

# 6140R, 6150R, 6170R, 6190R and 6210R Tractors



OPERATOR'S MANUAL
6140R, 6150R, 6170R,
6190R and 6210R Tractors
OMETN78900 ISSUE F4 (ENGLISCH)

John Deere GmbH & Co. KG John Deere Werk Mannheim
(This manual replaces OMETN78900 K3)

European / Export Edition
PRINTED IN U.S.A.



#### 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.

RIGHT-HAND AND LEFT-HAND sides are determined by facing the direction of forward travel.

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.

CHANGES THAT RESULT IN THE INJECTED FUEL QUANTITY BEING OUTSIDE OF THE FACTORY SPECIFICATIONS or other power boosts void the warranty for this machine.

BEFORE DELIVERING THIS MACHINE, your dealer performed an inspection. After the first 100 operating hours, schedule an after-sale inspection with your dealer to ensure best performance.

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.

OU12401,0001CAE -19-23OCT13-1/1

# **Contents**

	Page		
Library Const.			Page
Identification View	00.4	Transport Tractor Safely	05-19
Identification View		Service Cooling System Safely	
Trademarks	00-2	Service Accumulator Systems Safely	
		Service Tires Safely	
Safety		Service Front-Wheel Drive Tractor Safely	05 20
Recognize Safety Information	05-1		
Understand Signal Words	05-1	Tightening Wheel Retaining Bolts/Nuts	
Follow Safety Instructions		Avoid High-Pressure Fluids	
Prepare for Émergencies		Do Not Open High-Pressure Fuel System	
Wear Protective Clothing		Store Attachments Safely	
Protect Against Noise		Dispose of Waste Properly	05-22
Handle Fuel Safely—Avoid Fires	05-3		
Handle Starting Fluid Safely	05-3	Safety Decals	
Fire Prevention		Pictorial Safety Signs	10-1
In Case of Fire		Operator's Manual	
Avoid Static Electricity Risk When Refueling		Hitch Remote Control	
		Cab Suspension Accumulators	
Keep ROPS Installed Properly		Front-Axle Suspension Accumulators	
Use Foldable ROPS and Seat Belt Properly		Front-Axle Suspension Accumulators	
Stay Clear of Rotating Drivelines		Brake System Accumulator	
Jse Steps and Handholds Correctly	05-6	Pick-Up Hitch	
Read Operator Manuals for ISOBUS		Never Carry Riders (China Only)	
Implements			10-3
Use Seat Belt Properly		PTOs and Rotating Components of	10.4
Operating the Tractor Safely		Implements (China Only)	10-4
Avoid Backover Accidents		Engine Cooling System (China Only)	10-4
Limited Use in Forestry Operation			
Operating the Loader Tractor Safely	05-9	Controls and Instruments	
Keep Riders Off Machine	05-10	Vehicle Controls with PowrQuad™	
Instructional Seat	05-10	PLUS and AutoQuad™ PLUS	
Use Safety Lights and Devices	05-10	Transmissions	15-1
Transport Towed Equipment at Safe Speeds.		Vehicle Controls with Au-	
Use Caution On Slopes and Uneven Terrain		toPowr™/IVT™ Transmission	15-2
Freeing a Mired Machine		Vehicle Controls with DirectDrive Transmission	n15-3
Avoid Contact with Agricultural Chemicals		Immobilizer	
Handle Agricultural Chemicals Safely		Emergency Brake System	
Handling Batteries Safely		PTO Controls	
Avoid Heating Near Pressurized Fluid Lines		Creeper Control	
Remove Paint Before Welding or Heating		Attachment Controls	
Handle Electronic Components and	05-15		13-0
	05 15	Heater and Air-Conditioning Controls	15.6
Brackets Safely		(Tractors without ClimaTrak System)	15-0
Practice Safe Maintenance		Heater and Air-Conditioning Controls	15.7
Avoid Hot Exhaust		(Tractors with ClimaTrak System)	
Clean Exhaust Filter Safely		Indicator Lights and Displays	
Work In Ventilated Area		Software Update	15-12
Support Machine Properly			
Prevent Machine Runaway		CommandCenter™ and Additional Ins	trumen
Park Machine Safely	05-19	CommandCenter™ - Controls and Navigating	40.4

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 © 2014
John Deere GmbH & Co. KG Mannheim Regional Center
Zentralfunktionen
All rights reserved.
A John Deere ILLUSTRUCTION ® Manual
Previous Editions
Copyright © 2013

Page		Page
CommandCenter™ - Activating System16-2	CommandCenter™ - GreenStar™,	
CommandCenter™ - Menu16-2	ISOBUS-Compliant Auxiliary Controls	16-36
CommandCenter™ - Hotkeys16-3	GreenStar™ Display (Option)	
CommandCenter™ - Page Structure16-3	AutoTrac (Optional)	
CommandCenter™ - Set Up Monitor Boxes 16-4	, , , , , , , , , , , , , , , , , , , ,	
CommandCenter™ - Softkeys16-5	Operating the Radio Through the	
CommandCenter Input Fields16-6	CommandCenter™	
CommandCenter™ - Navigating to	Radio Source Select on the	
Specific Page16-7	CommandCenter™	10 1
CommandCenter™ - Check the TouchScreen16-8		10-1
CommandCenter™ - Touchscreen Keys16-9	MW/FM/LW Home Page on the	10.0
CommandCenter™ - Access Manager16-9	CommandCenter™	10-2
CommandCenter™ - Selecting	Radio with CD/MP3/USB/AUX Home	40.0
Highlight Color16-12	Pages on the CommandCenter™	
CommandCenter™ - Country,	Radio Settings on the CommandCenter	18-4
Language and Units16-13	Operating the Phone Through the	40.5
CommandCenter™ - Setting System Time16-14	CommandCenter™	
CommandCenter™ - Setting System Time 10-14 CommandCenter™ - Viewing Basic	Phone Book on the CommandCenter	
Diagnostic Readings16-15	Phone Directories on the CommandCenter	
	Phone Settings on the CommandCenter™	18-8
CommandCenter™ - Message Center16-15		
CommandCenter™ - Displaying  Engine Operating Hours  16.16	Lights	
Engine Operating Hours16-16	Lights	20-1
CommandCenter™ - Configuring	Xenon (HID) Worklights	
Home Page16-17	Switch for Turn Signal Lights and Horn	
CommandCenter™ - Set Up	Light Switch	
Background Lighting of Display16-19	Additional Headlights	
CommandCenter™ - Setting Service Interval16-20	Lighting System - Worklights	
CommandCenter™ - Setting Distance	Lighting System - Egress Light	
Counter16-21	Operate the Hazard Warning Light Switch	
CommandCenter™ - Setting	Beacon Light (Option)	
Performance Monitor Access16-22	Seven-Terminal Trailer Socket	20-5
CommandCenter™ - Using	Seven-Terminal Trailer Socket	20-3
Performance Monitor16-23		
CommandCenter™ - Set Implement	Cab	
Width and Control Modes16-24	Avoid Contact with Agricultural Chemicals	
CommandCenter™ - Setting Alarm Volume16-25	Clean Vehicle of Hazardous Pesticides	
CommandCenter™ - Accessing Video	Emergency Exits	
Camera Capability16-26	Roll-Over Protective Structure	
CommandCenter™ - Software Version16-28	Seat Belt	
CommandCenter™ - Service	Air Comfort Seat — MSG95GL	25-4
ADVISOR Remote (SAR), If Equipped 16-28	Air Comfort Seats — MSG95AL and	
CommandCenter™ - Calibrating John	MSG95AL-DDS	25-5
Deere Dual-Beam Radar16-29	Passenger Seat	25-6
CommandCenter™ - Match Travel	Wiper and Washer System	25-7
Speed to Radar Sensor Speed16-30	Fan and Air Louvers (Tractors without	
CommandCenter™ - Calibrate	ClimaTrak System)	25-8
Other-Make Radars Manually16-31	Heater (Tractors without ClimaTrak System)	
CommandCenter™ - GreenStar™ Functions16-32	Air-Conditioning System (Tractors	
CommandCenter™ - Accessing	without ClimaTrak System)	25-9
	Tips on Using Air-Conditioning	
	Using ClimaTrak (Automatic	
GreenStar™ Main Page16-33		25-10
CommandCenter™ - GreenStar™,	Temperature Control)	
CommandCenter™ - GreenStar™, Read Operator Manuals for ISOBUS	Temperature Control)	
CommandCenter™ - GreenStar™, Read Operator Manuals for ISOBUS Implements16-33	Changing the ClimaTrak Display (ATC)	25-11
CommandCenter™ - GreenStar™, Read Operator Manuals for ISOBUS Implements16-33 CommandCenter™ - GreenStar™,	Changing the ClimaTrak Display (ATC) Storage Box	25-11 25-11
CommandCenter™ - GreenStar™, Read Operator Manuals for ISOBUS Implements16-33 CommandCenter™ - GreenStar™, Connecting ISOBUS Implements	Changing the ClimaTrak Display (ATC) Storage Box Dome Light	25-11 25-11
CommandCenter™ - GreenStar™, Read Operator Manuals for ISOBUS Implements16-33 CommandCenter™ - GreenStar™,	Changing the ClimaTrak Display (ATC) Storage Box	25-11 25-11 25-11

ii 070114 PN=2

	Page		Page
Adjusting the Steering Wheel	25-13	Notes on Changing to a Different Size	
Installing the Monitor		of Tire	45-3
Sockets		Transmission - Information on	
Multiple Power-Outlet Socket Strip (If	20 11	Maximum Speed	45-3
Equipped)	25-15	Travel Speed Tables and SRI Values	
Service Socket (CAN BUS)		Travel Speeds, PowrQuad™ PLUS and	
Cigarette Lighter and Ashtray		AutoQuad™ PLUS Transmissions	
Microphone for Bluetooth Applications		for 40 km/h (20/20), on 6140R and	
Connection of Memory Storage and	25	6150R Tractors - Tires with SRI 825	
Multimedia Appliances	25-17	and 875	45-5
USB Service Connection for		Travel Speeds, PowrQuad™ PLUS and	
CommandCenter	25-17	AutoQuad™ PLUS Transmissions	
ISOBUS Socket		for 40 km/h (20/20), on 6140R and	
Opening Windows		6150R Tractors - Tires with SRI 925	45-6
Routing Cables Through the Window		Travel Speeds, PowrQuad™ PLUS and	
Roof Hatch (If Equipped)		AutoQuad™ PLUS Transmissions	
Roller-Blind		for 40 km/h (20/20), on 6170R and	
		6210R Tractors - Tires with SRI 925	
Break-In Period		and 975	45-7
After the First 4 and 8 Hours of Operation	30-1	Travel Speeds, AutoQuad™ PLUS	
Within the First 100 Hours of Operation		Transmission with EcoShift for 40	
After the First 100 Hours of Operation		km/h (20/20), on 6140R and 6150R	
		Tractors - Tires with SRI 700 and 725	45-8
Prestarting Checks		Travel Speeds, AutoQuad™ PLUS	
Prestarting Checks	35.1	Transmission with EcoShift for 40	
Comply with Operator's Manuals of	35-1	km/h (20/20), on 6140R and 6150R	
Implement Manufacturers	35_3	Tractors - Tires with SRI 800	45-9
implement manufacturers		Travel Speeds, AutoQuad™ PLUS	
Operating the Engine		Transmission with EcoShift for 40	
Operating the Engine	- 40.4	km/h (20/20), on 6170R to 6210R	
Important Information Regarding the Engin		Tractors - Tires with SRI 925 and 975	45-10
Start the Engine		Travel Speeds, AutoQuad™ PLUS	
Cold-Weather Starting Aids		Transmission for 50 km/h (20/20),	
Coolant Heater		on 6140R and 6150R Tractors -	45.44
Starting the Engine with a Slave Battery		Tires with SRI 825 and 875	45-11
Engines with TurbochargerIntelligent Power Management (power boo		Travel Speeds, AutoQuad™ PLUS	
Engine Protection		Transmission for 50 km/h (20/20),	
Towing the Tractor		on 6140R and 6150R Tractors -	45 10
Stopping the Engine		Tires with SRI 925	45-12
Battery Cut-Off Switch (If Equipped)		Travel Speeds, AutoQuad™ PLUS	
Buttery out on owner (in Equipped)		Transmission for 50 km/h (20/20),	
Exhaust Cleaning System		on 6170R to 6210R Tractors - Tires with SRI 925 and 975	<i>1</i> 5 13
Exhaust Cleaning System  Exhaust Filter Cleaning Conerel Information	on 42.1	Travel Speeds, DirectDrive	45-15
Exhaust Filter Cleaning, General Information	31142-1	Transmission for 40 km/h (24/24),	
Access the Engine Menu in CommandCenter™	12.1	on 6140R and 6150R Tractors -	
Exhaust Cleaning System, Information	42-1	Tires with SRI 825, 875 and 925	45-14
	12.3	Travel Speeds, DirectDrive	
for OperatorPassive Exhaust Filter Cleaning	42-3 42-4	Transmission for 50 km/h (24/24),	
Automatic Exhaust Filter Cleaning		on 6140R and 6150R Tractors -	
Exhaust Filter Cleaning with Tractor Parket		Tires with SRI 825, 875 and 925	45-16
Exhaust Filter, Service-Cleaning		Travel Speeds, DirectDrive	
Exhaust Filter, Oct vioc-Oleaning	<del>7</del> 2-10	Transmission for 40 km/h (24/24),	
Operating the Treater Consul		on 6170R to 6210R Tractors - Tires	
Operating the Tractor — General	AE 1	with SRI 925 and 975	45-18
Reduce Fuel Consumption		Travel Speeds, DirectDrive	
Select Correct Travel Speed	45-3	Transmission for 50 km/h (24/24),	
		, ,,,	

on 6170R to 6210R Tractors - Tires with SRI 925 and 975.  45-20 Engage Front-Wheel Drive	Page		Page
## SRI 925 and 975.	on 6170R to 6210R Tractors - Tires		
Engage Front-Wheel Drive		Hitch	
Tractors with TLS Front Axle		Hitch Control	50-1
Tractors with Cab Suspension			
Engage the Oreeper Transmission 45-25 Hydraulic Foot Brakes 45-26 Hydraulic Foot Brakes 45-26 Hydraulic Trailer Brakes 45-27 Ant Brakes 45-28 Parking the Tractor (Tractors Without 45-28 Parking the Tractor (Tractors Without 45-28 Parking the Tractor (Tractors With AutoPowr) 45-29 Chock Block 52-9 Chock 52-9 C			
Engage the Differential Lock 45-25 Hydraulic Foot Brakes 45-26 Emergency Brake System 45-27 Air Brakes 45-28 Parking the Tractor (Tractors Without AutoPowr) 45-28 Parking the Tractor (Tractors With AutoPowr) 45-29 Parking the Tractor (Tractors with AutoPowr) 45-29 Parking the Tractor (Tractors with AutoPowr) 45-29 Chock Block 55-29 Chock Block 45-29 Chock			
Hydraulic Foot Brakes. 45-26 Emergency Brake System 45-27 Hydraulic Trailer Brakes 45-27 Hydraulic Trailer Brakes 45-27 Hydraulic Trailer Brakes 45-27 Hitch - Adjust the Rate of Lift 50-5 Hitch - Adjust the Rate of Lift 40-50-5 Hitch - Direct Drive 50-10 Hitch - Direct Drive 50		Hitch - Transporting Mounted Implements	50-3
Emergency Brake System			
Hydraulic Trailer Brakes	Emergency Brake System45-27		
Parking the Tractor (Tractors Without AutoPowr)			
AutoPowr) — 45-28 Parking the Tractor (Tractors With AutoPowr) .45-29 Parking the Tractor (Tractors with DirectDrive)	Air Brakes45-28		
Parking the Tractor (Tractors with AutoPowr)45-29 DirectDrive)	Parking the Tractor (Tractors Without	Hitch - Load/Depth Adjustment	50-6
Parking the Tractor (Tractors with DirectDrive)		Hitch - Using Draft Control	50-8
DirectDrive)	Parking the Tractor (Tractors With AutoPowr)45-29	Hitch - Adjust Slip Sensitivity (if equipped)	50-9
Chock Block. 45-29  Operating the Tractor — PowrQuad™ PLUS Shifting the PowrQuad™ PLUS Transmission — Settings. 46-3 PowrQuad™ PLUS Transmission — Settings. 46-3 Operating the Tractor — AutoQuad™ PLUS Shifting the AutoQuad™ PLUS Transmission — 47-1 AutoQuad™ PLUS Transmission — Settings. 47-4 AutoPowr™ — Special Features when Maneuvering the Tractor — AutoPowr™ AutoPowr™ — Cold-Weather Starting. 48-1 AutoPowr™ — Settings. 48-5 AutoPowr™ — Settings. 48-5 AutoPowr™ — Operating on Hillsides in Silppery Conditions. 48-11 AutoPowr — Using Creeper Mode. 48-12 AutoPowr — Come-Home Mode. 48-14 AutoPowr — Come-Home Mode. 48-14 AutoPowr — Come-Home Mode. 48-14 AutoPowr — Towing the Tractor — 49-4 DirectDrive — Cold-Weather Starting. 49-1 DirectDrive — Controls — 49-4 DirectDrive — Controls — 49-1 Di			
Three-Point Hitch		Hitch - Direct Control	50-10
Operating the Tractor — PowrQuad™ PLUS Transmission46-1 PowrQuad™ PLUS Transmission46-1 PowrQuad™ PLUS Transmission46-3 PowrQuad™ PLUS Transmission46-3 Powrquad™ PLUS Transmission46-3 Operating the Tractor — AutoQuad™ PLUS Shifting the AutoQuad™ PLUS Transmission47-1 AutoQuad™ PLUS Transmission47-1 AutoQuad™ PLUS Transmission47-1 AutoQuad™ PLUS Transmission47-1 AutoPowr™ — Cold-Weather Starting48-1 AutoPowr™ — Cold-Weather Starting48-1 AutoPowr™ — Settings48-2 AutoPowr™ — Settings48-10 AutoPowr™ — Settings48-11 AutoPowr — Using Creeper Mode48-11 AutoPowr — Stopping And Parking The Tractor48-13 AutoPowr — Come-Home Mode48-14 AutoPowr — Towing the Tractor48-14 AutoPowr — Towing the Tractor48-14 AutoPowr — Towing the Tractor48-14 AutoPowr — Settings49-1 DirectDrive — Controls49-15 DirectDrive — Settings49-15 DirectDrive — Stopping and Parking the Tractor49-15 DirectDrive — Stopping and Parking the Tractor49-15 DirectDrive — Stopping and Parking the Tractor49-17 DirectDrive — Cone-Home Mode49-17 DirectDrive — Stopping and Parking the Tractor49-18 DirectDrive — Cone-Home Mode49-17 DirectDrive — Cone-Home Mode49-18 DirectDrive —	Chock Block45-29	Front Hitch	50-10
Shifting the PowrQuad™ PLUS Transmission — 46-1 PowrQuad™ PLUS Transmission — Settings … 46-3  Operating the Tractor — AutoQuad™ PLUS Shifting the AutoQuad™ PLUS Transmission … 47-1 AutoPowr™ — Cold-Weather Starting … 48-1 AutoPowr™ — Controls … 48-2 AutoPowr™ — Settings … 48-5 AutoPowr™ — Settings … 48-5 AutoPowr™ — Settings … 48-10 AutoPowr™ — Operating on Hillisides in Slippery Conditions … 48-11 AutoPowr — Stopping And Parking The Tractor … 48-14 AutoPowr — Towing the Tractor … 48-14 AutoPowr — Stopping And Parking The Tractor … 48-14 AutoPowr — Controls … 48-14 AutoPowr — Controls … 48-14 AutoPowr — Towing the Tractor … 48-14 AutoPowr — Stopping And Parking The Tractor … 48-14 AutoPowr — Controls … 48-14 AutoPowr — Stopping And Parking … 48-14 AutoPowr — Controls … 48-14 AutoPowr — Stopping And Parking … 48-14 AutoPowr — Controls … 48-14 AutoPowr — C			
Shifting the PowrQuad™ PLUS Transmission — Settings. 46-3  Operating the Tractor — AutoQuad™ PLUS Shifting the AutoQuad™ PLUS Transmission — Settings. 47-4  AutoQuad™ PLUS Transmission — Settings. 47-4  AutoPowr™ — Lus Transmission — Settings. 47-4  AutoPowr™ — Cold-Weather Starting. 48-1 AutoPowr™ — Controls. 48-2 AutoPowr™ — Settings. 48-5 AutoPowr™ — Settings. 48-1 AutoPowr™ — Settings. 48-1 AutoPowr™ — Settings. 48-1 AutoPowr™ — Operating on Hillsides in Slippery Conditions. 48-11 AutoPowr — Accelerator Pedal Mode 48-12 AutoPowr — Accelerator Pedal Mode 48-14 AutoPowr — Towing the Tractor. 48-14 AutoPowr — Condewsher Starting. 48-13 AutoPowr — Operating on Hillsides in Slippery Conditions. 48-11 AutoPowr — Controls — 48-14 AutoPowr — Condewsher Starting. 48-13 AutoPowr — Operating with Traiter on Hillsides in Slippery Conditions. 49-1 DirectDrive — Settings. 49-5 DirectDrive — Stopping and Parking TirectDrive — Special Features when Maneuvering the Tractor. 49-4 DirectDrive — Controls — 49-4 DirectDrive — Special Features when Maneuvering the Tractor — 49-4 DirectDrive — Controls — 49-5 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Come-Home Mode — 49-13 DirectDrive — Come-Home Mode — 49-13	Operating the Tractor — PowrQuad™ PLUS		
PowrQuad™ PLUS Transmission — Settings	Shifting the PowrQuad™ PLUS Transmission46-1	Telescopic Draft Links	50-16
Derating the Tractor — AutoQuad™ PLUS Shifting the AutoQuad™ PLUS Transmission 47-1 AutoQuad™ PLUS Transmission — Settings 47-4 AutoPowr™— Special Features when Maneuvering the Tractor 48-1 AutoPowr™— Controls 48-2 AutoPowr™— Controls 48-5 AutoPowr™— Settings 48-5 AutoPowr™— Settings 48-5 AutoPowr™— Settings 48-1 AutoPowr™— Controls 48-2 AutoPowr™— Settings 48-5 AutoPowr™— Settings 48-10 AutoPowr™— Operating on Hillsides in Slippery Conditions 48-11 AutoPowr — Using Creeper Mode 48-11 AutoPowr — Stopping And Parking The Tractor 48-13 AutoPowr — Stopping And Parking The Tractor 48-14 AutoPowr — Towing the Tractor 49-1 DirectDrive — Cold-Weather Starting 49-1 DirectDrive — Customizing Vehicle Behavior 49-1 DirectDrive — Stopping and Parking the Tractor 49-12 DirectDrive — Stopping and Parking the Tractor 49-12 DirectDrive — Stopping and Parking the Tractor 49-12 DirectDrive — Come-Home Mode 49-12 DirectDrive — Come-Home Mode 49-13 DirectDrive — Come-Home Mode 49-14 DirectDrive — Come-Home Mode 49-12 DirectDrive — Come-Home Mode 49-13 DirectDrive — Come-Home Mode 49-14 D		Attach Three-Point Hitch Mounted and	
Shifting the AutoQuad™ PLUS Transmission47-1 AutoQuad™ PLUS Transmission47-1 AutoQuad™ PLUS Transmission47-1 AutoPowr — Special Features when Maneuvering the Tractor48-1 AutoPowr™ — Cold-Weather Starting48-1 AutoPowr™ — Settings48-2 AutoPowr™ — Settings48-5 AutoPowr™ — Settings48-5 AutoPowr™ — Settings48-1 AutoPowr™ — Operating on Hillsides in Slippery Conditions48-11 AutoPowr™ — Accelerator Pedal Mode48-11 AutoPowr — Using Creeper Mode48-11 AutoPowr — Stopping And Parking The Tractor48-13 AutoPowr — Come-Home Mode48-14 AutoPowr — Towing the Tractor48-13 AutoPowr — Come-Home Mode48-14 AutoPowr — Towing the Tractor49-14 DirectDrive — Cold-Weather Starting49-4 DirectDrive — Cold-Weather Starting49-4 DirectDrive — Settings49-5 DirectDrive — Cothrols49-15 DirectDrive — Coperating with Traiter on Hillsides in Slippery Conditions49-11 DirectDrive — Stopping and Parking the Tractor49-45 DirectDrive — Stopping and Parking the Tractor49-45 DirectDrive — Stopping and Parking the Tractor49-45 DirectDrive — Stopping and Parking the Tractor49-41 DirectDrive — Stopping and Parking the Tractor49-42 DirectDrive — Stopping and Parking the Tractor49-43 DirectDrive — Stopping and Parking the Tractor49-43 DirectDrive — Stopping and Parking the Tractor49-45 DirectDrive — Cone-Home Mode49-13 DirectDrive — Stopping and Parking the Tractor49-14 DirectDrive — Cone-Home Mode49-15 DirectDrive — Cone-Home Mode49-16 DirectDrive — Cone-Home Mode49-17 DirectDrive — Cone-Home Mode49-18 DirectDrive — Cone-Home Mode49-18 DirectDrive — Cone-Home Mode49-19 DirectDrive — Cone-Home Mo			
Shifting the AutoQuad™ PLUS Transmission47-1 AutoQuad™ PLUS Transmission — Settings47-4 AutoQuad™ PLUS Transmission — Settings47-4  Operating the Tractor — AutoPowr™ AutoPowr — Special Features when Maneuvering the Tractor48-1 AutoPowr™ — Cold-Weather Starting48-1 AutoPowr™ — Controls48-2 AutoPowr™ — Settings48-5 AutoPowr — Set Speeds, Guidelines and Examples48-10 AutoPowr — Stepeds, Guidelines in Slippery Conditions48-11 AutoPowr — Using Creeper Mode48-11 AutoPowr — Stopping And Parking The Tractor48-13 AutoPowr — Come-Home Mode48-14 DirectDrive — Cold-Weather Starting49-15 DirectDrive — Cold-Weather Starting49-15 DirectDrive — Settings49-15 DirectDrive — Operating with Trailer on Hillsides in Slippery Conditions49-11 DirectDrive — Stopping and Parking The Tractor49-45 DirectDrive — Controls49-15 DirectDrive — Settings49-51 DirectDrive — Settings49-51 DirectDrive — Stopping and Parking The Tractor49-45 DirectDrive — Settings49-51 DirectDrive — Stopping and Parking The Tractor49-45 Dire	Operating the Tractor — AutoQuad™ PLUS		
AutoQuad™ PLUS Transmission — Settings47-4  Operating the Tractor — AutoPowr™  AutoPowr — Special Features when Maneuvering the Tractor		Center Link	50-17
Operating the Tractor — AutoPowr™ AutoPowr — Special Features when Maneuvering the Tractor			
Operating the Tractor — AutoPowr™  AutoPowr — Special Features when Maneuvering the Tractor	Actoquad 1 200 Harisinission — Octilings41-4		50-18
AutoPowr — Special Features when Maneuvering the Tractor — 48-1 AutoPowr™ — Cold-Weather Starting — 48-1 AutoPowr™ — Controls — 48-2 AutoPowr™ — Settings — 48-5 AutoPowr™ — Settings — 48-5 AutoPowr™ — Settings — 48-10 AutoPowr™ — Operating on Hillsides in Slippery Conditions — 48-11 AutoPowr — Using Creeper Mode — 48-11 AutoPowr — Stopping And Parking The Tractor — AutoPowr — Towing the Tractor — 48-14 AutoPowr — Towing the Tractor — DirectDrive DirectDrive — Cond-Weather Starting — 49-1 DirectDrive — Settings — 49-5 DirectDrive — Customizing Vehicle Behavior — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Stopping and Parking the Tractor — 49-1 DirectDrive — Come-Home Mode — 49-13	On a ration with a Transfer Auto Daving IM	Hydraulic Center Link / EasyGuide	
Maneuvering the Tractor 48-1 AutoPowr™ — Cold-Weather Starting 48-2 AutoPowr™ — Settings 48-5 AutoPowr™ — Settings 48-5 AutoPowr™ — Set Speeds, Guidelines and Examples 48-10 AutoPowr™ — Operating on Hillsides in Slippery Conditions 48-11 AutoPowr — Using Creeper Mode 48-11 AutoPowr — Using Creeper Mode 48-11 AutoPowr — Stopping And Parking The Tractor 48-13 AutoPowr — Come-Home Mode 48-14 AutoPowr — Towing the Tractor 48-14 AutoPowr — Towing the Tractor 49-1 DirectDrive — Cold-Weather Starting 49-5 DirectDrive — Settings 49-5 DirectDrive — Customizing Vehicle Behavior — 49-12 DirectDrive — Stopping and Parking the Tractor 49-12 DirectDrive — Come-Home Mode 49-13 DirectDrive — Come-Home Mode 49-13 DirectDrive — Come-Home Mode 49-13			
AutoPowr™ — Controls 48-1 AutoPowr™ — Controls 48-2 AutoPowr™ — Settings 48-5 AutoPowr™ — Settings 48-5 AutoPowr™ — Operating on Hillsides in Slippery Conditions 48-11 AutoPowr™ — Accelerator Pedal Mode 48-11 AutoPowr — Stopping And Parking The Tractor — Stopping And Parking The Tractor — Towing the Tractor 48-14 AutoPowr — Towing the Tractor 48-14 AutoPowr — Towing the Tractor 48-14 DirectDrive — Controls — Maneuvering the Tractor 49-1 DirectDrive — Operating with Trailer on Hillsides in Slippery Conditions 49-11 DirectDrive — Stopping and Parking the Tractor — Stopping And Parking The Tractor — Settings 49-5 DirectDrive — Controls — Settings 49-5 DirectDrive — Condewather Starting 49-5 DirectDrive — Controling With Trailer on Hillsides in Slippery Conditions 49-11 DirectDrive — Stopping and Parking the Tractor 49-12 DirectDrive — Come-Home Mode 49-13			
AutoPowr™ — Controls			
AutoPowr → Set Speeds, Guidelines and Examples — 48-10 AutoPowr → Operating on Hillsides in Slippery Conditions — 48-11 AutoPowr → Operator Pedal Mode — 48-11 AutoPowr → Accelerator Pedal Mode — 48-12 AutoPowr → Stopping And Parking The Tractor — DirectDrive — Come-Home Mode — 48-14 AutoPowr → Towing the Tractor — DirectDrive DirectDrive — Special Features when Maneuvering the Tractor — 49-4 DirectDrive — Customizing Vehicle Behavior — 49-1 DirectDrive — Stopping and Parking the Tractor — Stopping And Parking on Hillsides in Slippery Conditions — 49-12 DirectDrive — Stopping And Parking the Tractor — 49-12 DirectDrive — Come-Home Mode — 49-13 DirectDrive — Controls — 49-12 DirectDrive — Come-Home Mode — 49-13			
AutoPowr — Set Speeds, Guidelines and Examples	AutoPowr™ — Controls48-2		
and Examples			
AutoPowr™ — Operating on Hillsides in Slippery Conditions			
in Slippery Conditions 48-11 AutoPowr — Using Creeper Mode 48-11 AutoPowr — Accelerator Pedal Mode 48-12 AutoPowr — Stopping And Parking The Tractor			50-24
AutoPowr — Using Creeper Mode		Draft Links, Category 3 — Adjust	
AutoPowr™ — Accelerator Pedal Mode			50-25
AutoPowr — Stopping And Parking The Tractor		Draft Links, Category 3N — Adjust	
Adjust the Spreading Dimension on Hydraulic Stabilizer Bars			
AutoPowr — Come-Home Mode			50-27
AutoPowr — Towing the Tractor			
Category 3 or 3N			50-28
Operating the Tractor — DirectDrive         DirectDrive — Controls       49-1         DirectDrive — Cold-Weather Starting       49-4         DirectDrive — Special Features when       49-4         Maneuvering the Tractor       49-4         DirectDrive — Settings       49-5         DirectDrive — Customizing Vehicle Behavior       49-11         DirectDrive — Operating with Trailer       iTEC - Main Page, Enter Program Mode         on Hillsides in Slippery Conditions       49-11         DirectDrive — Stopping and Parking       iTEC - Alerts         the Tractor       49-12         DirectDrive — Come-Home Mode       49-13     ITEC TM — Intelligent Total Equipment Control  ITEC TM — Description, Controls and Functions         iTEC - Summand Center       Menu       51-2         iTEC - Indicator Light on Instrument Panel       51-3         iTEC - Summary of Programs and Functions       51-4         iTEC - Main Page, Enter Program Mode       51-5         iTEC - Alerts       51-7         iTEC - Alerts       51-9         iTEC - Status Page       51-10         Rename iTEC Implement/Sequence       51-11	AutoPowl — Towling the Tractor46-14		
DirectDrive — Controls		Category 3 or 3N	50-29
DirectDrive — Cold-Weather Starting			
DirectDrive — Cold-Weather Starting		iTEC™ — Intelligent Total Equipment	Control
Maneuvering the Tractor		iTEC™ - Description, Controls and Function	s51-1
Maneuvering the Tractor			
DirectDrive — Settings			
DirectDrive — Customizing Vehicle Behavior 49-11  DirectDrive — Operating with Trailer on Hillsides in Slippery Conditions			
DirectDrive — Operating with Trailer on Hillsides in Slippery Conditions		iTEC - Main Page, Enter Program Mode	
DirectDrive — Stopping and Parking the Tractor			
the Tractor — Come-Home Mode — 49-13 iTEC - Alerts — 51-9  iTEC - Alerts — 51-9  iTEC - Status Page — 51-10  Rename iTEC Implement/Sequence 51-11		Possible Operations	51-7
the Tractor			
DirectDrive — Come-Home Mode49-13 Rename iTFC Implement/Sequence		iTEC - Status Page	51-10
DirectDrive — Towing the Tractor49-13		Rename iTEC Implement/Sequence	51-11
	שוויפכנטרועe — rowing the rractor49-13		

#### Contents

Page	Page
iTEC - Editing Mode, Set Up a	Change Wheels Safely65-3
Sequence While Stationary51-12	Tires on Front Wheels65-3
iTEC - Recording Mode, Set Up a	Checking and Adjusting Toe-In65-4
Sequence While Driving51-13	Checking Toe-in on Front-Wheel Drive Axles65-4
iTEC - Delete Sequence51-14	Adjusting Toe-in on Front-Wheel Drive Axles65-5
iTEC - Learn Distances51-15	Instructions for Front Wheel Tread
iTEC - Perform Programmed Sequences51-16	Adjustment with Rims for 2, 8 and
	16 Positions65-6
TIA™ — Tractor-Implement Automation™	Front Wheel Tread Adjustment with
TIA - Tractor-Implement Automation, Safety 52-1	Rims for 2 Positions - 6140R65-7
TIA - Safety52-1	Front Wheel Tread Adjustment with
TIA™ - Implement Detected52-1	Rims for 2 Positions - 6150R65-8
TIA™ - Auxiliary Control Detected52-2	Front-Wheel Tread Adjustment with
TIA - Status Page52-3	Rims for 2 Positions - 6170R to 6210R65-9
TIA - Activating the Implements52-4	Front Wheel Tread Adjustment with
TIA - Requirements for Rear Hitch52-6	Rims for 8 Positions - 6140R65-10
TIA - Requirements for PTO52-6	Front Wheel Tread Adjustment with
TIA - Requirements for Electronic	Rims for 8 Positions - 6150R65-11
Selective Control Valves52-7	Front-Wheel Tread Adjustment with
TIA - Requirements for Guidance52-7	Rims for 8 Positions - 6170R to 6210R65-12
TIA - Requirements for AutoPowr52-8	Front Wheel Tread Adjustment with
TIA - Operating Tractor-Implement Automation52-9	Rims for 16 Positions - 6140R65-13
	Front Wheel Tread Adjustment with
Power Take-Off	Rims for 16 Positions - 6150R65-17
PTO Guard55-1	Adjust the Fixed Fenders65-19
Operating Instructions55-2	Adjust the Pivoting Fenders65-20
PTO Options55-2	Fender Settings - (on 6140R and
PTO Speeds55-2	6150R Tractors)
Change the Rear PTO Stub Shaft55-3	Fender Settings - (on Tractors 6170R
Front PTO55-3	to 6210R)
Engaging the PTO55-4	Front Axle - Adjust Steering Stop65-31 Instructions for Rear Wheel Tread
Select Standard Speed of Rear PTO	Adjustment with Rims for 2, 8 and
(Shiftable PTO)55-5	16 Positions - Flanged Axle65-37
Fine Adjustment of Rear PTO Speed	Rear Wheel Tread Adjustment with
(Shiftable PTO)55-6	Rims for 2 Positions - Flanged Axle
Operating the Rear PTO by Fender Control55-7	(Tractor 6140R)65-38
Connect an Implement to the Rear PTO55-8	Rear Wheel Tread Adjustment with
	Rims for 2 Positions - Flanged Axle
Ballast	(Tractor 6150R)65-39
Selection of Weights60-1	Rear Wheel Tread Adjustment with
Ballasting Rear Wheels60-1	Rims for 2 Positions - Flanged Axle
Measuring Rear Wheel Slip60-1	(Tractors 6170R to 6210R)65-40
Wheel Weights60-2	Rear Wheel Tread Adjustment with
Filling Tires With Liquid Ballast60-2	Rims for 2 Positions (Heavy-Duty
Draining the Tires60-3	Type) - Flanged Axle (6140R Tractor)65-41
Attach the Pick-Up Weight to the Front Hitch60-3	Rear Wheel Tread Adjustment with
Pre-Assemble the Pick-Up Weight60-4	Rims for 2 Positions (Heavy-Duty
Attaching to Rear Hitch60-5	Type) - Flanged Axle (6150R Tractor)65-41
Attaching to Basic Weight60-6	Rear Wheel Tread Adjustment with
Weight in the Three-Point Hitch60-7	Rims for 2 Positions (Heavy-Duty
Install Front Weights60-8	Version) - Flanged Axle (6170R to
	6210R Tractors)65-42
Wheels, Tires	Rear Wheel Tread Adjustment with
General Wheel, Tire, and Tread Guidelines65-1	Rims for 8 Positions - Flanged Axle
Use of Dual Wheels (easy-to-attach)65-2	(Tractors 6170R to 6210R)65-43
Changing to a Different Tire Size65-2	

	Page		Page
Rear Wheel Tread Adjustment with		Levers for Mechanical Selective	
Rims for 16 Positions - Flanged Axle		Control Valves	70-2
(Tractor 6140R)	65-44	Additional Functions for Mechanical	
Rear Wheel Tread Adjustment with		Selective Control Valves	
Rims for 16 Positions - Flanged Axle		Levers for Electronic Selective Control Valv	es70-4
(Tractor 6150R)	65-46	Additional Functions for Electronic	
Rear Wheel Tread Adjustment with		Selective Control Valves	70-5
Rims for 16 Positions (Heavy-Duty		Selective Control Valves - Couplers	70-10
Type) - Flanged Axle (6140R Tractor)	65-48	Selective Control Valves - Hose Unions	70-10
Rear Wheel Tread Adjustment with		Selective Control Valves - Maximum	
Rims for 16 Positions (Heavy-Duty		Permissible Oil Withdrawal	70-11
Type) - Flanged Axle (6150R Tractor)	65-50	Selective Control Valves - Oil	
Tighten Rear Wheel Bolts (with		Withdrawal with Hydrostatic Drive	70-12
Rack-and-Pinion Axle)	65-52	Additional Oil Reservoir	
Rear Wheel Adjusting —Cast		Pressure-Free Return Circuit	
Rear Wheel Adjusting —Steel		Mechanical Multi-Function Lever with	
Rear Wheel Tread Adjustment		Front-Loader Dampening	70-14
with Rims for 2 Positions -		Multi-Function Lever (Electrical)	
Rack-and-Pinion Axle (6170R to		Front Loader with Return-to-Position	
6210R Tractors)	65-55	Function	70-17
Rear Wheel Tread Adjustment			
with Rims for 8 Positions -		Additional Equipment Other	
Rack-and-Pinion Axle (6170R to		Additional Equipment — Other	74.4
6210R Tractors)	65-56	Swinging Drawbar	
Service Tires Safely		Proper Use of Drawbar	
Tire Combinations - 6140R		Locking the Hitch Pins	
Tire Combinations - 6150R		Locking the Height-Adjustable Trailer Hitch	71-3
		Front Loader Implements - Front loader	
Tire Combinations - 6170R to 6210R		Consoles for Loaders H360 and H380	
Calculate Tire Combinations (Graphic)	05-03	Front Jaw Hitch	
Calculate Tire Combinations - (on	05.04	Tow Hitch (Piton-Fix/Ball-Type)	71-5
6140R and 6150R Tractors)	65-64	Height-Adjustable Trailer Hitch	
Calculate Tire Combinations - (on	05.00	Remote Control (If Equipped)	71-7
Tractors 6170R to 6210R)		Hydraulic Pick-Up Hitch (Mechanically	
Tire Pressures		Actuated)	71-8
Tire Inflation Pressure Guidelines	65-67	Hydraulic Pick-Up Hitch (Electrically Actuate	ed)71-9
Front Wheels - Recommended		Lockable Tank Filler Cap	
Pressures, Bias Single Front Tires		·	
(Two-Wheel Drive)	65-68	Transport	
Front Wheels - Recommended		Driving Tractor on Roads	75_1
Pressures, Group 42	65-69	Towing Loads	
Front Wheels - Recommended		Transporting the Tractor	75 7
Pressures, Group 42 (Continued)	65-70	Towing the Treeter	75.2
Front Wheels - Recommended		Towing the Tractor	15-3
Pressures, Group 43	65-71	Manual Park Lock Release (Tractors	75.0
Front Wheels - Recommended		with AutoPowr)	
Pressures, Group 43 (Continued)	65-72	Mired Machine	/5-6
Rear Wheels - Recommended			
Pressures, Group 47	65-73	Fuels, Lubricants, Oils and Coolants	
Rear Wheels - Recommended	-	John Deere Break-In Plus™ Engine Oil	
Pressures, Group 47 (Continued)	65-74	<ul> <li>Interim Tier 4, Final Tier 4, Stage</li> </ul>	
Rear Wheels - Recommended		IIIB, and Stage IV	80-1
Pressures, Group 47 (Continued)	65-75	Diesel Engine Oil — Interim Tier 4,	
		Final Tier 4, Stage IIIB, and Stage IV	80-1
	O 4	Engine Oil and Filter Service Intervals	
Additional Equipment - Under 11: 6			
Additional Equipment — Hydraulic S		— Interim Tier 4, Final Tier 4. Stage	
Selective Control Valves		<ul> <li>Interim Tier 4, Final Tier 4, Stage</li> <li>IIIB. and Stage IV — OEM Applications</li> </ul>	80-2
	70-1	<ul> <li>Interim Tier 4, Final Tier 4, Stage</li> <li>IIIB, and Stage IV — OEM Applications</li> <li>Transmission and Hydraulic Oil</li> </ul>	

070114 PN=6 ٧i

Pa	ge Page
Wash Machine After Unloading80	-5 Clean the Radiator, Condenser and
Grease 80	
Multiluber Grease80	
Mixing of Lubricants80	
Lubricant Storage80	
Alternative and Synthetic Lubricants80	
Diesel Engine Coolant (engine with	Oil Level90-3
wet sleeve cylinder liners)80	
Operating in Warm Temperature Climates80	
John Deere COOL-GARD™ II Coolant	Lubricate Front Hitch
Extender80	
Water Quality for Mixing with Coolant	Lubricate Hitch Jaw90-6
Concentrate80	
Testing Coolant Freeze Point80	
Diesel Fuel80-	
Handling and Storing Diesel Fuel80-	40
Lubricity of Diesel Fuel80-	14 COLUMN TO THE STATE OF THE S
Testing Diesel Fuel	,, one on the result of the control
BioDiesel Fuel80-	10 Town Quad Thub and Auto Quad
Minimizing the Effect of Cold Weather	1 103 110111331011
on Diesel Engines80-	Check the Neutral Start Circuit -
Supplemental Diesel Fuel Additives80-	15
Oilscan™ and CoolScan™80-	The state of the s
Oliscan and Ocolocan	DirectDirect transmission
Lubrication and Daviadia Camrica	Check Air Intake Hoses
Lubrication and Periodic Service	Service the Fuel Tank
Scope of This Manual85	
Safe Maintenance and Cleaning85	-1 Level in Axle Housing95-2
Observe Service Intervals	
Using High Pressure Washers	
Lubricate All Lubricating Points85	
Lubrication and Periodic Service85	
General Instructions Regarding the	Front Loader Bracket - Tighten Screws
Condition of the Tractor85	
Open the Hood85	
Opening Service Doors85	
Access to Battery85	-4 CAT III Drawbar - Tighten the Screws95-7
Access to Fuses	
Jack Up the Tractor - Lifting Points85	-6 Tighten the Screws
Important Instructions Regarding Alternator85	-8 Ball-Type Tow Hitch with Forced
Service After the First 100 Hours85	
Service As Required85	-9 Pick-Up Hitch95-8
Check/Replace Hydraulic Hoses	-9 Lubricate Pivoting Fenders
Other Service Jobs85	
Note Regarding the Service Interval for	Rear PTO, Lubricate Stub Shaft Support95-9
Engine Coolant85-	
Periodic Service85-	
Service (Daily / Every 10, After 100,	Check the Manually-Operated Hitch for
Every 250 and 500 Hours)	11 Wear (Italy and Spain Only)95-11
Service (Every 750, 1000, 2000 Hours,	Check the Remote-Controlled Trailer
Annually and Every 1500 Hours)85-	
Service (Every 2 Years, Every 3000,	Trailer Hitch, Check the Guide Rails95-14
4500, 6000 and 10000 Hours)85-	
	Check for Wear at Ball-Type Tow Hitch95-15
Service / Daily or Every 10 Hours	Check the Drawbar for Wear95-15
Check Brakes90	
Check the Lights90	-1

Page	Page
Service / Every 500 Hours	Service / Every 6000 Hours
Change Engine Oil100-1	Note Regarding the Service Interval for
Engine - Change the Oil Filter100-1	Engine Coolant120-1
Change the Fuel Filters100-2	Change Coolant120-2
Changing Activated Carbon Filters100-2	3.2.3.
Lubricate the Draft Link Bearings (if	Service / As Required
equipped)100-3	Cleaning Cab Air Filters125-1
Lubricate the Rear Axle100-3	Bleed Air from Fuel System125-1
Engine - Check Drive Belt for Wear100-4	Lubricate All Lubricating Points
Check Engine Ground Connection100-4	Operator's Seat
Check the Cab Ground Connection100-4	Starter Motor
Bleed and Check the Brake System100-5	Replace Diesel Particulate Filter (DPF)125-2
Sorvice / Every 750 Hours	Replacing the Drive Belt - 6-Cylinder Engines 125-3 Fuse and Relay of Electrical Starting Aid 125-5
Service / Every 750 Hours	
Replace Transmission/Hydraulic Oil Filters105-1	Fuse and Relay Box (PLB) - (on Tractors 6140R and 6150R)125-6
Front PTO - Change Oil Filter (if equipped)105-1	
Change Oil in Final Drives	Fuse and Relay Box (PLB) - (on
(Front-Wheel Drive Axle with Brake)105-2	Tractors 6170R to 6210R)125-8
	Fuses and Relays (LCS) with
Service / Once a Year	PowrQuad™ Transmission - (on
Check the Seat Belt110-1	Tractors 6140R and 6150R)125-10
Engine - Use Coolant Test Strips to	Fuses and Relays (LCS) with
Check Coolant110-1	PowrQuad™ Transmission - (on
Inspect Hydraulic Hoses110-1	Tractors 6170R to 6210R)125-16
Other Annual Service Jobs110-2	Fuses and Relays (LCS) on DirectDrive Transmission - (on 6140R and
Service / Every 1500 Hours or 2 Years	6210R Tractors)
Changing Cab Air Filters and	Fuses and Relays (LCS) with
Recirculation Air Filters	AutoPowr™/IVT™ Transmissions -
Change the Engine Air Cleaner115-1	(on Tractors 6140R and 6150R)125-28
Engine - Change Filter of Oil Separator	Fuses and Relays (LCS) with
in Crankcase Vent115-2	AutoPowr™/IVT™ Transmissions -
Changing Oil in Front-Wheel Drive	(on Tractors 6170R to 6210R)125-34
Axle and Final Drives115-2	
Change Oil In Front-Wheel Drive Axle	Troubleshooting
Housing 115-2	Hydraulic system130-1
Change Oil in Front-Wheel Drive Final Drives 115-3	Engine130-2
Change Transmission/Hydraulic	Electrical System130-3
Oil and Oil Filters (Tractors with	
AutoPowr™/IVT™)115-4	Diagnostic Trouble Codes and Settings
Change Transmission/Hydraulic	Operation and Entering the Diagnostic
Oil and Oil Filters (Tractors with	Addresses with CommandCenter™
PowrQuad™ PLUS or AutoQuad™ PLUS) 115-6	(Customer Level)135-1
Change Transmission/Hydraulic	Displaying and Deleting Diagnostic
Oil and Oil Filters (Tractors with	Trouble Codes with CommandCenter™135-4
DirectDrive Transmission)115-8	Diagnostic Trouble Codes, Information
Front PTO - Change Oil and Oil Filter	for the User135-6
(if equipped)115-9	AIC - Control Software
Air Brakes - Change the Air-Drier Cartridge 115-9	CCU - Control Software
Draings the file blief dufflinge 110-9	CLC - Control Software
Comico / Eveny 4500 House	CSC - Control Software
Service / Every 4500 Hours	CSM - Control Software
Engine Air Cleaner - Change the	ECU - Control Software
Secondary Element117-1	EIC - Control Software
	FCC - Control Software
	1 00 - Ooitii oi Ooitwale 130-13

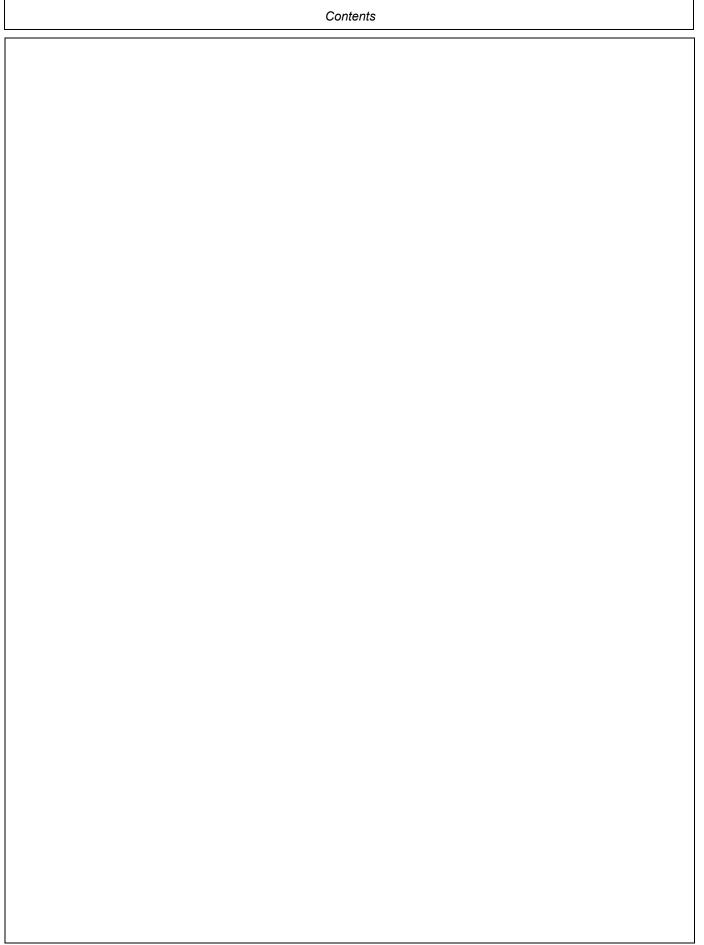
Continued on next page

070114 PN=8

#### Contents

Page	Page
_	·
HCC - Control Software	Permissible Front Axle Load in Relation
OIC - Control Software	to Tires (Normal Operation) - 6170R to 6210R145-23
PLC - Control Software	Permissible Front Axle Load in Relation
PTA - Control Software135-15	to Tires (Front Loader Operation) -
PTF - Control Software135-15	6170R to 6210R145-25
PTQ - Control Software135-16	Permissible Rear Axle Load in Relation
RLC - Control Software135-16	to Tires - 6140R145-27
RPT - Control Software135-17	Permissible Rear Axle Load in Relation
SCC - Control Software	to Tires - 6150R145-29
SCO - Control Software	Permissible Rear Axle Load in Relation
SFA - Control Software	to Tires - 6170R to 6210R145-30
SMV - Control Software	Unified Inch Bolt and Screw Torque Values145-31 Metric Bolt and Screw Torque Values145-32
TIA - Control Software135-19	Safety Note Regarding the Subsequent
TIQ - Control Software	Installation of Electrical and
VLC - Control Software	Electronic Appliances and/or
XMC - Control Software135-20	Components
XSC - Control Software135-21	
	Serial Numbers
Storage	Type Plates150-1
Storage for a Long Period140-1	Plate for Product Identification and
Removing Tractor from Storage140-2	Serial Numbers of Components150-1
	Plate for Product Identification Number150-1
Specifications	Engine Serial Number150-2
Dimensions145-1	Transmission Serial Number150-2
Engine - (on Tractors 6140R and 6150R) 145-2	Front-Wheel Drive Axle Serial Number150-2
Engine - (on Tractors 6170R to 6210R)145-3	Serial Number of Operator's Cab
PTO Power Output - (on Tractors	Serial Number of Operator's Seat
6140R and 6150R)145-4	Sub-Assembly Serial Numbers150-3
PTO Power Output - (on Tractors	
6170R to 6210R)	Glossary
Transmission	Glossary155-1
Hitch - (on Tractors 6140R and 6150R)145-6 Hitch (6170R to 6210R)145-6	
Hydraulic System145-7	
Oil Withdrawal	
Operating the Tractor in an Inclined Position 145-8	
Loads and Weights - (on Tractors	
6140R and 6150R)145-9	
Loads and Weights - (on Tractors	
6170R to 6210R)145-10	
How to Calculate Maximum	
Permissible Download on Trailer Hitch 145-11	
Towed Mass	
How to Calculate Permissible Mass145-12	
Vibration         145-13           Electrical System         145-13	
Capacities (6140R and 6150R)145-13	
Capacities (6170R to 6210R)145-14	
Sound Level145-14	
Permissible Front Axle Load in Relation	
to Tires (Normal Operation) - 6140R145-15	
Permissible Front Axle Load in Relation	
to Tires (Front Loader Operation) - 6140R 145-17	
Permissible Front Axle Load in Relation	
to Tires (Normal Operation) - 6150R145-19	
Permissible Front Axle Load in Relation	
to Tires (Front Loader Operation) - 6150R145-21	

ix (270114 PN=9



070114 PN=10 X

# **Identification View**

# **Identification View** LX1049728

Tractor Shown with Optional Equipment

OULXBER,00018D5 -19-23APR10-1/1

LX1049728 —UN—19APR10

070114 PN=13 00-1

#### **Trademarks**

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

OULXA64,00027E1 -19-25JUN12-1/1

00-2 070114 PN=14

### **Safety**

#### **Recognize Safety Information**

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 -19-29SEP98-1/1

-UN-28JUN13

#### **Understand Signal Words**

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.

# **A** DANGER

**AWARNING** 

**ACAUTION** 

DX,SIGNAL -19-03MAR93-1/1

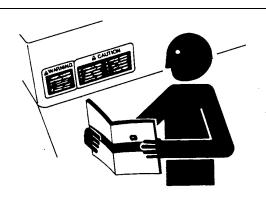
#### Follow Safety Instructions

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 -19-16JUN09-1/1

05-1 070114 PN=15

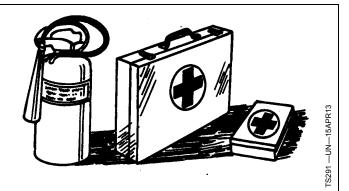
3-1/ LS187

#### **Prepare for Emergencies**

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.

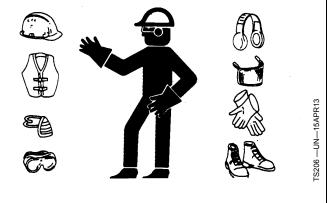


DX,FIRE2 -19-03MAR93-1/1

#### **Wear Protective Clothing**

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.

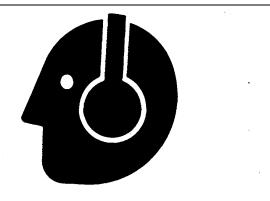


DX,WEAR2 -19-03MAR93-1/1

#### **Protect Against Noise**

Prolonged exposure to loud noise can cause impairment or loss of hearing.

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



DX,NOISE -19-03MAR93-1/1

05-2 PN=16

#### Handle Fuel Safely—Avoid Fires

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 -19-12OCT11-1/1

#### **Handle Starting Fluid Safely**

Starting fluid is highly flammable.

Keep all sparks and flame away when using it. Keep starting fluid away from batteries and cables.

To prevent accidental discharge when storing the pressurized can, keep the cap on the container, and store in a cool, protected location.

Do not incinerate or puncture a starting fluid container.



DX,FIRE3 -19-16APR92-1/1

#### 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 -19-12OCT11-1/1

05-3

-UN-23AUG88

#### In Case of Fire

CAUTION: Do not risk personal injury. If a fire is too far advanced, do not try to extinguish it.

Stop machine operation immediately at first sign of fire. Fire may be indicated by smell of smoke or sight of smoke or flames.

If fire can be safely extinguished, proceed carefully following the instructions on your fire extinguisher. If your extinguisher does not have instructions, carefully follow these general guidelines:

- Remove fire extinguisher from bracket.
- 2. Cautiously approach area of fire with wind to your back.
- 3. Pull safety pin from extinguisher.
- 4. Hold extinguisher by handles and aim hose at base of flames.



5. Squeeze handles to discharge extinguisher.

Move nozzle back and forth, covering flames with extinguishing agent.

DX.FIRE4 -19-15AUG12-1/1

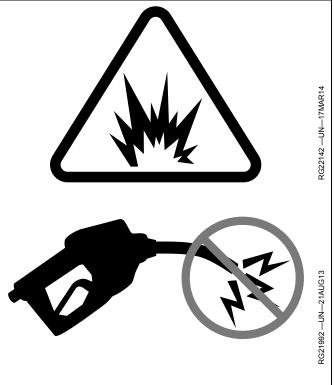
#### Avoid Static Electricity Risk When Refueling

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 -19-12JUL13-1/1

05-4

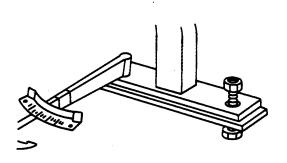
#### **Keep ROPS Installed Properly**

Make certain all parts are reinstalled correctly if the roll-over protective structure (ROPS) is loosened or removed for any reason. Tighten mounting bolts to proper torque.

The protection offered by ROPS will be impaired if ROPS is subjected to structural damage, is involved in an overturn incident, or is in any way altered by welding, bending, drilling, or cutting. A damaged ROPS should be replaced, not reused.

The seat is part of the ROPS safety zone. Replace only with John Deere seat approved for your tractor.

Any alteration of the ROPS must be approved by the manufacturer.



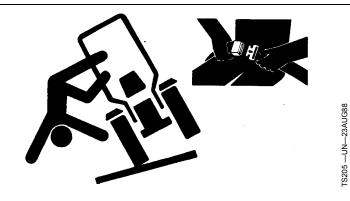
DX,ROPS3 -19-12OCT11-1/1

TS212 —UN—23AUG88

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

If this tractor is equipped with a foldable ROPS, keep the ROPS in the fully extended and locked position. If the tractor is ever operated with ROPS folded (e.g., to enter a low building), drive with extreme caution. Do NOT use seat belt with the ROPS folded.

Return the ROPS to the raised, fully extended and locked position as soon as the tractor is operated under normal conditions. Always fasten your seat belt when the ROPS is fully extended and locked.



DX,FOLDROPS -19-31AUG99-1/1

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

Entanglement in rotating driveline can cause serious injury or death.

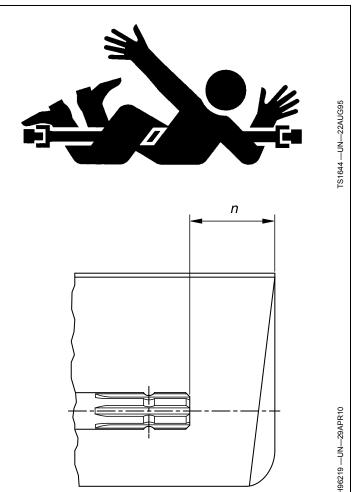
Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

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 drive shaft 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.

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.)

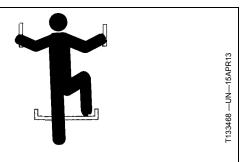


DX,PTO -19-30JUN10-1/1

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

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 -19-12OCT11-1/1

#### **Read Operator Manuals for ISOBUS Implements**

In addition to GreenStar Applications, this display can be used as a display device for any implement that meets ISO 11783 standard. This includes capability to control ISOBUS implements. When used in this manner, information and implement control functions placed on the display are provided by the implement and are the responsibility of the implement manufacturer. Some of these implement functions could provide a hazard either to the Operator or a bystander. Read the operator manual provided by the implement manufacturer and observe all safety messages in manual and on implement prior to use.

NOTE: ISOBUS refers to the ISO Standard 11783

DX,WW,ISOBUS -19-19AUG09-1/1

05-6 O70114 PN=20

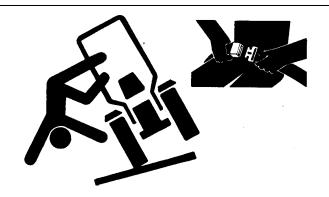
#### **Use Seat Belt Properly**

Use a seat belt when you operate with a roll-over protective structure (ROPS) or cab to minimize chance of injury from an accident such as an overturn.

Do not use a seat belt if operating without a ROPS or cab.

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 -19-29OCT07-1/1

TS205 -- UN-23AUG88

#### **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.
- 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
- Make sure that everyone is clear of machine, attached equipment, and work area before starting engine or
- Keep hands, feet, and clothing away from power-driven parts

#### **Driving Concerns**

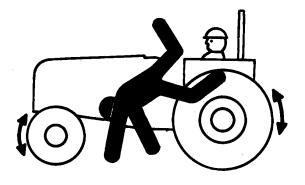
- Never get on or off a moving tractor.
- Keep all children and nonessential personnel off tractors and all equipment.
- · Never ride on a tractor unless seated on a John Deere approved seat with seat belt.
- Keep all shields/guards in place.
- Use appropriate visual and audible signals when operating 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
- Couple brake pedals together for road travel.
- Pump brakes when stopping on slippery surfaces.

#### **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





S276 — UN — 23AUG88

and securely engage park mechanism, including the park pawl and park brake. In addition, if 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:

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

DX.WW.TRACTOR -19-21AUG09-1/1

05-8 PN=22

#### **Avoid Backover Accidents**

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 guarters.

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 -19-30AUG10-1/1

#### **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 -19-12OCT11-1/1

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

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.

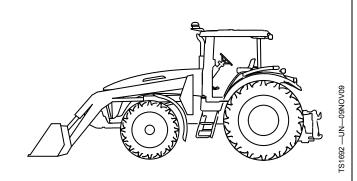
Never allow anyone to walk or work under a raised loader.

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.

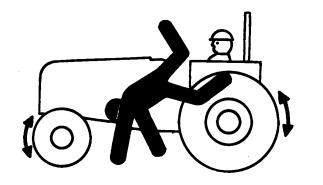
DX,WW,LOADER -19-18SEP12-1/1

05-9

#### **Keep Riders Off Machine**

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 -19-03MAR93-1/1

#### **Instructional Seat**

The instructional seat, if so equipped, has been provided only for training operators or diagnosing machine problems.



3XA0103436 —UN—15JUN09

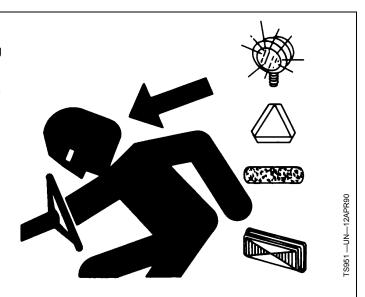
TS290 —UN—23AUG88

DX,SEAT,NA -19-19AUG09-1/1

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

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 -19-07JUL99-1/1

05-10 PN=24

#### **Transport Towed Equipment at Safe Speeds**

Do not exceed the maximum transport speed. This tractor is capable of operating at transport speeds that exceed the maximum allowable transport speed for most towed implements.

Before transporting a towed implement, determine from signs on the implement or information provided in the implement's operator manual the maximum transport speed. Never transport at speeds that exceed the implement's maximum transport speed. Exceeding the implement's maximum transport speed can result in:

- Loss of control of the tractor/implement combination
- Reduced or no ability to stop during braking
- Implement tire failure
- Damage to the implement structure or its components

#### Implements without brakes:

- Do not transport at speeds greater than 32 km/h (20 mph).
- Must weigh less than 1.5 times the tractor weight and less than 1.5 t (3300 lb) when fully loaded.

#### Implements with brakes:

- If the manufacturer does not specify a maximum transport speed, do not tow at speeds greater than 40 km/h (25 mph).
- When transporting at speeds up to 40 km/h (25 mph) the fully loaded implement must weigh less than 4.5 times the tractor weight.



 When transporting at speeds between 40—50 km/h (25—31 mph) the fully loaded implement must weigh less than 3.0 times the tractor weight.

DX,TOW1 -19-12OCT11-1/1

#### **Use Caution On Slopes and Uneven Terrain**

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 tractor to tip over rearward. Back out of these situations if possible.

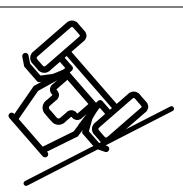
Danger of overturn increases greatly with narrow tread setting, at high speed.

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

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.



RXA0103437 —UN-01JUL09

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 -19-12OCT11-1/1

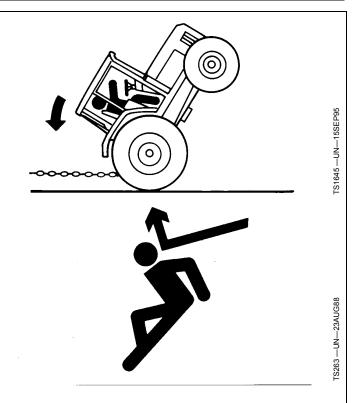
#### Freeing a Mired Machine

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.



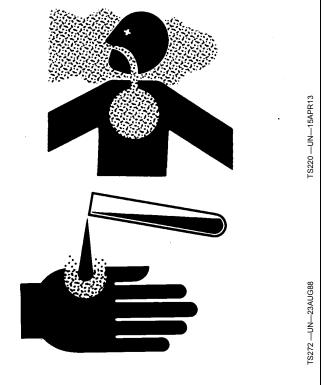
DX,MIRED -19-07JUL99-1/1

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

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 -19-25MAR09-1/1

05-12

A34471

#### **Handle Agricultural Chemicals Safely**

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:

- 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 -19-24AUG10-1/1

#### **Handling Batteries Safely**

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

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.

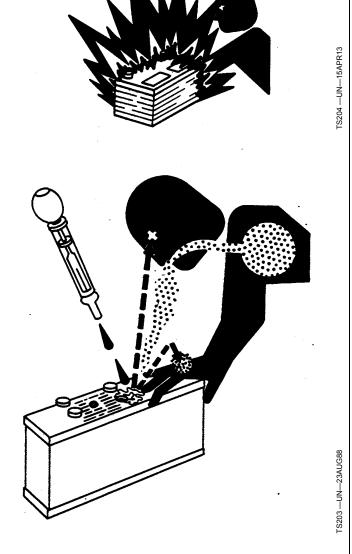
#### If acid is spilled on skin or in eyes:

- 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:

- Do not induce vomiting.
- 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 -19-02DEC10-1/1

#### **Avoid Heating Near Pressurized Fluid Lines**

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 -19-10DEC04-1/1

05-14 PN=28

#### **Remove Paint Before Welding or Heating**

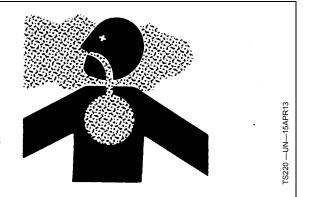
Avoid potentially toxic fumes and dust.

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 -19-24JUL02-1/1

# Handle Electronic Components and Brackets Safely

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 -19-24AUG10-1/1

#### **Practice Safe Maintenance**

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 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.



1S218 —UN—23AUG88

DX,SERV -19-17FEB99-1/1

#### **Avoid Hot Exhaust**

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 -19-20AUG09-1/1

05-16 PN=30

#### **Clean Exhaust Filter Safely**

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.

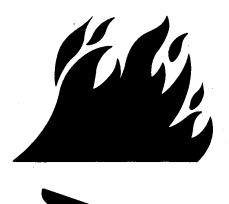
If service procedure requires engine to be running:

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

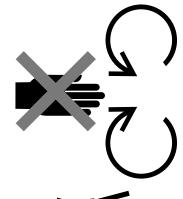
Keep hands, feet, and clothing away from power-driven parts.

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 -19-12JAN11-1/1

S227 —UN—15APR13

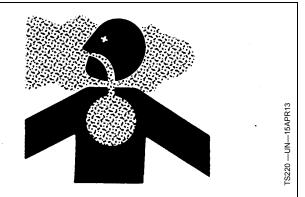
FS1693 —UN—09DEC09

FS1695 —UN—07DEC09

#### Work In Ventilated Area

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.



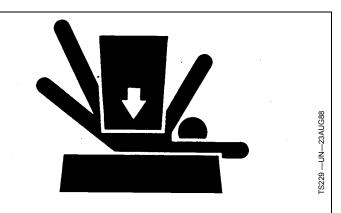
DX.AIR -19-17FEB99-1/1

#### **Support Machine Properly**

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 -19-24FEB00-1/1

#### **Prevent Machine Runaway**

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.



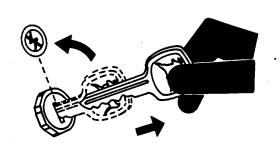
DX.BYPAS1 -19-29SEP98-1/1

05-18 PN=32

#### **Park Machine Safely**

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 -19-04JUN90-1/1

TS230 —UN—24MAY89

RXA0103709 —UN—01JUL09

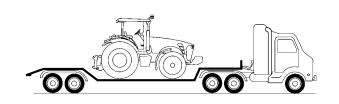
TS281 -- UN--15APR13

#### **Transport Tractor Safely**

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.

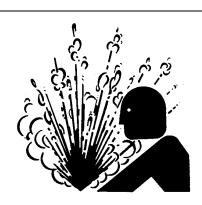


DX,WW,TRANSPORT -19-19AUG09-1/1

#### **Service Cooling System Safely**

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 -19-19AUG09-1/1

05-19 PN=33

#### Service Accumulator Systems Safely

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.



3XA0103438 —UN—11JUN09

DX.WW.ACCLA2 -19-22AUG03-1/1

#### **Service Tires Safely**

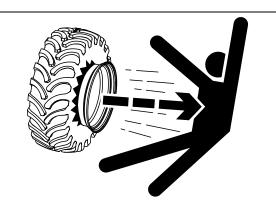
Explosive separation of a tire and rim parts can cause serious injury or death.

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.

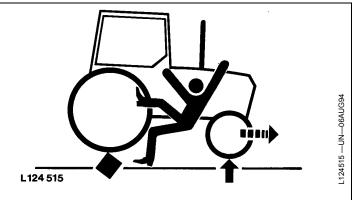
Check wheels for low pressure, cuts, bubbles, damaged rims, or missing lug bolts and nuts.



DX.WW.RIMS -19-19AUG09-1/1

#### **Service Front-Wheel Drive Tractor Safely**

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 -19-19AUG09-1/1

05-20 PN=34

#### **Tightening Wheel Retaining Bolts/Nuts**

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



L124 516

DX.WW.WHEEL -19-12OCT11-1/1

L124516 —UN—03JAN95

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

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



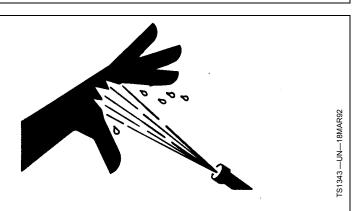
with this type of injury should reference a knowledgeable medical source. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

DX FLUID -19-12OCT11-1/1

#### Do Not Open High-Pressure Fuel System

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 -19-07JAN03-1/1

#### Store Attachments Safely

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.



TS219 —UN—23AUG88

DX,STORE -19-03MAR93-1/1

#### **Dispose of Waste Properly**

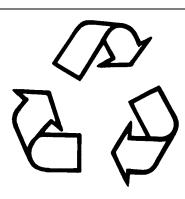
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with John Deere equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

Do not pour waste onto the ground, down a drain, or into any water source.

Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.

Inquire on the proper way to recycle or dispose of waste from your local environmental or recycling center, or from your John Deere dealer.



DX,DRAIN -19-03MAR93-1/1

05-22 PN=36

## **Safety Decals**

10-1

#### **Pictorial Safety Signs**

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.

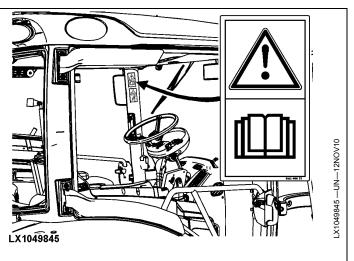


LX,LABEL 002079 -19-02MAY92-1/1

TS231 —19—07OCT88

#### **Operator's Manual**

This Operator's Manual contains all important information necessary for safe machine operation. Carefully observe all safety rules to avoid accidents.



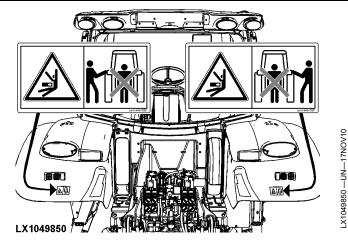
OULXBER,00019D1 -19-15NOV10-1/1

#### **Hitch Remote Control**

 $oldsymbol{\Lambda}$ 

CAUTION: When attaching or detaching an implement, there is an extreme danger of crushing in the area between the tractor and implement.

When actuating the hitch, stay clear of the area where the three-point hitch rises and do not permit anyone to be in the area.

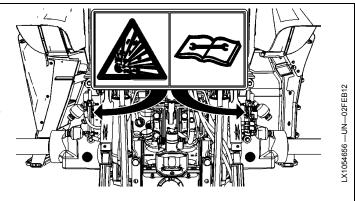


OULXBER,00019DC -19-26AUG11-1/1

#### **Cab Suspension Accumulators**

**CAUTION: Cylinder and accumulators are** under pressure. Air, gas or fluid may escape and cause unintended motions.

Get your John Deere dealer to perform checks and repairs.



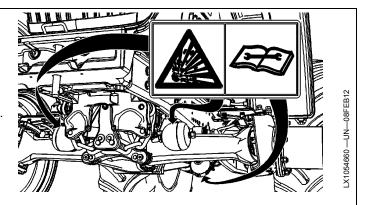
OULXBER,00019D7 -19-02FEB12-1/1

#### **Front-Axle Suspension Accumulators**



**CAUTION:** The accumulators are under pressure. Air, gas or fluid may escape and cause unintended motions.

Get your John Deere dealer to perform checks and repairs.



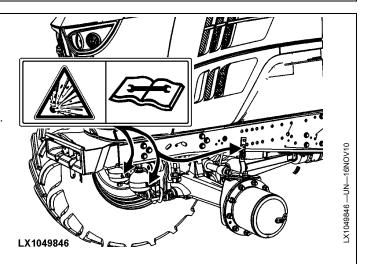
OULXA64,00028EB -19-08FEB12-1/1

#### **Front-Axle Suspension Accumulators**



**CAUTION:** The accumulators are under pressure. Air, gas or fluid may escape and cause unintended motions.

Get your John Deere dealer to perform checks and repairs.



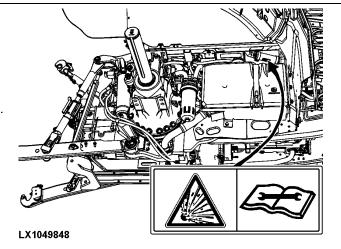
OULXBER,00019D8 -19-16NOV10-1/1

10-2 PN=38

#### **Brake System Accumulator**

**CAUTION:** The accumulator is under pressure. Air, gas or fluid may escape and cause unintended motions.

Get your John Deere dealer to perform checks and repairs.



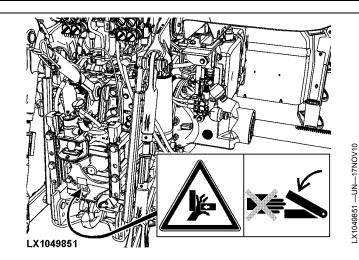
OULXBER,00019DA -19-04OCT12-1/1

#### Pick-Up Hitch



CAUTION: If used improperly, there is a serious danger of pick-up hitch components causing injury.

With hitch lowered, NEVER put your hand in the mounting frame or the opening of the pick-up hitch.



OULXBER,00019D5 -19-26AUG11-1/1

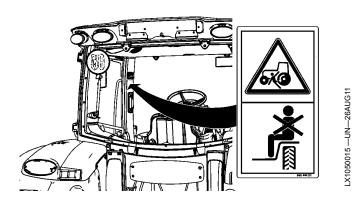
#### **Never Carry Riders (China Only)**



CAUTION: Riders could fall off and be seriously injured or killed.

Riders are permitted only on a properly installed passenger seat that has been checked and approved by John Deere.

10-3



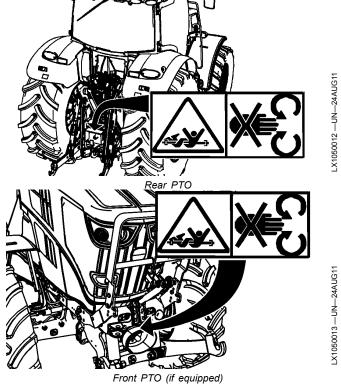
OULXA64,000289D -19-30NOV11-1/1

PN=39

#### PTOs and Rotating Components of Implements (China Only)

**CAUTION: Never touch rotating components** - danger of death.

Shut off the engine and wait until all components have stopped turning.



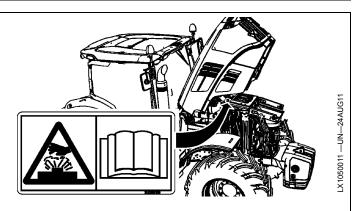
OULXBER,0001AB9 -19-26AUG11-1/1

#### **Engine Cooling System (China Only)**



**CAUTION:** Danger of scalding due to coolant under high pressure. Before removing the cap, allow sufficient time for the cooling system to cool down and for pressure to drop.

Shut off the engine, open the hood and wait until the cooling system has cooled down. Do not open the cap unless the hoses of the cooling system are cool enough to be touched with your bare hand. First open the cap only far enough to allow the pressure to drop, then unscrew it completely.



OULXBER,0001AB8 -19-26AUG11-1/1

10-4 PN=40 This as a preview PDF file from best-manuals.com



Download full PDF manual at best-manuals.com