

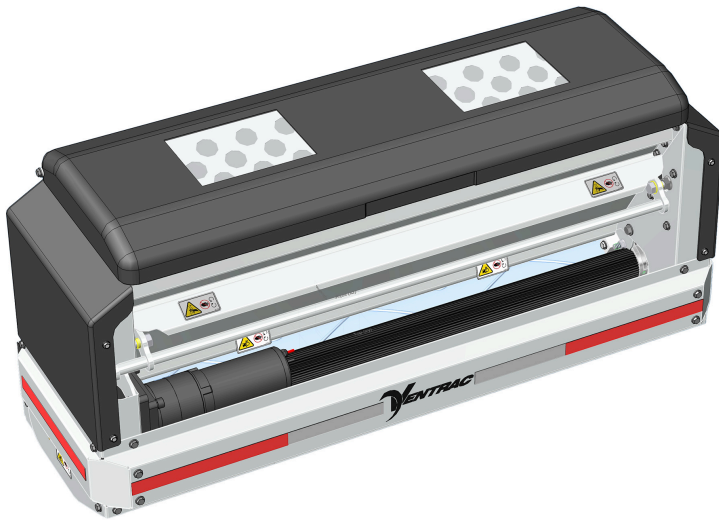


# Operator's Manual

## Drop Spreader

### Model—Serial Range

**SA252**—Beginning Serial # 01001 and Up



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# Intended Use

The Ventrac SA252 drop spreader is intended to only be used with Ventrac traction units by professional operators in commercial applications. It is designed to spread an array of deicing materials with precision flow control. Using this product for any purpose other than its intended use could prove dangerous to you and bystanders.

Read this information carefully to learn how to operate and maintain your product properly and to avoid injury and product damage. You are responsible for operating the product properly and safely.

Read and Understand the traction unit *Operator's Manual* before operating the machine.

# Product Description

The Ventrac SA252 drop spreader is designed to spread an array of deicing materials with precision flow control. With a narrow frame and a 102 cm (40 inch) drop pattern, the drop spreader is ideal for spreading material on sidewalks and other narrow walkways.

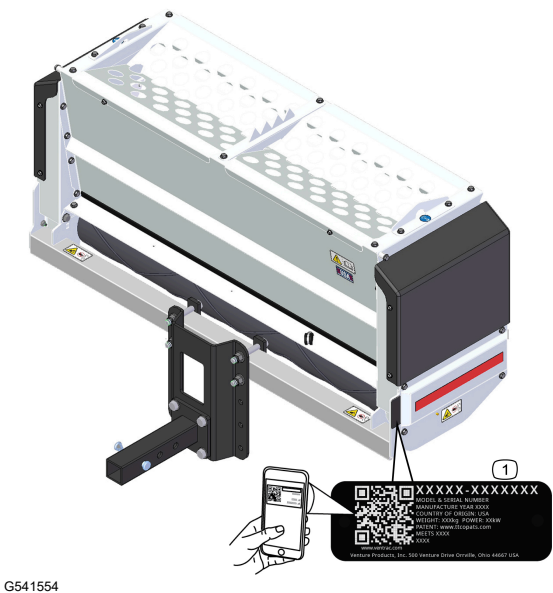
The drop spreader's unique compression roller system evenly distributes deicing materials. The variable speed motor allows for quick flow adjustments.

Stainless steel construction prevents premature failure due to rust and corrosion. An innovative agitation system prevents material bridging and eliminates the need for a traditional noisy vibration motor.

# Getting Help

Visit [www.Ventrac.com](http://www.Ventrac.com) for product safety and operation training materials, accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine Ventrac parts, or additional information, contact an Authorized Service Dealer or Ventrac Customer Service and have the model and serial numbers of your product ready. These numbers are located on the serial plate on your product ①. Write the numbers in the space provided.



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## IMPORTANT

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With your mobile device, you can scan the QR code on the serial number decal (if equipped) to access warranty, parts, and other product information.

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Model Number:		Serial Number:	
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# Why do I Need an Operator's Manual?

This manual has been created to help you gain the important knowledge of what is needed to safely operate and maintain your machine, and to avoid injury and product damage. It is divided into chapters for convenient reference of the appropriate information.

You must read and understand the *Operator's Manual* for each piece of Ventrac equipment you own. Reading the *Operator's Manual* will help you become familiar with each specific piece of equipment. If this manual becomes damaged or unreadable, it should be replaced immediately. Contact your local Ventrac dealer for a replacement.

When using a Ventrac attachment, be sure to read and follow the safety and operating instructions of both the machine and the attachment being used to ensure the safest operation possible.

The information in this manual provides the operator with the safest procedures to operate the machine while getting the maximum use out of the unit. Failure to follow the safety precautions listed in this manual may result in personal injury and/or damage to the equipment.

# Manual Conventions

This manual identifies potential hazards and has safety messages identified by the safety-alert symbol, which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



This manual uses 2 words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

## Safety Alert Classifications

The safety-alert symbol shown in this manual and on the machine identifies important safety messages that you must follow to prevent accidents.

Safety-alert symbol appears above information that alerts you to unsafe actions or situations and is followed by the word **DANGER**, **WARNING**, or **CAUTION**.



**Danger** indicates an imminently hazardous situation which, if not avoided, *will* result in death or serious injury.

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**Warning** indicates a potentially hazardous situation which, if not avoided, *could* result in death or serious injury.

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**Caution** indicates a potentially hazardous situation which, if not avoided, *may* result in minor or moderate injury.

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# General Safety

## Training Required

- The owner of this machine is solely responsible for properly training the operators.
- The owner/operator is solely responsible for the operation of this machine and for the prevention of accidents or injuries occurring to him/herself, other people, or property.
- Do not allow operation or service by children or untrained personnel. Local regulations may restrict the age of the operator.
- Before operating this machine, read the *Operator's Manual* and understand its contents.
- If the operator of the machine cannot understand this manual, then it is the responsibility of this machine's owner to fully explain the material within this manual to the operator.
- Learn and understand the use of all the controls.
- Know how to stop the machine and the attachments quickly in the event of an emergency.

## Operation Safety

- Secure long hair and loose clothing. Do not wear jewelry.
- Inspect the machine before operation. Repair or replace any damaged, worn, or missing parts. Be sure the guards and shields are in proper working condition and are secured in place. Make any necessary adjustments before operating the machine.
- Some pictures in this manual may show shields or covers opened or removed in order to clearly illustrate the instructions. Under no circumstance should the machine be operated without these devices in place.
- Alterations or modifications to this machine can reduce safety and could cause damage to the machine. Do not alter the safety devices or operate with the shields or covers removed.
- Before each use, verify that all the controls function properly and inspect all the safety devices. Do not operate if the controls or safety devices are not in proper working condition.
- Check the parking brake function before operating. Repair or adjust the parking brake if necessary.
- Observe and follow all of the safety decals.
- All the controls are to be operated from the operator's station only.
- Always wear a seat belt if the machine has a roll cage/bar installed and in the upright position.
- Ensure the attachment or accessory is locked or fastened securely to the machine before operating.
- Ensure that all bystanders are clear of the machine and the attachment before operating. Stop the machine if someone enters your work area.



# Operation Safety (continued)

- Always be alert to what is happening around you, but do not lose focus on the task you are performing. Always look in the direction the machine is moving.
- Look behind and down before backing up to be sure of a clear path.
- If you hit an object, stop and inspect the machine. Make any necessary repairs before operating the machine again.
- Stop operation immediately at any sign of equipment failure. An unusual noise can be a warning of equipment failure or a sign that maintenance is required. Make any necessary repairs before operating the machine again.
- If equipped with a high/low range feature, never shift between high and low range while on a slope. Always move the machine to level ground and engage the parking brake before shifting range.
- Do not leave the machine unattended while it is running.
- Always park the machine on level ground.
- Always shut off the engine when connecting the attachment drive belt to the machine.
- Never leave the operator's station without lowering the attachment to the ground, engaging the parking brake, shutting off the engine, and removing the ignition key. Make sure all moving parts have come to a complete stop before dismounting.
- Never leave the machine unattended without lowering the attachment to the ground, engaging the parking brake, shutting off the engine, and removing the ignition key.
- Only operate in well-lit conditions.
- Do not operate when there is a risk of lightning.
- Never direct the discharge of any attachment in the direction of people, buildings, animals, vehicles, or other objects of value.
- Never discharge material against a wall or obstruction. The material may ricochet back toward the operator.
- Use extra caution when approaching blind corners, shrubs, trees, or other objects that may obscure your vision.
- Do not run the engine in a building without adequate ventilation.
- Do not touch the engine or the muffler while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Do not change the engine governor settings or over-speed the engine. Operating the engine at excessive speeds may increase the hazard of personal injury.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, excessive grease, and other flammable materials.
- Clear the working area of objects that might be hit or thrown from the machine.
- Keep people and pets out of the working area.
- Know the work area well before operation. Do not operate where traction or stability is questionable.
- Reduce speed when you are operating over rough ground.

# Operation Safety (continued)

- Equipment can cause serious injury and/or death when improperly used. Before operating, know and understand the operation and safety of the machine and the attachment being used.
- Do not operate the machine if you are not in good physical and mental health, if you will be distracted by personal devices, or if you are under the influence of any substance which might impair your decisions, dexterity, or judgment.
- Children are attracted to machine activity. Be aware of children and do not allow them in the work area. Turn off the machine if a child enters the work area.
- Machines, attachments, and accessories are not designed or intended for travel on public roadways. Never operate or travel on public roads or highways.
- Operate with safety lights when operating near roadways.
- Slow down and be careful of traffic when operating near or crossing roadways. Stop before crossing roads or sidewalks. Use care when approaching areas or objects that may obscure vision.
- Only allow the operator on the machine. Keep riders off.
- Never allow riders on any attachment or accessory.

## SA252 Drop Spreader Safety

- The drop spreader must be properly secured to the traction unit before starting operation.
- Never exceed the recommendations in the weight capacity charts in the operation section, which specifies the material weight that can be used with different front attachments. Exceeding the weight recommendation for your front attachment may result in loss of steering or front wheel traction.
- Do not operate a Ventrac traction unit with the SA252 drop spreader on slopes greater than 10 degrees. Operation on slopes greater than 10 degrees may result in loss of steering or front wheel traction.
- Do not operate the spreader in temperatures below -29° C (-20° F) or above 10° C (50° F).
- Never attempt to remove the spreader from the traction unit while there is material in the spreader hopper.
- When possible, use a crane or forklift to lift the spreader. If the spreader must be lifted manually, ask someone to assist you.
- Before attempting to clear an obstruction or empty the hopper by hand, unplug the spreader from the vehicle power supply to prevent accidental startup.
- Do not use with foreign debris or non deicing materials in the spreader. The spreader is designed only for use with deicing materials.
- Do not splice any other device into the wire harness.
- The SA252 spreader is not designed for use with aftermarket vibrators/agitation systems.

# Maintenance Safety

- Keep the safety decals legible. Remove all grease, dirt, and debris from the safety decals and instructional labels.
- If any decals are faded, illegible, or missing, contact your dealer promptly for replacements.
- When new components are installed, be sure that the current safety decals are affixed to the replacement components.
- If any component requires replacement, use only original Ventrac replacement parts.
- Always turn the battery disconnect to the OFF position or disconnect the battery before performing any repairs. Disconnect the negative terminal first and the positive terminal last. Reconnect the positive terminal first and the negative terminal last.
- Keep all bolts, nuts, screws, and other fasteners properly tightened.
- Always lower the attachment to the ground, engage the parking brake, shut off the engine, and remove the ignition key. Make sure all moving parts have come to a complete stop before cleaning, inspecting, adjusting, or repairing.
- If the machine, attachment, or accessory requires repairs or adjustments not instructed in the operator's manual, the machine, attachment, or accessory must be taken to an authorized Ventrac dealer for service.
- Never perform maintenance on the machine and/or attachment if someone is in the operator's station.
- Always use protective glasses when handling the battery.
- Check the fuel lines for tightness and wear on a regular basis. Tighten or repair them as needed.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, and excess grease.
- Do not touch the engine, the muffler, or other exhaust components while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Allow the engine to cool before storing and do not store near an open flame.
- Do not change the engine governor settings or over-speed the engine. Operating engine at excessive speeds may increase the hazard of personal injury.
- Springs may contain stored energy. Use caution when disengaging or removing springs and/or spring-loaded components.
- An obstruction or blockage in a drive system or moving/rotating parts may cause a buildup of stored energy. When the obstruction or blockage is removed, the drive system or moving/rotating parts may move suddenly. Do not attempt to remove an obstruction or blockage with your hands. Keep your hands, feet, and clothing away from all power-driven parts.

# Safety and Instructional Decals

Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or missing.



Keep all safety decals legible. Remove all grease, dirt, and debris from safety decals and instructional labels. If any decals are faded, illegible, or missing, contact your dealer promptly for replacements.

When new components are installed, be sure that current safety decals are affixed to the replacement components.

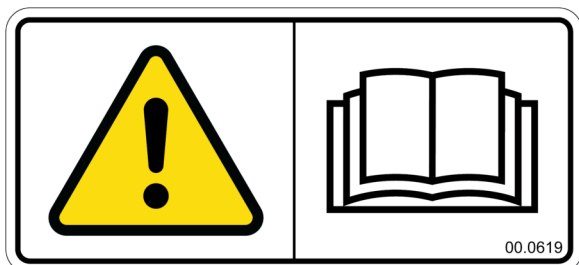
## Decal Part: 00.0364



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① Pinch points—Moving parts can crush or cut

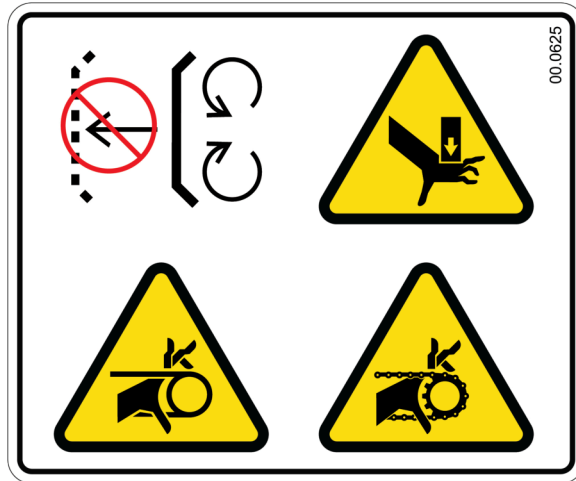
## Decal Part: 00.0619



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① Warning—Read *Operator's Manual*.

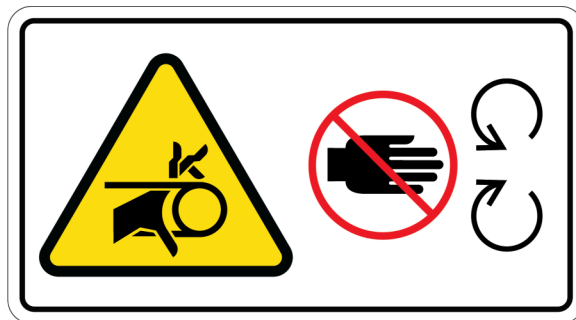
## Decal Part: 00.0625



G546381

① Shield missing—Do not operate, pinching/crushing hazard, fingers or hand entanglement

## Decal Part: 00.0631



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① Finger/Hand Entanglement

## Decal Part: 00.0815



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① Lift Point.





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


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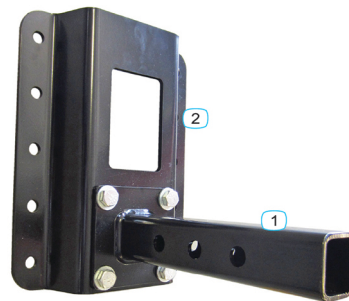
# Installing the Spreader Hitch

## Required Parts

Part Number	Description	Image	Quantity
62.1412	Hitch, SA Spreader 4000 Series		1
64.1849	Mount, Spreader Hitch		1
64.1850	Plate, Spreader Hitch		2
90.0812-3	Bolt, 1/2-13 UNC x 1-1/2 SS	—	4
90.0830-3	Bolt, 1/2-13 UNC x 3-3/4 SS	—	4
95.08-3	Washer, Flat 1/2 SAE SS	—	16
99.A08N-3	Locknut, Nylon 1/2-13 UNC SS	—	8

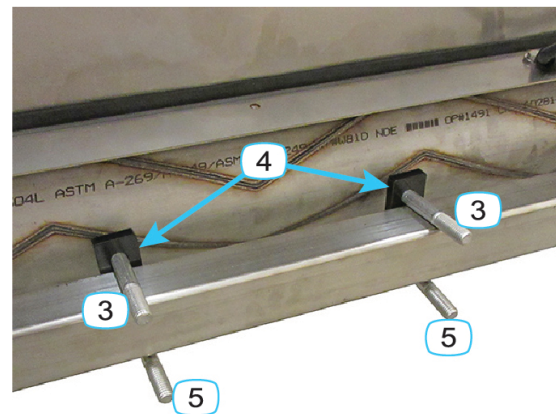


1. Install the SA spreader hitch<sup>①</sup> onto the spreader hitch mount<sup>②</sup> using four 1/2 x 1-1/2 inch bolts, eight 1/2 inch flat washers, and four 1/2 inch nylon lock nuts. Ensure the holes in the hitch tube are turned to the sides to align with the holes in the hitch receiver. Torque the bolts to **102 N•m (75 ft-lb)**.



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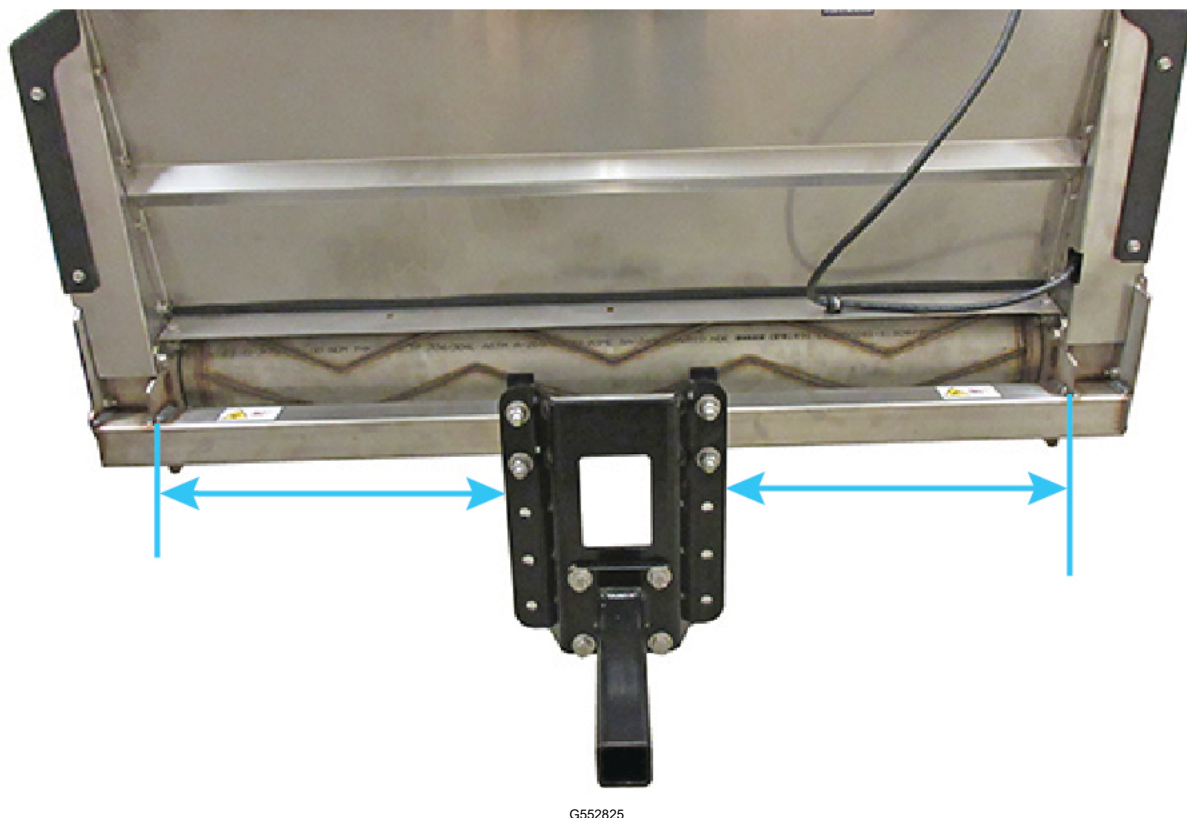
2. Place a 1/2 inch flat washer on each of the 1/2 x 3-3/4 inch bolts.
3. Insert a 1/2 x 3-3/4 inch bolt<sup>③</sup> into the top hole on the spreader hitch plates<sup>④</sup> and place the hitch plates and bolts onto the spreader cross tube as shown.
4. Insert a 1/2 x 3-3/4 inch bolt<sup>⑤</sup> into the bottom hole on the spreader hitch plates.



G552813

5. Install the spreader hitch mount onto the four 1/2 x 3-3/4 inch bolts and secure loosely with four 1/2 inch flat washers and 1/2 inch nylon locknuts. For maximum ground clearance when driving on and off sidewalks and curbs or loading and unloading the spreader and traction unit from a truck or trailer, install the spreader hitch mount using the top set of holes as shown. If clearance is not an issue, installing the spreader hitch mount using lower hole settings makes it easier to load ice melt products into the spreader and also lessens the wind affects on the spread pattern when applying the ice melt product.





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### IMPORTANT

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If the spreader is equipped with a hopper extension kit and will be used with a traction unit that is equipped with a weather cab, do not use the top set of holes to install the spreader hitch mount as this will allow the hopper extension to contact and damage the rear window of the weather cab.

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6. Center the spreader hitch on the spreader tube by measuring from the outside edge of the spreader mount plate to the inside of the main frame end plates. Torque the bolts to **102 N•m (75 ft-lb)**.

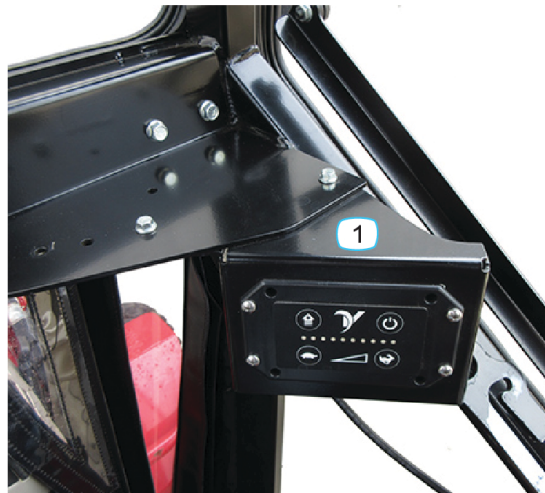
# Installing the Controller (with Weather Cab)

## Required Parts

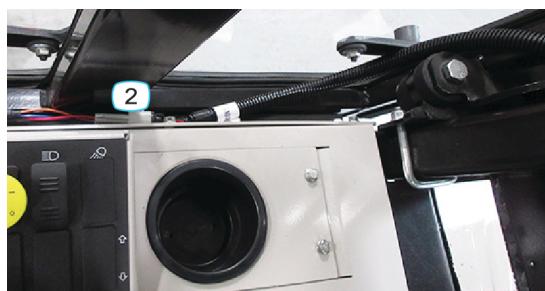
Part Number	Description	Quantity
—	Controller Bracket and Controller	1
99.SF04	Nut, SRF 1/4-20 UNC	2
99.SF0406-1	Bolt, SMF 1/4-20 x 3/4	2



1. Install the controller bracket<sup>①</sup> onto the underside of the right side of the lower windshield panel using two 1/4 x 3/4 inch flange bolts and flange nuts. Torque to **11 N•m (100 in-lb)**.
2. Route the controller harness back and place the connector between the right fender and the weather cab.
3. Disconnect the extension harness from the spreader harness.
4. Connect the extension harness to the controller connector<sup>②</sup> and route the extension harness behind the right roll bar and down behind the seat.
5. Flip the seat up and unfasten the rear frame canvas from the rear flange on the seat box frame.
6. Route the extension harness over to the left side of the seat.
7. Replace the rear frame canvas and lower the seat to the operating position.



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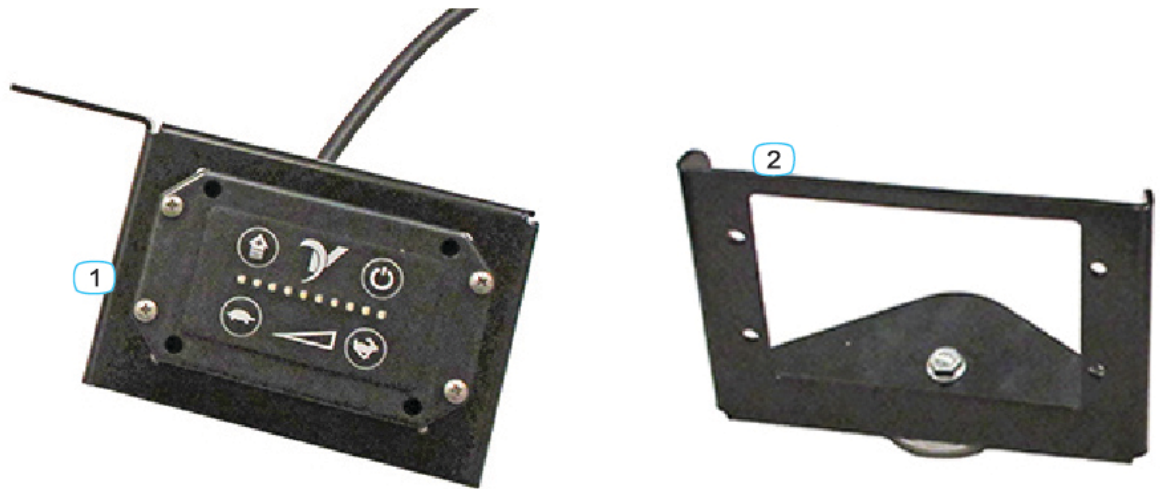
G553059

# Installing the Controller (without Weather Cab)

## Required Parts

Part Number	Description	Quantity
—	Controller Bracket and Controller	1
—	Controller Bracket with Magnetic Base	1
00.0798	Decal, Wear Resistant SA	1

1. Remove the controller from the weather cab mount<sup>①</sup>.



G552952

2. Install the controller on the controller bracket<sup>②</sup> with a magnetic base using the original hardware.
3. Clean the top of the fuel tank cover.
4. Install the clear wear resistant decal<sup>③</sup> on the top of the fuel tank cover.
5. Place the controller bracket on the fuel tank cover and adjust the position as needed for easy reach of the controls.
6. Route the controller connector down between the fuel tank cover and the seat and route to the back of the seat box frame.



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# Product Overview

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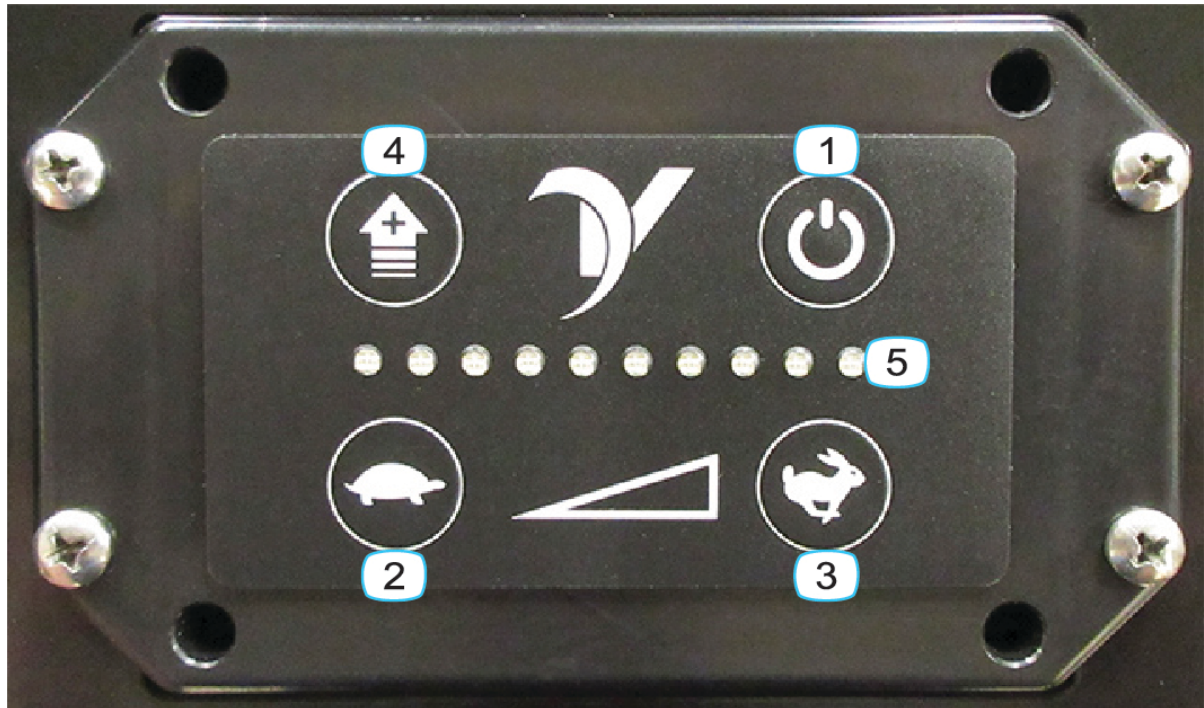


# Operational Controls

**Note:** Refer to the traction unit *Operator's Manual* for traction unit operational control locations.

## Motor Controller

The motor controller turns the spreader motor ON and OFF and adjusts the motor speed.



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- |                     |                                |
|---------------------|--------------------------------|
| ① Power button      | ④ Speed burst button           |
| ② Slow speed button | ⑤ Motor speed indicator lights |
| ③ Fast speed button |                                |

The power button<sup>①</sup> turns on the controller and the motor. Press the power button once to turn on power to the controller. Press the power button again to turn on power to the spreader motor.

When the motor is running, press the power button to shut off the spreader motor without turning off the controller. Press the power button again to restart the spreader motor.

Press and hold the power button to shut off the controller.

The slow speed button<sup>②</sup> decreases the motor speed by one setting each time the button is pushed.

The fast speed button<sup>③</sup> increases the motor speed by one setting each time the button is pushed.

## Motor Controller (continued)

The speed burst button<sup>(4)</sup> activates the maximum motor speed for as long as the button is pushed. When the button is released, the controller will return to the previously selected speed setting.

The motor speed indicator lights<sup>(5)</sup> display the selected motor speed when the controller is turned on. The speed setting is displayed with solid lights when the motor is running. The speed setting is displayed with blinking lights when the motor is not running.

## Hopper Cover Strap



G553161

After placing the hopper cover over the hopper, pull out on the cord<sup>(1)</sup> to cinch the cover in place. Push in on the ratchet latch<sup>(2)</sup> to release the cord and remove the cover.







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# Before Operation

## Daily Inspection



### WARNING



**Always engage the parking brake, shut off the traction unit engine, remove the ignition key, and ensure that all moving parts have come to a complete stop before inspecting the components, or attempting any repair or adjustment. Failure to do so can result in injury or death.**

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1. Park the machine on a level surface, engage the parking brake, and remove the ignition key.
2. Inspect the traction unit in accordance with the traction unit *Operator's Manual*.
3. Perform a visual inspection of the drop spreader. Replace any missing or damaged components before operating the machine.
4. Ensure the electrical connections are tight and clean.
5. Check to ensure nothing is jammed in the hopper.

## Attaching the Drop Spreader

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### IMPORTANT

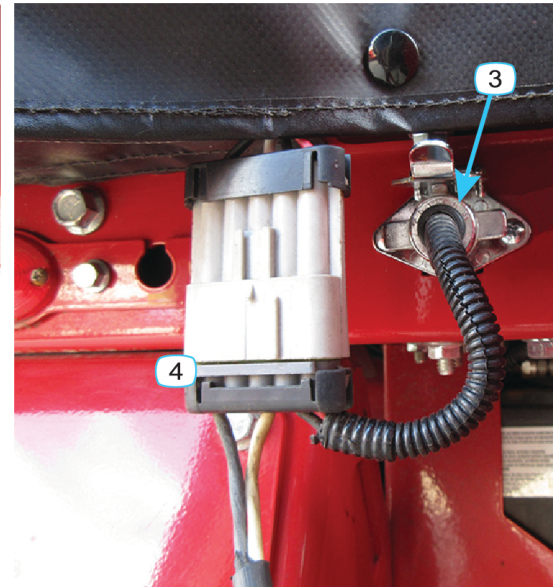
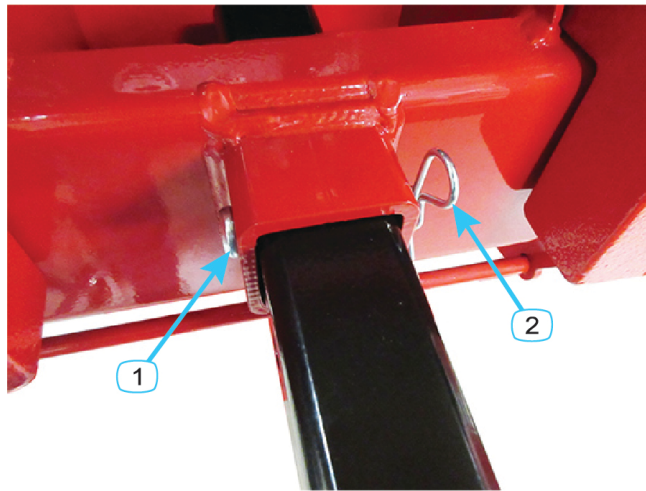
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**If possible, use a crane or forklift to lift the spreader. If the spreader must be lifted manually, make sure you have an assistant to help you.**

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1. Park the traction unit on a level surface.
2. Engage the parking brake, shut off the engine, and remove the ignition key.
3. Lift the spreader (with assistance) and slide the spreader hitch into the hitch receiver tube on the traction unit. Fasten in place with a clevis pin<sup>①</sup> and a hair pin<sup>②</sup>.

## Attaching the Drop Spreader (continued)



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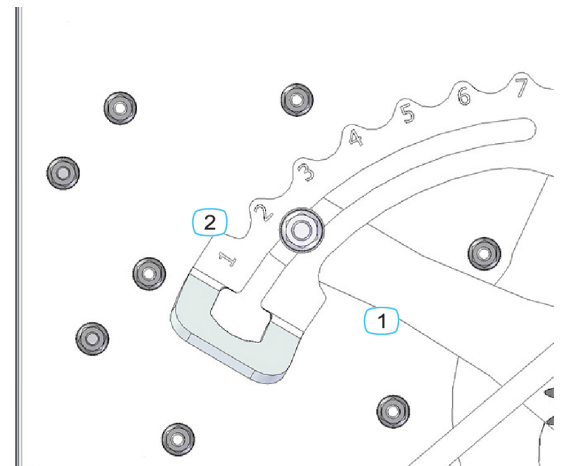
4. Connect the 4-pin electric plug<sup>(3)</sup> on the spreader harness to the traction unit's rear 4-pin socket.
5. Connect the 5 position connector<sup>(4)</sup> to the controller harness at the left rear corner of the seat. On traction units with a weather cab, unfasten the corner of the lower rear canvas and pull the controller connector down between the canvas and the seat box frame. After connecting the harness, snap the lower rear canvas back in place.

## Adjusting the Gate Travel

1. Remove the cover from the left side of the spreader.
2. Loosen the nut that fastens the gate link<sup>(1)</sup> to the gate control rocker arm<sup>(2)</sup>.
3. Slide the gate link to the desired position. Setting number 1 is the minimum amount of gate travel with the lowest frame rate. Setting number 7 is the maximum amount of gate travel with the highest flow rate.



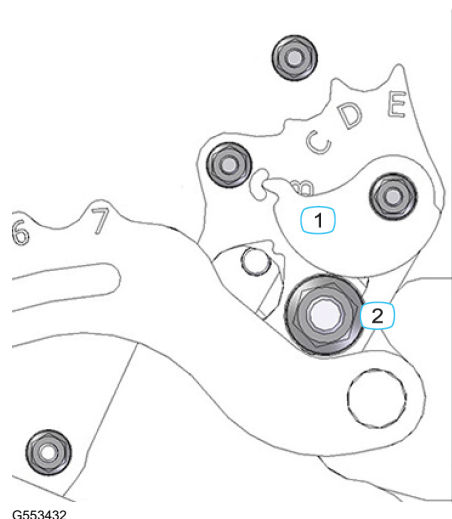
4. Tighten the nut and torque to **42 N·m (31 ft-lb)**.
5. Install the left side cover.



G553430

# Adjusting the Gate Opening

1. Remove the plastic covers from the left and right sides of the spreader.
2. Note the location of the left and right gate indicator plates<sup>①</sup>.
3. Loosen the nuts<sup>②</sup> that fasten the gate control rocker to the end panels and the stiffener plates.
4. Slide the gate control rocker up or down to the desired setting. Setting A is the minimum gate opening and setting E is the maximum gate opening.



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## IMPORTANT

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**Check to ensure there is clearance between the bottom of the gate and the rotor. If the gate contacts the rotor, the rotor could jam and cause damage to the motor or the controller.**

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5. Tighten the gate control rocker nuts<sup>②</sup> slightly. Rotate the left and right indicator plates<sup>①</sup> down until they are resting against the washers on the gate control rocker mounting bolts.
6. Check the left and right indicator plate settings. If the indicators are aligned (i.e. both indicators are pointing to setting C), then the rocker shaft is level. If the indicators are not aligned, adjust one end of the gate control rocker until the indicator plates align.



7. After both indicator plates are aligned, torque the nuts to **102 N·m (75 ft-lb)**.
8. Install the plastic covers on the left and right sides of the spreader.

# During Operation

## Loading the Drop Spreader



### WARNING



Overloading the drop spreader or the traction unit will result in unpredictable and/or unsafe machine handling and may cause damage to the equipment.

Do not exceed the listed material weight capacity for your traction unit and front attachment combination. Refer to the [Material Weight Chart](#) to help calculate the weight of the deicing material. The weights of materials are an average for dry materials. Use the [Attachment/Traction Unit \(without cab\) Combination Weight Capacity](#) and [Attachment/Traction Unit \(with cab\) Combination Weight Capacity](#) charts to determine the allowable material weight capacity for your setup.

1. Park the traction unit on a level surface and turn off the drop spreader controller.
2. Engage the parking brake, shut off the engine, and remove the ignition key.
3. Open the hopper cover.
4. Pour or shovel the proper amount of ice melt material into the spreader hopper.
5. Close the hopper cover.

## Operating the Spreader

Before operation, perform the daily inspection.



### WARNING



Do not operate the traction unit and spreader on slopes greater than 10 degrees. Operation on slopes greater than 10 degrees may result in the loss of steering or front wheel traction.

Do not exceed 16 kph (10 mph) when operating the spreader.

1. Move the machine into position.
2. Press the power button to turn on the spreader controller.
3. Adjust the motor speed to the desired position.
4. Press the power button to start the spreader motor.
5. Drive forward following the sidewalk or other treatment area.
6. Adjust the spreader speed as needed. The speed of the traction unit, the type of material being used, the moisture content, and the desired application rate all factor into determining the necessary motor speed.

# Operating the Spreader (continued)

7. When the end of the treatment area is reached, stop the machine and press the power button to shut off the spreader motor.
8. When spreading is complete, empty the spreader hopper to prevent the ice melt material from hardening or forming clumps inside the hopper.

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## IMPORTANT

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**Never leave materials in the spreader hopper for long periods of time, as ice melt products are hygroscopic and will attract atmospheric moisture and harden.**

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## Rate Calculation

A = pounds per minute

S = speed (mph)

R = pounds per 1,000 square feet

The formula to calculate pounds per 1,000 square feet from the measured pounds per minute:	The formula to calculate pounds per minute from the desired pounds per 1,000 square feet:
$R = 4.55 \times A/S$	$A = R \times S/4.55$

## Application Rates

Use of excessive amounts of ice melt products increases the cost of treatment and could harm vegetation due to run off of the materials. For these reasons, it is best to use the minimum amount of materials necessary to achieve the desired results.

Material	Minimum Rate (Motor Speed 1 and minimum gate opening and gate travel settings)	Maximum Rate (Motor Speed 10 and maximum gate opening and gate travel settings)
Rock Salt (Bagged)	1.5 kilograms/minute (3.25 lbs/minute)	60.5 kilograms/minute (133 lbs/minute)

# After Operation

## Detaching the Drop Spreader

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### IMPORTANT

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**If possible, use a crane or forklift to lift the spreader. If the spreader must be lifted manually, make sure you have an assistant to help you.**

**Do not remove the spreader from the traction unit while there is still material in the spreader hopper.**

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1. Park the traction unit on a level surface.
2. Engage the parking brake, shut off the engine, and remove the ignition key.
3. Disconnect the spreader harness from the controller connector and the rear 4-pin socket..
4. Remove the clevis pin from the hitch receiver tube, lift up on the spreader (with assistance), and slide the spreader hitch out of the receiver tube.







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# Recommended Maintenance Schedule

Maintenance Service Interval	Maintenance Procedure
Before each use or daily	Check for loose, missing, or worn components.
	Check the motor for oil leaks.
	Inspect the safety decals.
Every 50 hours	Oil the drive chain.
	Check the drive chain tension and adjust if needed.
Yearly or before storage	Touch up chipped paint.

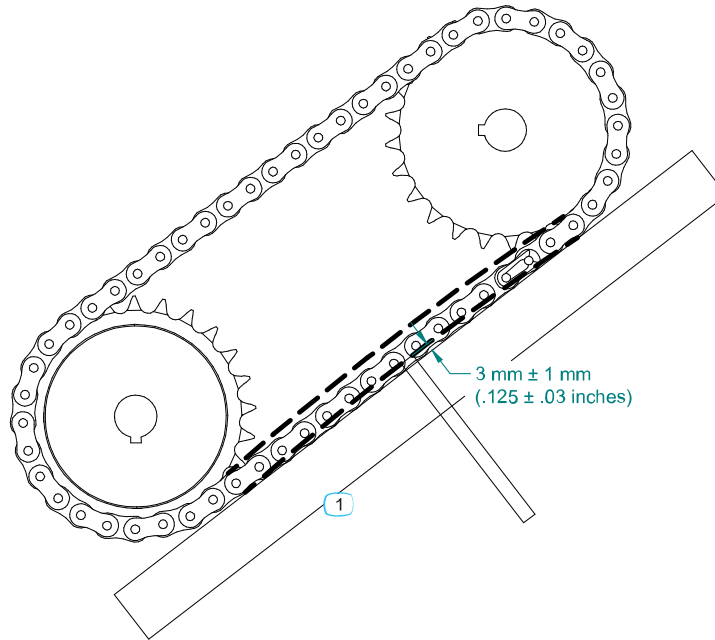
# Lubricating the Drive Chain

Refer to the [maintenance schedule](#) for service intervals.

1. Apply chain oil to the drive chain.
2. Wipe up any oil drips or spills.

# Inspecting the Drive Belt Tension

1. Unplug the spreader from the power supply.
2. Remove the left side panel from the spreader.
3. Remove the left bumper from the spreader.
4. Place a straightedge<sup>①</sup> across the bottom of the sprockets as shown.



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5. Lightly press on the chain at the center point between the sprockets to remove the slack. There should be 3 mm ± 1 mm (.125 ± .03 inches) between the chain and the straightedge.
6. If the chain tension needs to be adjusted, proceed to the following section of Adjusting the Chain Tension. If the chain tension is correct, reinstall the left bumper and the left side panel.

# Adjusting the Drive Chain Tension

1. Loosen the four motor mount bolts.
2. Move the motor to increase or decrease the chain tension and torque the motor mount bolts to 13 N•m (115 in-lb).
3. Reconnect the spreader to the power supply and run the spreader for 20 to 30 seconds.
4. Unplug the spreader from the power supply and recheck the tension.
5. When chain tension is correct, reinstall the left bumper and the left side panel.

# Cleaning

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## IMPORTANT

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**To maintain the finish of the traction unit and attachment, thoroughly wash the equipment after each use to remove any corrosive agents (e.g., salt). Failure to clean the equipment may result in corrosion of (including but not limited to) steel, aluminum, and electrical components. Equipment that will experience repeated exposure to corrosive agents should be pretreated with a corrosion preventative.**

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The spreader is constructed of stainless steel panels, along with the majority of components and hardware, to prevent corrosion from salt. Dirt and salt deposits can affect the performance of the spreader.

For best results and performance, clean or wash the spreader to prevent accumulations of dirt, sand, and salt. Remove any ice or snow accumulations from the spreader and hitch mount.



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# Preparing the Attachment For Storage

1. Clean and wash the attachment.
2. Allow the attachment to dry, then apply a rust preventative coating to the chain drive sprockets.
3. Remove any rust from the hitch mount and paint any bare metal hitch mount surfaces.
4. Inspect for loose or missing hardware, damaged components, or signs of wear. Repair or replace any damaged or worn components.
5. Inspect the motor for oil leaks.
6. Inspect the safety decals. Replace any decals that are faded, illegible, or missing.
7. Apply chain oil to the drive chain. Clean up any excess oil or oil drips.
8. Place the attachment on a skid or wood blocks for storage.



# Removing the Attachment from Storage

1. Clean the attachment to remove any accumulated dust or debris.
2. Inspect the attachment as instructed in the Daily Inspection section of this manual.
3. Test the attachment to ensure that all the components are working properly.





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# Dimensions

**Note:** Specifications and design are subject to change without notice.

Width	119 cm (47 inches)
Length (including hitch receiver tube)	68.5 cm (27 inches)
Height (varies with hitch mounting height)	58.5–78.5 cm (23–31 inches)
Weight	81.5 kg (180 lb)
Spreading Drop Width	102 cm (40 inches)
Material Capacity (Volume)	0.071 cu m (2.5 cu ft)
Material Capacity (Weight)	91 kg (200 lb)

# Technical Information

Voltage	12 Volt DC
Amperage	up to 12 Amps
Temperature Range	-29° to 10° C (-20° to 50° F)
Motor Type	Permanent Magnet

# Material Weight Chart

**Note:** Specifications and design are subject to change without notice.

Material	Weight per Cubic Foot
Rock Salt	34–38.5 kg (75–85 pounds)
Sand/Salt Mix	43–54.5 kg (95–120 pounds)
<b>Maximum Spreader Capacity (Volume)</b>	
Standard Spreader	Spreader with Hopper Extension
.071 m <sup>3</sup> (2.5 ft <sup>3</sup> )	.142 m <sup>3</sup> (5 ft <sup>3</sup> )
<b>Maximum Spreader Capacity (Weight)</b>	
Standard Spreader	Spreader with Hopper Extension
91 kg (200 pounds)	181 kg (400 pounds)

# Attachment/Traction Unit (without cab) Combination Weight Capacity

**Note:** Specifications and design are subject to change without notice.

Attachment on the front of the traction unit		Standard Capacity	Capacity with a Hopper Extension Kit
HE482	Power Bucket	91 kg (200 pounds) <sup>1</sup>	<sup>1</sup> 36 kg (300 pounds)
KD482	48 inch dozer blade	91 kg (200 pounds) <sup>1</sup>	<sup>1</sup> 36 kg (300 pounds)
KD602	60 inch dozer blade	91 kg (200 pounds) <sup>1</sup>	<sup>1</sup> 59 kg (350 pounds)
KD722	72 inch dozer blade	91 kg (200 pounds) <sup>1</sup>	<sup>1</sup> 59 kg (350 pounds)
KV552	55 inch V-blade	91 kg (200 pounds) <sup>1</sup>	<sup>1</sup> 81 kg (400 pounds)
KJ520	Power Broom	91 kg (200 pounds) <sup>2</sup>	<sup>1,2</sup> 81 kg (400 pounds)
HB580	Power Broom	91 kg (200 pounds) <sup>2</sup>	<sup>1,2</sup> 81 kg (400 pounds)
KX480	Snow Blower	91 kg (200 pounds) <sup>2</sup>	<sup>1,2</sup> 81 kg (400 pounds)
KX523	Snow Blower	91 kg (200 pounds) <sup>2</sup>	<sup>1,2</sup> 81 kg (400 pounds)
<sup>1</sup> The rear weights must be removed from the machine.			
<sup>2</sup> The traction unit's weight transfer must be set to high (maximum).			

# Attachment/Traction Unit (with cab) Combination Weight Capacity

**Note:** Specifications and design are subject to change without notice.

Attachment on the front of the traction unit		Standard Capacity	Capacity with a Hopper Extension Kit
HE482	Power Bucket	68 kg (150 pounds) <sup>1</sup>	68 kg (150 pounds) <sup>1</sup>
KD482	48 inch dozer blade	68 kg (150 pounds) <sup>1</sup>	68 kg (150 pounds) <sup>1</sup>
KD602	60 inch dozer blade	91 kg (200 pounds) <sup>1</sup>	91 kg (200 pounds) <sup>1</sup>
KD722	72 inch dozer blade	91 kg (200 pounds) <sup>1</sup>	91 kg (200 pounds) <sup>1</sup>
KV552	55 inch V-blade	91 kg (200 pounds) <sup>1</sup>	<sup>1</sup> 13 kg (250 pounds)
KJ520	Power Broom	<sup>1,2</sup> 91 kg (200 pounds)	<sup>1,2</sup> 181 kg (400 pounds)

Attachment on the front of the traction unit		Standard Capacity	Capacity with a Hopper Extension Kit
HB580	Power Broom	91 <sub>1,2</sub> kg (200 pounds)	181 <sub>1,2</sub> kg (400 pounds)
KX480	Snow Blower	91 <sub>1,2</sub> kg (200 pounds)	181 <sub>1,2</sub> kg (400 pounds)
KX523	Snow Blower	91 <sub>1,2</sub> kg (200 pounds)	181 <sub>1,2</sub> kg (400 pounds)
<sup>1</sup> The rear weights must be removed from the machine. <sup>2</sup> The traction unit's weight transfer must be set to high (maximum).			



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# Limited Warranty — Ventrac Commercial Equipment

Venture Products, Inc., (henceforth referred to as V.P.I.) warrants on the terms and conditions herein, that it will repair, replace, or adjust any part manufactured by V.P.I., and found by V.P.I., to be defective in material and/or workmanship during the applicable warranty term.

All Ventrac commercial equipment purchased on or after January 1, 2019, will carry a 2-year commercial warranty. The warranty period begins on the date of original customer purchase:

Ventrac Commercial Equipment	Warranty Term
2000 Series SSV's and Attachments	2-year
3000 Series Tractors and Attachments	2-year
4000 Series Tractors and Attachments	2-year

All Ventrac add-on kits and accessories such as: 3-point hitch, 12V front & rear power outlets, foot pedal, dual wheel kit, etc., will be covered under the above warranty periods provided they are installed by an Authorized Ventrac Dealer. This warranty may be transferred and will carry the remainder of the warranty starting from the original purchase/registration date with the dealership and/or V.P.I.

The engine warranty is covered by its respective engine manufacturer. Please refer to the engine manufacturer's warranty statement that is included in the owner's manual.

For warranty consideration, the Ventrac commercial equipment, including any defective part, must be returned to an Authorized Ventrac Dealer within the warranty period. The warranty shall extend to the cost to repair or replace (as determined by V.P.I.) the defective part. The expense of pickup and delivery of equipment, service call drive time or any transportation expense incurred for warranty repair is the sole responsibility of the owner and is not covered under warranty by Ventrac and/or V.P.I. Ventrac and V.P.I.'s responsibility in respect to claims is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Ventrac equipment. Proof of purchase may be required by the dealer to substantiate any warranty claim. Only warranty work performed and submitted by an Authorized Ventrac Dealer may be eligible for warranty credit.

This warranty extends only to Ventrac commercial equipment operated under normal conditions and properly serviced and maintained. The warranty expressly does NOT cover: (a) any defects, damage or deterioration due to normal use, wear and tear, or exposure; (b) normal maintenance services, such as cleaning, lubrication, oil change; (c) replacement of service items, such as oil, lubricants, spark plugs, belts, rubber hoses, bearings or other items subject to normal service replacement; (d) damage or defects arising out of, or relating to abuse, misuse, neglect, alteration, negligence or accident; (e) repair or replacement arising from operation of, or use of the equipment which is not in accordance with operating instructions as specified in the operator's manual or other operational instructions provided by V.P.I.; (f) repair or replacement arising as a result of any operation from Ventrac equipment that has been altered or modified so as to, in the determination of V.P.I., adversely affect the operation,



performance or durability of the equipment or that has altered, modified or affected the equipment so as to change the intended use of the product; (g) repair or replacement necessitated by the use of parts, accessories or supplies, including gasoline, oil or lubricants, incompatible with the equipment or other than as recommended in the operator's manual or other operational instructions provided by V.P.I.; (h) repairs or replacements resulting from parts or accessories which have adversely affected the operation, performance or durability of the equipment; or (i) damage or defects due to or arising out of repair of Ventrac equipment by person or persons other than an authorized Ventrac service dealer or the installation of parts other than genuine Ventrac parts or Ventrac recommended parts.

The sole liability of V.P.I. with respect to this warranty shall be the repair and replacement as set forth herein. V.P.I. shall have no liability for any other cost, loss, or damage. In particular V.P.I. shall have no liability or responsibility for: (i) expenses relating to gasoline, oil, lubricants; (ii) loss, cost or expense relating to transportation or delivery of turf equipment from the location of owner or location where used by owner to or from any Authorized Ventrac Dealer; (iii) travel time, overtime, after hours' time or other extraordinary repair charges or charge relating to repairs or replacements outside of normal business hours at the place of business of an Authorized Ventrac Dealer; (iv) rental of like or similar replacement equipment during the period of any warranty repair or replacement work; (v) any telephone or data charges; (vi) loss or damage to person or property other than that covered by the terms of this warranty; (vii) any claims for lost revenue, lost profit or additional cost or expense incurred as a result of a claim of breach of warranty; or (viii) attorney's fees.

**The remedies of buyer set forth herein are exclusive and are in lieu of all other remedies. The liability of V.P.I., whether in contract, tort, under any warranty, or otherwise, shall not extend beyond its obligation as set forth herein. V.P.I. shall not be liable for cost of removal or installation nor shall V.P.I. be responsible for any direct, indirect, special or consequential damages of any nature. In no event shall V.P.I. be liable for any sum in excess of the price received for the goods for which liability is claimed.**

**All implied warranties, including merchantability and fitness for a particular purpose, are limited to the duration of the express warranty.**

There are no representations or warranties which have been authorized to the buyer of the Ventrac commercial equipment other than set forth in this warranty. Any and all statements or representations made by any seller of this equipment, including those set forth in any sales literature or made orally by any sales representative, are superseded by the terms of this warranty. Any affirmation of fact or promise made by V.P.I. or any of its representatives to the buyer which relates to the goods that are the subject to this warranty shall not be regarded as part of the basis of the bargain and shall not be deemed to create any express warranty that such goods shall conform to the affirmation or promise.

No employee, distributor, or representative is authorized to change the foregoing warranties in any way or grant any other warranty on behalf of V.P.I.

Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty applies to all Ventrac commercial equipment sold by Venture Products Inc.

**Notes:**

