

# SNOWBEAR®

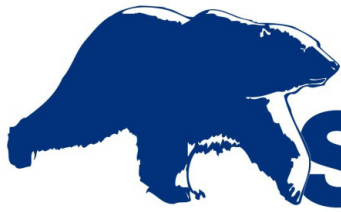
Owner's Manual





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# SNOWBEAR®

## Owner's Manual

## General Safety Precautions



**READ THE OWNER'S MANUAL CAREFULLY.** Know your tailgate spreader. Learn its applications and limitations. Improper installation and operation could cause personal injury and/or equipment and property damage.



**KEEP AWAY FROM CHILDREN AND PETS.** Be sure bystanders, especially children and pets are kept a safe distance from the tailgate spreader operating area.



**DO NOT ABUSE THE SPREADER.** Follow the guidelines set forth in this manual. Do not force the tailgate spreader to do a job it was not designed for.



**MAINTAIN THE SPREADER.** Keep the spreader clean when the unit is not in use to avoid corrosion and/or seizing of parts. Before servicing/working on the spreader, disconnect power cord, secure all loose-fitting clothing, unrestrained long hair and wait for auger and spinner to stop. **Do not operate a spreader in need of maintenance.**



**INSPECT THE SPREADER BEFORE EACH USE.** Check the alignment of all moving parts, and check for any loose bolts that may affect the operation of the spreader system. Before operating spreader, reassemble any parts or hardware removed for cleaning or adjusting.



**NEVER SIT IN, CLIMB OR RIDE ON THE SPREADER.** Serious injury could occur.



**ONLY USE SNOWBEAR® CERTIFIED PARTS AND ACCESSORIES.** Consult the owner's manual for the recommended accessories and/or replacement parts. The use of improper accessories and/or replacement parts may cause hazards and void applicable warranties.



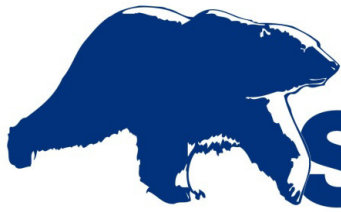
**ALWAYS VERIFY THAT THE HITCH PIN IS PROPERLY INSTALLED BEFORE MOVING.** If the spreader is incorrectly attached to the vehicle's receiver, the spreader could fall off from the vehicle potentially harming bystanders and damaging your SnowBear® product, or vehicle.



**NEVER OVERLOAD YOUR VEHICLE OR SPREADER.** Overloading could result in an accident or damage. Do not exceed GVWR or GAWR ratings as found on the driver-side door side or corner post of the vehicle. See Loading Section to determine maximum volumes of spreading material.



**DO NOT LEAVE UNUSED MATERIAL IN SPREADER HOPPER.** Material can freeze and/or solidify, causing unit to not work properly. Empty and clean after each use whenever possible.



# SNOWBEAR®

### Personal Safety



Remove ignition key and put the vehicle in park or in gear to prevent others from starting the vehicle during installation or service.



Wear only snug-fitting clothing while working on your vehicle or spreader. Do not wear dangling jewelry or neckties and secure long hair.



Wear safety glasses to protect your eyes from dust, dirt & debris from the spreader, especially when in operation and close to spreader. Material is spread at significant velocity.

### Fire and Explosion



**GASOLINE IS HIGHLY FLAMMABLE, VAPOURS ARE EXPLOSIVE.** Never smoke while working on vehicle. Keep all open flames and sources of ignition away from gasoline tank, lines and containers. Wipe up any spilled gasoline immediately. Do not use gasoline to clean parts. Store gasoline only in approved containers away from sources of heat or flame.

### Ventilation

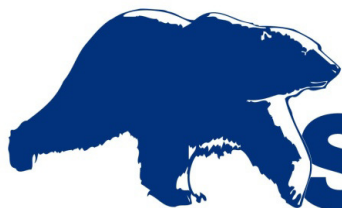


**VEHICLE EXHAUST CONTAINS LETHAL FUMES.** Breathing these fumes, even in low concentrations, can cause illness or death. Never operate a vehicle or leave engine running while performing spreader maintenance in an enclosed area without venting the exhaust to the outside.

### Cell Phones



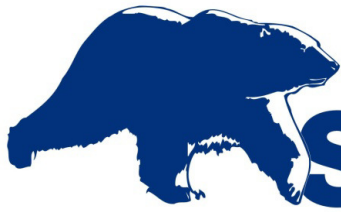
A driver's first responsibility is the safe operation of the vehicle. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate Mobile Communication Devices such as cell phones, text messaging devices, pagers or two-way radios (ie. when vehicle is parked).




### Spreader Parts List

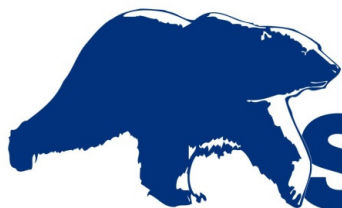
Before you begin, please verify that all of the parts below have been included with your spreader.  
Your spreader is packaged nearly complete in one box.

ITEM #1 PT # 324-223	TAILGATE SPREADER ASSEMBLY (WITH 2 PRE-PAIRED WIRELESS REMOTE CONTROLS)  (QTY 1)	
ITEM #2 PT # 298-178	2" RECEIVER ASSEMBLY (QTY 1)	
ITEM #3 PT # 250-761	5/8-11 X 3.50" HEX HEAD CAP SCREW, 18-8 STAINLESS (QTY 2)	
ITEM #4 PT # 253-255	5/8-11 NYLOCK NUT, 18-8 STAINLESS (QTY 2)	
ITEM #5 PT # 254-018	5/8" SAE FLAT WASHER, 18-8 STAINLESS (QTY 4)	
ITEM #6 PT # 263-320	Ø5/8"x4.0" HITCH PIN w/ R-CLIP (Not Shown) (QTY 1)	
ITEM #7 PT # 324-239	RIGID PLASTIC LID ASSY KIT (STRAP AND BRKTS NOT SHOWN) (QTY 1)	



### Assembly tool list

	Ratcheting Wrench
	15/16" Socket, 1/2" Socket (For Deflector Adjustment)
	15/16" Open Ended Wrench
	9/64" Long Shank Allen Key wrench (For Main Shaft Adjustment (if required))



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## SnowBear® Wireless Remote System

The SnowBear® Tailgate Spreader should only be operated when the vehicle is running. Failure to follow this instruction could result in the premature failure of your vehicles battery.

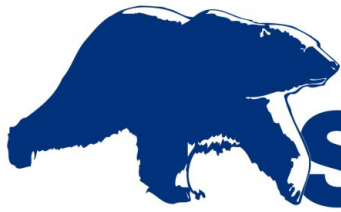
When the vehicle has been turned on, the engine is running, and the headlights turned on, the Green 'ON' button on the supplied key fob must be pressed to turn spreader unit on. The Red 'OFF' button must be pressed to turn the spreader off. The Indicator Light will flash each time one of the buttons is pressed.



The spreader has been supplied with two remote key fobs, and one remote receiver, factory installed in the spreader unit. Both supplied key fobs are already paired specifically to the receiver, so there is no need to perform any pairing with the system. Care has been taken when packaging the spreader unit to keep the specific remotes together with the properly paired receiver.







## Spreader Installation

### OVERVIEW:

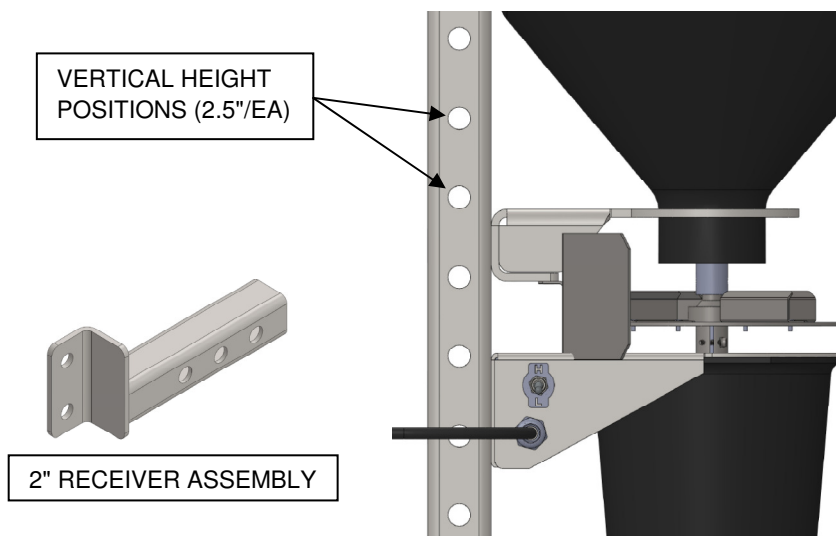
The SnowBear® Tailgate Spreader uses a standard 2" trailer receiver on your vehicle, and standard 4-pin trailer connector for the electrical harness. Each of these must be already installed on your vehicle to use the spreader.

### INSTALLATION:

The SnowBear® Tailgate Spreader comes factory pre-assembled, except for the 2" Receiver Assembly and associated mounting hardware (all included).

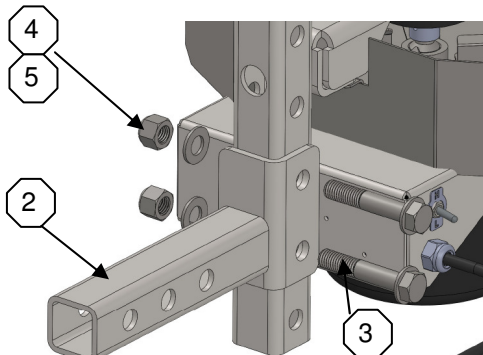
To install the 2" Receiver Assembly to the Spreader Assembly, select the optimal height for your application. The Spreader has several vertical mounting height positions that will move the Spreader assembly up or down 2.5" per position. This optimal height will vary with the height of the vehicle's hitch, and the desired maximum/minimum material spread desired for the application. The higher the Spreader assembly, the greater the material spread diameter.

Testing was performed at approximately 1 1/2' (18") from the ground to spinner plate of the Spreader. This yielded an approximate 25-30' spread diameter.

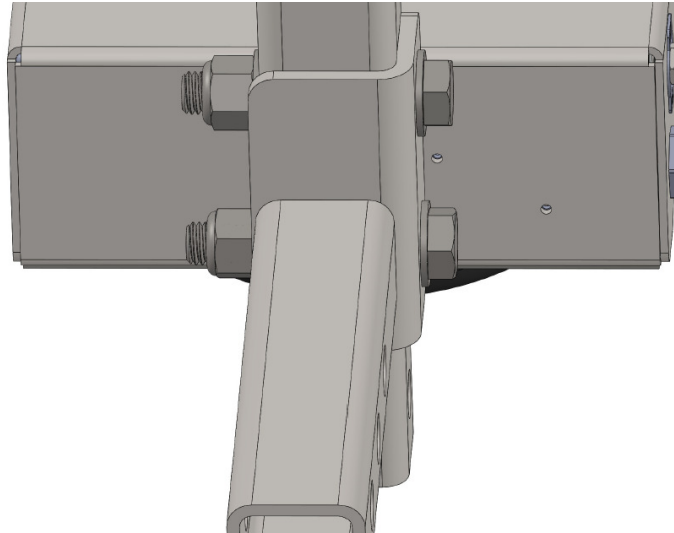




Once your desired height is determined, install the two 5/8-11x3.50" hex bolts and washers on the 2" Receiver Assembly bracket side, and install washer and 5/8-11 lock nut on vertical post side. Tighten until there is no movement of the spreader assembly on the receiver assembly.

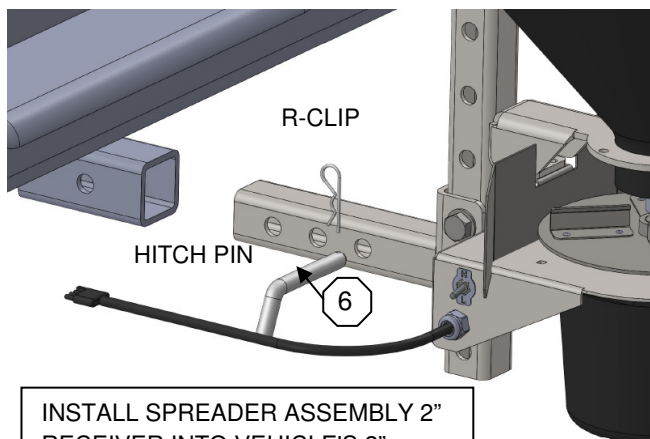


INSTALL 5/8-11x3.50" HEX BOLT AND WASHER ON RECEIVER ASSEMBLY SIDE. WASHER AND NUT ON VERTICAL POST SIDE.

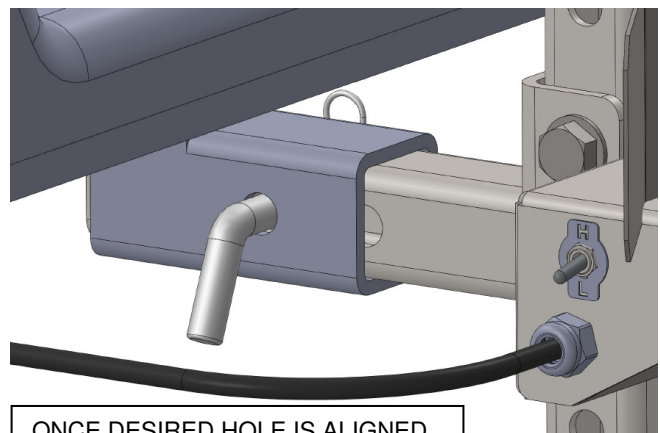


The spreader is ready to install into your vehicle's hitch receiver.

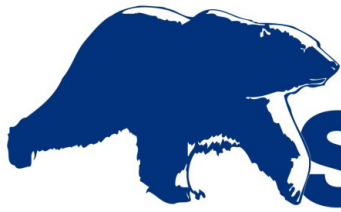
Hold the spreader assembly up to the 2" hitch receiver, and slide in. There are three holes in the spreader's 2" receiver assembly to allow for horizontal depth adjustment in the vehicle's hitch receiver. Each hole is spaced 2" from another. When the spreader assembly is slid into the hitch receiver, look to see when one of the assembly's holes aligns with the hitch receiver, and install the supplied hitch pin. Insert fully, and install the supplied r-clip in the hitch pin hole to secure the assembly.



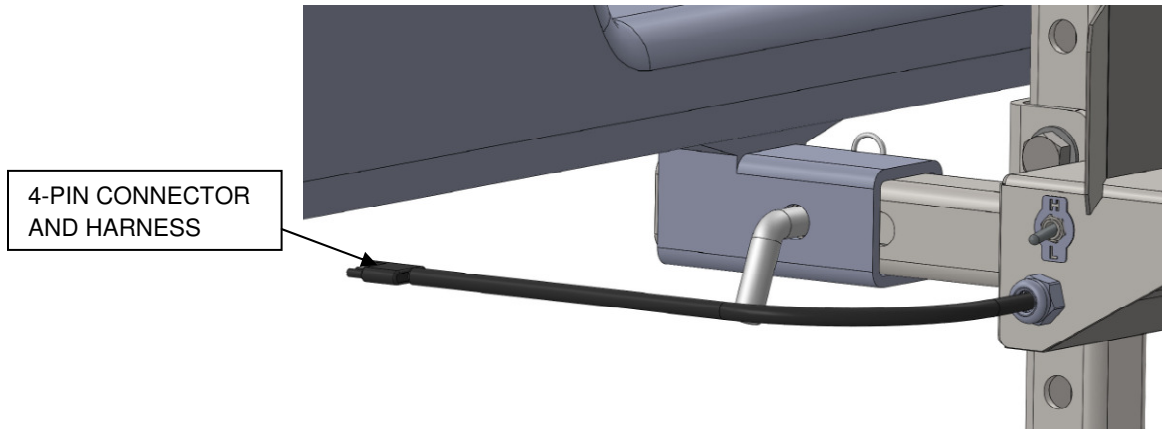
INSTALL SPREADER ASSEMBLY 2" RECEIVER INTO VEHICLE'S 2" HITCH RECEIVER. ALIGN ONE HORIZONTAL DEPTH ADJUSTMENT HOLE.



ONCE DESIRED HOLE IS ALIGNED, INSTALL SUPPLIED HITCH PIN AND R-CLIP TO SECURE ASSEMBLY.



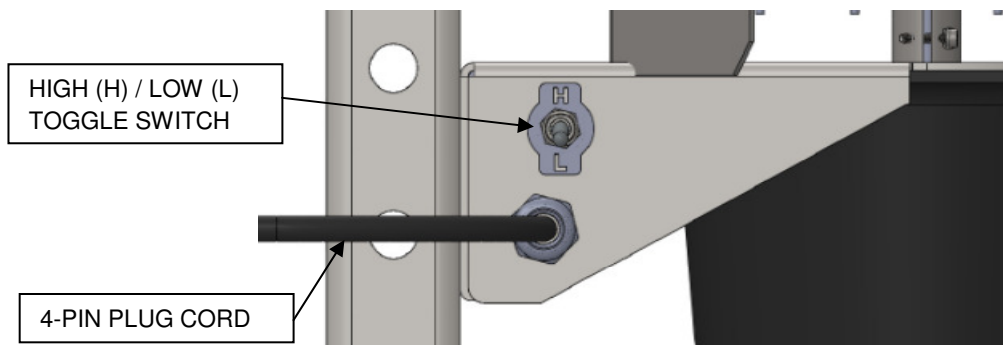
The 4-pin connector can now be plugged into the vehicle's 4-pin socket (if vehicle has a 7 or 9-pin connector, then a suitable adaptor needs to be purchased). Spreader is now ready to operate.



### OPERATION:

The SnowBear® Tailgate Spreader has two speeds (High/Low) that can be manually adjusted on the spreader assembly to adjust the material spread diameter. The toggle switch is located above where the 4-pin plug cord exits the spreader assembly, and indicated by a 'H' for High and 'L' for Low (see figure below).

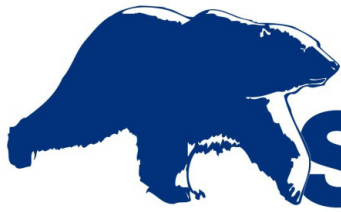
At the High setting, the approximate maximum material dispersion is 25-30' [7.6-9.2m]. At the Low setting, the approximate material dispersion is 12-15' [3.7-4.6m]. Again, this spread diameter will vary on the mounting height of the spreader assembly in relation to the ground.



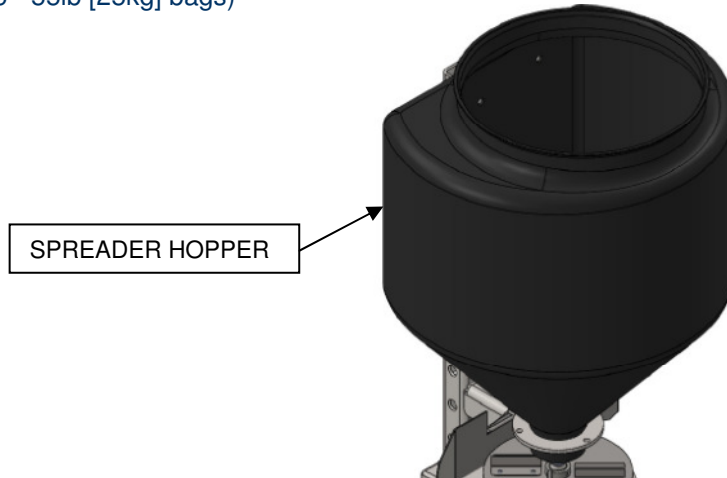
The toggle can be switched when the spreader is on or off, but for safety, it is recommended that it only be switched when the unit is off.

**CAUTION:** If the spreader is toggled while running, please be aware of the spinner assembly. It can grab on to loose clothing and potentially cause injury.

The SnowBear® Tailgate Spreader is now ready to fill with material and be put to use.



The spreader hopper is designed to hold approximately 250lbs [115kg] of bagged rock salt or ice melt material (~4 to 5 - 55lb [25kg] bags)

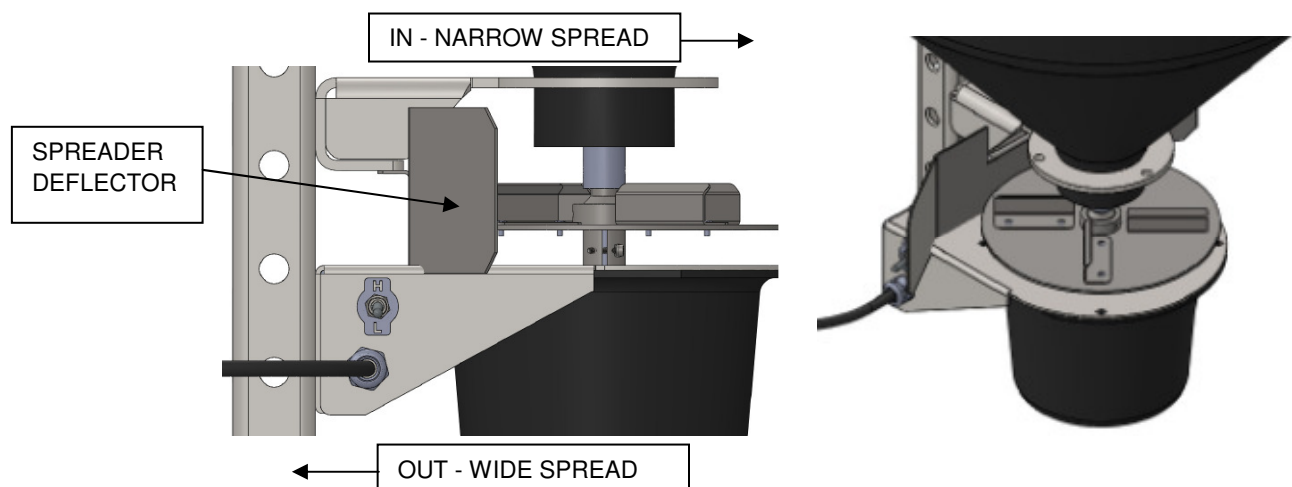


Once desired amount of material is poured in, and the spinner speed is set, the spreader is ready to run.

Before driving the vehicle, make sure vehicle lights are turned on, and make sure the spreader system is working by pushing the 'ON' button on the remote key fob. If spinning is going, and material is flowing, system is ready to spread. Push the 'OFF' button to stop the spreader. Begin driving the vehicle, and when you're in the desired area to spread the material, push the 'ON' button and continue until the required area is covered, then push 'OFF' to stop spreading.

### SPREAD WIDTH

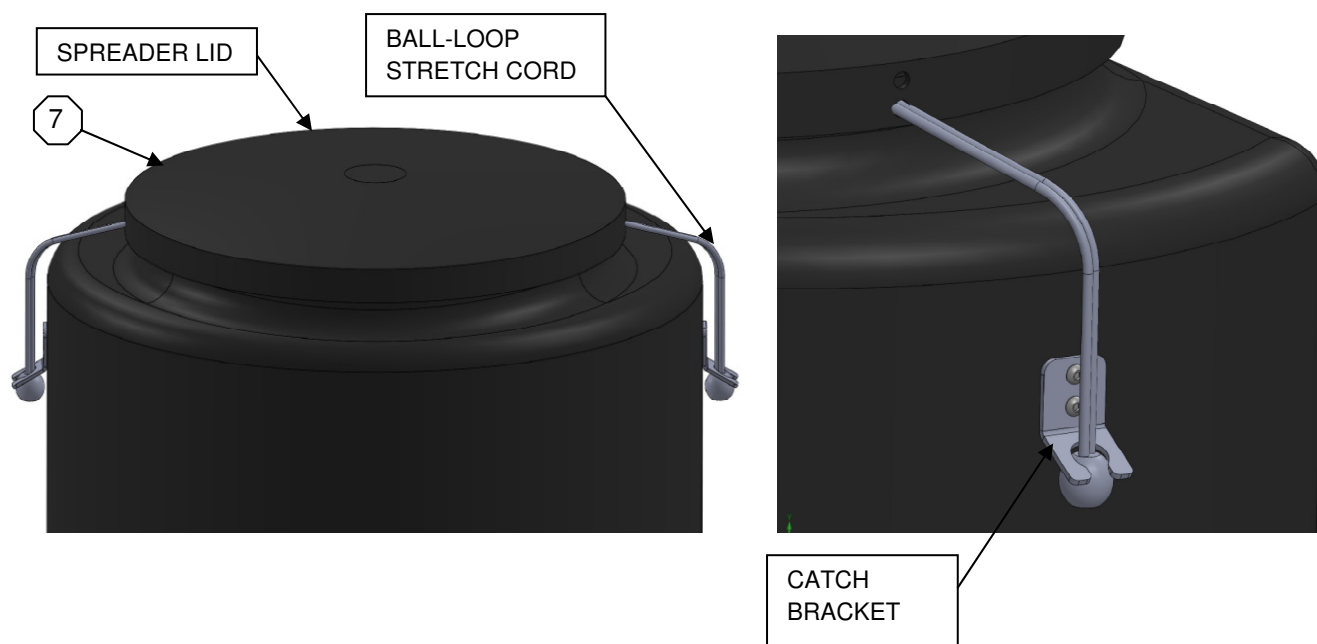
If the material spread is too wide, the dispersion can be narrowed by the adjustable deflector on the spreader assembly. Loosen the 2 x 3/8" nuts and move the deflector in or out to achieve desired dispersion width.

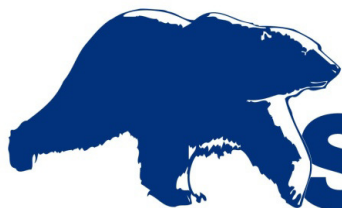


### SPREADER LID INSTALLATION

The SnowBear® Tailgate Spreader comes standard with a rigid plastic lid. The lid is affixed to the spreader hopper by two ball-loop stretch cords that are installed on the lid, and latched to the pre-installed catch brackets.

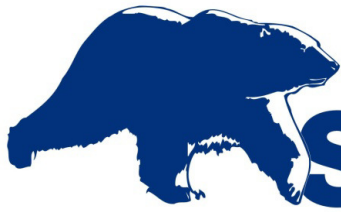
Stretch the ball-loop cord and snap under the catch bracket and release. To remove the lid, pull on the stretch cord and out from under the catch bracket.





### Accessories

PT # 324-234	<b>HOPPER MOUNTED BAG CUTTER KIT</b> <ul style="list-style-type: none"><li>-Simple field installed assembly</li><li>-Sharp 'teeth' to cut salt/ice melt bags</li><li>-Stainless steel for corrosion resistance</li></ul>	
PT # 324-235	<b>FLOW STOP ASSEMBLY</b> <ul style="list-style-type: none"><li>-Installs around auger to manually stop material from slowly escaping in transit</li><li>-Lever to adjust flow coming from auger</li><li>-Stainless steel for corrosion resistance</li></ul>	
PT # 324-236	<b>MATERIAL AGITATOR</b> <ul style="list-style-type: none"><li>-Simple field installed assembly</li><li>-Formed prongs break up salt/ice melt material so auger can process</li><li>-Stainless steel for corrosion resistance</li></ul>	



## General Maintenance

The SnowBear® Tailgate Spreader is generally maintenance free, but there are a few recommendations to help ensure many seasons of trouble-free operation.

**WARNING:** Never remove the spreader with material in the hopper. Always empty before removing.

**CAUTION:**

- Disconnect electric power at spreader electrical harness plug connection before servicing or performing maintenance.
- When replacing parts, use only original manufacturer's parts. Failure to do so will void warranty.
- Remote receiver is a solid-state electronic unit and is not serviceable. Any attempt to service will void warranty.
- There are no serviceable parts in the motor assembly. Any attempt to service will void warranty.
- If pressure washing spreader motor/electrical enclosure area, stay at least 48" [1.2m] away and avoid direct spray on the openings to avoid excessive water intrusion.
- During removal or mounting, securely grip spreader to avoid dropping.

### AFTER EACH USE

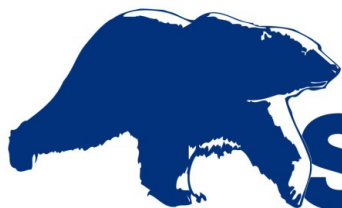
- Do not leave unused material in the hopper. Material can freeze or solidify, causing unit to not work properly. Empty and clean after each use.
- Wash out hopper & rinse off all external surfaces, especially spinner and deflector areas.
- Apply dielectric grease on 4-pin connector plugs to prevent corrosion.

### AT THE END OF EACH SEASON OR AFTER EXTENDED STORAGE

- Wash out hopper & rinse off all external surfaces.
- Apply dielectric grease on 4-pin connector plugs to prevent corrosion.
- Paint any bare, non-stainless steel, metal surfaces to prevent corrosion.

### STORAGE

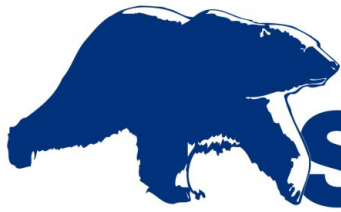
- Store the spreader in a clean, dry location and preferably away from direct sunlight.



### Tailgate Spreader Troubleshooting

PROBLEM	CAUSES	HOW TO CORRECT
<b>Spreader does not run</b>	<ol style="list-style-type: none"><li>1. Electrical connection</li><li>2. Bad motor</li><li>3. Loose wire connection to switch/receiver</li><li>4. Corrosion</li><li>5. Fuse blown</li><li>6. Check battery</li><li>7. Jammed auger</li><li>8. Headlights on vehicle not turned on (wiring harness typically part of light circuit)</li></ol>	<ol style="list-style-type: none"><li>1. Check 4-pin plug and make sure it is securely plugged in</li><li>2. Contact distributor for replacement</li><li>3. Open electrical enclosure &amp; inspect switch and receiver connections, fix where needed</li><li>4. Check all electrical connections for corrosion, fix if necessary</li><li>5. Locate blown fuse and replace</li><li>6. Load test battery. Recharge vehicle's battery if required</li><li>7. Unplug spreader and remove jam. If auger damaged, fix or replace</li><li>8. Turn vehicle headlights on</li></ol>
<b>Material will not flow</b>	<ol style="list-style-type: none"><li>1. Spreader hopper is empty</li><li>2. Material has solidified, stuck to wall, material obstruction</li><li>3. Auger is spinning in reverse</li><li>4. Auger broke</li></ol>	<ol style="list-style-type: none"><li>1. Refill spreader hopper with desired material</li><li>2. With spreader unplugged, use screwdriver or rigid rod to break-up material until proper consistency</li><li>3. Change polarity of motor</li><li>4. Auger needs to be replaced</li></ol>
<b>Spreader does not respond to key fob</b>	<ol style="list-style-type: none"><li>1. Plug not secure</li><li>2. No vehicle power to connector</li><li>3. Key fob battery low</li><li>4. Range issue</li><li>5. Control connection</li><li>6. Headlights on vehicle not turned on</li></ol>	<ol style="list-style-type: none"><li>1. Fully seat 4-pin connector plug</li><li>2. Ensure vehicle is running and power is going to plug connector</li><li>3. Replace battery</li><li>4. Try key fob at close range to spreader, if unit works, replace battery. If not, check electrical connections</li><li>5. Remove electrical cover and check all connections</li><li>6. Turn vehicle headlights on</li></ol>





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## SnowBear® Warranty Information

Please see the latest version of The SnowBear® Tailgate Spreader warranty can be found online at:

<http://www.snowbear.com/UserContent/documents/warranty.pdf>

Alternatively, please call our customer service hotline at (800) 337-2327.