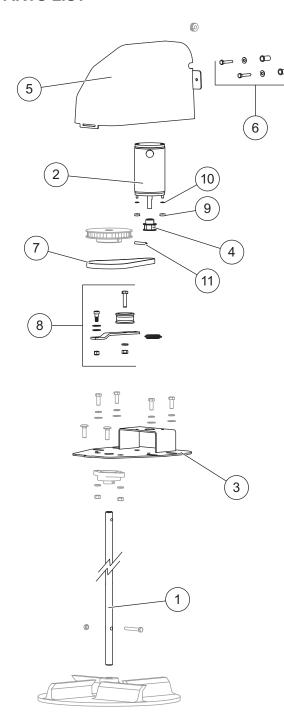
November 15, 2012 Lit. No. 94597, Rev. 01

Spinner Drive Service Kit

Poly Hopper Spreaders

PARTS LIST



	78305	12V Sp	oinner Drive Service Kit
Item	Part	Qty	Description
1	78283	1	Spinner Shaft
2	93100	1	Motor 12V DC 1/3 hp
3	78297	1	Chute Motor Base Plate
4	93101	1	10-Tooth Cogged Belt Pulley
5	78287	1	Chute Motor Cover
6	78270	1	1/4" Well Nut Fasteners Kit*
7	78285	1	Gear Belt
8	78298	1	Idler Kit
9	68511	2	10-32 Hex Locknut GB SS
10	95227	2	#10 Flat Washer, Type A SS
11	48954	1	1/4-20 x 1-3/4 Set Screw SS
S	S = Stain	less Ste	el G = Grade

^{*} Lock washers from kit not used in this application.

	79064	24V S _I	oinner Drive Service Kit		
Item	Part	Qty	Description		
1	78283	1	Spinner Shaft		
2	96270	1	Motor 24V DC 1/3 hp		
3	78297	1	Chute Motor Base Plate		
4	93101	1	10-Tooth Cogged Belt Pulley		
5	78287	1	Chute Motor Cover		
6	78270	1	1/4" Well Nut Fasteners Kit*		
7	78285	1	Gear Belt		
8	78298	1	Idler Kit		
9	68511	2	10-32 Hex Locknut GB SS		
10	95227	2	#10 Flat Washer, Type A SS		
11	48954	1	1/4-20 x 1-3/4 Set Screw SS		
S	SS = Stainless Steel G = Grade				

^{*} Lock washers from kit not used in this application.

A CAUTION

Read this document before installing the spinner drive service kit.

A CAUTION

Use standard methods and practices when attaching spreader and installing accessories, including proper personal protective safety equipment.

A CAUTION

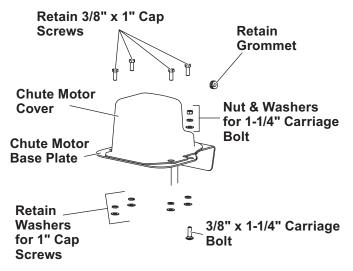
Disconnect electric power at spreader electrical wiring harness connection and tag out if required before servicing or performing maintenance.

INSTALLATION INSTRUCTIONS

Park the vehicle on a smooth, level, hard surface, such as concrete. Turn the vehicle ignition to the "OFF" position and remove the key.

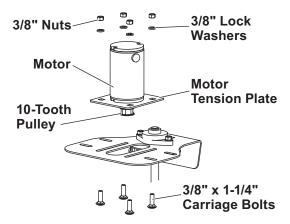
Disassemble Spinner Drive

- Remove and retain the two 3/8" x 1" cap screws, 3/8" flat washers and 3/8" lock washers securing the chute motor cover. Remove and discard the 3/8" x 1-1/4" carriage bolt, 3/8" flat washer, 3/8" lock washer and 3/8" nut. Remove and retain the wiring grommet. Remove and discard the chute motor cover.
- 2. Loosen the 2 set screws securing the spinner shaft on the bottom bearing of the chute assembly.
- 3. Remove and retain the 2 remaining 3/8" x 1" cap screws, 3/8" flat washers and 3/8" lock washers from the chute motor base plate.

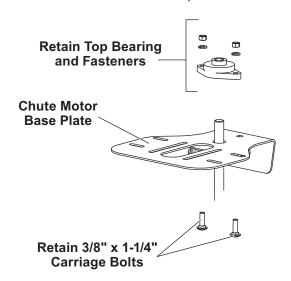


4. Lift the spinner drive unit out of the chute body and place it on a secure work surface.

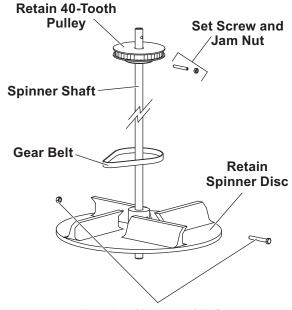
5. Loosen the four 3/8" x 1-1/4" carriage bolts, 3/8" nuts and 3/8" lock washers securing the motor tension plate and slide the motor toward the spinner shaft.



- 6. Drop the gear belt to the spinner disc.
- Remove and discard the motor tension plate hardware, motor tension plate, motor and 10-tooth pulley.
- 8. Loosen the 2 set screws on the top bearing and separate the chute motor base plate from the spinner shaft assembly.
- 9. Remove the two 3/8" x 1-1/4" square carriage bolts securing the top bearing to the chute motor base plate. Retain the fasteners and the bearing. Discard the chute motor base plate.



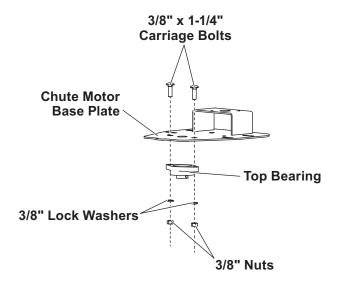
- Remove and retain the 5/16" x 2-1/4" cap screw and 5/16" nut securing the spinner disc to the shaft. Remove and retain the spinner disc. Discard the gear belt.
- 11. Remove the jam nut and set screw from the 40-tooth pulley. Remove the pulley from the spinner shaft. Retain the pulley. Discard the spinner shaft, jam nut and set screw.



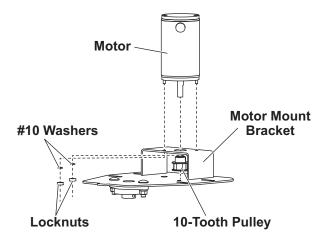
Retain 5/16" x 2-1/4" Cap Screw and Nut

Install Replacement Components

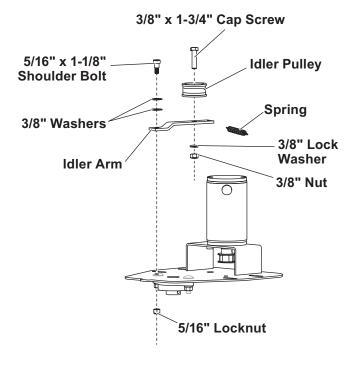
- 1. Install the spinner disc on the replacement spinner shaft using the retained 5/16" x 2-1/4" cap screw and 5/16" nut.
- 2. Mount the top bearing on the bottom side of the replacement chute motor base plate using the retained 3/8" x 1-1/4" square carriage bolts, lock washers and nuts.



 Center the replacement 10-tooth pulley, sleeve up, below the motor mount bracket. Position the replacement motor on the motor mount bracket, making sure to slide the pulley onto the motor shaft. Secure the motor using the supplied #10 washers and lock nuts.

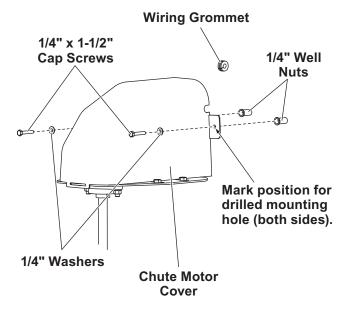


- 4. Slide the 10-tooth pulley up until the bottom is flush with the end of the motor shaft. Tighten the set screw on the flat of the motor shaft.
- 5. Install the idler kit components:
 - a. Mount the idler pulley to the idler arm using the supplied 3/8" x 1-3/4" cap screw, 3/8" lock washer and 3/8" nut, making sure that the cap screw head is on the top.
 - b. Mount the idler arm to the replacement chute motor base plate using the two 3/8" washers, 5/16" x 1-1/8" shoulder bolt and 5/16" locknut. Ensure that the idler arm can pivot freely.
 - c. Install the spring between the idler arm and the chute motor base plate.



- 6. Slide the spinner shaft assembly into the bottom bearing on the chute assembly.
- 7. Slide the chute motor base plate onto the spinner shaft and set it into place in the chute.
- 8. Secure the chute motor base plate to the chute with the 4 retained 3/8" x 1" cap screws, 3/8" flat washers and 3/8" spring lock washers.
- 9. Apply medium-strength threadlocker to the supplied 1/4" x 1-3/4" set screw and use it to reinstall the 40-tooth pulley.
- 10. Tighten the set screws on the upper and lower bearings.
- 11. Confirm the alignment of the 10-tooth pulley with the 40-tooth pulley. Adjust the height of the 10-tooth pulley if necessary.
- 12. Stretch the idler arm out of the way and install the supplied gear belt.

- 13. Position the replacement chute motor cover over the unit and mark the mounting hole locations on the back wall of the chute.
- 14. Remove the cover and drill two 3/8" diameter holes through the chute wall. Install the 1/4" well nuts from the well nut fasteners kit into the drilled holes.



- 15. Replace the chute motor cover and secure it with the 1/4" x 1-1/2" cap screws and 1/4" flat washers from the well nut fasteners kit into the well nuts.
- 16. Feed the wires through the retained wiring grommet and slide the grommet into the slot on the chute motor cover.

Copyright © 2012 Douglas Dynamics, L.L.C. 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 the company. Authorization to photocopy items for internal or personal use by the company's outlets or spreader owner is granted.

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. This equipment manufacturer 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.

Printed in U.S.A.