

8245R, 8270R, 8295R, 8320R, 8335R, 8345R and 8370R Tractors (Serial No. 100001-)(North American Edition) L4



OPERATOR'S MANUAL

8245R, 8270R, 8295R, 8320R, 8335R,
8345R and 8370R Tractors (Serial No.
100001-)(North American Edition)

OMRE573841 ISSUE L4 (ENGLISH)

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents
are known to the State of California to cause cancer,
birth defects, and other reproductive harm.

If this product contains a gasoline engine:

⚠ WARNING

The engine exhaust from this product contains
chemicals known to the State of California to cause
cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.

Additional Proposition 65 Warnings can be found in this manual.

John Deere Waterloo Works

North American Edition
LITHO IN U.S.A.



Introduction

Foreword

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

THIS 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. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

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

WRITE PRODUCT IDENTIFICATION NUMBERS (P.I.N.) in the Specification or Identification Numbers section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. File the identification numbers in a secure place off the machine.

WARRANTY is provided as part of John Deere's support program for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate or statement which you should have received from your dealer.

This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.

THE TIRE MANUFACTURER'S warranty supplied with your machine may not apply outside the U.S.

If you are not the original owner of this machine, it is in your interest to contact your local John Deere dealer to inform them of this unit's serial number. This will help John Deere notify you of any issues or product improvements.

DX,IFC1 -19-03APR09-1/1

Look For Supplemental Information

Occasionally new or revised information will become available after manuals are printed. To get this up-to-date information into your hands, publication supplements are prepared and supplied to the field in the machine literature package.

Supplements can be supplied in the following forms and are usually identified with one of these titles:

- Direction(s) Sheet
- Installation Instructions
- Publications Supplement

Before your initial review of the Operator's Manual, look through the machine literature package to see if any

supplemental information has been provided. If supplied, review this information to determine which operating procedures are impacted or modified by the revised instructions. Pay close attention to "CAUTION" and "IMPORTANT" statements as they address your safety, the safety of others, and safe operation of the machine.

When Operator's Manuals are revised, the supplemental information is incorporated directly into the manual, thereby eliminating the supplement.

RW29387,00001CC -19-10JUL12-1/1

Trademarks

Trademarks	
AccuDepth™	Trademark of Deere and Company
ACS™ (ActiveCommand Steering)	Trademark of Deere and Company
ActiveSeat™	Trademark of Deere and Company
AirCushion™	Trademark of Deere and Company
AMBLYGON™	Trademark of Kluber Lubrication
AMPSEAL 16™	Trademark of Tyco Electronics
AutoLoad™	Trademark of Deere and Company
AutoPowr™	Trademark of Deere and Company
AutoPowr™/IVT™	Trademark of Deere and Company
AutoQuad™ II	Trademark of Deere and Company
AutoQuad™ PLUS	Trademark of Deere and Company
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Avdel™	Trademark of Avdel UK Limited
Bio Hy-Guard™	Trademark of Deere and Company
Break-In™	Trademark of Deere and Company
Break-In PLUS™	Trademark of Deere and Company
Bluetooth®	Trademark of Bluetooth SIG
CINCH™	Trademark of Cinch Inc.
ClimaTrak™	Trademark of Deere and Company
ComfortCommand™	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
CommandQuad™	Trademark of Deere and Company
CommandView™	Trademark of Deere and Company
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Cummins®	Trademark of Cummins Inc.
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DEUTSCH™	Trademark of Deutsch Company
DURABUILT™	Trademark of Camoplast Inc.
e18™	Trademark of Deere and Company
e23™	Trademark of Deere and Company
Efficiency Manager™	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
HydraCusion™	Trademark of Deere and Company
Hy-Gard™	Trademark of Deere and Company
ILS™	Trademark of Deere and Company
iPhone®	Trademark of Apple, Inc.
iPod®	Trademark of Apple, Inc.
iPod Touch®	Trademark of Apple, Inc.
iTEC™	Trademark of Deere and Company
iTEC™ Pro	Trademark of Deere and Company
IVT™	Trademark of Deere and Company
IVT Selector™	Trademark of Deere and Company

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RW29387,000050B -19-18JUL14-1/2

Introduction

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JDLink™	Trademark of Deere and Company
JDOffice™	Trademark of Deere and Company
John Deere™	Trademark of Deere and Company
John Deere FarmSight™	Trademark of Deere and Company
Loctite™	Trademark of Henkel Corporation
MATE-N-LOC™	Trademark of AMP Incorporated
METRIMATE™	Trademark of AMP Incorporated
METRI-PACK™	Trademark of Delphi Packard Electric Systems
NEVER-SEEZ™	Trademark of Bostik-Findley Inc.
Oilscan™	Trademark of Deere and Company
Parallel Tracking™	Trademark of Deere and Company
PLUS-50™ II	Trademark of Deere and Company
PowrQuad™	Trademark of Deere and Company
PowrQuad™ PLUS	Trademark of Deere and Company
PowerTech™	Trademark of Deere and Company
PowerTech™ Plus	Trademark of Deere and Company
Power Zero™	Trademark of Deere and Company
QUICK METAL™	Trademark of Henkel Corporation
Quik-Tatch™	Trademark of Deere and Company
Row-Trak™	Trademark of Deere and Company
Service ADVISOR™	Trademark of Deere and Company
SERVICEGARD™	Trademark of Deere and Company
SiriusXM®	Trademark of Sirius XM Radio Inc.
StarFire™	Trademark of Deere and Company
StarFire™ iTC	Trademark of Deere and Company
STC™	Trademark of Aeroquip Corporation
StellarSupport™	Trademark of Deere and Company
SUMITOMO™	Trademark of Sumitomo Corporation
TEFLON™	Trademark of DuPont Co.
TIA™	Trademark of Deere and Company
TLS™	Trademark of Deere and Company
TLS™ Plus	Trademark of Deere and Company
TouchSet™	Trademark of Deere and Company
Tractor-Implement Automation™	Trademark of Deere and Company
Vari-Cool™	Trademark of Deere and Company
Weather Pack™	Trademark of Packard Electric
YAZAKI™	Trademark of Yazaki Corporation

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Quick Reference Specifications

NOTE: See Specifications Section for Additional Specifications

Capacities (Approximate):

	8245R	8270R	8295R	8320R	8335R ^a	8345R	8370R
Fuel Tank with Group 47/48 Tires ^b	645 L (170.4 gal.)						
Fuel Tank with Group 49 Tires ^b	686 L (181.2 gal.)						
Fuel Tank with Group 47/48/49 Tires ^c	719 L (190 gal.)						
DEF Tank ^b	23 L (6 gal.) ^d						
Cooling System	43.8 L (11.6 gal.)						
Crankcase, oil volume, includes front axle							
1300 MFWD	25.0 L (6.6 gal.)			Not Available			
1500 MFWD				28.0 L (7.4 gal.)			
ILS				27.5 L (7.3 gal.)			
Transmission, Differential, Hydraulic System with 1300 MFWD / 1500 MFWD	140 L (37 gal.)						
Transmission, Differential, Hydraulic System with ILS	165 L (43.6 gal.)						
1300 MFWD	13.6 L (3.6 gal.)			Not Available			
1500 MFWD				18.7 L (4.9 gal.)			
1300 MFWD / 1500 MFWD Wheel Hubs (each)	3.8 L (4.0 qt.)						
ILS Wheel Hubs (each)	3.8 L (4 qt.)			5.6 L (5.9 qt.)			

^aUS EPA Tier 2/EU Stage II Engine Only

^bUS EPA Final Tier 4/EU Stage IV

^cUS EPA Tier 2/EU Stage II

^dNormal usage.

TO84419,000034C -19-05SEP14-1/1

Contents

Page	Page
Safety	
Recognize Safety Information	05-1
Understand Signal Words	05-1
Follow Safety Instructions	05-1
Prepare for Emergencies	05-2
Wear Protective Clothing	05-2
Protect Against Noise	05-2
Handle Fuel Safely—Avoid Fires	05-3
Handle Starting Fluid Safely	05-3
Fire Prevention	05-3
In Case of Fire	05-4
Avoid Static Electricity Risk When Refueling	05-4
Keep ROPS Installed Properly	05-5
Use Foldable ROPS and Seat Belt Properly	05-5
Stay Clear of Rotating Drivelines	05-6
Use Steps and Handholds Correctly	05-6
Read Operator Manuals for ISOBUS Implements	05-6
Use Seat Belt Properly	05-7
Operating the Tractor Safely	05-8
Avoid Backover Accidents	05-9
Limited Use in Forestry Operation	05-9
Operating the Loader Tractor Safely	05-9
Keep Riders Off Machine	05-10
Instructional Seat	05-10
Use Safety Lights and Devices	05-10
Use a Safety Chain	05-11
Transport Towed Equipment at Safe Speeds	05-11
Use Caution On Slopes and Uneven Terrain	05-12
Freeing a Mired Machine	05-12
Avoid Contact with Agricultural Chemicals	05-13
Handle Agricultural Chemicals Safely	05-14
Handling Batteries Safely	05-15
Avoid Heating Near Pressurized Fluid Lines	05-15
Remove Paint Before Welding or Heating	05-16
Handle Electronic Components and Brackets Safely	05-16
Practice Safe Maintenance	05-17
Avoid Hot Exhaust	05-17
Clean Exhaust Filter Safely	05-18
Work In Ventilated Area	05-19
Support Machine Properly	05-19
Prevent Machine Runaway	05-19
Park Machine Safely	05-20
Transport Tractor Safely	05-20
Service Cooling System Safely	05-20
Service Accumulator Systems Safely	05-21
Follow Tire Recommendations	05-21
Service Tires Safely	05-21
Service Front-Wheel Drive Tractor Safely	05-22
Tightening Wheel Retaining Bolts/Nuts	05-22
Avoid High-Pressure Fluids	05-22
Do Not Open High-Pressure Fuel System	05-23
Store Attachments Safely	05-23
Dispose of Waste Properly	05-23
Safety Signs	
Operator's Manual	10-1
Seat Belt	10-2
Instructional Seat (If Equipped)	10-3
Cab Suspension (If Equipped)	10-3
Starter	10-4
Engine Block Heater (If Equipped)	10-4
Independent-Link Suspension (ILS™) (If Equipped)	10-5
Brake Accumulator (If Equipped)	10-5
Front PTO (If Equipped)	10-6
Quick Coupler (If Equipped)	10-6
Rear PTO Shield	10-7
Controls and Instruments	
Front Console	15-1
Information Indicators	15-1
Aftertreatment Indicators Overview	15-2
Corner Post Display	15-3
Digital Indicators—Tachometer, Ground Speed, Transmission, and Set Speed	15-4
Gauges—Coolant Temperature, Diesel Exhaust Fluid (DEF) Level, and Fuel Level	15-5
CommandARM™ with Generation 4 CommandCenter™ Display	15-5
CommandARM™ Joystick (If Equipped)	15-6
CommandARM™ Rear and Front Hitch Control Levers	15-6
CommandARM™ SCV Controls	15-7
CommandARM™ Climate, Radio and Lighting Controls	15-7
CommandARM™ PTO Control Levers (If Equipped)	15-7
CommandARM™ Left-Hand Side Controls	15-8
CommandARM™ ISOBUS Shortcut Button (ISB)	15-8

Continued on next page

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Page	Page
Foot Throttle (If Equipped).....	15-9
Hitch, SCV and PTO External Switches	15-9
CommandCenter™	
Onscreen Help.....	16-1
Generation 4 CommandCenter™ Display	16-2
Generation 4 CommandCenter™ Processor.....	16-3
Federal Communications Commission and Industry Canada Notification	16-3
Run Page Structure	16-4
Menu.....	16-4
Tractor Settings Overview	16-4
Operating System Applications Overview	16-7
AMS Applications Overview	16-10
Automation Status Overview	16-11
Navigate Generation 4 CommandCenter™	16-12
Turn Display On and Off.....	16-13
Clean CommandCenter™ Display	16-13
Navigate Run Pages on Main Page	16-13
Shortcut Buttons	16-14
Navigate to Display & Sound.....	16-14
Display & Sound	16-14
Brightness.....	16-15
Sound	16-15
Multiple Displays.....	16-16
Display Calibration.....	16-17
Navigate to Date & Time	16-17
Date & Time Application	16-18
Change Current Date	16-18
Change Current Time	16-18
Navigate to Language & Units.....	16-19
Language & Units.....	16-19
Language & Units Settings.....	16-19
Change Pages and Values	16-20
Status Center.....	16-20
Navigate to Software Manager.....	16-21
Software Manager	16-21
Factory and Service ADVISOR™	
Installed Onscreen Help.....	16-22
Update Display Software.....	16-22
Activations	16-24
Service ADVISOR™ Remote	16-24
Vehicle Reprogramming	16-25
Troubleshooting - Reprogramming	16-28
Navigate to File Manager	16-28
File Manager.....	16-29
USB Drive.....	16-30
Capture Screen Shots	16-30
Navigate to Diagnostics Center	16-30
Diagnostics Center	16-31
Controller Diagnostics	16-31
Diagnostic Information.....	16-32
Hide Diagnostic Center.....	16-32
Diagnostic Trouble Codes	16-32
Readings	16-33
CAN Bus Information.....	16-34
CAN Bus Values	16-35
Network	16-35
Navigate to Users & Access	16-36
Users & Access	16-36
User Profiles	16-36
Access Groups	16-37
Navigate to Layout Manager	16-38
Layout Manager.....	16-38
Active Set	16-38
Shortcut Bar.....	16-39
All Run Pages.....	16-40
Add, Edit, or Duplicate Run Pages	16-40
Navigate to Fields.....	16-41
Fields.....	16-41
Manage Clients, Farms, and Fields.....	16-42
AutoTrac™ Guidance	16-43
Navigate to Machine Profile.....	16-43
Machine Profiles	16-44
Navigate to Implement Profile	16-44
Implement Profiles.....	16-45
Navigate to Machine Monitor.....	16-45
Machine Monitor	16-46
Navigate to Work Monitor	16-46
Work Monitor	16-46
Work Recording.....	16-47
Navigate to Maintenance & Calibrations	16-47
Maintenance & Calibrations.....	16-47
Calibrations.....	16-48
Service Intervals	16-48
Service Checks.....	16-48
Navigate to Controls Setup.....	16-49
Controls Setup.....	16-50
Controls	16-50
Automation Status	16-52
Read ISOBUS Controller's Operator's Manual	16-52
ISOBUS VT	16-52
StarFire™ GPS Receiver	16-53
Use Video Display Capability Properly	16-53
Installing Video Display Camera.....	16-54
Three-Camera Video Connectors with Ethernet Cable (If Equipped).....	16-55
Navigate to Video Application.....	16-55
Video Application.....	16-56
Video Triggers	16-56
Operating the Radio	
Using Premium Radio.....	17-1
Select Radio Receiver Wave Band	17-2
Federal Communications Commission (FCC) Bluetooth® Information.....	17-2
Mexico Bluetooth® Information	17-3
Turn Confirmation Beep On/Off (BEEP)	17-3
Adjust Maximum Volume at Power-On (ONVOL)	17-3
Program Type (PTY).....	17-4
Treble Reduction During Interference (HCUT) ...	17-4
Set Key Function (KEY PRG).....	17-4

Continued on next page

	Page
SiriusXM® Radio, General Information	17-5
Display XM Serial Number	17-5
External Sources (Premium Radio)	17-6
Select Radio Source With Generation 4 CommandCenter™	17-7
AM, FM, Weather Channel Home Page	17-7
Premium Radio CD Home Page (If Equipped) ...	17-8
Premium Radio XM Home Page (If Equipped) ...	17-8
Premium Radio USB Home Page (If Equipped) ..	17-9
Premium Radio Bluetooth® Home Page (If Equipped)	17-9
Auxiliary Home Page	17-10
Operating Phone	17-11
Contact List	17-12
Recent Calls	17-13
Pairing Bluetooth® Device—On Generation 4 CommandCenter™	17-14
Lights	
Light Identification	20-1
Configurable Lights	20-2
Steering Column Light Controls	20-3
Exit Lights	20-4
Operating Turn Signals and High/Low Beam	20-5
Safety Lights and Devices	20-6
CommandARM™ Light Buttons	20-6
Hazard Lights and Extremity Warning Lights	20-7
Rotary Beacon Light (If Equipped)	20-8
7-Pin Outlet	20-9
Operator Station	
Avoid Contact with Agricultural Chemicals	25-1
Adjust ComfortCommand™ Seat	25-2
Adjust Heated Leather Seat (If Equipped)	25-2
Adjust ActiveSeat™ (If Equipped)	25-3
Adjust ComfortCommand™ with HCS Plus Cab Suspension Seat	25-4
Operator Presence Sensor	25-4
Using Instructional Seat	25-5
Adjust CommandARM™ Position	25-6
Adjusting Steering Wheel and Column	25-6
Operating Horn	25-7
Generation 4 CommandCenter™ HVAC Settings	25-8
Operating Front Wiper and Washer	25-9
Operating Rear Wiper and Washer (If Equipped)	25-9
Operating Right-Hand Wiper and Washer (If Equipped)	25-10
Install Business Band or Citizens Band (CB) Radio and Antenna	25-11
Use Auxiliary Power Strip and Accessory Electrical Outlets (If Equipped) ...	25-12
Connect Compatible Electronic Equipment	25-14
Configure Tractor for GPS/Radar	25-15
Mount StarFire™ Receiver	25-16
Install GreenStar™ System Components	25-17

	Page
Install Machine Communications Radio (MCR) Antenna (If Equipped)	25-18
Connect AutoTrac™ Assisted Steering System (If Equipped)	25-19
Machine Sync (If Equipped)	25-20
Monitor Bracket Mounts	25-20
Use Manual Mirror (If Equipped)	25-21
Use Electric Mirror (If Equipped)	25-21
Use Telescoping Heated Electric Mirror (If Equipped)	25-22
Pull-Down Sunshade	25-22
Refrigerator or Storage Space (If Equipped) ...	25-23
Position Left-Hand Steps	25-24

Operating the Engine

Exhaust Filter System Overview	30-1
Selective Catalytic Reduction (SCR) System Overview	30-2
Auto Exhaust Filter Cleaning Mode	30-3
Parked Exhaust Filter Cleaning	30-4
Selective Catalytic Reduction (SCR) System - Final Tier 4 and Stage IV Engines ..	30-5
Engine Fuel System and Power Rating	30-6
Battery Disconnect Switch (If Equipped)	30-6
Starting the Engine	30-7
Running the Engine	30-8
Stopping the Engine	30-8
Cold Weather Starting—Without Starting Aid (If Equipped)	30-9
Cold Weather Starting—With Starting Aid (If Equipped)	30-10
Changing Starting Fluid Can (If Equipped)	30-10
Low Fuel or Low Diesel Exhaust Fluid (DEF) Warning	30-11
Restarting Engine That Has Run Out of Fuel ...	30-11
Reduce Fuel Consumption	30-11
Using Auxiliary Heaters	30-12
Using a Battery Booster or Charger	30-13

Operating the Tractor

Avoid Contact with Agricultural Chemicals	40-1
Clean Vehicle of Hazardous Pesticides	40-1
Keep Riders Off Machine	40-1
Keep Operator Station Window and Door Closed	40-2
Using Seat Belts	40-2
Use Emergency Exit	40-3
Disconnect Battery - Final Tier 4 and Stage IV Engines	40-3
Change to Different Size of Tires	40-3
Transmission - Note on Top Speed	40-4
Warm-Up Transmission-Hydraulic System	40-4
Activate and Set FieldCruise™	40-7
Use FieldCruise™ with Different Transmission Modes	40-8
Intelligent Power Management (If Equipped)	40-8

Continued on next page

Page	Page
Operate Independent-Link Suspension (ILS™) and Cab Suspension (If Equipped).....40-9	Intelligent Total Equipment Control (iTEC™)
Differential Lock.....40-11	CommandARM™ Control Functions47-1
Adjust Steering Angle to Disengage Differential Lock40-12	CommandCenter™ Pages
Mechanical Front-Wheel Drive (MFWD).....40-13	Descriptions And Functions47-2
Adjust Steering Angle to Disengage Mechanical Front-Wheel Drive (MFWD)40-14	Status Area.....47-2
Use AutoClutch (If Equipped).....40-15	Set Up A Sequence.....47-4
Foot Pedal Mode (If Equipped).....40-16	Sequence Step Status.....47-5
Use the Brakes.....40-18	Execute Sequence47-10
Hydraulic Trailer Brakes (If Equipped).....40-20	Delete Sequence.....47-11
Trailer Air Brakes (If Equipped)40-21	iTEC Functions—IVT™/AutoPowr™
Come Home Mode40-22	Transmission.....47-11
Operate the PowerShift Transmission—16-Speed	Tractor-Implement Automation™ (TIA™)
Operate the Transmission — 16-Speed	Tractor Implement Automation™ (TIA™).....50-1
PowerShift.....42-1	Activating Tractor Implement
Shift the Transmission.....42-2	Automation™ Equipment50-2
Set Startup Gear And RPM Droop42-4	TIA™ - Status Page.....50-3
Operate Automatic PowerShift (APS).....42-6	Operating Tractor Implement Automation™50-4
Operate e23™ Transmission	PTO Requirements.....50-4
Transmission Operation	SCV Requirements.....50-5
e23™ Transmission with Right Hand Re- verser.....44-1	IVT™/AutoPowr™ Requirements.....50-6
Shifting e23™ Transmission with Right-hand reverser44-2	AutoTrac™ Guidance Requirements.....50-7
e23™ Transmission with Left-Hand Re- verser.....44-4	Rear Hitch Requirements50-7
Shift e23™ Transmission with Left-hand reverser44-5	Operate Drive Strategy Requirements50-7
Set Startup Gears.....44-7	TouchSet™ Depth Control
CommandCenter™ Transmission Main Page ..44-10	Attaching Implement and Control System55-1
Efficiency Manager™ on the e23™ Transmission.....44-11	Using TouchSet™ Depth Controls.....55-3
Efficiency Manager™ on e23™ Transmission in Manual Mode44-12	Hydraulics and Selective Control Valves
Custom Transmission Settings.....44-13	Configuring Selective Control Valves -
Operate IVT™/AutoPowr™ Transmission	Access to Settings.....60-1
Controls Identification.....45-1	Configuring Selective Control Valves -
Left-Hand and Right-Hand Reverser	Standard Mode.....60-2
Shift Patterns.....45-2	Activating Independent Mode.....60-3
Operate the Transmission45-3	Configuring Selective Control Valves -
Adjust Set Speeds.....45-4	Independent Mode60-4
Set Speeds—Guidelines and Examples.....45-5	Configuring Selective Control Valves -
IVT™/AutoPowr™ Modes and Setting	Feature Mode.....60-5
Maximum Speed45-6	Total Rear SCV Flow60-6
Custom IVT™/AutoPowr™ Settings.....45-7	Using Six Position SCV Control Levers.....60-7
Adjust Reverse/Forward Set Speed Ratio.....45-9	SCV Control Lever—Neutral Position.....60-8
Put Tractor in Motion45-10	SCV Control Lever—Extend and
Using Creeper Mode45-10	Extend Detent Position.....60-8
Stop and Park Tractor45-11	SCV Control Lever—Retract and
Downhill Operation in Slippery Conditions45-12	Retract Detent Position60-9
	SCV Control Lever—Float Position60-10
	Operator Presence Sensor.....60-10
	CommandARM™ Joystick (If Equipped).....60-11
	SCV and Joystick Flow Response Setting60-16
	Laser Scraper Control
	Laser Scraper—for Scrapers Equipped
	with Scraper Control Unit62-1

Continued on next page

	Page
Remote Hydraulic Connections	
Hydraulic Component Identification.....	63-1
Connecting Hydraulic Hoses—Rear of Tractor ..	63-2
Disconnecting Hydraulic Hoses—Rear of Tractor	63-3
Using Load-Sensing Hydraulic System—Power-Beyond	63-4
Examples Using Load-Sensing Hydraulic System—Power-Beyond	63-4
Using Hydraulic Spray Pumps.....	63-5
Implement Connection, Example 1—Pressure Control Valve Applications (Grain Drills or Air Seeders with Constant Down-Pressure System)	63-6
Implement Connection, Example 2—Motor Application Using Motor Case Drain	63-7
Implement Connection, Example 3—Motor Application Using SCV Retract and Auxiliary Motor Return	63-8
Implement Connection, Example 4—Planter with Vacuum Motor and Return Line to SCV Using Motor Return Tip.....	63-9
Implement Connection, Example 5—Planter with Vacuum Motor, Return Line to Motor Return and Lift Assist ..	63-10
Implement Connection, Example 6—Planter with Vacuum Motor and Return Line to Motor Return	63-11
Using Hydraulic Motor Return	63-12
Using Hydraulic Motor Case Drain	63-12
Using Implement Requiring Large Volumes of Oil	63-13
Hitch	
Rear Hitch.....	65-1
Hitch Control Lever.....	65-2
Rear Hitch Lock/Damping.....	65-3
Adjust Load Depth Control (Draft Response).....	65-4
Using Position Control	65-4
Using Draft Control	65-5
Adjust Rear Hitch Upper Limit	65-6
Adjust Rear Hitch Drop Rate	65-7
Adjust Rear Hitch Raise Rate	65-8
Rear Hitch Slip Sensitivity	65-8
Float Operation.....	65-9
Rear Hitch Components	65-9
Remote Rear Hitch Switches.....	65-10
Hitch Manual Lowering.....	65-10
Correct Center Link Position.....	65-11
Hydraulic Center Link (If Equipped).....	65-12
Adjust Sway Blocks	65-13
Attach Implement to Quick Coupler	65-14
Adjusting Implement Level	65-15

	Page
Changing Lateral Float	65-16
Detaching Implement from Quick Coupler.....	65-16
Hitch Conversion—Convertible Quick Coupler.....	65-16
Converting Category 4 Convertible Quick Coupler Lower Hooks	65-18
Converting Category 3/4 Convertible Quick Coupler Upper Hooks	65-19
Using Front Hitch (If Equipped)	65-21
Front Hitch Single Acting Mode And Position & Set Points.....	65-22
Using Front Hitch Upper And Lower Locking Plates	65-23
Placing Front Hitch Arms In Stowed or Extend Position	65-24
Connecting Front Hitch SCV'S	65-25
Adjusting Front Hitch Drop Rate	65-26
Adjusting Front Hitch Raise Rate	65-26
Drawbar and PTO	
Stay Clear of Rotating Drivelines.....	70-1
Observing Drawbar Load Limitations	70-2
Adjusting Drawbar Length, Height, and Side-to-Side	70-3
Installing and Using Clevis Assembly.....	70-4
Attaching PTO-Driven Implement.....	70-5
Using PTO Shield	70-6
Using Correct Engine Speed	70-7
Operating Front PTO (If Equipped)	70-8
Operating Rear PTO.....	70-9
Select PTO Cruise Speed	70-10
Fine Adjustment To PTO Cruise Speeds.....	70-11
Remote Front PTO Switch (If Equipped)	70-12
Remote Rear PTO Switch (If Equipped).....	70-13
PTO Engagement Rate	70-14
Changing Optional Front PTO Shafts.....	70-15
Using Correct PTO Shaft.....	70-15
Changing PTO Stub Shaft.....	70-16

Performance Ballasting	
General Ballasting Information	75-1
General Guidelines for Tractor Weight Based on PTO Horsepower Rating	75-2
General Weight Split Guidelines.....	75-3
Ballast Types	75-4
Ballasting Suggestions for Specific Types of Implements	75-6
Determining Ballasted Tractor Weight, Weight Split, Axle Loads, and Required Tire Inflation Pressures.....	75-8
8245R-8370R Tractor Unballasted Weight Chart	75-10
Maximum Load Per Wheel	75-13
Worksheet to Calculate Ballast Changes	75-14
Controlling Power Hop—MFWD Tractors.....	75-14
Using Quik-Tatch™ Weights.....	75-15
Using Rear Wheel Weights	75-16

Continued on next page

Page	Page
Install 70 kg (154 lb.) Weight and 900 kg (1984 lb.) Outer Rear Wheel Weights75-17	Independent Link Suspension Front Tire, Fender, and Steering Stop Settings With Front Hitch—Continued80-32
Using Liquid Ballast75-19	1500 MFWD Dual Front Tire, Fender and Steering Stop Settings80-33
Implement Codes75-21	Independent Link Suspension Dual Front Tire, Fender, and Steering Stop Settings80-34
Weight Added to Rear Axle with Hitch Mounted Implements75-22	Independent Link Suspension Dual Front Tire, Fender and Steering Stop Settings With Front Hitch80-35
Measuring Wheel Slip—Manually75-23	
Front Wheels, Tires and Treads	Rear Wheels, Tires and Treads
Service Tires Safely80-1	Service Tires Safely81-1
Select Tire Combinations80-2	Select Tire Combinations81-2
Tire Inflation Pressure Guidelines80-3	Use Wheel Tightening Stand81-3
Recommended Tire Pressures (Group 42)80-4	Wheel Torque Wrench Adapter81-4
Recommended Tire Pressures (Group 42 Continued)80-5	Recommended Tire Pressures (Group 47)81-5
Recommended Tire Pressures (Group 43)80-6	Recommended Tire Pressures (Group 47 Continued)81-6
Recommended Tire Pressures (Group 43 Continued)80-7	Recommended Tire Pressures (Group 48)81-7
Recommended Pressures—Group 4480-10	Recommended Pressures—Group 47 — IF Tires81-11
Recommended Pressures—Group 44 — Continued80-11	Recommended Pressures—Group 48 — IF Tires81-12
Tire Load Rating80-12	Recommended Pressures—Group 48 — IF Tires — continued81-13
MFWD and Independent Link Suspension Front Wheel Bolts Tightening80-13	Recommended Pressures—Group 4981-15
Independent Link Suspension Front Duals Installation80-14	Recommended Pressures—Group 49—continued81-17
Independent Link Suspension/Install 500 mm Front Wheel Dual Extensions80-15	Tire Load Rating81-19
MFWD Toe-In Check80-17	Rear Wheel, Tire and Tread Guidelines81-20
1300 MFWD Axle Toe-In Adjustment80-18	Minimum Tread Setting With Air Trailer Brakes And Inner Wheel Weights81-21
1500 MFWD Axle Toe-In Adjustment80-18	Installing Rear Drive Wheel to Cast Hub81-22
Independent Link Suspension Adjust Toe-In80-19	Rear Dual Rim to Hub Installation81-22
MFWD Steering Stop Settings80-19	Rear Drive Wheel with Standard Hubs Adjusting and Tightening81-23
Independent Link Suspension Steering Stop Settings80-20	Rear Drive Wheels with Standard Hubs adjusting and Tightening81-24
MFWD Fender Settings80-21	Adjusting and Tightening Rear Wheels with Heavy Duty Hubs81-25
Independent Link Suspension Fender Settings80-21	Adjusting and Tightening Rear Wheels—Flanged Axle81-26
Determining Rim Type80-22	Rear Drive Wheel Tread Settings for Single Wheels81-27
Eight Position Wheels Settings80-23	Rear Dual Wheel Tread Settings—320 and 380 Tire, 3015 mm (118.5 in.) Axle81-28
MFWD and Independent Link Suspension Front Tire, Fender and Steering Stop Settings80-25	Rear Dual Wheel tread Settings—420 and 480 Tires, 3015 mm (118.5 in.) Axle81-29
1300 MFWD Axle Front Tire, Fender, and Steering Stop Settings80-26	Rear Dual Wheel Tread Settings—520 and 620 Tires, 3015 mm (118.5 in.) Axle81-30
1300 MFWD Axle Front Tire, Fender, and Steering Stop Settings80-27	Rear Dual Wheel Tread Settings—650 Tires, 3015 mm (118.5 in.) Axle81-30
1500 MFWD Front Axle, Tire, Fender, and Steering Stop Settings80-28	Rear Dual Wheel Tread Settings—710 and 800 Tires, 3015 mm (118.5 in.) Axle81-31
Independent Link Suspension Front Tire, Fender and Steering Stop Settings80-29	Rear Triple Wheel Tread Settings—320 Tires ..81-32
Independent Link Suspension Front Tire, Fender, and Steering Stop Settings—Continued80-30	
Independent Link Suspension Front Tire, Fender, and Steering Stop Settings With Front Hitch80-31	

Continued on next page

	Page
Rear Triple Wheel Tread Settings—380 Tires ..	81-33
Rear Triple Wheel Tread Settings—420 Tires ..	81-34
480 and 520 mm Triple Rear Wheel Tread Settings	81-35
Dual Rear Wheel Tread Setting and Hub Extensions	81-36
Triple Rear Wheel Tread Spacing and Hub Extensions	81-37

Transport

Driving Tractor on Roads	85-1
Transporting with Ballast	85-1
Towing Loads	85-2
Safety Chain	85-3
Tow Mode	85-4
Towing Tractor	85-5
Freeing a Mired Machine	85-6
Transporting on Flat-Bed Carrier	85-7

Fuel, Lubricants and Coolant

Diesel Fuel	90-1
Supplemental Diesel Fuel Additives	90-1
Lubricity of Diesel Fuel	90-2
Handling and Storing Diesel Fuel	90-2
Avoid Static Electricity Risk When Refueling	90-3
Filling Fuel Tank	90-4
BioDiesel Fuel	90-5
Testing Diesel Fuel	90-6
Fuel Filters	90-6
Minimizing the Effect of Cold Weather on Diesel Engines	90-7
Filling Diesel Exhaust Fluid (DEF) Tank - FT4/Stage IV Engines	90-8
Diesel Exhaust Fluid (DEF) — Use in Selective Catalytic Reduction (SCR) Equipped Engines	90-9
Storing Diesel Exhaust Fluid (DEF)	90-10
Refilling Diesel Exhaust Fluid (DEF) Tank	90-11
Testing Diesel Exhaust Fluid (DEF)	90-12
Disposal of Diesel Exhaust Fluid (DEF)	90-12
John Deere Break-In Plus™ Engine Oil — Interim Tier 4, Final Tier 4, Stage IIIB, and Stage IV	90-12
Determining Tractor Engine Type	90-13
Diesel Engine Oil — Interim Tier 4, Final Tier 4, Stage IIIB, and Stage IV	90-13
Engine Oil and Filter Service Intervals — Interim Tier 4, Final Tier 4, Stage IIIB, and Stage IV Engines	90-14
Diesel Engine Oil — Tier 2 and Stage II	90-15
Engine Oil and Filter Service Intervals — Tier 2 and Stage II Engines	90-16
Oil Filters	90-16
Diesel Engine Coolant (engine with wet sleeve cylinder liners)	90-17
John Deere COOL-GARD™ II Coolant Extender	90-18

	Page
Operating in Warm Temperature Climates	90-18
Water Quality for Mixing with Coolant Concentrate	90-19
Testing Coolant Freeze Point	90-20
Disposing of Coolant	90-20
Transmission and Hydraulic Oil	90-21
Transmission and Hydraulic Oil	90-21
MFWD Axle Housing Oil	90-22
Independent Link Suspension Differential Oil	90-22
Gear Oil	90-23
Grease	90-23
Corn Head Grease	90-24
Mixing of Lubricants	90-24
Alternative and Synthetic Lubricants	90-24
Lubricant Storage	90-24

Break-In Service (100 Hours or Less)

Perform Break-In Checks	92-1
-------------------------------	------

Maintenance and Service Intervals

Observe Service Intervals	95-1
Service Interval Chart—Daily or 10 Hour, 50 Hour, 250 Hour, 500 Hour and 1000 Hour	95-2
Service Interval Charts	95-3

As Indicated Service

Perform As Indicated Service	100-1
Replace Primary And Secondary Engine Air Filters	100-1
Check Coolant Level	100-1
Clean Diesel Particulate Filter (DPF)	100-1
Drain Water Separator	100-2

As Required Service

Perform As Required Service	103-1
Clean Radiator, Coolers and Air Conditioning Condenser	103-1
Check Engine and Exhaust Compartments for Debris	103-2
Clean Exhaust Enclosure	103-3
Check Air Conditioning System	103-5
Remove and Install Vari-Cool™ Fan Belt (Final Tier 4 and Stage IV Engines)	103-6
Remove and Install Vari-Cool™ Fan Belt (Tier 2 and Stage II Engines)	103-9
Replace Auxiliary Drive Belt	103-13
Check Engine Weep Hole	103-16
Drain Fuel Tank Sump	103-17
Check MFWD Axle Housing Oil Level	103-17
Check MFWD or Independent Link Suspension Wheel Hub Oil Level	103-18
Bleed Trailer Hydraulic Brakes (If Equipped) ..	103-18
Bleed Trailer Air Brakes (If Equipped)	103-19
Cleaning Diesel Exhaust Fluid (DEF) Tank	103-20
Diesel Exhaust Fluid (DEF) Tank Drain Plug ..	103-20

Continued on next page

Page	Page
Clean CommandCenter™ Display 103-21	Tighten Rear Wheel Bolts—Heavy-Duty Cast 10-Bolt Hubs..... 120-17
Daily or 10 Hour Service	Clean Dual Beam Radar Sensor (If Equipped)..... 120-17
Check Engine Oil Level 105-1	Lubricate Cab Suspension System (If Equipped)..... 120-18
Check Transmission-Hydraulic Oil Level 105-2	Replace Fuel Filters..... 120-18
Lubricate MFWD U-Joints 105-3	Inspect Air Intake System (Final Tier 4 and Stage IV Engines) 120-19
Lubricate ILS™ U-Joints (If Equipped) 105-4	Inspect Air Intake System (Tier 2 and Stage II Engines)..... 120-20
Lubricate MFWD Kingpins, Tie Rod Ends, Steering Cylinder and Axle Pivot Fittings..... 105-4	Lubricating Front PTO Drive Shaft (If Equipped)..... 120-21
Lubricate ILS™ Kingpins, Tie Rod Ends, Suspension Cylinder and Pivot Fittings..... 105-4	Back Flush Optional Fuel Water Separator (If Equipped)..... 120-22
50 Hour Service	Service Optional Fuel Water Separator Filter Element (If Equipped) 120-23
Perform This and Other Scheduled Services ... 110-1	1000 Hour Service
Inspect Tires 110-1	Perform This and Other Scheduled Services ... 125-1
Lubricate Rear Hitch..... 110-1	Replace Cab Recirculation Air Filter..... 125-1
Lubricate Front Hitch (If Equipped)..... 110-1	Replace Cab Fresh Air Filter 125-2
250 Hour Service	Clean MFWD Axle Breather 125-3
Perform This and Other Scheduled Services ... 115-1	Replace Primary and Secondary Engine Air Filters 125-3
Lubricate Rear Hitch..... 115-1	Test Coolant Freeze Point 125-4
Lubricate Front Hitch (If Equipped)..... 115-1	Check Cab Suspension Accumulator Charge Pressure (If Equipped) 125-4
Check Neutral Start System—IVT/AutoPowr Transmission..... 115-2	Annual Service
Check Neutral Start System—16-speed and e23™ Transmissions..... 115-3	Handling Batteries Safely 130-1
Check Transmission PARK System..... 115-4	Service Batteries And Connections 130-2
Check Transmission PARK Position..... 115-5	Change Engine Oil and Filter 130-3
500 Hour Service	Test Engine Coolant Freeze Point..... 130-3
Perform This and Other Scheduled Services ... 120-1	Replace Cab Recirculation and Fresh Air Filters 130-4
Change Engine Oil and Filter 120-2	Inspect Seat Belts..... 130-4
Lubricate Vari-Cool™ Fan Drive (Final Tier 4 and Stage IV Engines) 120-4	Inspect and Replace Primary and Secondary Engine Air Filters..... 130-5
Lubricate Vari-Cool™ Fan Drive (Tier 2 and Stage II Engines)..... 120-5	Check Independent-Link Suspension™ Upper and Lower Rod and Head End Accumulator Charge Pressure (If Equipped)..... 130-6
Lubricate MFWD King Pins, Tie Rod Ends and Axle Pivot Fittings (1300 Axle) 120-7	Check Cab Suspension Accumulator Charge Pressure (If Equipped) 130-6
Lubricate MFWD King Pins, Tie Rod Ends and Axle Pivot Fittings (1500 Axle) 120-8	1500 Hour Service
Lubricate MFWD U-Joints 120-9	Perform This and Other Scheduled Services ... 135-1
Lubricate ILS™ King Pins, Tie Rod Ends and A-Arm Pivot Point Fittings (If Equipped)..... 120-10	Fuel Tank Vent Filter 135-1
Lubricate ILS™ U-Joints (If Equipped) 120-11	Replace Diesel Exhaust Fluid (DEF) Tank Vent- FT4/Stage IV Engines 135-2
Tighten Wheel and Wheel Weight Bolts 120-11	Drain Differential..... 135-3
Use Wheel Tightening Stand 120-12	Drain 16-Speed PowerShift Transmission (PST) and Clean Filter 135-3
Wheel Torque Wrench Adapter 120-13	Drain IVT™/AutoPowr™ and e23™ Transmissions and Clean Transmission Filter 135-4
Tighten Rear Wheel Weight Bolts..... 120-14	
Tighten Front Wheel Bolts 120-14	
Tighten Rear Drive Wheel to Cast Hub Bolts .. 120-15	
Tighten Rear Steel Wheel to Hub Bolts 120-15	
Tighten Rear Steel Wheels—Cast Hub Bolts .. 120-16	

Continued on next page

	Page
Drain Independent Link Suspension (If Equipped).....	135-6
Clean Hydraulic Oil Suction Screen	135-6
Replace Transmission-Hydraulic Filter and Refill Transmission-Hydraulic Oil	135-7
Change MFWD or Independent Link Suspension Wheel Hub Oil	135-8
Change MFWD Axle Housing Oil	135-9
Lubricate Draft Link Support Shaft Bushing ...	135-10
Inspect Auxiliary Drive Belt and Drive Belt Tensioner	135-10
Check Independent-Link Suspension™ Upper and Lower Rod and Head End Accumulator Charge Pressure (If Equipped).....	135-10
Lubricate Independent Link Suspension Axle—Tie Rod Internal Ball Joints (If Equipped)	135-11
Replace Trailer Air Brake Dryer Filter (If Equipped).....	135-13
2000 Hour Service	
Perform This and Other Scheduled Services ...	140-1
Adjust Engine Valve Clearance - Tier 2 and Stage II Engines	140-1
3000 Hour Service	
Perform This and Other Scheduled Services ...	142-1
Adjust Engine Valve Clearance—Final Tier 4 and Stage IV Engines	142-1
4500 Hour Service	
Perform This and Other Scheduled Services ...	145-1
Access Diesel Exhaust Fluid (DEF) Dosing Unit and Tank Vent Filters - Final Tier 4 and Stage IV Engines.....	145-1
Changing Diesel Exhaust Fluid (DEF) Dosing Unit Filter.....	145-2
5000 Hour Service	
Perform This and Other Scheduled Services ...	148-1
Replace Engine Crankshaft Damper	148-1
Replace Transmission Torsional Damper	148-1
6000 Hour Service	
Perform This and Other Scheduled Services ...	150-1
Draining, Flushing and Refilling Cooling System	150-2
General Service	
Jack Up the Tractor - Lifting Points and Support Stand Placement	155-1
Servicing and Connecting Snap to Connect Fittings.....	155-3
Using High-Pressure Washers	155-3
Diesel Particulate Filter Service.....	155-4

Exhaust Filter/Diesel Particulate Filter (DPF) Ash Handling and Disposal	155-4
Exhaust Filter Disposal	155-5
Do Not Modify Fuel System.....	155-5
Do Not Open High-Pressure Fuel System.....	155-5
Bleed Fuel System	155-5
Identify Zinc-Flake Coated Fasteners.....	155-6
Unified Inch Bolt and Screw Torque Values.....	155-6
Metric Bolt and Screw Torque Values.....	155-7

Electrical System Service

Introduction to Electrical Service Section	160-1
Disconnect Battery - Final Tier 4 and Stage IV Engines	160-1
Load Center Fuses	160-1
Master Fuses.....	160-5
Welding Near Electronic Control Units	160-6
Keep Electronic Control Unit Connectors Clean	160-6
Using Compressed Air.....	160-6
Using High-Pressure Washers	160-7
Service Implement Power Relay Module.....	160-8
Handle Halogen Light Bulbs Safely	160-9
Replace Front HID/LED Light Assembly	160-9
Replace Front Grille Halogen Light Bulbs	160-10
Adjust Front Grille Lights	160-11
Aim Headlights	160-12
Replace Front, Side And Rear Cab Roof Light Assembly	160-13
Replace Brake or Turn Signal Light Bulb	160-13
Replace Dome Light Bulb.....	160-14
Replace Courtesy Light Bulb	160-15
Replace Map Light Bulb	160-16
Replace Extremity Warning Light Bulb (If Equipped).....	160-17

Troubleshooting

Engine	165-1
Transmission	165-5
Hydraulic System.....	165-6
Hitch	165-7
Selective Control Valves.....	165-9
Depth Control	165-10
Electrical System	165-11
Operator Enclosure	165-13
Tractor Operation	165-14
Independent Link Suspension	165-15
Steering	165-16
Premium Radio.....	165-17

Diagnostic Trouble Codes

STOP, Service Alert, and Information Indicators.....	170-1
Accessing Diagnostic Trouble Codes.....	170-3

Continued on next page

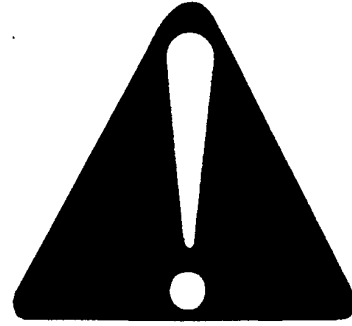
	Page
Storage	
Place Tractor in Storage	175-1
Long-Term Storage	175-2
Paint Finish Care	175-2
Specifications	
Engine	180-1
Electrical System	180-1
Capacities	180-2
Hydraulic System	180-2
Transmission and Power Train	180-3
Hitch, Drawbar and PTO	180-4
Other Equipment	180-5
Overall Tractor Dimensions	180-6
Ground Speeds With 16 Speed	
PowerShift Transmission 42 km/h	
(26 mph) (8245R, 8270R, 8295R, 8320R) ...	180-7
Ground Speeds With e23™	
Transmission 42 km/h (26 mph)	180-8
Ground Speeds With e23™	
Transmission 50 km/h (31 mph)	180-9
Ground Speeds With —	
IVT™/AutoPowr™ Transmission	180-10
Emissions Control System Certification	
Label	180-11
EPA Non-road Emissions Control	
Warranty Statement—Compression	
Ignition	180-12
CARB Non-road Emissions Control	
Warranty Statement—Compression	
Ignition	180-14
Limited Battery Warranty	180-22
Identification Numbers	
Serial Number Plates	185-1
Keep Proof of Ownership	185-6
Keep Machines Secure	185-6
Lubrication and Maintenance Records	
Service Records	
Daily	190-1
50 Hours	190-1
250 Hours	190-1
500 Hours	190-2
1000 Hours	190-2
Annually	190-3
1500 Hours	190-3
2000 Hour Service Record — Tier	
2/Stage II Engines Only	190-4
3000 Hour Service Record —	
FT4/Stage IV Engines Only	190-4
4500 Hours	190-4
5000 hours	190-5
6000 Hours	190-5
Glossary	
Glossary of Terms	195-1

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

TS1389 —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.

 **DANGER**

 **WARNING**

 **CAUTION**

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

TS187 —19—30SEP88

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

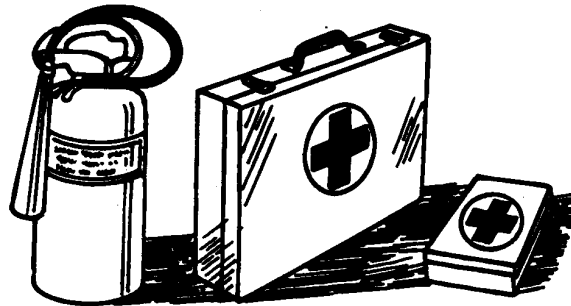
TS201 —UN—15APR13

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.



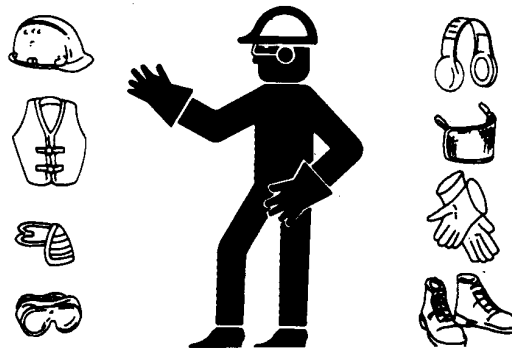
TS291 —UN—15APR13

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.



TS206 —UN—15APR13

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.



TS207 —UN—23AUG88

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

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

TS202 —UN—23AUG88

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

TS1356 —UN—18MAR92

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

In Case of Fire

CAUTION: Avoid personal injury.

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

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

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

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



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

DX,FIRE4 -19-22AUG13-1/1

TS227 —UN—15APR13

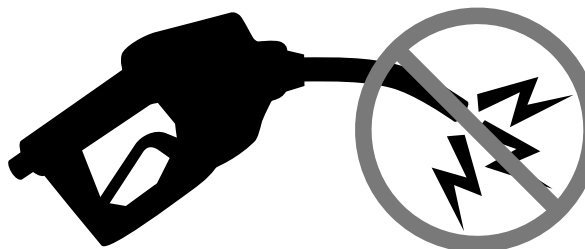
Avoid Static Electricity Risk When Refueling

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

RG22142 —UN—17MAR14

RG21992 —UN—21AUG13

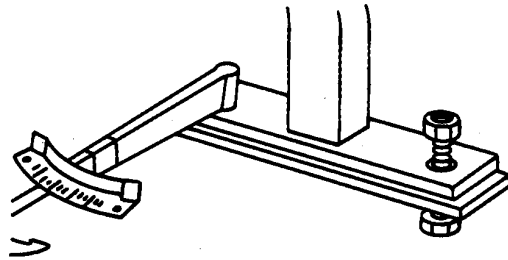
Keep ROPS Installed Properly

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.



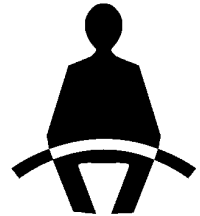
DX,ROPS3 -19-12OCT11-1/1

TS212 —UN—23AUG88

Use Foldable ROPS and Seat Belt Properly

Avoid crushing injury or death during rollover.

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



DX,FOLDROPS -19-22AUG13-1/1

TS1729 —UN—24MAY13

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.

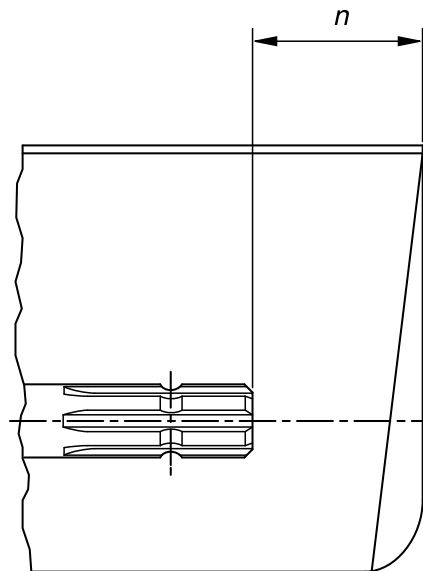
Do not install any adapter device between the tractor and the primary implement PTO drive shaft that will allow a 1000 rpm tractor shaft to power a 540 rpm implement at speeds higher than 540 rpm.

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	$n \pm 5 \text{ mm (0.20 in.)}$
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.)



TS1644 —UN—22AUG95



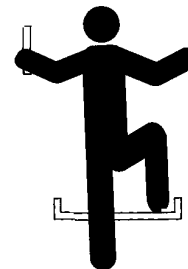
H96219 —UN—29APR10

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.



T133488 —UN—15APR13

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

Use Seat Belt Properly

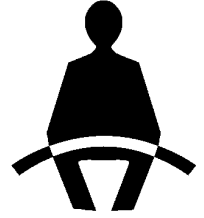
Avoid crushing injury or death during rollover.

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

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

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

Inspect seat belt and mounting hardware at least once a year. Look for signs of loose hardware or belt damage, such as cuts, fraying, extreme or unusual wear,



discoloration, or abrasion. Replace only with replacement parts approved for your machine. See your John Deere dealer.

DX,ROPS1 -19-22AUG13-1/1

TS1729 —UN—24MAY13

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

Driving Concerns

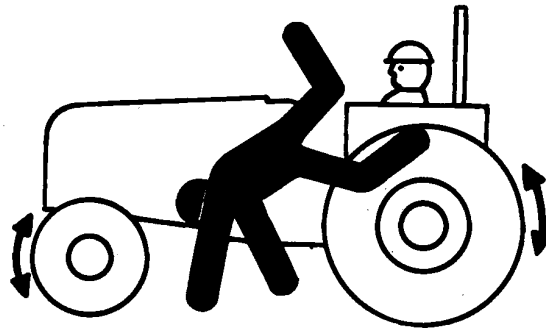
- Never get on or off a moving tractor.
- Keep all children and nonessential personnel off tractors and all equipment.
- Never ride on a tractor unless seated on a John Deere approved seat with seat belt.
- Keep all shields/guards in place.
- Use appropriate visual and audible signals when operating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

Towing Loads

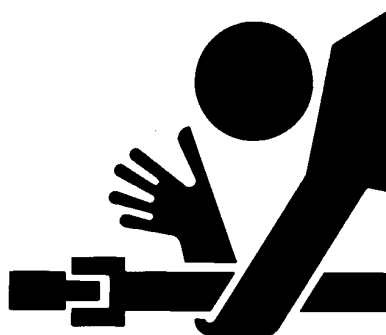
- Be careful when towing and stopping heavy loads. Stopping distance increases with speed and weight of towed loads, and on slopes. Towed loads with or without brakes that are too heavy for the tractor or are towed too fast can cause loss of control.
- Consider the total weight of the equipment and its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



TS290—UN—23AUG88



TS276—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,VW,TRACTOR -19-21AUG09-1/1

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 quarters.

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



PC10857XW —UN—15APR13

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.

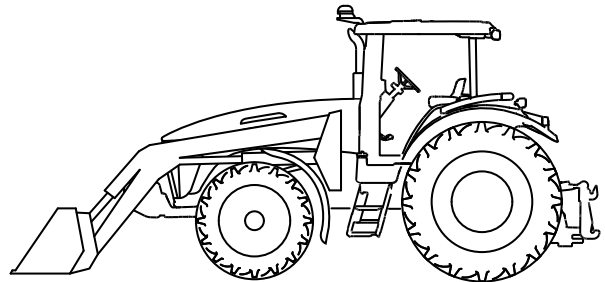
Never allow anyone to walk or work under a raised loader.

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



TS1692 —UN—09NOV09

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 clammers).

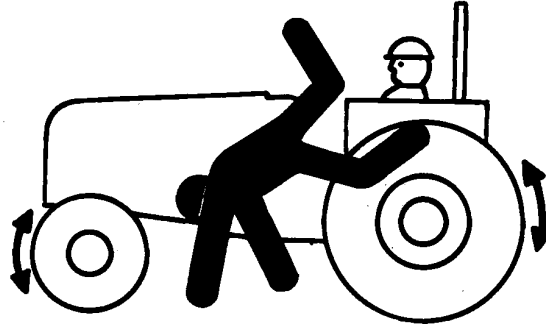
Ballast tractor in accordance to Ballast Recommendations in PREPARE TRACTOR section.

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

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.

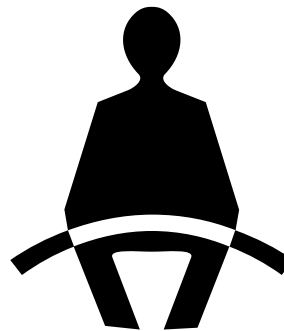


TS290 —UN—23AUG88

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.



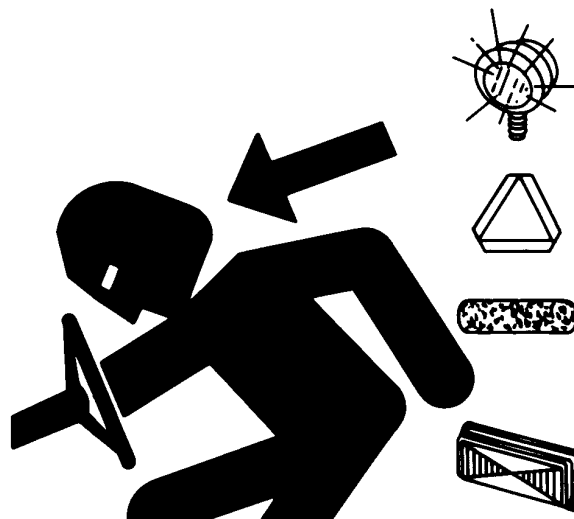
TS1730 —UN—24MAY13

DX,SEAT,NA -19-22AUG13-1/1

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.



TS951 —UN—12APR90

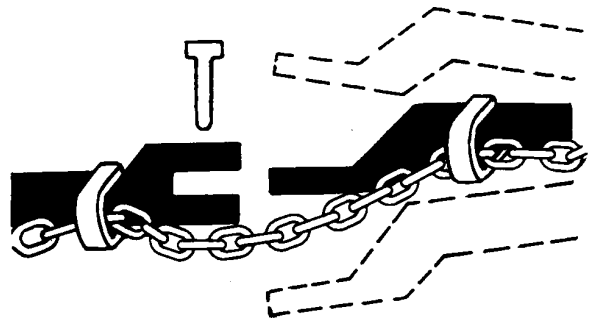
DX,FLASH -19-07JUL99-1/1

Use a Safety Chain

A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning.

See your John Deere dealer for a chain with a strength rating equal to or greater than the gross weight of the towed machine. Do not use safety chain for towing.



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

TS217 —UN—23AUG88

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:

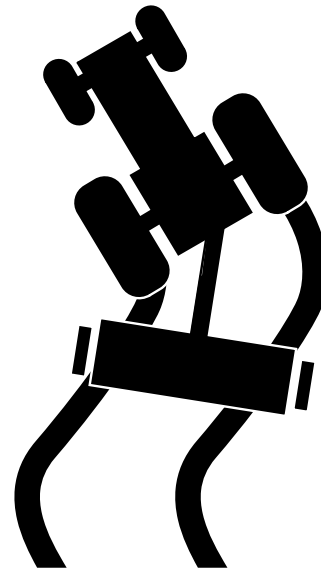
- Loss of control of the tractor/implement combination
- Reduced or no ability to stop during braking
- Implement tire failure
- Damage to the implement structure or its components

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

TS1686 —UN—27SEP06

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.

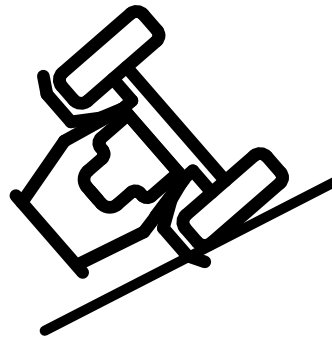
Danger of overturn increases greatly with narrow tread setting, at high speed.

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

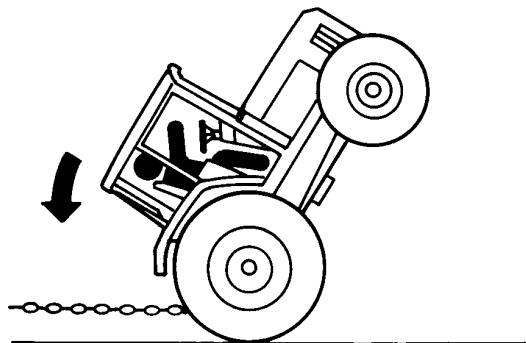
Freeing a Mired Machine

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.



TS1645 —UN—15SEP95



TS263 —UN—23AUG88

DX,MIREO -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

TS220 —UN—15APR13

TS272 —UN—23AUG88

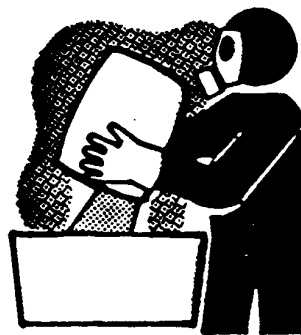
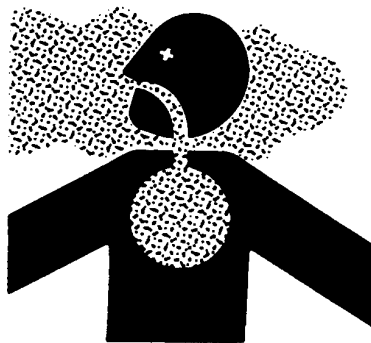
Handle Agricultural Chemicals Safely

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.



A34471

- 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.

TS220 —UN—15APR13

A34471 —UN—11OCT88

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 level.

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

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

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

Avoid hazards by:

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

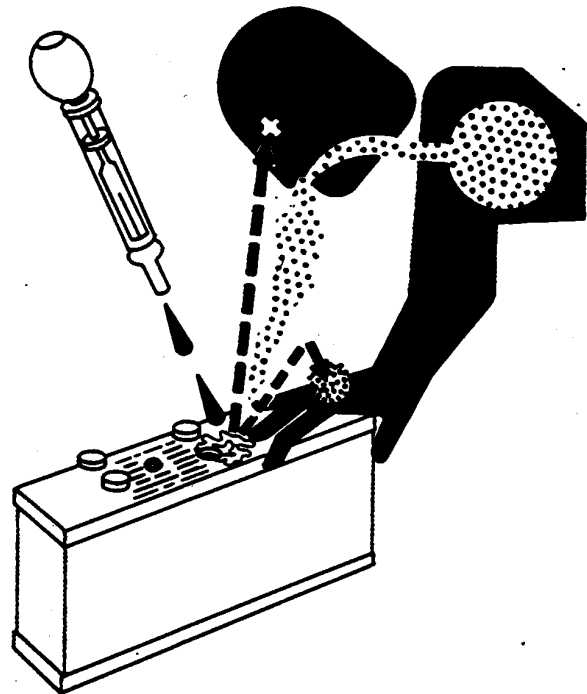
If acid is spilled on skin or in eyes:

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

If acid is swallowed:

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

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



TS204 —UN—15APR13

TS203 —UN—23AUG88

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

TS953 —UN—15MAY90

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

TS220 —UN—15APR13

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

TS249 —UN—23AUG88

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.



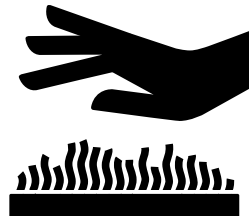
TS218 —UN—23AUG88

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.



RG17488 —UN—21AUG09

DX,EXHAUST -19-20AUG09-1/1

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.

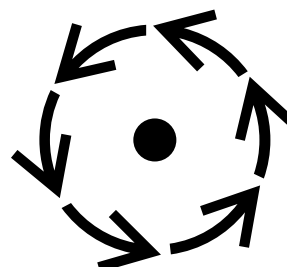
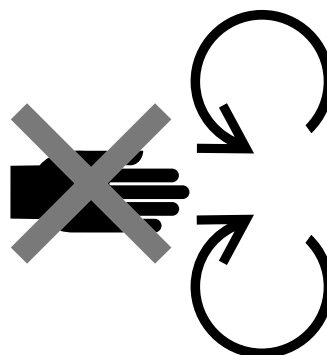
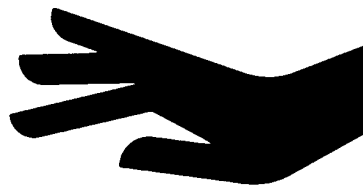
If service procedure requires engine to be running:

- 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.



STOP

TS227 —UN—15APR13

TS271 —UN—23AUG88

TS1683 —UN—09DEC09

TS1685 —UN—07DEC09

DX,EXHAUST,FILTER -19-12JAN11-1/1

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

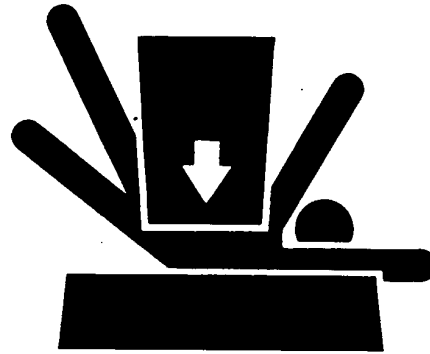
TS220 —UN—15APR13

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

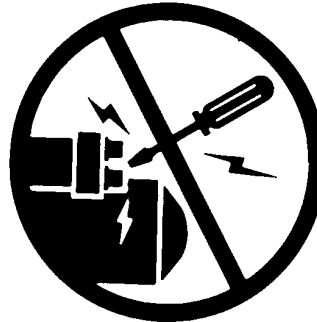
TS229 —UN—23AUG88

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.



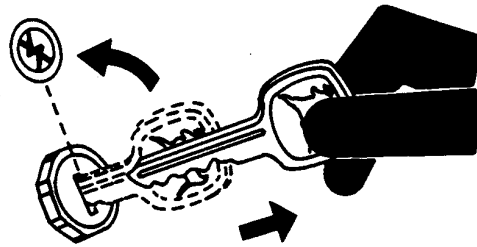
DX,BYPAS1 -19-29SEP98-1/1

TS177 —UN—11JAN89

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.



TS230 —UN—24MAY89

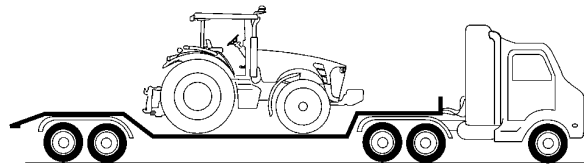
DX,PARK -19-04JUN90-1/1

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.



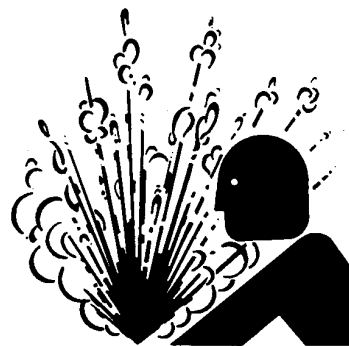
RXA0103709 —UN—01JUL09

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.



TS281 —UN—15APR13

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

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.



T5281 —UN—15APR13

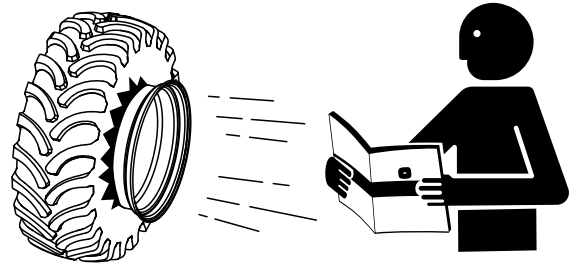
DX,WW,ACCL2 -19-22AUG03-1/1

Follow Tire Recommendations

Keep your machine in proper working order.

Use only prescribed tire sizes with correct ratings and inflate to the pressure specified in this manual.

Use of other than prescribed tires may decrease stability, affect steering, result in premature tire failure, or cause other durability or safety issues.



H111235 —UN—13MAY14

DX,TIRE,INFO -19-19MAY14-1/1

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.

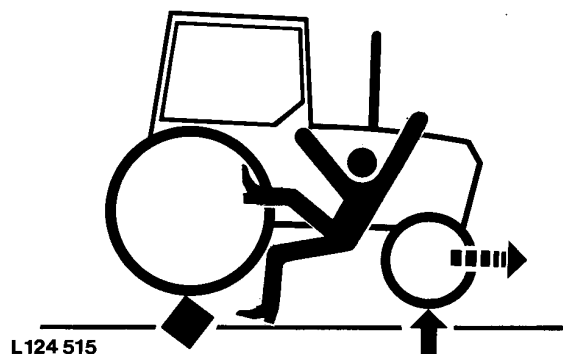


RXA0103438 —UN—11JUN09

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.



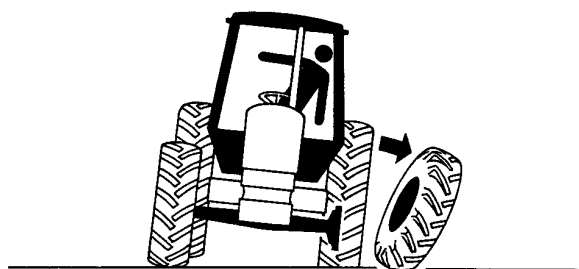
L124 515

L124515 —UN—06AUG94

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

Tightening Wheel Retaining Bolts/Nuts

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



L124 516

L124516 —UN—03JAN95

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

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.

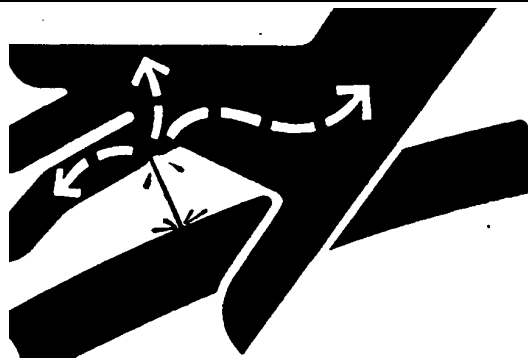
Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

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.

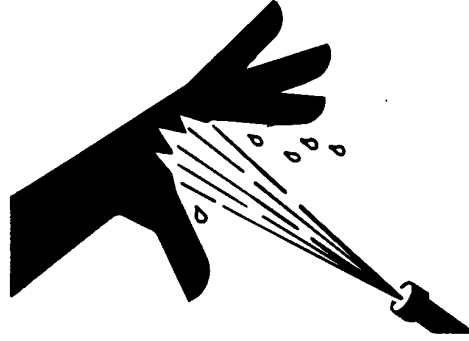
X9811 —UN—23AUG88

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.)



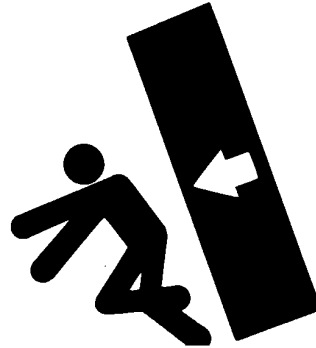
TS1343 —UN—18MAR92

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

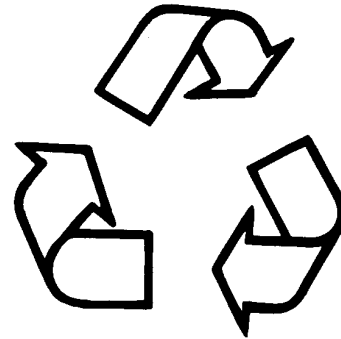
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with John Deere equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

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.



TS1133 —UN—15APR13

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

Safety Signs

Operator's Manual



RXA0143795 —UN—18JUL14

CAUTION

1. Read Operator's Manual before operating this tractor.
2. Keep all shields in place.
3. Hitch towed loads only to drawbar to avoid rearward upset.
4. Make certain everyone is clear of machine before starting engine or operation.
5. Keep all riders off tractor and equipment.
6. Keep hands, feet and clothing away from power-driven parts.
7. Reduce speed when turning or applying individual brakes or operating around hazards, on rough ground or steep slopes.
8. Couple brake pedals together for road travel.
9. Use flashing warning lights on highway unless prohibited by law.
10. Stop engine, lower implement to ground and shift to "PARK" or set handbrake securely before dismounting.
11. Wait for all movement to stop before servicing machinery.
12. Remove key if leaving tractor unattended.

RXA0143458 —19—09JUL14

A—Before Operating Tractor
Label

RD47322,0000689 -19-13AUG14-1/1

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