



# Operator's Manual

## Reelmaster® 3100-D Traction Unit

### Model—Serial Range

**03170**—418200000 and Up

**03171**—418310093 and Up



# Disclaimers and Regulatory Information

# Electromagnetic Compatibility Certification

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**Intended Use**

**Getting Help**

# Manual Conventions



# Safety Alert Classifications



## **General Safety**

### **Before Operation Safety**

# **Fuel Safety**

## **During Operation Safety**

# Rollover Protection System (ROPS) Safety

**Slope Safety**

**After Operation Safety**

**Maintenance Safety**

# Engine Safety

# Electrical System Safety

# Cooling System Safety



# Hydraulic System Safety

# **Blade Safety**

## **Storage Safety**

# Safety and Instructional Decals

# batterysymbols







**99-3444**



**106-9290**

**117-3270**

**121-3598**

**121-3623**

**121-3628**

**125-6688**

**133-8062**

**136-3678**



**136-3679**

**136-3702**

**136-3716**

**147-6069**



# **1 Installing the Wheels**

# 2

## Installing the Steering Wheel

**3 Charging and Connecting the Battery**

**4 Checking the Slope Indicator**

**5 Installing the Roll Bar**

**6 Installing the Front Lift Arms**

# 7

## Preparing to Install the Lift Arms



# 8

## Assembling the Lift Arms to the Machine

# 9

## Assembling the Lift Cylinder to the Left Lift Arm

**10**

**Assembling the Lift Cylinder to the Right Lift Arm**

**11**

**Installing the Carrier Frames to the Cutting Units**

# **12** Preparing the Cutting Units

# **Assembling the Carrier Frames for the Front Cutting Units**

## Assembling the Cutting Unit and Rear Carrier Frame

# **Assembling the Carrier Frames for the Front Cutting Units**

**16** Assembling the Cutting Unit and Rear Carrier Frame

**17** Installing the Cutting Units

**18** Installing the Cutting Unit Drive Motors



**19** Installing the Telematics Device

**20** Adjusting the Lift Arms

# Checking Lift Arm and Rear Cutting Unit Clearance

# **22** Adjusting Lift Arm Clearance



**24** Adjusting the Rear Cutting Unit Clearance

**25** Preparing the Machine

**26** Installing the Hood Latch

**27** Installing the Exhaust Guard

**28** Installing the CE Decals



**30** Applying the CE Tilt Danger Decal

**31** Installing the Tipper Roller Kit (Optional)



## Controls



# Key Switch

# Traction Pedals

# Mow/Transport Slide

# Cutting Unit Shift Lever

# Raise/Lower

# Side Shift

# Slope Indicator

# Indicator Slot



# Cutting-Unit Drive Switch

# Throttle

# Lift Lever Lock

# Parking Brake

# Oil Pressure Warning Light

# Engine Coolant Temperature Warning Light

# Alternator Light

# Glow-Plug Indicator Light



# Hour Meter

# Mower Manifold

# Reel Speed Knob

# Backlap Control

# Fuel Gauge

# Tilt-Steering Lever

# Seat Adjustment Lever

# Specifications

# Attachments/Accessories





## **Before Operation**

# Performing Daily Maintenance

# Fuel

# Fuel Specifications

# Adding Fuel

# Checking the Interlock Switches

# Preparing the Machine

# Checking the Traction Pedal Start-Interlock



# Checking the Cutting Unit Drive Switch Start-Interlock

# Checking the Parking Brake and Seat Run-Interlock

# Checking the Parking Brake and Traction Pedal Run-Interlock

# **Checking the Seat and Traction Pedal Run-Interlock**

## **During Operation**

# Starting the Engine

# Shutting Off the Engine

# Cutting Grass with the Machine

# Side-Shifting the Cutting Units



# Driving the Machine in Transport Mode

# Clip Rate (Reel Speed)

# Adjusting the Reel Speed

# Bleeding the Fuel System

# Operating Tips

# Mowing Techniques

**After Operation**

**After Mowing**

**Towing the Machine**

**Tie-Down Point Locations**

**Hauling the Machine**



## **Recommended Maintenance Schedule**



# **Daily Maintenance Checklist**

## **Pre-Maintenance Procedures**

# Preparing for Maintenance

# Lifting the Front of the Machine

# Lifting the Back of the Machine (Using a Hoist)

# **Lifting the Back of the Machine (Using a Jack)**

# Removing the Battery Cover

# Opening the Hood

## Lubrication

# Greasing the Bearings and Bushings



# Grease Fitting Locations

# Checking the Sealed Bearings

## Engine Maintenance

# Engine Oil Specifications

# Checking the Engine-Oil Level

# Changing the Engine Oil and Filter

# **Servicing the Air Cleaner**

## **Fuel System Maintenance**

# Fuel Storage

# Servicing the Fuel Tank



# Inspecting the Fuel Lines and Connections

# Servicing the Fuel/Water Separator

# Draining the Fuel/Water Separator

# Replacing the Fuel/Water Separator Filter

# **Bleeding Air from the Injectors**

## **Electrical System Maintenance**

# Servicing the Battery

# **Servicing the Fuses**

## **Drive System Maintenance**

# Checking the Tire Pressure



# Torquing the Wheel Lug Nuts

# Torquing the Axle Hub Nuts

# **Adjusting the Traction Drive for Neutral Cooling System Maintenance**

# Coolant Specifications

# Checking the Coolant Level

# **Cleaning the Engine Cooling System**

## **Brake Maintenance**

# **Adjusting the Parking Brake Belt Maintenance**

# Servicing the Engine Belts



# Tensioning the Alternator/Fan Belt

# **Replacing the Hydrostat Drive Belt**

## **Controls Maintenance**

# Adjusting Mow Ground Speed

# **Adjusting the Throttle**

## **Hydraulic System Maintenance**

# Hydraulic Fluid Specifications

# Checking the Hydraulic Fluid

# Inspecting the Hydraulic Lines and Hoses

# Changing the Hydraulic Fluid



# **Changing the Hydraulic Filter**

## **Cutting Unit Maintenance**

# Checking the Reel-to-Bedknife Contact

# Backlapping the Cutting Units

# Preparing the Machine

# Lapping the Reels and Bedknife

# **Finishing Backlapping**

## **Chassis Maintenance**

# **Inspecting the Seat Belt Cleaning**

# Washing the Machine





## **Storing the Machine**

## **Storing the Battery**



## **Using the Standard Control Module (SCM)**

# Troubleshooting the Standard Control Module (SCM)

# **California Proposition 65 Warning Information**