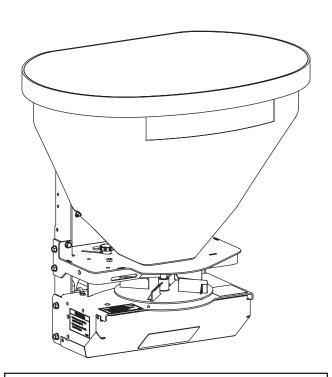
February 1, 2023 Lit. No. 30752EN, Rev. 00



# LOW-PRO 300G Tailgate Spreader #30870

Owner's Manual and Installation Instructions
Original Instructions



#### **A** CAUTION

Read this manual before installing or operating the spreader.

This manual is for WESTERN® LOW-PRO 300G tailgate spreaders with serial numbers beginning with 210801 and higher.

#### **TABLE OF CONTENTS**

INTRODUCTION	5
Owner's Information Form	5
SAFETY	6
LOADING	11
Certification	11
Approximate Material Weights	11
MOUNTING THE SPREADER	12
Assembly Instructions	12
Receiver Mount Spreader	14
WIRING INSTRUCTIONS	15
WIKING INSTRUCTIONS	_
300G Tailgate Spreaders	15

OPERATING THE SPREADER	∠∪
Driving and Spreading on Snow and Ice	20
Spreading Tips	20
REMOVING THE SPREADER	21
MAINTENANCE	22
Lubrication	22
After Each Use	22
At the End of Each Season or	
After Extended Storage	
Fuse Replacement	
Storage	22
TROUBLESHOOTING	23

#### **INTRODUCTION**

This manual has been prepared to acquaint you with the safety information, operation, and maintenance of your new 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 distributor. 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.

Register your spreader online at www.westernplows.com			
	OWNER'S INFORMATION	ON	
Owner's Name:		<del></del>	
Date Purchased:			
Distributor Name:		Phone:	
Distributor Address:		· · · · · · · · · · · · · · · · · · ·	
Vehicle Model:		Year:	
Spreader Model:	Serial #:	<del>-</del>	
Spreader Weight:	lb/kg		

#### **SAFETY DEFINITIONS**

#### **A** WARNING

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

#### **A** CAUTION

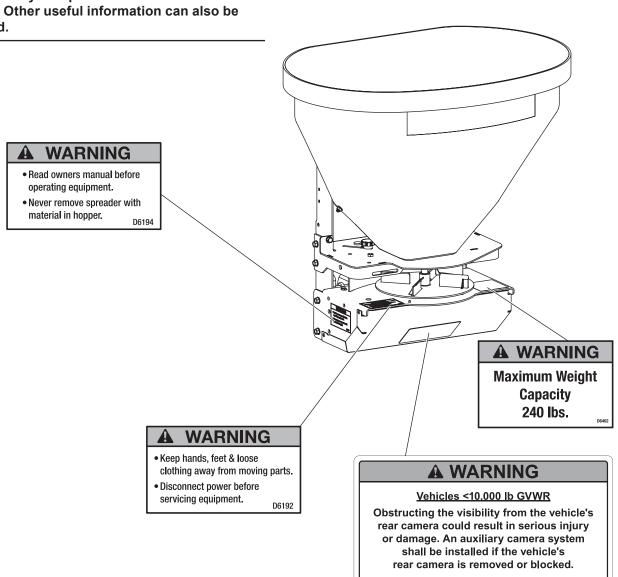
Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

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.

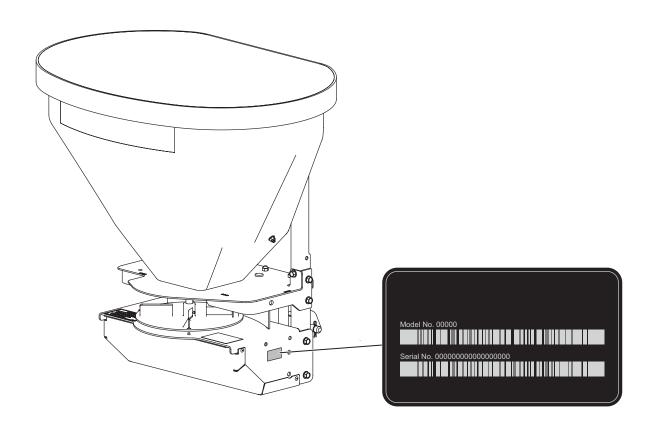
#### WARNING/CAUTION LABELS

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

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



#### **SERIAL NUMBER LABEL**





#### 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 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 door cornerpost of

the vehicle. See Loading section to determine maximum volumes of spreading material.

#### **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.

#### **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

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

#### **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.
- 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.

#### **A** CAUTION

Disconnect electric and/or hydraulic power 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 after each use.

#### **FUSES**

The electrical system may contain 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 rating as the original. Installing a fuse with a higher rating can damage the system and could start a fire. Fuse Replacement is located in the Maintenance section of this 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 snowplow vibration does not exceed 2.5 m/s² to the hand-arm or 0.5 m/s² 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.

Re	Recommended Fastener Torque Chart					
	Inch Fasteners Grade 5 and Grade 8					
Torque (ft-lb)			Torque (ft-lb)			
Size	Grade 5	Grade 8	Size	Grade 5	Grade 8	
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						
	Torque (ft-lb)			Torque (ft-lb)		
Size	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.						

This manual covers vehicles which have been recommended for carrying the 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.

#### APPROXIMATE MATERIAL WEIGHTS

#### **A** WARNING

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

#### **A** WARNING

Do not overload vehicle. Use chart below to calculate weight of material. Weights of material are an average for dry materials.

#### **A** CAUTION

Never use wet materials or materials with foreign debris with any of these spreaders. These units are designed to handle dry, clean, free-flowing material.



#### A CAUTION

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

Material	Density (lb/ft³)
Rock Salt (dry)	80–90
Bagged Ice Melters	
Calcium Flakes	See product information on
Calcium Chlorides	bag or bulk material.
Granular Turf Materials	

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.

Weight of spreader and mount must be added to struck material weight to determine total spreader weight. Do not exceed maximum material capacity as shown on the safety label (see Safety section).

Use only fine materials with the spreader. Other forms of spreading material (e.g., bagged or bulk rock salt) are not compatible with the tailgate spreader.

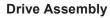
NOTE: If spreader and ice control material loading is in doubt, weigh vehicle for compliance with vehicle ratings.

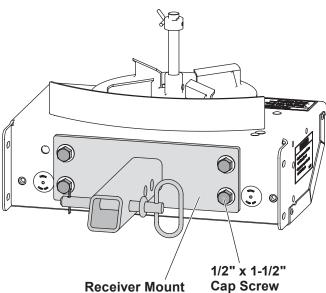
#### MOUNTING THE SPREADER

#### **ASSEMBLY INSTRUCTIONS**

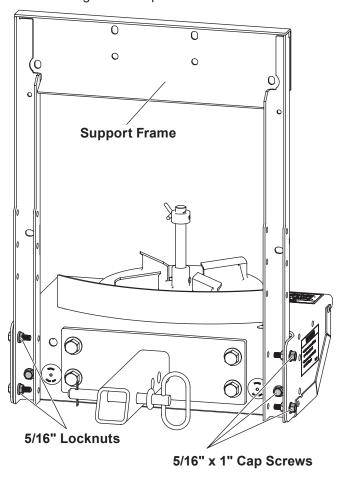
The spreader shall be installed according to instructions supplied. Your local outlet is trained to provide this service and service your spreader with factory original parts.

 Place the drive assembly on a flat, level surface. Attach the receiver mount to the drive assembly as shown using four 1/2" x 1-1/2" cap screws. Tighten according to the torque chart.



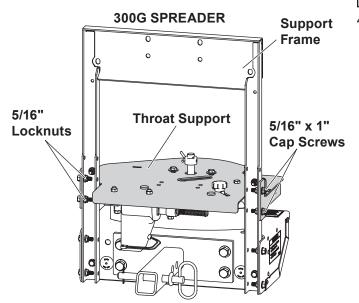


2. Mount the support frame to the drive assembly using the six supplied 5/16" x 1" cap screws and the four supplied 5/16" locknuts. Tighten fasteners according to the torque chart.



#### MOUNTING THE SPREADER

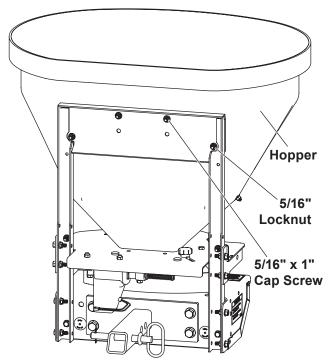
3. Mount the throat support to the support frame at the two lower holes by using the four supplied 5/16" x 1" cap screws and 5/16" locknuts. Tighten the fasteners according to the torque chart.



#### A CAUTION

Before drilling holes, check to be sure that no vehicle wiring or other components could be damaged.

4. Drill four holes in the hopper using the support frame holes as a template. Place the backing plate inside the hopper.



5. Fasten the hopper to the support frame by running the four supplied 5/16" x 1" cap screws through the backing plate, hopper, and support frame from inside the hopper. Attach using the four supplied 5/16" locknuts. Tighten the fasteners according to the torque chart.

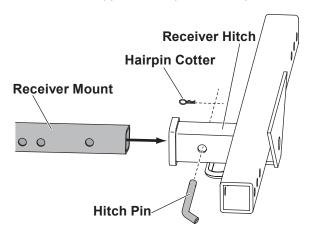
#### RECEIVER MOUNT SPREADER

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.

#### **A** CAUTION

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

Insert the assembled unit into the receiver hitch and secure with the supplied hitch pin and hairpin cotter.



#### WIRING INSTRUCTIONS

#### 300G Tailgate Spreaders

- Mount the rear plug bracket on the back of the vehicle. Locate the harness toward the center of the bumper as it will reduce the amount of debris getting onto the plug. Apply dielectric grease to the plug.
- Route the wires from the back to front using zip-ties or clamps (not supplied). Do not secure to brake lines, fuel lines, or near exhaust, engine, or moving parts. Use the heavy-duty cable ties along the frame and lighter-duty cable ties everywhere else.

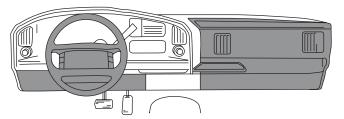
#### **A** CAUTION

Before drilling holes, check to be sure that no vehicle wiring or other components could be damaged.

- 3. Drill a 3/4" hole in the firewall near the steering column. Be sure to check for wires and components in the way (both sides of the firewall) before drilling the hole.
- 4. Run the data cable into the cab. Cable tie the wire under the dash so that it does not get in the way

#### A CAUTION

Do not alter, modify, or install additional components in shaded areas shown below. Failure to comply may interfere with airbag deployment or cause injury to operator in an accident.



of the brake or accelerator pedal. Leave enough of the data cable outside of the dash so that the operator can hold the control pendant in hand. Install the pendant mounting base and bracket. Stick the hook/loop fastener to the pendant and pendant base.

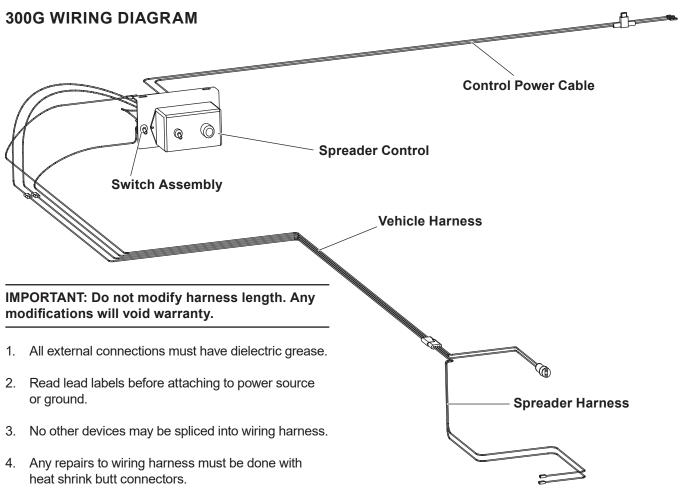
- Connect the harness to the back of the control.
   Cable tie the loose control harness and move it to the engine compartment. Do not mount the harness close to any heater vents.
- 6. Connect power leads to the battery:

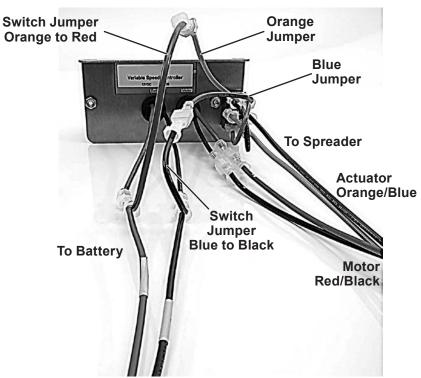
Red: POSITIVE (+)

Black: NEGATIVE (-)

Always connect to the primary battery if using a dual battery system. Secure loose loom to any other large or medium vehicle harness with medium-duty cable ties to secure the wiring harness.

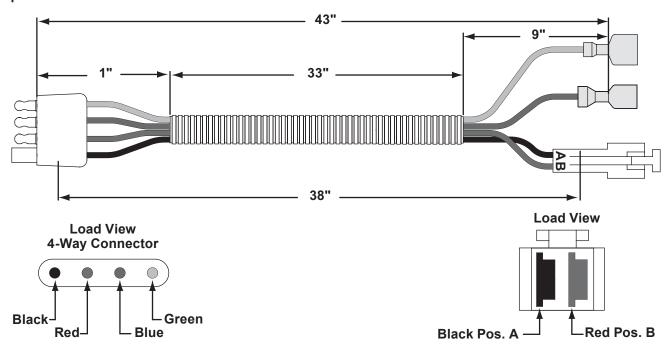
7. Push the ON/OFF button on the control to check for power. When confirmed, turn power OFF. The electrical portion of the installation is complete.





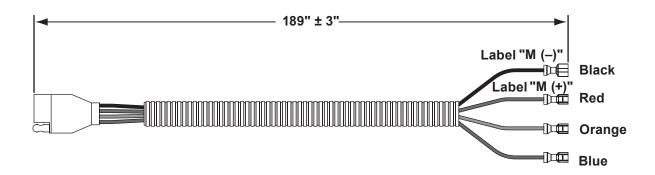
#### **CONTROL AND HARNESS DIAGRAM**

#### **Spreader Harness**

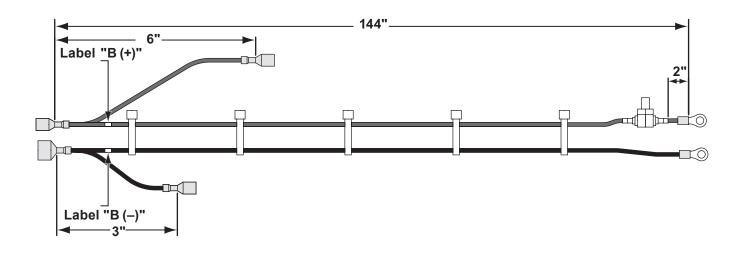


#### **300G HARNESS DIAGRAMS**

#### **Vehicle Harness**

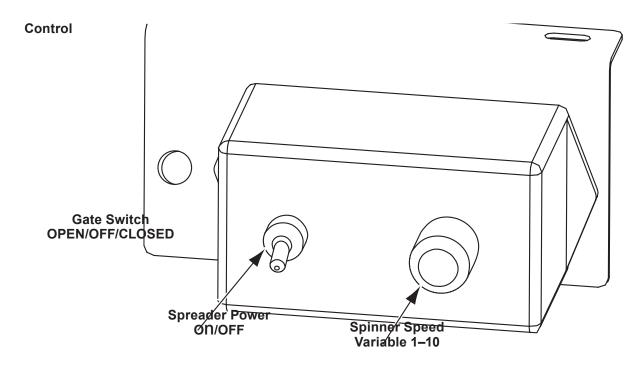


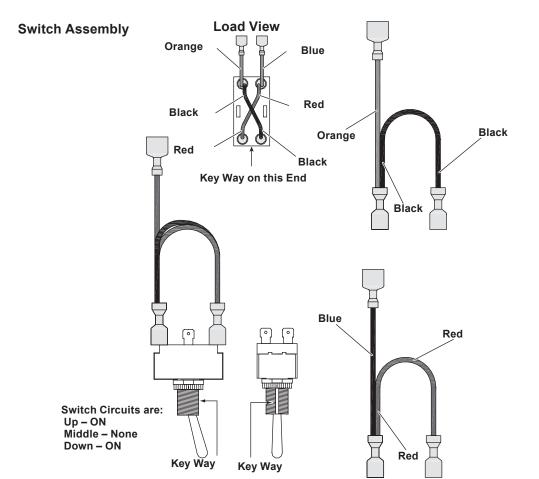
#### **Battery Harness**



18

#### **300G CONTROL**





### DRIVING AND SPREADING ON SNOW AND ICE

#### WARNING

Drinking and then driving or spreading is very dangerous. Your reflexes, perceptions, attentiveness, and judgment 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 offer 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.
- The spreader's size and location reduce driver visibility to the rear of the vehicle. We recommend an 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.

#### SPREADING TIPS

- Spread ice melters with the storm to prevent unmanageable levels of ice.
- Never exceed 10 mph (16 km/h) when spreading.
- · For a heavier pass, drive slower.
- Never operate spreader near pedestrians.
- Calculate spread pattern when near vegetation.

#### CONTROL

#### **A WARNING**

Never operate equipment when under the influence of alcohol, drugs, or medications that might alter your judgment and/or reaction time.

#### **A WARNING**

Never exceed 45 mph (72 km/h) when loaded spreader is attached to vehicle. Braking distances may be increased and handling characteristics may be impaired at speeds above 45 mph (72 km/h).

#### **A WARNING**

Never allow children to operate or climb on equipment.

#### **A** WARNING

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

#### **Spreader Power**

The tailgate spreader comes standard with an ON/OFF switch.

**To start the spreader:** Turn the power ON. Material will begin to flow through the feed auger.

**To stop the spreader:** Switch the power OFF. Material will cease to spread.

#### **Controlling the Gate:**

**To open the gate:** Move the gate switch to the UP position in order to open the gate. Once the gate is open, move the switch to the MIDDLE position to maintain the gate position.

**To close the gate:** Move the switch to the DOWN position. Once the gate is closed, move the switch back to the MIDDLE position.

#### **Adjusting Spinner Speed**

The tailgate spreader comes standard with a variable speed dial. Spinner speed can be adjusted to get desired spread distance.

- 1. Turn the speed dial clockwise to increase speed, resulting in a wider spread pattern. When the POWER switch is set to the ON position, the spreader will accelerate to the speed set on the dial.
- 2. Turn the speed dial counterclockwise to decrease speed, resulting in a narrower spread pattern.

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

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

NOTE: The spinner motor is not designed for continuous duty. Allow the motor to cool between long cycle times.

#### REMOVING THE SPREADER

#### **A** CAUTION

Empty the hopper before removing the spreader.

#### A CAUTION

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

- Unplug the spreader harness from the vehicle harness.
- 2. Remove the hitch pin from the receiver hitch.
- 3. Remove the spreader from the vehicle and stand it upright. This may require additional support.

#### **A WARNING**

Never remove the spreader with material in the hopper.

#### **A** CAUTION

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

#### **A** CAUTION

- When replacing parts use only original manufacturer's parts. Failure to do so will void warranty.
- The control 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/transmission assembly. Any attempt to service will void warranty.
- When pressure washing motor enclosure area, keep spray at least 36" away from motor enclosures.

#### LUBRICATION

To keep your spreader running smoothly, observe the following recommendations:

- Lubricate bearings after every 20 hours of use.
- Apply a small amount of light oil to latches as needed.

#### **AFTER EACH USE**

## \*

#### **A** CAUTION

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

- Wash out the hopper and rinse off all external surfaces.
- Apply dielectric grease on all electrical connections to prevent corrosion.

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

- Wash out the hopper and rinse off all external surfaces.
- Apply dielectric grease on all electrical connections to prevent corrosion.
- Lubricate all grease fittings with good quality multipurpose grease.
- · Oil or paint all bare metal surfaces.
- If motor cover is removed for any reason, use silicone sealant to ensure weatherproofing of enclosure.

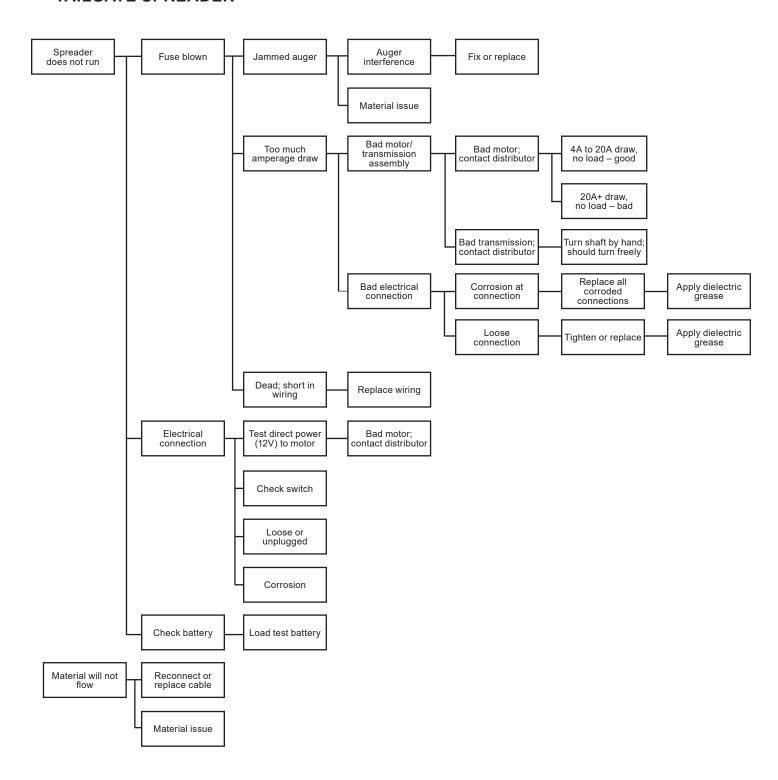
#### **FUSE REPLACEMENT**

If a problem should occur and fuse replacement is necessary, the replacement fuse must be of the same type and amperage rating as the original. Installing a fuse with a higher rating can damage the system and could start a fire.

#### **STORAGE**

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

#### **TAILGATE SPREADER**





Western Products PO Box 245038 Milwaukee, WI 53224-9538 www.westernplows.com

#### **A DIVISION OF DOUGLAS DYNAMICS, LLC**

### CE

This product conforms to EU Machinery Directive 2006/42/EC and Directive 2011/65/EC (RoHS2).



This product conforms to UK Supply of Machinery (Safety) Regulations 2008 and 2012 (RoHS2).

Copyright © 2023 Douglas Dynamics, LLC. All rights reserved. This material may not be reproduced or copied, in whole or in part, in any printed, mechanical, electronic, film, or other distribution and storage media, without the written consent of Western Products. Authorization to photocopy items for internal or personal use by Western Products outlets or spreader owner is granted.

Western Products 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. Western Products or the vehicle manufacturer may require or recommend optional equipment for spreaders. Do not exceed vehicle ratings with a spreader. Patent pending. Western Products offers a limited warranty for all spreaders and accessories. See separately printed page for this important information. The following is a registered (®) trademark of Douglas Dynamics, LLC: WESTERN®.

#### Printed in U.S.A.

Lit. No. 30752EN, Rev. 00 February 1, 2023