

B09990 LP-8 Tailgate Spreaders

Owner's Manual

A CAUTION

Read this manual before installing or operating the spreader.

This manual is for BLIZZARD® LP-8 Tailgate Spreaders with serial numbers beginning with 0704 – 0812

This document supersedes all editions with an earlier date.

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PREFACE

This manual has been prepared to acquaint you with the safety information, operation and maintenance of your new LP-8 Tailgate Spreader. Please read this manual carefully and follow all recommendations. This will help ensure profitable and trouble-free operation of your spreader. Keep this manual accessible. It is a handy reference in case minor service is required.

When service is necessary, bring your spreader to your local outlet. They know your spreader best and are interested in your complete satisfaction.

NOTE: This spreader is designed to spread snow and ice control materials only. Do not use it for purposes other than those specified in this manual.

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 or 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.

Personal Safety

- Park the vehicle on a level surface and set the parking brake.
- Remove ignition key and put the vehicle in park or in gear to prevent others from starting the vehicle during installation or service.

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 all safety guards are in place.
- Before servicing the spreader, wait for conveyor or spinner to stop, then lock out power.
- 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 CAUTION

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.

A CAUTION

- 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 Owner's Manual.
- While operating the spreader, use auxiliary warning lights, except when prohibited by
- Tighten all fasteners according to the Torque Chart. Refer to Torque Chart for the recommended torque values.

SAFETY INFORMATION

A CAUTION

Disconnect electric power at spreader electrical wiring harness connection and tag out if required before servicing or performing maintenance.

A CAUTION

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

NOTE: Maintain proper belt tension for correct belt functioning.

NOTE: Lubricate grease fittings after each use. Use a good quality multi-purpose grease.

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

Torque Chart

A CAUTION

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

Recommended Fastener Torque Chart (ft-lb)			
Size	SAE Grade 2	SAE Grade 5	SAE Grade 8
1/4-20 5/16-18 3/8-16 3/8-24 7/16-14 1/2-13 9/16-12 5/8-11 3/4-10 7/8-9 1-8	6 11 19 24 30 45 66 93 150 150 220	9 18 31 46 50 75 110 150 250 378 583	13 28 46 68 75 115 165 225 370 591 893
Metric Grade 8.8 (ft-lb)			
Size	Torque	Size	Torque
M 6 M 8 M 10	7 17 35	M 12 M 14 M 16	60 95 155
These torque values apply to fasteners except those noted in the instruction.			

SAFETY INFORMATION

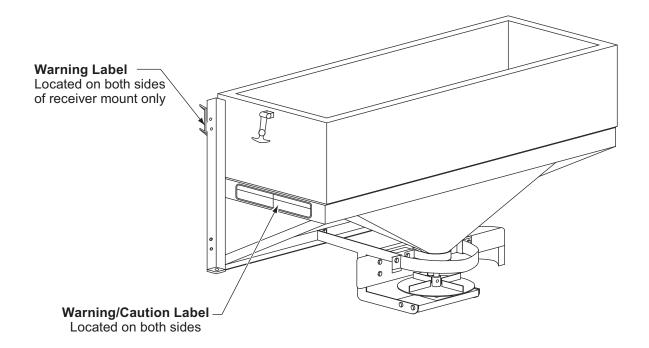
Warning/Caution Label

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

Warning Label

A WARNING

DO NOT EXCEED HITCH MANUFACTURER RATINGS.
DO NOT EXCEED GVWR OR GAWR WITH SPREADER AND LOAD.



Warning/Caution Label

 DO NOT exceed GVWR or GAWR with spreader and load. Turn spreader OFF before filling, adjusting or cleaning. Bystanders to stay a minimum of 25 feet away from operating spreader. DO NOT climb into or ride on spreader. Keep hands feet and clothing away from moving conveyor and spinner. 	AWARNING	A CAUTION
receptioned, feet and clothing away from moving conveyor and spiriter.	Turn spreader OFF before filling, adjusting or cleaning. Bystanders to stay a minimum of 25 feet away from operating spreader.	, , ,

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

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.

Approximate Material Weights

A CAUTION

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

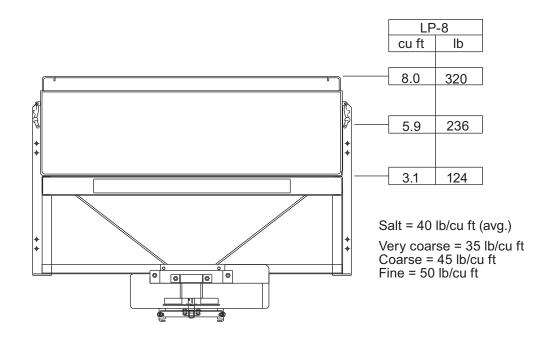
NOTE: If spreader and ice control material loading is in doubt weigh vehicle for compliance with vehicle ratings.

NOTE: Use only dry, free-flowing granular materials with this spreader. Damp or wet ice control materials and other products may not spread properly.

Certification

A WARNING

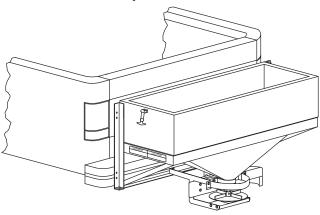
New untitled vehicle installation of a spreader requires National Highway Traffic Safety Administration altered vehicle certification labeling. Installer to verify that struck load of snow or ice control material does not exceed GVWR or GAWR rating label and complies with FMVSS.



Plus Approximate Base Unit Weights of 154 lb for LP-8 Unit, Including Mount.

MOUNTING THE SPREADER

Receiver Mount Spreader



A CAUTION

During removal or mounting, securely grip spreader to avoid dropping.

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

- 1. Attach the spreader to the receiver mount with six 3/8" x 1" cap screws.
- 2. Insert the assembled unit into the receiver hitch and secure with pin (not included).
- 3. Plug the spreader harness into the vehicle harness.

OPERATING THE SPREADER

Driving and Spreading on Snow and Ice

A CAUTION

Drinking and then driving or spreading is very dangerous. Your reflex, perceptions, attentiveness and judgement can be affected by even a small amount of alcohol. You can have a serious or even fatal collision if you drive after drinking. Please do not drink then drive or spread ice control materials.

Follow your vehicle owner's manual instructions for driving in snow and ice conditions. Remember when you drive on snow or ice, your wheels will not get good traction. You cannot accelerate as quickly, turning is more difficult and you will need longer braking distance. Wet and hard packed snow or ice offers the worst tire traction. It is very easy to lose control. You will have difficulty accelerating. If you do get moving, you may have poor steering and difficult braking which can cause you to slide out of control.

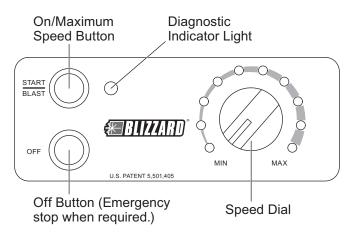
Here are some tips for driving in these conditions.

- Drive defensively.
- Do not drink, then drive or spread ice control materials.
- Spread or drive only when you have good visibility for operating a vehicle.
- If you cannot see well due to snow or icy conditions, you will need to slow down and keep more space between you and other vehicles.
- Slow down, especially on higher speed roads.
 Your headlamps can light up only so much road ahead.
- If you are tired, pull off in a safe place and rest.
- Spreader size reduces driver visibility to the rear of the vehicle due to spreader size and location. We recommend OSHA compliant backup alarm for all governed employers.
- Keep your windshield and all glass on your vehicle clean to see around you.
- Dress properly for the weather. Wear layers of clothing, as you get warm you can take off layers.

Accessory Circuit

The yellow wire in the vehicle harness is provided for accessory use of 12 amps or less.

Variable Speed (PWM) Control



WARNING

Before starting the spreader, the driver shall verify all bystanders are a minimum of 25 feet away from operating spreader.

Starting and Stopping the Motor

- To start the spreader motor, press the START/BLAST button and release. Both the START/BLAST and OFF buttons will be backlit when the motor is running. The spreader will operate at the speed selected on the speed dial.
- Press the OFF button to stop the motor. The OFF button operates as emergency stop when required.

NOTE: The truck ignition must be ON to start the spreader.

NOTE: If the truck ignition is turned OFF while the spreader is running, the motor will stop.

Adjusting the Spinner Speed

The speed setting can be adjusted when the spreader is either ON or OFF.

- Turn the speed dial clockwise. The speed will increase as the number of green LEDs illuminated on the speed dial increase.
- 2. Turning the speed dial counterclockwise will decrease the speed.

Blast/Maximum Speed

- 1. Press and hold the START/BLAST button as long as maximum speed is needed.
- Release the button when maximum speed is no longer needed. The control automatically returns to the ON position and the speed shown on the speed dial.

NOTE: When blast is used, the speed dial does not move to the maximum speed setting, but remains at the preset speed.

Diagnostic Indicator Light

The diagnostic indicator light located to the right of the START/BLAST button remains dark unless a problem with the motor or wiring is detected. The light will flash a number of flashes in a row, pause, then repeat. Count the flashes to determine the nature of the malfunction and refer to the diagnostic chart below.

# of Flashes	Problem	Possible Causes
0	No Fault	_
2	No Power	Battery fuse is blown, or battery cable is disconnected or faulty.
3	No Motor	Motor is disconnected.
4	No Ground	Spreader harness ground is disconnected or faulty.
5	Overheated	Motor off due to controller overheat, possibly due to frozen or jammed spreader.
6	Excess Current	Over 35A for more than 1-2 seconds. (Higher overloads are allowed for shorter periods of time.)

If additional information is needed, refer to the Troubleshooting section of this manual.

REMOVING THE SPREADER

A CAUTION

During removal or mounting, securely grip spreader to avoid dropping.

NOTE: Empty the hopper before removing the spreader.

Removing the Receiver Mount Spreader

- 1. Unplug the spreader.
- 2. Remove the pin from the receiver hitch.
- 3. Remove the spreader from the vehicle and stand in an upright position. This may require additional support.

A CAUTION

Disconnect electric power at spreader electrical wiring harness connection and tag out if required before servicing or performing maintenance.

Cleaning

After every use, clean the spreader, but first disconnect the electrical plug located between the spreader and the truck. The spreader can be cleaned using tap water or a high pressure washer. A long handle brush can be used to aid cleaning.

A CAUTION

- 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.
- Empty and clean spreader after every use.
 Material can freeze or solidify causing unit to not work properly.

Preseason Check

Before the unit is placed in service for the ice control season make sure that it is in top working condition. Here are some tips for getting your spreader ready.

Remove the motor cap assembly and inspect the following:

- Check the condition of the drive belt. Any cracks or damaged teeth indicate the need for a new belt. See Drive Belt Replacement in this section.
- Check the motor connection terminals for damage or corrosion. Clean or replace as necessary and coat with dielectric grease.
- 3. Check the condition of the drive shaft bearings by first removing the drive belt. To remove the drive belt see Drive Belt Replacement in this section. With the drive belt removed spin the drive shaft by hand. Any excess noise or roughness in either the top or the bottom bearing may indicate bearing failure.

- 4. If bearings pass inspection be sure to thoroughly grease them with a good quality multi-purpose grease. See Bearing Maintenance in this section.
- 5. Verify all drive sprocket set screws are tight. Verify that all other fasteners are tight. Refer to the Torque Chart in the safety section of this manual.
- Check the condition of the motor cap assembly seal. This seal is very important to the dependability of your unit. Replace the seal if needed.
- Check the condition of the spinner disk. If the vanes are excessively worn the unit may not spread as intended. Replace the spinner if necessary.
- 8. Replace the motor cap assembly and locknuts.

Postseason Maintenance

Before storing the unit for the off season, taking a few minutes to do the following will extend the service life of your spreader.

- 1. Thoroughly clean the unit inside and out.
- 2. Apply dielectric grease to all electrical connections to prevent corrosion.
- 3. Grease the drive shaft bearings.
- 4. Oil or paint all bare metal surfaces.
- 5. Place the lid on the hopper body of the unit and secure the latch.
- Store the unit in an upright position; stabilize it with supports if necessary. If the unit is stored outdoors, cover the unit and place it on blocks to eliminate ground moisture.

MAINTENANCE

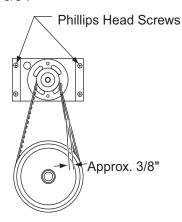
Drive Belt Replacement

Disconnect the electrical plug between the spreader and truck before drive belt replacement.

A CAUTION

Overtightening the belt may result in damage to the motor or bearings.

- 1. Remove the motor cap assembly.
- 2. Loosen the four Phillips head screws that fasten the motor mount to the drive support.
- 3. Slide the motor toward the drive shaft.
- 4. Remove the belt and replace with a new one.
- 5. Slide the motor mount away from the drive shaft until the proper tension of the drive belt is achieved. After tightening the belt should easily deflect 3/8".



6. Tighten the four Phillips head screws and replace the motor cap.

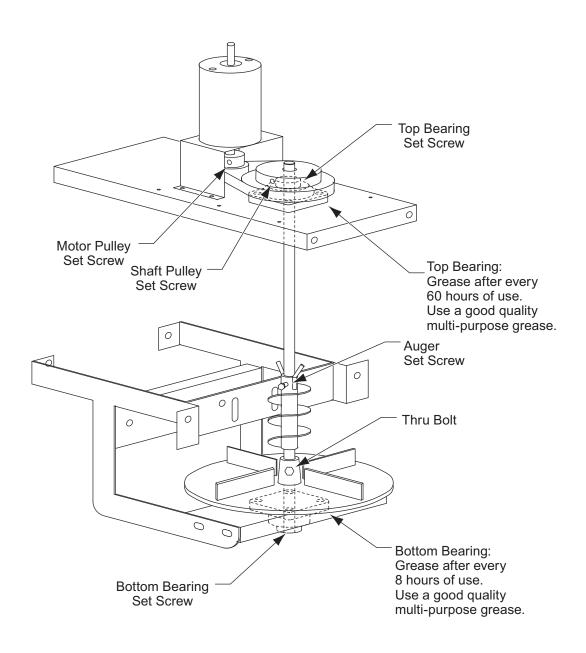
Recycle

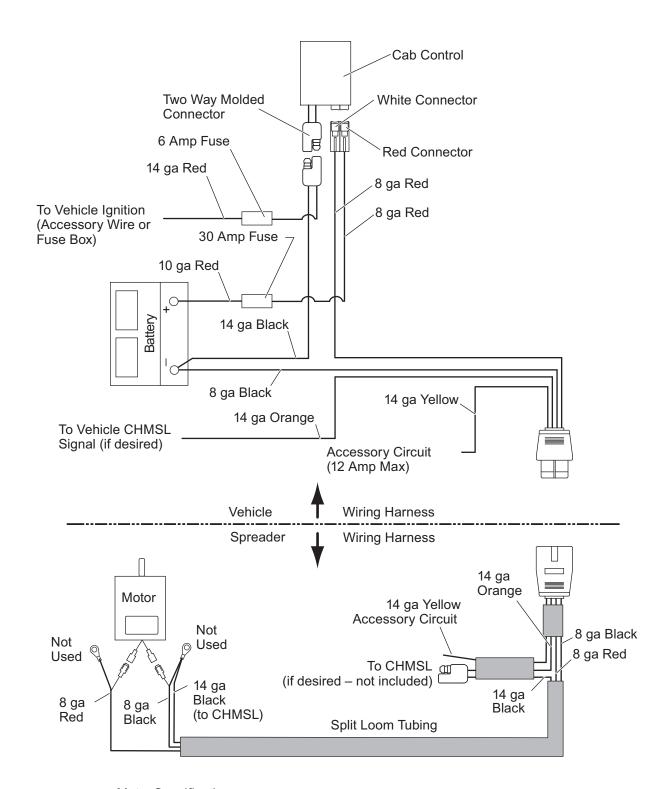
When your spreader has performed its useful life, the majority of its components can be recycled as steel. Gear oil shall be disposed of according to local regulations. Balance of parts made of plastic shall be disposed of in customary manner.

Bearing and Set Screw Maintenance

Disconnect the electrical plug between the spreader and the truck before performing any maintenance.

- Tighten all set screws shown after every 60 hours of use.
- Grease the top and bottom drive shaft bearings as shown. Due to the harsh environment of the bottom bearing it will require more care than the top bearing.





Motor Specification:

12 Volt DC, .56 kW Motor

TROUBLESHOOTING GUIDE

For control operation and use of diagnostic indicator lights, locate the section for your control style in the Operating Section of this manual.

PROBLEM	POSSIBLE CAUSE	SUGGESTED SOLUTION
No power to cab control (Ignition and control switches ON; no illumination of indicator light(s).)	 Control connector plug is loose. Battery lead in-line fuse is blown. Battery connection is poor. Battery wiring harness is damaged. 	 Check plug connection at cab control. Change the fuse (4-pin harness – 6-amp fuse; 3-pin – 10-amp) and inspect for short circuits. Check power supply for 12V DC. Check for low battery. Clean or replace ring terminal. Coat with dielectric grease. Repair or replace damaged wires or harness as required.
Speed control dial does not change motor speed.	Malfunctioning cab control. Red and white connectors are incorrectly hooked up.	 Replace cab control. Reconnect so red matches red and white matches white.
Spreader does not operate. (Indicator light(s) illuminated.)	Overloaded condition is causing over-current protection to activate. Wire harness is damaged or has an open circuit between cab control and spreader.	1. Reset cab control by turning the power OFF. Depress the START/BLAST switch to resume operation. 2a. Check plug connections at cab control and spreader. 2b. Check wire connections at spreader motor and at vehicle battery – disconnect motor leads, turn control on, set cab control to maximum on variable speed controls and check for voltage at motor leads. 2c. Repair or replace damaged wires and connectors. 2d. Check the 30-amp in-line fuse. Replace if necessary.
Spinner does not turn. (Motor is running.)	 Spreader motor is not running. Obstruction is preventing rotation. Drive belt is loose or damaged. Motor pulley not secured to motor shaft. Spinner pulley is not secured to spinner shaft. 	 Replace motor if shaft will not turn. Unplug the spreader harness and tag out, if required, before performing any of the following repairs. Clear obstruction. Adjust tension or replace belt if worn or damaged. Tighten pulley set screw or replace pulley if damaged. Replace cap screw and nut if missing or damaged. Replace pulley if damaged.
	Spinner shaft bearings are dry or seized.	5. Grease or replace bearings.

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SUGGESTED SOLUTION
Ice control material not flowing (Spinner is turning.)	Bridging of material or obstruction in hopper.	Unplug the spreader harness and tag out if required. Check hopper for material and free any bridged material or obstruction.
Spread pattern not optimum.	Deflector out of adjustment.	Unplug the spreader harness and tag out, if required. Change deflector adjustment to suit desired pattern.



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