

# Tractors 6230R and 6250R (MY17-)

(Serial No. 6-cylinder Engines 6068U -

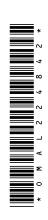


**OPERATOR'S MANUAL** 

Tractors 6230R and 6250R (MY17-)

OMAL224842 ISSUE J1 (ENGLISH)





# Introduction

#### **Foreword**

READ THIS OPERATOR'S MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or machine damage. This manual and the safety signs on your machine may also be available in other languages (see your John Deere dealer to order).

THIS OPERATOR'S MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. units of measure. Use only correct replacement parts and mounting hardware. Metric and inch mounting hardware may require a specific metric or inch wrench.

The designations RIGHT and LEFT are relevant to the direction of forward travel of the tractor.

ENTER THE PRODUCT IDENTIFICATION NUMBERS (PIN) in the Specifications or Identification Numbers sections, at the corresponding point. Please note down all numbers exactly. In the event of a theft, they can be important for the police investigations. Your John Deere dealer also needs these numbers when you order spare parts. It is advisable to note down these numbers at a secure place away from the machine.

BEFORE DELIVERING THIS MACHINE, your dealer performed an inspection.

THIS TRACTOR WAS BUILT ONLY for normal agricultural applications or similar tasks ("INTENDED USE"). Use in any other way is considered as contrary to the intended use. The manufacturer accepts no liability for damage or injury resulting from this misuse, and these risks must be borne solely by the user. Intended use also includes compliance with all operating, maintenance and servicing conditions specified by the manufacturer.

THIS TRACTOR MAY ONLY be used, serviced and repaired by persons who are familiar with it and who have been instructed in the corresponding safety provisions (accident prevention). The accident prevention regulations, all other generally recognized regulations on safety and occupational medicine and the road traffic regulations must be observed at all times. Any arbitrary modifications carried out on this tractor will relieve the manufacturer of all liability for any resulting damage or injury.

REGISTER USED PRODUCTS. If you purchased used John Deere products from an authorized John Deere dealer, the warranty registration information was updated by the dealer and requires no further information on your part.

If you purchased used John Deere products at an auction, through a trader or from a farmer, please register it now. John Deere and John Deere dealers

value their customer's safety and satisfaction. Your local John Deere dealer is best-equipped to provide you with excellent support for your machine. Please enter your product details and your address online, using the John Deere website corresponding to your country. Then select the dealer of your choice and you will receive a voucher for a discount for purchasing John Deere parts.

OULXA64.00031CE-19-03DEC15

### **Emissions Performance and Tampering**

#### **Operation and Maintenance**

The engine, including the emissions control system, shall be operated, used, and maintained in accordance with the instructions provided in this manual to maintain the emissions performance of the engine within the requirements applicable to the engine's category/ certification.

### **Tampering**

No deliberate tampering with or misuse of the engine emissions control system shall take place; in particular with regard to deactivating or not maintaining an exhaust gas recirculation (EGR) or a DEF dosing system. Tampering with an engine's emissions control system will void the European Union (EU) type approval and applicable emissions-related warranties.

DX,EMISSIONS,PERFORM-19-12JAN18

<sup>&</sup>lt;sup>1</sup> or your authorized dealer

Pa	age	Page
Glossary		Tightening Wheel Retaining Bolts/Nuts 05-16
Glossary 00		Avoid High-Pressure Fluids
Trademarks 00		Do Not Open High-Pressure Fuel System 05-17
		Store Attachments Safely05-17
Safety		Decommissioning — Proper Recycling and
Recognize Safety Information	5_1	Disposal of Fluids and Components 05-17
Understand Signal Words	5-1 5-1	
Follow Safety Instructions	5-1	Safety Signs
Prepare for Emergencies	5-1	Pictorial Safety Signs 05A-1
Wear Protective Clothing		Operator's Manual
Protect Against Noise		Passengers on Tractors with Passenger Seat 05A-1
Handle Fuel Safely—Avoid Fires		Use the Seat Belt Properly
Fire Prevention		Front Hitch Remote Control (if equipped) 05A-2
In Case of Fire		Hitch Remote Control
Avoid Static Electricity Risk When Refueling 05		Pick-Up Hitch
Use Foldable ROPS and Seat Belt Properly 05		Cab Suspension Accumulators 05A-2
Stay Clear of Rotating Drivelines		Pressure Accumulator of the Front-Axle
Use Steps and Handholds Correctly		Suspension 05A-3
Read Operator's Manuals for ISOBUS		Brake System Accumulator 05A-3
Controllers 05		Hydraulic Lines and Hydraulic Components
Use Seat Belt Properly		— Front Hitch
Vibration	5-5	Hydraulic Lines and Hydraulic Components
Operating the Tractor Safely 05	5-6	— Rear Hitch 05A-3
Avoid Backover Accidents		05A-4
Limited Use in Forestry Operation 05		
Operating the Loader Tractor Safely 05		Vehicle Overview
Keep Riders Off Machine		Identification View
Passenger Seat	5-8	Turning and the state of the st
Use Safety Lights and Devices 05		Operator's Manual – General Information
Towing Trailers/Implements Safely 05	5-8	Scope of This Manual
Use Caution on Slopes, Uneven Terrain, and		How to Use This Manual
Rough Ground	5-9	Comply with Operator's Manuals of
Freeing a Mired Machine 05	J-9	Implement Manufacturers
Avoid Contact with Agricultural Chemicals 05-	·10	implement Manadadaloro 10/1
Handle Agricultural Chemicals Safely05-		Operating the Engine
Handling Batteries Safely05-		Operating the Engine
Avoid Heating Near Pressurized Fluid Lines 05-		EU Qualified Emergency Use — SCR Derate
Remove Paint Before Welding or Heating 05-	·12	Override Option
Handle Electronic Components and Brackets		Engines with Turbocharger
Safely		Engine Protection
Practice Safe Maintenance	. •	Required Machine Stop Warning
Avoid Hot Exhaust		Intelligent Power Management (Power
Clean Exhaust Filter Safely		Boost)
Work In Ventilated Area		Starting the Engine
Support Machine Properly		Engine Start with an Auxiliary Battery
Prevent Machine Runaway		Stopping the Engine
Park Machine Safely		Battery Disconnect System (If Equipped) 20-6
Transport Tractor Safely05- Service Cooling System Safely05-	15	Tow the Tractor
Service Cooling System Salely	. •	Fill the Fuel Tank
Service Accumulator Systems Salely05- Service Tires Safely05-	. •	Filling the DEF Tank
Service Front-Wheel Drive Tractor Safely05-	. •	g 5 = 1
Convide Figure 1 actor Salety	10	

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 © 2021
John Deere GmbH & Co. KG Mannheim Regional Center
Zentralfunktionen
All rights reserved.
Previous Editions
Copyright © D1

Page	Page
Cold Weather Operation	Controls Setup - Assignment of Functions 30C-6
Cold Start Aids	Controls Setup - Independent Mode for
Coolant Heater	Toggle Switch
Ground Fault Circuit Interrupter (GFCI) 20A-1	Controls Setup - Resetting to Default 30C-9 Controls Setup - Custom Settings (Settings
Aftertreatment	Manager)
Exhaust Cleaning System, General	Lock Out the Button Functions with
Information 20B-1	CommandPRO™ Joystick
Required Machine Stop Warning 20B-1	
Aftertreatment Indicators Overview 20B-2	CommandCenter™
Access the Engine Menu 20B-3	Generation 4 Display
AUTO Exhaust Filter Cleaning 20B-3	Machine Settings Overview
Parked exhaust filter cleaning 20B-4	Automation Status Overview
Exhaust Filter, Service Cleaning	Navigate Generation 4 CommandCenter™ 30D-2
Exhaust Cleaning System, Information for	Compatible Displays
Operator	Power Display On and Off
DEF (Diesel Exhaust Fluid) Level Gauge 20B-7	Shortcut Buttons
Selective Catalytic Reduction (SCR) System	Navigate to Display & Sound
Overview	Navigate to the Section Multiple Displays 30D-5
	Navigate to Date & Time
Controls	Change Pages and Values
Vehicle Controls of Tractors with	Navigate to Software Manager 30D-7
AutoPowr™/IVT™ Transmission	Factory and Service ADVISOR™ Installed
Vehicle Controls of Tractors with AutoPowr™/IVT™ Transmission and	Onscreen Help
CommandPro™ Joystick	Navigate to File Manager 30D-7
Key Switch	Navigate to Diagnostics Center 30D-7
Immobilizer 30-3	Navigate to Users & Access
Emergency Brake System 30-4	Navigate to Layout Manager 30D-8
PTO - Controls	Navigate to Fields Page
Premium Front Hitch - Controls 30-4	Navigate to Equipment Manager 30D-9
Rear Hitch - Controls 30-5	Navigate to Machine Monitor
Electronic Selective Control Valves (SCV) -	Navigate to Work Monitor
Controls 30-6	Navigate to Maintenance & Calibrations 30D-10 Radar Calibration 30D-10
Multi-Function Lever, Electrical	Wheel Slip Calibration
Front-Wheel Drive - Controls	Navigate to Controls Setup30D-12
Differential Lock - Controls	Controls
Heating and Ventilation Controls	Controls Setup
Radio A – Additional Controls for Telephone 30-8 Radio A – Additional Controls for the Radio 30-8	Automation Status
Radio B – Additional Controls for the Radio 30-8	Read ISOBUS Controller's Operator's
	Manual
iTEC <sup>™</sup> — Intelligent Total Equipment Control - Controls	Use Video Display Capability Properly 30D-15
AutoTrac™ - Controls	Navigate to Video Application30D-16
ISOBUS Button (ISB)	
( )	Radio A – Operation
Instrument Panel	Radio A - Controls
Instrument Panel and Indicator Lights —	Radio A – Additional Controls for the Radio 30E-2
AutoPowr™ Transmission without	Radio A – Additional Controls for Telephone 30E-3
CommandPRO™ Joystick 30A-1	Radio A – Microphone for Bluetooth
Instrument Panel and Indicator Lights —	Applications
AutoPowr™ Transmission with	FM, MW, LW and DAB/DAB+-Compliant
CommandPRO™ Joystick	Radio Antenna (from MY19, for Europe
Level Indicator — Fuel Tank and DEF Tank 30A-4	only)
Coolant Temperature Gauge	omy) 00L 0
Other Control Systems	Radio B – Operation
Software Update	Radio B – Operation Radio B – Identification Views and Features30F-1
Commond A DM TM Controls	Radio B - Controls
CommandARM™ Controls Controls with Variable Functions 30C 1	Radio B – Additional Controls for the Radio30F-3
Controls Setup General Information 30C-1	Radio B – Microphone for Bluetooth
Controls Setup - General Information (without CommandPRO™ Joystick) 30C-1	Applications
Controls Setup - General Information (with	
CommandPRO™ Jovstick)	

Page	Paç	ge
FM, MW, LW and DAB/DAB+-Compliant	Front-wheel Drive	
Radio Antenna (from MY19, for Europe	Front-Wheel Drive, Control Elements and	
only)	Indicator Lights 50A-	-1
External Sources – Using Premium Radio30F-3	Front-Wheel Drive, Manual Engagement and	
Select Radio Source with Generation 4	Disengagement	-1
CommandCenter™	Front-wheel drive, engage and disengage	_
FM, MW, LW Home Page30F-5 Home Page Premium Radio CD (If	automatically	-2
Equipped)30F-5	Front-Wheel Drive, Automatic	-2
Home Page Premium Radio USB (If	Disengagement Depending on the	
Fauipped) 30F-5	Steering Angle (Optional) 50A-	-2
Home Page Premium Bluetooth® (If	Tractor Equipped With Front Suspension	_
Equipped)	Option 50A-	-3
Auxiliary Home Page (Various Devices)30F-6		
Pair Bluetooth® Device to Generation 4	Differential Lock	
CommandCenter™	Differential Lock, Controls and Indicator	
Manage Paired Bluetooth® Devices (If	Lights 50B-	-1
Equipped)	Differential Lock, Engaging and Disengaging 50B-	-1
Phone Signal Strength and Battery Charge30F-9	Differential lock, automatic switching off,	_
Contact List30F-9	depending on the steering angle (optional) 50B-	-2
Recent Calls		
Clear Favorites and Call History 30F-11	Brakes	
	Brake System Compliance 50C- Hydraulic Foot Brakes 50C- Emergency Brake System 50C-	-1 1
Guidance	Fmergency Brake System 500-	- つ
AutoTrac™ Steering System (if equipped) 40-1	Single-Line Hydraulic Trailer Brake (If	
Variable Ratio Steering (If Equipped) 40-1	Equipped) 50C-	-2
	Air Brake System 50C-	-3
Intelligent Total Equipment Control (iTEC™)	Trailer Brake Test 50C-	-4
iTEC <sup>™</sup> Controls and Functions (with CommandARM <sup>™</sup> )	Socket for the Anti-Blocking System (ABS) of	
CommandARM <sup>™</sup> ) 40A-1	Trailer 50C-	-5
CommandCenter™ Pages Descriptions and	Parking the Tractor with AutoPowr™ 50C-	-5
Functions	Parking the Tractor with AutoPowr™ and	_
Status Area       40A-2         All Sequences Page       40A-2	CommandPRO™ Joystick	-ე
Add New Sequence 40A-3	CHOCK Block 50C-	-0
Sequence - Available Functions and	Transmission Constal Information	
Measures 40A-4	Transmission - General Information Reduce Fuel Consumption	1
Sequence Step Status 40A-5	Notes on Changing to a Different Size of Tire 50D-	- 1 - 2
Edit or Remove Sequence	Transmission - Information on Maximum	_
Sequence Sets Page	Speed 50D-	-2
Perform Sequence	Switch the Backup Alarm On or Off (if	
Recommendations (AutoLearn) 40A-6	available) 50D-	-2
Tractor Implement Management (TIM and		
Tractor Implement Management (TIM and TIA™)	AutoPowr™/IVT™ Transmission	
TIM and TIA™ - Tractor Implement	AutoPowr™/IVT™ — Controls	-1
Management, General	AutoPowr™/IVT™ — Special Features when	2
TIM/TIA™ Operator Controls	Maneuvering the Tractor	ر- 1
TIM/TIA™ - Activating the Implements 40B-1	AutoPowr™/IVT™ — Cold-Weather Starting 503- AutoPowr™/IVT™ — Set Ground Speed 50J-	
TIM/TIA™ - Requirements for Rear Hitch 40B-3	AutoPowr™/IVT™ — Use Maximum Engine	_
TIM/TIA™ - Requirements for PTO	Speed	-5
TIM/TIA™ - Requirements for Electronic	Speed50J- AutoPowr™/IVT™ — Set Operating Mode50J-	-6
Selective Control Valves (SCV)	AutoPowr™/IVT™ — Set Engine Speed	
TIM/TIA™ - Requirements for Guidance 40B-4 TIM/TIA™ - Requirements for AutoPowr™ 40B-4	Reduction (Custom Setting)	-7
TIM/TIA™ - Requirements for AutoPowr™/	AutoPowr™/IVT™ — Set Engine Droop	_
IVT™ Transmission with	(Custom Setting)50J- AutoPowr™/IVT™ — Adjust Engine Speed	-8
CommandPRO™ Joystick 40B-5	for the Additional Load Anticipation 50J-	Q
TIM/TIA™ - Operating the Tractor-Implement	AutoPowr <sup>™</sup> /IVT <sup>™</sup> — Set Reverse/Forward	-0
Automation 40B-6	Speed Ratio	_0
	AutoPowr™/IVT™ — AutoClutch Sensitivity 50J-1	10
Drivetrain	AutoPowr™/IVT™ — Travel Set Speed,	
Drive Systems - Overview 50-1	Guidelines and Examples50J-1	11

Page	Page
AutoPowr™/IVT™ — Operation on Hillsides	CommandPRO™ Joystick - Cold-Weather
in Slippery Conditions	Starting
AutoPowr™/IVT™ — Using Individual Brake Pedals 50J-13	Mode
AutoPowr™/IVT™ – Speed Control Pedal Mode	Tractor
Mode	Functions
Tractor	Functions
Backup Alarm (If Equipped)	
AutoPowr™/IVT™ Transmission with	Power Take-Off, Hitch and Trailer Hitch Hitch - Maximum Lifting Force
CommandPRO™ Joystick	Thich Maximum Litting Force
CommandPRO™ Joystick - Basic Functions 50K-1	PTO Shaft - General Information
CommandPRO™ Joystick - Park Lock 50K-2	Front PTO — PTO Shield 60A-1
CommandPRO™ Joystick - Starting to Drive 50K-3	Rear PTO — PTO Shield 60A-1
CommandPRO™ Joystick – Increase and	Operating instructions 60A-2
Reduce Travel Speed	PTO Speeds
CommandPRO™ Joystick - Change Direction of Travel 50K-5	PTO Shaft – Options 60A-2
CommandPRO™ joystick – Change travel	
speed using the accelerator pedal 50K-6	Front Power Take-Off
CommandPRO™ Joystick – Comfort	Front Power Take-Off
Function for Control Range Quick Stting of	Switching the Front PTO
Speed Control Pedal 50K-7	Operate PTO with CommandPRO™ Joystick 60B-2 Front PTO – PTO Automatic Shut-Off
CommandPRO™ Joystick – Slow Forward	Function (If Available)
and Reverse Travel 50K-8	Turiotion (II / Wallable)
CommandPRO™ Joystick – Triggering the	Rear PTO
Travel Speed	Rear Power Take-Off 60C-1
Speed / Stopping50K-10	Engaging Rear PTO
CommandPRO™ Joystick – Set the	Operate PTO with CommandPRO™ Joystick 60C-2
Characteristics for Increasing and	Rear PTO — Select Standard Speed
Decreasing Travel Speed 50K-11	(Shiftable PTO) 60C-3
CommandPRO™ Joystick – Set and Store	Rear PTO — Fine Adjustment of PTO
Travel Speeds (Travel Set Speed) 50K-12	Speeds (Shiftable PTO)
CommandPRO™ Joystick – Limit Maximum	Rear PTO — Remote Control and Function 60C-4
Speed for Forward and Reverse Travel 50K-14	Rear PTO – PTO Automatic Shut-Off Function (if available)
CommandPRO™ Joystick – Target Travel	Rear PTO — Change the PTO Stub Shaft 60C-6
Speed when Changing Direction of Travel 50K-14 CommandPRO™ Joystick – Engine Speed /	Rear PTO — Connect an Implement 60C-6
Hand Throttle Module	The second secon
CommandPRO™ Joystick – PTO Operation /	Front Hitch
Engine Speed Setting 50K-16	Front Hitch (Premium) 60D-1
CommandPRO™ Joystick – Set the	Premium Front Hitch - Set Transport Position
Operating Mode 50K-17	and Operating Depth 60D-3
CommandPRO™ Joystick – Reset Custom	Front Hitch (Premium) - Set the Raise Height
Setting to Default	Limit
CommandPRO™ Joystick – Set Engine  Speed Ingresses (Custom Setting)  50K 18	Front Hitch (Premium) - Set Rate-of-Drop 60D-4
Speed Increase (Custom Setting) 50K-18 CommandPRO™ Joystick – Set Engine	Front Hitch (Premium) - Set the Lift Rate 60D-5
Droop (Custom Setting) 50K-19	Premium Front Hitch – Activate Single-Acting Mode 60D-5
CommandPRO™ Joystick – Operating on	Premium Front Hitch – Automatically Activate
Hillsides in Slippery Conditions 50K-20	Float Position (with CommandPRO™
CommandPRO™ Joystick – Using Creeper	Joystick) 60D-5
Mode (Version 1) 50K-20	Premium Front Hitch – Activate Float
CommandPRO™ Joystick – Using Creeper	Position 60D-7
Mode (Version 2)	Premium Front Hitch – Activate Float
CommandPRO™ Joystick – Using Individual	Position Automatically
Brake Pedals	Front Hitch - Center Link
the Tractor	Front Hitch - Center Link Positions
	TOTAL TROOK Type Conton Link

Page	Pa	ıge
Rear Hitch	Ball-Type Hitch (Version 2), Height-	
Rear Hitch - Operation with	Adjustable	6
CommandARM™ 60E-1	Ball-Type Hitch, Extendable (only 6175R to	
Rear Hitch - Settings and Functions in	6250R)60F	-7
CommandCenter™ 60E-1	Height Adjustable Trailer Hitch60F	8
Rear Hitches - General Information on	Remote Control for Trailer Hitch (if Equipped) 60F	9
Electronic Hitch Sensing 60E-2	Hydraulic Pick-Up Hitch (Mechanically	
Rear Hitch - Use the Depth Control Lever 60E-4	Actuated)	9
Rear Hitch - Set Operating Depth 60E-5	Hydraulic Pick-Up Hitch (Electrically	
Rear Hitch - Use the Float Position 60E-6	Actuated) 60F-	10
Rear Hitch - Set the Raise Height Limit 60E-7		
Rear Hitch - Adjust the Rate of Drop 60E-7	Hydraulic System	
Rear Hitch - Adjust the Raise Rate 60E-8	Selective Control Valves - Maximum	
Rear Hitch - Draft/Depth Control Adjustment 60E-9	Permissible Oil Withdrawal	)-1
Rear Hitch - Use the Depth Control 60E-9	Use of large-volume hydraulic cylinders	)-1
Rear Hitch - Use Draft Control	Additional Oil Reservoir	)-1
Rear Hitch - Adjust Slip Sensitivity (if equipped) 60E-10		
Page Hitch Catting Locking Height of the	Hydraulic Connections	
Rear Hitch - Setting Locking Height of the	Selective Control Valves - Fittings 70A	۱-1
Stabilizer Bar (If Equipped) 60E-11	Selective Control Valves - Connect Hydraulic	
Rear Hitch - Driving under Load with	Hoses 70A	<b>∖-</b> 1
Mounted Implement	Selective Control Valves - Disconnect	
Rear Hitch - Remote Control	Hydraulic Hoses	۷-2
Rear Hitch - Direct Actuation	Selective Control Valves - Connecting or	
Three Point Hitch with Quick-Coupling Draft	Disconnecting Hydraulic Hoses at Front	
Links	Hitch (If Equipped)	۱-3
Quick-Coupling (Hook-Type) Draft Links 60E-14	Hydraulic Connections for Implements and	
Telescopic Draft Links	Hydraulic Motors 70A	۷-4
Attach Three-Point Hitch Mounted and	Connect Implements to Selective Control	
Drawn Implements	Valves 70A	۱-6
Implement, levelling 60E-17		
Center Link 60E-17	Selective Control Valves (SCVs) - Controls	
Center Link Positions 60E-17	Selective Control Valves (SCV), Electronic -	
Hook-Type Center Link 60E-18	Control Levers (CommandARM™) 70B	3-1
Hydraulic Center Link 60E-18	Selective Control Valves (SCV), Electronic -	
EasyGuide Center Link (if equipped) 60E-19	Neutral Position	3-2
Hydraulic Center Link - Remote Control 60E-20	Selective Control Valves (SCV), Electronic -	
Adjust Lift Links 60E-21	Extend and Extend Click Position	3-2
Lift Links - Adjust for Vertical Float 60E-22	Selective Control Valves (SCV), Electronic -	
Sway Blocks, Category 3/3N (if Equipped) 60E-22	Retract and Retract Click Position	5-2
Stabilizer (If Equipped) 60E-23	Selective Control Valves (SCV), Electronic -	, ,
Stabilizing System (If Équipped)	Float Position (Detent) 70B	5-J
Draft Links — Adjust Spread Dimension 60E-24		
Adjust Draft Links for Category 3 or 3N (if	Selective Control Valves (SCV) - Settings	
available) 60E-25	Selective Control Valves (SCV), Electronic -	
Telescopic Draft Links - Convert Category 3	SCV Main Page	;-1
and 3N	Selective Control Valves (SCV), Electronic -	
Quick Coupler - Setting Category 3 and 3N 60E-26	Activate/De-Activate Independent Mode 700	;-1
Hydraulic Stabilizer Bars (If Equipped) 60E-26	Selective Control Valves (SCV), Electronic –	٠,
Adjust the Spreading Dimension on Hydraulic Stabilizer Bars 60E-27	Set Flow Time	,- I
Trydraulic Stabilizer bars	Set Flow Pete 700	٠,
M/- non-1194-b	Set Flow Rate	,-2
Wagon Hitches CAT III Drawbar60F-1	Set Responsiveness	`_1
Proper Use of Drawbar60F-1	Selective Control Valves (SCV), Electronic -	<i>,</i>
	Activating/De-Activating Loader Mode 70C	:_4
Lock the Hitch Pins60F-1 Locking the Height-Adjustable Trailer Hitch60F-2	Operator Presence Sensor — For North	, ¬
	America, Australia, and New Zealand Only 70C	)_5
Latch for Telescopic Draft Links	onou, radicala, and rion Louidia Only 700	
Trailer Hitch with Piton Fix or Ball-Type, Rigid60F-4	Front Loader	
Ball-Type Hitch (Version 1), Height-	Front Loader Mounting Frames for Loaders	
Adjustable	640R/643R, 660R/663R and 680R/683R 70D	)_1
, a	OHOLVOHOLK, OUDLAUGULK ALIA OUDLAUGULK TOD	,- 1

Page	Page
Front Loader Mounting Frames for Loaders 640R/643R, 660R/663R and 680R/683R 70D-2	Notes on Adjusting the Fenders
Front Loader – Influence of Engine Speed on	Overview of Axle Category and Axle Type 80B-4
Lifting Function	Three-Piece Front Axle (Version 2) — Notes on Adjusting the Steering Stop
and Functions	the Fixed Fenders and Steering Stop - 755 (M60HD)
Multi-Function Lever, Electrical — Controls Setup	the Pivoting Fenders and Steering Stop - 755 (M60HD)80B-10
Multi-Function Lever, Electric - Assign an	733 (MIOOTID)
SCV to a Motion Axis of the Multi-function Lever	Rear Wheels, Tires, and Tread Widths Tires and Wheels - Foreword
Wheels and Tires	Adjustment with Rims for 2, 8 and 16
Tires and Wheels - Foreword	Positions - Flanged Axle
Tractor Components	Tread Widths for Rear Wheels with Rims for 2 Positions (Heavy-Duty Type) - Flanged
Use of Dual Wheels (Easy-to-Attach)	Axle
Change Wheels Safely	8 Positions - Flanged Axle
Tire Combinations	16 Positions - Flanged Axle
Calculating Tire Combinations, Three-Piece Front Axle	Notes on Rear Wheels at Rack-and-Pinion Axles
Tires	Rack-and-Pinion Axles - Adjust Tread Widths for Steel and Cast Rear Wheels
Tires "Bridgestone VT-Tractor"	Tread Widths for Rear Wheels with Rims for 2 Positions - Rack-and-Pinion Axle 80C-11
Tires "MICHELIN XeoBib"         80-13           Tire Pressures         80-13	Tread Widths for Rear Wheels with Rims for 8 Positions - Rack-and-Pinion Axle 80C-13
Tire Inflation Pressure Guidelines	Tread Widths for Rear Wheels with Rims for 16 Positions - Rack-and-Pinion Axle 80C-15
Front Wheels, Tires, and Tread Widths	Operator's Cab
Tires and Wheels - Foreword	Cab Classification According to EN 15695-1 (for Application of Crop Protection
Front-Wheel Drive Axle — Toe-In Check and	Chemicals and Liquid Fertilizer) 90-1
Adjustment	Avoid Contact with Agricultural Chemicals 90-1 Clean Vehicle of Hazardous Pesticides 90-2
(Conventional Method)	Emergency Exits
a Laser Wheel-Measuring Tool 80A-2	Use the Seat Belt
Front-Wheel Drive Axle — Adjust Toe-In 80A-2	Tractors with Cab Suspension 90-4
Instructions for Front Wheel Tread Adjustment with Rims for 2, 8, and 16 Positions	Seat Adjustment
Three-Piece Front Axle (Version 2) — Tread Widths for Front Wheels with Rims for 2	Air Comfort Seat with CommandArm™ (Ultimate Seat) — MSG95AL and MSG95AL-DDS90A-1
Positions	Air Comfort Seat - MSG97AL 90A-2
Widths for Front Wheels with Rims for 8	Air Comfort Seat — MSG97EL-DDS 90A-3 CommandARM™ — Adjust Height 90A-4
Positions	Passenger Seat
Widths for Front Wheels with Rims for 16	Steering Column
Positions 80A-8	Adjust the Steering Wheel 90B-1
Steering Stop and Fender — Settings Adjust Fenders	
, who is a chack of the control of t	

Page	Page
Mirrors	Controls for Hydraulic Quick Release and
External Mirrors, Manually Adjustable 90C-1	Worklights on Front Loader (if Equipped) 90I-1
Electrically Adjustable Outside Mirrors 90C-1	Install Monitor 90I-1
	Mounting Rail for Additional Control
Access Steps	Instruments or Monitors (if Available) 90I-2 Open Rear Window 90I-2
Access Steps and Handrails	Rear Window - Cable Guides 901-2
Remove the Right Access Step 90D-1	Roof Hatch (If Equipped) 90I-3
Wiper / Washer System	Pull-Down Sunshade 90I-3
Wiper and Washer System 90E-1	Lockable Tank Filler Cap 90I-3
	Performance Ballast
Heater / Ventilation / Air Conditioning	Ballasting Information and Guidelines for
(HVAC)	Tractors with Single Tires100-1
Heating and Ventilation	General Guidelines for Tractor Weight Based
Air Flow Distribution — Description	on Engine Horsepower (according to EC Directive 97/68, using PS as Unit of
and Rear Window Heater90F-2	Measurement)100-1
	Selection of Weights
Lights	Load on Rear Wheels100-2
Lights - Overview of the Lights 90G-1	Measure Rear Wheel Slip
Shift Lever for Turn Signal and Horn with	Fill Tires with Water
Detent Position	Draining Tires
Detent Position	Change Wheel Weights Safely (Type B) 100-4
Light Switch (Low/High-Beam Headlights) 90G-4	Weight in Three-Point Hitch 100-4
Select Headlights 90G-5	Attach Pickup Weight to the Front Hitch 100-4
Select Worklights	Attach the Pickup Weight to the Rear Hitch 100-5
Worklights on Front Loader (if equipped) 90G-7	Attach Pickup Weight to the Basic Weight100-6 Install Front Weights100-7
Worklights on Front Loader (if equipped) 90G-7 Lights - Select Egress Light 90G-8	motali i font vvoignto 100 /
Switch On the Hazard Warning Lights 90G-9	Transporting
Beacon Light (Optional) 90G-9	Transporting tractor 110-1
Access-Step Light	Lashing the tractor to transport trailers 110-1
Dome Lights	Wash Machine After Unloading
OCVOIT-TOTTIMA TRAILER GOOKET	Loads, Towing
Power Outlet Sockets	Freeing a Mired Machine
Sockets — Overview, Cab with	Tow the Tractor 110-6
CommandArm™ 90H-1	AutoPowr™/IVT™ — Towing the Tractor 110-6
Socket for GreenStar™ Display	AutoPowr™/IVT™ — Release the Park Lock Manually110-6
Ethernet Socket for Universal Display 90H-2 USB Service Connection for	ivialitially110-0
CommandCenter™ 90H-2	Fuel, Lubricants, and Coolant
Socket For Video Camera 90H-3	Oilscan™ and CoolScan™
3-Terminal Power Outlet Socket and Multiple	
Power Outlet Socket Strip (12V, ECE) 90H-3	Diesel Fuel
Socket for 2nd Monitor	Diesel Fuel
ISOBUS Socket in Cab	Handling and Storing Diesel Fuel
Signal Socket According to ISO Standard	Lubricity of Diesel Fuel
11786 90H-5	Biodiesel Fuel 200A-2
230-V or 115-V Power Outlet Socket (Max.	Minimizing the Effect of Cold Weather on
150 W)	Diesel Engines
Diagnostic Connector (CAN Bus)	Supplemental Diesel Fuel Additives 200A-4
12-V Socket on CommandArm 90H-6	Discal Exhaust Fluid
Power Outlet Sockets on Front Hitch	Diesel Exhaust Fluid (DEF) Lise in
Connection for External Audio Sources 90H-6 ISOBUS Socket (ISB) 90H-7	Diesel Exhaust Fluid (DEF) — Use in Selective Catalytic Reduction (SCR)
100000 000ket (100) 90H-7	Equipped Engines
Accessories	Refilling Diesel Exhaust Fluid (DEF) Tank 200B-1
Storage Tray 90I-1	Storing Diesel Exhaust Fluid (DEF)
J ,	Testing Diesel Exhaust Fluid (DEF)

Page	Page
Disposal of Diesel Exhaust Fluid (DEF) 200B-3	Service Intervals — Only Tractors with 6- Cylinder Final Tier 4 Engines
Engine Oil - Only for Tractors with 6-Cylinder	Notes
Final Tier 4 Engines	Service Daily or Every 10 Operating Hours 210B-1
John Deere Break-In Plus™ Engine Oil —	Service (As Required, Annually, Every 2 and
Interim Tier 4 Final Tier 4 Stage IIID	3 Years) - Only on Tractors with 6-Cylinder
Interim Tier 4, Final Tier 4, Stage IIIB,	Final Tier 4 Engines
Stage IV, and Stage V	Final Tier 4 Engines
Diesel Engine Oil — Interim Tier 4, Final Tier	Cylinder Final Tier 4 Engines 210P 2
4, Stage IIIB, Stage IV, and Stage V 200CB-1	Cylinder Final Tier 4 Engines
Engine Oil and Filter Service Intervals —	Information on Changing Engine Oil - Only
Interim Tier 4, Final Tier 4, Stage IIIB,	for 6-Cylinder Final Tier 4 Engines 210B-4
Stage IV, and Stage V Engines 200CB-2	Engine Oil and Filter Change 210B-5
0 , 0	Engine Oil and Filter Change
Engine Coolent	Engine Oil and Filter Change
Engine Coolant	Engine Oil and Filter Change 210B-8
Diesel Engine Coolant (engine with wet	Service the Engine Air Filters and Cab Air
sleeve cylinder liners)	Filters
Operating in Warm Temperature Climates 200D-1	Service the Engine Air Filters and Cab Air
John Deere COOL-GARD™ II Coolant	Filters and Cab All
Extender 200D-2	Filters
Water Quality for Mixing with Coolant	Servicing Cooling System
Concentrate	Servicing Cooling System210B-12
Testing Coolant Freeze Point	Service the DEF System210B-13
resuling Goolant i reeze i olit	Service the DEF System210B-14
	Annual Service210B-15
Other Lubricants	Annual Service210B-16
Transmission and Hydraulic Oil 200E-1	100 Hours Service210B-17
Oil for Front-Wheel Drive Axle 200E-1	Service after 750 Operating Hours210B-18
Multipurpose Extreme Pressure (EP) Grease 200E-2	Service after 1500 Operating Hours210B-19
Grease for Automated Lubrication Systems 200E-2	Service after 2250 Operating Hours210B-13
Grease	Service after 3000 Operating Hours210B-22
Multipurpose Grease	Service after 2750 Operating Hours
Mixing of Lubricants	Service after 3750 Operating Hours210B-23
Lubricant Storage 200E 4	4500 Hours Service
Lubricant Storage	Service after 5250 Operating Hours210B-26
Alternative and Synthetic Lubricants 200E-4	Service after 6000 Operating Hours210B-27
	Service after 6750 Operating Hours210B-28
Maintenance – General Information	Service after 7500 Operating Hours210B-30
Required Emission-Related Information 210-1	Service after 8250 Operating Hours210B-31
Safe Maintenance and Cleaning210-1	Service after 9000 Operating Hours210B-32
Using High-Pressure Washers210-1	Service after 9750 Operating Hours210B-34
Observe Service Intervals	10000 Hour Service210B-36
Maintenance Intervals	Information About Further Services210B-36
Raise the Hood	Record For Further Services210B-37
Open Service Door for Dipstick	TREGORD TO TURBOT CONTROLS
Open Service Doors 210-2	
Open Service Doors	Service - Clean
Bleed Fuel System	Clean CommandCenter™ Screen 220A-1
Compressed-Air Coupler (If Available)210-3	Clean Dust Unloading Valve
Jack Up the Tractor - Lifting Points	Clean Radiator, Viscous Fan, Condenser,
General Instructions Regarding the Condition	and Engine Environment
of the Tractor210-7	Clean Cab Air Filters
Inspect/Replace Hydraulic Hoses	Check the Fuel Filters
Important Instructions Regarding Alternator 210-7	Service Fuel Tank
Note on Wheels and Tires	Fuel tank ventilation - check filter (only for
Notes, Before Initial Start-Up and Daily	tractors with threaded fuel tank cap) 220A-3
Service210-8	
Note Regarding the Service Interval for	DEF Tank - Clean Screen on Filler Neck 220A-3
Engine Coolent 210.9	DEF tank ventilation - Check filter
Engine Coolant	Cleaning Diesel Exhaust Fluid (DEF) Tank 220A-4
Service Checks (if equipped)	
Instructions for Starting up the Air-	Service - Electrical System
Conditioning System	Battery — Disconnect the Electrical Circuit 220B-1
Unified Inch Bolt and Screw Torque Values 210-10	Access to the Battery
Metric Bolt and Screw Torque Values 210-11	Access to Fuses
	Fuse and Relay of Electrical Starting Aid 220B-2
	Fuses and the Relay for the Anti-Blocking
	Cyctom (ARC) of Troilor (If Equipped)
	System (ABS) of Trailer (If Equipped) 220B-3

Page		Page
Fuse and Relay Box (PLB)	Transmission/Hydraulic System - Check Oil	
Fuses and Relays (LCS) with AutoPowr™/	Level	220D-3
IVT™ Transmission	Check leak-off oil containers (if equipped)	220D-3
Check the Movement Inhibitor - on	Inspect Hydraulic Hoses	220D-4
AutoPowr™/IVT™ Transmission220B-10	Cab — Check Closing Mechanisms and	
Check the Movement Inhibitor - on AutoPowr™/IVT™ Transmission with	Rubber Seals of the Doors, Windows, and	330D 4
CommandPro <sup>™</sup> Joystick	Roof Hatches Cab - Check Dust Pre-Filter	
PTO Actuation - Check Safety Device220B-11	Inspect Seat Belt	
Starter Motor	Check Brakes	220D-4
Check the Engine Ground Connection 220B-11	Bleed and Check the Brake System	
Light Test220B-11	Air Brake System - Check for Condensed	2200 .
Handling Halogen Lamps Safely220B-12	Water	220D-4
Safe Maintenance and Cleaning220B-12	Check the Manually-Operated Hitch for Wear	220D-5
Headlight in the Engine Hood, Low-Beam	Check Trailer Hitch CUNA (Manually	
Headlight - Exchange Lamps220B-12	Operated) for Wear	220D-5
Headlight in the Engine Hood, High-Beam	Check Trailer Hitch (Remotely Operated) for	
Headlight - Exchange Lamps220B-13	Wear	220D-6
Worklight in the Engine Hood - Exchange	Trailer Hitch, Check the Guide Rails	
Lamps	Check Piton Fix Trailer Hitch for Wear	
Worklights on Cab Frame, Cab Roof, or Rear	Check Ball-Type Hitch for Wear	220D-8
Fender - Exchange Lamps220B-13	Check Swinging Drawbar for Wear	220D-8
Turn Signal and Clearance Lights on Cab	Check Tow Hook on Pick-Up Hitch for Wear .	220D-9
Frame - Exchange Lamps		
Headlights on Cab Frame - Change Lamp220B-14	Service – Change	
Tail Brake Light/Turn Signal on Fender - Change Lamp220B-15	Replace Bulbs	220E-1
License Plate Light - Change Bulb220B-16	Change Engine Oil Filter	220E-1
Beacon Light, Bulb Change220B-16	Change Engine Oil	220E-1
Cab Lighting - Change Bulb220B-18	Engine - Change Filter of Oil Separator in	2205.0
Lighting of the Transmission Shift Unit -	Črankcase Vent (If Equipped)	220E-2
Change Bulb	Change the engine tersion damper, only for	220⊑-2
g	Change the engine torsion damper - only for 6-cylinder engines	220⊑-/
Maintenance - Checking Hardware Torques	Change the Engine Air Cleaner	220E-4
Tighten Front-Wheel Bolts, on Vehicles with	Engine Air Cleaner - Change Secondary	220L-4
Front-Wheel Drive Axles with 10-Bolt	Element	220E-4
Circle	Change Cab Air Filters and Recirculation Air	2202
Tighten Wheel Bolts of Rear Wheels, for	Filters	220E-5
Flanged Axles with 10-Bolt Circle 220C-1	Cab Air Filter — Change Activated Carbon	
Rack-and-Pinion Axle - Check Rear Wheel	Filter (if equipped)	220E-5
Attachment on Steel and Cast Rear	Cab Suspension - Fill Pressure Accumulator .	220E-6
Wheels 220C-1	Coolant Change	220E-6
Wheel Weights - Tighten Screws	Changing Diesel Exhaust Fluid (DEF) Dosing	
Front Hitch - Tighten the Screws	Unit Filter	220E-7
Front Loader Mounting Frame - Maintenance 220C-2	Replace Suction Screen on DEF Tank	
CAT III Drawbar - Tighten the Screws 220C-2	Header (Only for Tractors without In-Line	0005.0
Trailer Hitch, Guide Rails - Tighten Screws 220C-3	DEF Filter)	220E-8
Ball-Type Hitch with Attached Arms for	In-Line DEF Filter (If Equipped) - Installation	220E 42
Forced Steering - Tighten Screws	Position Change Discal Exhaust Fluid (DEE) In Line	.220E-13
Ball-Type Hitch, Extendable (only 6175R to 6250R)) - Tighten Screws	Change Diesel Exhaust Fluid (DEF) In-Line	.220E-13
Pickup Hitch - Tighten Screws	Filter	.220E-13
rickup fillon - fighten Screws2200-3	Front-Wheel Drive Axle - Instructions on	.2206-13
O and the Observation	Changing Oil (Axle Housing and Final	
Service - Check	Drives)	.220E-15
Check Engine Oil Level	Front-Wheel Drive Axle - Axle Housing, Oil	.2206-10
Engine - Čheck Drive Belt for Wear	Change	.220E-16
Cooling System - Check Viscous Fan	Front-Wheel Drive Axle - Final Drives, Oil	
	Change	.220E-17
Use Coolant Test Strips to Check Engine Coolant	Electrical Hydraulic Pump Oil Change	.220E-17
Check Air Intake Hoses	Transmission/Hydraulic Oil Filters, Replace	
Front-Wheel Drive Axle - Axle Housing,	Change Transmission/Hydraulic Oil and	_
Check Oil Level	Clean Intake Screens — AutoPowr™/	
Front-Axle Suspension - Accumulator Check 220D-3	IVT™ Transmission	.220E-19

Page	Page
Air Brake System - Change Air-Drier	Permissible Front Axle Load in Relation to
Cartridge220E-20	Tires (Front Loader Operation) - 6230R
Front PTO - Change Oil Filter (If Equipped) 220E-20	and 6250R500A-17
Front PTO - Change Oil (If Equipped)220E-21	Permissible Rear Axle Load in Relation to
	Tires and Tread Width up to 2,25 m -
Service - Lubrication	6230R and 6250R500A-19
Lubrication - General information 220F-1	Air Pressures and Load Capacities of VF
Unscheduled Lubrication 220F-1	Tires "Bridgestone VT-Tractor"
Lubricate Tractor - Lubrication Points 220F-2	Air Pressures and Load Capacities of VF
Rear PTO - Lubricate PTO Stub Shaft	Tires "MICHELIN XeoBib"
Support	Permissible Ground Speed of the VF Tires
Windshield - Grease Hinges (Not with Glued	"MICHELIN AXOBIB 2"
Windshields)	Identification of Air-Conditioning Systems500A-22 Safety Note Regarding the Subsequent
	Installation of Electrical and Electronic
Troubleshooting	Appliances and/or Components500A-22
Transmission	Carbon Dioxide Emissions (CO <sub>2</sub> )500A-22
Hydraulic System 300A-1	Carbon Dioxide Linissions (CO2)
Selective Control Valves 300A-2	O - 2 - I November -
Engine 300A-3	Serial Numbers
Electrical System 300A-4	Type Plates
Operator's Čab	Plate for Product Identification and Serial
Premium Radio 300A-5	Numbers of Components
	Plate for Product Identification Number 500B-1 Engine Serial Number 500B-1
Troubleshooting - Diagnostic Trouble Codes	Transmission Serial Number
and Settings	Differential Case Serial Number
STOP, Service Alert, and Information	Front-Wheel Drive Serial Number
Indicators 300B-1	Operator's Cab Serial Number
Access diagnostic trouble codes 300B-2	Serial Number of Operator's Seat
Access Diagnostic Addresses 300B-2	Subassembly Serial Numbers 500B-4
Storage Shutting Down for an Extended Period	Change of Ownership Record of Changes of Ownership
rtemore rrem eterage	
Specifications	Pre-delivery Inspection
Note on Specifications 500A-1	Notes on Pre-Delivery Inspection
Dimensions - 6230R and 6250R 500A-1	Service Procedure
Engine - 6230R and 6250R 500A-2	
PTO Power Output - 6230R and 6250R 500A-3	Copy for Owner
Transmission - 6230R and 6250R 500A-3	
Hitches - 6230R and 6250R 500A-4	
Hydraulic System - 6230R and 6250R 500A-4	700-0
Capacities - 6230R and 6250R 500A-5	
Oil Withdrawal - 6230R and 6250R 500A-5	
Use of large-volume hydraulic cylinders 500A-5	
Operating the Tractor in an Inclined Position 500A-6	
Loads and Weights - Part 1 (6230R and	
6250R)	
Loads and Weights - Part 2, from MY19 500A-11	
How to Calculate Maximum Permissible	
Download on Trailer Hitch500A-13	
Maximum Permissible Towed Loads - 6230R	
and 6250R	
Calculate Permissible Mass	
Electrical System - 6230R and 6250R500A-15	
Vibration         500A-15           Cab, Classification         500A-15	
Sound Level500A-15	
Permissible Front Axle Load in Relation to	
Tires (Normal Operation) - 6230R and	
6250R500A-16	

# Glossary

# Glossary

	0	Medium speed
	++	Fastest speed
Revolutions per Minute	rpm	Abbreviation
Air-Conditioning System	A/C	System used for conditioning the air in the operator's cab
Alternating Current	AC	Electrical current that reverses its direction at regularly recurring intervals
Accessories	ACC	Secondary electrical system
Armrest Control Unit	ACU	Armrest control for operating the tractor functions
AutoQuad Plus Transmission	AQ+	Partial power-shiftable transmission
Air Quality System	AQS	System used to control conditioned air in the operator's cab
Automatic Temperature Control	ATC	Abbreviation
Cold Cranking Amperes	CCA	Refers to a battery's capability to perform during cold weather operation
CommandCenter™	CC	Computerized system for tractor monitoring
Component Technical Manual	CTM	Technical manual for component maintenance
Diesel Exhaust Fluid	DEF	Diesel Exhaust Fluid
Direct Current	DC	Electrical current flowing in one direction only
Diesel particulate filter	DPF	Abbreviation
Dynamic Weighing System	DWS	System for recording weights and quantities (front loader)
Engine control unit	ECU	Computerized system used to govern engine speed
Electric-Hydraulic:	EH	Electrically controlled hydraulic valve functions
Electrohydraulic Depth Control	EHDC	Abbreviation
Electro-Hydraulic Selective Control Valve	EH-SCV	Selective control valve driven with electrical magnetic switches
Electronics	ELX	Abbreviation
Electronic Self-Leveling	ESL	Electronic self-leveling of the loader tool (front loader)
Forward Set Speed	FSS	Speed control for Infinitely Variable Transmission
Gallons per Minute	gpm	Volume flow, measured for the period of one minute
Hitch Control Center	HCU	Computerized system used to control hitch functions
Heavy-Duty Type	HD	Abbreviation
High Intensity Discharge	HID	A specific type of Xenon worklights that are used for front lighting
Hitch Slip Command	HSC	Computer supported system for supporting the draft response control of the hitch
Instrument Control Unit	ICU	Computerized system controlling tractor warning functions
Ignition	IGN	Control for starting and stopping the engine
Implement System	IMS	System used to control functions when turning at end of a field
International Standards Organization	ISO	Abbreviation
Electronic Operator Support	iTEC	Abbreviation for Intelligent Total Equipment Control
Liters per Minute	l/min	Volume flow, measured for the period of one minute
Leveling to Horizon	LTH	Automatic alignment of the loader tool when changing driving conditions (inclination/slope), (front loader)
Mechanical front-wheel drive	MFWD	Mechanically powered front axle
PowrQuad-Plus Transmission	PQ+	Partial power-shiftable transmission
Pressure Control Valve	PCV	Device to regulate pressure in a system
Product ID number	PIN	Serial number for product identification
Power Take-Off	PTO	Abbreviation
Return-to-Position	RTP	Bring loader boom and loader tool automatically to preselected position (front loader)
SCV Controller	SCU	Computerized system used to control selective control valve functions
Selective Control Valve	SCV	Device used to control remote hydraulic functions
Slow Moving Vehicle	SMV	Warning sign on the rear of the tractor
Tractor-Implement Automation	TIA	Abbreviation for <b>T</b> ractor <b>I</b> mplement <b>A</b> utomation Included in TIM.
Tractor Implement Management	TIM	Abbreviation for <b>T</b> ractor <b>I</b> mplement <b>M</b> anagement ISOBUS application
Front axle suspension	TLS	Abbreviation for Triple Link Suspension

# **Trademarks**

Trademarks		Trademarks	
AutoPowr™	Trademark of Deere and Company	iTEC™ Basic	Trademark of Deere and Company
AutoPowr™/IVT™	Trademark of Deere and Company	iTEC™ Pro	Trademark of Deere and Company
AutoQuad™ II	Trademark of Deere and Company	IVT™	Trademark of Deere and Company
AutoQuad™ PLUS	Trademark of Deere and Company	IVT Selector™	Trademark of Deere and Company
AutoTrac™	Trademark of Deere and Company	JDLink™	Trademark of Deere and Company
Bio Hy-Gard ™	Trademark of Deere and Company	JDOffice™	Trademark of Deere and Company
ClimaTrak™	Trademark of Deere and Company	John Deere	Trademark of Deere and Company
ComfortGard™	Trademark of Deere and Company	Oilscan™	Trademark of Deere and Company
ComfortGard Deluxe™	Trademark of Deere and Company	Parallel Tracking™	Trademark of Deere and Company
CommandARM™	Trademark of Deere and Company	Plus-50™	Trademark of Deere and Company
CommandCenter™	Trademark of Deere and Company	PowerTech™	Trademark of Deere and Company
CommandPRO™	Trademark of Deere and Company	PowerTech™ Plus	Trademark of Deere and Company
CommandQuad™	Trademark of Deere and Company	PowerZero™	Trademark of Deere and Company
COOL-GARD™	Trademark of Deere and Company	PowrQuad™	Trademark of Deere and Company
COOL-GARD II™	Trademark of Deere and Company	PowrQuad™ PLUS	Trademark of Deere and Company
CoolScan™	Trademark of Deere and Company	PowrReverser™	Trademark of Deere and Company
CoolScan PLUS™	Trademark of Deere and Company	Service ADVISOR™	Trademark of Deere and Company
Deere™	Trademark of Deere and Company	SERVICEGARD™	Trademark of Deere and Company
DieselScan™	Trademark of Deere and Company	StarFire™	Trademark of Deere and Company
FieldCruise™	Trademark of Deere and Company	StarFire™ iTC	Trademark of Deere and Company
Field Doc™	Trademark of Deere and Company	StellarSupport™	Trademark of Deere and Company
Field Office™	Trademark of Deere and Company	SyncroPlus™	Trademark of Deere and Company
GreenStar™	Trademark of Deere and Company	TLS™	Trademark of Deere and Company
Hy-Gard™	Trademark of Deere and Company	Tractor-Implement Automation™	Trademark of Deere and Company
ILS™	Trademark of Deere and Company	Triple Link Suspension™	Trademark of Deere and Company
iTEC™	Trademark of Deere and Company		

OULXA64,0003F82-19-17OCT18

# **Safety**

### **Recognize Safety Information**



T81389—UN—28JUN13

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

DX,ALERT-19-29SEP98

### **Understand Signal Words**



# **A WARNING**

# **ACAUTION**

TS187—19—30SEP88

**DANGER**; The signal word DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**WARNING**; The signal word WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION**; The signal word CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices associated with events which could lead to personal injury.

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards. DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

DX,SIGNAL-19-05OCT16

### **Follow Safety Instructions**



TS201—UN—15APR1:

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

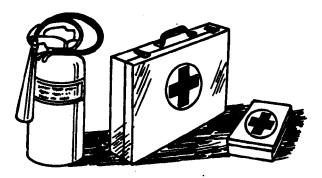
Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.

DX,READ-19-16JUN09

## **Prepare for Emergencies**



TS291-UN-15APR13

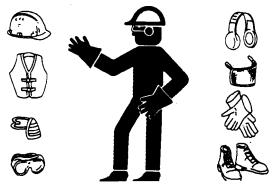
Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.

DX,FIRE2-19-03MAR93

### **Wear Protective Clothing**



TS206-UN-15APR13

Wear close fitting clothing and safety equipment appropriate to the job.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

DX,WEAR2-19-03MAR93

### **Protect Against Noise**



TS207—UN—23AUG88

There are many variables that affect the sound level range, including machine configuration, condition and maintenance level of the machine, ground surface, operating environmental, duty cycles, ambient noise, and attachments.

Exposure to loud noise can cause impairment or loss of hearing.

Always wear hearing protection. Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

DX,NOISE-19-03OCT17

### Handle Fuel Safely—Avoid Fires



TS202-UN-23AUG88

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

Use only an approved fuel container for transporting flammable liquids.

Never fill fuel container in pickup truck with plastic bed liner. Always place fuel container on ground before refueling. Touch fuel container with fuel dispenser nozzle before removing can lid. Keep fuel dispenser nozzle in contact with fuel container inlet when filling.

Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.

DX,FIRE1-19-12OCT11

### **Fire Prevention**

To reduce the risk of fire, your tractor should be regularly inspected and cleaned.

- Birds and other animals may build nests or bring other flammable materials into the engine compartment or onto the exhaust system. The tractor should be inspected and cleaned prior to the first use each day.
- A build up of grass, crop material and other debris may occur during normal operation. This is especially true when operating in very dry conditions or conditions where airborne crop material or crop dust is present. Any such build up must be removed to ensure proper machine function and to reduce the risk of fire. The tractor must be inspected and cleaned periodically throughout the day.
- Regular and thorough cleaning of the tractor combined with other routine maintenance procedures listed in the Operator's Manual greatly reduce the risk of fire and the chance of costly downtime.

- Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.
- Check fuel lines, tank, cap, and fittings frequently for damage, cracks or leaks. Replace if necessary.

Follow all operational and safety procedures posted on the machine and the Operator's Manual. Be careful of hot engine and exhaust components during inspection and cleaning. Before carrying out any inspection or cleaning, always shut OFF the engine, place the transmission in PARK or set parking brake, and remove the key. Removal of the key will prevent others from starting the tractor during inspection and cleaning.

DX,WW,TRACTOR,FIRE,PREVENTION-19-120CT11

### In Case of Fire



TS227—UN—15APR13

# Λ

### **CAUTION:** Avoid personal injury.

Stop machine immediately at the first sign of fire. Fire may be identified by the smell of smoke or sight of flames. Because fire grows and spreads rapidly, get off the machine immediately and move safely away from the fire. Do not return to the machine! The number one priority is safety.

Call the fire department. A portable fire extinguisher can put out a small fire or contain it until the fire department arrives; but portable extinguishers have limitations. Always put the safety of the operator and bystanders first. If attempting to extinguish a fire, keep your back to the wind with an unobstructed escape path so you can move away quickly if the fire cannot be extinguished.

Read the fire extinguisher instructions and become familiar with their location, parts, and operation before a fire starts. Local fire departments or fire equipment distributors may offer fire extinguisher training and recommendations.

If your extinguisher does not have instructions, follow these general guidelines:

1. Pull the pin. Hold the extinguisher with the nozzle

- pointing away from you, and release the locking mechanism.
- 2. Aim low. Point the extinguisher at the base of the fire.
- Squeeze the lever slowly and evenly.
- 4. Sweep the nozzle from side-to-side.

DX,FIRE4-19-22AUG13

# Avoid Static Electricity Risk When Refueling



RG22142-UN-17MAR14



RG21992—UN—21AUG13

The removal of sulfur and other compounds in Ultra-Low Sulfur Diesel (ULSD) fuel decreases its conductivity and increases its ability to store a static charge.

Refineries may have treated the fuel with a static dissipating additive. However, there are many factors that can reduce the effectiveness of the additive over time.

Static charges can build up in ULSD fuel while it is flowing through fuel delivery systems. Static electricity discharge when combustible vapors are present could result in a fire or explosion.

Therefore, it is important to ensure that the entire system used to refuel your machine (fuel supply tank, transfer pump, transfer hose, nozzle, and others) is properly grounded and bonded. Consult with your fuel or fuel system supplier to ensure that the delivery

system is in compliance with fueling standards for proper grounding and bonding practices.

DX,FUEL,STATIC,ELEC-19-12JUL13

### **Use Foldable ROPS and Seat Belt Properly**



TS1729-UN-24MAY13

Avoid crushing injury or death during rollover.

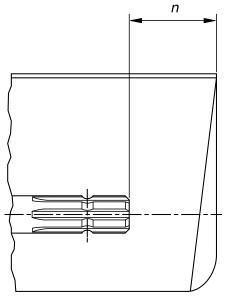
- If this machine is equipped with a foldable rollover protective structure (ROPS), keep the ROPS in the fully extended and locked position. USE a seat belt when you operate with a ROPS in the fully extended position.
  - Hold the latch and pull the seat belt across the body.
  - Insert the latch into the buckle. Listen for a click.
  - Tug on the seat belt to make sure that the belt is securely fastened.
  - Snug the seat belt across the hips.
- If this machine is operated with the ROPS folded (for example, to enter a low building), drive with extreme caution. DO NOT USE a seat belt with the ROPS folded.
- Return the ROPS to the raised, fully extended position as soon as the machine is operated under normal conditions.

DX,FOLDROPS-19-22AUG13

### **Stay Clear of Rotating Drivelines**



TS1644-UN-22AUG95



H96219-UN-29APR10

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Only use power take-off driveshafts with adequate guards and shields.

Wear close fitting clothing. Stop the engine and be sure that PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.

Do not install any adapter device between the tractor and the primary implement PTO driveshaft that will allow a 1000 rpm tractor shaft to power a 540 rpm implement at speeds higher than 540 rpm.

Do not install any adapter device that results in a portion of the rotating implement shaft, tractor shaft, or the adapter to be unguarded. The tractor master shield shall overlap the end of the splined shaft and the added adaptor device as outlined in the table.

The angle at which the primary implement PTO

driveshaft can be inclined may be reduced depending on the shape and size of the tractor master shield and the shape and size of the guard of the primary implement PTO driveshaft.

Do not raise implements high enough to damage the tractor master shield or guard of primary implement PTO driveshaft. Detach the PTO driveline shaft if it is necessary to increase implement height. (See Attching/ Detaching PTO Driveline)

When using Type 3/4 PTO, inclination and turning angles may be reduced depending on type of PTO master shield and coupling rails.

PTO Type	Diameter	Splines	n ± 5 mm (0.20 in.)
1	35 mm (1.378 in.)	6	85 mm (3.35 in.)
2	35 mm (1.378 in.)	21	85 mm (3.35 in.)
3	45 mm (1.772 in.)	20	100 mm (4.00 in.)
4	57.5 mm (2.264 in.)	22	100 mm (4.00 in.)

DX.PTO-19-28FEB17

### **Use Steps and Handholds Correctly**



T133468--UN--15APR1

Prevent falls by facing the machine when getting on and off. Maintain 3-point contact with steps, handholds, and handrails.

Use extra care when mud, snow, or moisture present slippery conditions. Keep steps clean and free of grease or oil. Never jump when exiting machine. Never mount or dismount a moving machine.

DX,WW,MOUNT-19-12OCT11

# Read Operator's Manuals for ISOBUS Controllers

In addition to GreenStar<sup>™</sup> Applications, this display can be used as a display device for any ISOBUS Controller that meets ISO 11783 standard. This includes capability to control ISOBUS implements. When used in this manner, information and control functions placed on the

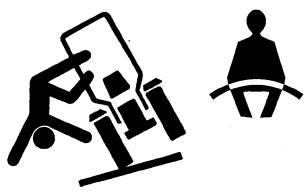
GreenStar is a trademark of Deere & Company

display are provided by the ISOBUS Controller and are the responsibility of the ISOBUS Controller manufacturer. Some of these functions could pose a hazard to either the operator or a bystander. Read the Operator's Manual provided by the ISOBUS Controller manufacturer and observe all safety messages in manual and on ISOBUS Controller product prior to use.

NOTE: ISOBUS refers to the ISO Standard 11783

DX,WW,ISOBUS-19-15JUL15

### Use Seat Belt Properly



TS1729-UN-24MAY13

Avoid crushing injury or death during rollover.

This machine is equipped with a rollover protective structure (ROPS). USE a seat belt when you operate with a ROPS.

- Hold the latch and pull the seat belt across the body.
- Insert the latch into the buckle. Listen for a click.
- Tug on the seat belt latch to make sure that the belt is securely fastened.
- Snug the seat belt across the hips.

Replace entire seat belt if mounting hardware, buckle, belt, or retractor show signs of damage.

Inspect seat belt and mounting hardware at least once a year. Look for signs of loose hardware or belt damage, such as cuts, fraying, extreme or unusual wear, discoloration, or abrasion. Replace only with replacement parts approved for your machine. See your John Deere dealer.

DX,ROPS1-19-22AUG13

#### **Vibration**

All operator's seats approved by John Deere are component type-approved in accordance with 78/764/ EEC or (EU) 1322/2014 Annex XIV, being allocated an average of the vibration acceleration actually measured at the seat ( $a_{ws}$ ), equivalent to  $\leq$  1.25 m/s<sup>2</sup>.

This value must NOT be used to calculate vibration stress as per 2002/44/EC! Local John Deere dealers can provide assistance in assessing vibration stress.

Measures to reduce vibration may include:

- Appropriate style of driving, e.g. not too fast
- Suspended front axle
- Suspended cab
- · Correctly adjusted operator's seat
- Correct tire pressure

DX,VIBRATION,EU-19-28FEB17

### **Operating the Tractor Safely**

You can reduce the risk of accidents by following these simple precautions:

- Use your tractor only for jobs it was designed to perform, for example, pushing, pulling, towing, actuating, and carrying a variety of interchangeable equipment designed to conduct agricultural work.
- Operators must be mentally and physically capable of accessing the operator's station and/or controls, and operating the machine properly and safely.
- Never operate machine when distracted, fatigued, or impaired. Proper machine operation requires the operator's full attention and awareness.
- This tractor is not intended to be used as a recreational vehicle.
- Read this operator's manual before operating the tractor and follow operating and safety instructions in the manual and on the tractor.
- Follow operation and ballasting instructions found in the operator's manual for your implements/ attachments, such as front loaders.
- Follow the instructions outlined in the operator's manual of any mounted or trailed machinery or trailer. Do not operate a combination of tractormachine or tractor-trailer unless all instructions have been followed.
- Make sure that everyone is clear of machine, attached equipment, and work area before starting engine or operation.
- Stay clear of the three-point linkage and pickup hitch (if equipped) when controlling them.
- Keep hands, feet, and clothing away from powerdriven parts.

### **Driving Concerns**

- Never get on or off a moving tractor.
- Complete any required training prior to operating vehicle.
- Keep all children and nonessential personnel off tractors and all equipment.

- Never ride on a tractor unless seated on a John Deere approved seat with a seat belt.
- Keep all shields/guards in place.
- Use appropriate visual and audible signals when operating on public roads.
- Move to side of road before stopping.
- Reduce speed when turning, applying individual brakes, or operating around hazards on rough ground or steep slopes.
- Stability degrades when attached implements are at high position.
- Couple brake pedals together for road travel.
- Pump brakes when stopping on slippery surfaces.
- Regularly clean fenders and fender valances (mud flaps) if installed. Remove dirt before driving on public roadways.

### **Heated and Ventilated Operator's Seat**

 An overheated seat heater can cause a burn injury or damage to the seat. To reduce the risk of burns, use caution when using the seat heater for extended periods of time, especially if the operator cannot feel temperature change or pain to the skin. Do not place objects on the seat, such as a blanket, cushion, cover, or similar item, which can cause the seat heater to overheat.

#### **Towing Loads**

- Be careful when towing and stopping heavy loads. Stopping distance increases with speed and weight of towed loads, and on slopes. Towed loads with or without brakes that are too heavy for the tractor or are towed too fast can cause loss of control.
- Consider the total weight of the equipment and its load.
- Hitch towed loads only to approved couplings to avoid rearward upset.

### **Parking and Leaving the Tractor**

- Before dismounting, shut off SCVs, disengage PTO, stop engine, lower implements/attachments to ground, place implement/attachment control devices in neutral, and securely engage park mechanism, including the park pawl and park brake. In addition, if the tractor is left unattended, remove key.
- Leaving transmission in gear with engine off will NOT prevent the tractor from moving.
- Never go near an operating PTO or an operating implement.
- Wait for all movement to stop before servicing machinery.

#### **Common Accidents**

Unsafe operation or misuse of the tractor can result in accidents. Be alert to hazards of tractor operation.

The most common accidents involving tractors are:

- Tractor rollover
- · Collisions with motor vehicles
- Improper starting procedures
- Entanglement in PTO shafts
- Falling from tractor
- Crushing and pinching during hitching

DX,WW,TRACTOR-19-08MAY19

#### **Avoid Backover Accidents**



PC10857XW-UN-15APR13

Before moving machine, be sure that all persons are clear of machine path. Turn around and look directly for best visibility. Use a signal person when backing if view is obstructed or when in close quarters.

Do not rely on a camera to determine if personnel or obstacles are behind the machine. The system can be limited by many factors including maintenance practices, environmental conditions, and operating range.

DX,AVOID,BACKOVER,ACCIDENTS-19-30AUG10

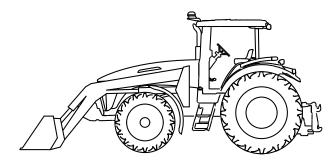
### **Limited Use in Forestry Operation**

The intended use of John Deere tractors when used in forestry operations is limited to tractor-specific applications like transport, stationary work such as log splitting, propulsion, or operating implements with PTO, hydraulic, or electrical systems.

These are applications where normal operation does not present a risk of falling or penetrating objects. Any forestry applications beyond these applications, such as forwarding and loading, requires fitment of application-specific components including Falling Object Protective Structure (FOPS) and/or Operative Protective Structures (OPS). Contact John Deere dealer for special components.

DX,WW,FORESTRY-19-12OCT11

### **Operating the Loader Tractor Safely**



TS1692-UN-09NOV09

When operating a machine with a loader application, reduce speed as required to ensure good tractor and loader stability.

To avoid tractor rollover and damage to front tires and tractor, do not carry load with your loader at a speed over 10 km/h (6 mph).

To avoid tractor damage do not use a front loader or a sprayer tank if the tractor is equipped with a 3 Meter Front Axle.

Never allow anyone to walk or work under a raised loader.

Do not use loader as a work platform.

Do not lift or carry anyone on loader, in bucket, or on implement or attachment.

Lower loader to ground before leaving operators station.

The Rollover Protective Structure (ROPS) or cab roof, if equipped, may not provide sufficient protection from load falling onto the operators station. To prevent loads from falling onto the operators station, always use appropriate implements for specific applications (that is, manure forks, round bale forks, round bale grippers, and clampers).

Ballast tractor in accordance to Ballast Recommendations in PREPARE TRACTOR section.

DX,WW,LOADER-19-18SEP12

### **Keep Riders Off Machine**



TS290-UN-23AUG88

Only allow the operator on the machine. Keep riders off.

Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

DX,RIDER-19-03MAR93

### **Passenger Seat**



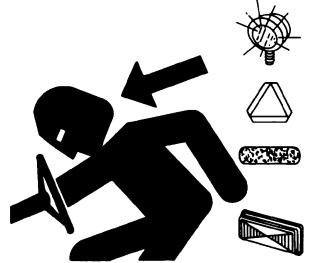
TS1730—UN—24MAY13

The passenger seat is intended only for transport of a passenger in on-road operations (that is, transport from farm to field).

If it is necessary to transport a passenger, the passenger seat is the only means of transporting a passenger provided by John Deere.

DX,SEAT,EU-19-28FEB17

### **Use Safety Lights and Devices**



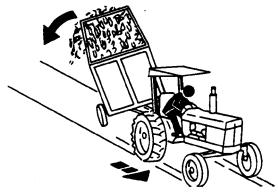
TS951-UN-12APR9

Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible, clean, and in good working order. Replace or repair lighting and marking that has been damaged or lost. An implement safety lighting kit is available from your John Deere dealer.

DX,FLASH-19-07JUL99

### **Towing Trailers/Implements Safely**



TS216—UN—23AUG8

Stopping distance increases with speed and mass of trailer/implement, and when transporting on slopes. Towed mass with or without brakes that is too heavy for the tractor or is towed too fast can cause loss of control. Consider the total weight of the equipment and its load.

When towing a trailer, become familiar with the braking characteristics and ensure the compatibility of the tractor/trailer combination in regard to the deceleration rate.

Stay clear of area between tractor and trailed vehicle.

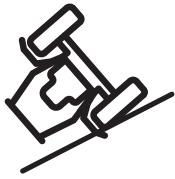
Trailer/Implement Brake System	Top Speed
Unbraked	25 km/h (15.5 mph)
Independent	25 km/h (15.5 mph)
Overrun brake	25 km/h (15.5 mph)
Single-line hydraulic brake	25 km/h (15.5 mph)
Dual-line hydraulic brake	40 km/h (25 mph)
Single-line air brake	25 km/h (15.5 mph)
Dual-line air brake	Maximum design speed

There may be legal limits in force that restrict travel speeds to figures lower than those quoted here.

Use additional caution when towing loads under adverse surface conditions, when turning, and on inclines.

DX,TOW3,EU-19-28FEB17

# Use Caution on Slopes, Uneven Terrain, and Rough Ground



RXA0103437-UN-01JUL09

Avoid holes, ditches, and obstructions which cause the tractor to tip, especially on slopes. Avoid sharp uphill turns

Driving forward out of a ditch, mired condition, or up a steep slope could cause the tractor to tip over rearward. Back out of these situations if possible.

Danger of overturn increases greatly with narrow tread setting, at high speed.

Not all conditions that can cause a tractor to overturn are listed. Be alert for any situation in which stability may be compromised.

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution.

Uneven terrain or rough ground can cause loss-ofcontrol and tip-over accidents, which can result in severe injury or death. Operation on uneven terrain or rough ground requires extra caution. Never drive near the edge of a gully, drop-off, ditch, steep embankment, or a body of water. The machine could suddenly roll over if a wheel goes over the edge or the ground caves in

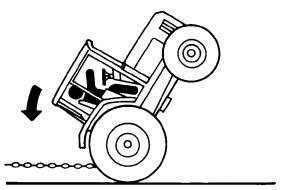
Choose a low ground speed so you will not have to stop or shift while on a slope.

Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the PTO and proceed slowly, straight down the slope.

Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.

DX,WW,SLOPE-19-28FEB17

### Freeing a Mired Machine



TS1645—UN—15SEP95



TS263—UN—23AUG88

Attempting to free a mired machine can involve safety hazards such as the mired tractor tipping rearward, the towing tractor overturning, and the tow chain or tow bar (a cable is not recommended) failing and recoiling from its stretched condition.

Back your tractor out if it gets mired down in mud. Unhitch any towed implements. Dig mud from behind the rear wheels. Place boards behind the wheels to provide a solid base and try to back out slowly. If necessary, dig mud from the front of all wheels and drive slowly ahead.

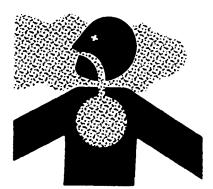
If necessary to tow with another unit, use a tow bar or a long chain (a cable is not recommended). Inspect the

chain for flaws. Make sure all parts of towing devices are of adequate size and strong enough to handle the load.

Always hitch to the drawbar of the towing unit. Do not hitch to the front pushbar attachment point. Before moving, clear the area of people. Apply power smoothly to take up the slack: a sudden pull could snap any towing device causing it to whip or recoil dangerously.

DX,MIRED-19-07JUL99

### **Avoid Contact with Agricultural Chemicals**



TS220-UN-15APR13



TS272—UN—23AUG88

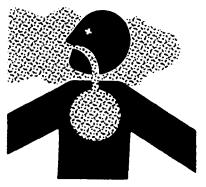
This enclosed cab does not protect against inhaling vapor, aerosol or dust. If pesticide use instructions require respiratory protection, wear an appropriate respirator inside the cab.

Before leaving the cab, wear personal protective equipment as required by the pesticide use instructions. When re-entering the cab, remove protective equipment and store either outside the cab in a closed box or some other type of sealable container or inside the cab in a pesticide resistant container, such as a plastic bag.

Clean your shoes or boots to remove soil or other contaminated particles prior to entering the cab.

DX,CABS-19-25MAR09

### Handle Agricultural Chemicals Safely



TS220-UN-15APR13



A34471—UN—11OCT88

Chemicals used in agricultural applications such as fungicides, herbicides, insecticides, pesticides, rodenticides, and fertilizers can be harmful to your health or the environment if not used carefully.

Always follow all label directions for effective, safe, and legal use of agricultural chemicals.

Reduce risk of exposure and injury:

A34471

- Wear appropriate personal protective equipment as recommended by the manufacturer. In the absence of manufacturer's instructions, follow these general guidelines:
  - Chemicals labeled **'Danger'**: Most toxic. Generally require use of goggles, respirator, gloves, and skin protection.
  - Chemicals labeled 'Warning': Less toxic.
     Generally require use of goggles, gloves, and skin protections.
  - Chemicals labeled 'Caution': Least toxic. Generally require use of gloves and skin protection.
- Avoid inhaling vapor, aerosol or dust.
- Always have soap, water, and towel available when working with chemicals. If chemical contacts skin, hands, or face, wash immediately with soap and water. If chemical gets into eyes, flush immediately with water.
- Wash hands and face after using chemicals and before eating, drinking, smoking, or urination.

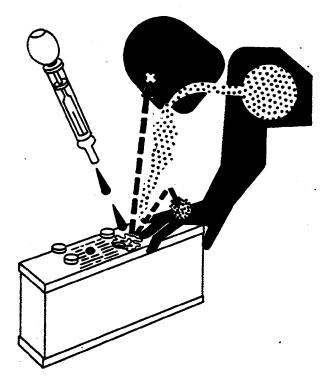
- Do not smoke or eat while applying chemicals.
- After handling chemicals, always bathe or shower and change clothes. Wash clothing before wearing again.
- Seek medical attention immediately if illness occurs during or shortly after use of chemicals.
- Keep chemicals in original containers. Do not transfer chemicals to unmarked containers or to containers used for food or drink.
- Store chemicals in a secure, locked area away from human or livestock food. Keep children away.
- Always dispose of containers properly. Triple rinse empty containers and puncture or crush containers and dispose of properly.

DX,WW,CHEM01-19-24AUG10

### **Handling Batteries Safely**



TS204—UN—15APR13



TS203-UN-23AUG88

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (-) battery clamp first and replace grounded clamp last.

Sulfuric acid in battery electrolyte is poisonous and strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

### Avoid hazards by:

- Filling batteries in a well-ventilated area
- Wearing eye protection and rubber gloves
- Avoiding use of air pressure to clean batteries
- Avoiding breathing fumes when electrolyte is added
- Avoiding spilling or dripping electrolyte
- Using correct battery booster or charger procedure.

### If acid is spilled on skin or in eyes:

- 1. Flush skin with water.
- 2. Apply baking soda or lime to help neutralize the acid.
- 3. Flush eyes with water for 15—30 minutes. Get medical attention immediately.

#### If acid is swallowed:

- 1.Do not induce vomiting.
- 2. Drink large amounts of water or milk, but do not exceed 2 L (2 qt.).
- 3. Get medical attention immediately.

**WARNING:** Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.** 

DX,WW,BATTERIES-19-02DEC10

# **Avoid Heating Near Pressurized Fluid Lines**

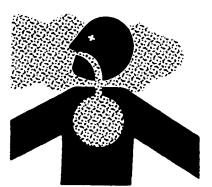


TS953-UN-15MAY90

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can accidentally burst when heat goes beyond the immediate flame area.

DX,TORCH-19-10DEC04

## Remove Paint Before Welding or Heating



TS220—UN—15APR13

Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Remove paint before heating:

- Remove paint a minimum of 100 mm (4 in.) from area to be affected by heating. If paint cannot be removed, wear an approved respirator before heating or welding.
- If you sand or grind paint, avoid breathing the dust.
   Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

Do not use a chlorinated solvent in areas where welding will take place.

Do all work in an area that is well ventilated to carry toxic fumes and dust away.

Dispose of paint and solvent properly.

DX,PAINT-19-24JUL02

# Handle Electronic Components and Brackets Safely



TS249-UN-23AUG88

Falling while installing or removing electronic components mounted on equipment can cause serious injury. Use a ladder or platform to easily reach each mounting location. Use sturdy and secure footholds and handholds. Do not install or remove components in wet or icy conditions.

If installing or servicing a RTK base station on a tower or other tall structure, use a certified climber.

If installing or servicing a global positioning receiver mast used on an implement, use proper lifting techniques and wear proper protective equipment. The mast is heavy and can be awkward to handle. Two people are required when mounting locations are not accessible from the ground or from a service platform.

DX,WW,RECEIVER-19-24AUG10

### **Practice Safe Maintenance**



TS218—UN—23AUG88

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing away from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

On towed implements, disconnect wiring harnesses from tractor before servicing electrical system components or welding on machine.

Falling while cleaning or working at height can cause serious injury. Use a ladder or platform to easily reach each location. Use sturdy and secure footholds and handholds.

DX,SERV-19-28FEB17

### **Avoid Hot Exhaust**





RG17488-UN-21AUG09

Servicing machine or attachments with engine running can result in serious personal injury. Avoid exposure and skin contact with hot exhaust gases and components.

Exhaust parts and streams become very hot during operation. Exhaust gases and components reach temperatures hot enough to burn people, ignite, or melt common materials.

DX,EXHAUST-19-20AUG09

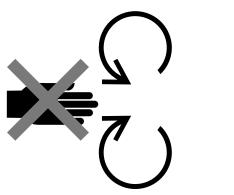
### Clean Exhaust Filter Safely



TS227—UN—15APR13



TS271-UN-23AUG88



TS1693-UN-09DEC09



TS1695-UN-07DEC09

During exhaust filter cleaning operations, the engine may run at elevated idle and hot temperatures for an extended period of time. Exhaust gases and exhaust filter components reach temperatures hot enough to burn people, or ignite or melt common materials.

Keep machine away from people, animals, or structures which may be susceptible to harm or damage from hot exhaust gases or components. Avoid potential fire or explosion hazards from flammable materials and vapors near the exhaust. Keep exhaust outlet away from people and anything that can melt, burn, or explode.

Closely monitor machine and surrounding area for smoldering debris during and after exhaust filter cleaning.

Adding fuel while an engine is running can create a fire or explosion hazard. Always stop engine before refueling machine and clean up any spilled fuel.

Always make sure that engine is stopped while hauling machine on a truck or trailer.

Contact with exhaust components while still hot can result in serious personal injury.

Avoid contact with these components until cooled to safe temperatures.

If service procedure requires engine to be running:

- Only engage power-driven parts required by service procedure
- Ensure that other people are clear of operator station and machine

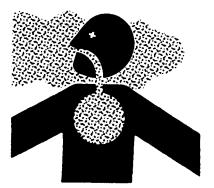
Keep hands, feet, and clothing away from power-driven parts.

Always disable movement (neutral), set the parking brake or mechanism and disconnect power to attachments or tools before leaving the operator's station.

Shut off engine and remove key (if equipped) before leaving the machine unattended.

DX,EXHAUST,FILTER-19-12JAN11

### Work In Ventilated Area



TS220-UN-15APR1

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open the doors and get outside air into the area.

DX,AIR-19-17FEB99

## **Support Machine Properly**



TS229—UN—23AUG88

Always lower the attachment or implement to the ground before you work on the machine. If the work requires that the machine or attachment be lifted, provide secure support for them. If left in a raised position, hydraulically supported devices can settle or leak down.

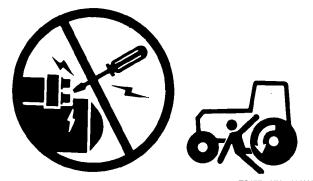
Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load.

Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.

When implements or attachments are used with a machine, always follow safety precautions listed in the implement or attachment operator's manual.

DX,LOWER-19-24FEB00

### **Prevent Machine Runaway**



TS177—UN—11JAN89

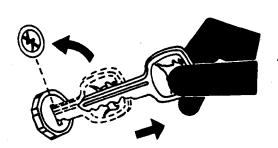
Avoid possible injury or death from machinery runaway.

Do not start engine by shorting across starter terminals. Machine will start in gear if normal circuitry is bypassed.

NEVER start engine while standing on ground. Start engine only from operator's seat, with transmission in neutral or park.

DX,BYPAS1-19-29SEP98

## Park Machine Safely



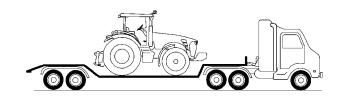
TS230—UN—24MAY89

Before working on the machine:

- Lower all equipment to the ground.
- Stop the engine and remove the key.
- Disconnect the battery ground strap.
- Hang a "DO NOT OPERATE" tag in operator station.

DX,PARK-19-04JUN90

### **Transport Tractor Safely**



RXA0103709-UN-01JUL09

A disabled tractor is best transported on a flatbed carrier. Use chains to secure the tractor to the carrier. The axles and tractor frame are suitable attachment points.

Before transporting the tractor on a low-loader truck or flatbed rail wagon, make sure that the hood is secured over the tractor engine and that doors, roof hatch (if equipped) and windows are properly closed.

Never tow a tractor at a speed greater than 10 km/h (6 mph). An operator must steer and brake the tractor under tow.

DX,WW,TRANSPORT-19-19AUG09

# **Service Cooling System Safely**



TS281—UN—15APR13

Explosive release of fluids from pressurized cooling system can cause serious burns.

Shut off engine. Only remove filler cap when cool enough to touch with bare hands. Slowly loosen cap to first stop to relieve pressure before removing completely.

DX,WW,COOLING-19-19AUG09

### **Service Accumulator Systems Safely**



TS281-UN-15APR13

Escaping fluid or gas from systems with pressurized accumulators that are used in air conditioning, hydraulic, and air brake systems can cause serious injury. Extreme heat can cause the accumulator to burst, and pressurized lines can be accidentally cut. Do not weld or use a torch near a pressurized accumulator or pressurized line.

Relieve pressure from the pressurized system before removing accumulator.

Relieve pressure from the hydraulic system before removing accumulator. Never attempt to relieve hydraulic system or accumulator pressure by loosening a fitting.

Accumulators cannot be repaired.

DX,WW,ACCLA2-19-22AUG03

### **Service Tires Safely**



RXA0103438-UN-11JUN09

Explosive separation of a tire and rim parts can cause serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel. When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check wheels for low pressure, cuts, bubbles, damaged rims, or missing lug bolts and nuts.

Wheels and tires are heavy. When handling wheels and tires use a safe lifting device or get an assistant to help lift, install, or remove.

DX,WW,RIMS-19-28FEB17

### Service Front-Wheel Drive Tractor Safely



L124515-UN-06AUG94

When servicing front-wheel drive tractor with the rear wheels supported off the ground and rotating wheels by engine power, always support front wheels in a similar manner. Loss of electrical power or transmission hydraulic system pressure will engage the front driving wheels, pulling the rear wheels off the support if front wheels are not raised. Under these conditions, front drive wheels can engage even with switch in disengaged position.

DX,WW,MFWD-19-19AUG09

# **Tightening Wheel Retaining Bolts/Nuts**



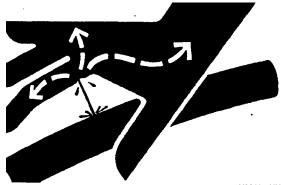
L124 516

L124516—UN—03JAN95

Torque wheel retaining bolts/nuts at the intervals specified in section Break-In Period and Service.

DX,WW,WHEEL-19-12OCT11

### **Avoid High-Pressure Fluids**



X9811—UN—23AUG88

Inspect hydraulic hoses periodically – at least once per year – for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

DX,FLUID-19-12OCT11

### Do Not Open High-Pressure Fuel System



TS1343—UN—18MAR92

High-pressure fluid remaining in fuel lines can cause serious injury. Do not disconnect or attempt repair of fuel

lines, sensors, or any other components between the high-pressure fuel pump and nozzles on engines with High Pressure Common Rail (HPCR) fuel system.

Only technicians familiar with this type of system can perform repairs. (See your John Deere dealer.)

DX,WW,HPCR1-19-07JAN03

### Store Attachments Safely



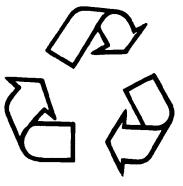
TS219-UN-23AUG88

Stored attachments such as dual wheels, cage wheels, and loaders can fall and cause serious injury or death.

Securely store attachments and implements to prevent falling. Keep playing children and bystanders away from storage area.

DX,STORE-19-03MAR93

# Decommissioning — Proper Recycling and Disposal of Fluids and Components



TS1133-UN-15APR13

Safety and environmental stewardship measures must be taken into account when decommissioning a machine and/or component. These measures include the following:

- Use appropriate tools and personal protective equipment such as clothing, gloves, face shields or glasses, during the removal or handling of objects and materials.
- Follow instructions for specialized components.

- Release stored energy by lowering suspended machine elements, relaxing springs, disconnecting the battery or other electrical power, and releasing pressure in hydraulic components, accumulators, and other similar systems.
- Minimize exposure to components which may have residue from agricultural chemicals, such as fertilizers and pesticides. Handle and dispose of these components appropriately.
- Carefully drain engines, fuel tanks, radiators, hydraulic cylinders, reservoirs, and lines before recycling components. Use leak-proof containers when draining fluids. Do not use food or beverage containers.
- Do not pour waste fluids onto the ground, down a drain, or into any water source.
- Observe all national, state, and local laws, regulations, or ordinances governing the handling or disposal of waste fluids (example: oil, fuel, coolant, brake fluid); filters; batteries; and, other substances or parts. Burning of flammable fluids or components in other than specially designed incinerators may be prohibited by law and could result in exposure to harmful fumes or ashes.
- Service and dispose of air conditioning systems appropriately. Government regulations may require a certified service center to recover and recycle air conditioning refrigerants which could damage the atmosphere if allowed to escape.
- Evaluate recycling options for tires, metal, plastic, glass, rubber, and electronic components which may be recyclable, in part or completely.
- Contact your local environmental or recycling center, or your John Deere dealer for information on the proper way to recycle or dispose of waste.

DX,DRAIN-19-01JUN15

# Safety Signs

# **Pictorial Safety Signs**

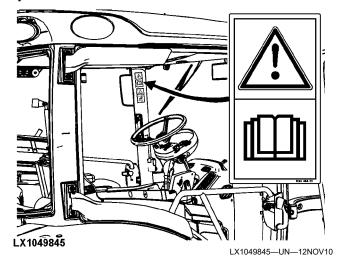


TS231—19—07OCT88

At several important places of this machine safety signs are affixed intended to signify potential danger. The hazard is identified by a pictorial in a warning triangle. An adjacent pictorial provides information how to avoid personal injury. These safety signs, their placement on the machine and a brief explanatory text are shown below.

LX,LABEL 002079-19-02MAY92

### **Operator's Manual**



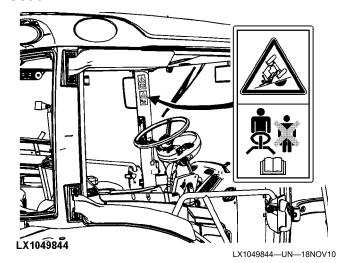
A

**CAUTION:** Avoid the risk of injury.

This Operator's Manual contains important information necessary for safe machine operation and explanation of safety signs. Carefully observe all safety instructions to avoid accidents.

OULXA64,000326A-19-28JAN14

# Passengers on Tractors with Passenger Seat



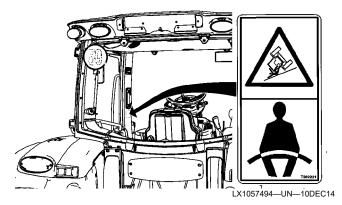
A

CAUTION: Avoid crush injuries due to machine rollover.

The passenger seat may NOT be used during field operations. Passengers are permitted only on a properly installed passenger seat that has been approved by John Deere. When using the passenger seat, always use the seat belt.

OULXA64,00032FA-19-16MAR14

### **Use the Seat Belt Properly**



A

CAUTION: Avoid serious crush injuries or death resulting from the machine rolling over.

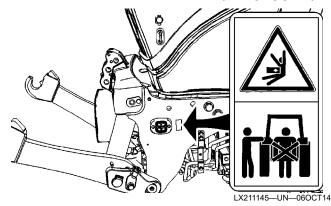
This machine is equipped with a roll-over protective structure (ROPS). ALWAYS use a seat belt when you use the roll-over protective structure.

- Hold the latch and pull the seat belt across the body.
- Insert the latch into the belt buckle.
- Listen for a click.
- Tug on the seat belt latch to make sure that the belt is securely fastened.

Tension the seat belt across the hips.

OULXA64,000326B-19-10DEC14

### Front Hitch Remote Control (if equipped)



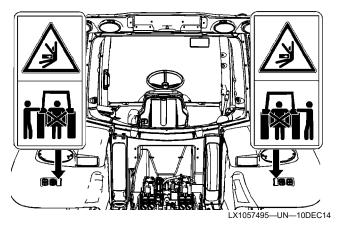
Λ

### CAUTION: Avoid crush injury.

When attaching or detaching an implement, there is a risk of crushing in the area between the tractor and implement. When attaching to the hitch, stay clear of the area where the three-point hitch rises and do not permit anyone to be in the area.

OULXA64,0003473-19-06OCT14

### **Hitch Remote Control**



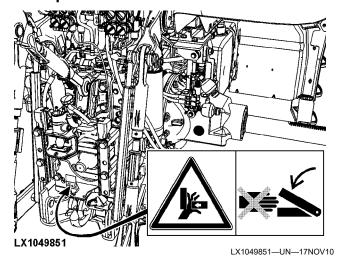
Λ

### CAUTION: Avoid crush injury.

When attaching or detaching an implement, there is a risk of crushing in the area between the tractor and implement. When attaching to the hitch, stay clear of the area where the three-point hitch rises and do not permit anyone to be in the area.

OULXA64,0003281-19-10DEC14

### Pick-Up Hitch



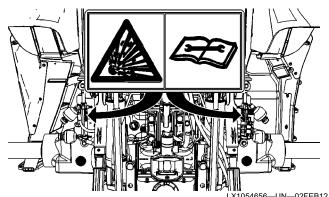
Λ

### CAUTION: Avoid crushing and pinching.

When attaching or detaching an implement, there is a risk of crushing in the area between the tractor and implement. Keep clear of pick-up hitch components while operating the pick-up hitch.

OULXA64,0003271-19-28JAN14

## **Cab Suspension Accumulators**



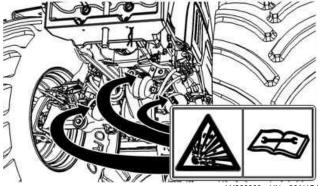
Λ

CAUTION: Avoid crushing and fluid injection.

Releasing pressure may cause machine movement and exposure to fluid under pressure. See dealer for instruction on relieving pressure before servicing system.

OULXA64,0003275-19-28JAN14

### Pressure Accumulator of the Front-Axle Suspension



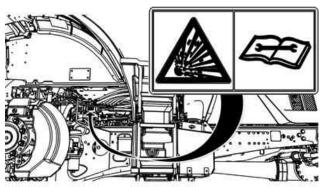
LX266963—UN—30AUG16

CAUTION: Avoid injury from crushing; avoid injury from spraying fluid.

Releasing pressure may cause machine movement and exposure to fluid under pressure. Contact dealer for instructions on relieving pressure before servicing system.

OULXA64,MW6\_7,0003E3F-19-29AUG16

### **Brake System Accumulator**



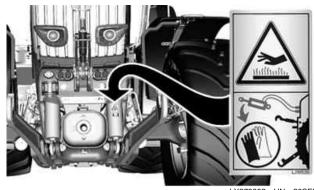
LX299185-UN-03NOV16

CAUTION: Avoid injury from crushing and from fluid penetrating the skin.

Releasing pressure may cause machine movement and exposure to fluid under pressure. Contact dealer for instructions on relieving pressure before servicing system.

OULXA64,MW6\_7,0003E9D-19-14NOV16

### **Hydraulic Lines and Hydraulic Components** - Front Hitch



LX279052-UN-20SEP16

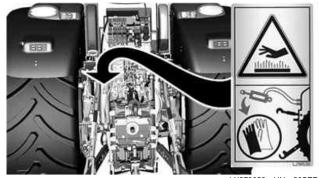
**CAUTION: Avoid contact with hot surfaces.** 

Hydraulic system components can get hot. Touching hot surfaces of the hydraulic system, accessories, or hoses and leads can cause personal injuries.

Wear work gloves or allow the hydraulic components to cool before starting maintenance work on the hydraulic system.

OULXBER,0002BC7-19-23SEP16

### Hydraulic Lines and Hydraulic Components Rear Hitch



**CAUTION: Avoid contact with hot surfaces.** 

Hydraulic system components can get hot. Touching hot surfaces of the hydraulic system. accessories, or hoses and leads can cause personal injuries.

Wear work gloves or allow the hydraulic components to cool before starting maintenance work on the hydraulic system.

OULXBER,0002BC8-19-23SEP16

•

OULXA64,0003F66-19-17MAR17

# **Vehicle Overview**

# **Identification View**



Tractor Shown with Optional Equipment

LX266814—UN—14JUN16

OULXA64,0003D52-19-08JUN16

# **Operator's Manual – General Information**

### Scope of This Manual

This publication is not a detailed service manual. It contains information meant primarily for machine operation and routine maintenance. For more detailed service information, order a Technical Manual through your authorized John Deere dealer.

OULXA64,0003F84-19-17MAR17

### **How to Use This Manual**

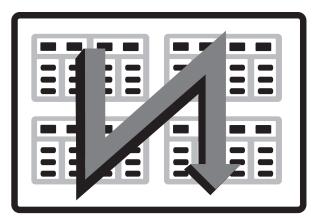
The information in this operator's manual is divided into sections. The sections are organized with the typical machine features or functional systems together (Engine, Electrical, Hydraulic, Transmission, and so forth). These sections are identified at the top of each page. Specific information within each section is organized into modules. These modules are enclosed in boxes and the main modules are identified with a heading at the top left. Page numbers identify the section as well as the number of the page in the section.

By reviewing this manual frequently you learn which section to turn to for specific information. For example:

- Safety information is covered at the beginning.
- Operation of all features and systems is covered in the first half of the manual.
- Maintenance Intervals are in the middle of the manual.
- Maintenance of all the features and systems is covered in the second half of the manual.
- Specifications are covered at the end.

A detailed table of contents appears before safety information and there is an alphabetical index at the very end of the manual.

The contents of the operator's manual are displayed column by column from left to right.

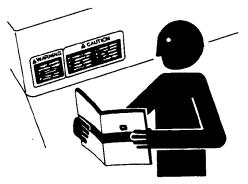


W28329—UN—18OCT17

The texts and graphs are displayed in the columns as shown sequentially from top to bottom.

OULXA64,0004993-19-25FEB19

## Comply with Operator's Manuals of Implement Manufacturers



TS201—UN—15APR13

Λ

CAUTION: Disregarding the manufacturer's specifications on implements and trailers, as well as the relevant operator's manuals, poses the risk of severe or fatal injury.

Before operating the tractor in conjunction with a mounted implement or trailer, it is the responsibility of the operator to become familiar with the relevant operator's manuals. Operator errors may have serious consequences.

Operator's manuals and the safety decals on mounted implements and trailers provide important information on how to operate them safely. For this reason, it is important to make yourself familiar with them before starting work. Operator's manuals must made be available to all operators of the tractor.

OULXA64,0003F85-19-25FEB19

# Operating the Engine

# EU Qualified Emergency Use — SCR Derate Override Option

NOTE: This is an EU only option.

IMPORTANT: Operating the engine without emissions related derates could damage the aftertreatment system.

# Description: EU Qualified Emergency Use – SCR Derate Override Option

Under the EU regulations, this engine may be fitted with a means to disable the operator inducement (SCR Derate Override) during a qualified emergency. Using this option is only permitted during an emergency declared by a national or regional government, their emergency services, or their armed services. Any activation will be recorded in the on-board computer log and national inspection authorities will be able to read these records with a scan tool.

Emergency SCR Derate Override enables a Selective Catalyst Reduction (SCR) equipped application to operate without emissions-related derates for a specified period of time during qualified emergency situations. A qualified emergency situation is one in which the condition of an engine's emission controls poses a significant direct or indirect risk to human life. An example of a direct risk is an emission control condition that inhibits the performance of an engine being used to rescue a person from a life-threatening situation. An example of an indirect risk is an emission control condition that inhibits the performance of an engine being used to provide electrical power to a data center that routes "911" emergency response telecommunications.

# **Emergency SCR Derate Override Activation / Reporting**

The operator can activate the Emergency SCR Derate Override through the operator interface. Once activated, the engine can operate free of emissions-related derates for 120 hours. If the derate condition is corrected during the 120 hours, the Emergency SCR Derate Override can be paused in order to preserve the remainder of time for future use. The option expires along with any remaining time 240 hours after the Emergency SCR Derate Override is activated.

When the Emergency SCR Derate Override has expired, the engine informational Diagnostic Trouble Code (DTC) is displayed to the operator upon every engine start and every hour until acknowledged by the operator. To clear the DTC and reset the Emergency SCR Derate Override timer for future use, the operator (or other person responsible for the engine/equipment) must submit a report to the John Deere Dealer Technical Assistance Center, which must include the following:

- Contact name, mail and email addresses, and telephone number for responsible company or entity
- Description of the emergency situation, the location of the engine during the emergency, and the contact information for an official who can verify the emergency situation (such as a county sheriff, fire marshal, or hospital administrator)
- Reason for the Emergency SCR Derate Override activation during the emergency situation, such as the lack of diesel exhaust fluid, or the failure of an emission-related sensor when the engine was needed to respond to an emergency situation
- Engine's serial number
- Description of the extent and duration of the engine operation while the Emergency SCR Derate Override was active, including a statement describing whether or not the Override was manually deactivated after the emergency situation ended

In no event may this report be submitted to John Deere or other qualified service provide later than 60 calendar days after the Emergency SCR Derate Override is activated.

#### **LEGAL Notification**

Any activation will be recorded in the on-board computer log and national inspection authorities will be able to read these records with a scan tool.

DX,SCR,EMRGNCY,OVERIDE,EU-19-19JAN18

### Important Engine Information

The guarantee does not apply to engine and drivetrain damage caused by impermissible engine settings.

Manipulations violate the emission regulations that apply for this engine and may be subject to prosecution.

OULXA64,0003FF5-19-21MAR17

### Engines with Turbocharger

Most damage to the turbocharger is caused by not following the correct procedure when starting and shutting off the engine. After starting and before shutting off, idle the engine without load for at least 30 seconds.

IMPORTANT: If the engine stalls when in operation, restart it IMMEDIATELY. This will prevent the turbocharger from overheating.

OULXA64,0003FF7-19-21MAR17

### **Engine Protection**

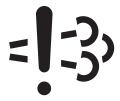
Malfunctions in the fuel system and engine are indicated by the red STOP light, yellow CAUTION light and blue INFO light coming on. In addition, a message appears on the CommandCenter.

NOTE: For more information on possible errors and trouble codes, see the component manual for the fuel system.

OULXA64.0003FF8-19-21MAR17

## **Required Machine Stop Warning**

**Machine Stop Mandate Occurs** 



RG22491-UN-21AUG13

IMPORTANT: In some situations, machine engine power may be reduced as described. On notification, immediately place the machine in a safe state and or move it to a safe location. A mandated machine stop can only be removed by a service technician.

Engine Emissions System Malfunction Indicator illuminates when an emission-related fault occurs.



RG22492—UN—21AUG13

Warning Indicator illuminates when a condition exists which requires operator action.



RG22493—UN—21AUG13

Engine Stop Indicator illuminates when a condition exists which requires immediate operator action and service.

#### **Emission System Fault Has Occurred**





RG26361-UN-04SEP14

30 minutes remaining, Engine Emissions System Malfunction and Warning Indicators are illuminated and alarm sounds to warn operator of emissions-related fault. "Less than 30 minutes to Power Restriction" displayed on machines with display.

- Engine power is normal.
- Machine operation is normal.
- Place machine in a safe state.
- Contact service provider.



RG26972-UN-26MAR15

20 minutes remaining, Engine Emissions System Malfunction and Engine Stop Indicators are illuminated and alarm sounds to warn operator of emissions-related fault. "Less than 20 minutes to Power Restriction" displayed on machines with displays.

- Engine power and torque are reduced.
- Key Off Key On will temporarily provide full power.
- Place machine in a safe state.
- Contact service provider.



RG26972—UN—26MAR15

2 minutes or less remaining, Engine Emissions System Malfunction and Engine Stop Indicators are illuminated and alarm sounds to warn operator of emissions-related fault which has not been corrected. "Power Restriction" displayed on machines with displays.

- Engine power is idle only.
- Place machine in a safe state.
- Contact service provider.

DX,MACHSTOPWARN,AG-19-02OCT15

# Intelligent Power Management (Power Boost)

#### Deactivate or activate power boost

NOTE: Power boost is activated automatically when starting the engine.

1. Press engine button (A).

This as a preview PDF file from best-manuals.com



Download full PDF manual at best-manuals.com