

# Chute Strut Kit

## Poly-Hopper Spreaders

### PARTS LIST

48970 Chute Strut Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
1		1	Chute Strut Assembly – DS	5		1	Sill Deflector – DS
2		1	Chute Strut Assembly – PS	6		1	Sill Deflector – PS
3		1	Brace – PS	7	48977	1	Belt Tension Guide – 3/8
4		1	Brace – DS	ns		1	Bolt Bag – Chute Strut Kit
Bolt Bag – Chute Strut Kit							
8		2	3/8-16 x 1-1/2 Hex Cap Screw SS	14		4	3/8-16 Hex Nut SS
9		2	3/8 Flat Washer Wide SS	15		1	1/4-20 x 1-3/4 Set Screw SS
10		10	3/8 Lock Washer SS	16		1	1/4-20 Hex Nut
11		2	3/8-16 x 1 Hex Cap Screw SS	17		2	3/8-16 Well Nut
12		2	3/8-16 x 3/4 Hex Cap Screw SS	18		1	Shaft Collar
13		4	3/8-16 x 1 Carriage Bolt				
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)

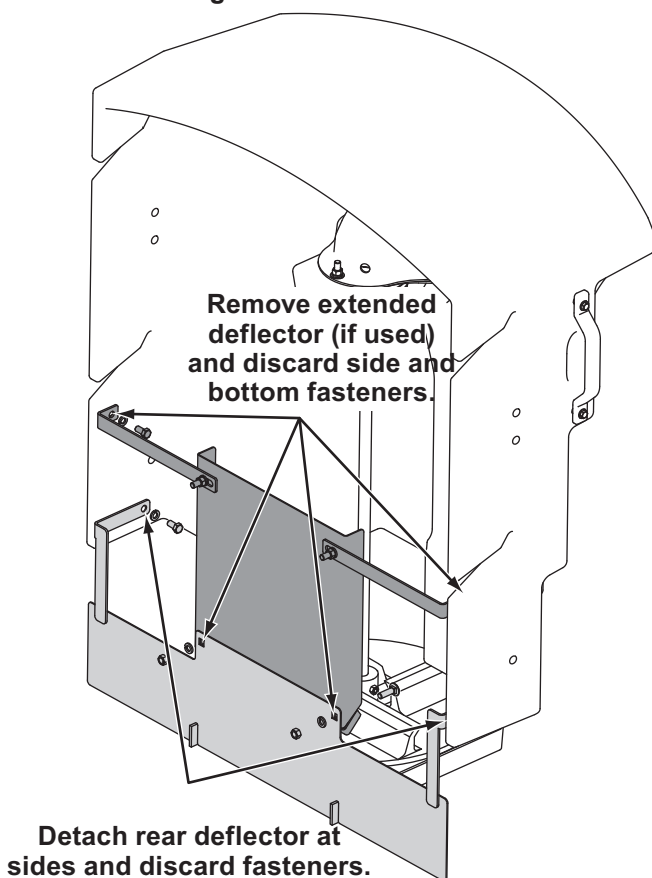
## INSTALLATION INSTRUCTIONS

These instructions are designed to help you install the chute strut kit for your poly hopper spreader. This kit may be used on spreaders with straight or curved rear deflector plates. This kit may also be used with the extended deflector when the hopper is installed in the lower position (using the upper two slots).

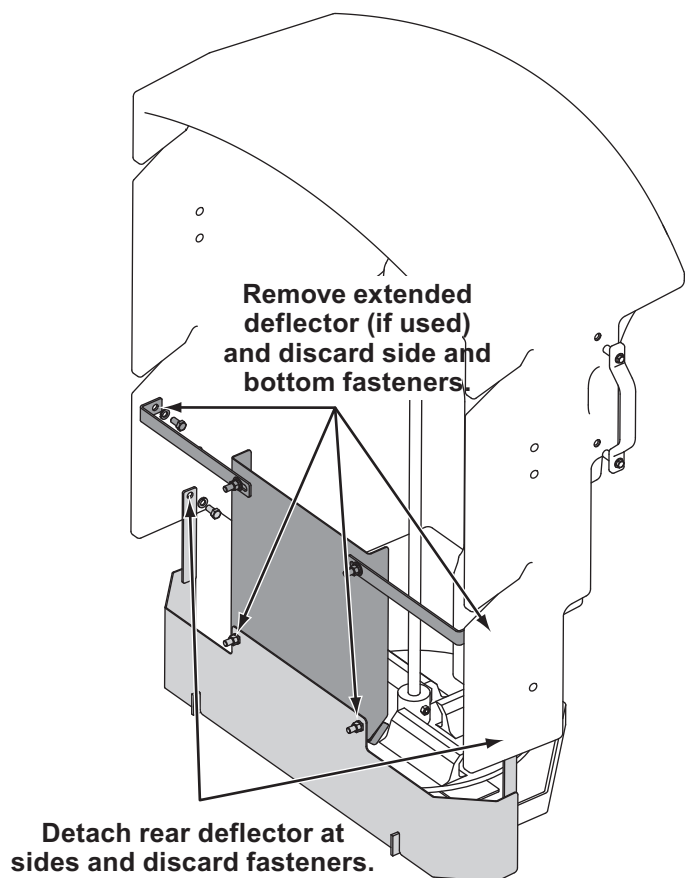
1. Park the vehicle on a smooth, level, hard surface, such as concrete. Turn the vehicle ignition to the "OFF" position and remove the key.
2. Remove the chute as directed in your Owner's Manual. Lay the chute face down on cardboard or similar material, taking care to protect the face and any accessories.

3. Remove the extended deflector (if applicable) and discard the side and bottom fasteners. Do not disassemble the deflector, and do not remove the top center fasteners.
4. Detach the rear deflector on both sides and discard the fasteners. Do not remove the fastener at the center-rear of the chute. Retain the deflector(s) for reinstallation.

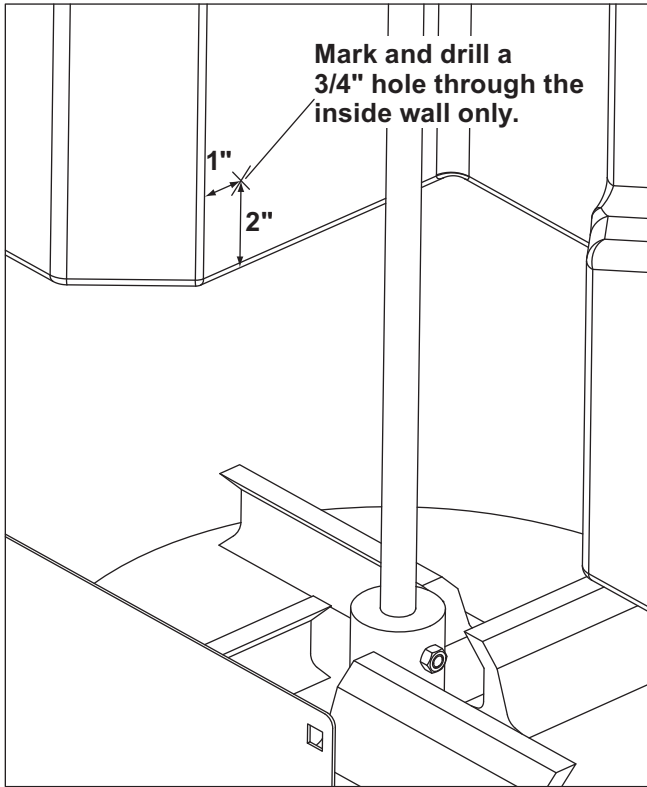
**Straight Rear Deflector Plate**



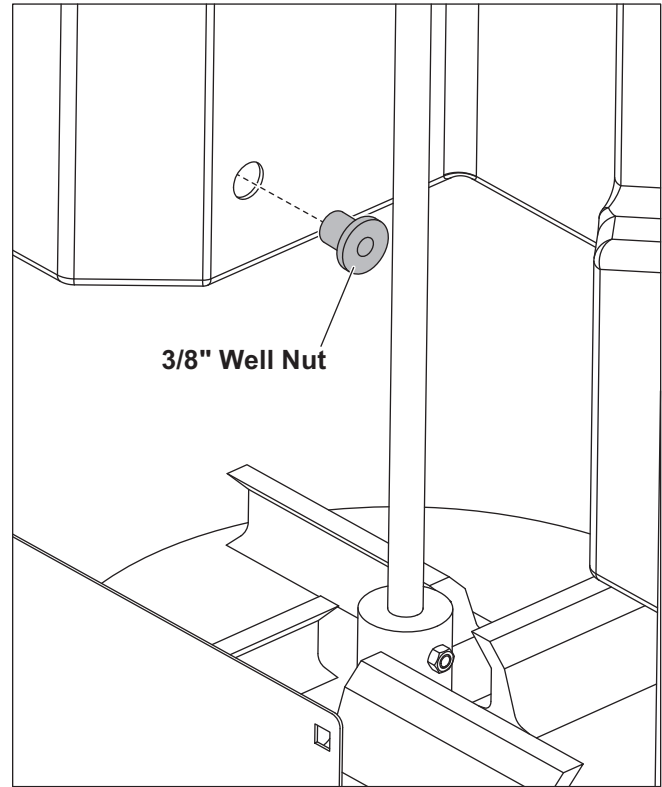
**Curved Rear Deflector Plate**



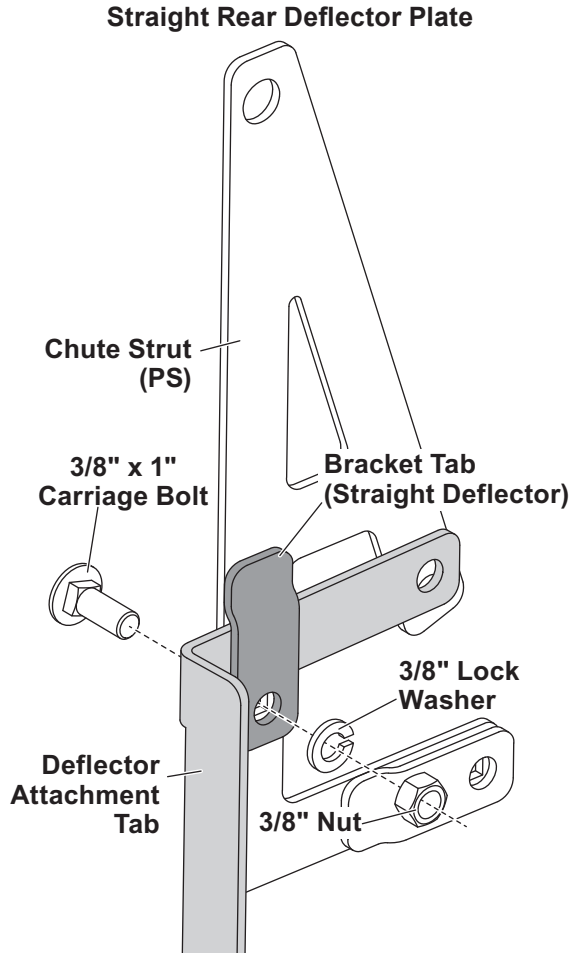
5. At the rear of the chute, make a mark 2" up from the bottom and 1" back from the edge, as shown. Drill a 3/4" inch hole in the poly chute wall.



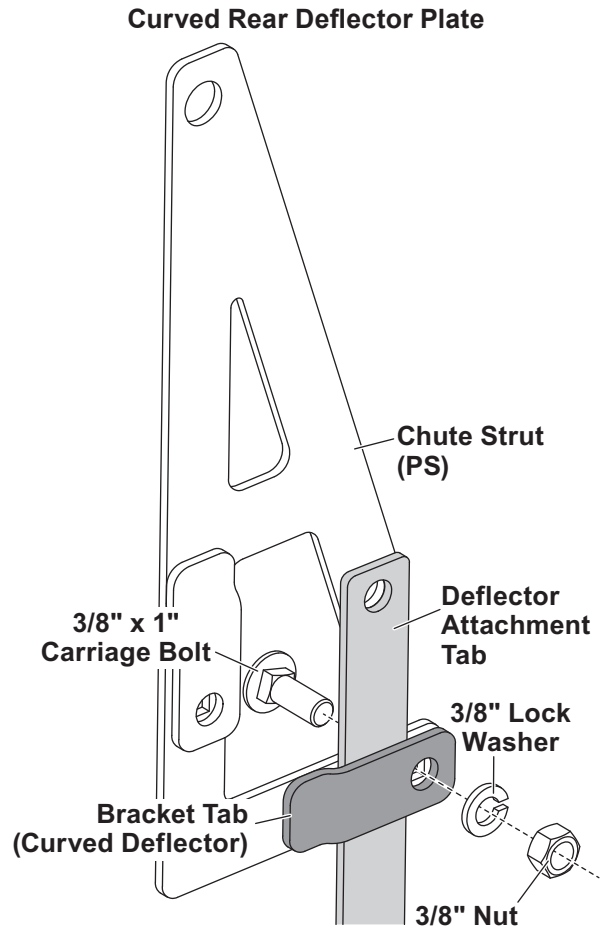
Insert the 3/8" well nut into this hole. Repeat on the other side.



6. Insert the chute strut between the poly chute side wall and the deflector attachment tab, aligning holes. The deflector attachment tab must fit under the appropriate bracket tab.

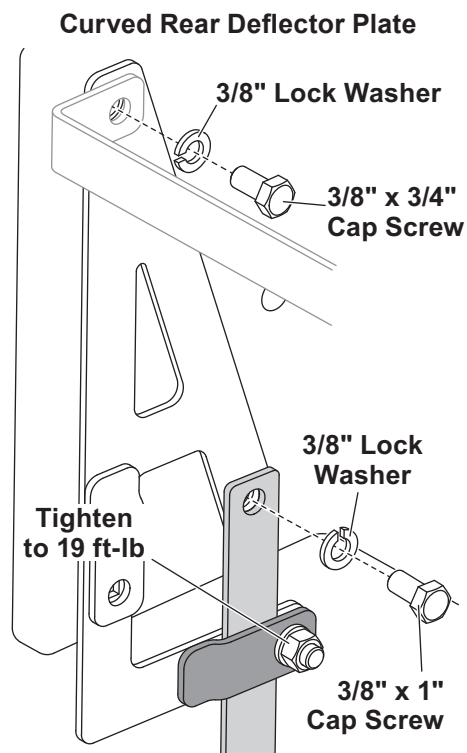
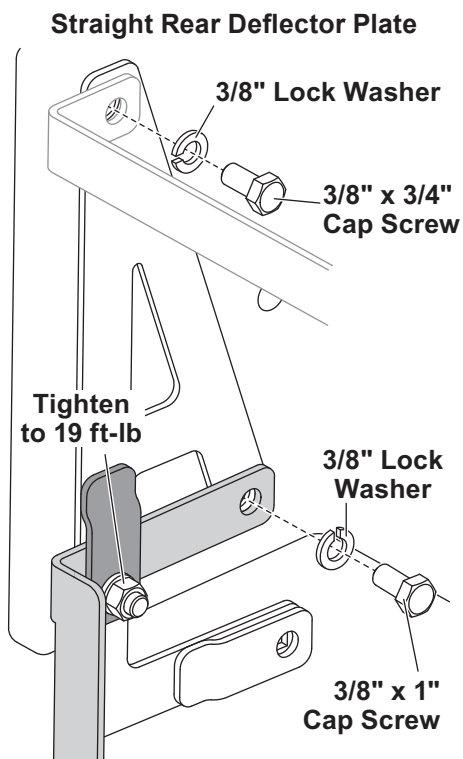


7. Insert 3/8" x 1" carriage bolt from behind the chute strut through the bracket tab. Secure with a 3/8" lock washer and nut. Finger tighten.

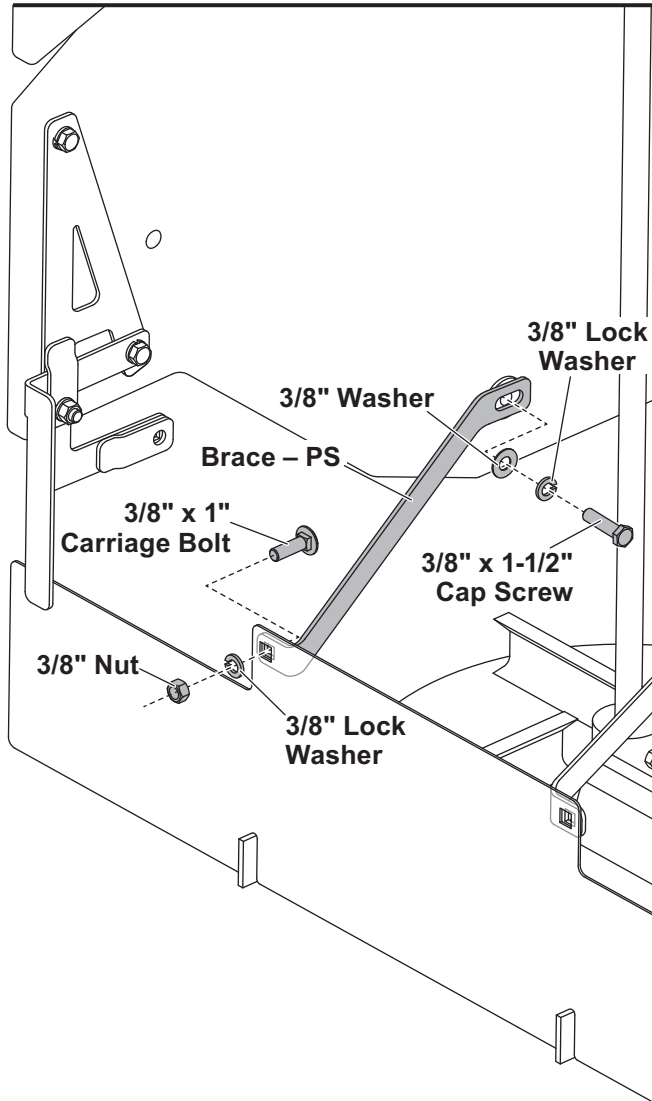


8. Reattach the deflector attachment tabs (and extended deflector attachment tabs, if applicable) to the chute side wall using supplied 3/8" x 3/4" cap screws and 3/8" lock washers

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 bolt and nut to 19 ft-lb.

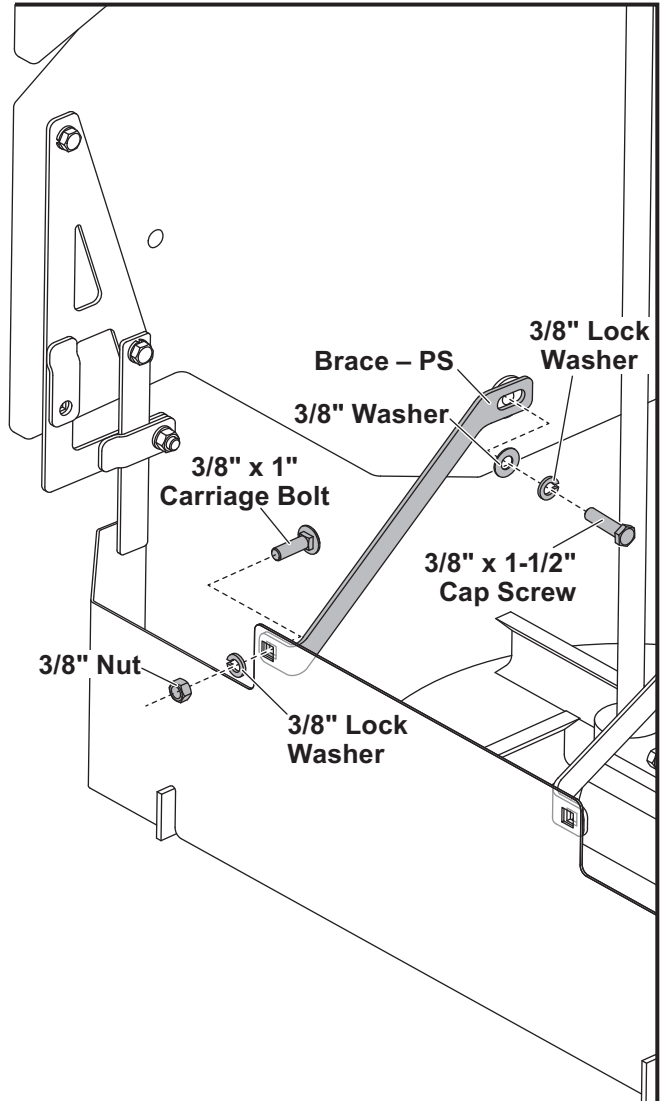


9. Align the slot in the passenger-side brace with the hole in the well nut, and the square hole in the brace with the square hole in the rear deflector plate (if applicable, the extension plate should fit between the rear deflector and the brace).
10. Fasten the brace to the rear deflector plate with a 3/8" x 1" carriage bolt, a 3/8" lock washer and 3/8" nut. Tighten to 19 ft-lb.



**Straight Rear Deflector Plate**

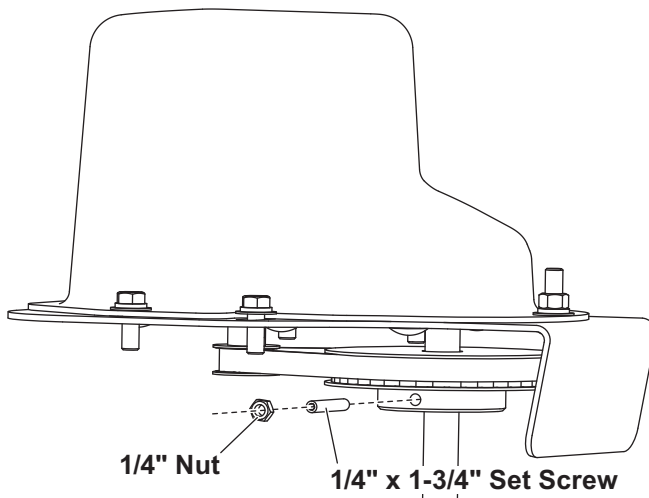
11. Secure the other end of the brace to the well nut using a 3/8" x 1-1/2" cap screw, 3/8" washer and 3/8" lock washer. Tighten to 6 ft-lb. Repeat on other side.



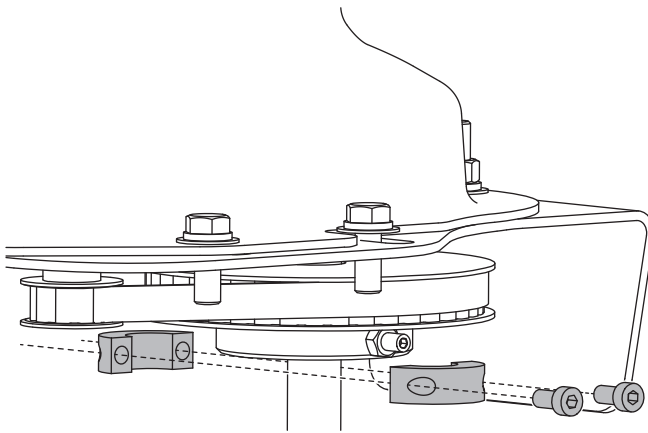
**Curved Rear Deflector Plate**

## 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.



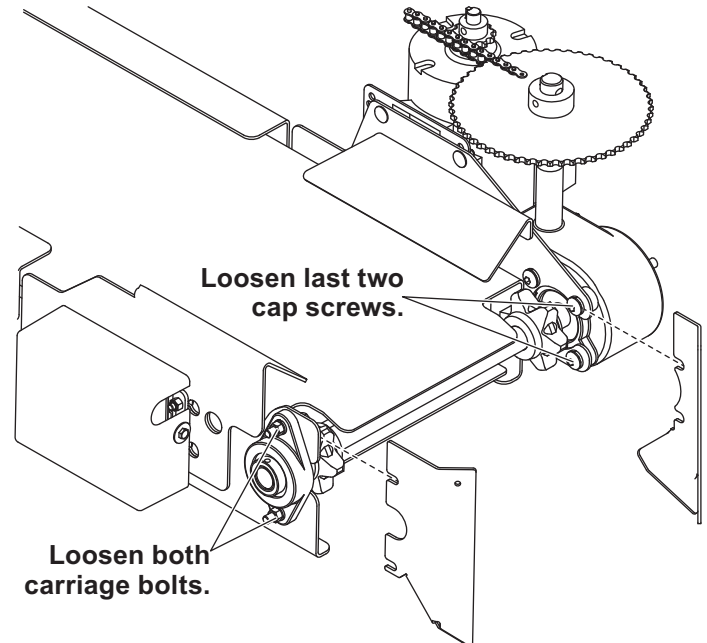
13. Install the split collar on the spinner shaft under the pulley. The collar should be tight against the pulley.



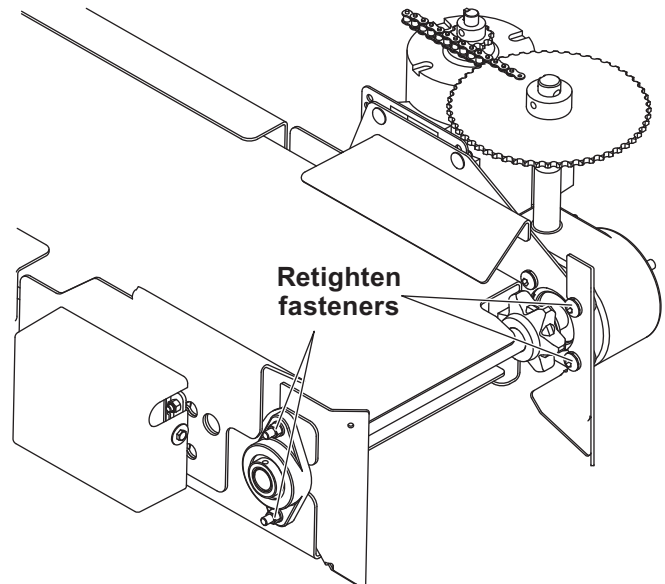
## Material Deflectors

With this kit installed, it is necessary to replace the material deflector on the passenger side of the sill.

14. Loosen both carriage bolts for the bearing and the last two cap screws.



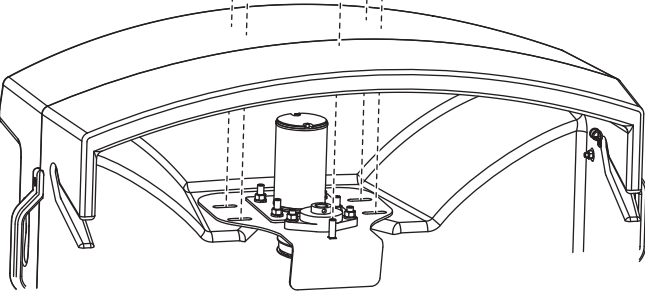
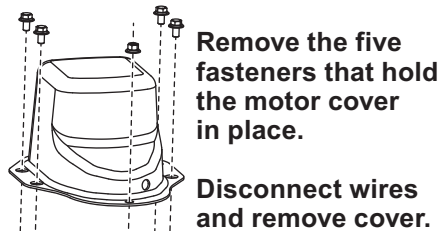
15. Slide the deflectors into place between the sill and the fastener heads. Tighten the carriage bolts to 19 ft-lb and the cap screws to 45 ft-lb.



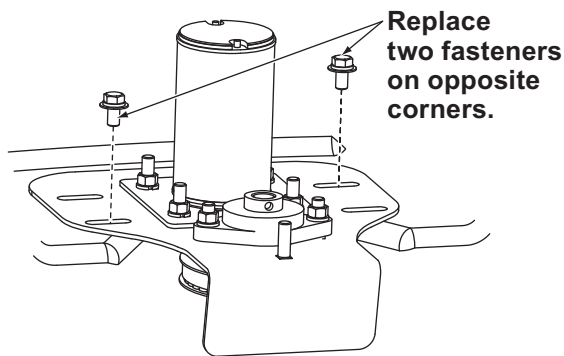
**NOTE:** The deflectors must be removed if you are going to store the unit vertically.

**SPINNER MOTOR BELT TENSION RESET**

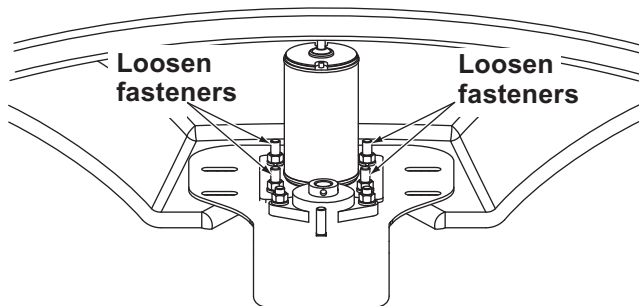
1. Remove the five fasteners that hold the motor cover in place. Disconnect the wires and remove the cover.



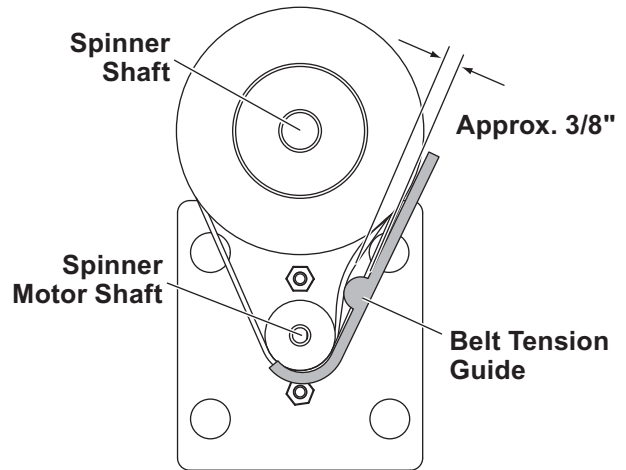
2. Replace two of the fasteners on opposite corners of the motor to secure the base plate to the chute.



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 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.





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