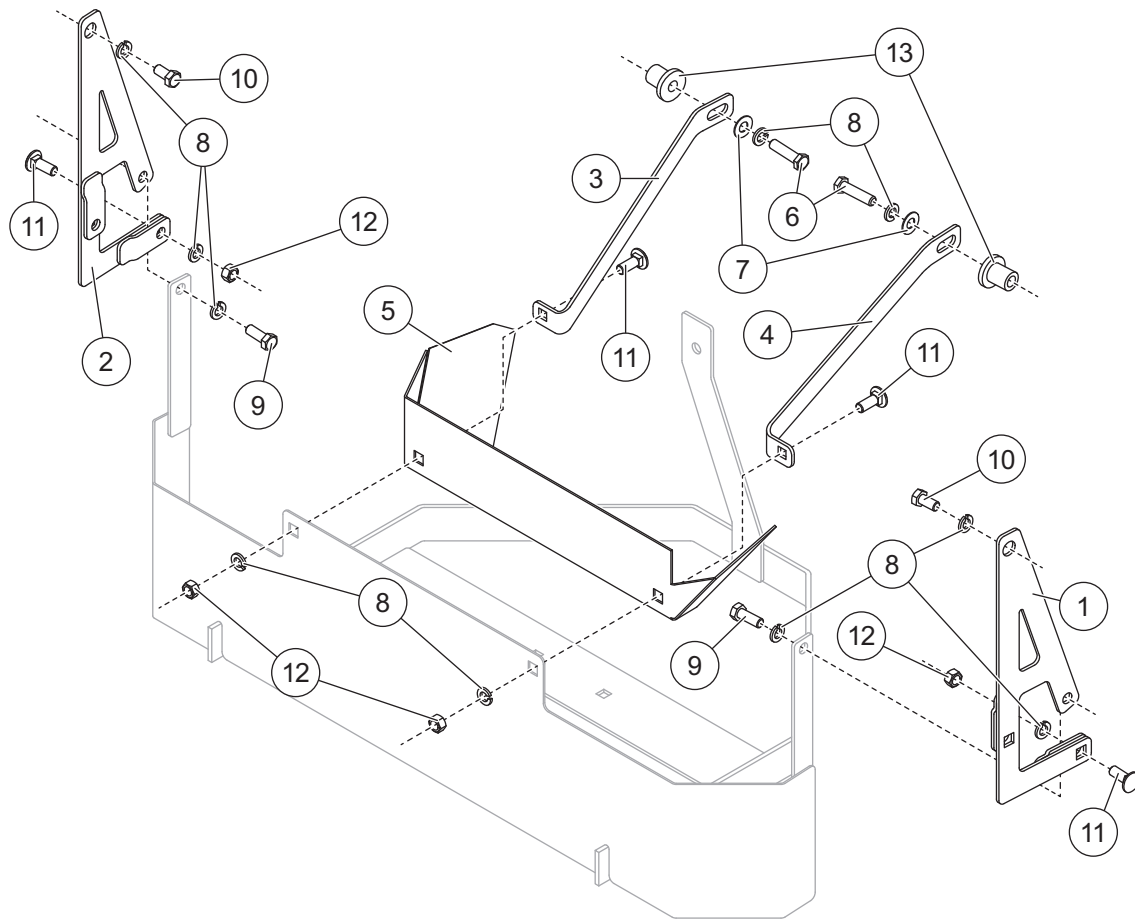


Chute Strut Kit

Poly-Hopper Spreaders

PARTS LIST



48970-1 Chute Strut Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
1		1	Chute Strut Assembly – DS	5		1	Rear Sill Deflector
2		1	Chute Strut Assembly – PS	ns	48977	1	Belt Tension Guide – 3/8"
3		1	Brace – PS	ns		1	Bolt Bag – Chute Strut Kit
4		1	Brace – DS				
Bolt Bag – Chute Strut Kit							
6		2	3/8-16 x 1-1/2 Hex Cap Screw SS	12		4	3/8-16 Hex Nut SS
7		2	3/8 Flat Washer Wide SS	13		2	3/8-16 Well Nut
8		10	3/8 Lock Washer SS	ns		1	1/4-20 x 1-3/4 Set Screw SS
9		2	3/8-16 x 1 Hex Cap Screw SS	ns		1	1/4-20 Hex Nut SS
10		2	3/8-16 x 3/4 Hex Cap Screw SS	ns		1	Shaft Collar SS
11		4	3/8-16 x 1 Carriage Bolt SS				
			ns = not shown			SS = Stainless Steel	
						G = Grade	

⚠ CAUTION

Read this document before installing the chute strut kit.

⚠ CAUTION

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

REQUIRED TOOLS

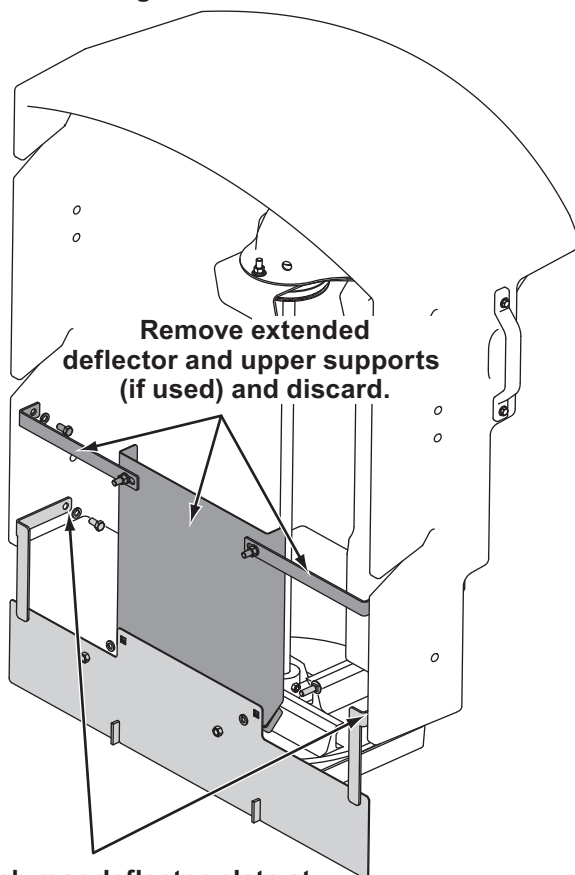
- 9/16" socket and ratchet
- 3/16" Allen wrench
- 1/8" Allen wrench
- 7/16" wrench
- 3/4" drill bit
- Belt tension guide (included in kit)

INSTALLATION INSTRUCTIONS

This Chute Strut Kit may be used on spreaders with straight or curved rear deflector plates.

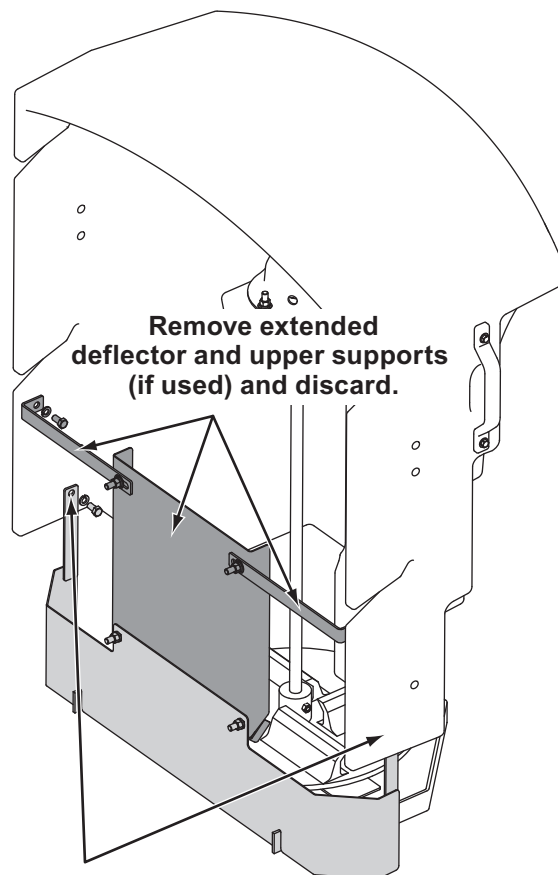
1. Park the vehicle on a smooth, level, hard surface, such as concrete. Turn the vehicle ignition to the "OFF" position and remove the key.
2. Remove the chute as directed in your Owner's Manual. Lay the chute face-down on cardboard or similar material, taking care to protect the face and any accessories.
3. Remove the extended deflector (if used) and discard the deflector, upper braces and side and bottom fasteners. Do not disassemble the deflector and do not remove the top center fasteners.
4. Detach the rear deflector plate on both sides and discard the fasteners. Do not remove the fastener at the center-rear of the chute. Retain the rear deflector plate for reinstallation.

Straight Rear Deflector Plate



Detach rear deflector plate at sides and discard fasteners.

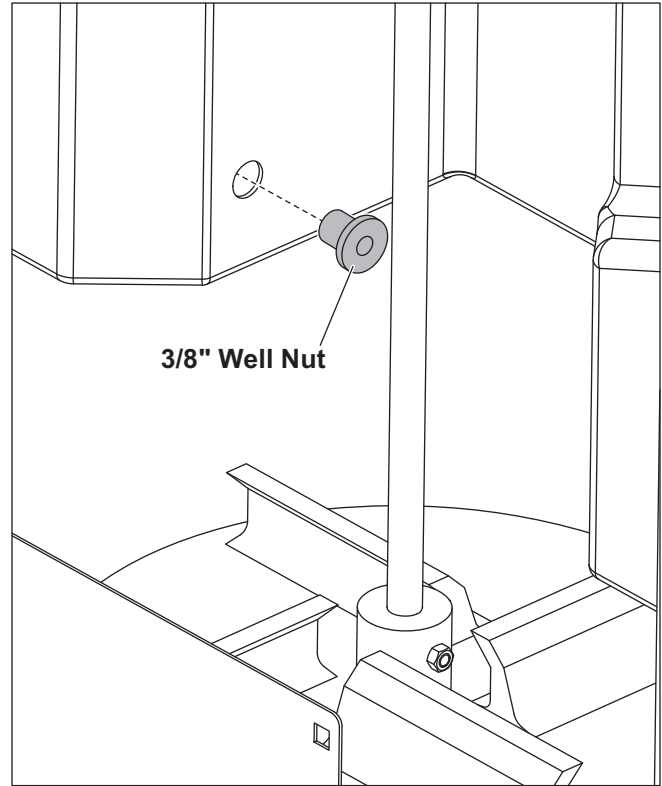
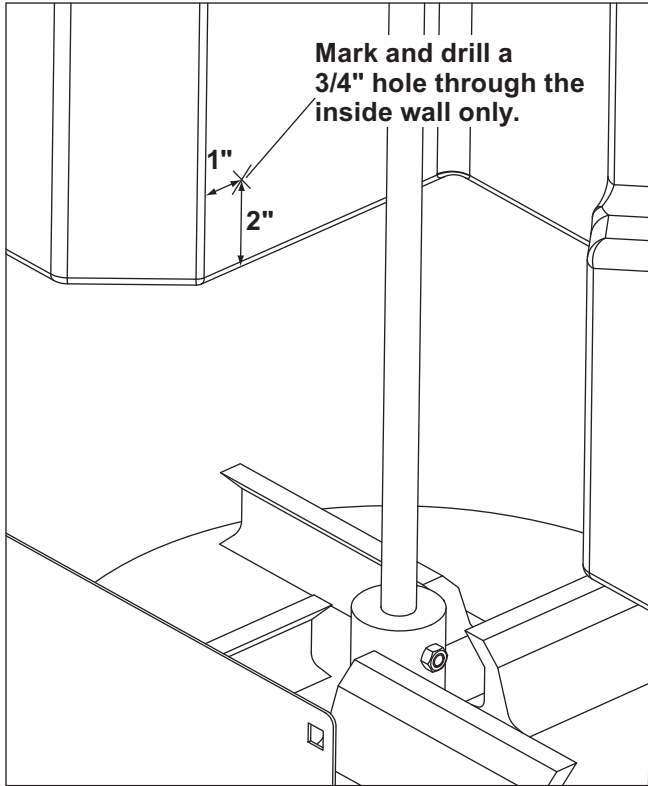
Curved Rear Deflector Plate



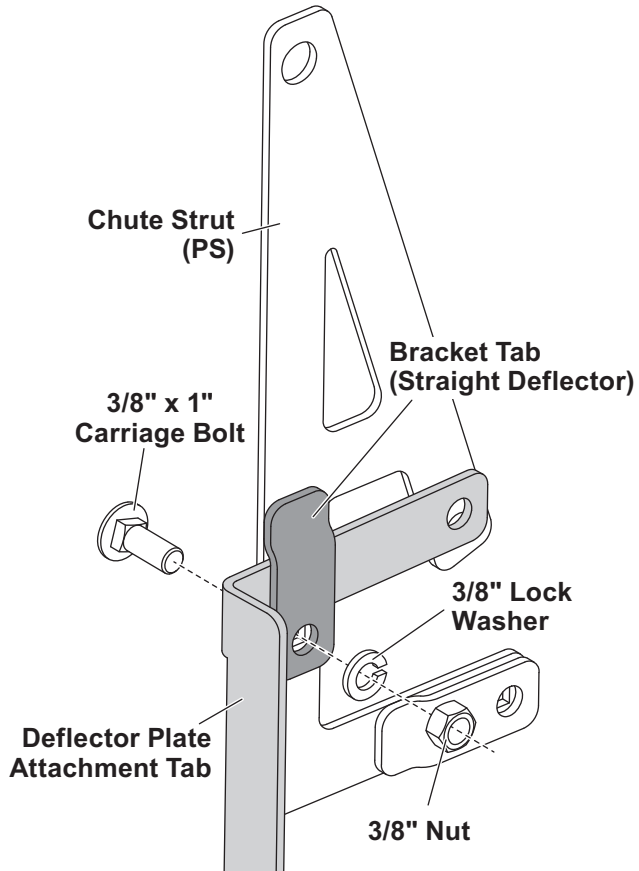
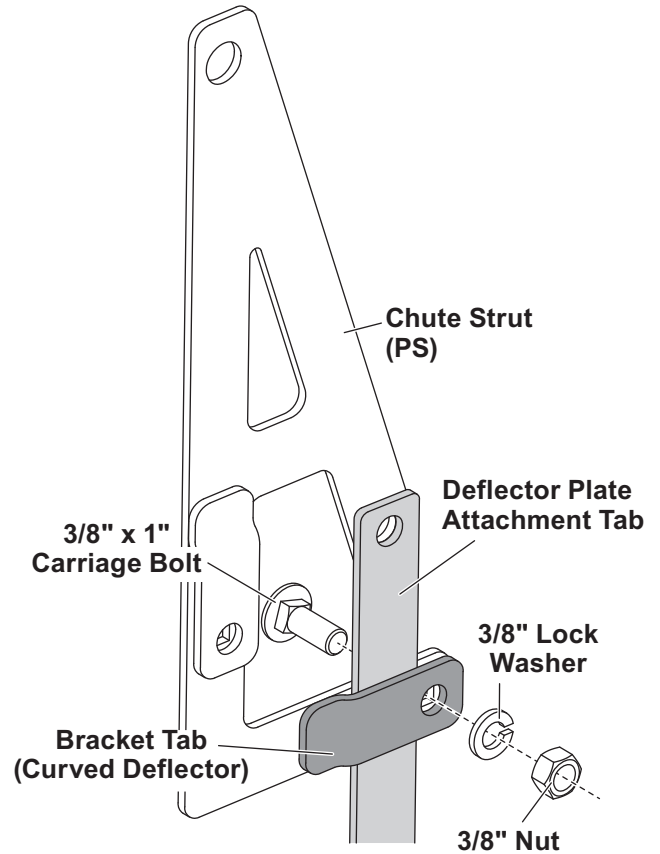
Detach rear deflector plate at sides and discard fasteners.

5. At the rear of the chute, make a mark 2" up from the bottom and 1" back from the edge, as shown. Drill a 3/4" inch hole in the poly chute wall.

Insert a supplied 3/8" well nut into this hole. Repeat on the other side.

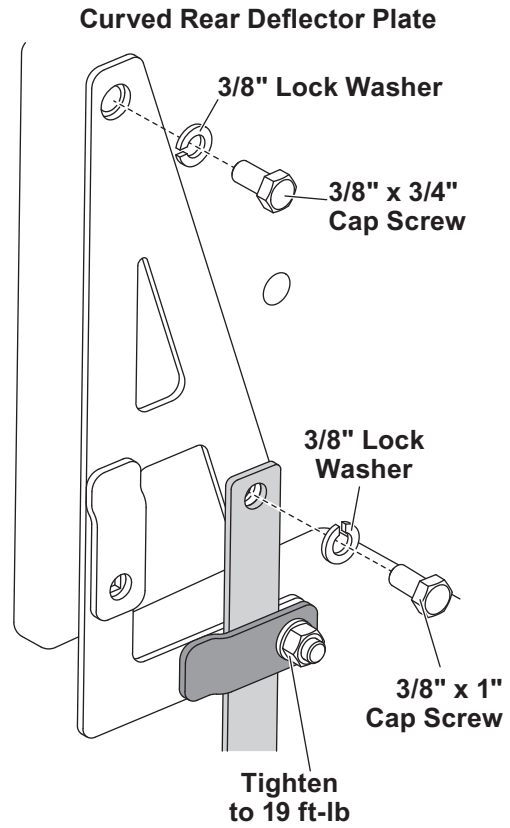
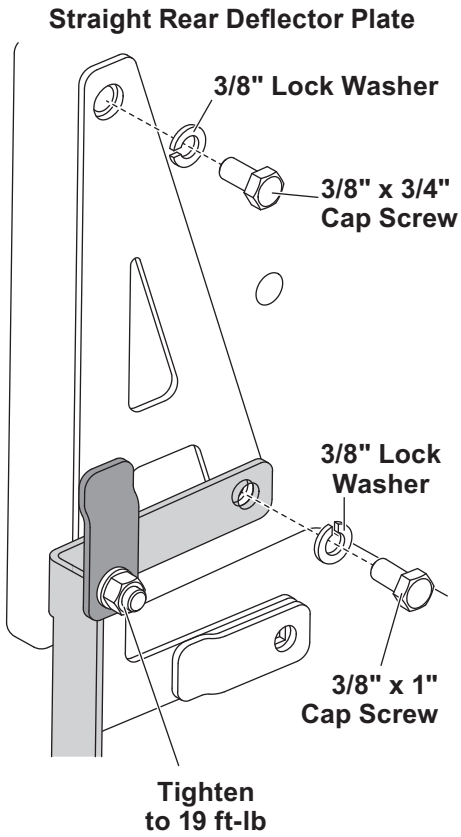


6. Insert a chute strut between the poly chute side wall and the deflector attachment tab on each side of the chute, aligning the holes. The deflector attachment tabs must fit under the appropriate bracket tabs.
7. Insert a 3/8" x 1" carriage bolt from behind the chute strut through each bracket tab. Secure with a 3/8" lock washer and nut. Finger tighten.

Straight Rear Deflector Plate**Curved Rear Deflector Plate**

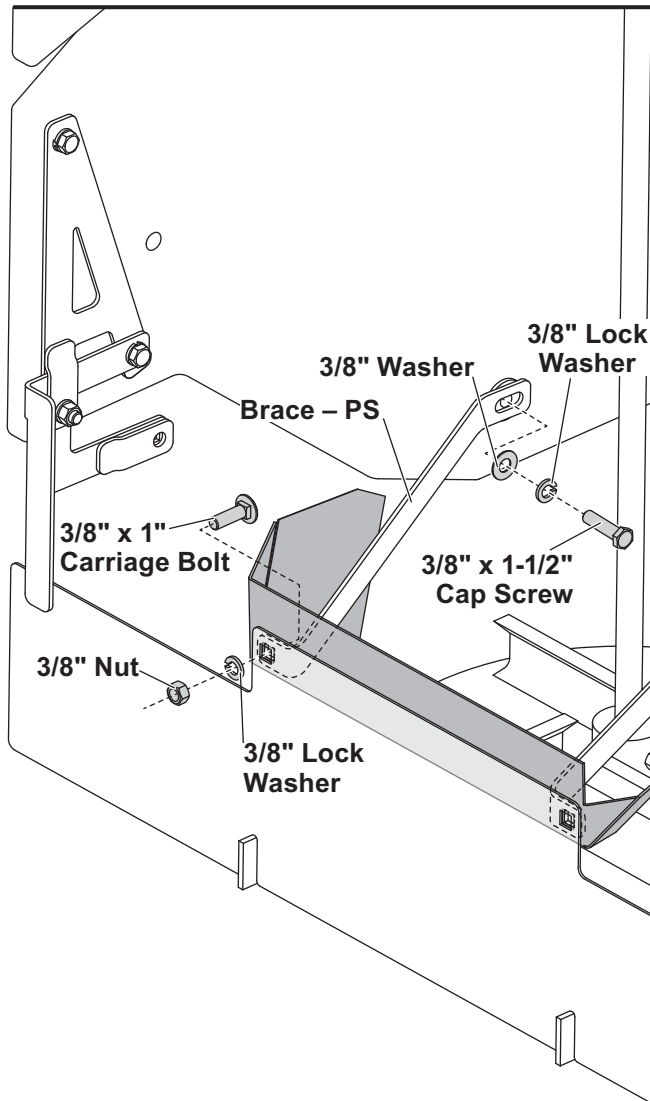
8. Reattach the rear deflector plate attachment tabs to the chute side walls using supplied 3/8" x 3/4" cap screws and 3/8" lock washers in the top holes, and 3/8" x 1" cap screws and

3/8" lock washers in the bottom holes. Tighten to 15 ft-lb. Tighten the previously installed carriage bolts and nuts to 19 ft-lb.

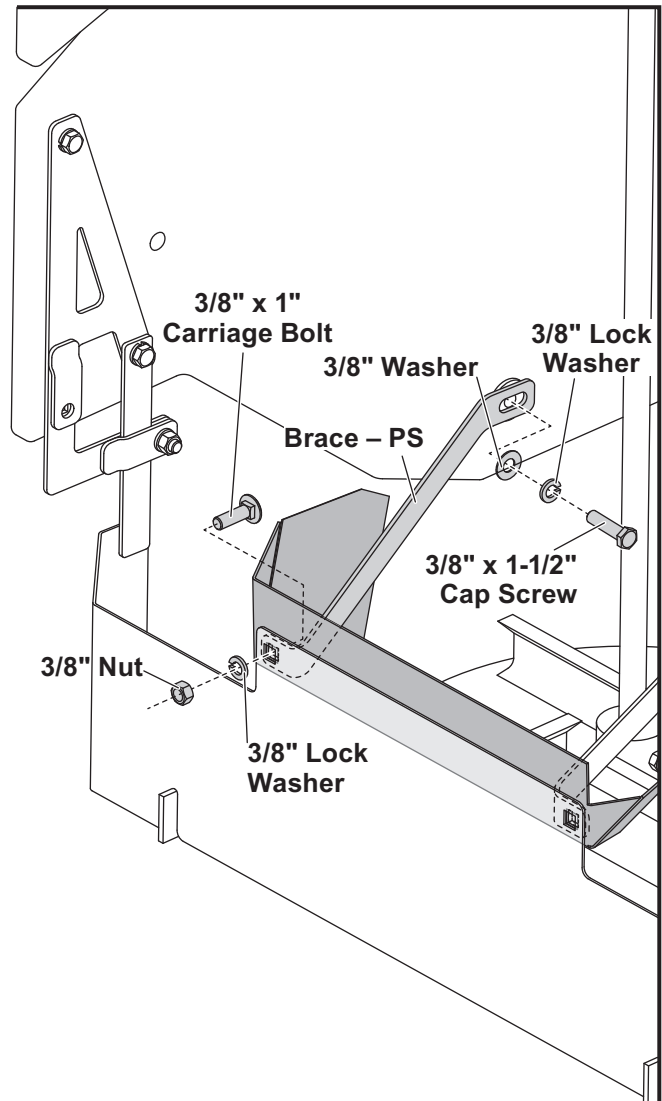


9. Align the slot in the passenger-side brace with the hole in the well nut, and the square hole in the brace with the square hole in the rear sill deflector and the retained rear deflector plate.
10. Fasten the brace to the rear sill deflector and rear deflector plate with a 3/8" x 1" carriage bolt, a 3/8" lock washer and 3/8" nut. Tighten to 19 ft-lb.

11. Secure the other end of the brace to the well nut using a 3/8" x 1-1/2" cap screw, 3/8" washer and 3/8" lock washer. Tighten to 6 ft-lb. Repeat Steps 9–11 on the driver's side.



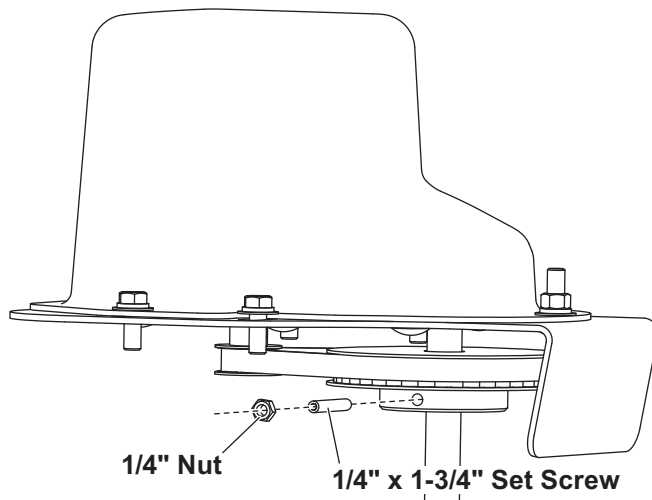
Straight Rear Deflector Plate



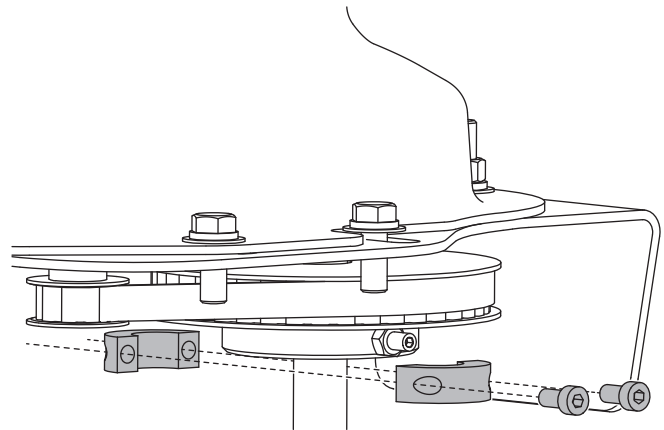
Curved Rear Deflector Plate

Spinner Shaft Set Screw

12. Remove the existing set screw in the spinner shaft pulley. There may be more than one set screw installed. Insert the supplied 1/4" x 1-3/4" set screw and 1/4" nut. Align the motor and spinner pulleys. Tighten the set screw and nut to 6 ft-lb.

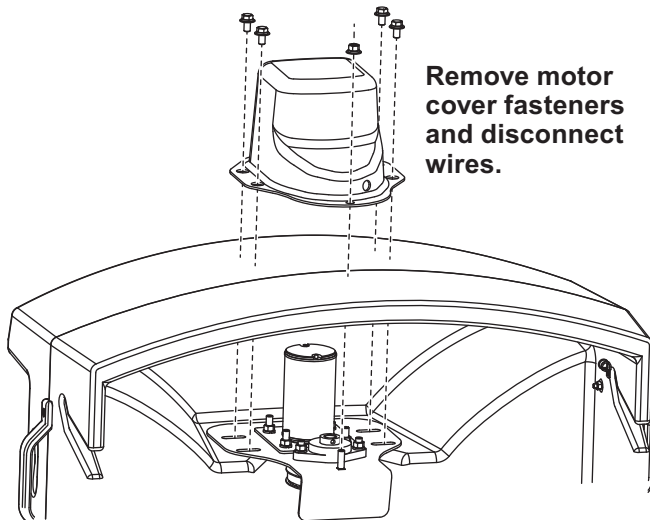


13. Install the split collar on the spinner shaft under the pulley. The collar should be tight against the pulley.

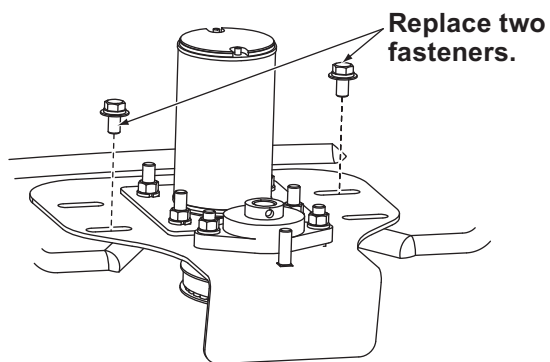


SPINNER MOTOR BELT TENSION RESET

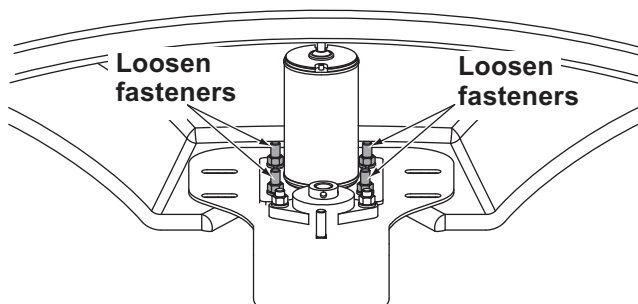
1. Remove the five fasteners that hold the motor cover in place. Disconnect the wires and remove the cover.



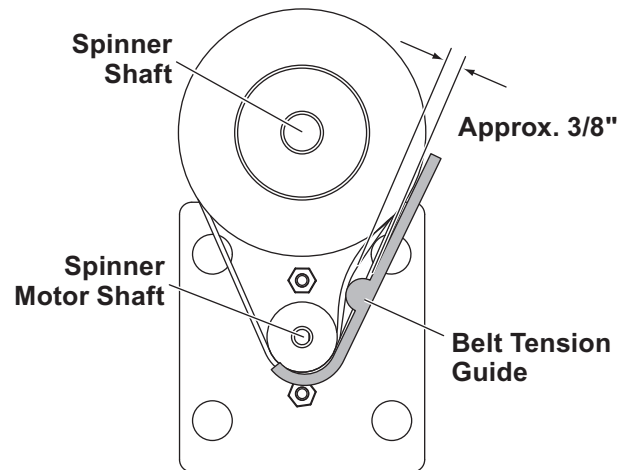
2. Replace two of the fasteners on opposite corners of the motor to secure the base plate to the chute.



3. Loosen the four fasteners that secure the motor mount plate to the base plate.



4. Slide the motor until the proper tension of the drive belt (when it is easily deflected 3/8") is achieved. **Do not overtighten the belt.**



5. To check for the proper tension, hook the curved end of the supplied belt tension guide around the spinner motor shaft pulley. Rest the other end against the spinner shaft pulley, with the bump against the belt. You should be able to accomplish this easily, without having to push too hard to make contact.
6. Tighten the four motor mount plate fasteners.
7. Verify the belt tension. The belt should easily deflect 3/8" when it is properly tightened.
8. Remove the two fasteners holding the base plate to the chute and replace the cover.
9. Tighten the five fasteners to proper torque and reconnect the motor wires.
10. Verify the belt tension. The belt should easily deflect 3/8" when it is properly tightened.

Copyright © 2013 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.
