittings With Inch Stud	10 20 1
Drain Gasoline When Storing	10 10 4	Ends Torque	10-30-1
Machine		Face Seal Fittings With Metric Stud	40.20.0
Follow Tire Recommendations	10-10-5	Ends Torque	10-30-2
Handle Agricultural Chemicals	40.40.5	Service Recommendations for Fittings	40.00.0
Safely	10-10-5	Flat Face O-Ring Seal	10-30-3
Handle Fluids Safely—Avoid	40.40.0	Service Recommendations for	40.00.0
Fires		O-Ring Boss Fittings	10-30-3
Illuminate Work Area Safely		One way 40. Free land and Locked a set a	
Keep Electronic Control Unit	40.40.0	Group 40—Fuels and Lubricants	40 40 4
Connectors Clean		Engine Break-In Oil	
Keep ROPS Installed Properly		Alternative Lubricants	
Park Machine Safely		Synthetic Lubricants	
Practice Safe Maintenance		Mixing of Lubricants	10-40-2
Prepare for Emergencies	10-10-8		
Prevent Acid Burns		Group 50—Machine Specifications	40 =0 4
Prevent Battery Explosions		Record Identification Numbers	
Prevent Machine Runaway	10-10-10	Machine Specifications	10-50-2
Protect Against High Pressure	10 10 10		
Spray			
Recognize Safety Information	10-10-10		
Remove Paint Before Welding or	10.10.11		
Heating	10-10-11		
Service Accumulator Systems	10 10 11		
Safely	10-10-11		
Service and Operate Chemical			
Sprayers Safely			
Service Cooling System Safely			
Service Machines Safely			
Service Tires Safely			
Servicing Electronic Control Units			
Support Machine Properly			
Understand Signal Words			
Use Proper Lifting Equipment			
Use Proper Tools	10-10-15		
Wait Before Opening			
High-Pressure Fuel System			
Wear Protective Clothing	10-10-15		
Welding Near Electronic Control			
Units	10-10-16		