

5210, 5310, 5410 and 5510 Tractors

**John Deere Augusta
OMRE71736 Issue I7**

LITHO IN U.S.A.
ENGLISH

Introduction

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.

IDENTIFICATION VIEWS



-UN-26AUG97

LV1701

John Deere 5310 Tractor—Open Station



-UN-26AUG97

LV1702

John Deere 5510 Tractor—Cab

Introduction

Contents

| | Page | | Page |
|--|------|---|-------|
| Safety | 05-1 | Prestarting Checks | 40-1 |
| Safety Signs | 10-1 | Operating the Engine | |
| Controls and Instruments | 15-1 | Before Starting the Engine | 45-1 |
| Lights | | Starting the Engine | 45-2 |
| Light Switch Positions | 20-1 | Check Instruments After Starting | 45-3 |
| Using Head Lamps | 20-1 | Oil Pressure Indicator | 45-3 |
| High Beam Indicator | 20-2 | Charging System Indicator | 45-3 |
| Tail Lamp(s) | 20-2 | Air Restriction Indicator | 45-4 |
| Using Fender Lamps (5410 and 5510) | 20-3 | Coolant Temperature Gauge | 45-4 |
| Using Rear Flood Lamp—Open Station | 20-3 | Watch Fuel Level | 45-4 |
| Adjusting Rear Flood Lamp—Open Station | 20-4 | Changing Engine Speeds | 45-5 |
| Flood Lamps—Cab | 20-4 | Warming Up Engine | 45-5 |
| Using Warning Lamps | 20-5 | Restart Stalled Engine | 45-6 |
| Using Turn Signals | 20-6 | Avoid Idling Engine | 45-6 |
| Seven-Terminal Outlet (If Equipped) | 20-7 | Observe Engine Work and Idle Speeds | 45-6 |
| Operator's Platform (Open Station) | | Work With Speed/Hour Meter | 45-7 |
| Operating Foldable ROPS | 25-1 | Stopping the Engine | 45-7 |
| Using Seat Belt | 25-2 | Cold Weather Starting Procedure | 45-8 |
| Selecting Seat Position | 25-2 | Using Booster Battery | 45-9 |
| Adjusting Ride Comfort | 25-3 | Driving the Tractor | |
| Adjusting Steering Wheel Tilt—If Equipped | 25-4 | Operator Training Required | 50-1 |
| Operator's Station (Cab) | | Avoid Contact With Pesticides | 50-1 |
| Using Seat Belt | 30-1 | Driving on Public Roads | 50-2 |
| Selecting Seat Position | 30-1 | Use Caution on Hillsides | 50-4 |
| Adjusting Ride Comfort | 30-2 | Collar Shift or SyncShuttle™ | |
| Adjusting Steering Wheel Tilt | 30-3 | Transmissions | |
| Adjusting Blower Speed | 30-3 | Operating | 50-5 |
| Controlling Temperature | 30-4 | Shifting—Collar Shift | 50-5 |
| Operating Wiper(s) | 30-4 | Shifting—SyncShuttle™ | 50-6 |
| Accessory Electrical Outlet | 30-4 | PowerReverser™ Transmission | |
| Radio | 30-5 | Operating | 50-7 |
| Dome Lamp | 30-5 | Shifting | 50-8 |
| Break-In Period | 35-1 | Selecting a Gear | 50-10 |
| | | Creeper Gear Operation (Optional) | 50-10 |
| | | Brakes | 50-11 |
| | | Differential Lock | 50-11 |
| | | Front-Wheel Drive | 50-12 |

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.

OMRE71736 17-19-10SEP97

COPYRIGHT© 1997
DEERE & COMPANY
Moline, Illinois
All rights reserved
A John Deere ILLUSTRATION Manual

| | Page | | Page |
|--|-------|---|-------|
| Stopping Tractor | | Selecting PTO Speeds (SyncShuttle™ Transmission) | 65-4 |
| Collar Shift or SyncShuttle™ | | Operating Tractor PTO | 65-4 |
| Transmission | 50-13 | Adjusting PTO Clutch Operating Rod | 65-6 |
| PowerReverser™ Transmission | 50-14 | | |
| Rockshaft and 3-Point Hitch | | Ballast | |
| Match Tractor Power to Implement | 55-1 | Planning for Maximum Productivity | 70-1 |
| 3-Point Hitch Components | 55-1 | Selecting Ballast Carefully | 70-1 |
| Rockshaft Control Levers | 55-2 | Matching Ballast to Load Work | 70-1 |
| Using Rockshaft Position Control | 55-3 | Checking for Correct Ballast | 70-2 |
| Setting Position Control Lever Stop | 55-4 | Measuring Wheel Slip—Manually | 70-3 |
| Using Draft Control | 55-5 | Ballast Limitations | 70-4 |
| Adjusting Rockshaft Speed-of-Drop | 55-6 | Ballasting | |
| Preparing Implement | 55-6 | Front End for Transport | 70-4 |
| Converting Hitch Category | 55-7 | Two-Wheel Drive Tractors | 70-5 |
| Positioning Center Link | 55-8 | MFWD-Equipped Tractors | 70-5 |
| Attaching Implements to 3-Point Hitch | 55-9 | Determining Maximum Ballast | |
| Adjusting Hitch Side Sway | 55-11 | Rear | 70-6 |
| Leveling The Hitch | 55-12 | Front | 70-6 |
| Adjusting Lateral Float | 55-14 | Using Cast Iron Weights | 70-7 |
| Adjusting Rockshaft Control Lever Friction | 55-14 | Installing Rear Cast Iron Weights | 70-7 |
| Warming Hydraulic System Oil | 55-14 | Using Liquid Weight | 70-8 |
| | | Using Implement Codes | 70-9 |
| Remote Hydraulic Cylinders | | Wheels, Tires and Treads | |
| Use Correct Hose Tips | 60-1 | Service Tires Safely | 75-1 |
| Control Lever and Coupler Identification | 60-1 | Check Implement-to-Tire Clearance | 75-1 |
| Installing Remote Outlet Oil Manifolds | 60-2 | Tire Inflation Pressure | |
| Connecting | | Check | 75-2 |
| Cylinder Hoses | 60-2 | Chart | 75-3 |
| Hose Under Pressure | 60-3 | Selecting Front Tire Rolling Direction | 75-4 |
| Single-Acting Cylinder | 60-4 | Tighten Wheel/Axle Hardware Correctly | 75-4 |
| Correcting Reversed Cylinder Response | 60-4 | Tighten Hardware | |
| Neutral Lever Position | 60-4 | Adjustable Front Axle | 75-5 |
| Extending/Retracting Cylinder | | MFWD Axle | 75-5 |
| #1 and #2 SCV | 60-5 | Rear Axle | 75-6 |
| #3 SCV | 60-5 | Observe Rear Wheel Tread Width | |
| Using Implement Float (#1 SCV Only) | 60-6 | Limitations | 75-6 |
| Adjusting Cylinder Stop | 60-6 | Tread Settings | |
| Power Beyond Connections | 60-7 | Two-Position Steel Wheels | 75-7 |
| Loader Joystick Functions | 60-9 | Multi-Position Rear Wheels | 75-8 |
| Disconnecting Cylinder Hoses | 60-10 | Multi-Position MFWD Wheels | 75-10 |
| | | Adjustable Front Axle | 75-11 |
| Drawbar and PTO | | Adjust Front Axle Tread Width | 75-12 |
| Drawbar Load Limitations | 65-1 | Fender Settings (MFWD Axle) | 75-13 |
| Selecting Drawbar Position | 65-1 | Toe-In | |
| Adjusting Drawbar Length | 65-1 | Checking—Two-Wheel Drive Tractor | 75-14 |
| Using Swinging Drawbar | 65-2 | Adjusting—Two-Wheel Drive Tractor | 75-14 |
| Attaching PTO-Driven Implement | 65-2 | Checking—MFWD Tractor | 75-15 |
| | | Adjusting—MFWD Tractor | 75-15 |

Continued on next page

| | Page | | Page |
|---|-------|---|-------|
| Set MFWD Steering Stops Turning Radius . . . | 75-16 | Check for Loose Hardware | 100-5 |
| Use Correct Tire Combinations | 75-17 | Service—100 Hours | |
| Tire Compatibility Charts | | Change Oil and Filter | 105-1 |
| 5210 and 5310 | 75-18 | Replace Transmission-Hydraulic Filter | 105-1 |
| 5410 and 5510 | 75-19 | | |
| Transporting | | Service—250 Hours | |
| Use Safety Lights and Devices | 80-1 | Service Air Cleaner | 110-1 |
| Use a Safety Chain | 80-1 | Inspect and Adjust Alternator/Fan Belt | |
| Driving on Roads | 80-2 | (5210 and 5310) | 110-1 |
| Transport on Carrier | 80-7 | Inspect and Adjust A/C Compressor Belt | |
| Towing Tractor | 80-7 | (Cab—5210 and 5310) | 110-2 |
| | | Lubricate 3-Point Hitch | 110-2 |
| Fuels, Lubricants, and Coolant | | Check Neutral Start System | 110-3 |
| Fuel Storage | 85-2 | Clutch Pedal | |
| Cold Weather Operation | 85-2 | Free Play (Collar Shift and | |
| Diesel Fuel | 85-3 | SyncShuttle™ Transmissions) | 110-4 |
| Fill Fuel Tank | 85-4 | Adjust Linkage (PowerReverser™ | |
| Alternative and Synthetic Lubricants | 85-5 | Transmission) | 110-5 |
| Lubricant Storage | 85-5 | Clean Operator Enclosure Air Filters | 110-6 |
| Diesel Engine Oil | 85-6 | | |
| Oil Filters | 85-6 | Service—500 Hours | |
| Diesel Engine Coolant | 85-7 | Replace Fuel Filter | 115-1 |
| Liquid Coolant Conditioner | 85-8 | | |
| Transmission/Hydraulic Oil | 85-9 | Service—600 Hours | |
| Hydraulic-Transmission Filter Element | 85-9 | Change Oil in MFWD Axle | 120-1 |
| Gear Oil | 85-10 | Clean Engine Crankcase Vent Tube | 120-2 |
| Grease | 85-10 | Pack Front Wheel Bearings (Adjustable | |
| | | Front Axle) | 120-2 |
| Lubrication and Maintenance | | Check Hoses and Hose Clamps | 120-3 |
| Clean Vehicle of Hazardous Pesticides | 90-1 | Lubricate Rear Axle Bearings | 120-3 |
| Observe Service Intervals | 90-2 | Check Engine Idle Speeds | 120-3 |
| Use Correct Lubricant | 90-2 | Check Front Axle Pivot Pin | 120-4 |
| Break-In Service | 90-3 | Adjust Engine Valve Clearance | 120-4 |
| Service Intervals | 90-4 | | |
| | | Service—1200 Hours | |
| Service—10 Hours | | Change Transmission-Hydraulic Oil and | |
| Check Engine Oil Level | 95-1 | Filter | 125-1 |
| Check Coolant Level | 95-2 | Clean Transmission-Hydraulic Pickup | |
| Drain Water and Sediment From Fuel | | Screen | 125-2 |
| Tank | 95-2 | | |
| Lubricate | 95-3 | Service—Annually | |
| | | Change Engine Oil and Filter | 130-1 |
| Service—50 Hours | | Replace Air Cleaner Elements | 130-2 |
| Transmission-Hydraulic System Oil Level . . . | 100-1 | | |
| Check MFWD Axle Oil Level | 100-1 | Service—2 Years/2000 Hours | |
| Clean and Check Battery | 100-2 | Flush Cooling System and Replace | |
| Inspect Tires | 100-3 | Thermostat | 135-1 |
| Lubricate | | | |
| Front Axle Pivot Pin(s) | 100-4 | | |
| Steering Spindles | 100-4 | | |

Continued on next page

| | Page | | Page |
|---|-------|---|--------|
| Service—As Required | | Service | |
| Service Air Cleaner | 140-1 | Service Tractor Safely | 145-1 |
| Adjust Throttle Friction | 140-1 | Additional Information | 145-2 |
| Adjust 540E PTO Throttle Limiter (SyncShuttle™ Transmission) | 140-1 | Hood | |
| | | Opening | 145-3 |
| | | Removing | 145-4 |
| | | Removing Side Screens | 145-4 |
| | | Air Intake System Components | 145-5 |
| | | Service Air Cleaner | 145-5 |
| | | Air Intake System | 145-6 |
| | | Primary Air Cleaner Element | |
| | | Removing—5210 and 5310 | 145-7 |
| | | Removing—5410 and 5510 | 145-8 |
| | | Cleaning | 145-8 |
| | | Washing | 145-9 |
| | | Inspecting | 145-9 |
| | | Storing | 145-10 |
| | | Replacing Alternator/Fan Belt | |
| | | 5210 and 5310 | 145-10 |
| | | 5410 and 5510 | 145-11 |
| | | Replacing A/C Compressor Belt | |
| | | (Cab—5210 and 5310) | 145-11 |
| | | Fuel System Components | 145-12 |
| | | Replace Fuel Filter | 145-13 |
| | | Bleeding Fuel System | 145-14 |
| | | Do Not Modify Fuel System | 145-15 |
| | | Engine Cooling System | |
| | | Components | 145-16 |
| | | Cleaning | 145-17 |
| | | Flush Cooling System | 145-17 |
| | | Replacing Thermostat | 145-18 |
| | | Winterize | 145-20 |
| | | Prevent Battery Explosions | 145-20 |
| | | Electrical Service Precautions | 145-21 |
| | | Battery | |
| | | Access—Open Station | 145-22 |
| | | Access—Cab | 145-22 |
| | | Removing | 145-23 |
| | | Servicing | 145-24 |
| | | Replacement Specifications | 145-26 |
| | | Charging | 145-27 |
| | | Check Condition | 145-28 |
| | | Connecting Starter Wiring | 145-29 |
| | | Connecting Alternator Wiring | 145-29 |
| | | Servicing Air Conditioner (Cab) | 145-30 |
| | | Locating Fusible Link | 145-31 |
| | | Fuses | |
| | | Locating | 145-31 |
| | | Size and Function—Tractor | 145-32 |
| | | Size and Function—Cab | 145-33 |
| | | Head Lamps | |
| | | Aiming | 145-33 |
| | | Adjusting | 145-34 |
| | | Replace Bulb | 145-34 |
| | | Warning/Tail Lamp(s) | |
| | | Replace Bulb—Open Station | 145-35 |
| | | Replace Warning Lamp Bulb—Cab | 145-35 |
| | | Replace Tail Lamp Bulb—Cab | 145-36 |
| | | Flood Lamp(s) | |
| | | Replace Bulb—Open Station | 145-36 |
| | | Replace Bulb—Cab | 145-37 |
| | | Replace Fender Lamp Bulb (5410 and 5510) | 145-37 |
| | | Replace Dome Lamp Bulb (Cab) | 145-37 |
| | | Check Tires | 145-38 |
| | | Tubeless Tire Repair | 145-38 |
| | | Keep ROPS Installed Properly | 145-39 |
| | | Troubleshooting | |
| | | Engine | 150-1 |
| | | Transmission | 150-4 |
| | | Hydraulic System | 150-5 |
| | | Brakes | 150-5 |
| | | Rockshaft and Quick-Coupler 3-Point | |
| | | Hitch | 150-6 |
| | | Remote Hydraulic Cylinders | 150-7 |
| | | Electrical System | 150-8 |
| | | Heater and A/C System (Cab) | 150-10 |
| | | Wiper(s), Flood Lamps, Dome Lamp and Radio (Cab) | 150-13 |
| | | Storage | 155-1 |
| | | Specifications | |
| | | Machine Specifications | 160-1 |
| | | Machine Dimensions | 160-4 |
| | | Permissible Load Specifications | 160-6 |
| | | Ground Speed Estimates | |
| | | Collar Shift and SyncShuttle™ | |
| | | Transmission | 160-7 |
| | | PowerReverser™ Transmission | 160-8 |
| | | Bolt and Cap Screw Torque Value Charts | |
| | | Metric | 160-9 |
| | | Inch | 160-10 |

Continued on next page

Contents

| | Page |
|--|--------------|
| Battery Warranty | 160-11 |
| Identification Numbers | |
| Identification Plates | 165-1 |
| Record Serial Numbers | |
| Tractor | 165-1 |
| Adjustable Front Axle | 165-1 |
| MFWD Axle | 165-2 |
| Engine | 165-2 |
| Transmission | 165-2 |
| Lubrication Maintenance Record Charts . . | 170-1 |
| Crime Prevention Tips | 175-1 |
| Index | |

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

You can download the most
perfect and complete manual in
the world immediately.

Our support email:

ebooklibonline@outlook.com