November 1, 2018 Lit. No. 94380, Rev. 06

# Model 1000 Low-Profile Tailgate Spreader Receiver Mount

Installation Instructions

## **A** CAUTION

Read this manual before installing or operating the spreader.

The receiver mount is recommended for use on the following vehicles: All trucks with Class IV receiver hitches with 1000 lb tongue weight capacity.

This manual supersedes all editions with an earlier date.

#### SAFETY DEFINITIONS

#### **A** WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

## A CAUTION

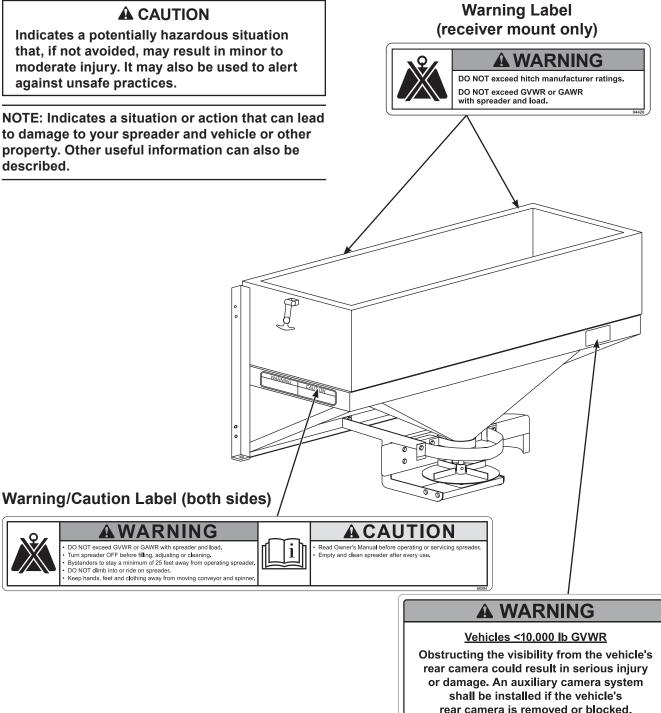
Indicates a potentially hazardous situation that, if not avoided, may result in minor to moderate injury. It may also be used to alert against unsafe practices.

NOTE: Indicates a situation or action that can lead to damage to your spreader and vehicle or other property. Other useful information can also be described.

#### WARNING/CAUTION LABELS

Please become familiar with and inform users about the warning and caution labels on the spreader.

NOTE: If labels are missing or cannot be read, see your sales outlet.



## SAFETY PRECAUTIONS

Improper installation and operation could cause personal injury and/or equipment and property damage. Read and understand labels and the Owner's Manual before installing, operating, or making adjustments.

#### A WARNING

- Driver to keep bystanders minimum of 25 feet away from operating spreader.
- Before working with the spreader, secure all loose-fitting clothing and unrestrained hair.
- Before operating the spreader, verify that all safety guards are in place.
- Before servicing the spreader, wait for conveyor, auger, and spinner to stop.
- Do not climb into or ride on spreader.

#### A WARNING

Overloading could result in an accident or damage. Do not exceed GVWR or GAWR ratings as found on the driver-side vehicle door cornerpost. See Loading section to determine maximum volumes of spreading material.

#### A WARNING

Do not install the control for this product in the deployment path of an air bag. Refer to vehicle manufacturer's manual for air bag deployment area(s).

#### **A** WARNING

Vehicles <10,000 lb GVWR: Obstructing the visibility from the vehicle's rear camera could result in serious injury or damage. An auxiliary camera system shall be installed if the vehicle's rear camera is removed or blocked.

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If rear directional, CHMSL light, or brake stoplights are obstructed by the spreader, the lights shall be relocated, or auxiliary directional or brake stoplights shall be installed.

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During the hopper installation we recommend the addition of an OSHA compliant Backup Alarm. This alarm is required for OSHA governed employers.

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- Do not operate a spreader in need of maintenance.
- Before operating the spreader, reassemble any parts or hardware removed for cleaning or adjusting.
- Before operating the spreader, remove materials such as cleaning rags, brushes, and hand tools from the spreader.
- Before operating the spreader, read the engine owner's manual, if so equipped.
- While operating the spreader, use auxiliary warning lights, except when prohibited by law.
- Tighten all fasteners according to the Torque Chart. Refer to Torque Chart for the recommended torque values.

#### 

Disconnect electric and/or hydraulic power and tag out if required before servicing or performing maintenance.

#### 

DO NOT leave unused material in hopper. Material can freeze or solidify, causing unit to not work properly. Empty and clean after each use.

NOTE: Lubricate grease fittings after each use. Use a good quality multipurpose grease.

## FUSES

The spreader electrical system contains several automotive-style fuses. If a problem should occur and fuse replacement is necessary, the replacement fuse must be of the same type and amperage as the original. Installing a fuse with a higher rating can damage the system and could start a fire. Fuse Replacement, including fuse ratings and locations, is located in the Maintenance section of the Owner's Manual.

## 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 jewelry or a necktie, and secure long hair.
- Wear safety goggles to protect your eyes from battery acid, gasoline, dirt, and dust.
- Avoid touching hot surfaces such as the engine, radiator, hoses, and exhaust pipes.
- Always have a fire extinguisher rated BC handy, for flammable liquids and electrical fires.

# FIRE AND EXPLOSION

#### A WARNING

Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on vehicle. Keep all open flames away from gasoline tank and lines. Wipe up any spilled gasoline immediately.

Be careful when using gasoline. Do not use gasoline to clean parts. Store only in approved containers away from sources of heat or flame.

#### **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 Equipment such as cell phones, text messaging devices, pagers, or two-way radios.

#### VENTILATION

#### **A** WARNING

Vehicle exhaust contains lethal fumes. Breathing these fumes, even in low concentrations, can cause death. Never operate a vehicle in an enclosed area without venting exhaust to the outside.

## BATTERY SAFETY

#### **A** CAUTION

Batteries normally produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks, or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.

- Batteries contain sulfuric acid, which burns skin, eyes, and clothing.
- Disconnect the battery before removing or replacing any electrical components.

#### NOISE

Airborne noise emission during use is below 70 dB(A) for the spreader operator.

#### VIBRATION

Operating spreader vibration does not exceed 2.5 m/s<sup>2</sup> to the hand-arm or 0.5 m/s<sup>2</sup> to the whole body.

## **TORQUE CHART**

#### **A** CAUTION

Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to torque chart. Use standard methods and practices when attaching spreader, including proper personal protective safety equipment.

Recommended Fastener Torque Chart								
Inch Fasteners Grade 5 and Grade 8								
Size	Torque (ft-lb)			Torque (ft-lb)				
	Grade 5		Size	Grade 5	Grade			
1/4-20	8.4	11.9	9/16-12	109	154			
1/4-28	9.7	13.7	9/16-18	121	171			
5/16-18	17.4	24.6	5/8-11	150	212			
5/16-24	19.2	27.3	5/8-18	170	240			
3/8-16	30.8	43.6	3/4-10	269	376			
3/8-24	35.0	49.4	3/4-16	297	420			
7/16-14	49.4	69.8	7/8-9	429	606			
7/16-20	55.2	77.9	7/8-14	474	669			
1/2-13	75.3	106.4	1-8	644	909			
1/2-20	85.0	120.0	1-12	704	995			
Metric Fasteners Class 8.8 and 10.9								
Size	Torque (ft-lb)			Torque (ft-lb)				
	Class 8.8	Class 10.9	Size	Class 8.8	Class 10.9			
M6 x 1.00	7.7	11.1	M20 x 2.50	325	450			
M8 x 1.25	19.5	26.9	M22 x 2.50	428	613			
M10 x 1.50	38.5	53.3	M24 x 3.00	562	778			
M12 x 1.75	67	93	M27 x 3.00	796	1139			
M14 x 2.00	107	148	M30 x 3.50	1117	1545			
M16 x 2.00	167	231	M33 x 3.50	1468	2101			
M18 x 2.50	222	318	M36 x 4.00	1952	2701			
These torque values apply to fasteners except those noted in the instructions.								

#### **A** WARNING

Overloading could result in an accident or damage. Do not exceed GVWR or GAWR ratings as found on the driver-side vehicle door cornerpost.

This manual covers vehicles that have been recommended for carrying the tailgate spreader. Please see your local dealer for proper vehicle applications.

#### CERTIFICATION

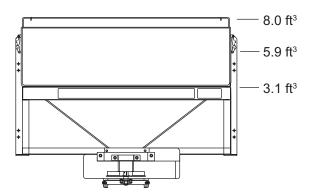
#### **A** WARNING

New untitled vehicle installation of a spreader requires National Highway Traffic Safety Administration altered vehicle certification labeling. Installer to verify that struck load of snow or ice control material does not exceed GVWR or GAWR rating label and complies with FMVSS.

#### **CLASS IV RECEIVER HITCH INFORMATION**

Hitch Type	Max. Gross Trailer Weight	Max. Tongue Weight	
Weight- Distributing	10,000 lb	1,000 lb	
Weight-Carrying Ball Mount	10,000 lb	1,000 lb	

#### SPREADER CAPACITY



#### SPREADER WEIGHT

Approximate base unit weight: 154 lb, including mount.

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Read and adhere to manufacturer's ice-control material package labeling, including Material Safety Data Sheet requirements.

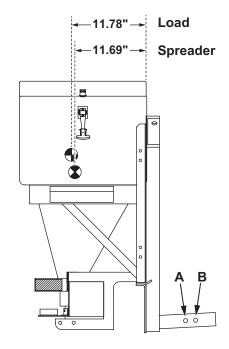
#### MATERIAL WEIGHT

	Density				
Material	(lb/ft <sup>3</sup> )	(lb/yd³)	(kg/m³)		
Salt	80	2160	1282		

Material densities are approximate and are based on dry, loose material. It is the responsibility of the operator to know the weight of the material to be spread and the vehicle carrying capacity.

NOTE: If spreader and ice control material loading is in doubt, weigh vehicle for compliance with vehicle ratings.

## CENTER OF GRAVITY

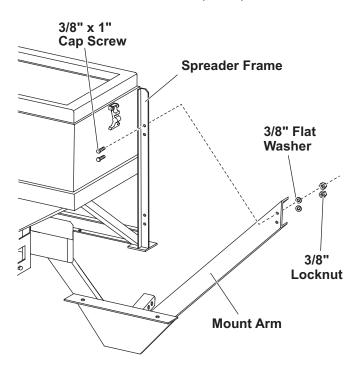


Material load weight not to exceed 340 lb if hole A is used for mounting the spreader, or 300 lb if hole B is used.

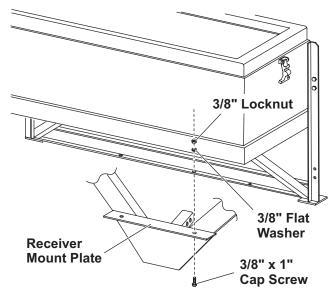
#### INSTALLATION INSTRUCTIONS

The spreader shall be installed according to the instructions supplied. Your local outlet is trained to provide this service and to service your spreader with factory original parts.

- 1. Remove the spreader cover. Position the spreader and frame upside down on a flat, level surface.
- Align the holes in the mount arms with the holes on each side of the spreader frame as shown. Install the mount arms to the spreader frame using two 3/8" x 1" cap screws, 3/8" flat washers, and 3/8" locknuts for each arm (4 total).



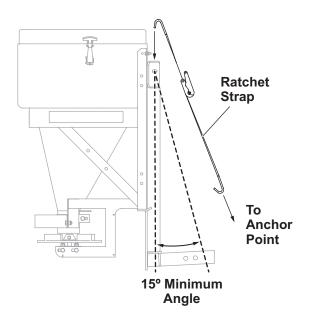
3. Secure the receiver mount plate to the spreader frame using one 3/8" x 1" cap screw, 3/8" flat washer, and 3/8" locknut in each hole as shown.



#### Chute portion of hopper not shown.

- 4. Tighten the fasteners according to the torque chart.
- 5. Park the vehicle on a level surface. Place the shift lever in PARK or NEUTRAL and set the parking brake.

- 6. Return the assembled spreader and receiver mount to normal operating position. Install the spreader and frame into the receiver hitch on the vehicle and secure with the original hitch pin.
- 7. Install the supplied ratchet straps. Insert the upper hook of the ratchet strap into the hole near the top of the receiver mount arm. Route the strap behind the bumper and and hook the lower end onto the truck frame or other rigid anchor point. Tighten the ratchet straps evenly and securely.



NOTE: Do not install ratchet straps to the bumper or tailgate. Doing so may result in vehicle or spreader damage. NOTE: If the spreader obstructs the view of the license plate, check for any local regulations that may apply.

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The company reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used. The company or the vehicle manufacturer may require or recommend optional equipment for spreaders. Do not exceed vehicle ratings with a spreader. The company offers a limited warranty for all spreaders and accessories. See separately printed page for this important information.

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