

# **OPERATOR'S MANUAL**

### 43" Drop Spreader Gator Drop Spreader

LP53512 Supplier ST50551 03/01/2016 English

North American Edition Printed in USA

## Introduction

### **Using Your Operator's Manual**

Read this entire operator's manual, especially the safety information, before operating.

This manual is an important part of your machine. Keep all manuals in a convenient location so they can be accessed easily.

Use the safety and operating information in the attachment operator's manual, along with the tractor operator's manual, to operate and service the attachment safely and correctly.

If your attachment manual has a section called Preparing the Machine, it means that you will have to do something to your tractor or vehicle before you can install the attachment. The Assembly and Installation sections of this manual provide information to assemble and install the attachment to your tractor or vehicle. Use the Service section to make any needed adjustments and routine service to your attachment.

If you have any questions or concerns with the assembly, installation, or operation of this attachment, see your local John Deere dealer.

Warranty information on this John Deere attachment can be found in the warranty that came with your John Deere tractor or vehicle.

### **Table of Contents**

Introduction	2
Product Identification	2
Safety Labels	3
Safety	5
Installing	6
Operating	7
Maintenance	8
Getting Quality Service	9
Warranty	9

### **Product Identification**

#### **Product Compatibility**

Contact your John Deere dealer for specific utility vehicle compatibility information.

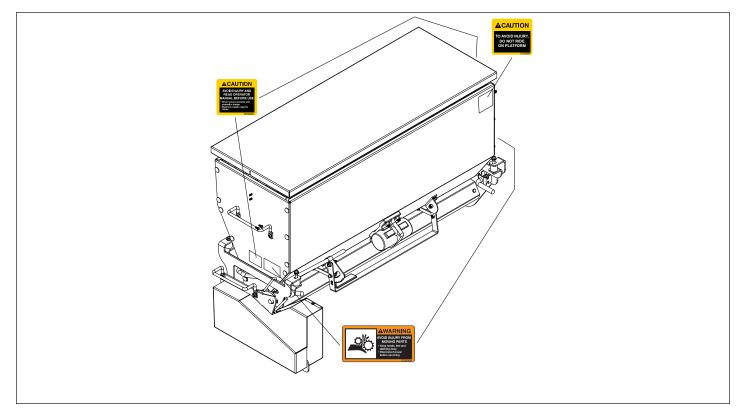
Original instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication.

The right is reserved to make changes at any time without notice.

## Safety Labels

### Safety Labels

#### Safety Label Location



#### **Understanding The Machine Safety Labels**



The machine safety labels shown in this section are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine safety labels, the words **DANGER**, **WARNING**, and **CAUTION** are used with this safety-alert symbol. **DANGER** identifies the most serious hazards.

The operator's manual also explains any potential safety hazards whenever necessary in special messages that are identified with the word, **CAUTION**, and the safety-alert symbol.

Replace missing or damaged safety labels. Use this operator's manual for correct safety label placement.

There can be more safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

## French or Spanish Safety Labels and Operator's Manual

Operator's manuals and safety labels with content in French or Spanish are available for this machine through authorized John Deere dealers. NOTE: Both text and no-text labels are shown. Your machine is only equipped with one of these types of labels

#### Warning

**Avoid Injury From Moving Parts** 



- Keep hands, feet and clothing away
- Disconnect power before servicing

## Safety Labels

### Caution

Avoid Injury and Read Operator Manual Before Use



- Never remove spreader with material in hopper
- Maximum weight capacity 350 lb.

#### Caution

#### To Avoid injury, do not ride on platform



### Safety

#### Read Safety in Machine Operator's Manual

Read the general safety operating precautions in your machine operator's manual for additional safety information.

#### **Operating Safely**

- Read the machine and attachment operator's manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the machine and disengage the controls quickly.
- This attachment is intended for use in sidewalk and property maintenance applications. Do not use for use other than intended by the manufacturer.
- Do not modify machine or safety devices. Unauthorized modifications to the machine or attachment may impair its function and safety.

#### **Operating Safely**

- Do not let children or an untrained person operate machine.
- Make any necessary adjustments before you operate. Never attempt to make any adjustments while the engine is running, unless if recommended in adjustment procedure.
- Look behind machine before you back up. Back up carefully.
- Do not let anyone, especially children, ride on machine or attachment. Riders are subject to injury such as being struck by foreign objects and being thrown off. Riders may also obstruct the operator's view, resulting in the machine being operated in an unsafe manner.
- Weight of mounted machines, including their loads, can influence tractor maneuverability. Refer to tractor OM for ballasting.
- Disengage any power to the attachment when the machine is transported or not in use.
- Never exceed 15 mph when loaded spreader is attached to vehicle.

#### **Parking Safety**

- 1. Stop machine on a level surface.
- 2. Lock the park brake
- 3. Stop the engine
- 4. Remove the key
- 5. Wait for engine and all moving parts to stop before you leave the operator's seat

#### **Practice Safe Maintenance**

- Only qualified, trained adults should service this machine.
- Understand service procedure before doing work. Keep area clean and dry.
- Do not operate the engine in a confined space where dangerous carbon monoxide fumes can collect.
- Never lubricate, service or adjust the machine or attachment while it is moving. Keep safety devices in place and in working condition. Keep hardware tight.
- Keep hands, feet, clothing, jewelry, and long hair away from any moving parts, to prevent them from getting caught.
- Lower any attachment completely to the ground or to an existing attachment mechanical stop before servicing the attachment. Disengage all power and stop the engine. Lock park brake and remove the key. Let machine cool.
- Disconnect battery or remove spark plug wire (for gasoline engines) before making any repairs.

## Safety

#### Practice Safe Maintenance

- Before servicing machine or attachment, carefully release pressure from any components with stored energy, such as hydraulic components and springs.
- Release hydraulic pressure by lowering attachment or cutting units to the ground or to a mechanical stop and move hydraulic control levers.
- Securely support any machine or attachment elements that must be raised for service work. Use jack stands or lock service latches to support components when needed.
- Never run engine unless park brake is locked.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Replace all worn or damaged safety and instruction decals.
- Check all hardware at frequent intervals to be sure the equipment is in safe working condition.
- Do not modify machine or safety devices. Unauthorized modifications to the machine or attachment may impair its function and safety
- Death or serious injury will result from contact with overhead power lines. Keep clear of electrically charged power lines. Check the area before operating the spreader.
- Do not put large clumps of material into the hopper. Never reach in to the hopper without disconnecting the power first. If a blockage occurs, follow the proper procedure in the Preventing and Clearing Blockages section of this manual.
- When lifting bagged material, use proper lifting technique. Lift the load using your leg muscles not your back. Do not lift bulky or heavy loads alone. Lift as a team.

#### Wear Appropriate Clothing



- Always wear eye protection when operating the machine.
- Wear close fitting clothing and safety equipment appropriate for the job.
- While operating this machine, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
- Wear a suitable protective device such as earplugs. Loud noise can cause impairment or loss of hearing.

#### **Read Chemical Container Label**

- Chemicals can be dangerous. Improper selection or use can injure persons, animals, plants, soils or other property. Select the right chemical for the job and handle and apply with care.
- Read the instructions, precautions, and warnings on the container label before opening. Use the product strictly according to label directions for specific applications, in the amounts specified, at the times specified and only when needed.
- Keep the container closed tightly except when preparing the mix.
- Do not remove labels from chemical containers. Store all chemicals in their original containers.
- Do not mix chemicals unless stated on the container label.
- Store chemicals when not in use according to the container label.

#### Handle Chemical Products Safely

- Direct exposure to hazardous chemicals can cause serious injury.
- Potentially hazardous chemicals used with John Deere equipment include pesticides, herbicides and fungicides.
- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.
- The MSDS should be obtained from the chemical dealer at the time of the chemical purchase.
- Check the MSDS before beginning any job using a hazardous chemical. Know exactly what the risks are and how to do the job safely. Always wear recommended personal protection equipment.

#### Handling Waste Product and Chemicals

Waste products, such as, used oil, fuel, coolant, brake fluid and batteries, can harm the environment and people:

- Do not use beverage containers for waste fluids -someone may drink from them.
- See your local Recycling Center or authorized dealer to learn how to recycle or get rid of waste products.
- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques. The seller of the chemical products used with your machine is responsible for providing the MSDS for that product.

## Installing

#### Assembly

#### Parts In Kit

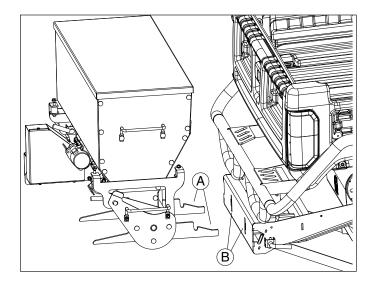
Qty.	Description
1	Spreader Assembly

The wiring kit for the Utility Vehicle Mount comes with the hitch assembly (LP49057 - XUV, LP49241 - HPX or LP53809 - TH) and installation is described in that instruction sheet.

#### Installing

## NOTE: It is recommended two people lift the spreader for this installation.

To install the spreader onto the Utility Vehicle Attachment Mounting Frame, slide the receiver arms (A) into the slots (B) until it clicks to lock into place (adding grease to the slots makes installation easier). Then plug the wire connectors together.



### Operating

#### Operation

Switch (A) controls the motor to start and stop the material flow. Allow motor two seconds to ramp up to speed changes or on/off inputs.

Knob (B) controls the speed of the rotor and material application rate.

Switch (C) controls the vibrator to prevent the material from bridging and allows the material to flow faster and more evenly. The vibrator is not required to be on for proper operation of the spreader. It is recommended to only use the vibrator when the hopper is full or the material is bridging.



#### Calibration

For proper application of the desired material the drop spreader must be calibrated. A suitable container is required to catch the material falling from the drop spreader.

- 1. Park the machine safely (see Parking Safely in the Safety section).
- 2. Ensure that all wiring is plugged in and test auger speed and vibration functions.
- 3. Turn off the spreader. Never make adjustments to the spreader while it is operating.
- 4. Place the gates near one of the middle positions to begin (see Metering Gate Adjustment).
- 5. Place container under the drop spreader.
- 6. Fill the spreader with the desired material enough to cover the auger and lower portion of the spreader.
- 7. Turn the speed control knob to the desired position. Turn on the spreader and observe the spreading of the material.
- 8. Turn off spreader and dump spread material back into the hopper.
- 9. Adjust the gate position or auger speed to achieve desired material flow rate.

If the material is bridging in the hopper or not spreading smoothly, test again with the addition of vibration. The vibration will cause the material to flow better from the hopper to the auger as well as spread more evenly. The vibrator may also cause an increase in material flow rate.

## Operating

To calculate application rate:

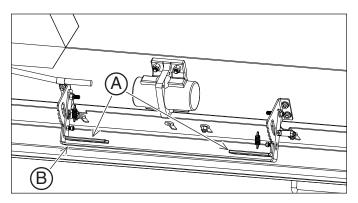
- Determine the vehicle speed that will be used.
- Place the container on a scale and make note of the weight or tare the scale.
- Measure the weight / mass of the material spread in 30 seconds. Subtract the weight / mass of the container.
- Divide lbs measured in 30 seconds by the intended speed of the vehicle in mph, and multiply by 6.06 to get lbs per 1000 ft<sup>2</sup>.

 $\frac{lbs \ per \ 30 \ seconds}{intended \ vehicle \ speed \ in \ mph} \quad x \ 6.06 = \frac{lbs}{1000 ft^2}$   $\frac{kg \ per \ 30 \ seconds}{x \ 3.5 = \frac{kg}{x}}$ 

intended vehicle speed in kmph

#### Metering Gate Adjustment

To adjust the opening on the metering gate, squeeze lever(A) downward and rotate handle(B) to desired opening. There are 6 gate positions, each position increments the gate by approximately 1/4".



#### Preventing and Clearing blockages.

Material flows best when material is free of large clumps. If a blockage occurs or material is not spreading, proceed with the following steps until the blockage is cleared.

- 1. Open the metering gate to a larger position and attempt to spread material again.
- 2. Turn on the vibrator to help break apart any clumps of material and help the material to flow into the rotor tray. Attempt to spread again.
- 3. If the rotor is stalled and jammed. Disconnect the spreader harness from the control box. Follow the steps in the cleaning the rotor section.
- 4. Disconnect power from the spreader. Remove lid and open top grate. Remove any clumped material from the hopper

### Maintenance

Before performing any maintenance, turn off the spreader and park machine safely (see Parking Safely in the Safety section). Unplug the spreader harness from the control box.

#### **Cleaning Rotor**

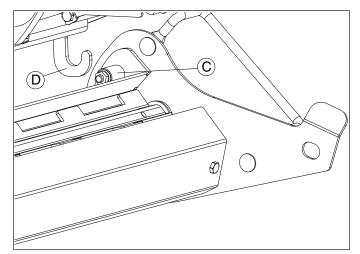
To clean the rotor area, do not reach down from the top of the machine. The tray housing the rotor is removable.

- 1. Disconnect the power cord (A) to the drive motor.
- 2. Lock out the pins (B) on both sides of the machine. When the second pin is pulled, the rear of the tray will drop.



# NOTE: It is recommended two people remove the rotor assembly

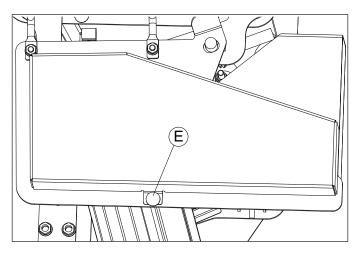
3. Lift pivot bolts (C) off the hooks (D) and the rotor can be removed for cleaning. (Left side shown above)



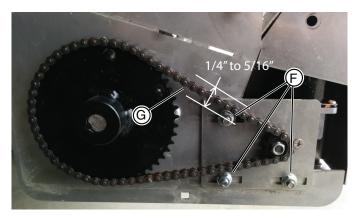
## Maintenance

#### Adjusting Chain Tension

4. Remove bolt (E) and lift bottom of shield until it is rotated about 90° and pull out.



 Loosen three bolts (F) and slide the motor mount plate rearward. The slack-side (G) tension should be 1/4" to 5/16" (6mm to 8mm) of midspan movement. Re-tighten three bolts.



#### **Chain Lubrication**

Schedule chain lubrication:

- · Apply lubrication upon removal from storage
- Reapply lubrication every 20 hours of use
- Apply lubrication prior to storage

#### Cleaning

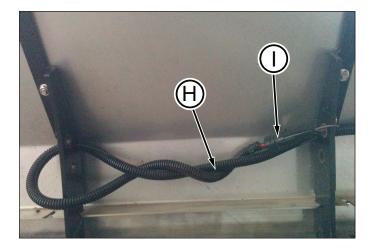
To protect from corrosion, clean spreader after every use with warm water and mild detergent.

Do not leave material in the spreader.

#### **Removing and Storing**

#### **Removing Spreader From Tractor**

- 1. Park the machine safely. (See Parking Safely in Safety section.)
- 2. Empty the spreader.
- 3. Lower tractor lift link to lowest position.
- Disconnect spreader wire harness, wrap the harness (H) and plug into the storage plug (I) located on the spreader frame.



- 5. Disconnect spreader from tractor 3-Point hitch.
- 6. Disconnect and remove the control box and extension wire from the tractor.
- 7. Remove any added front ballast from machine.

#### **Specifications**

43" Drop Spreader	
Volume	5 cu ft (.14 cu m)
Weight (Empty)	185 lbs (84 kg)
Maximum Weight (Full)	540 lbs (245 kg)
Spreading Width	43 in (109 cm)

## Warranty

### John Deere Quality Continues with

### **Quality Service**

John Deere provides a process to handle your questions or problems, should they arise, to ensure that product quality continues with quality parts and service support.

Follow the steps below to get answers to any questions you may have about your product.

- 1. Refer to your attachment and machine operator manuals.
- 2. In North America or Canada, call Superior Tech Customer Service at 1-888-867-2238 and provide product serial number (if available) and model number.

### Warranty

## Limited Warranty for New John Deere Licensed Products

Superior Tech's spreaders are guaranteed to be free from defects in material and workmanship from the date of purchase for 1 year residential use, 6 months commercial use, provided that the purchaser properly assembles, installs, uses and maintains the products in accordance with this manual.

Purchaser's failure to adhere to such requirements will void the warranty. To the extent permitted by applicable law, all other warranties, representations, obligations and conditions, expressed or implied, including but not limited to implied warranties of merchantability, fitness for any particular purpose and non-infringement, are hereby disclaimed and excluded.

Any product which does not meet warranty shall, as purchaser's sole and exclusive remedy, be repaired or replaced by Superior Tech. This warranty is non transferable.

In addition, our warranty does not cover:

- Labor charges
- Loss or consequential, incidental or special damages of any kind.

This product was manufactured by Superior-Tech Inc. a John Deere Licensee, located at 43 Industrial Rd, Ephrata, Pa 17522. If you have any questions or concerns with the assembly, installation or operation of this attachment see your local John Deere Dealer or call Superior-Tech Inc. at 1-888-867-2238 for assistance.



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