

Model 19A40024100 three-stage snowthrower attachment is designed for use with select lawn tractors and garden tractors. Refer to your tractor's Operator's Manual to assure compatibility.

Carton Contents

Before beginning installation, remove all parts from the carton to make sure everything is present. Carton contents are listed below and shown on page 6 and 7. The hardware pack contains seven individual bags of hardware. Do *NOT* open the individual bags until you reach the point in the assembly steps where the hardware is required.

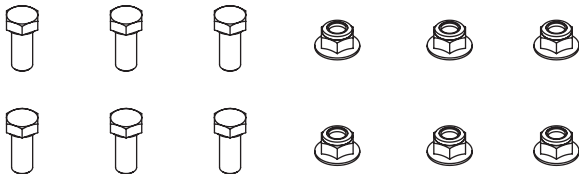
- One Operator's Manual
- One Lift Handle Assembly
- One Hardware Pack
- One Chute Crank / Chute Assembly
- One 5½-inch Extension Spring
- One Auger Housing Assembly
- One Carriage Assembly
- One Belt Keeper Rod
- One Chute Ring
- One 5-inch Extension Spring
- One Frame Rail Assembly
- One Bumper
- Two Carriage Support Brackets
- Two Lock Rods

Hardware Pack

689-00355



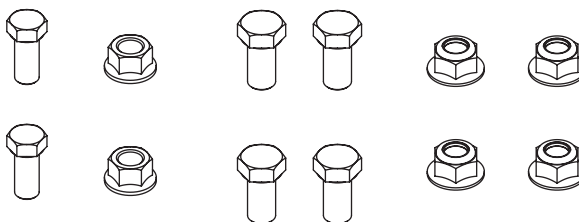
689-00354



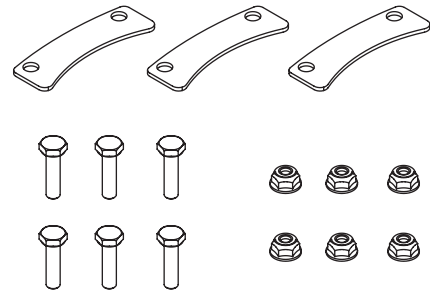
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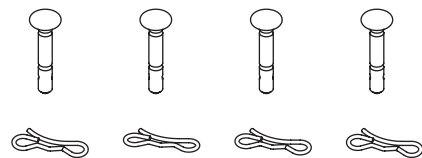
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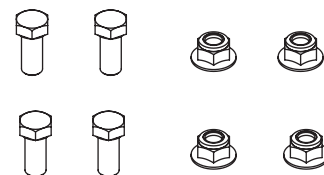
689-00350

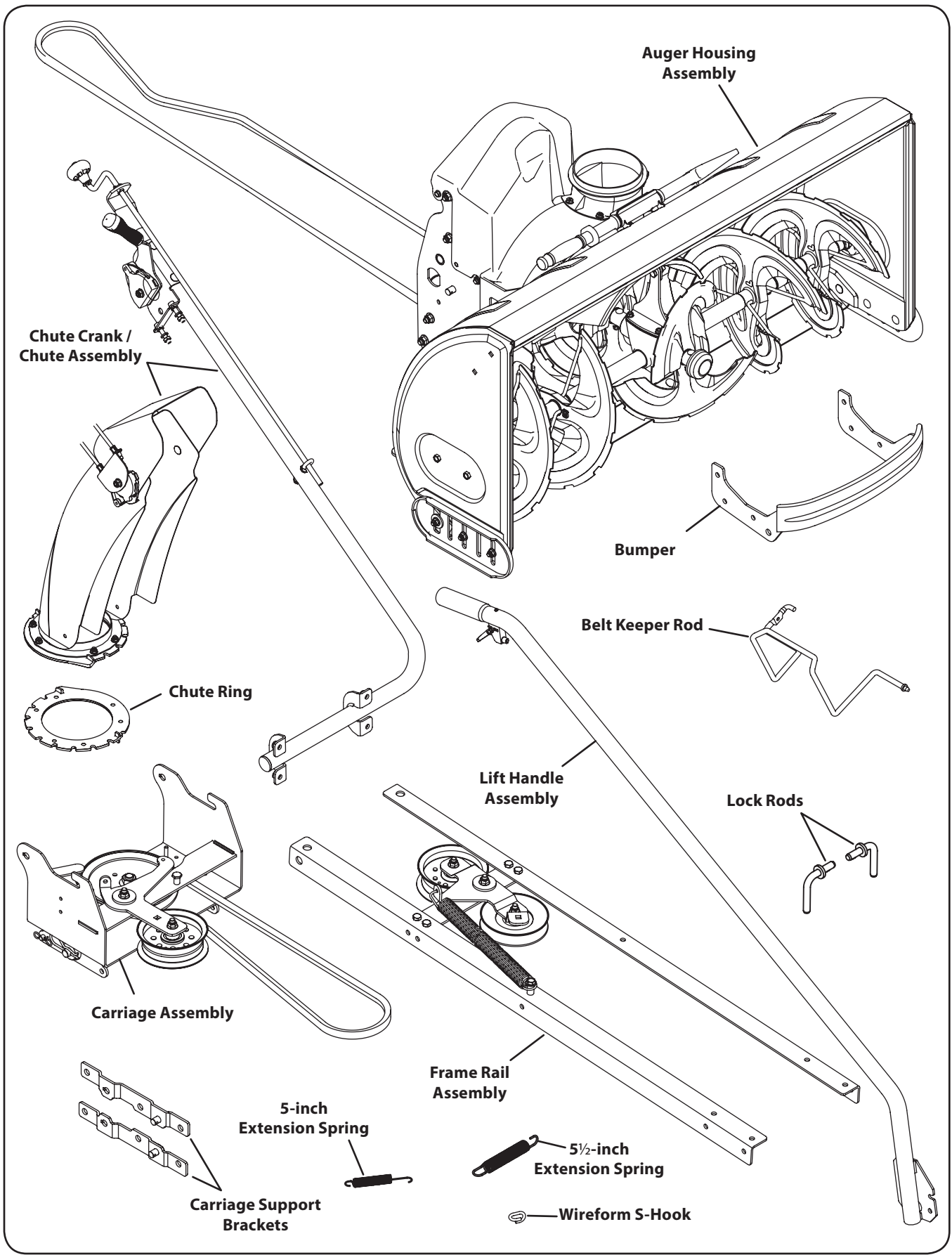


689-00356



689-00352







WARNING! Before installing the attachment, place tractor on a firm and level surface. Place the PTO in the disengaged (OFF) position, set the parking brake, shut engine off and remove key to prevent unintended starting.

NOTE: References to LEFT and RIGHT indicate the left and right sides of the tractor when facing forward in the operator's position. Reference to the FRONT indicates the grille end; to the REAR the drawbar end.

Several components on your tractor must be removed prior to mounting the snow thrower attachment. Refer to Deck Removal in your tractor's Operator's Manual for detailed instructions. If your tractor is equipped with any front-end accessory (i.e. front bumper kit), it must also be removed.

Having a second person assist with assembly is not necessary, but *will* aid in completing some of the steps.

Assembly

NOTE: If you engage your tractor's cutting deck by using your right hand to pivot a lever forward, your tractor has a **Manual PTO**. If you engage your tractor's cutting deck by pulling outward on a small knob located on the tractor's dash, your tractor has an **Electric PTO**. Follow applicable instructions throughout the assembly

Mounting The Bumper

Use Hardware Bag **689-00354** to mount the bumper.

- Using two $\frac{3}{16}$ " wrenches, secure the bumper to the tractor frame with six hex screws and flange lock nuts. See Figure 3-1.

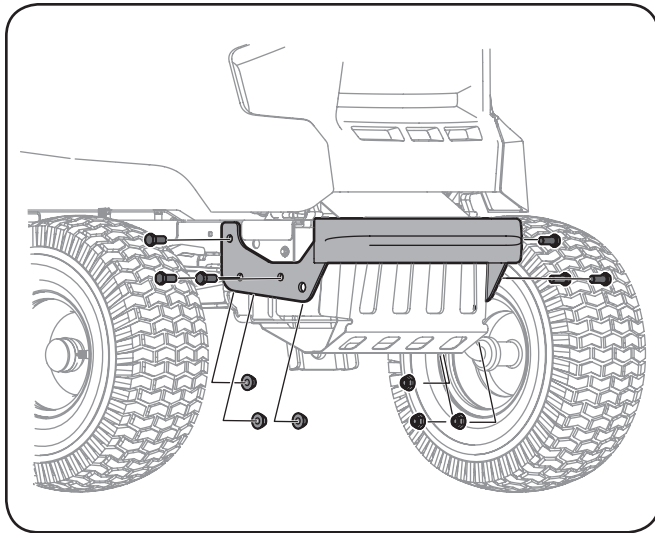


Figure 3-1

Attaching the Carriage Support Brackets

Use Hardware Bag **689-00351** to attach the carriage support brackets.

- Place the deck height lever into the lowest mowing position.

- Secure the right carriage support bracket marked with an "R" to the outside of the tractor's frame with three hex screws and flange lock nuts as shown in Figure 3-2.

IMPORTANT: The hex screws must be installed from the *OUTSIDE* of the frame and secured on the *INSIDE* with the flange lock Nuts. There are two different sized bolts in 689-00351. Use two $\frac{3}{4}$ -inch wrenches to secure the two larger bolts in the *outer* holes of the bracket. Use a $\frac{5}{8}$ -inch wrench (and an $\frac{1}{16}$ -inch wrench to hold the nut) to secure the smaller bolt in the *inner* hole of the bracket.

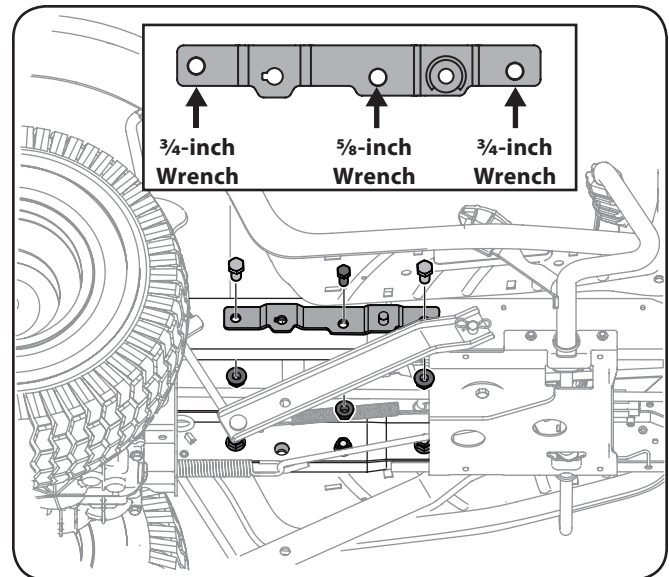


Figure 3-2

NOTE: The carriage support brackets can remain attached to the frame when the mowing deck is remounted to tractor.

- Then secure the left carriage support bracket following the instructions above.

Mounting the Carriage Assembly

- Remove the clevis pins and hairpin clips from the carriage assembly. Retain the clips and pins, as they will be used to attach components in later steps. See Figure 3-3.

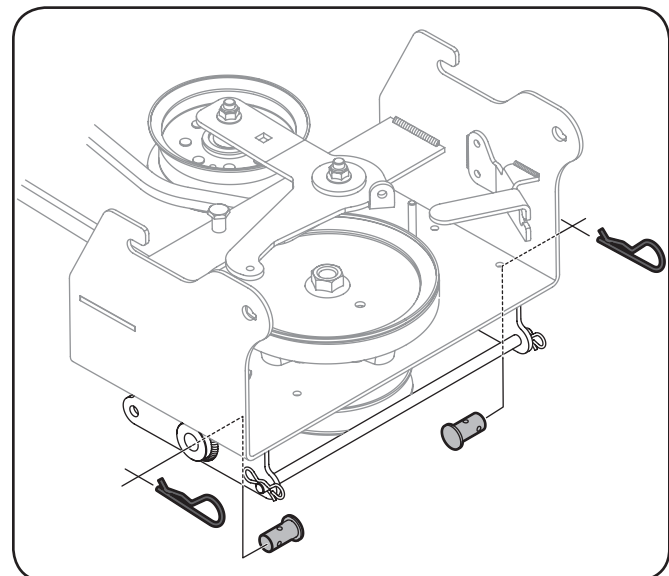


Figure 3-3

- Remove the rod from the rear of the carriage assembly. Retain the clips and rod, as they will be reattached in later steps. See Figure 3-4.

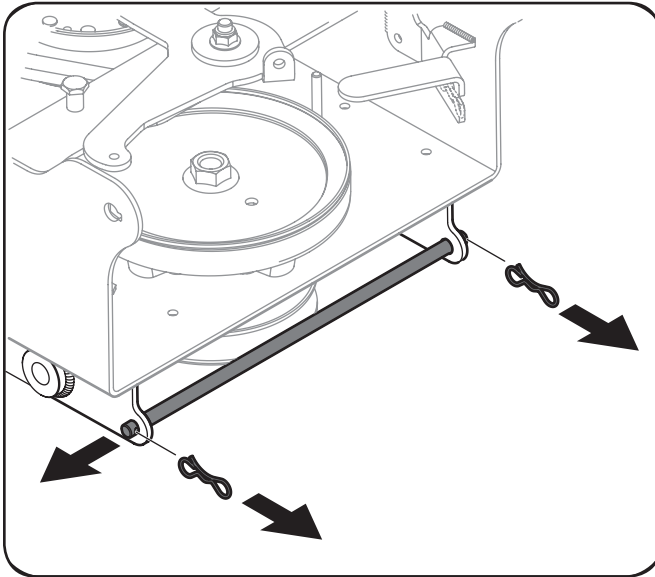


Figure 3-4

- If your tractor is equipped with a **Manual PTO**, attach the 5-inch extension spring to the carriage idler bracket as show in Figure 3-5.

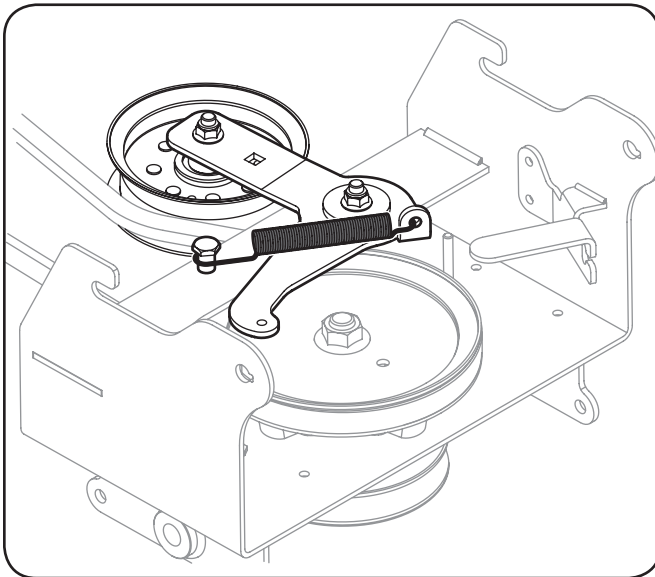


Figure 3-5

- If your tractor is equipped with a **Electric PTO**, attach the 5½-inch extension spring to the wireform S-hook and then to the carriage idler bracket as show in Figure 3-6.

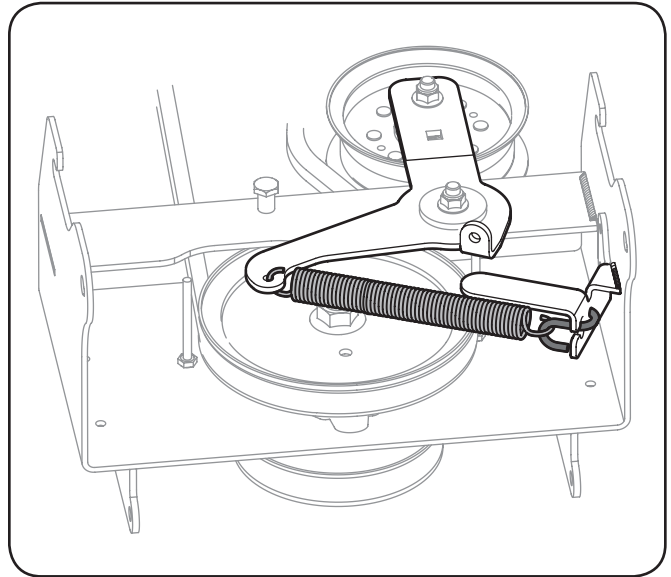


Figure 3-6

- Place the deck lift lever in the notch marked 3.
- Position the carriage beneath the tractor.
- Carefully raise the carriage up and position the slots on the front of the carriage over the pins on the support brackets. See Figure 3-7.

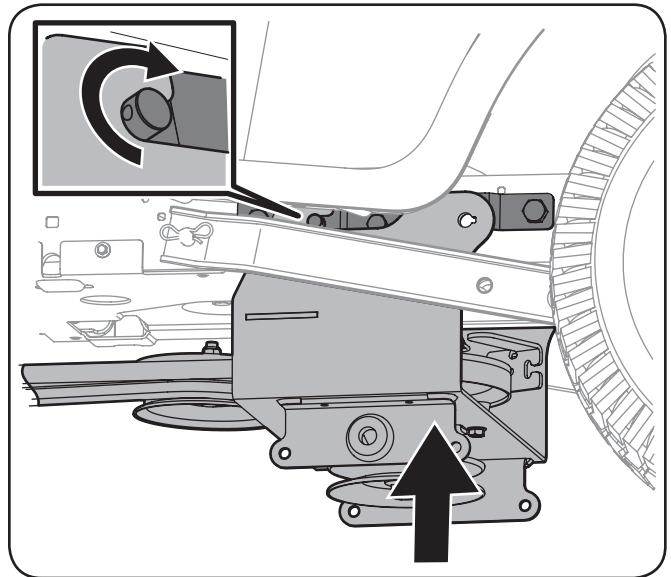


Figure 3-7

8. Secure the carriage in place with the two lock rods. See Figure 3-8.

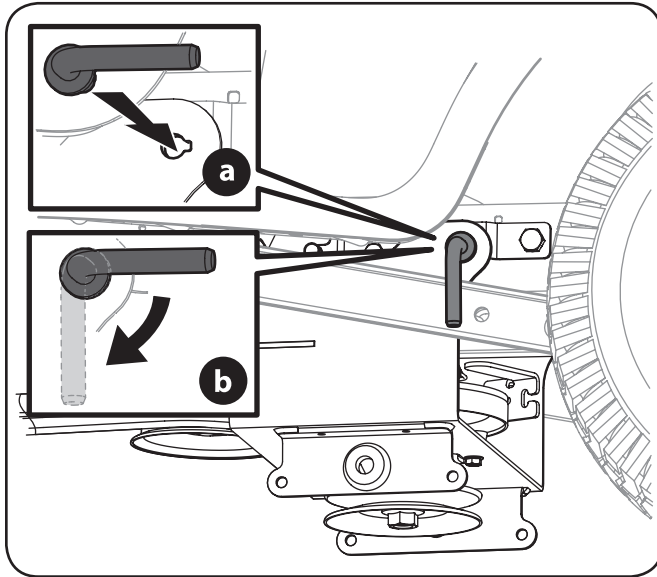


Figure 3-8

9. If your tractor is equipped with a **Manual PTO**, and the belt keeper rod wasn't removed from the tractor when the deck was taken off, remove it before proceeding to the next step. See Figure 3-9.

NOTE: Retain the screw used to secure the belt keeper rod to the tractor's frame. Also, retain the belt keeper rod for use when the mowing deck is remounted to tractor.

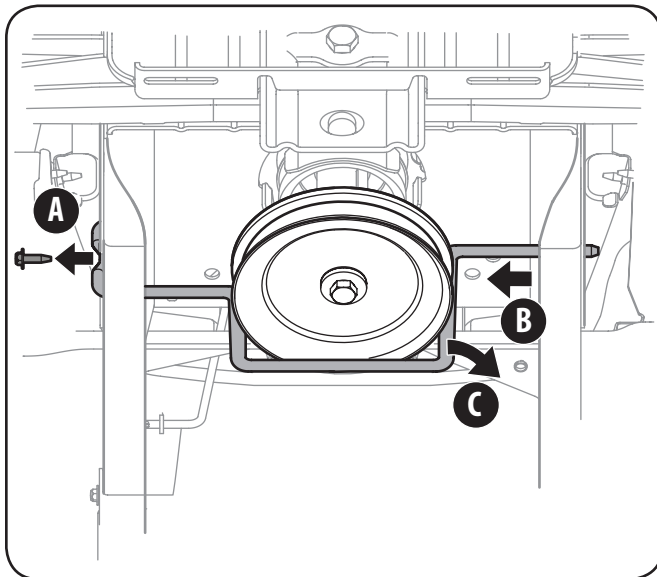


Figure 3-9

10. Route the carriage assembly's belt around the engine pulley (or electric PTO clutch, on models with an **Electric PTO**) as shown in Figure 3-10.

NOTE: To relieve tension on the idler pulley, insert a ratchet with a $\frac{3}{8}$ -inch drive into the square hole on the idler bracket

and pivot the pulley outward.

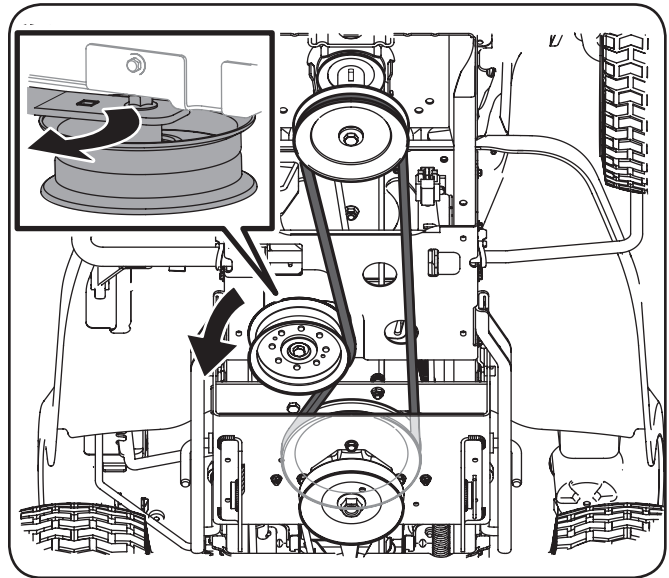


Figure 3-10

11. On models with a **Manual PTO**, install the new belt keeper rod and secure it with the hex screw retained when the old keeper rod was removed. See Figure 3-11.

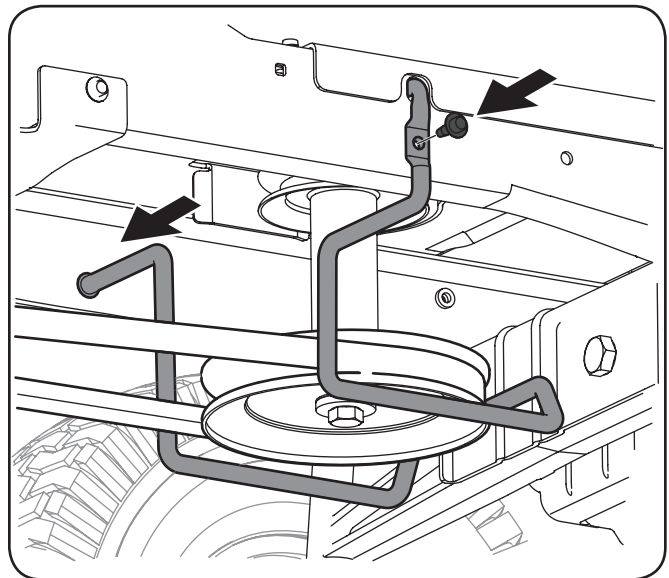


Figure 3-11

- On models with a **Manual PTO**, attach the PTO cable to the idler bracket as show in Figure 3-12.

NOTE: Secure the cable in place with the same pin that secured the cable to the mowing deck.

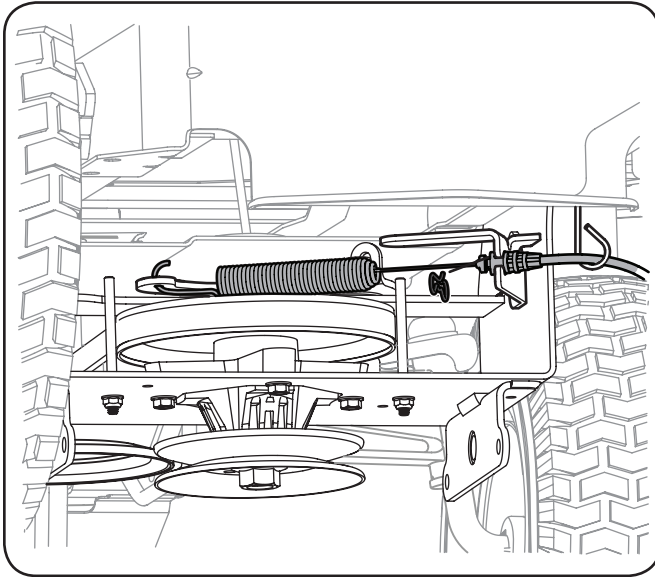


Figure 3-12

Attaching the Rail Assembly

Use Hardware Bag **689-00352** to attach the rail assembly.

NOTE: Having an assistant support and position the rail assembly will aid in completing the following step.

- Carefully pivot the auger housing up and forward until the top front face of the housing is resting on the ground. Refer to Figure 3-12 and Figure 3-13
- Using two 9/16" wrenches, secure the rail assembly to the auger housing assembly with four hex screws and flange lock nuts. See Figure 3-13.

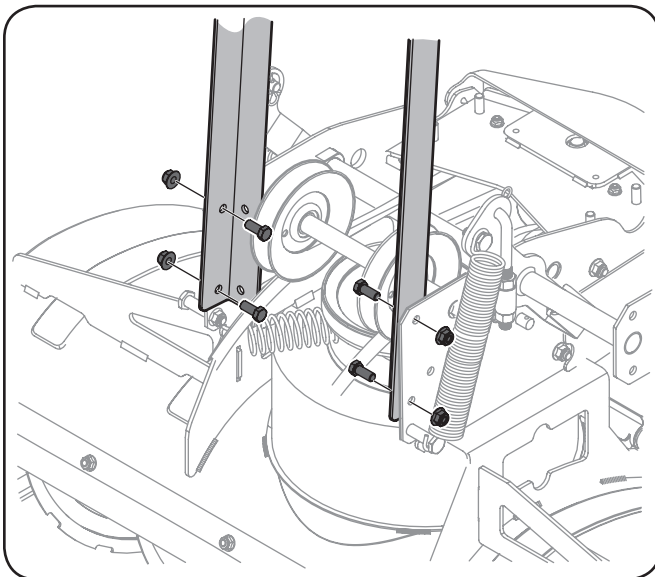


Figure 3-13

- Route the auger assembly's belt around the rail assembly's idler pulleys as shown in Figure 3-14.

Important: Make certain that the flat side of the belt is positioned on the *flat pulley*, and the V side of the belt is positioned on the *V-Pulleys*.

NOTE: To relieve tension on the idler pulleys, insert a ratchet with a 3/8-inch drive into the square hole on the idler bracket and pivot it outward.

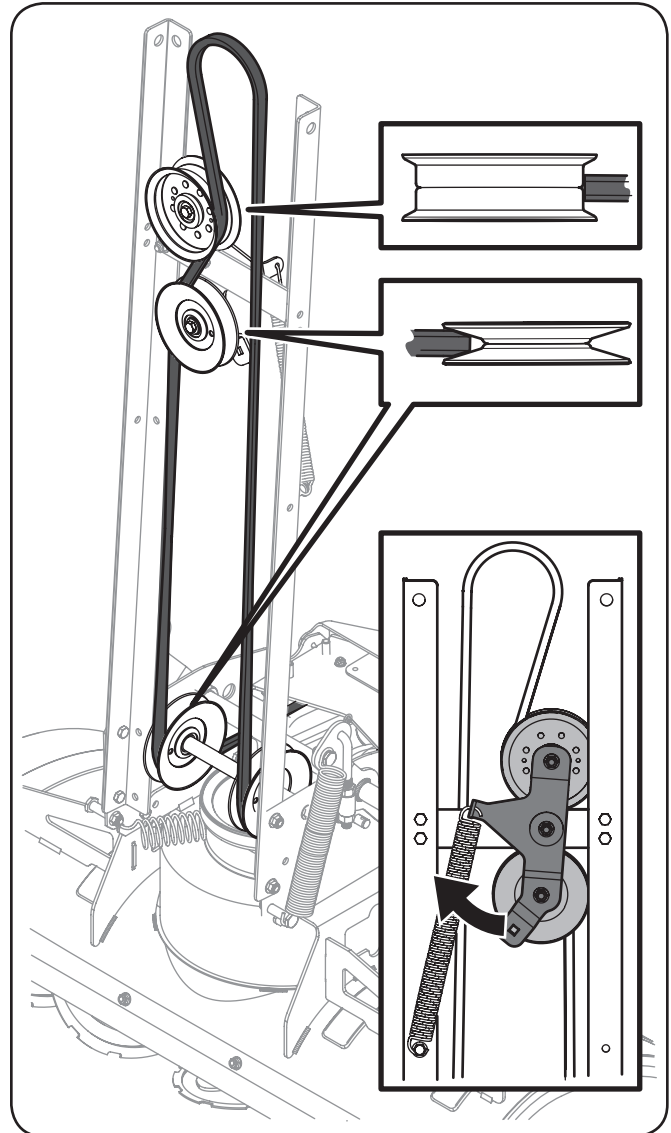


Figure 3-14

Attaching the Chute Crank Assembly

Use Hardware Bag **689-00353** to attach the chute crank assembly.

NOTE: Having an assistant support and position the chute crank assembly will aid in completing the following step.

1. Using a $\frac{3}{16}$ " wrench, secure the chute crank assembly to the auger housing assembly with four flange lock nuts. See Figure 3-15.

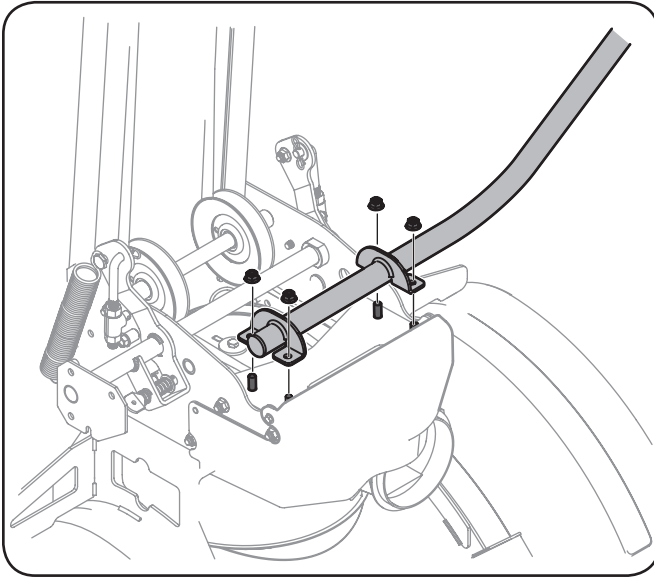


Figure 3-15

Attaching the Chute Assembly

Use Hardware Bag **689-00350** to attach the chute assembly.

NOTE: Having an assistant will aid in completing the following step.

1. While supporting the rail assembly, carefully pivot the auger assembly downward and position it in front of the tractor.

2. Position the chute ring on top of the auger housing's chute adapter as show in Figure 3-16.

NOTE: Make sure the groove found in the chute ring is facing forward.

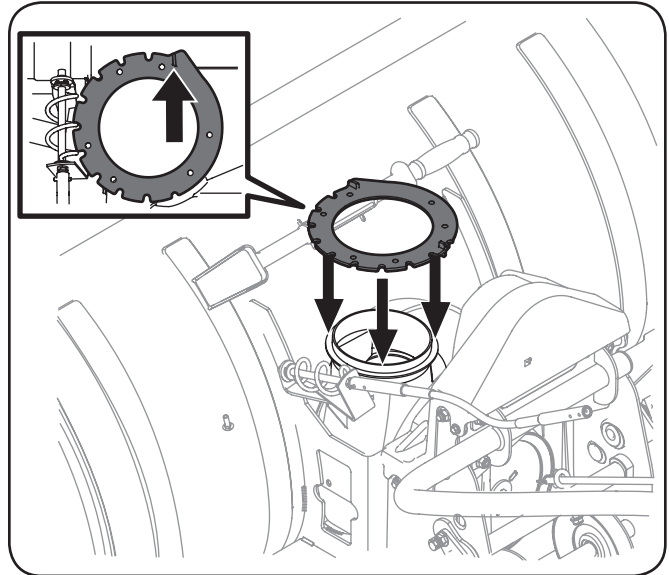


Figure 3-16

3. Position the chute assembly (facing forward) on the chute ring. See Figure 3-17.

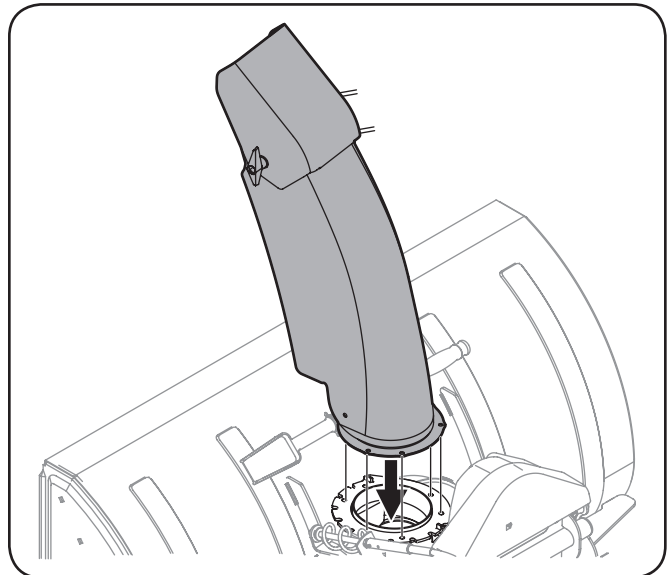


Figure 3-17

- Using two $\frac{7}{16}$ " wrenches, secure the chute assembly to the chute ring with three flange keepers, six hex screws and flange nuts as show in Figure 3-18.

Important: Do not over-tighten the flange keeper hardware. Doing so may result in the chute binding during rotation.

NOTE: After installing the first flange keeper, rotate the chute to more easily access the chute ring holes and install the next flange keeper.

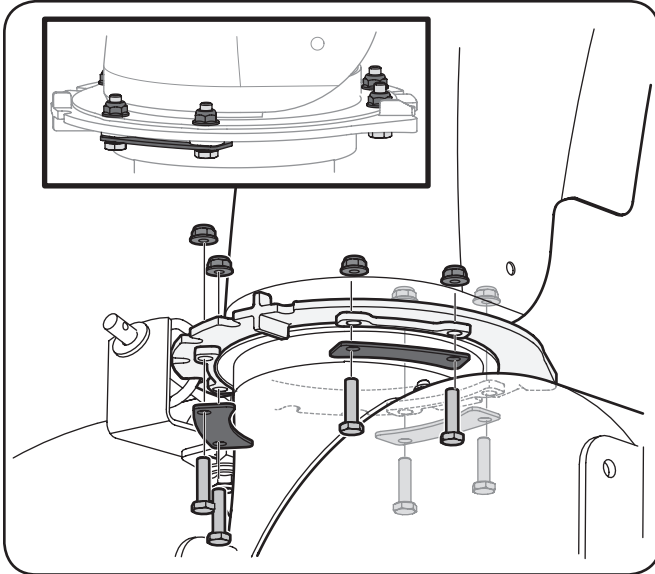


Figure 3-18

- Secure the flex shaft to the upper chute crank with the hair pin clip. See Figure 3-19.

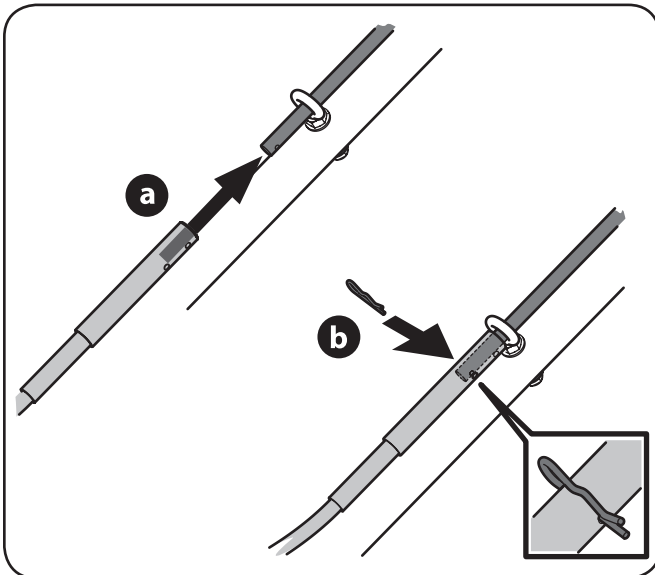


Figure 3-19

Attaching the Lift Handle Assembly

Use Hardware Bag **689-00355** to attach the lift handle assembly.

NOTE: Having an assistant support and position the lift handle assembly will aid in completing the following step.

- Using two $\frac{9}{16}$ " wrenches, secure the lift handle to the auger housing assembly with three hex screws and flange lock nuts. See Figure 3-20.

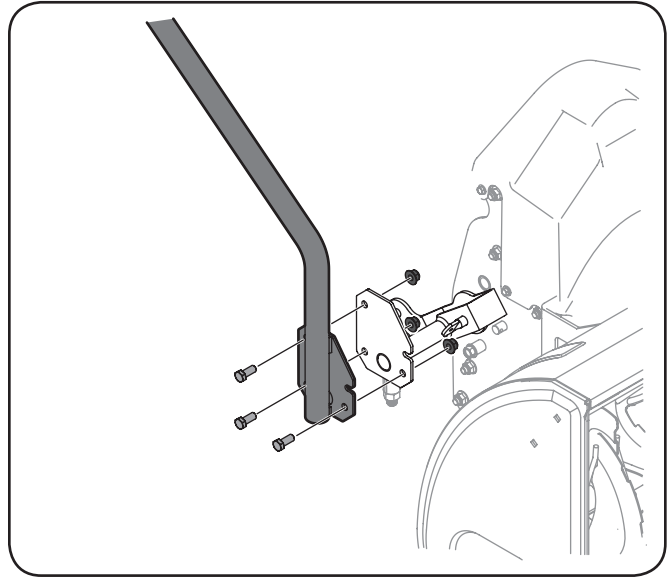


Figure 3-20

- Position the cable housing in the notch on the lift handle. Attach the Z-fitting end of the lift cable to the lock rod found on the lift shaft assembly. See Figure 3-21.

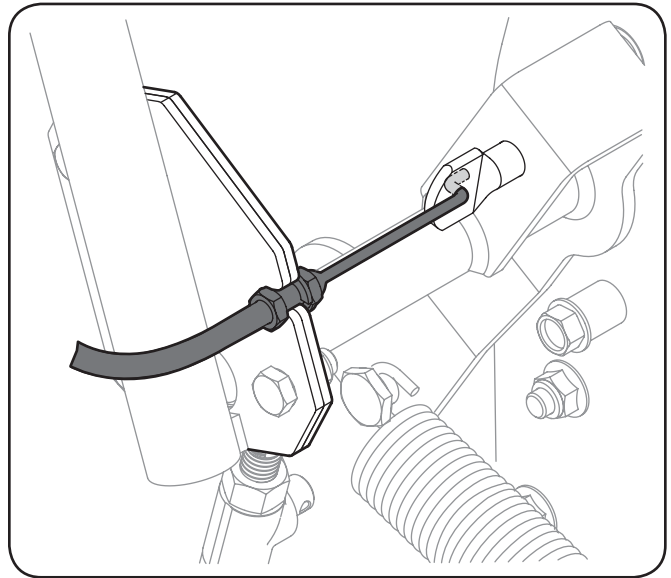


Figure 3-21

3. Pull the cable outward to take up slack, and tighten the jam nuts to secure the cable housing to the lift handle. See Figure 3-22.

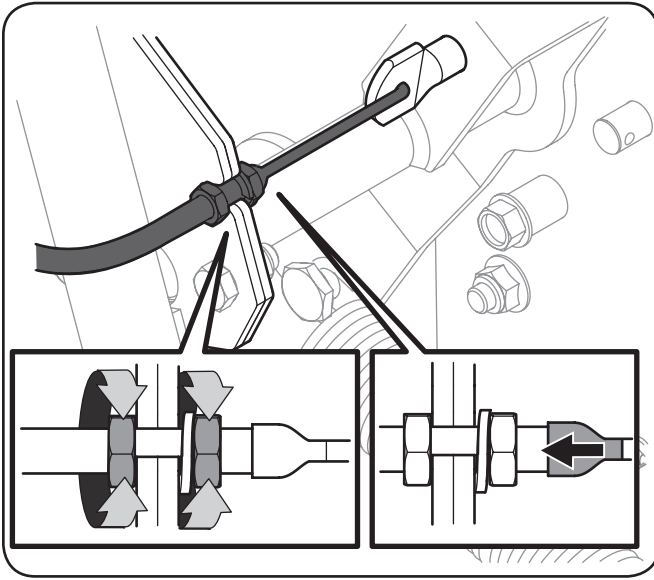


Figure 3-22

Mounting the Assembled Components to the Tractor

1. Roll the tractor into position over the frame rail assembly, aligning the frame rails with the carriage assembly. See Figure 3-23.

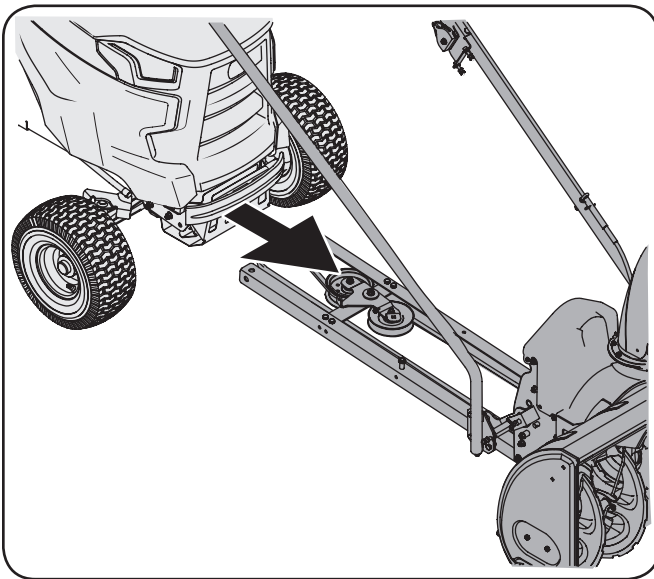


Figure 3-23

NOTE: Supporting the end of rail assembly with a 4x4 block of wood (beneath both rails) will aid in completing the following step.

2. Pivot the rear of the frame rail assembly upward and secure it to the inside of the carriage assembly with the clevis pins and hairpin clips removed earlier. See Figure 3-24.

NOTE: Pushing up on the lift handle will assist in pivoting the rear frame rail assembly into position.

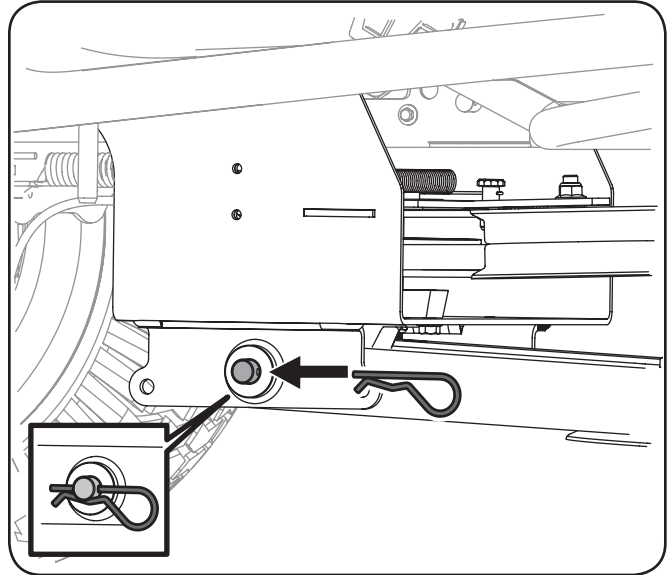


Figure 3-24

3. Squeeze the trigger found near the grip on the lift handle assembly and lift the handle up to align lift link ferrule and the hole in the bumper.
4. Remove the hair pin clip from the lift link ferrule. Insert the lift link ferrule into the hole found on the front right area of the bumper and secure it with the hairpin clip just removed. See Figure 3-25.

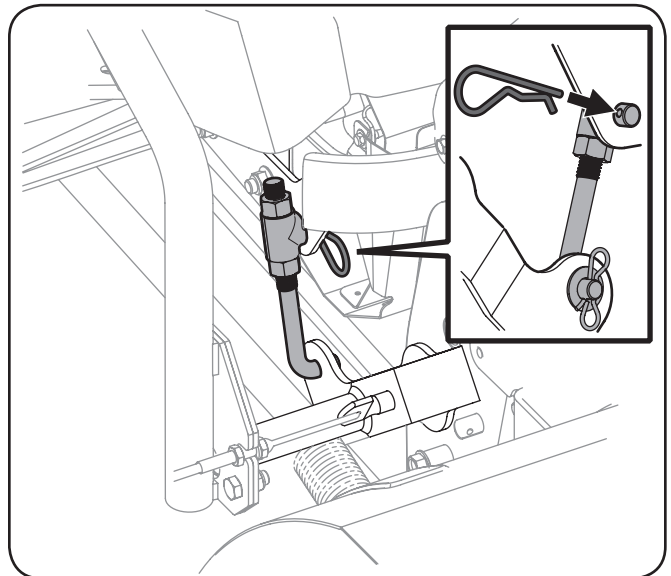


Figure 3-25

- Repeat the previous step on the left side of the auger housing.
- Route the auger assembly's belt around the carriage spindle pulley as shown in Figure 3-26.

NOTE: To relieve tension on the idler pulleys, insert a ratchet with a 3/8-inch drive into the square hole on the idler bracket and pivot it outward.

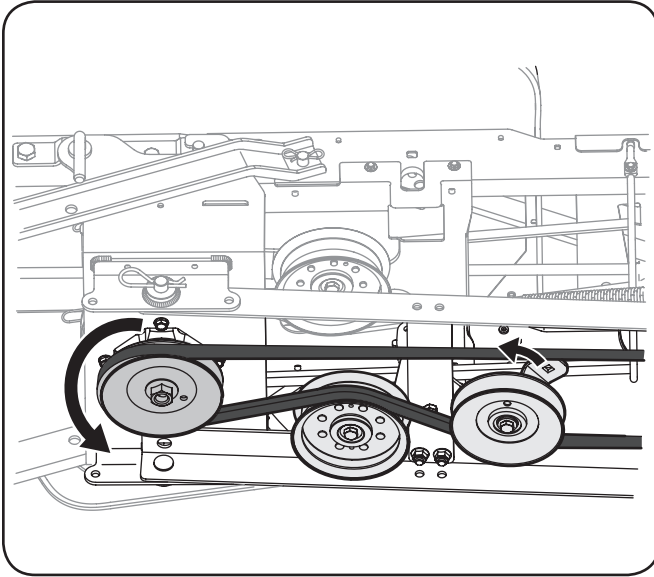


Figure 3-26

- Reinsert the rod into the rear of the carriage assembly and secure it in place with the two hair pin clips removed earlier. See Figure 3-27.

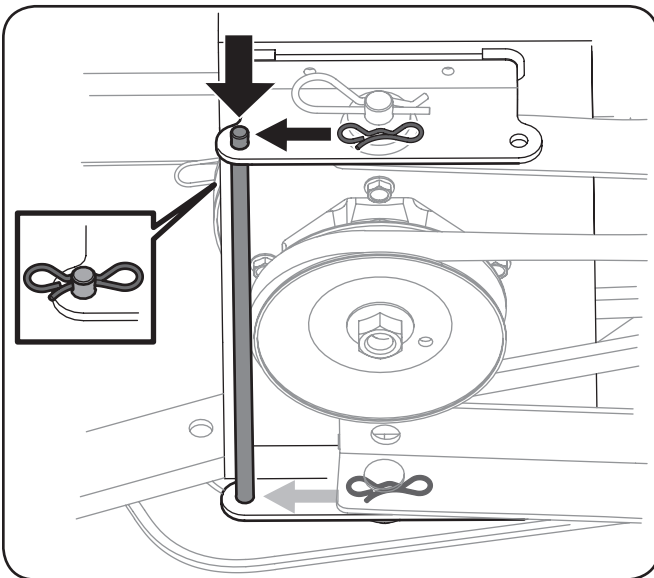


Figure 3-27

Attaching Reflectors

Peel off the backing from each of the reflectors to expose the adhesive surface. Adhere the reflectors to the rear of the tractor's fender (one on the left and one on the right) so that the reflectors simulate taillights.

Set-Up Shear Pins

Two pairs of replacement auger shear pins and bow tie cotter pins are included with your snow thrower in Hardware Bag **689-00356**. Store them in a safe place until needed.

Skid Shoe Adjustment



WARNING! Never attempt to make any adjustments while the engine is running, except where specified in the Operator's Manual. Place tractor on a firm and level surface. Place the PTO in the disengaged (OFF) position, set the parking brake, shut engine off, and remove key to prevent unintended starting.

The snow thrower skid shoes are adjusted at the factory for shipping purposes. Adjust them downward, if desired, prior to operating the snow thrower.



CAUTION: It is not recommended that you operate this snow thrower on gravel as it can easily pick up and throw loose gravel, causing personal injury or damage to the snow thrower and surrounding property.

- For close snow removal on a smooth surface, raise skid shoes higher on the auger housing.
- Use a middle or lower position when the area to be cleared is uneven, such as a gravel driveway

NOTE: If you choose to operate the snow thrower on a gravel surface, keep the skid shoes in position for maximum clearance between the ground and the shave plate.

To adjust the skid shoes:

- Using a 1/2" wrench, loosen the hex nuts. Move skid shoes to desired position. See Figure 3-28.
- Make certain the entire bottom surface of skid shoe is against the ground to avoid uneven wear on the skid shoes.
- Retighten nuts and bolts securely.
- Repeat the previous steps on the other side of the auger housing, making sure that both skid shoes are adjusted to the same height.

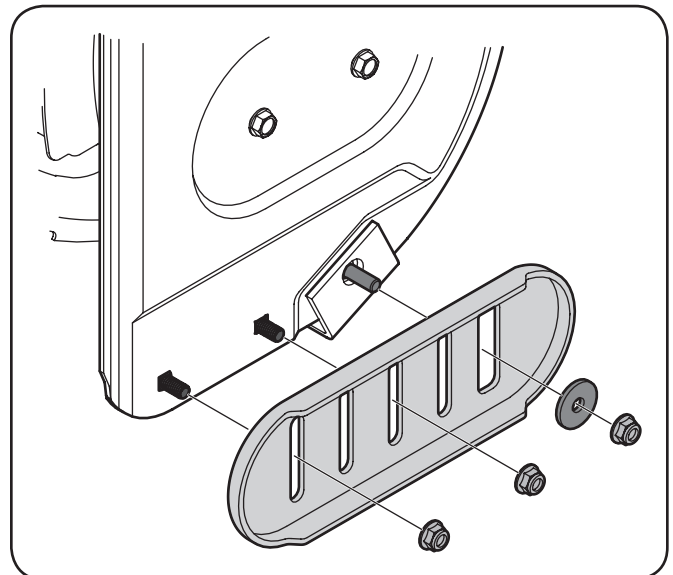


Figure 3-28