



Manufactured by: **Systems Control**
A Div. of Northern Star Industries, Inc.

906-774-0440
800-286-4155
906-779-4218 (FAX)

P.O. Box 788
Iron Mountain, MI 49801-0788
E-Mail: sales@bossplow.com
Web Site: www.bossplow.com

ADJUSTABLE FEED GATE TAILGATE SPREADER INSTALLATION INSTRUCTIONS TGS05990

BOSS Products / Northern Star Industries, Inc. reserves the right under its continuous product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used herein.

TGS05996-0

DRIVEN TO BE THE BEST

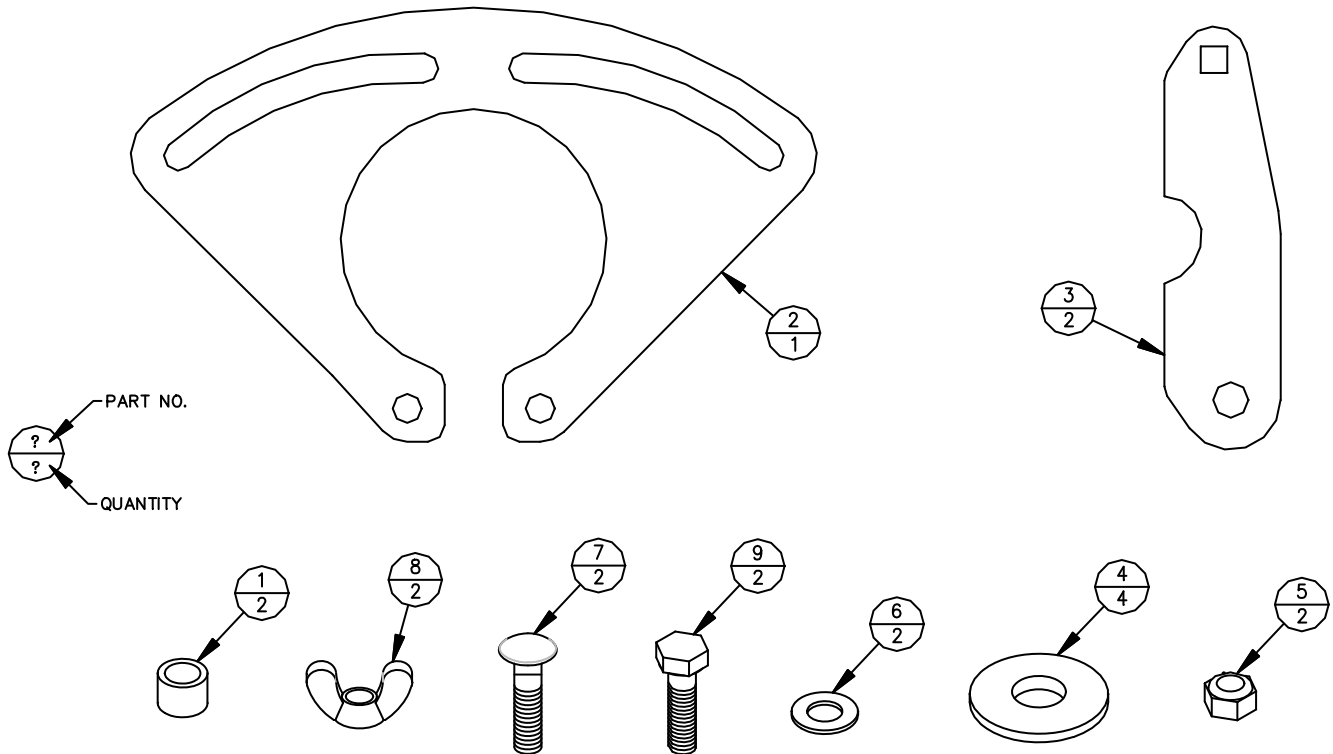


Figure 1. TGS05990 Adjustable Feed Gate Kit and TGS05996 Fastener Kit contents.

G10318

REF. NO.	DESCRIPTION	PART NO.	QTY.
1	3/8"ID BUSHING	TGS05924	2
2	BASE PLATE, FEED GATE	TGS05991	1
3	CHOKE PLATE, FEED GATE	TGS05992	2
	FASTENER KIT, FEED GATE	TGS05997	1
Includes:			
4	1/2" NYLON WASHER	HDW04631	4
5	3/8"-16 NYL LOCK NUT, ST/ST	HDW05854	2
6	3/8" FLAT WASHER, ST/ST	HDW05859	2
7	3/8"-16X1-1/2" CARRIAGE BOLT, ST/ST	HDW05993	2
8	3/8"-16 WING NUT, ST/ST	HDW05994	2
9	3/8"-16X1-1/2" HEX HEAD BOLT, ST/ST	HDW05995	2

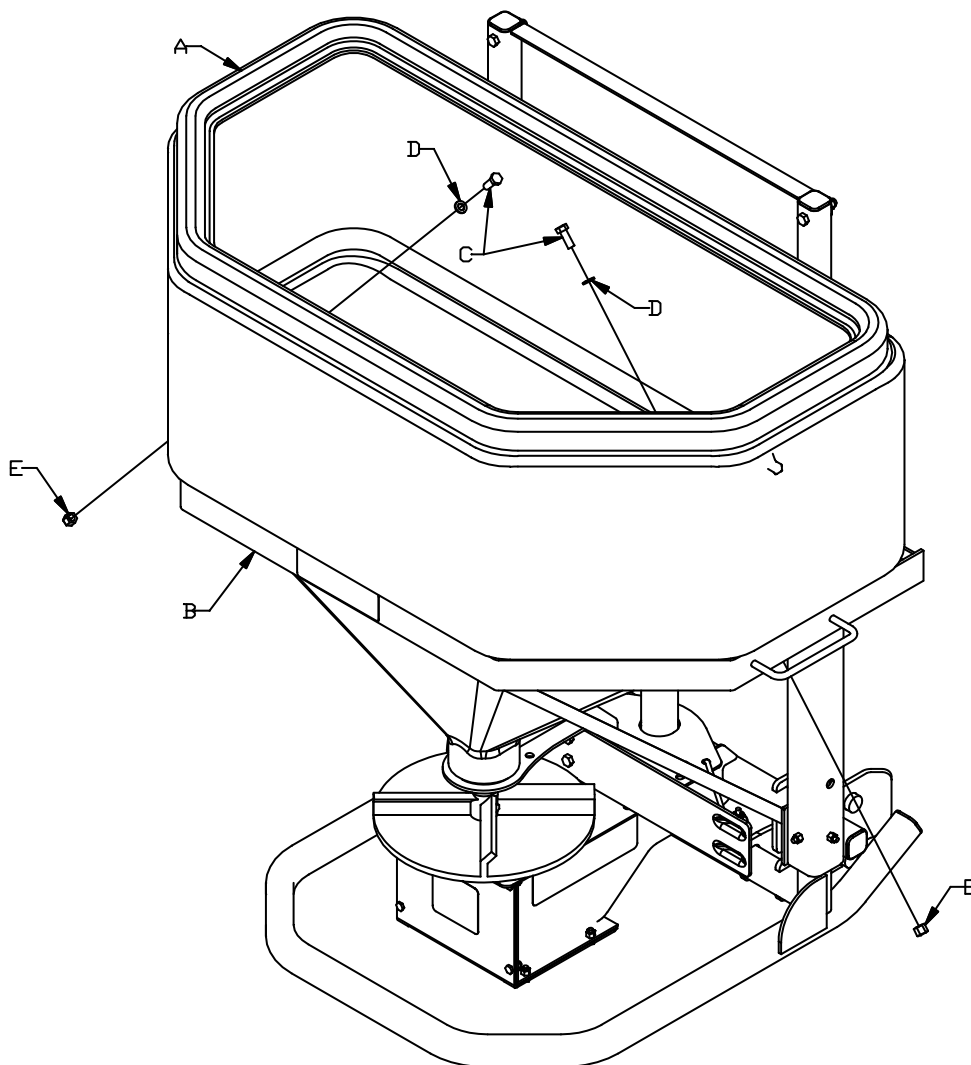


Figure 2. Removal of Tailgate Spreader Hopper

G10319

1. Remove Hopper (A) from Tailgate Spreader Frame (B) by removing two 3/8"-16 Hex Head Bolts (C), 3/8" Flat Washers (D), and 3/8"-16 Nylon Lock Nuts (E) holding the hopper to Frame (B). Refer to Figure 2. Retain all hardware.

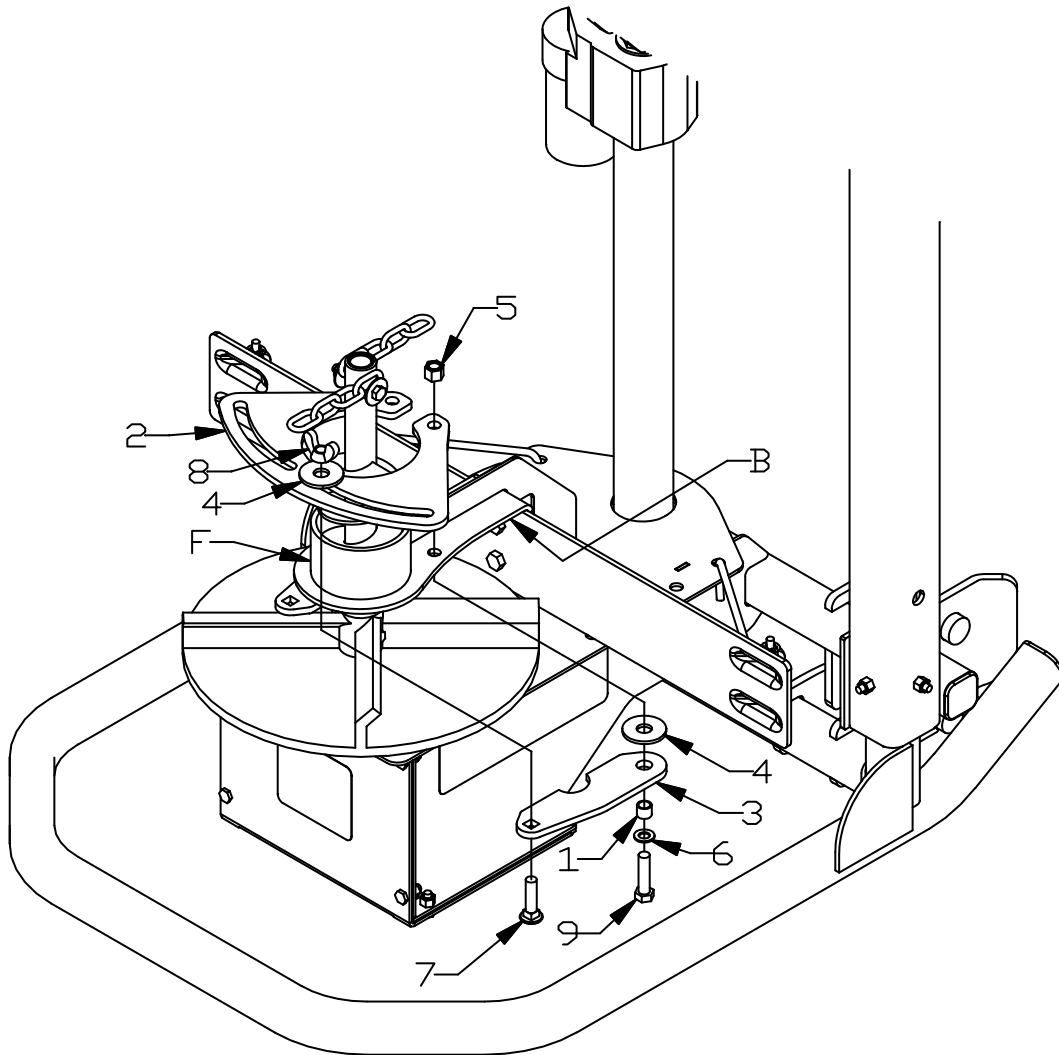


Figure 3. Base Plate and Choke Plate Assembly



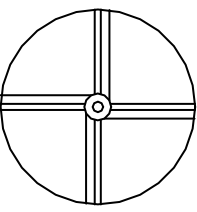
G10320

2. Place Base Plate (2) over the existing Frame Bushing (F) and align the two 7/16" diameter holes in Base Plate (2) with the two 7/16" diameter holes in Frame (B). Refer to Figure 3.
3. Assemble two Choke Plates (3) underneath the plate in Frame (B). Align the round hole in Choke Plate (3) with the 7/16" diameter holes in Base Plate (2) and the plate in Frame (B). Assemble using 3/8" ID Bushing (1), 1/2" Nylon Washer (4), 3/8"-16x1-1/2" Hex Head Bolt (9), and 3/8-16 Nylon Lock Nut (5). Be sure to place Nylon Washer (4) between Choke Plate (3) and Frame (B) as shown in Figure 3. Leave hardware finger tight.
4. Assemble square holes in Choke Plate (3) to the slotted hole in Base Plate (2) using 3/8"-16x1-1/2" Carriage Bolt (7), 1/2" Nylon Washer (4), and 3/8"-16 Wing Nut (8). Be sure to use one 1/2" Nylon Washer (4) on top of Base Plate (2). Refer to Figure 3.
5. Tighten 3/8"-16x1-1/2" Hex Head Bolts and 3/8"-16 Nylon Lock Nuts from Step 3. DO NOT OVERTIGHTEN. Refer to Page 6.
6. Re-assemble Hopper (A) to Spreader Frame (B) using the same hardware removed in Step 1. Refer to Figure 2. The installation is now complete.

The Adjustable Feed Gate was designed to change the amount of material being dispensed from the spreader without changing the speed of the spinner. This will allow the operator greater control over the amount of material is being spread over a given distance.

Feed Gate Adjustment:

<h2>WARNING</h2> <p>Never make adjustments to the Tailgate Spreader while any components are moving. Turn vehicle key to OFF position and In-Cab Controller switch to OFF position prior to servicing or adjusting any part of the Tailgate Spreader or Tailgate Spreader Option.</p>

			<h2>WARNING</h2> <p>KEEP CLEAR OF MOVING SPINNER & AUGER</p> <small>TGS05990-0</small>
---	---	---	---

To REDUCE the amount of material flowing from the spreader spout, loosen 3/8" Wing Nuts (8) and slide Choke Plates (3) toward the center of the spout. Retighten Wing Nuts (8) but leave finger tight. It is recommended that both Choke Plates (3) be adjusted to approximately the same relative position.

To INCREASE the amount of material flowing from the spreader spout, loosen 3/8" Wing Nuts (8) and slide Choke Plates (3) away from the center of the spout. Retighten Wing Nuts (8) but leave finger tight. It is recommended that both Choke Plates (3) be adjusted to approximately the same relative position.

GUIDE TO RECOMMENDED ASSEMBLY TORQUE

All Torque Values Are In Foot-Pounds (Ft.-Lb.)

DIA./PITCH	CLASS	GRADE 5	GRADE 8
1/4 - 20		6	9
5/16 - 18		14	19
3/8 - 16		23	33
7/16 - 14		38	53
1/2 - 13		56	80
9/16 - 12		82	116
5/8 - 11		113	159
3/4 - 10		201	283
M10-1.5	49		
M12-1.75	86		

* The torque values listed above are based on dry, coated bolts, variables such as oil, or other lubrications may appreciably alter these values and must be taken into consideration.