

68030 SNOW THROWER KIT

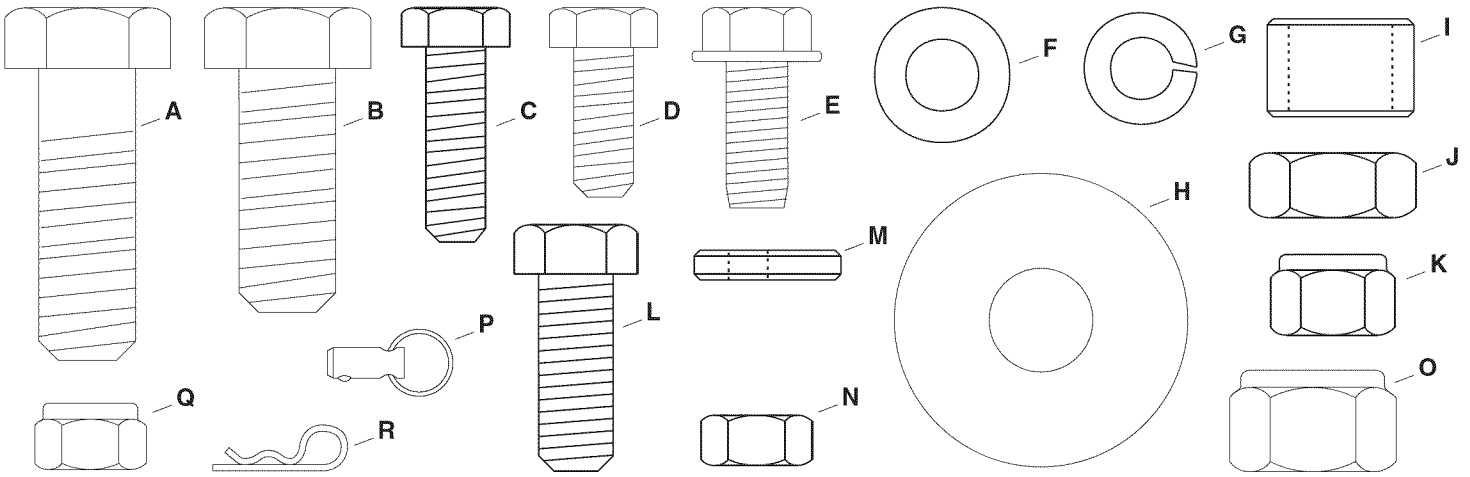
**FOR TRACTORS WITH MODEL NUMBERS
BEGINNING WITH 247**

**USE ASSEMBLY INSTRUCTIONS ON PAGE 8 FOR MODEL
247.28884 & 247.28885 SEARS TRACTORS**

NOTE:

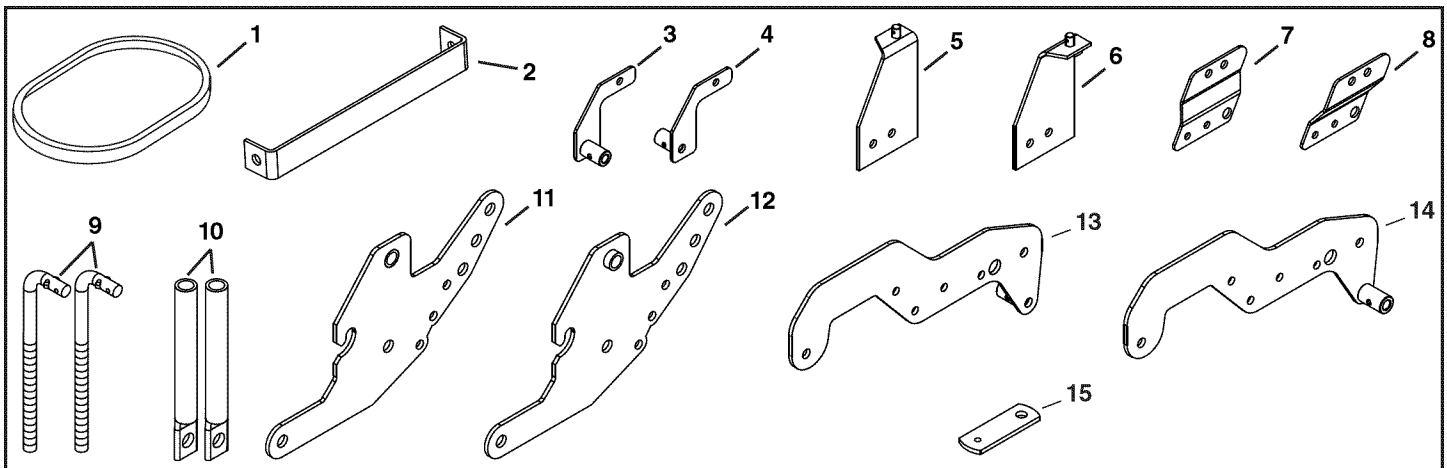
Purchase a Sears 486.24100 Rear Weight Kit to provide increased traction when using the snow thrower attachment.

KIT CONTENTS



REF.	QTY.	PART #	DESCRIPTION	REF.	QTY.	PART #	DESCRIPTION
A	2	43020	Hex Bolt, 1/2" x 1-1/2"	J	4	43019	Jam Nut, 1/2"
B	2	43351	Hex Bolt, 1/2" x 1-1/4"	K	2	HA21362	Nylock Nut, 3/8"
C	6	43063	Hex Bolt, 5/16" x 1"	L	2	43001	Hex Bolt, 3/8 x 1"
D	2	43182	Hex Bolt, 5/16" x 3/4"	M	4	42846	Pivot Bushing
E	2	47630	Hex Bolt, 5/16" x 3/4" (Thd. Form)	N	2	43064	Lock Nut, 5/16"
F	10	R19171616	Washer, 1/2" x 1"	O	4	41657	Nylock Nut, 1/2"
G	2	43086	Lock Washer, 5/16"	P	2	42487	Quick Release Pin
H	12	R19172410	Washer, 1/2" x 1-1/2"	Q	6	47810	Nylock Nut, 5/16"
I	2	27231	Spacer, 1/2"	R	4	47134	Hair Cotter Pin

IMPORTANT: Not all items supplied with the snowthrower and this kit will be needed for your particular tractor. Unneeded items may be discarded after you have completed assembly and checked operation of unit. **DO NOT DISCARD** the two spare shear bolts and 5/16" nylock nuts supplied with your tractor.



REF.	QTY.	PART #	DESCRIPTION	REF.	QTY.	PART #	DESCRIPTION
1	1	41353	V-Belt, Drive 52"	9	2	41346	Support Link (2)
2	1	25722	Frame Brace	10	2	41352	Support Tube (2)
3	1	67052	Hanger Bracket Assembly R.H.	11	1	67269	Side Plate L.H.
4	1	67053	Hanger Bracket Assembly L.H.	12	1	67268	Side Plate R.H.
5	1	67267	Rear Frame Bracket L.H.	13	1	67532	Frame Support R.H.
6	1	67266	Rear Frame Bracket R.H.	14	1	67533	Frame Support L.H.
7	1	27011	Front Frame Bracket L.H.	15	1	27340	Extension Strap
8	1	27010	Front Frame Bracket R.H.				

ASSEMBLY

TOOLS REQUIRED FOR ASSEMBLY

- (2) 7/16" Wrenches
- (2) 1/2" Wrenches
- (2) 9/16" Wrenches
- (2) 3/4" Wrenches
- (1) Knife

ADDITIONAL ITEMS REQUIRED

General Purpose Grease

- Remove all loose parts, parts bags and hardware bags from the snow thrower and this kit. Lay out and identify parts and hardware using the illustrations.

IMPORTANT: Not all items supplied with the snowthrower and this kit will be needed for your particular tractor. Unneeded items may be discarded after you have completed assembly and checked operation of unit. **DO NOT DISCARD** the two spare shear bolts and 5/16" nylock nuts supplied with the Snow Thrower.



CAUTION: Before starting to assemble the snow thrower, remove the spark plug wire(s), set the parking brake and remove the key from the tractor ignition.

TRACTOR PREPARATION

Before performing these instructions, refer to the Service and Adjustments section of your tractor owner's manual for specific safety instructions.

- Allow engine, muffler and exhaust deflector to cool before beginning.
- Remove any front or rear attachment which is mounted to your tractor.
- Remove the mower deck. Refer to your tractor owner's manual for removal instructions. Mark all loose parts and save for reassembly.
- Remove the tractor hood. Refer to your tractor owner's manual for removal instructions.

IMPORTANT: Right hand (R.H.) and left hand (L.H.) side of the tractor are determined from the operators position while seated on the tractor.

IF YOU HAVE A 247.28884 OR 247.28885 TRACTOR, GO TO ASSEMBLY INSTRUCTIONS ON PAGE 8.

STEP 1: (SEE FIGURE 1)

- Assemble a shoulder bolt and a 3/8" nylock nut to the holes shown on each side of the tractor frame.

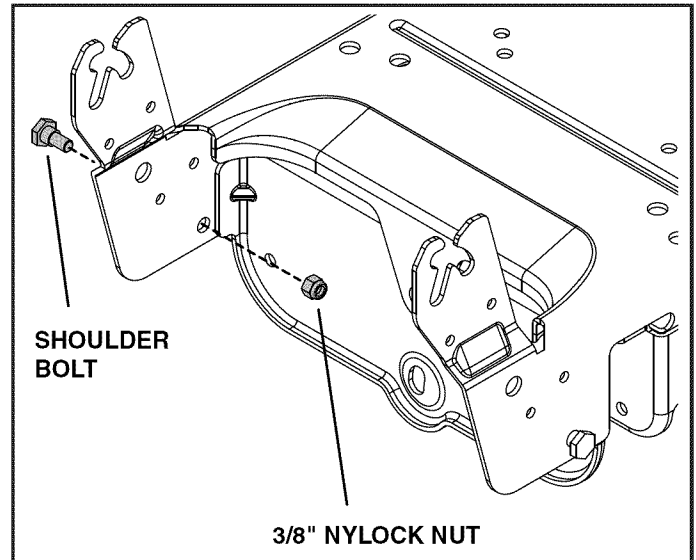


FIGURE 1

STEP 2: (SEE FIGURE 2)

- Place a front mount plate onto each shoulder bolt and install two quick release pins as shown.

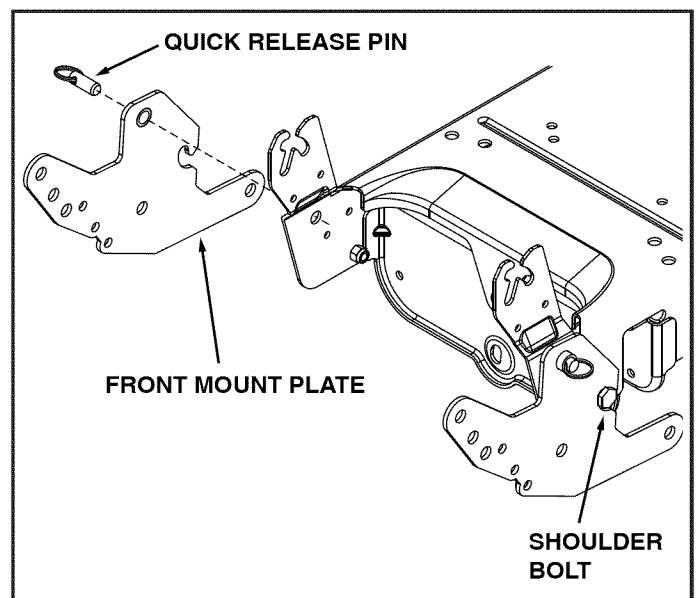


FIGURE 2

STEP 3: (SEE FIGURE 3)

- Attach the frame brace between the front mount plates using two 1/2" x 1-1/4" hex bolts, 1/2" x 1-1/2" washers and 1/2" nylock nuts.

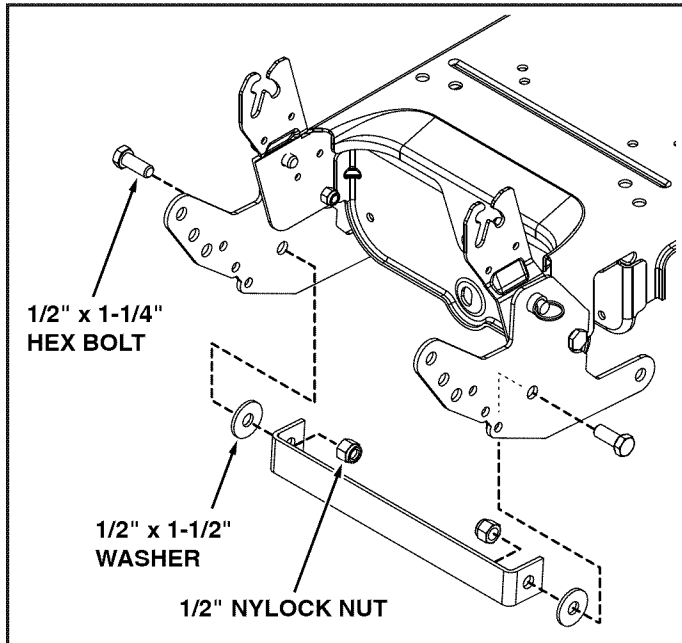


FIGURE 3

STEP 4: (SEE FIGURE 4)

- Measure from the center of the three holes indicated in figure 4 to select the hole that is approximately 10" above the ground in both front mount plates.
- Install a shoulder bolt and 3/8" nylock nut in the selected hole in each front mount plate.

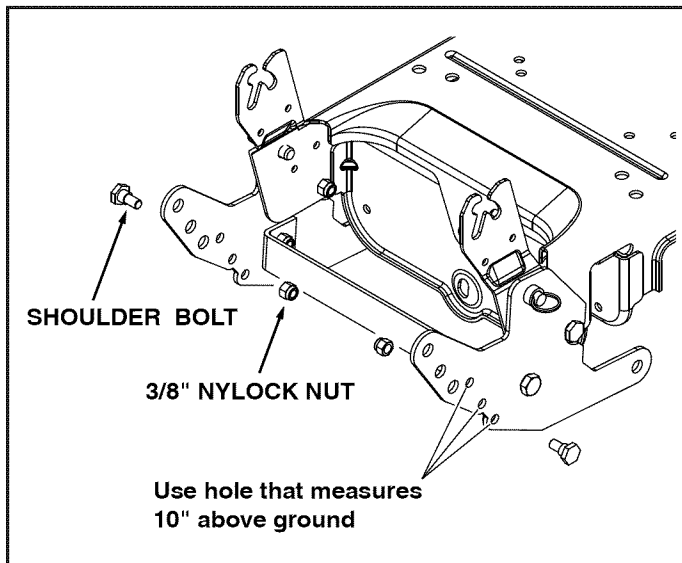


FIGURE 4

STEP 5: (SEE FIGURE 5)

- Remove the thread forming bolt from the hole in the footrest bracket on the left side of the tractor frame.
- Attach the L.H. hanger bracket to the empty hole using a 5/16" x 1" hex bolt, a 5/16" lock washer, and a 5/16" flat washer. Place the flat washer between the hanger bracket and the footrest bracket.
- Repeat on the right side of the tractor frame using the the R.H. hanger bracket.

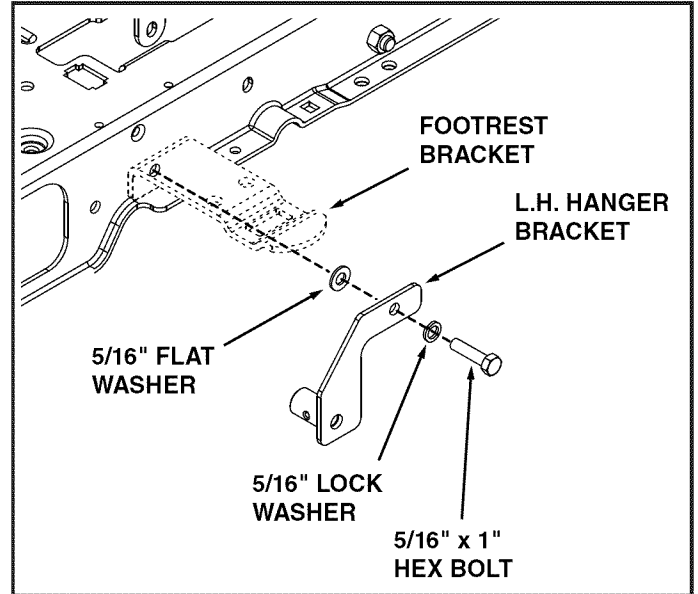


FIGURE 5

STEP 6: (SEE FIGURE 6)

- Turn the clutch idler assembly upside down.
- Attach the spring from the parts bag to the bottom of the upper idler arm. Hook the spring onto the bolt that extends through the nut on the bottom of the upper idler arm and then install a 3/8" hex lock nut onto the bolt. Leave enough space for the spring to pivot.

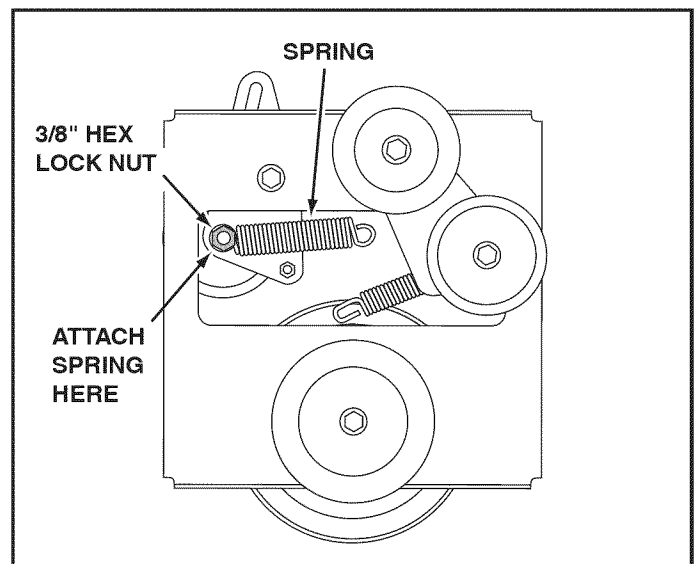


FIGURE 6

STEP 7: (SEE FIGURE 7)

- Insert tensioning chains through the holes shown and attach to the springs on the upper and lower idler arms.
- Attach a 3/32" hairpin cotter to the chain attached to the upper idler arm, placing it in the third link from the spring.

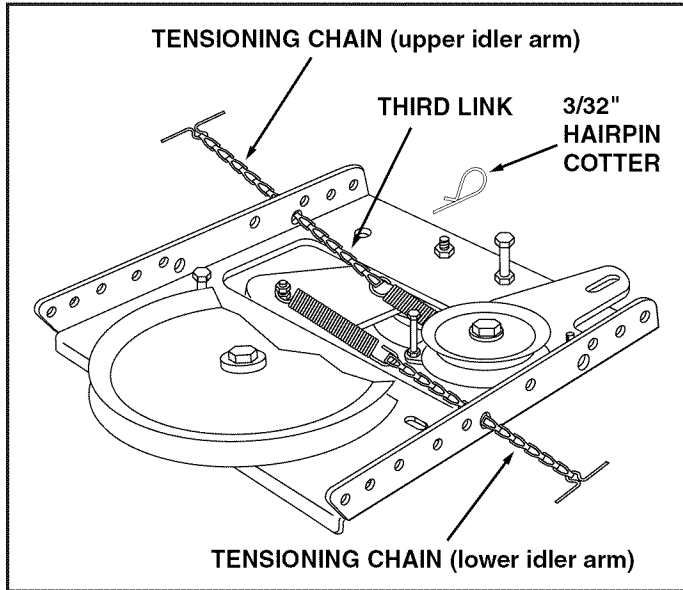


FIGURE 7

STEP 8: (SEE FIGURE 8)

- Refer back to step 4. If you used the top hole indicated in step 4, use hole A in this step. If you used one of the two lower holes, use hole B in this step.
- Attach the R.H. and L.H. rear frame brackets on the **inside** to either hole A or B using one 5/16" x 3/4" hex bolt and 5/16" nylock nut for each bracket. **Do not tighten yet.**
- Assemble the R.H. and L.H. front frame brackets on the **outside** using two 5/16" x 3/4" hex bolts and 5/16" nylock nuts for each bracket.

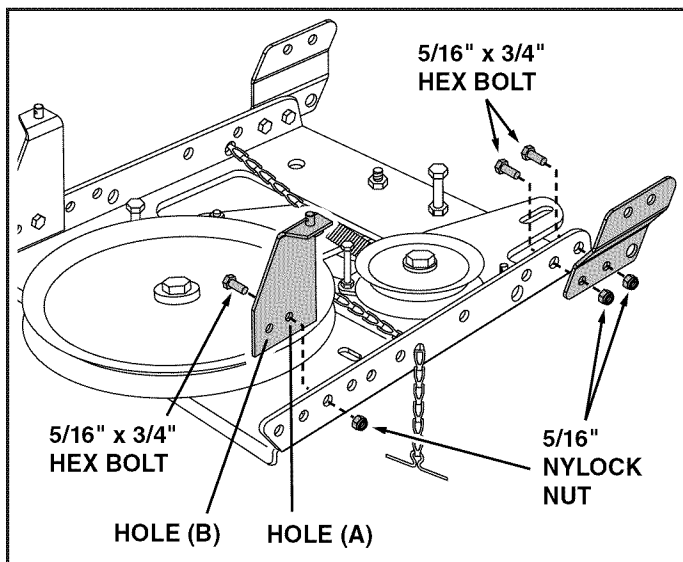


FIGURE 8

STEP 9: (SEE FIGURE 9)

- Assemble the two support tubes to the inside of each front frame bracket using a 1/2" x 1-1/2" hex bolt, a 1/2" spacer and a 1/2" nylock nut for each bracket. **Do not tighten yet.**

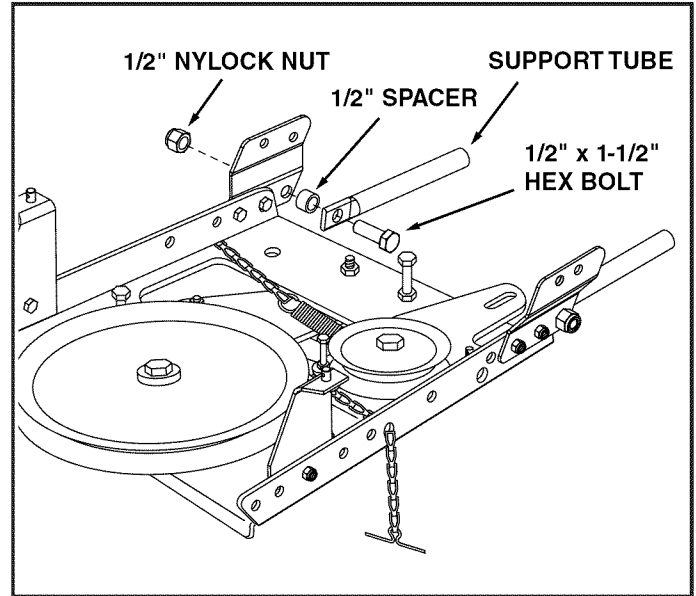


FIGURE 9

STEP 10: (SEE FIGURE 10)

- Three drive belts are supplied with the snow thrower. Select one of the two shorter belts. If you used hole A in step 8, use the 52" drive belt (#41353) belt. If you used hole B, use the 55" drive belt (#46989).
- Slightly loosen the hex bolt next to the flat idler pulley. Install the drive belt between the hex bolt and the flat idler pulley with the flat side of the belt against the pulley. **Retighten** the hex bolt.
- Loop the belt around the large v-pulley, placing it between the pulley and the hex bolt next to the pulley.

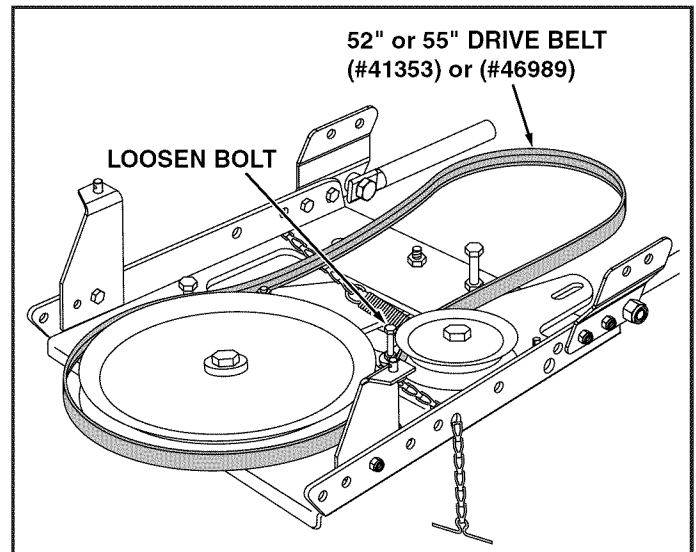


FIGURE 10

STEP 11 (SEE FIGURE 11)

- Assemble two 1/2" jam nuts all the way onto the threads of each support link.

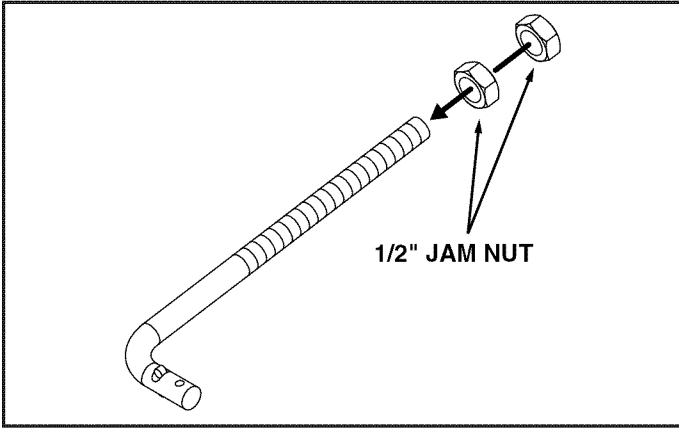


FIGURE 11

STEP 12: (SEE FIGURE 12)

- Attach the front frame brackets to the two hanger brackets on the tractor frame using two pivot lock pins and 1/8" hairpin cotters.
- Attach the rear frame brackets to the bottom of the tractor frame using two small 5/64" hairpin cotters.

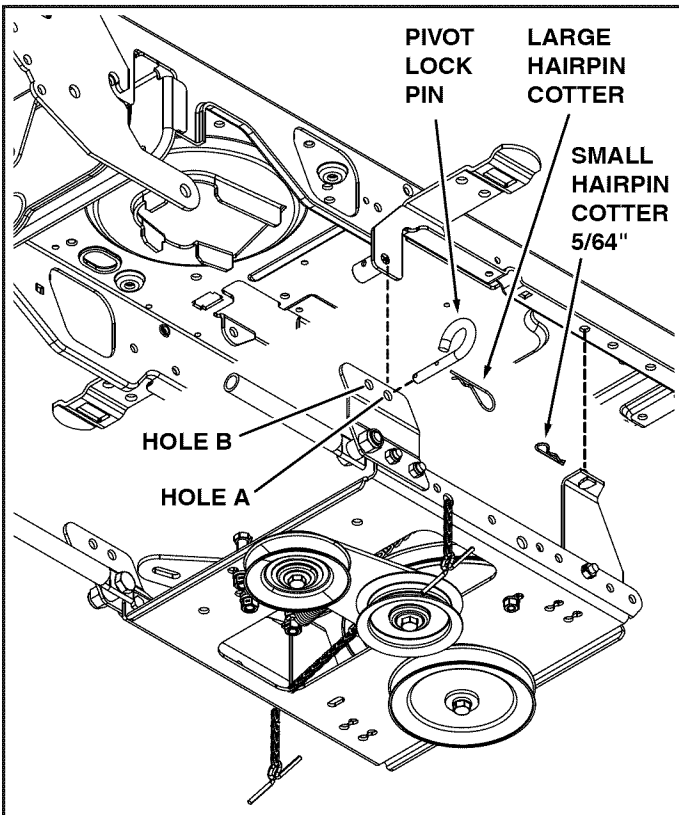


FIGURE 12

STEP 13 (SEE FIGURE 13)

- Assemble a 1/2" x 1" washer onto the bent end of a support link and then insert the threaded end into a support tube and the bent end into the rear hole in a front mounting plate. Assemble another 1/2" x 1" washer onto the end of the link and secure it with a small 5/64" hairpin cotter. Repeat for the other support link.
- **Tighten** the bolt and nut in each rear frame bracket.
- **Tighten** the bolt and nut in each support link.
- **Tighten** the jam nuts so that all looseness is eliminated from the support links and support tubes.

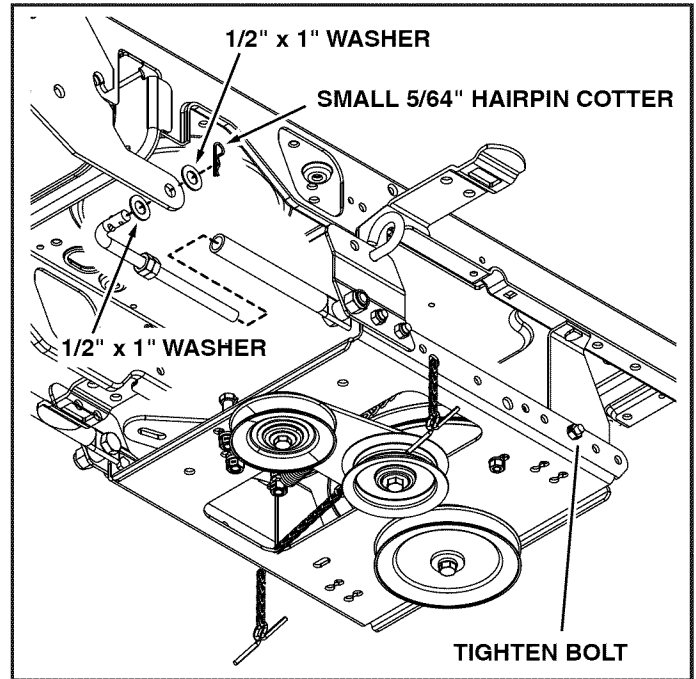


FIGURE 13

STEP 14: (SEE FIGURE 14)

- Remove the belt guard for the PTO pulley on the tractor. Refer to "Cutting Deck Removal" in the SERVICE AND MAINTENANCE section of your tractor Operator's Manual.
- Install the drive belt onto the tractor's PTO pulley. You may need to temporarily lift the belt from the large pulley on the clutch idler assembly.
- Reinstall the belt guard for the tractor's PTO pulley. Be sure the belt guard is installed in the notch on the side of the tractor's electric clutch.
- Place tension on the belt by pulling the left side tensioning chain out as far as the 3/32" hairpin cotter will allow. Secure the chain in this position by inserting a 1/8" hairpin cotter through the chain.



DO NOT start the engine until the PTO pulley belt guard has been reinstalled. The tractor's electric clutch could be damaged.

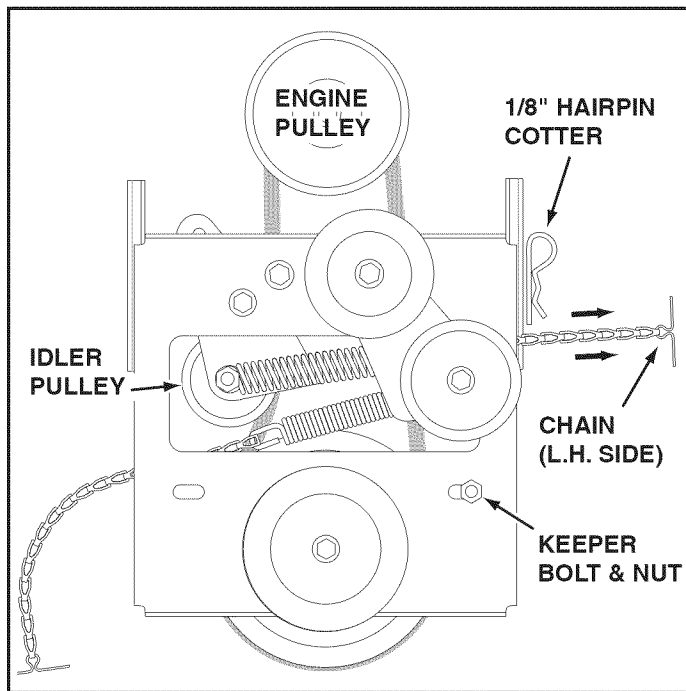


FIGURE 14

VIEWED FROM UNDERNEATH

GO TO ASSEMBLY OF SNOW THROWER SECTION ON PAGE 12.

INSTRUCTIONS BELOW ARE FOR 247.28884 AND 247.28885 TRACTORS. FOR ALL OTHER 247 TRACTORS, SEE PAGE 3.

STEP 1: (SEE FIGURE 15)

- Assemble a shoulder bolt and a 3/8" nylock nut to the holes shown on each side of the tractor frame.

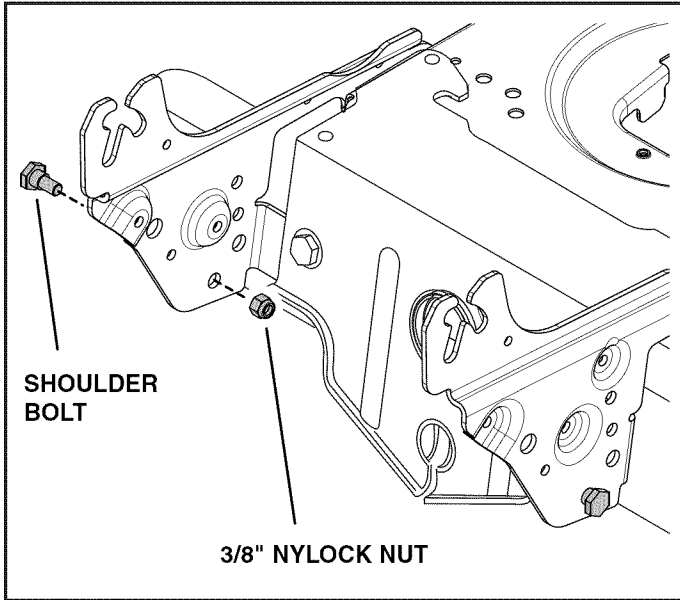


FIGURE 15

STEP 2: (SEE FIGURE 16)

- Place a front mount plate onto each shoulder bolt and install two quick release pins as shown.

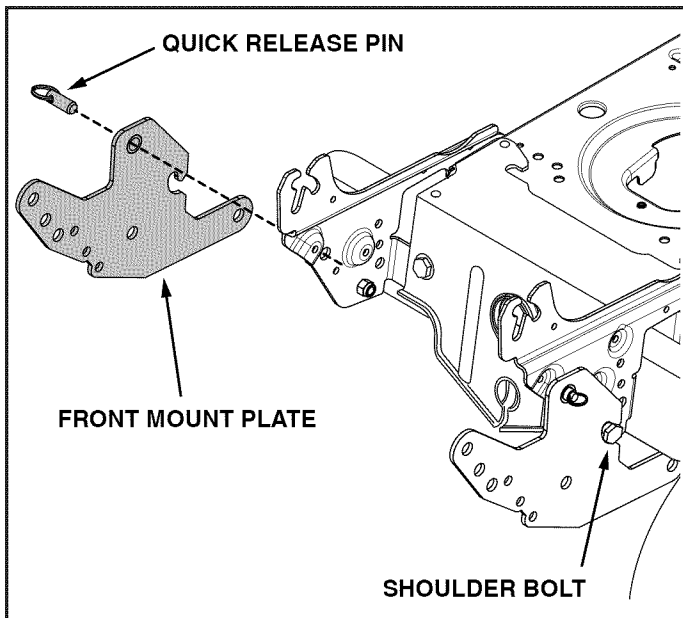


FIGURE 16

STEP 3: (SEE FIGURE 17)

- Attach the frame brace between the front mount plates using two 1/2" x 1-1/4" hex bolts, four 1/2" x 1-1/2" washers (from kit) and two 1/2" nylock nuts.

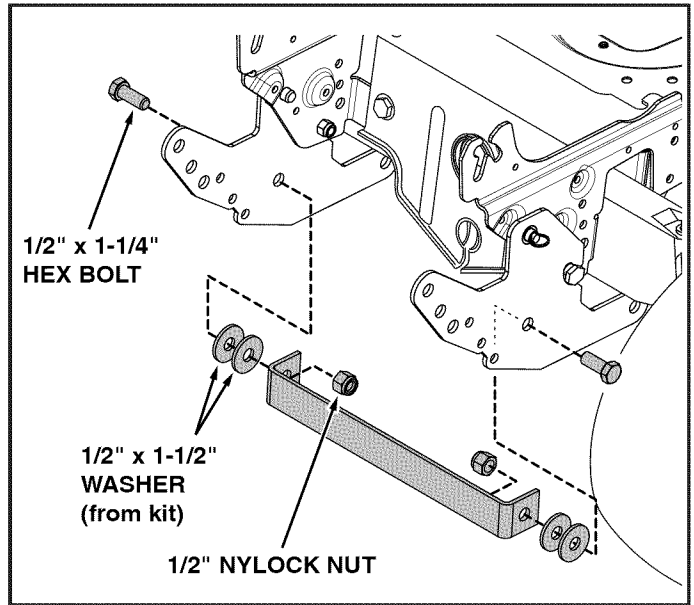


FIGURE 17

STEP 4: (SEE FIGURE 18)

- Install a shoulder bolt and 3/8" nylock nut in the bottom hole in each front mount plate.

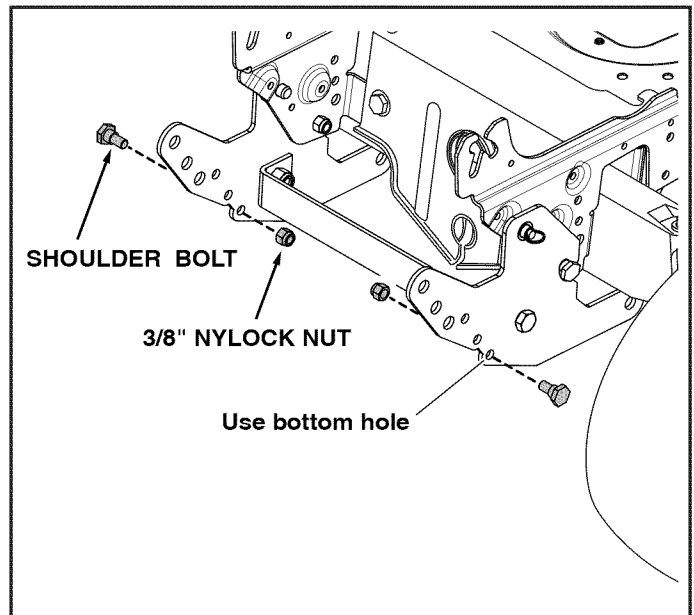


FIGURE 18

STEP 5: (SEE FIGURE 19)

- Attach the L.H. frame support to the tractor. Install a 3/8" x 1" hex bolt, a bushing and a nylock nut in the rear hole of the support. Install a 5/16" x 3/4" thread forming bolt and a bushing in the fourth hole of the support. Install three 5/16" x 1" hex bolt and 5/16" nylock nuts in the front three holes of the support. Tighten after all bolts are installed. Repeat this step using the R.H. frame support.

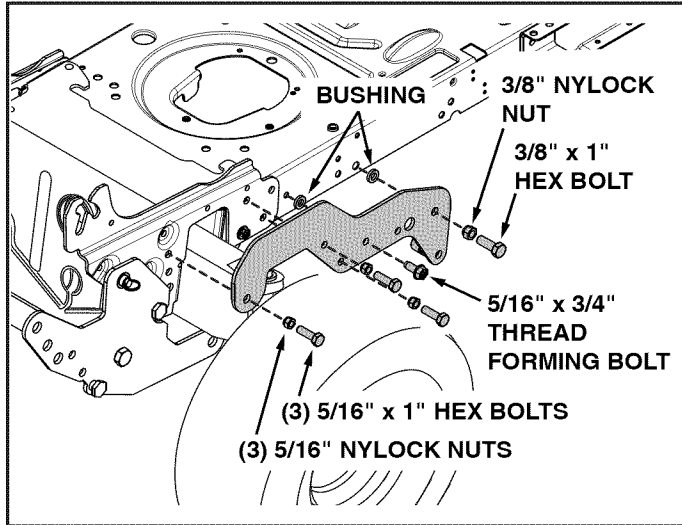


FIGURE 19

STEP 7: (SEE FIGURE 21)

- Attach the R.H. and L.H. rear frame brackets to the **inside** of the clutch/idler assembly. Use one 5/16" x 3/4" hex bolt and 5/16" nylock nut in the front hole of each bracket and the third hole in the clutch/idler assembly. **Do not tighten yet.**
- Assemble the R.H. and L.H. front frame brackets to the **inside** of the clutch/idler assembly using two 5/16" x 3/4" hex bolts and 5/16" nylock nuts for each bracket.

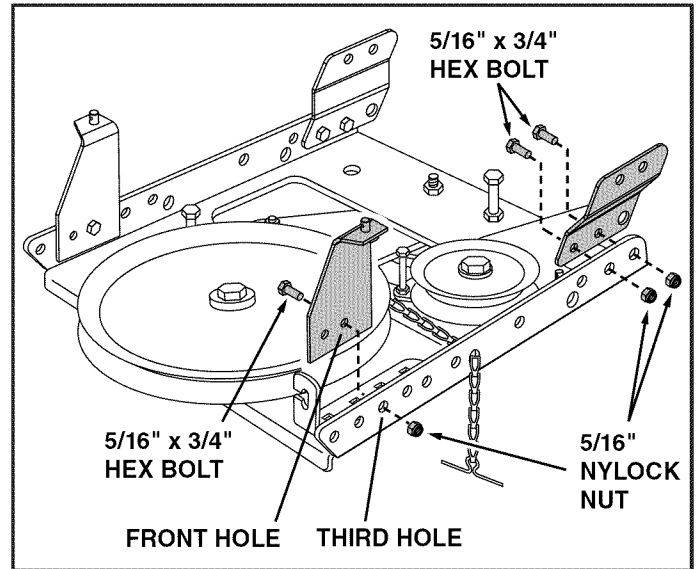


FIGURE 21

STEP 6: (SEE FIGURE 20)

- Assemble the cable bracket to the outside half of the double holes in the bottom of the clutch/idler assembly using two 5/16" x 3/4" carriage bolts and 5/16" nylock nuts.

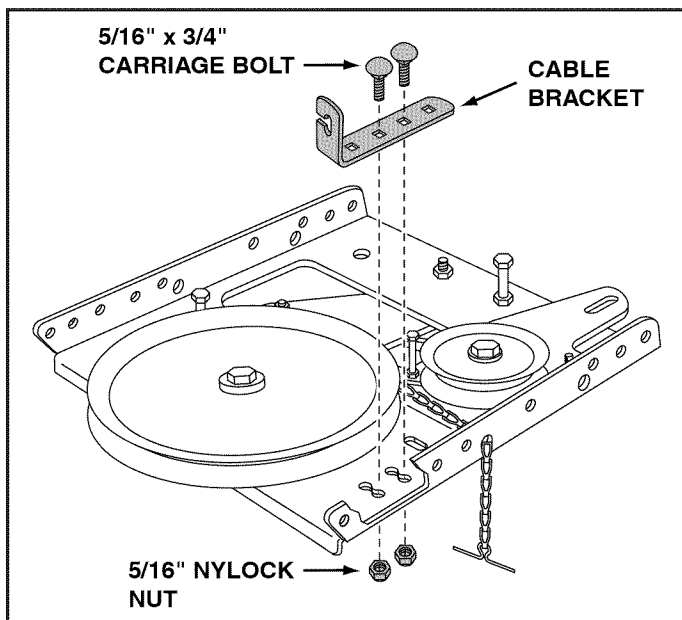


FIGURE 20

STEP 8: (SEE FIGURE 22)

- Assemble the two support tubes to the inside of each front frame bracket using a 1/2" x 1-1/2" hex bolt, three 1/2" x 1" washers (from kit) and a 1/2" nylock nut for each tube. **Do not tighten yet.**

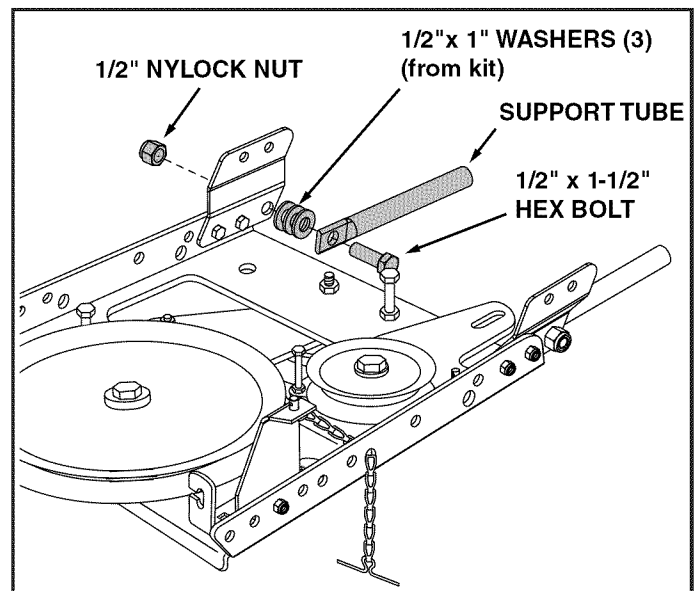


FIGURE 22

STEP 9: (SEE FIGURE 23)

- Select the 52" (shortest) drive belt #41353. Slightly loosen the hex bolt next to the flat idler pulley. Install the drive belt between the hex bolt and the flat idler pulley with the flat side of the belt against the pulley. **Retighten** the hex bolt.
- Loop the belt around the large v-pulley, placing it to the inside of the hex bolt that is beside the pulley.

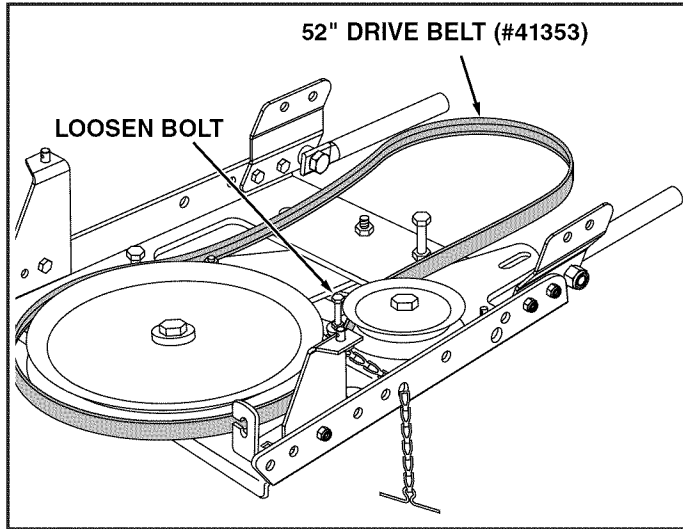


FIGURE 23

STEP 10: (SEE FIGURE 24)

- Place the extension strap (from kit), a 1/4" spacer and a 1/4" washer onto the welded pin on the idler arm. Install a 5/64" hair pin cotter in the welded pin.

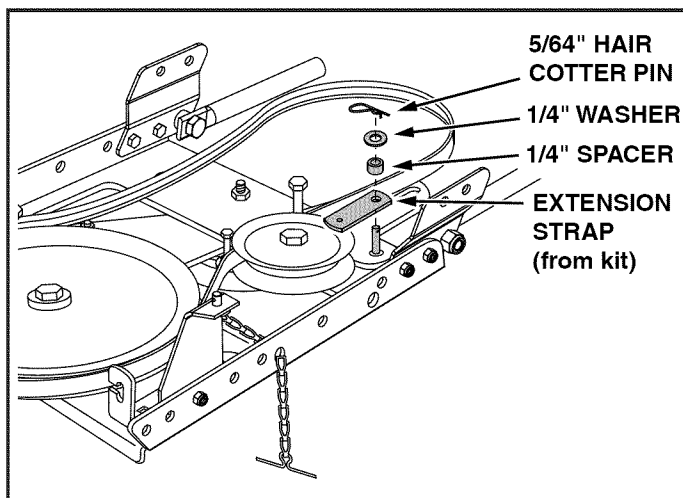


FIGURE 24

STEP 11: (SEE FIGURE 25)

- Disengage the tractor's attachment clutch lever.
- Place the clutch/idler assembly onto the floor at the right side of the tractor.
- Hook the end of the tractor's clutch cable spring to the extension strap on the clutch/idler assembly.
- Attach the tractor's mower clutch cable to the cable bracket on the clutch/idler assembly. Secure the cable housing guide (groove down) to the cable bracket using the original collar and a 5/64" hair cotter pin.

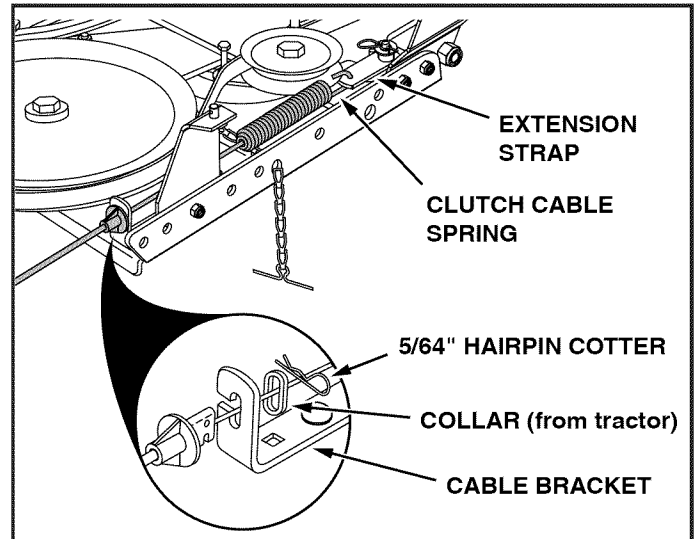


FIGURE 25

STEP 12: (SEE FIGURE 26)

- Attach the front of the clutch/idler assembly to the two frame support brackets you assembled in step 5, using two pivot lock pins and 1/8" hairpin cotters.
- Attach the rear of the clutch/idler assembly to the bottom of the tractor frame using two small 5/64" hairpin cotters.

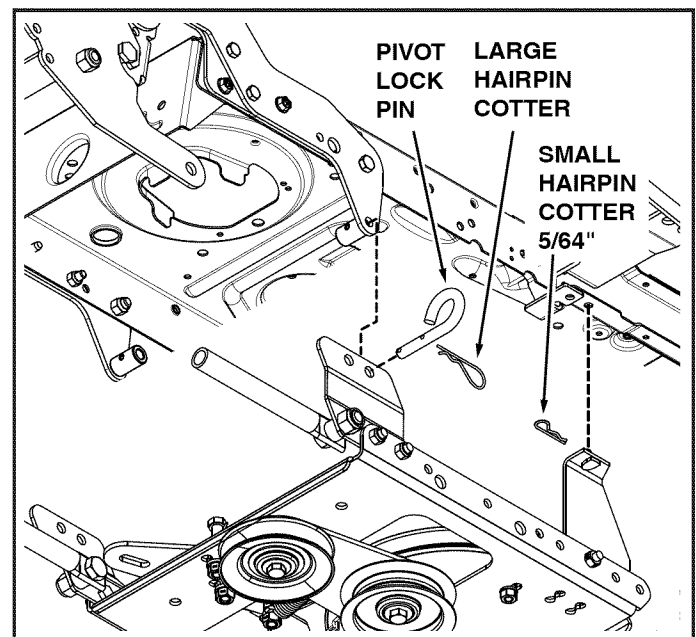


FIGURE 26

STEP 13 (SEE FIGURE 27)

- Assemble two 1/2" jam nuts all the way onto the threads of each support link.

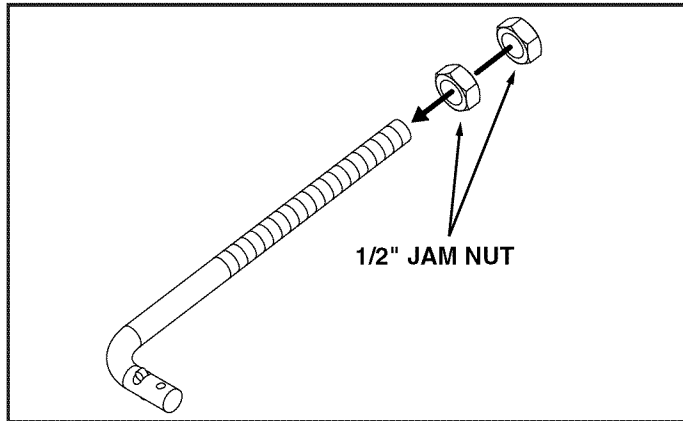


FIGURE 27

STEP 14 (SEE FIGURE 28)

- Insert the threaded end of a support link into the support tube on the left side of the tractor. Assemble a 1/2" x 1" washer onto the bent end of the link and insert it into the hole in the front mount plate. Assemble another 1/2" x 1" washer onto the end of the link and secure it with a small 5/64" hairpin cotter. Repeat on the right hand side.

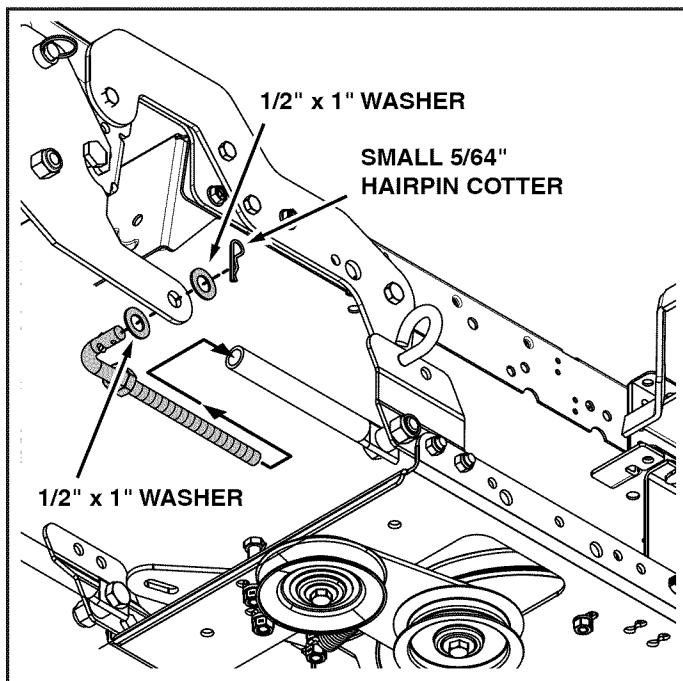


FIGURE 28 VIEWED FROM UNDER LEFT SIDE

STEP 15: (SEE FIGURE 29)

- 1. **Tighten** the bolt and nut in each rear frame bracket.
- 2. **Tighten** the bolt and nut in each support tube.
- 3. **Tighten** the jam nuts on each support link against the end of the support tube until slack is gone.

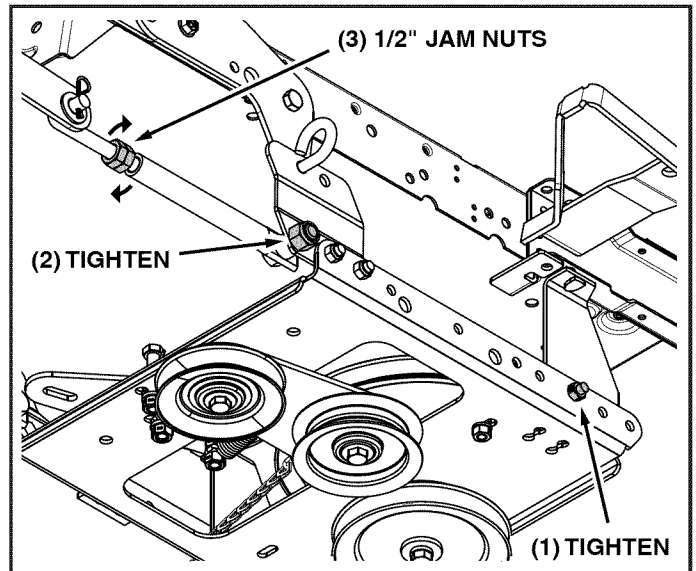


FIGURE 29 VIEWED FROM UNDER LEFT SIDE

STEP 16: (SEE FIGURE 30)

- Move the tractor's attachment clutch lever to the disengaged position.
- Remove the belt guard for the PTO pulley on the tractor's engine. Refer to "Cutting Deck Removal" in the SERVICE AND MAINTENANCE section of your tractor Operator's Manual.
- Install the drive belt onto the engine's PTO pulley. You may first need to temporarily lift the belt from the large pulley on the clutch idler assembly.
- Reinstall the belt guard.

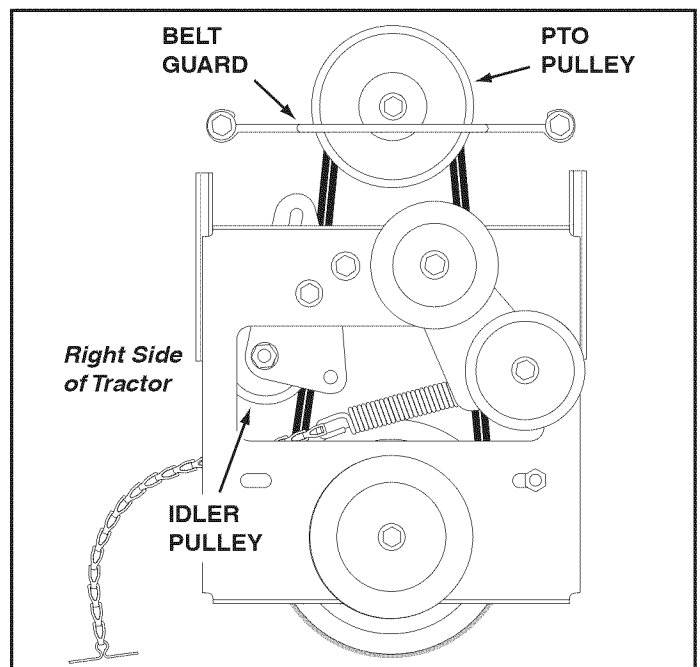


FIGURE 30 VIEWED FROM UNDERNEATH

ASSEMBLY OF THE SNOW THROWER

STEP 1: (SEE FIGURE 31)

- Place the lift handle into the lift bracket on the right side of the snow thrower. Fasten the handle to the bracket using two 5/16" x 1-3/4" hex bolts and 5/16" Nylock nuts.

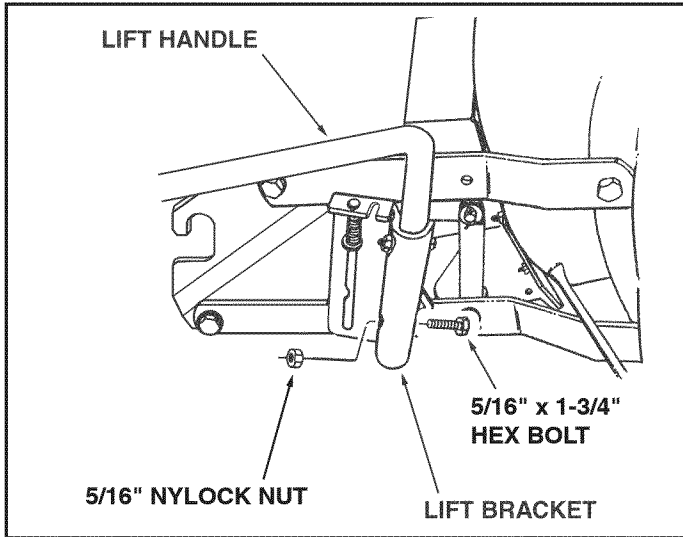


FIGURE 31 RIGHT SIDE VIEW

NOTE: Be sure the lift release cable's plastic covering stays inserted into the trigger assembly for the next step.

STEP 2: (SEE FIGURE 32)

- Push the lift handle down into the locked position. Insert the end of the cable wire into the hole in the lift rod. Place the threaded fitting into the slot in the lift bracket, with one hex nut above and one hex nut and the lock washer below the slot. Tighten the nuts, adjusting them to eliminate slack in the cable wire. Refer also to the Service and Adjustments section on page 28 in this manual.

HINT: For easier assembly of the lift release cable, tilt the snow thrower forward onto the spiral auger.

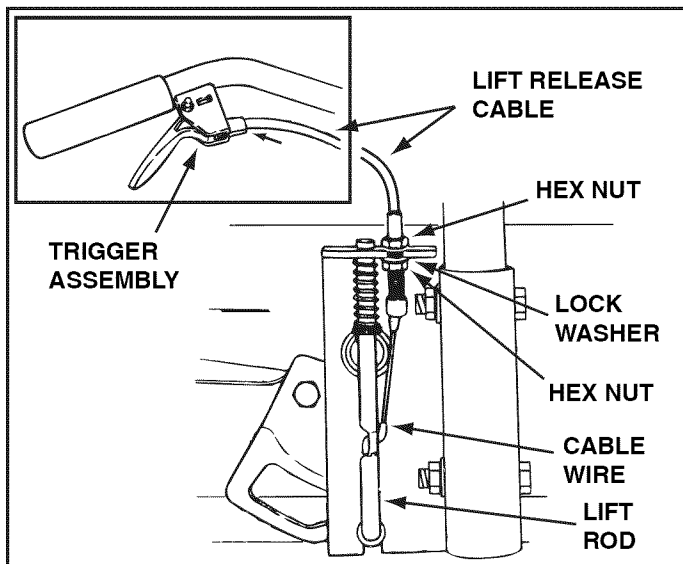


FIGURE 32 RIGHT SIDE VIEW

STEP 3: (SEE FIGURE 33)

- Tilt the snow thrower back down to the ground.
- Remove the nylon tie which fastens the auger drive belt to the discharge housing, leaving the belt assembled around the pulleys.
- Remove the nylon tie which fastens the chute crank rod to the crank rod support tube.
- Assemble the crank rod support tube to the bracket on the left side of the discharge housing using two 5/16" x 1-1/4" carriage bolts, and 5/16" Nylock nuts.

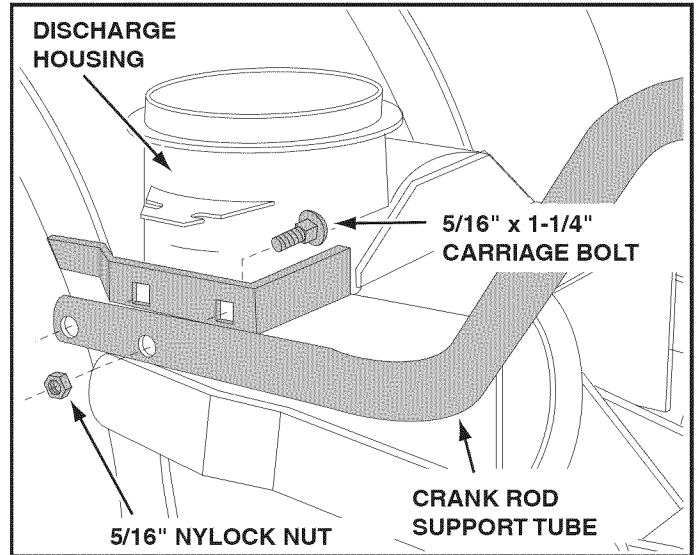


FIGURE 33 LEFT SIDE VIEW

STEP 4: (SEE FIGURE 34)

- Attach the chute tilt control assembly to the top side of the crank support tube using two 5/16" x 1-3/4" carriage bolts, bowed washers and 5/16" Nylock nuts.

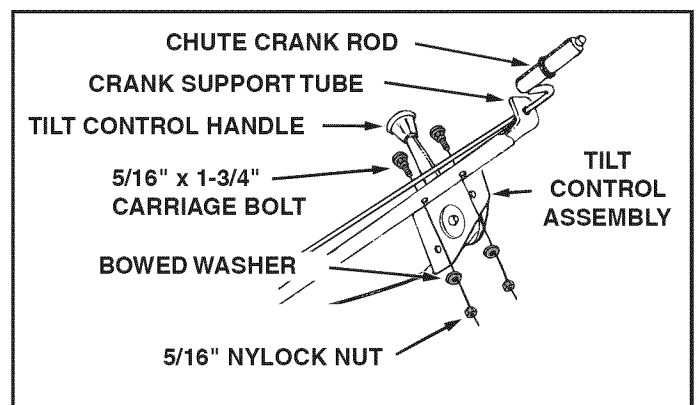


FIGURE 34 LEFT SIDE VIEW

STEP 5: (SEE FIGURE 35)

- Attach the chute crank rod assembly brackets to the plastic bracket on the left side of the discharge housing. Align the chute crank bracket beneath the rod support bracket and assemble both to the plastic bracket using two 5/16" x 1" carriage bolts, 5/16" washers and 5/16" Nylock nuts. **Do not tighten yet.**

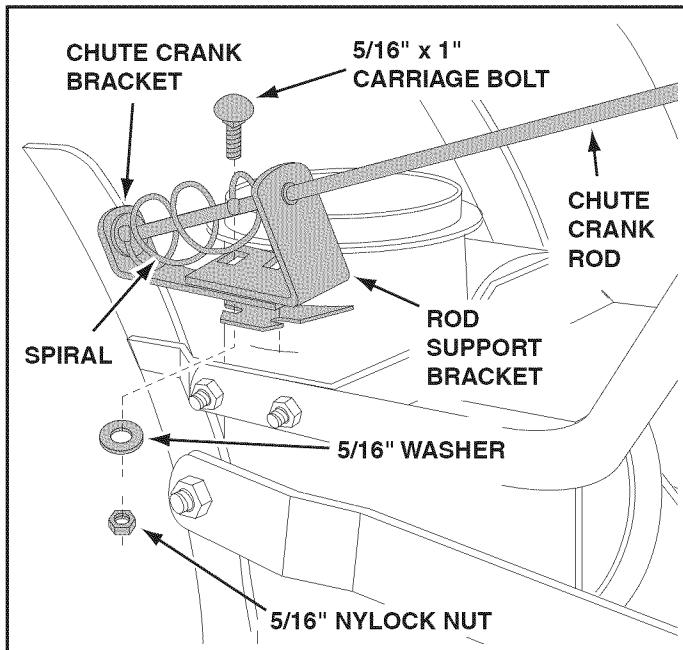


FIGURE 35

LEFT SIDE VIEW

STEP 6: (SEE FIGURE 36)

- Coat the top of the ring around the discharge opening with general purpose grease.
- Place the discharge chute (facing forward) onto the ring. Place the anti-rotation bracket on top of the chute flange, aligning it with the holes on the right hand side of the flange. Attach the three chute spacers and chute keepers to the bottom of the flange using six 1/4" x 1" hex bolts, 1/4" flat washers and 1/4" flanged lock nuts. **Tighten** the nuts.
- Position the crank rod spiral (see figure 51) so that it does not rub against the bottoms of the notches in the chute flange. **Tighten** the nuts.
- Turn the crank rod to check if the chute rotates freely. If not, loosen by 1/4 turn each of the six hex bolts and nuts attaching the chute spacers and chute keepers to the flange.
- Secure the control cables to the crank rod support tube using a nylon tie.

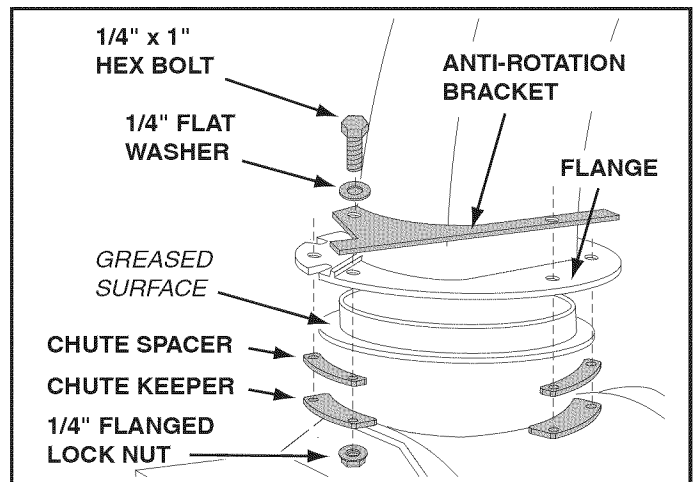


FIGURE 36

RIGHT SIDE VIEW

STEP 7: (SEE FIGURE 37)

Skip this step if you have a lawn tractor.

This step is for garden tractors only.

- If you have a (GT) Garden Tractor, remove the stop bolts from each side of the snow thrower frame.

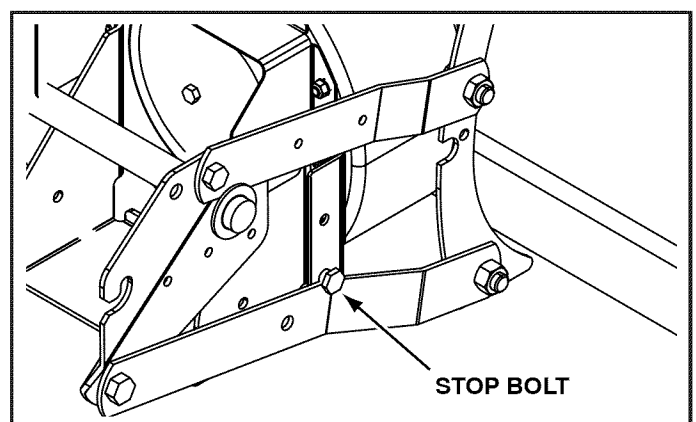


FIGURE 37

RIGHT SIDE VIEW

ATTACHING SNOW THROWER TO TRACTOR

STEP 1: (SEE FIGURE 22)

- Place the snow thrower on a flat, level surface.
- Extend the auger belt out behind the snow thrower, leaving the belt assembled to the snow thrower pulleys.
- Roll the tractor up behind the snow thrower, centering it between the snow thrower's mounting plates.
- Raise the rear of the snow thrower by lifting up on the lift handle until the notches in the mounting plates align with the shoulder bolts in the tractor's side plates. Guide the bolts into the notches.
- Delay installing the clevis pins until you have assembled the belt as instructed in steps 23 and 24.

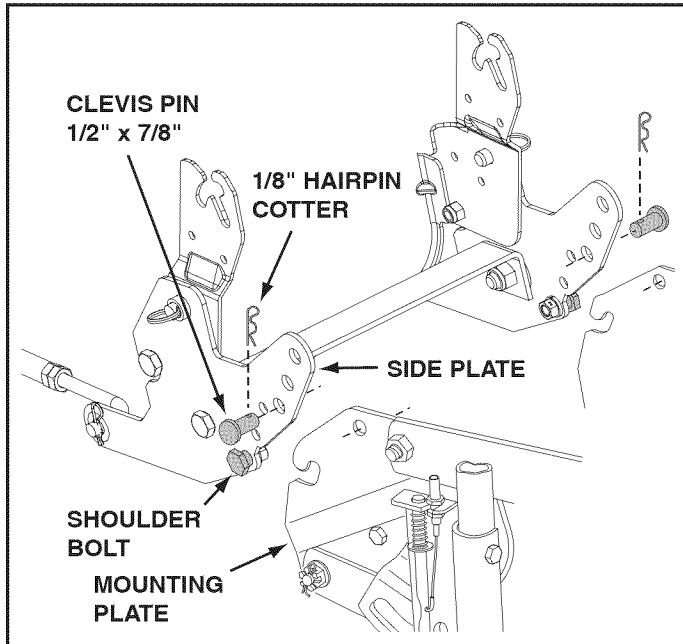


FIGURE 38 RIGHT SIDE VIEW

STEP 2: (SEE FIGURE 23)

- The auger belt comes pre-assembled to the pulleys on the snow thrower housing. Make sure the belt passes over the top of the auger pulley and then twists 1/4 turn to pass underneath each side idler pulley. The "V" side of the belt must mate with the grooves of the pulleys.

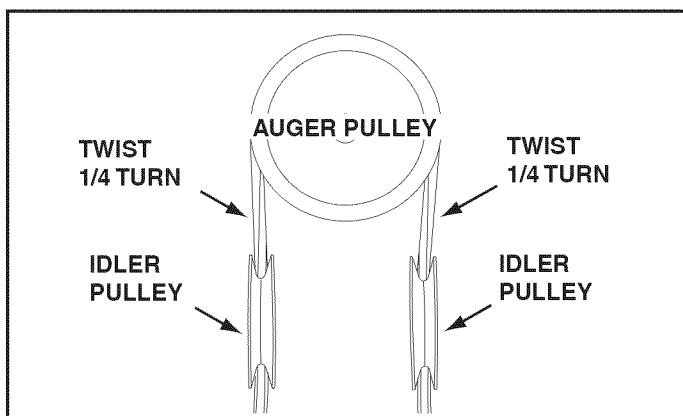


FIGURE 39

INSTALLING THE AUGER BELT

STEP 1: (SEE FIGURE 24)

- Push the lift handle down to increase slack in the belt (attachment pin must first be removed).
- Swing the idler arm over to the side.
- Place the auger belt around the rear pulley and between the two idler arm pulleys. The "V" side of the belt must be seated in the grooves of the V-pulleys.
- Install the two 1/2" x 7/8" clevis pins and 1/8" hairpin cotters.

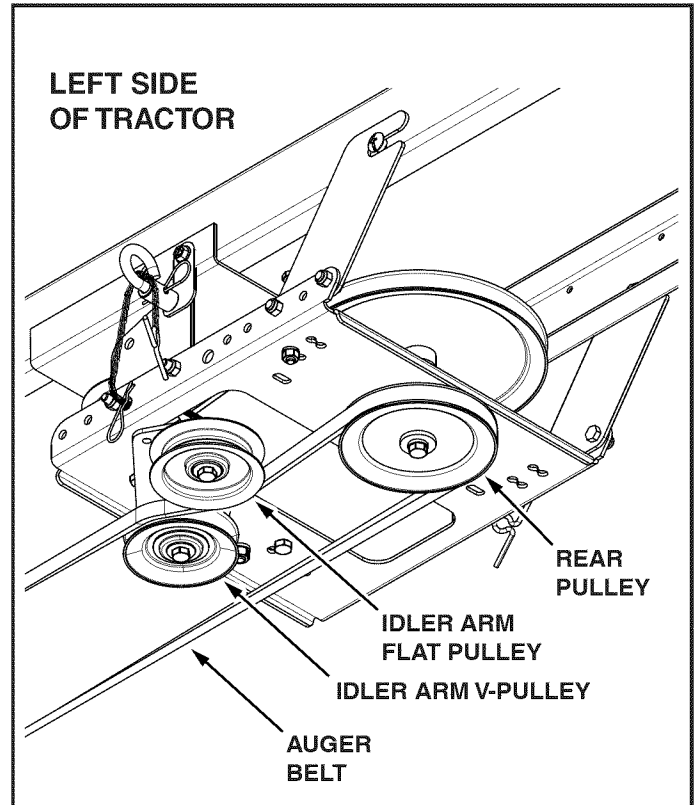
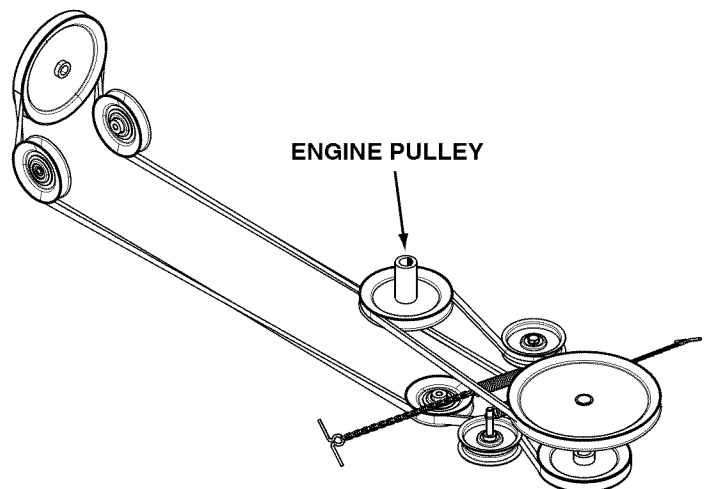


FIGURE 40 VIEWED FROM UNDERNEATH

BELT ROUTING DIAGRAM



INSTALLING THE ATTACHMENT PIN

STEP 1: (REFER BACK TO FIGURE 22 ON PAGE 14)

- Lift the front of the snow blower to align the holes in the mounting plates and the side plates. From the left side of the tractor insert the attachment pin through the holes. Secure it with by reinstalling the 1/8" hairpin cotter.

SETTING THE AUGER BELT TENSION

STEP 1: (SEE FIGURE 25)

- Pull the tensioning chain until the end of the spring is pulled through the hole in the side of the Clutch/Idler assembly. Install a 1/8" hairpin cotter through the end of the spring, securing it on the outside of the Clutch/Idler assembly.

IMPORTANT: For correct belt tension, the 1/8" hairpin cotter should attach to the end of the spring, not to the chain.

NOTE; To prevent the chain from dragging on the ground, loop the end of the chain through the pivot lock pin.

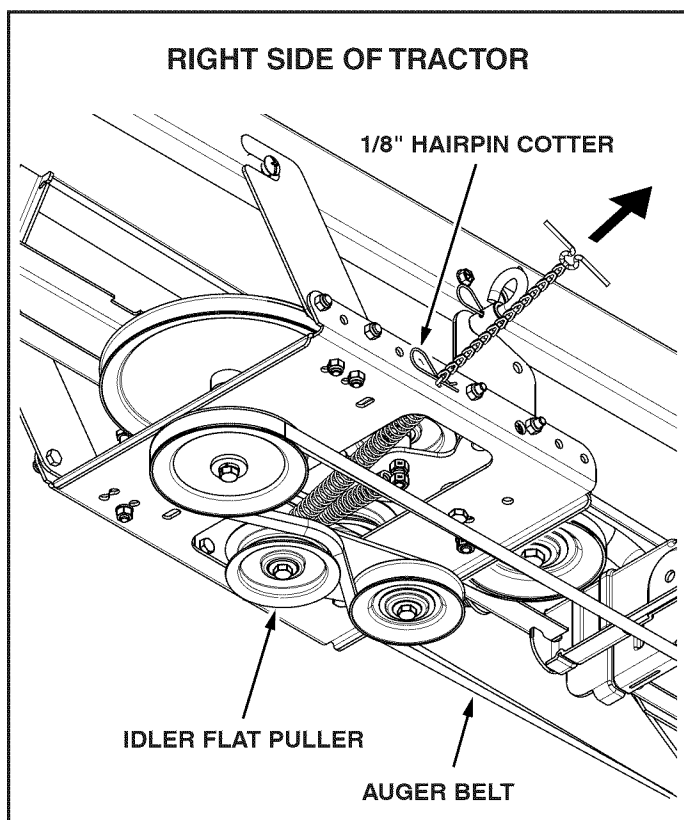


FIGURE 41

VIEWED FROM UNDERNEATH

ATTACH REFLECTORS TO REAR FENDER

STEP 1: (SEE FIGURE 26)

- If your tractor is not equipped with rear reflectors, assemble the supplied rear reflectors to the rear fender. Place the reflectors as close to the bottom of the fender and as far apart as the shape of the fender will allow.

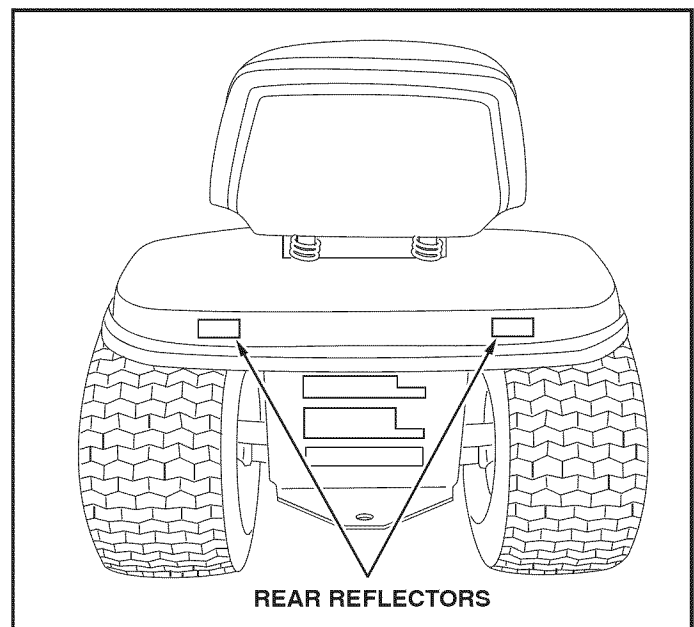


FIGURE 42

CHECKLIST

Before you operate your snow thrower, please review the following checklist to help ensure that you will obtain the best performance from your snow thrower.

- Make sure all assembly instructions have been completed with all bolts and nuts properly tightened.
- Make sure the correct drive belt was installed.
- Make sure the drive belt and auger belt are routed properly around pulleys and inside all belt keepers.
- Check discharge chute for proper rotation.
- Check operation of tilt control for upper chute.
- Verify that the lift handle will lock into and release from the raised transport position. (Refer to the Service and Adjustments section.)
- Check skid shoe adjustment. (Refer to the Service and Adjustments section.)

The following additional items are available from Sears to help enhance the performance of your snow thrower. See Accessories and Attachments in your Owner's Manual.

- Tire chains which can be installed to improve traction.
- Rear wheel weights which can be installed in addition to the rear weight tray to improve traction.
- Snow Cab which can be installed to help protect against wind and blowing snow.

CRAFTSMAN[®]

Product questions or problems?

1-888-331-4569

Customer Care Hot Line

**Get answers to questions, troubleshoot problems,
order parts, or schedule repair service.**

Para respuestas a preguntas o problemas, y ordenar
piezas o pedir servicio para la reparación de su equipo.

To help us help you, register your product at www.craftsman.com/registration

Para poderte ayudar mejor, registra tu producto en www.craftsman.com/registration

Join the Craftsman Club today!

CRAFTSMAN[®] CLUB

www.craftsman.com/signup

**Receive exclusive member benefits including special pricing and offers,
project sharing, expert advice, and SHOP YOUR WAY REWARDS!**

Como miembro exclusivo, recibe diversos beneficios como ofertas, precios especiales, proyectos nuevos, consejos de expertos y nuestro programa de puntos SHOP YOUR WAY REWARDS!