

# 9100, 9200, 9300, and 9400 Tractors (Serial No. 40,001- )



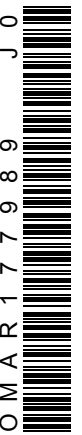
JOHN DEERE

## OPERATORS MANUAL 9100, 9200, 9300, and 9400 Tractors (Serial No. 40,001- )

OMAR177989 Issue J0 English

**John Deere Waterloo Works**  
**OMAR177989 Issue J0**  
North American Edition

LITHO IN U.S.A.  
ENGLISH



# 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 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.

### 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.

**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.**

AG,RF30435,1984 -19-19JUL00-1/2

Introduction



RW26040 -JUN-26MAR99

AG,RF30435,1984 -19-19JUL00-2/2

## Quick Reference Specifications

### CAPACITIES (Approximate):

**Fuel Tank** ..... 1025 L (270 gal)

### Cooling System:

.. 9100 ..... 58 L (14.5 gal)  
 .. 9200 ..... 60 L (16 gal)  
 .. 9300 ..... 60 L (16 gal)  
 .. 9400 ..... 60 L (16 gal)

### Crankcase with Filter:

.. 9100 ..... 30 L (8 gal)  
 .. 9200 ..... 42 L (11 gal)  
 .. 9300 ..... 42 L (11 gal)  
 .. 9400 ..... 42 L (11 gal)

### Transmission:

.. 12-Speed and 24-Speed Without PTO ..... 129 L (34 gal)  
 .. Powershift Without PTO ..... 51 L (13.5 gal)  
 .. Axles (Powershift) ..... 102 L (27 gal)

### Hydraulic System:

.. Without Hitch ..... 98 L (26 gal)  
 .. With Hitch ..... 102 L (27 gal)

### ROUTINE MAINTENANCE PARTS:

#### Filters:

##### Engine:

.. Oil Filter (9100) ..... RE57394  
 .. Oil Filter (9200-9300-9400) ..... RE58935  
 .. Fuel Primary Filter (9100) ..... RE65431  
 .. Fuel Secondary Filter (9100) ..... AR86745  
 .. Fuel Filter (9200-9300-9400) ..... RE504496  
 .. Fuel Pre-filter ..... RE38818  
 .. Air Primary Filter ..... RE63931  
 .. Air Secondary Filter ..... RE63932

##### Cab:

.. Air Filter ..... RE24619  
 .. Recirculation Air Filter ..... R120501  
 Transmission and Hydraulic Filters ..... RE51797  
 Powershift Axle Filter ..... AL77061

#### Belts:

.. A/C Compressor (9100) ..... R500093  
 .. A/C Compressor (9200-9300-9400) ..... R135607  
 .. Fan Drive (9100) ..... R500093  
 .. Fan Drive (9200-9300-9400) ..... R134632

**Batteries** ..... TY6128

# Contents

	Page		Page
<b>Safety</b> .....	05-1	<b>Break-In Period</b>	
<b>Safety Signs</b> .....	10-1	Engine .....	30-1
<b>Controls and Instruments</b>		Filter Changes .....	30-1
Front Console .....	15-1	<b>Operating the Engine</b>	
Shift and PTO Levers .....	15-2	Pre-starting Checks .....	35-1
Armrest Controls .....	15-3	Starting the Engine .....	35-1
Side Console .....	15-4	Cold Weather Starting .....	35-4
Corner Post Display .....	15-4	Engine Coolant Heater .....	35-6
Vehicle Monitor .....	15-5	Booster Battery/Charger .....	35-7
Changing Display Functions .....	15-8	<b>Operating the Tractor</b>	
Calibrating Tire Size .....	15-10	Avoid Pesticides .....	40-1
Calibrating Radar .....	15-11	Seat Belts .....	40-2
Performance Monitor .....	15-12	Instructional Seat .....	40-2
<b>Lights</b>		Drivetrain Protection - 9400 .....	40-2
Lights .....	20-1	Transmission-Hydraulic System Warm-Up .....	40-3
Turn Signals, Horn, and High/Low Beam .....	20-2	Transmission Operation .....	40-4
Delayed Egress Lighting .....	20-2	Powershift Disable Mode .....	40-11
Hazard Lights .....	20-2	Powershift Status Codes .....	40-12
Field Lights .....	20-3	Brakes .....	40-14
Extremity Transport Warning Lights .....	20-3	Field Cruise and Foot Decelerator .....	40-14
Seven-Terminal Outlet .....	20-4	Differential Lock .....	40-15
<b>Operator Station</b>		<b>Implement Management System</b>	
Seat .....	25-1	Description .....	45-1
Armrest Control .....	25-2	Display Codes .....	45-2
Seat .....	25-2	Functions .....	45-3
Air Flow and Temperature .....	25-2	Operation .....	45-5
Windshield Wipers/Washer .....	25-5	<b>Hydraulics and Selective Control Valves</b>	
Steering Wheel .....	25-6	Tractor Hydraulics .....	50-1
Radio .....	25-7	Hydraulic Hoses .....	50-2
Cassette Player .....	25-10	SCV Operation .....	50-4
Compact Disc Player .....	25-11	Operator Presence Sensor .....	50-13
Clock .....	25-11	<b>Remote Hydraulic Connections</b>	
Field Office .....	25-12	Hydraulic Component Identification .....	55-1
GreenStar Connections .....	25-13	Hydraulic Implements .....	55-3
Accessory Electrical Outlets .....	25-14	Hydraulic Motor Case Drain Return .....	55-4
Auxiliary Power Strip .....	25-15	Power Beyond .....	55-4
Mobile Radio and Antenna .....	25-16		
Monitor Mounts .....	25-18		

**Continued on next page**

*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 © 2000  
DEERE & COMPANY  
Moline, Illinois  
All rights reserved  
A John Deere ILLUSTRATION® Manual

## Contents

	Page		Page
Hydraulic Spray Pumps . . . . .	55-7	Towing Loads . . . . .	85-2
Implement Connections . . . . .	55-8	Carrier Transport . . . . .	85-4
<b>Drawbar and PTO</b>		Towing Tractor . . . . .	85-5
Drawbar . . . . .	60-1	<b>Fuels, Lubricants, and Coolants</b>	
PTO . . . . .	60-3	Diesel Fuel . . . . .	90-1
<b>TouchSet Depth/Scraper Control</b>		Fuel Tank . . . . .	90-2
TouchSet Scraper Control . . . . .	65-1	Engine Oil . . . . .	90-3
TouchSet Depth Control . . . . .	65-1	Oil Filters . . . . .	90-4
<b>Hitch</b>		Coolant . . . . .	90-5
Hitch Components . . . . .	70-1	Transmission and Hydraulic Oil . . . . .	90-7
Controls . . . . .	70-1	Grease . . . . .	90-8
Height Limit . . . . .	70-3	Lubricants . . . . .	90-8
Rate of Drop . . . . .	70-3	<b>Maintenance and Service Intervals</b>	
External Raise/Lower Switch . . . . .	70-3	Service Intervals . . . . .	95-1
Manual Lowering Feature . . . . .	70-4	Hood . . . . .	95-3
Load/Depth Control . . . . .	70-5	Front Grille . . . . .	95-4
Position Control . . . . .	70-5	Side Shields . . . . .	95-5
Float Position . . . . .	70-5	Batteries . . . . .	95-6
Draft Control . . . . .	70-6	High-Pressure Washer . . . . .	95-6
Hitch Slip Command . . . . .	70-7	Compressed Air . . . . .	95-6
Sway Blocks . . . . .	70-8	<b>General Maintenance and Inspection</b>	
Quick Coupler . . . . .	70-9	Tires and Wheel Bolts . . . . .	100-1
Implement Level . . . . .	70-11	Neutral Start System . . . . .	100-1
Lateral Float . . . . .	70-11	Transmission PARK Position . . . . .	100-2
Hitch Conversion . . . . .	70-12	Engine Air Filters . . . . .	100-3
<b>Performance Ballasting</b>		Cab Air Filter . . . . .	100-5
Guidelines . . . . .	75-1	Grille Screens, Radiator, and Oil Cooler . . . . .	100-6
Implement Guidelines . . . . .	75-2	Batteries . . . . .	100-7
Performance Guidelines . . . . .	75-3	Belt Tensioners . . . . .	100-9
Power Hop . . . . .	75-4	Manual Brakes . . . . .	100-10
Calculating Ballast . . . . .	75-5	Seat Belts . . . . .	100-10
Unballasted Tractor Weight Chart . . . . .	75-7	Air Conditioner . . . . .	100-11
Wheel Slip . . . . .	75-13	Engine Crankshaft Damper . . . . .	100-12
Ballast . . . . .	75-15	Transmission Drive Shaft Damper . . . . .	100-12
Liquid Ballast . . . . .	75-16	<b>Lubrication</b>	
Cast Ballast . . . . .	75-17	Engine Oil and Filter . . . . .	105-1
<b>Wheels, Tires, and Treads</b>		Transmission Oil and Filter . . . . .	105-3
Tire Combinations . . . . .	80-1	Transmission and Axle Oil . . . . .	105-4
Inflation Pressure Guidelines . . . . .	80-2	Transmission Oil and Filter . . . . .	105-6
Tire Inflation Pressures . . . . .	80-3	Axle Oil and Filter . . . . .	105-7
Correct Tire Usage . . . . .	80-7	Hydraulic Oil and Filter . . . . .	105-9
Tread Width . . . . .	80-8	Hydraulic Reservoir Screen . . . . .	105-11
Wheel Bolts . . . . .	80-10	Hinge Pins . . . . .	105-11
Adjusting Wheels . . . . .	80-11	Hitch Components . . . . .	105-12
Steering Stops . . . . .	80-13	Driveshafts . . . . .	105-13
<b>Transport</b>		PTO . . . . .	105-14
Road Transport . . . . .	85-1	Hitch Sensor . . . . .	105-14

Continued on next page

Contents

	Page		Page
<b>Maintenance—Cooling System</b>		<b>Lubrication and Maintenance Records</b>	
Coolant Level . . . . .	110-1	Service Records	
Coolant Condition . . . . .	110-1	250 Hour . . . . .	150-1
Drain, Flush, and Refill Cooling System . . . . .	110-2	750 Hour . . . . .	150-1
		1500 Hour . . . . .	150-2
		Annual . . . . .	150-2
		Two Year . . . . .	150-2
		4500 Hour . . . . .	150-3
<b>Maintenance—Fuel System</b>		<b>Glossary</b>	
Water Separator . . . . .	115-1	Glossary of Terms . . . . .	155-1
Fuel Filters . . . . .	115-1		
Fuel Tank Vent . . . . .	115-4		
Fuel Tank Sump . . . . .	115-4		
<b>Maintenance—Electrical System</b>		<b>Crime Prevention Tips</b>	
Fuses and Relays . . . . .	120-1	Help Prevent Crime . . . . .	160-1
Front Lights . . . . .	120-3	Record Ag Identification Numbers . . . . .	160-1
Hazard Lights . . . . .	120-5	Keep Proof of Ownership . . . . .	160-1
Roof Flood Lights . . . . .	120-5	Park Indoors Out of Sight . . . . .	160-1
Fender Flood Lights . . . . .	120-6	When Parking Outdoors . . . . .	160-2
Extremity Warning Lights . . . . .	120-6	Reduce Vandalism . . . . .	160-2
		Report Thefts Immediately . . . . .	160-3
<b>Troubleshooting</b>		<b>John Deere Service Literature Available . . .</b> SLIT-1	
Engine . . . . .	125-1		
Transmission . . . . .	125-4	<b>John Deere Service Keeps You On</b>	
Hydraulic System . . . . .	125-5	<b>  The Job . . . . .</b> IBC-1	
Brakes . . . . .	125-5		
Hitch . . . . .	125-6		
Selective Control Valves . . . . .	125-8		
Scraper Control . . . . .	125-9		
Electrical System . . . . .	125-10		
Operator Enclosure . . . . .	125-12		
<b>Service Codes</b>			
Armrest Control (ACU) . . . . .	130-1		
Central Control Unit (CCU) . . . . .	130-2		
Engine Control Unit (ECU) . . . . .	130-6		
Hitch Control Unit (HCU) . . . . .	130-9		
Instrument Control Unit (ICU) . . . . .	130-10		
Optional SCV Control Unit (SCo) . . . . .	130-11		
SCV Control Unit (SCU) . . . . .	130-12		
SCV Setup Panel (SUP) . . . . .	130-13		
<b>Storage</b>			
Long-Term Storage . . . . .	135-1		
Paint Finish Care . . . . .	135-2		
<b>Specifications</b>			
General Specifications . . . . .	140-1		
Overall Dimensions . . . . .	140-3		
Ground Speeds . . . . .	140-4		
Torque Charts . . . . .	140-6		
Battery Warranty . . . . .	140-8		
<b>Identification Numbers</b>			
Serial Number Plates . . . . .	145-1		

*Contents*

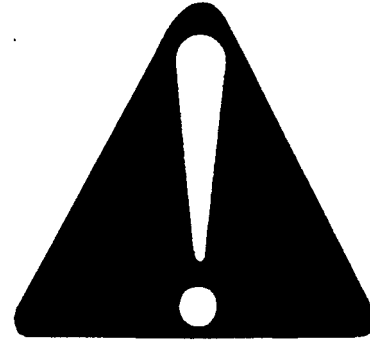


# Safety

## Recognize Safety Information

This is the 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 -19-03MAR93-1/1

T81389 -UN-07DEC88

## 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.



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

TS187 -19-30SEP88

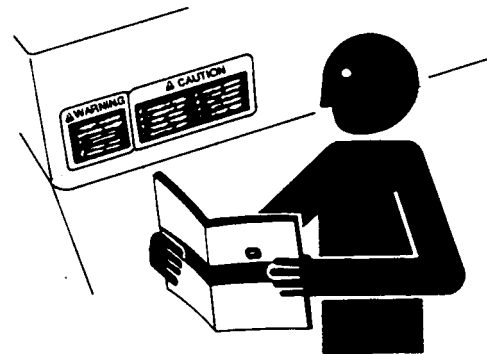
## Follow Safety Instructions

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.

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 -19-03MAR93-1/1

TS201 -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.



TS177 -UN-11JAN89

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

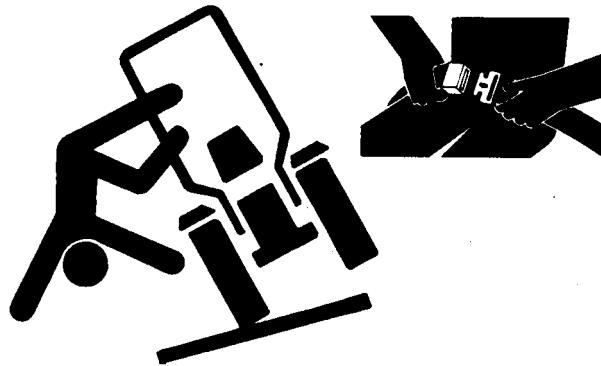
## Use Seat Belt Properly

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.



TS205 -UN-23AUG88

DX,ROPS1 -19-07JUL99-1/1

## Operating the Tractor Safely



TS213 -UN-23AUG88



TS276 -UN-23AUG88

Careless use of the tractor can result in unnecessary accidents. Be alert to hazards of tractor operation. Understand causes of accidents and take every precaution to avoid them. Most common accidents are caused from:

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

Avoid accidents by taking the following precautions:

- Put transmission speed-shift lever in NEUTRAL and range-shift lever in PARK before dismounting. Leaving transmission in gear with engine stopped will NOT prevent the tractor from moving.
- Be sure everyone is clear of tractor and attached equipment before starting engine.
- Never try to get on or off a moving tractor.
- When tractor is left unattended, put speed-shift lever in NEUTRAL and range-shift lever in PARK, lower implements to the ground, stop the engine, and remove the key.
- Never go near an operating PTO or an operating implement.
- Always fasten your seat belt.

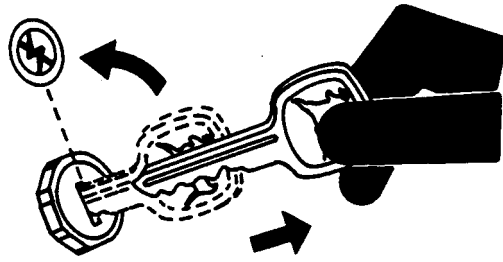
AG,RF30435,1986 -19-18NOV99-1/1

## Stopping and Parking Tractor

Tractor roll-over, collisions, runaway tractors, and people being crushed under machines and implements can happen when operators ignore safety.

To avoid these accidents, take some precautions:

- Signal before stopping, turning, or slowing down on public roads
- Pull over to side of road before stopping
- Slow down before braking
- Pump brakes when stopping on slippery surfaces
- Be careful when towing and stopping heavy loads
- Shift speed-shift lever to NEUTRAL and range-shift lever to PARK position
- Lower all equipment when leaving tractor
- Remove key
- Lock wide-swing drawbar into solid or transport position



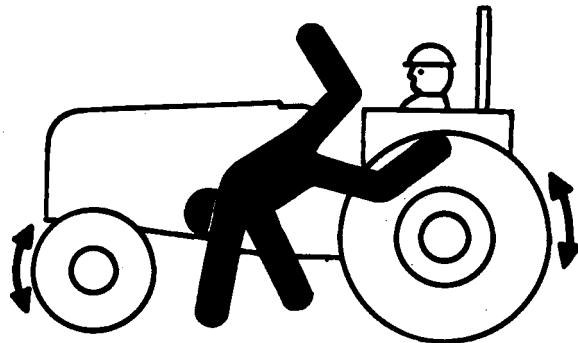
TS230 -UN-24MAY89

AG,RF30435,1987 -19-18NOV99-1/1

## 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

### 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.



TS202 -UN-23AUG88

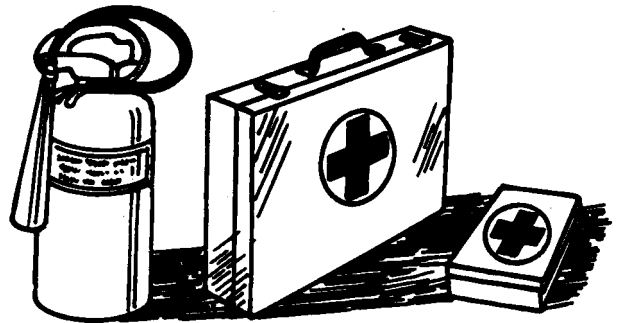
DX,FIRE1 -19-03MAR93-1/1

### 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-23AUG88

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

### 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.



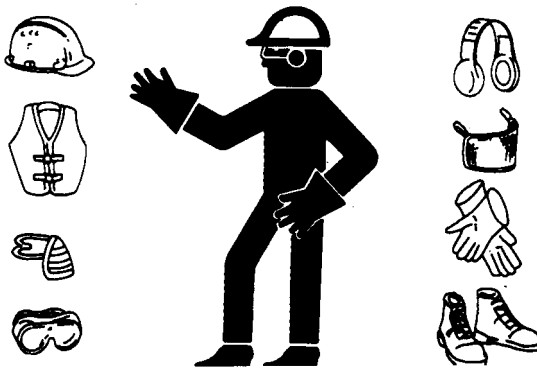
TS1356 -UN-18MAR92

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

### 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

TS206 -UN-23AUG88

### 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

TS207 -UN-23AUG88

### Handle Chemical Products Safely

Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with John Deere equipment include such items as lubricants, coolants, paints, and adhesives.

A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.

Check the MSDS before you start any job using a hazardous chemical. That way you will know exactly what the risks are and how to do the job safely. Then follow procedures and recommended equipment.

(See your John Deere Dealer for MSDS's on chemical products used with John Deere equipment.)



DX,MSDS,NA -19-03MAR93-1/1

TS1132 -UN-26NOV90

### Avoid Contact with Pesticides

This enclosed cab does not protect against inhaling harmful pesticides. 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.



TS220 -UN-23AUG88



TS272 -UN-23AUG88

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

### 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 PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.



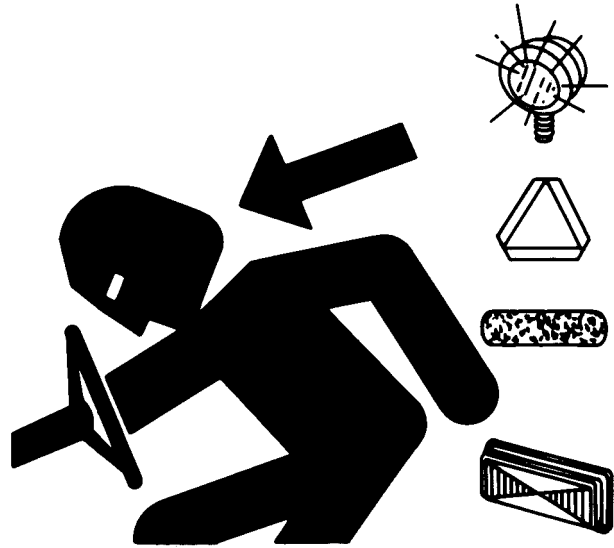
TS1644 -UN-22AUG95

DX,PTO -19-12SEP95-1/1

## 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 head lights, 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-12APR80

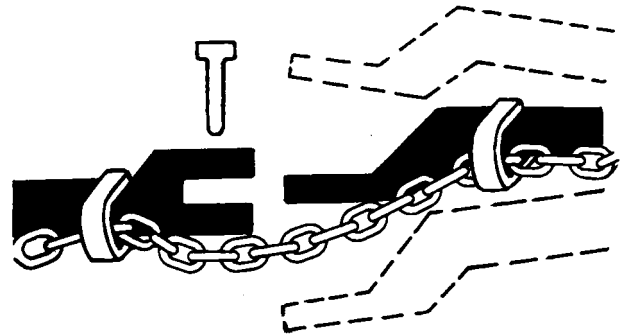
DX,FLASH -19-07JUL99-1/1

## 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.



TS217 -UN-23AUG88

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



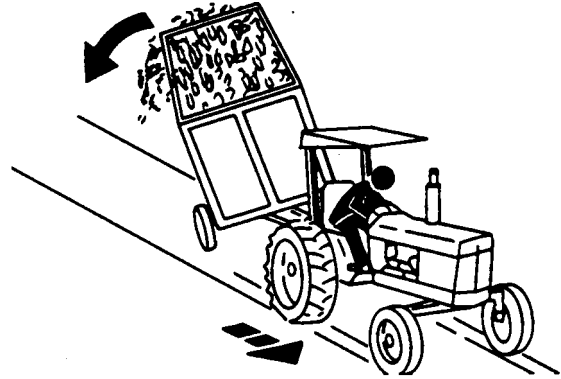
## Tow Loads Safely

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.

Observe these recommended maximum road speeds, or local speed limits which may be lower:

- If towed equipment does not have brakes, do not travel more than 32 km/h (20 mph) and do not tow loads more than 1.5 times the tractor weight.
- If towed equipment has brakes, do not travel more than 40 km/h (25 mph) and do not tow loads more than 4.5 times the tractor weight.

The load must not exceed the recommended weight ratio. Add ballast to recommended maximum for tractor, lighten the load, or get a heavier towing unit. The tractor must be heavy and powerful enough with adequate braking power for the towed load. Use additional caution when towing loads under adverse surface conditions, when turning, and on inclines.



TS216 -UN-23AUG88

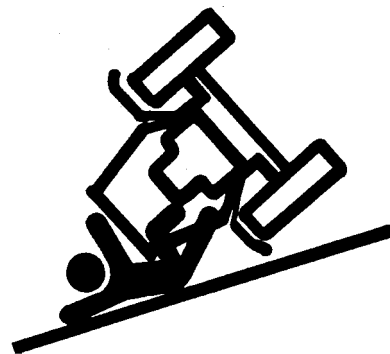
DX,TOW -19-02OCT95-1/1

## Use Caution on Hillsides

Avoid holes, ditches, and obstructions which can cause tractor roll-over, especially on hillsides. Avoid sharp turns on hills.

Never drive near the edge of a gully or steep embankment.

Driving 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.



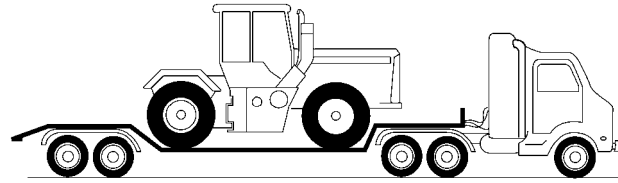
RW13093 -UN-07DEC88

AG,RF30435,1988 -19-18NOV99-1/1

## Transport Tractor Safely

Transport a disabled tractor on a flat-bed carrier. Securely chain tractor to carrier.

If towing a tractor, never tow faster than 8 km/h (5 mph). Have an operator steer and brake tractor. Always haul the tractor if long distance moving is required.



RW26778 -JUN-01FEB00

AG,RX15494,2339 -19-02FEB00-1/1

## 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 -JUN-23AUG88

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

## 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.



TS218 -UN-23AUG88

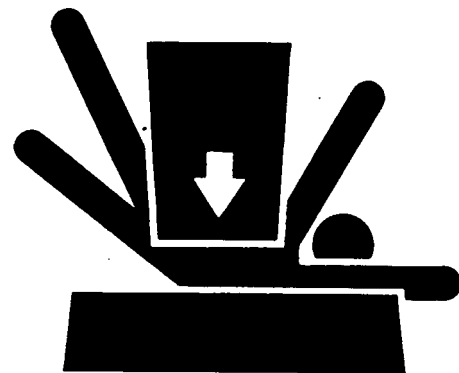
DX.SERV -19-17FEB99-1/1

## Support Machine Properly

Always lower the attachment or implement to the ground before you work on the machine. If you must work on a lifted machine or attachment, securely support the machine or attachment. 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 can 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 tractor, always follow safety precautions listed in the implement operator's manual.



TS229 -UN-23AUG88

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

## Remove Paint Before Welding or Heating

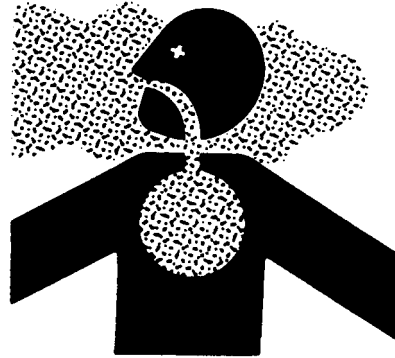
Avoid potentially toxic fumes and dust.

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

Do all work outside or in a well ventilated area. Dispose of paint and solvent properly.

Remove paint before welding or heating:

- 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.



TS220 -UN-23AUG88

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

## 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 be accidentally cut when heat goes beyond the immediate flame area.



TS953 -UN-15MAY90

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

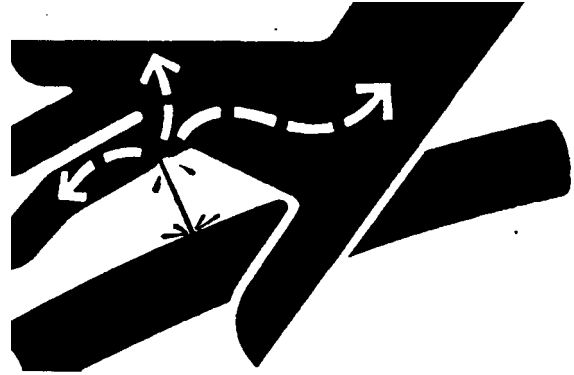
## Avoid High-Pressure Fluids

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 from Deere & Company Medical Department in Moline, Illinois, U.S.A.



X9811 -UN-23AUG88

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

## Protect Against High Pressure Spray

Spray from high pressure nozzles can penetrate the skin and cause serious injury. Keep spray from contacting hands or body.

If an accident occurs, see a doctor immediately. Any high pressure spray 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 from Deere & Company Medical Department in Moline, Illinois, U.S.A.



TS1343 -UN-18MAR92

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

## Handling Batteries Safely



**CAUTION:** 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 it last.



TS204 -UN-23AUG88



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

Avoid the hazard by:

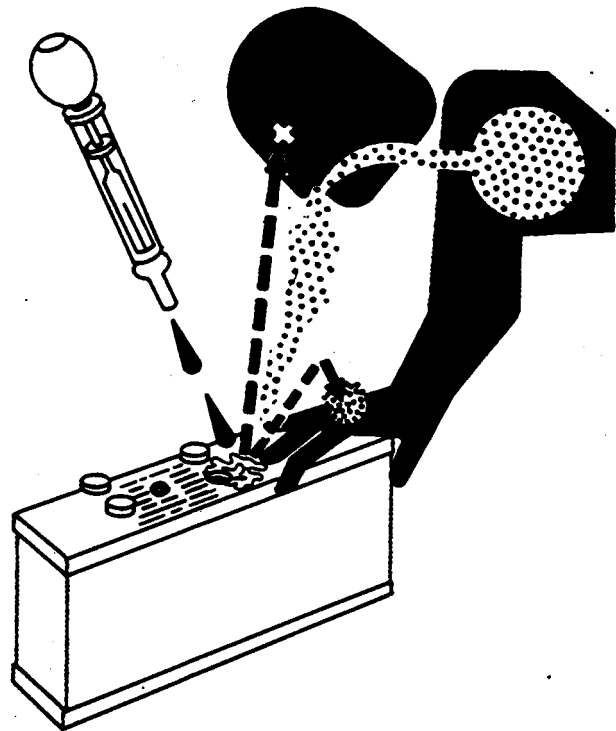
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

If you spill acid on yourself:

1. Flush your skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush your 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 quarts).
3. Get medical attention immediately.



TS203 -UN-23AUG88

**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.**

## Dispose of Waste Properly

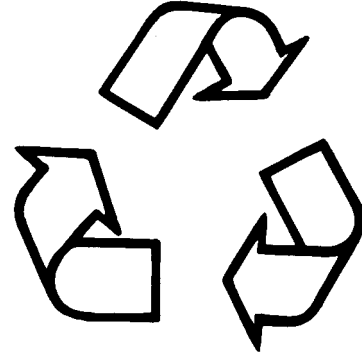
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with John Deere equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

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-26NOV90

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

# Safety Signs

## Replace Damaged or Missing Safety Signs

**IMPORTANT:** Install new safety signs if old signs are damaged, lost or can not be read. Install a new safety sign when replacing any new part that previously had a safety sign.

Keep safety signs clean and in good condition. Replacement signs are available. See your John Deere Dealer.

AG,RF30435,1989 -19-18NOV99-1/1

## Prevent Machine Runaway



AG,RF30435,1990 -19-19JUL00-1/1



### Stay Clear of Engine Fan



RW26062 -UN-13APR99

**⚠ WARNING**

**Avoid bodily injury from rotating engine fan: Keep hands out of fan discharge area when engine is running.**

RW26084 -19-04MAY99

AG,RF30435,1991 -19-18NOV99-1/1

### Use Instructional Seat Correctly



RW27038 -UN-18AUG00

**⚠ CAUTION**

**This Instructional seat has been provided only for training operators or diagnosing machine problems.**

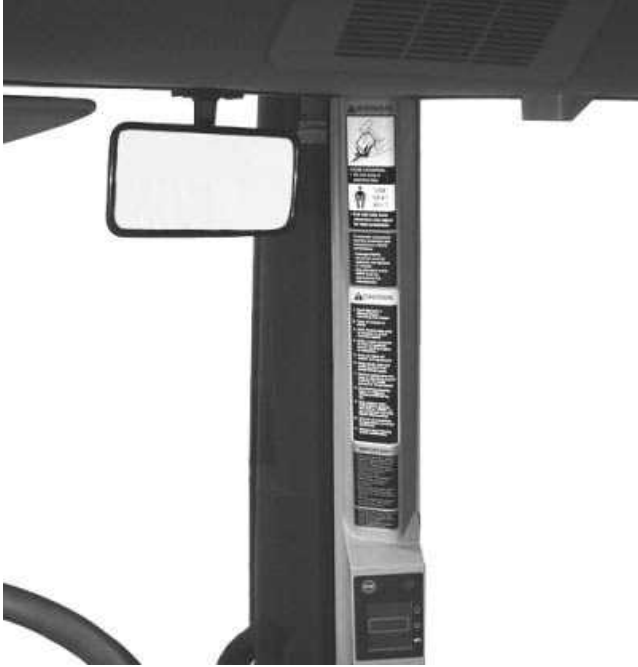
**Keep all other riders off the tractor and equipment.**

**Always wear your seat belt.**

RW27039 -19-21AUG00

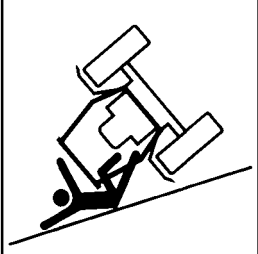
AG,RX15494,3868 -19-23AUG00-1/1

### Use Seat Belt—Do Not Modify ROPS




RW26063 -UN-12MAY99

**⚠ WARNING**



**AVOID CRUSHING:**

- Do not jump if machine tips.



**USE SEAT BELT**

- Pull belt fully from retractors and adjust for best protection.

To maintain unimpaired operator protection and manufacturer's ROPS certification:

- Damaged ROPS structures must be replaced, not repaired or revised.
- Any alteration to the ROPS must be approved by the manufacturer.

RW26064 -19-13APR99

AG,RF30435,1992 -19-18NOV99-1/1

## Operate Tractor Safely



RW26063 -UN-12MAY99

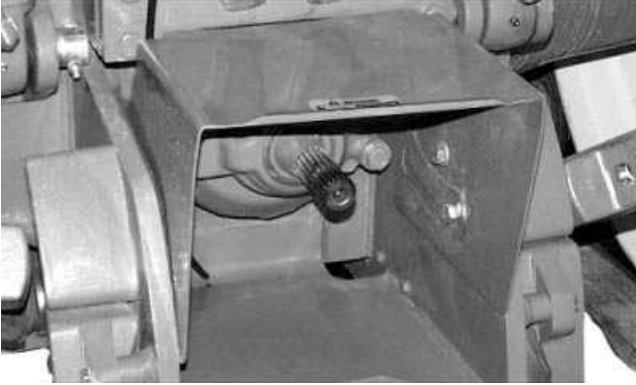
### CAUTION

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 operating around hazards on rough ground or steep slopes.
8. Use flashing warning lights on highway unless prohibited by law.
9. Stop engine, lower implement to ground and shift to "PARK" or set handbrake securely before dismounting.
10. Wait for all movement to stop before servicing machinery.
11. Remove key if leaving tractor unattended.

RW26079 -19-12MAY99

AG,RF30435,1993 -19-18NOV99-1/1

**PTO Driveline**



RW26586 -UN-28SEP99

**⚠ WARNING**

**TO AVOID BODILY INJURY:**

1. Keep PTO master shield and all power drive system safety shields in place.
2. When operating PTO driven implements, install drawbar in the down position if offset, and use the following drawbar instructions.

PTO Shaft	PTO Shaft End to Hitch Pin Hole
540 rpm - 6 spline	14.00 in. (356 mm)
1000 rpm - 21 spline	16.00 in. (407 mm)
* 1000 rpm - 20 spline	20.00 in. (508 mm)
	* 1.75 in. (44.5 mm) dia. shaft

RW10960 -19-16DEC89

AG,RF30435,1994 -19-18NOV99-1/1

**Couple Implement Securely**



RW26057 -UN-12MAY99

**⚠ CAUTION**

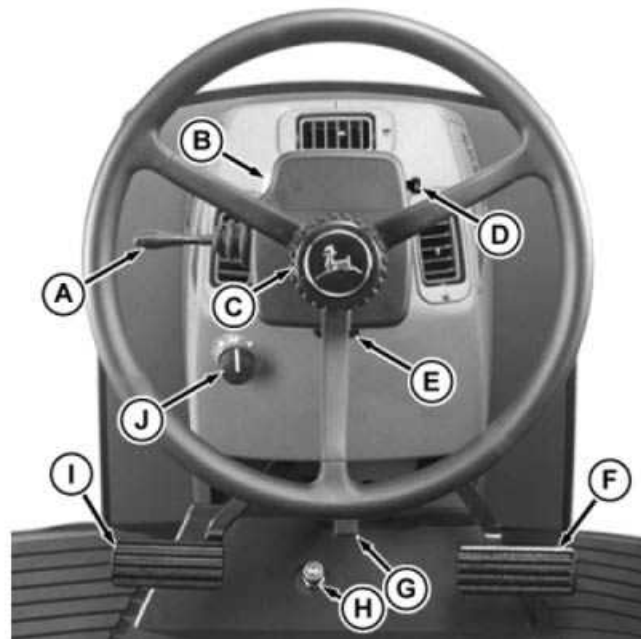
Improper attachment can allow implement to be pulled over the tractor wheel and onto the operator station.  
 Read and follow all instructions in operator's manual before using hitch.  
 Use control levers to fully engage both locking lugs over lower implement pins.  
 Secure draft link attaching pins by tightening retainer bolts to 115 Nm (85.0 ft lb) torque.

RW56095 -19-07JUL93

AG,RF30435,1995 -19-18NOV99-1/1

# Controls and Instruments

## Front Console



RW26047 -UN-26MAR99

A—Turn Signal Lever, Dimmer  
Switch, Horn,  
Flash-to-Pass  
B—Ether Aid Switch

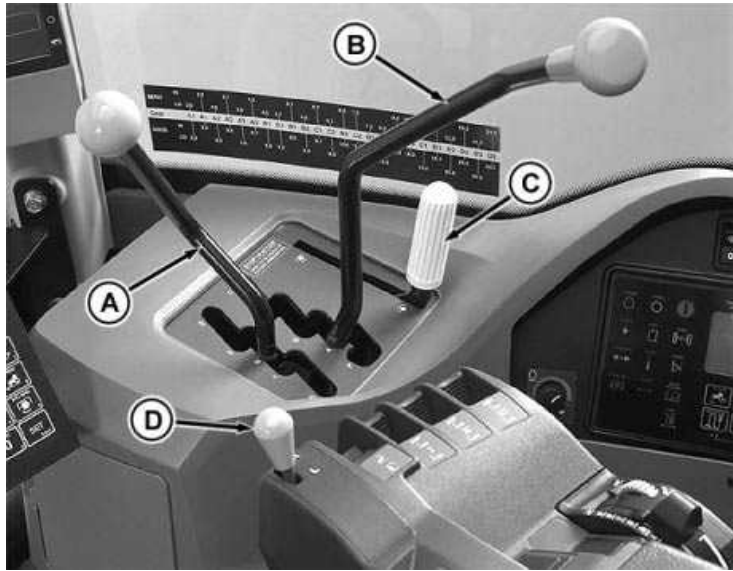
C—Steering Wheel Telescope  
Release  
D—Key Switch  
E—Steering Wheel Tilt Release

F—Brake Pedal  
G—Steering Column Foot  
Release

H—Differential Lock  
I—Clutch Pedal  
J—Air Flow Direction Knob

AG,RF30435,1996 -19-18NOV99-1/1

### Shift and PTO Levers



A—Gear-Shift Lever

B—Range-Shift Lever

C—PTO Lever (*Optional*)

D—Hi-Lo Shift Lever

AG,RF30435,1997 -19-18NOV99-1/1

This as a preview PDF file from [best-manuals.com](http://best-manuals.com)



Download full PDF manual at [best-manuals.com](http://best-manuals.com)