# 3210, 3310, 3410, 3210X, 3310X and 3410X Tractors

TECHNICAL MANUAL
Tractors 3210, 3310, 3410, 3210X,
3310X and 3410X Repair and
Operation and Tests

**TM4663 02FEB02 (ENGLISCH)** 

John Deere Werke Mannheim

Printed in Germany

# Introduction

#### **IMPORTANT NOTE**

IMPORTANT: Before using this manual, read

Groups 10, 20, 30, 35 and 40 in Section 10. These Groups include very important information on the John Deere versions of these

tractors.

IMPORTANT: Where corresponding statements are

made elsewhere in this manual, Groups 10, 20, 30, 35 and 40 in Section 10 take precedence.

#### **Model Number Comparison Chart**

See below for the correct John Deere model numbers.

- CERES 325 corresponds to 3210
- CERES 335 corresponds to 3310
- CERES 345 corresponds to 3410
- CERES 325X corresponds to 3210X
- CERES 335X corresponds to 3310X

• CERES 345X corresponds to 3410X

If any mention is made of the CERES 355(X) model, it has no relevance for any John Deere model.

#### **Special Tool Numbers**

When ordering a special tool mentioned in this Technical Manual, insert the capital letters RT in front of the number.

#### Example:

- number shown = 195068
- order number for this tool = RT195068

NOTE: Use European Microfiche Tool Catalogue (MTC4983, issue 10-01) to find information on the availability of these tools and to place orders.

OULXBER,000085A -19-22JAN02-1/1

# **Contents**

# SECTION 10—Annulation and Supplementation to this Publication

Group 05—Safety

Group 10—Safety Decals

Group 20—Fuel, Lubricants, Hydraulic Oil and Coolant

Group 30—Specifications 3210X, 3310X and 3410X

Group 35—Specifications 3210, 3310, and 3410

Group 40—Serial Numbers

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.

i

COPYRIGHT ® 2002 DEERE & COMPANY Moline, Illinois All rights reserved A John Deere ILLUSTRUCTION® Manual

INDX

Thanks very much for your reading,

Want to get more information,

Please click here, Then get the complete

manual



# **NOTE:**

If there is no response to click on the link above, please download the PDF document first, and then click on it.

Have any questions please write to me: admin@servicemanualperfect.com

	Contents	
10		
DX		
	TM4000 (00FFD00)	

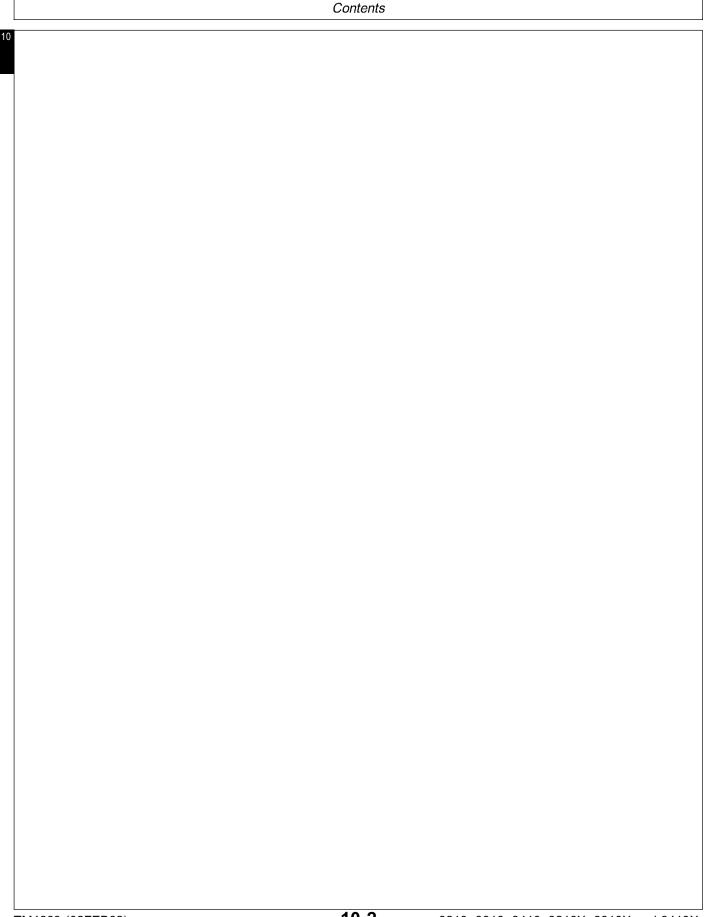
# Section 10

# **Annulation and Supplementation to this Publication**

#### **Contents**

	91		
Page			
<b>Group 05—Safety</b>			
Group 10—Safety DecalsPictorial Safety Signs.10-10-1Operator's Manual.10-10-1Rockshaft Remote Control.10-10-1Releasing the PTO Clutch.10-10-2			
Group 20—Fuel, Lubricants, Hydraulic Oil and Coolant			
Fuel.       .10-20-1         Handling and Storing Diesel Fuel       .10-20-1         Diesel Engine Break-In Oil       .10-20-2         Diesel Engine Oil       .10-20-3         Transmission and Hydraulic Oil       .10-20-4         Front Wheel Drive Axle Oil       .10-20-5         Brake Fluid       .10-20-5         Grease       .10-20-6         Oil Filters       .10-20-6         Lubricant Storage       .10-20-7         Alternative and Synthetic Lubricants       .10-20-7         Mixing of Lubricants       .10-20-8         Diesel Engine Coolant       .10-20-8			
Group 30—Specifications 3210X, 3310X and 3410X         Engine.       .10-30-1         PTO Power Output       .10-30-2         Transmission.       .10-30-2         Hydraulic System       .10-30-2         Electrical System.       .10-30-3         Capacities.       .10-30-3			
Group 35—Specifications 3210, 3310, and 3410         Engine			
Group 40—Serial Numbers  Type Plates			

TM4663 (02FEB02)



## **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.



81389 -UN-07

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

# **Understand Signal Words**

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.



# **A WARNING**

**A** CAUTION

IS187 -19-30SEP88

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

#### **Follow Safety Instructions**

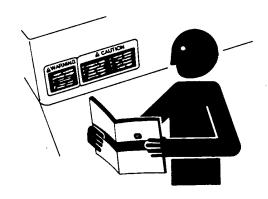
TM4663 (02FEB02)

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.



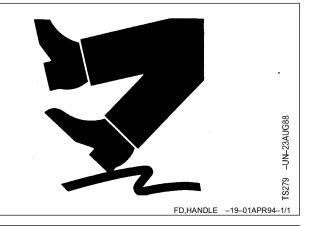
01 -UN-23AI

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

## Mount and Dismount the Machine Safely

Always use the access steps and handrails when mounting and dismounting the tractor.

Ensure that the access steps and operator's station are kept clean at all times. This will help prevent accidents.



# **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.



# **Use Seat Belt Properly**

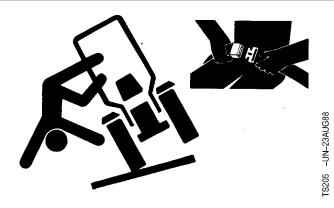
TM4663 (02FEB02)

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

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

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

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

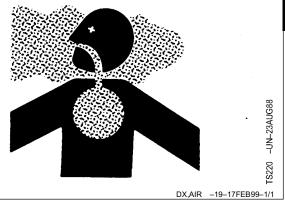


DX,ROPS1 -19-07JUL99-1/1

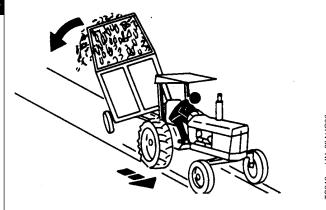
#### Work In Ventilated Area

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



## **Driving the Tractor Safely**



Always check the road and general operating safety of the machine before using.

Operate tractor only when all guards are fitted and in their correct position.

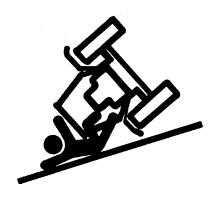
Before moving away, always check immediate vicinity of machine (e.g. for children). Ensure adequate visibility.

To limit the risks of overturning, set the tread width to the maximum suitable for the task. Comply with regulations restricting maximum width.

Make sure the tractor is ballasted properly for its intended task.

Always adapt your ground speed to meet the ground conditions. Avoid making sharp turns when driving up or down slopes or when driving across the slope. Do not attempt to turn the machine with the differential lock engaged. Reduce your ground speed when driving the tractor on slopes or over uneven ground and before making sharp turns. Before descending a steep hill, shift to a lower gear. When driving down slopes, never depress the clutch and change gear; use the same gear you would use to drive up the slope. Never coast downhill.

When making turns with towed or mounted implements, always take into consideration the width and inertia of the implement.



V13093 -UN-07DI

Avoid holes, ditches and obstructions which may cause the tractor to tip, particularly on hillsides. Never drive near the edge of a gully or steep embankment — it might cave in!

Front-wheel drive greatly increases traction. This means that the tractor can be driven on steeper slopes, increasing the possibility of a tip over. Driving forward out of a ditch or up a steep slope could cause tractor to tip over to the rear. Therefore reverse out of these situations whenever possible.

#### **Driving on Public Roads**

It is vital to comply with road traffic regulations.

Before driving the tractor on a public road, make sure that the lights, turn signals and brake lights are functioning correctly. Never switch on the work lights while driving on public roads. The brake pedals must be coupled together. Never apply the differential lock when driving on a road.

When transporting mounted implement(s), raise the rockshaft. If the implement is equipped with road wheels, use them.

Continued on next page

FD,DRIVE -19-02JUN94-1/2

-UN-23AUG88

#### **Towing Implements or Trailers**

Attach implements and trailers to the tractor only using the prescribed drawbars or hitches. Attach trailers and implements correctly. Always ensure that trailers and implements cannot roll away. If trailer brakes are equipped, use them! Braking to stop towed loads from transport speeds can cause the towed load to swerve and upset. Reduce speed if towed load weighs more than the tractor and is not equipped with brakes.

FD.DRIVE -19-02JUN94-2/2

# **Operating the Tractor Safely**



276 -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 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, place 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 in a ROPS equipped tractor.

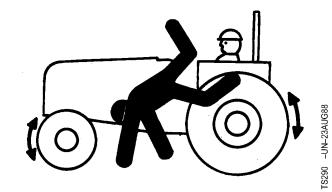
RX,HAZARD,S -19-20DEC95-1/1

## **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 the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

On machines equipped with a passenger seat, one rider is permitted.



LX,OMITF 002146 -19-01FEB92-1/1

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

Lower mounted implement(s) or equipment to the ground before leaving the tractor.

When leaving the tractor and/or implements, shut off engine, engage range and gear shift levers as well as handbrake and parking lock, remove main switch key and lock the operator's cab (if equipped). Put chock blocks in position.

Never leave tractor unattended while the engine is still running.

Never leave the operator's platform/cab when driving.



02510 -UN

LX,PARK -19-07DEC96-1/1

## 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.



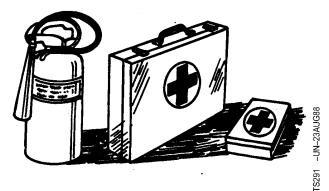
DX,FIRE1 -19-03MAR93-1/1

#### **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.



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

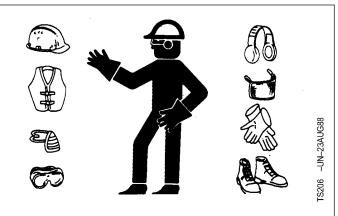
#### **Wear Protective Clothing**

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

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.

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



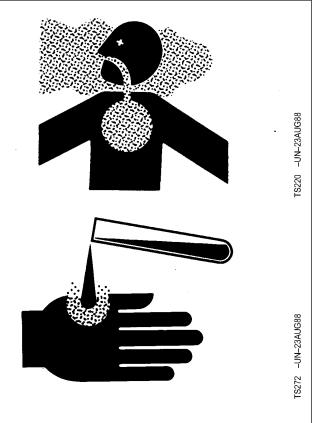
DX,WEAR -19-10SEP90-1/1

#### **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.



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

## Stay Clear of Rotating Drivelines

TM4663 (02FEB02)

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.

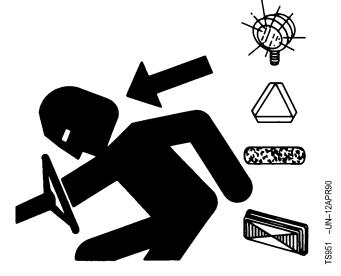


DX,PTO -19-12SEP95-1/1

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

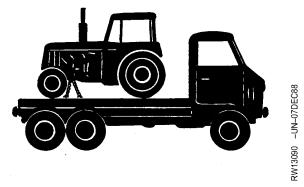


DX,FLASH -19-07JUL99-1/1

#### **Safely Transporting the Tractor**

A disabled tractor is best transported on a flatbed carrier. Use chains to secure the tractor to the carrier.

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



OU12401,0000543 -19-01DEC00-1/1

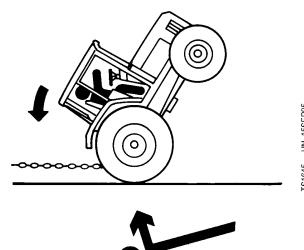
#### Freeing a Mired Machine

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

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

If necessary to tow with another unit, use a tow bar or a long chain (a cable is not recommended). Inspect the chain for flaws. Make sure all parts of towing devices are of adequate size and strong enough to handle the load.

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





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

#### **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-23AU(

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