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TAILGATE SPREADER MATERIAL SAVER SYSTEM INSTALLATION & OPERATION MANUAL (TGS 300, TGS 600, & TGS 1100) TGS11328

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Patents Pending

SPREAD AT THE SPEED OF THE STORM

MSC11335

 **WARNING**

Instructions and procedures are outlined within your spreader owner's manual. Failure to follow the steps in your owner's manual can result in serious injury or death.

NOTICE

To properly operate and maintain your Material Saver System follow the steps below.

- The Material Saver Feed System is restricted to the use of Dry Bagged Free-Flowing Material only (NO SAND). Never run other materials through the spreader.
- After each use, empty hopper, and rinse out any material residue.

Material Saver System Parts List

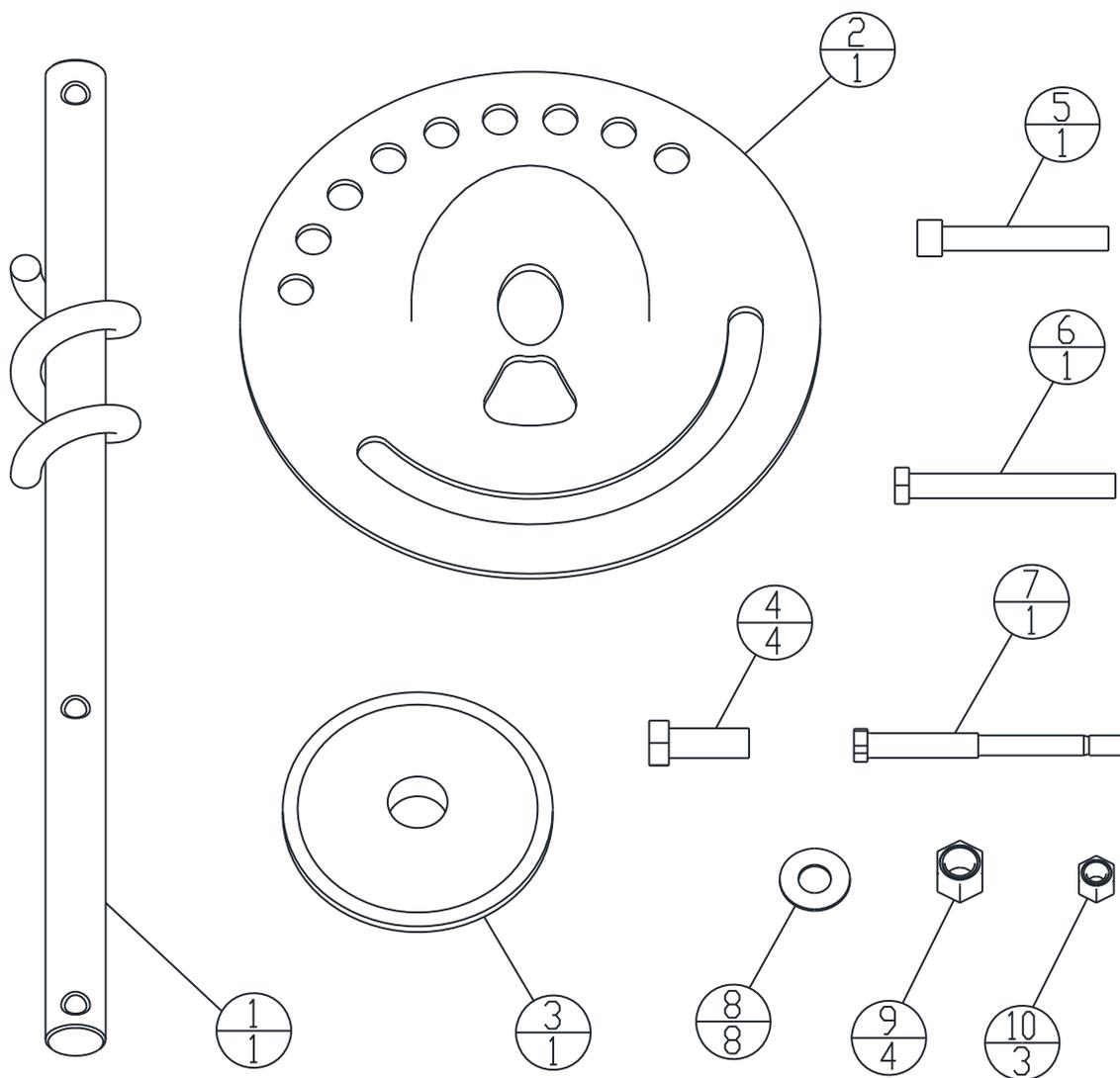


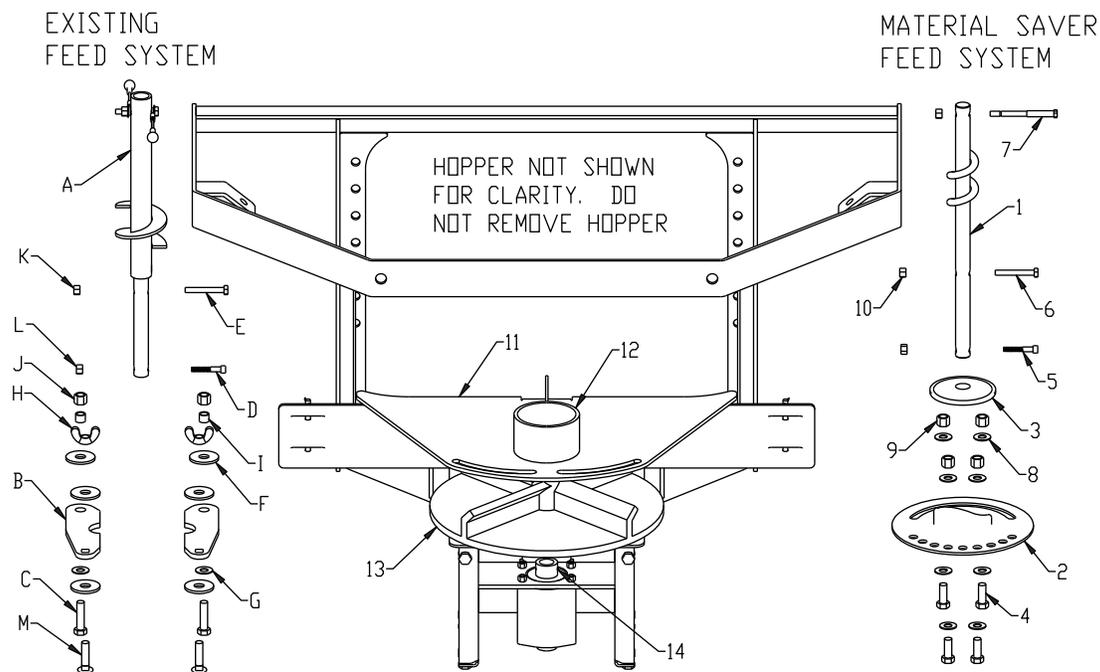
Figure 1: Material Saver System Kit Components – TGS11328

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ITEM #	QTY.	PART #	DESCRIPTION
1	1	TGS11332	MATERIAL SAVER AUGER
2	1	TGS11337	MATERIAL SAVER DROP GATE
3	1	MSC11327	IN-DISK BRUSH
	1	MSC11343	TGS MATERIAL SAVER HARDWARE KIT
4	4	HDW05853	HEX HEAD CAP SCREW, 3/8"-16 X 1" ST/ST 18-8
5	1	HDW10778	SOCKET HEAD CAP SCREW, 1/4"-20 X 1-1/2" ST/ST 18-8
6	1	HDW05857	HEX HEAD CAP SCREW, 1/4"-20 X 2" ST/ST 4/10
7	1	MSC04763	AGITATOR PIN
8	8	HDW05859	FLAT WASHER, 3/8" ST/ST 18-8
9	4	HDW05854	NYLON LOCK NUT, 3/8"-16 ST/ST 18-8
10	3	HDW05851	NYLON LOCK NUT, 1/4"-20 ST/ST 18-8

Table 1: Material Saver System Parts List

Existing Feed System Removal / Material Saver System Installation Procedure



* REMOVE COMPONENTS SHOWN ABOVE

* INSTALL COMPONENTS SHOWN ABOVE

Figure 2: Existing Feed System Removal / Material Saver System Installation

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Existing Component Removal

Note: Turn off the spreader controller and unplug the spreader at the bumper. All removed parts are not needed for the install.

1. Remove Motor Cover to access the auger shaft Socket Head Cap Screw (D).
2. Remove Socket Head Cap Screw (D) and Nylon Locking Nut (L).
3. Remove Hex Head Cap Screw (E) and Nylon Locking Nut (K) that mounts Spinner (13).
4. Pull Auger and Auger Shaft (A) out through the top of Hopper.
5. Remove Wing Nuts (H), Plastic Washers (F), and Carriage Bolts (M) holding the front part of Feed Gates (B).

6. Remove Hex Head Cap Screws (C), Plastic Washers (F), Stainless Brushings (I), Flat Washers (G), Nylon Locking Nuts (J), and Feed Gates (B).
7. Remove both Feed Gate pieces.

Material Saver System Installation

1. Mount Material Drop Gate (2) under the Feed Plate (11) using four 3/8"-16 X 1" Hex Head Cap Screws (4), eight 3/8" Flat Washers (8), and four 3/8"-16 Nylon Locking Nuts (9). See Figure 3.

Note: See Figure 4 to determine Material Drop Gate position.

Material Saver System Installation Procedure

2. Take the long end of Auger Shaft (1) and pass it through Material Drop Gate (2) and Spinner (13). Insert Auger Shaft (1) into Motor Shaft Cup (14).
 3. Using one 1/4"-20 X 1-1/2" Socket Head Cap Screw (5) and one 1/4"-20 Nylon Locking Nut (10) install Auger Shaft (1) to Motor Shaft Cup (14). Do not over tighten.
 4. Using one 1/4"-20 X 2" Hex Head Cap Screw (6) and one 1/4"-20 Nylon Locking Nut (10) attach Spinner (13) to Auger Shaft (1). Do not over tighten.
 5. Install In-Disk Brush (3) inside Hopper and slide it down around Auger Shaft (1). Place it flat on top of Frame Collar (12).
- Note:** If In-Disk Brush (3) does not sit flat on its own then turn Spinner (13) manually counter-clockwise until Auger Flighting pulls the brush down flat. The brush should move freely.
6. Install Agitator Pin (7) and one 1/4"-20 Nylon Locking Nut (10) to the short end of Auger Shaft (1). See Figure 3.

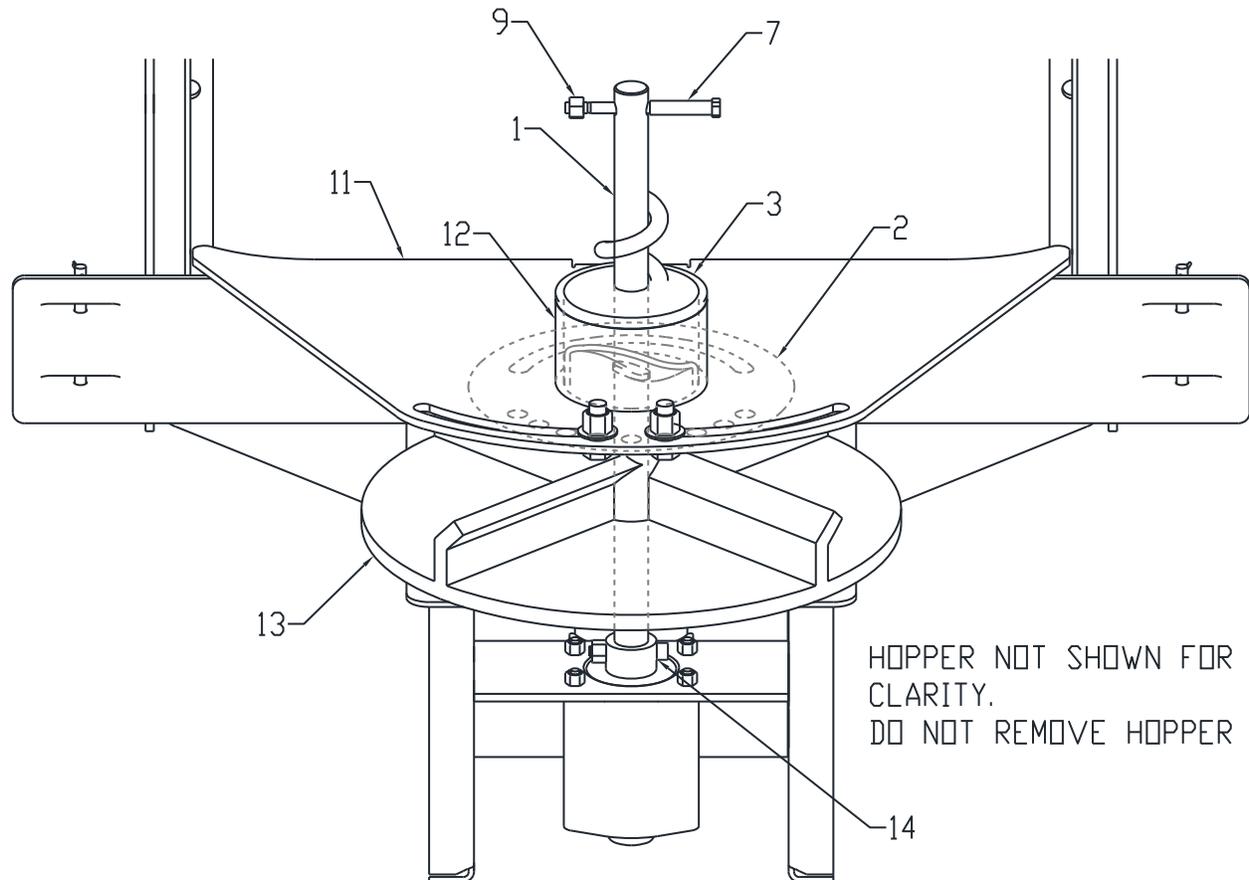


Figure 3: Complete Installation of Material Saver System

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Drop Gate Adjustment

Adjustable plastic drop gate can be used to adjust spread pattern as shown in Figure 4. Spinner motor speed will also have an effect on spread pattern.

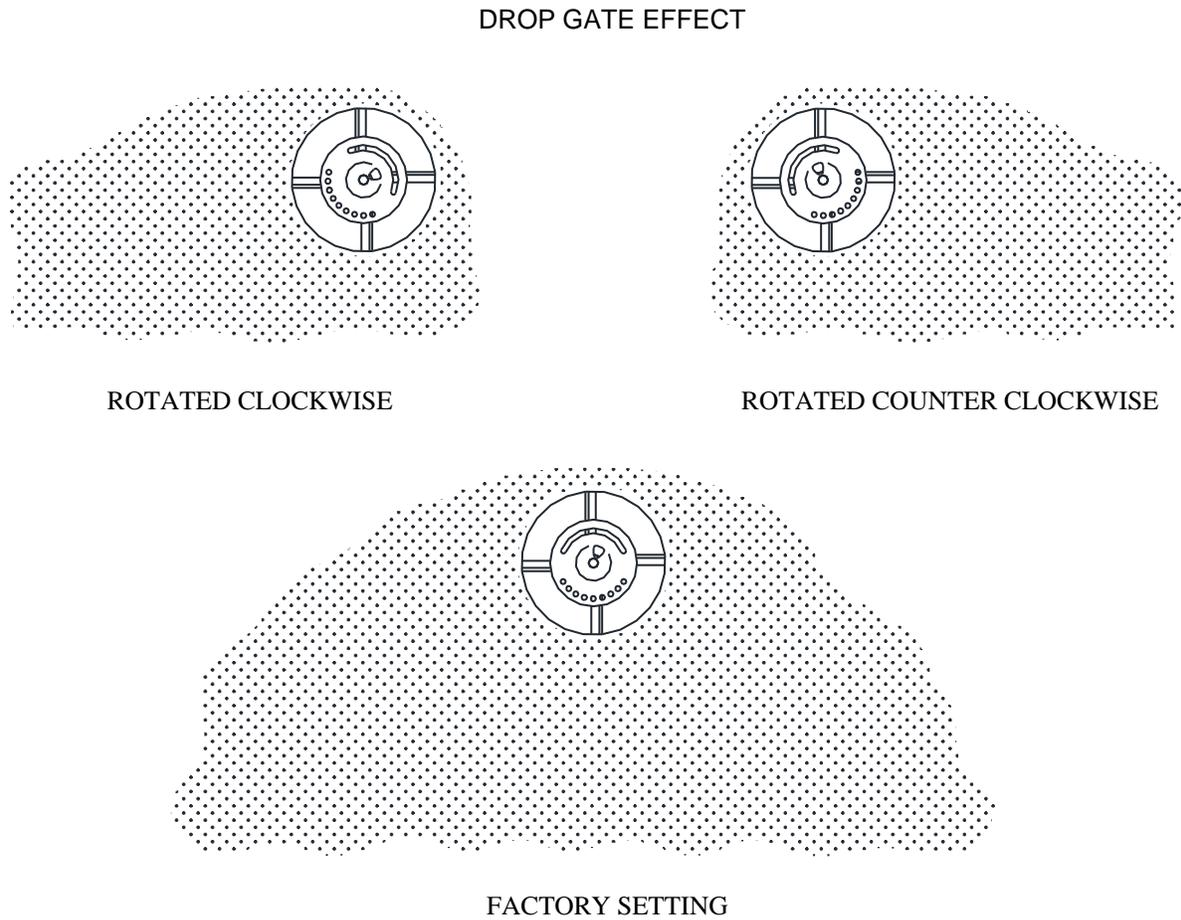
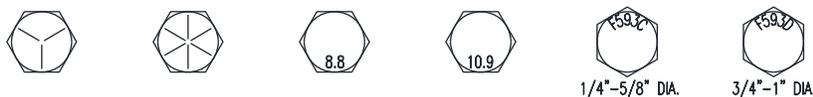


Figure 4: Drop Gate Adjustment

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Recommended Bolt Torque



DIAMETER / PITCH	GRADE 5	GRADE 8	GRADE 8.8	GRADE 10.9	18-8 STAINLESS STEEL	
					DRY	LUBRICATED
1/4-20	8.3	12			6.3	5.3
5/16-18	17.5	25.4			11	9.3
3/8-16	31	44			20	17
7/16-14	50	70			31	26
1/2-13	75	107			43	37
9/16-12	109	154			57	48
5/8-11	151	211			93	78
3/4-10	266	376			128	108
M10 X 1.25			37	53		
M10 X 1.5			37	53		
M12 X 1.75			65	92		
M14 X 2.0			103	148		
M16 X 2.0			167	231		

ALL TORQUE VALUES ARE IN FOOT-POUNDS (FT.-LB.) AND FOR DRY CONDITIONS UNLESS OTHERWISE SPECIFIED

Table 2: Recommended Bolt Torque

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NOTE: The torque values for the steel bolts listed above are based on dry, zinc plated bolts, variables such as oil, or other lubrications may appreciably alter these values and must be taken into consideration. Stainless steel hardware assembled at the factory has been lubricated, but the lubrication will wear off over time.

NOTE: IT IS IMPORTANT THAT ALL FASTENERS BE PROPERLY TORQUED TO ASSURE A SAFE OPERATING TAILGATE SPREADER. RE-TIGHTEN ALL FASTENERS AFTER 2 HOURS OF SPREADING.