

OPERATOR'S MANUAL

48" SNOW BLADE

Model Number
45-04292-669

Husqvarna
546 07 98-01

IMPORTANT: READ SAFETY RULES AND INSTRUCTIONS CAREFULLY

SAFETY RULES

Remember, any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times when using power equipment.



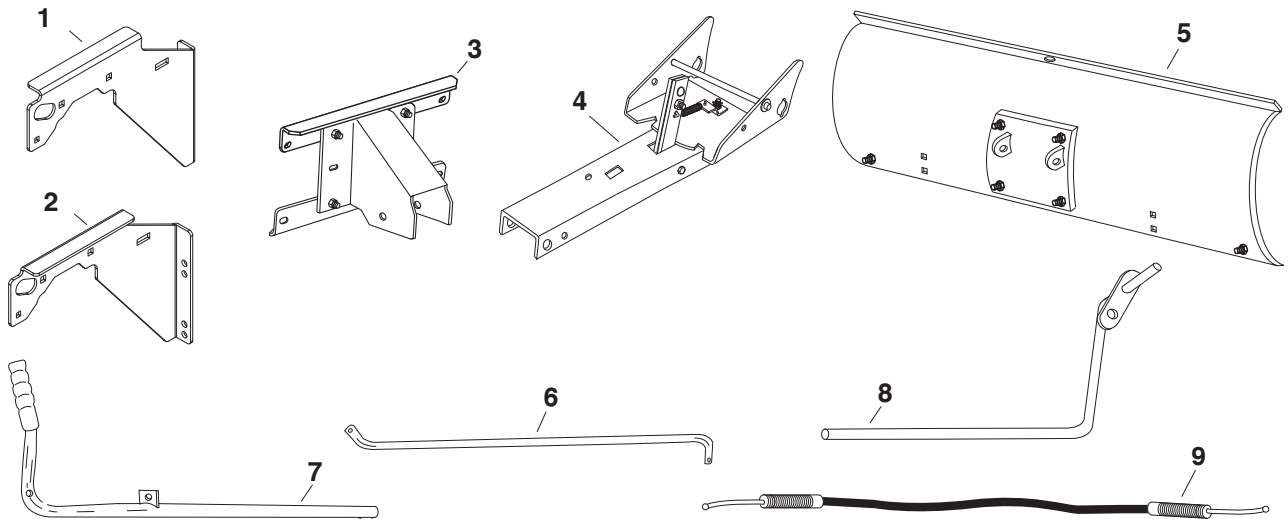
LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS—ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.



CAUTION: VEHICLE BRAKING AND STABILITY MAY BE AFFECTED WITH THE ADDITION OF AN ACCESSORY OR AN ATTACHMENT. BE AWARE OF CHANGING CONDITIONS ON SLOPES.

1. Read the tractor and snow blade owner's manuals and know how to operate your tractor before using tractor with snow blade attachment.
2. Never operate tractor and snow blade without wearing proper clothing suited to weather conditions and operation of controls.
3. Never allow children to operate tractor and snow blade, and do not allow adults to operate without proper instructions.
4. Always begin with transmission in first (low) gear and gradually increase speed as required.

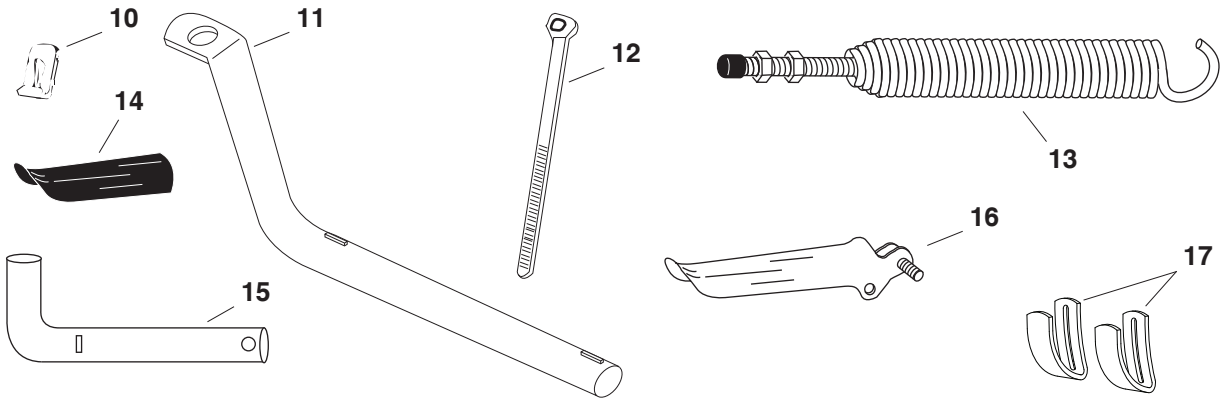
CARTON CONTENTS (Loose Parts in Carton)



REF	QTY	DESCRIPTION
1	1	Hanger Bracket, L.H.
2	1	Hanger Bracket, R.H.
3	1	Pivot Support Assembly
4	1	Channel Assembly
5	1	Blade Assembly

REF	QTY	DESCRIPTION
6	1	Blade Pivot Rod
7	1	Lift Handle Tube W/Grip
8	1	Lift Handle Rod
9	1	Cable

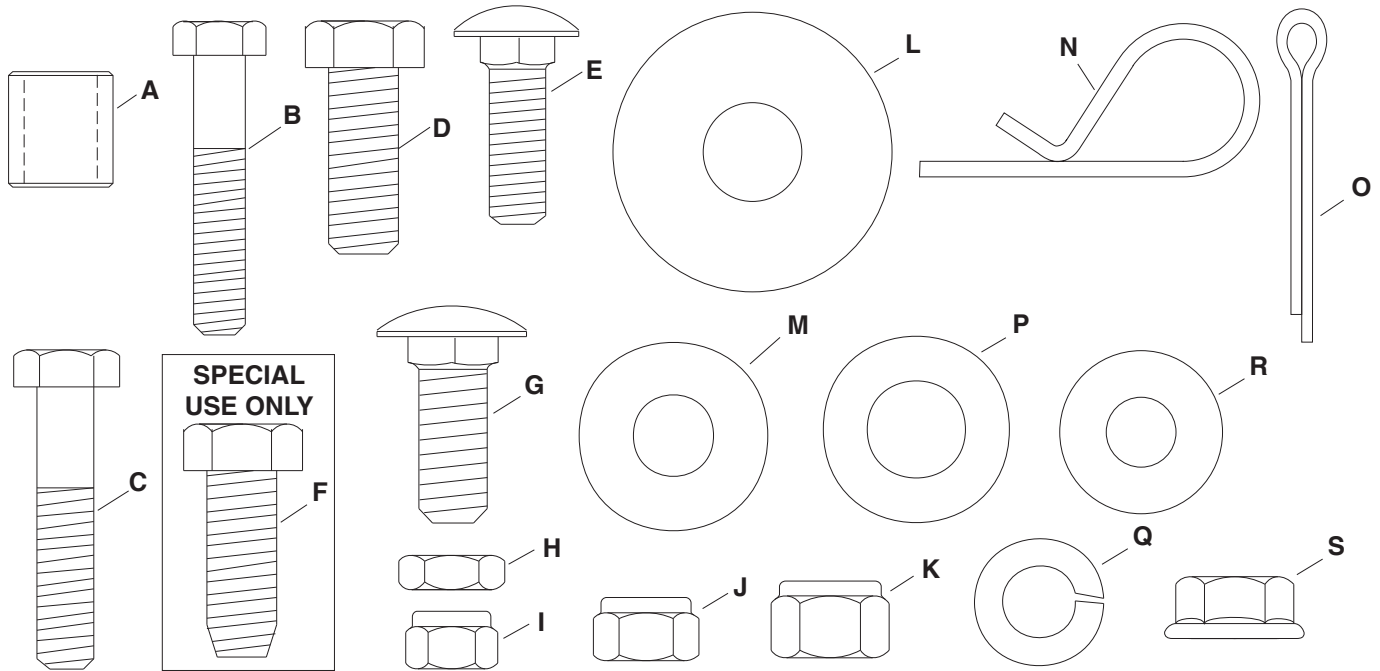
PARTS IN PACKAGES NOT SHOWN FULL SIZE



REF	QTY	DESCRIPTION
10	2	Cable End Fitting
11	1	Blade Pivot Shaft
12	2	Nylon Tie
13	1	Blade Adjust Spring

REF	QTY	DESCRIPTION
14	1	Plastic Grip
15	1	Channel Pivot Pin
16	1	Grip Assembly
17	2	Skid Shoe

(HARDWARE SHOWN FULL SIZE)



REF.	QTY.	DESCRIPTION
A	1	Spacer, 5/8" Long
B	1	Hex Bolt, 1/4-20 x 1-1/2"
C	1	Hex Bolt, 5/16-18 x 1-1/2"
D	10	Hex Bolt, 3/8-16 x 1"
E	6	Bolt, Carriage 5/16-18 x 1"
F	6	Hex Bolt, 3/8" x 1" Thd. Forming
G	6	Carriage Bolt, 3/8-16 x 1"
H	2	Hex Jam Nut, 5/16" Fine Thd.
I	2	1/4" Nylock Hex Nut
J	7	5/16" Nylock Hex Nut

REF.	QTY.	DESCRIPTION
K	6	3/8" Nylock Hex Nut
L	6	1/2" Washer, (Large)
M	6	3/8" Washer
N	4	Hairpin Cotter
O	2	Cotter Pin 1/8" x 1-1/4"
P	1	1/2" Washer
Q	6	3/8" Lock Washer
R	4	5/16" Washer
S	4	3/8" Flanged Lock Nut

SECTION 1: ASSEMBLY INSTRUCTIONS

TOOLS REQUIRED FOR ASSEMBLY

- (1) Pliers
- (1) Hammer
- (1) Adjustable Wrench (or socket set)
- (1) 9/16" Open End or Box End Wrench
- (1) 7/16" Open End or Box End Wrench
- (1) 1/2" Open End or Box End Wrench

1. Remove all parts and hardware packages from the carton. Lay out parts and hardware and identify using the illustrations on pages 2 and 3.

NOTE: Not all of the supplied parts and hardware will be needed for one particular tractor. Unneeded items may be discarded after assembly has been completed.

NOTE: Right hand (RH) and left hand (LH) are determined from the operator's position while seated on the tractor.



CAUTION: Do not begin assembling until the tractor engine, muffler and exhaust deflector have been allowed to cool off.

INSTRUCTIONS FOR TRACTORS WITH A SINGLE SUSPENSION BRACKET

3. Remove the tractor hood. Refer to your tractor owners manual for instructions on how to properly remove the hood.
4. Remove the browning shield from the front of the tractor as shown. Hold onto the shield as you remove the second bolt to prevent it from falling. See figure 2.

NOTE: Reinstall the browning shield before using your tractor. Please see supplement page 14

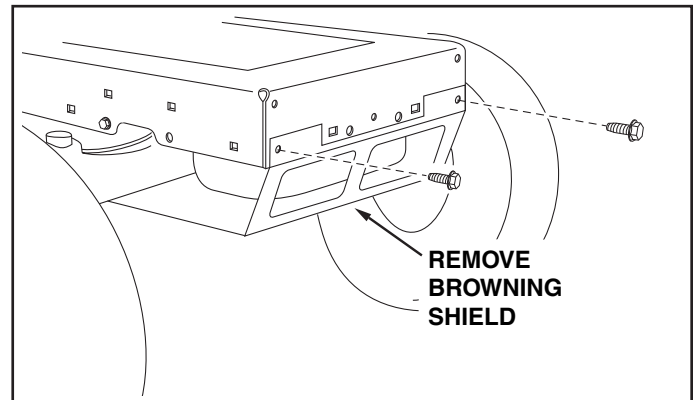


FIGURE 2

INSTRUCTIONS FOR ALL TRACTORS

2. Look under the front of your tractor. If there is a single mower deck suspension bracket located underneath the middle of the front axle as shown in figure 1, continue on to step 3. If your tractor does not have a mower deck suspension bracket underneath the middle of the front axle, skip to step 7 on page 5 for LT tractors with dual suspension brackets or step 16 on page 6 for GT tractors with dual suspension brackets.

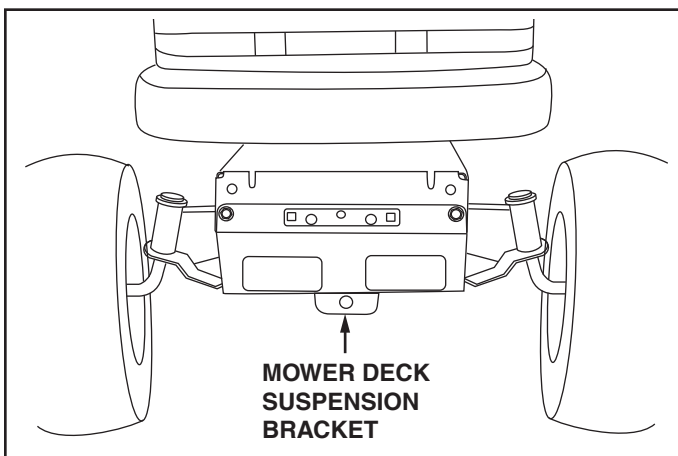


FIGURE 1

5. Fasten the R.H. hanger bracket (bend facing out) to the holes indicated in the tractor frame.

If there is an engine mounting plate like the one drawn with dotted lines in figure 3a, use large 1/2" flat washers (L) as shims between the hanger bracket and the tractor frame in the locations shown in figure 3a. In the front three holes use three 3/8" x 1" carriage bolts (G), two large 1/2" washers (L) if needed, and three 3/8" nylock nuts (K). In the rear hole use a 5/16" x 1" carriage bolt (E), a large 1/2" washer (L) if needed, and a 5/16" nylock nut (J).

If the tractor is a Husqvarna TS200 Series with dual pedal there will be a bracket like the one drawn with dotted lines in figure 3b. In the front three holes use three 3/8" x 1" carriage bolts (G), three large 1/2" washers (L), and three 3/8" nylock nuts (K). In the rear hole use a 5/16" x 1" carriage bolt (E), and a 5/16" nylock nut (J).

Tighten all bolts. Repeat for the L.H. hanger bracket. See figure 3.

6. Reinstall the browning shield then skip to step 21 on page 7.

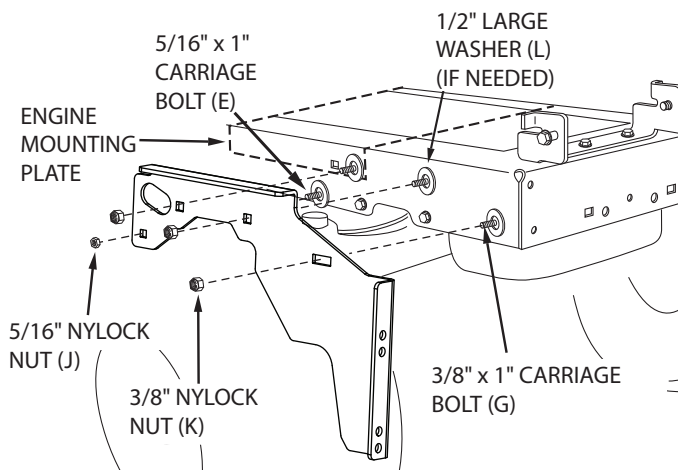


FIGURE 3a

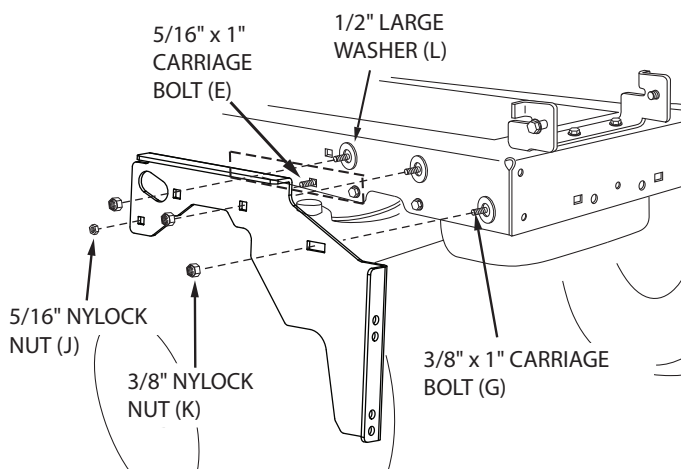


FIGURE 3b

INSTRUCTIONS FOR (LT) LAWN TRACTORS WITH DUAL SUSPENSION BRACKETS

If you have a (GT) Garden Tractor with dual suspension brackets, skip to step 16 on page 6.

7. Compare your tractor to the tractors shown in figure 4. If your tractor resembles "TYPE A" go to step 8. If your tractor resembles "TYPE B" go to step 12.

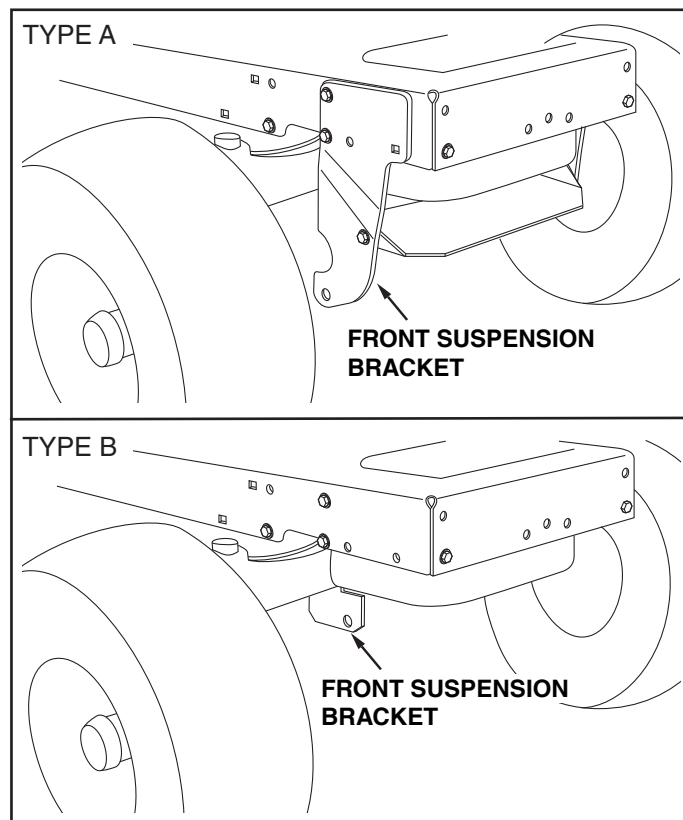


FIGURE 4

TYPE A TRACTORS

8. Remove any bolts found in the holes indicated in figure 5.

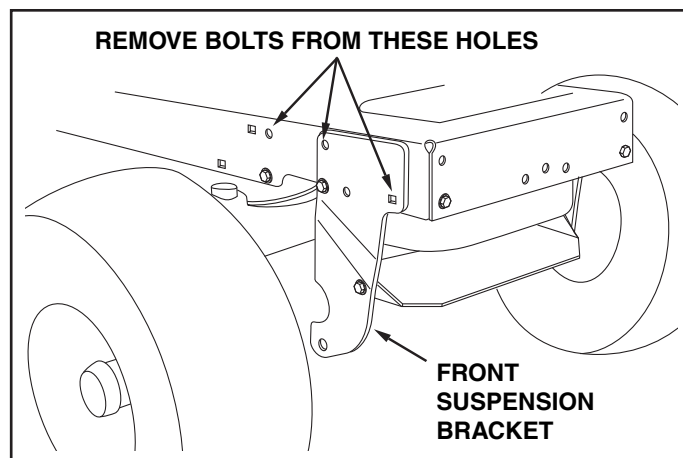


FIGURE 5

9. Attach the R.H. hanger bracket to the two front empty holes on the right side of the tractor frame using two new 3/8" x 1" hex bolts (D), 3/8" lock washers (Q), and 3/8" flat washers (M) as shown. For the rear hole, use a 3/8" x 1" hex bolt (D), 3/8" lock washer (Q) and 3/8" flat washer (M) with a large 1/2" washer (L) placed between the hanger bracket and the tractor frame. Tighten. See figure 6.
10. Repeat step 9 for the left side.
11. Skip to step 21 on page 7.

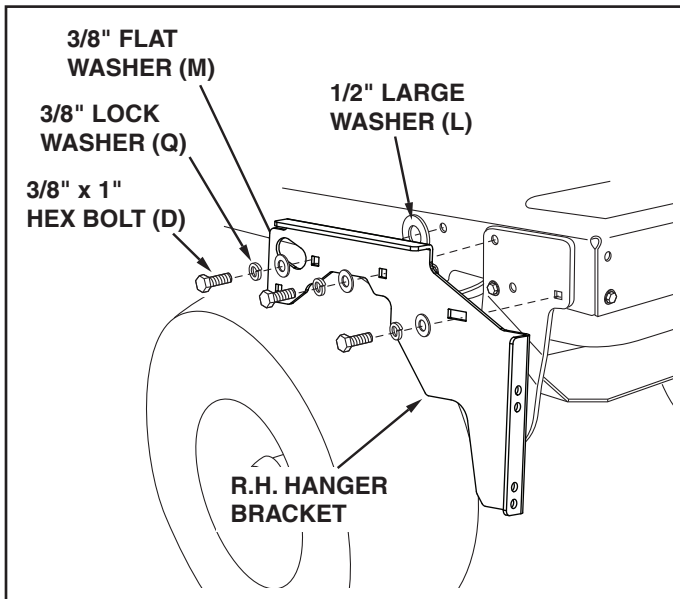


FIGURE 6

13. Attach the R.H. hanger bracket to the three holes shown on the side of the tractor frame using three 3/8" x 1" hex bolts (D), 3/8" lock washers (Q) and 3/8" flat washers (M). Use 3/8" nylock nuts (K) on inside of frame if bolts insert freely into holes. Tighten. See figure 8.
14. Repeat step 13 for other side.
15. Skip to step 21 on page 7.

NOTE: Use special 3/8" x 1" thread forming bolts (F) in any holes that are too small for regular bolts.

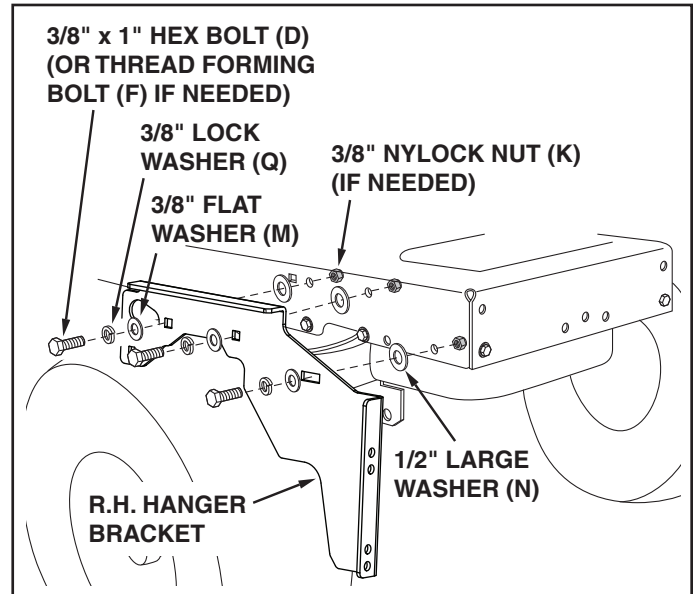


FIGURE 8

TYPE B TRACTORS

12. Remove any bolts found in the holes indicated in figure 7.

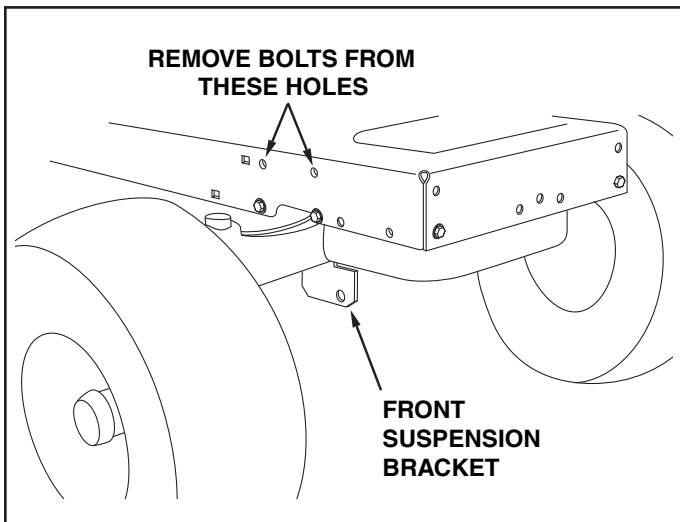


FIGURE 7

INSTRUCTIONS FOR (GT) GARDEN TRACTORS WITH DUAL SUSPENSION BRACKETS

16. Remove the lower front hex bolt from the R.H. front suspension bracket. See figure 9.
17. Remove the hex bolt from the hole at the rear of R.H. front suspension bracket. See figure 9.
18. Repeat for the L.H. front suspension bracket.

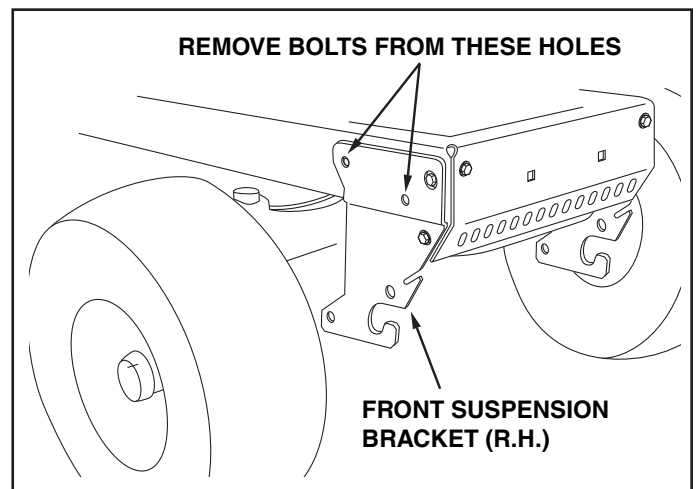


FIGURE 9

19. Attach the R.H. hanger bracket to the front two holes in the right side of the tractor frame using a new 3/8" x 1" hex bolt (D), 3/8" lock washer (Q), and 3/8" flat washer (M) as shown in figure 10. Do not tighten yet.
20. Repeat step 19 for the L.H. hanger bracket.

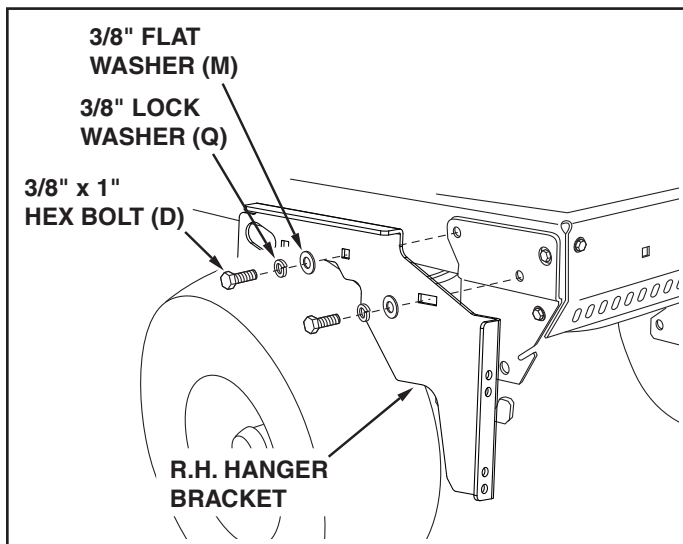


FIGURE 10

INSTRUCTIONS FOR ALL TRACTORS

21. Attach the pivot support assembly to the hanger brackets, using the upper holes for LT Tractors, or the lower holes for GT Tractors. Use four 3/8" x 1" hex bolts (D) and 3/8" flanged lock nuts (S). Do not tighten yet. See figure 11.

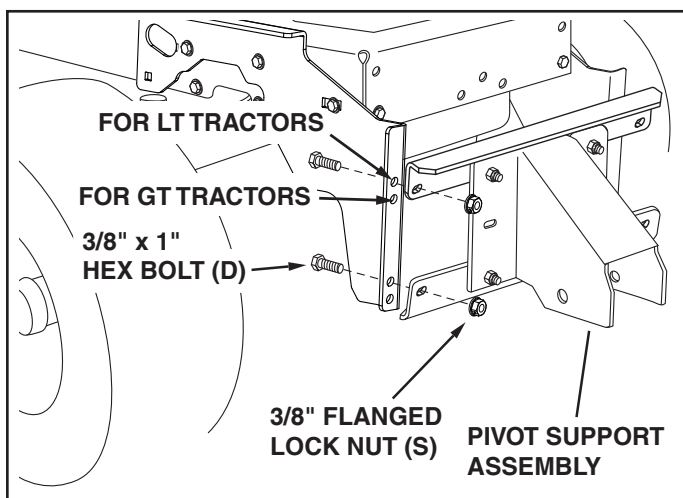


FIGURE 11

22. Assemble one 5/16" jam nut (H) approximately 3/4" onto threaded end of control cable that has no rubber cap or preassembled nuts. Assemble threaded cable end through round hole in cable mount bracket and secure with another 5/16" jam nut (H). Tighten. See figure 12.

NOTE: Some adjustment of jam nuts may be required after blade assembly is completed.

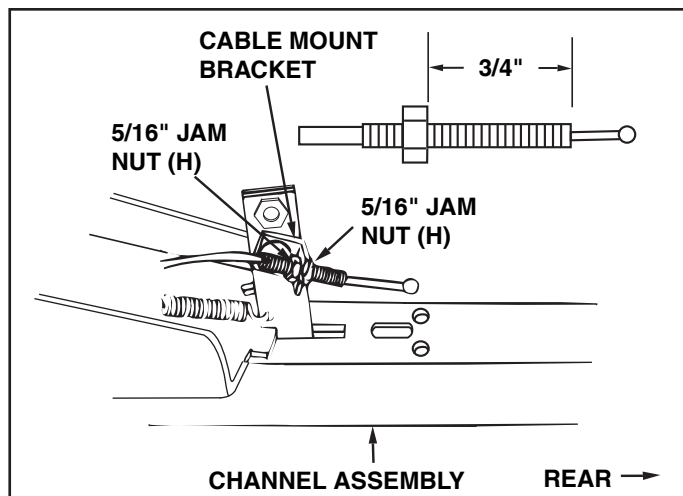


FIGURE 12 (Left Hand Side View)

23. Assemble ball end of control cable up through hole in cable end fitting and pull until ball slips inside curled edge of fitting. If ball won't slip under edge of curl, it will need to be inserted through open end of curl. See figure 13.
24. Assemble 1/4" x 1-1/2" (B) hex bolt down through the cable end fitting, the 5/8" long spacer (A) and the left hand hole in the channel assembly. Secure with a 1/4" nylock nut (I). Tighten. See figure 13.
25. Align the cable mount bracket shown in figure 12 with the cable end fitting and tighten the carriage bolt and nylock nut.

NOTE: Make sure the cable mount bracket is aligned with the cable end fitting to prevent binding of cable. The other end of the control cable will be attached in a later step.

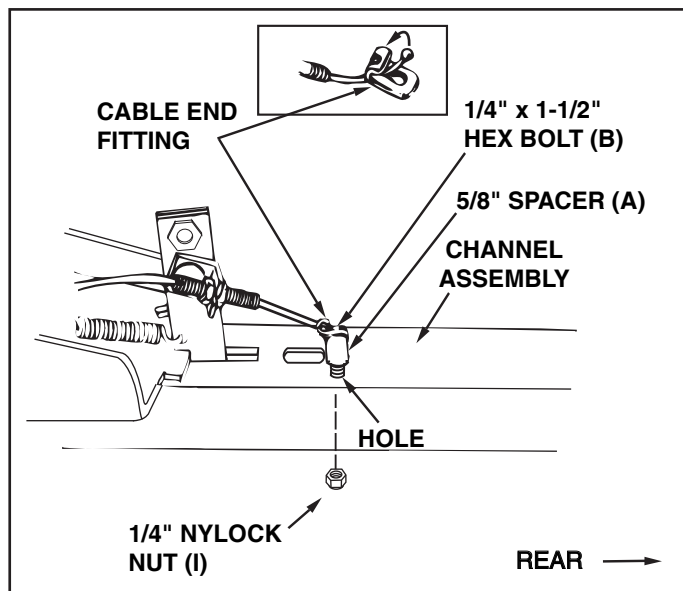


FIGURE 13 (Left Hand Side View)

26. To attach the blade to the channel assembly, align the notched holes in the pivot plate with the notched holes in the blade. Insert a 1/8" x 1-1/4" cotter pin (O) down through the hole at the bend in the blade pivot shaft. Spread the ends of the pin. From the left side insert the blade pivot shaft, bend facing top of blade, through the notched holes. Secure the shaft with another 1/8" x 1-1/4" cotter pin (O) through the end hole in the shaft. Spread the ends of the pin. See figure 14.
27. Remove the plastic cap and one 3/8" hex nut from the bolt in the blade adjust spring. Adjust the remaining 3/8" hex nut down approximately 1" onto the bolt threads. Hook the spring over the spring mount rod. Place the bolt up through the hole in the top edge of the blade and reassemble the other 3/8" hex nut to the bolt and tighten down against the top edge of the blade. Replace the plastic cap on the end of the bolt. See figure 14.

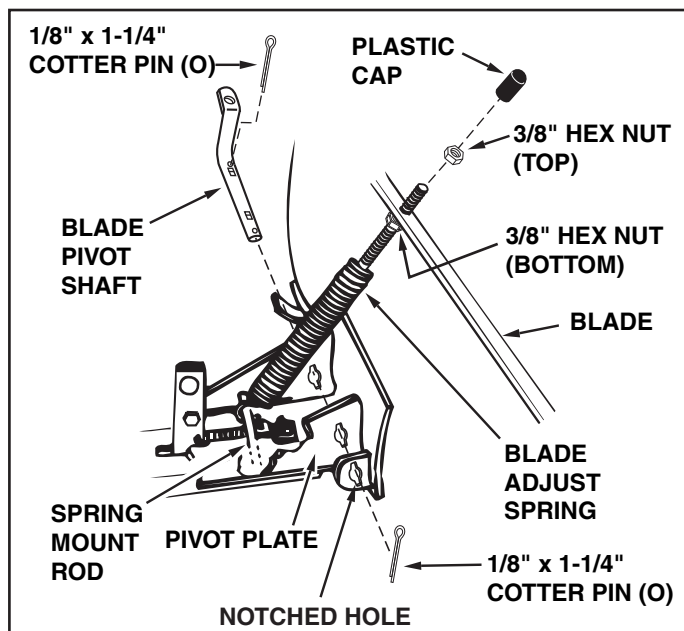


FIGURE 14 (Right Hand Side View)

28. Assemble the 1/2" washer (P) onto the channel pivot pin. See figure 15.
29. Attach the channel assembly to the tractor by placing the end of the channel assembly up inside the pivot support bracket on the tractor. Align hole (a) in the channel assembly with the hole in the pivot support bracket. Insert the channel pivot pin through the aligned holes from the left side, and secure it with a hairpin cotter (N).

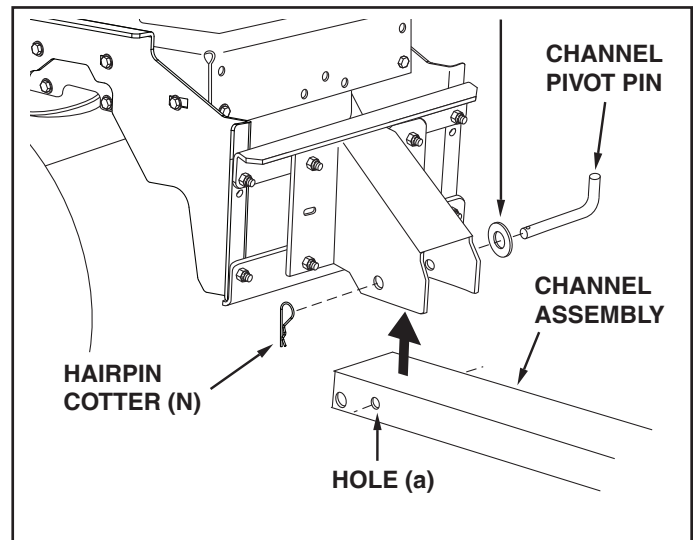


FIGURE 15 (Right Hand Side View)

30. From the left side, insert the welded end of the lift handle rod through the hole in the end of the channel assembly (Figure 16). Next, insert the lift link pin through the hole in the bracket that is welded to the lift handle rod. (The lift link is pre-assembled to the pivot support assembly). Secure the bracket with a hairpin cotter (N) inserted up through the lift link pin.
31. Apply a light coat of oil to the straight upper portion of the lift handle rod. Slide the lift handle tube onto the rod.

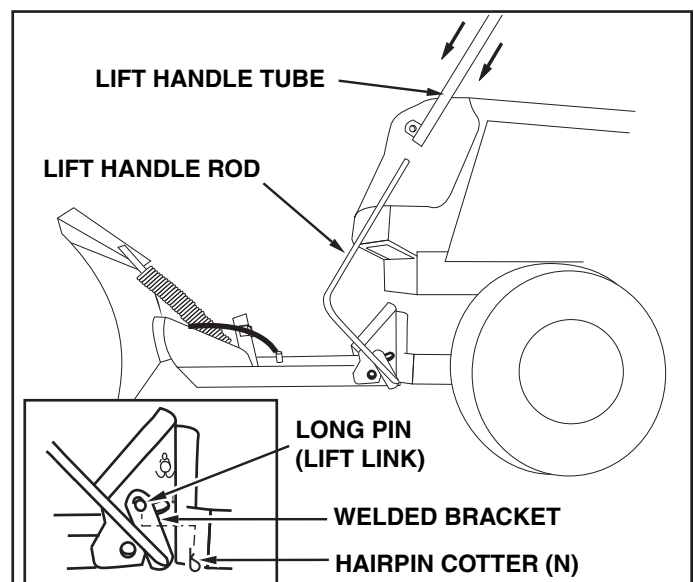


FIGURE 16 (Left Hand Side View)

32. Remove the rubber cap and the first jam nut from the threaded end of the control cable and slide them onto the control cable wire. Adjust the second jam nut on the threads so that it is approximately 3/4" from end. Assemble threaded end of cable through the cable mount bracket and secure it with the first jam nut. Reinstall the rubber cap onto the threaded cable end. See figure 17.

NOTE: Some adjustment of jam nuts may be required after blade assembly is completed.

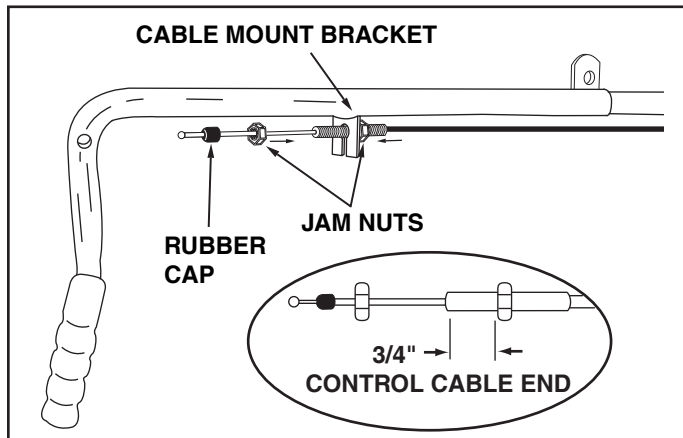


FIGURE 17 (Right Hand Side View)

33. Assemble plastic grip onto lock release grip assembly. See figure 18.
34. Attach lock release grip assembly to lift handle tube using one 5/16" x 1-1/2" hex bolt (C) and one 5/16" nylock nut (J). Do not overtighten the nut. The grip assembly must pivot freely. See figure 18.
35. Assemble the ball end of the cable to a cable end fitting as you did to the other end of the cable. Secure the cable end fitting to the weld bolt on the lock release grip with a 1/4" nylock nut (I). Do not overtighten the lock nut. The cable fitting must pivot freely. See figure 18.

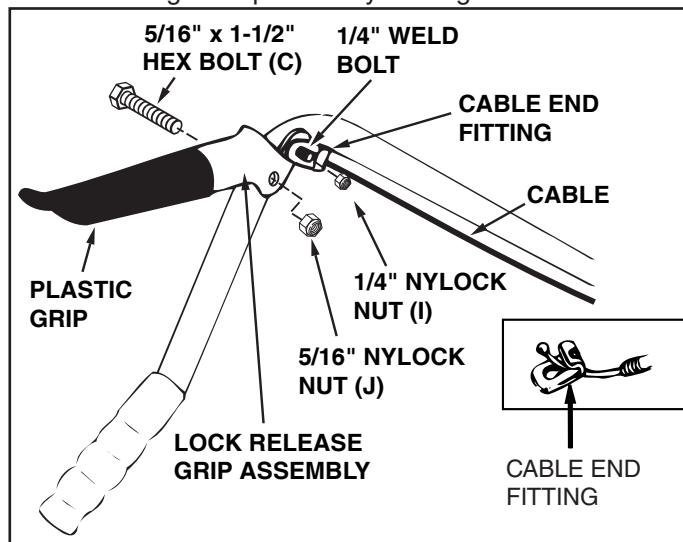


FIGURE 18 (Right Hand Side View)

36. Place the end of the blade pivot rod down through the blade pivot shaft. Attach the other end of the blade pivot rod to the lift handle tube. Secure both ends with a hairpin cotter (N). The holes for the hairpin cotters should be parallel to the ground. See figure 19.

37. Use two plastic ties to hold the cable securely to the outside of the handle tube, away from the tractor to avoid direct heat from the tractor muffler. See figure 19.

38. Squeeze the grip assembly to check if blade unlocks and pivots. To adjust locking mechanism, see Adjustments section on page 11.

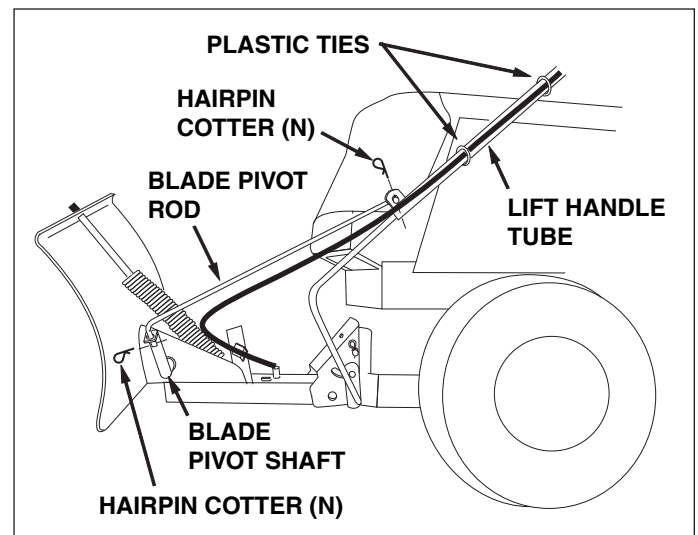


FIGURE 19 (Left Hand Side View)

39. Pivot the blade to the center position and lower it to the ground. Place shims under the blade to create the amount of ground clearance you want. The more uneven the surface the more clearance you will need.

40. Attach the skid shoes to the blade using two 5/16" x 1" carriage bolts (E), 5/16" washers (R) and 5/16" nylock nuts (J). Tighten the bolts with the skid shoes resting on the ground. See figure 20.

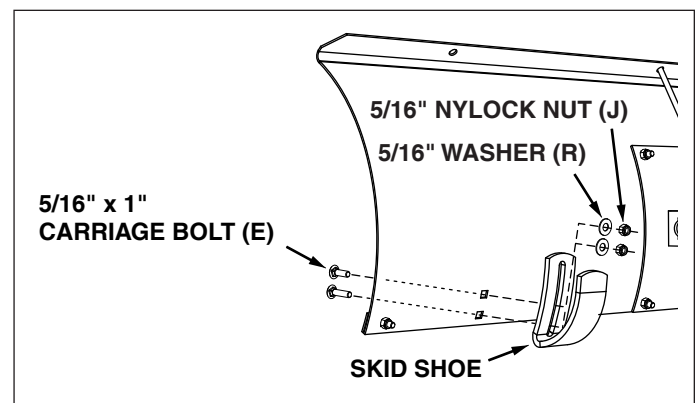


FIGURE 20 (Left Hand Side View)

SECTION 2: OPERATING THE BLADE

1. To raise the blade, use the handle grip located on the end of the handle tube. Pull back while pushing down on the handle grip. To lower blade, pull back while lifting up on handle grip. See figure 21.

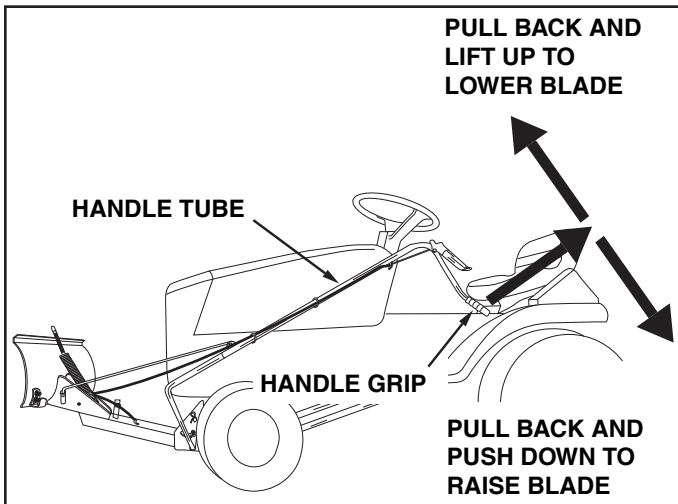


FIGURE 21

2. To unlock the blade, raise the blade to transport position. Push the lock release grip down against the handle tube to pivot the blade. Keep the grip depressed and push forward or pull back on the handle tube, sliding it along the lift rod. Release the grip to lock the blade when it is in either the right hand, the left hand or the straight ahead position. See figure 22.

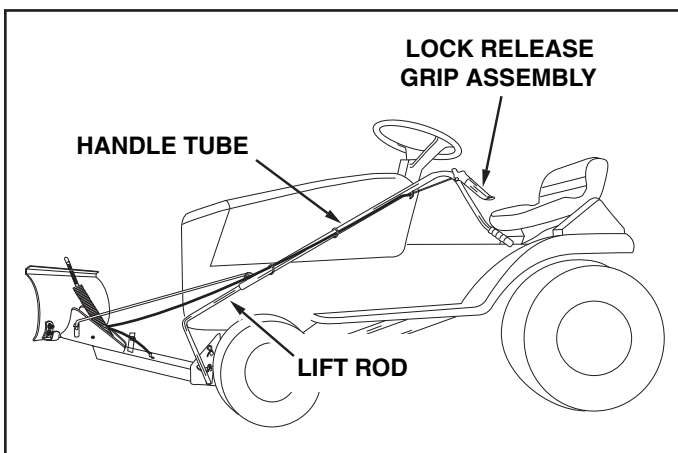


FIGURE 22

USING THE SNOW BLADE

3. Prepare the lawn tractor engine for cold weather using instructions furnished with the lawn tractor.
4. Always begin with the transmission in first (low) gear and gradually increase speed as required.
5. Do not repeatedly push snow in the same direction. This causes excessive build up with each successive pass.
6. To reduce icing on the blade, allow the lawn tractor and blade to adjust to outdoor temperature before operating.
7. For improved snow removal performance, coat the blade with automotive type paste wax.



CAUTION: Carefully inspect the area to be worked before operating the snow blade. Avoid pipes, roots, curbs or other heavy obstructions.



CAUTION: Know the terrain. Avoid exceptionally steep slopes or drop-offs which may be hidden by the snow. Never run the snow blade into heavy material at high speed.



CAUTION: Always lower the blade to the ground before leaving the tractor.

SECTION 3: MAINTENANCE

1. During the operating season, check all bolts, nuts and hairpin cotters to be sure they are secure.
2. Lubricate all pivot points to help maintain proper operation of blade.
3. Apply a light coating of oil to the upper portion of the lift handle rod if the lift handle tube becomes difficult to slide on the rod.

SECTION 4: ADJUSTMENTS

To Adjust Blade Spring

1. The tension of the blade adjust spring may be altered to permit the blade to tilt forward to bypass solid obstructions. To change the spring tension, adjust the nuts at upper end of the spring bolt. Standing in front of blade, turn the nuts counterclockwise to relieve tension and clockwise to increase tension. Refer to figure 14 on page 7.

To Adjust Blade Shoes

2. The blade shoes at the ends of blade may be raised for close work on smooth surfaces or lowered to raise the blade to work on rough or uneven areas. Make sure both shoes are set evenly and that the nuts are tightened securely. Refer to figure 20 on page 9.

To Adjust the Blade Pivot Lock Mechanism

3. If the blade will not unlock and pivot, the angle lock bars are not disengaging from the slots in the pivot plate. To correct, adjust the 5/16" hex jam nuts to draw the end of the control cable back towards the cable mount bracket. The less the threaded end of the cable extends through the bracket, the more the angle lock bars can retract to disengage from the slots in the pivot plate. See figure 23.

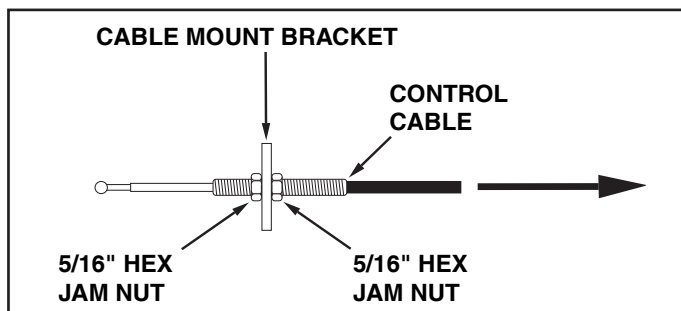


FIGURE 23

SECTION 5: STORING THE BLADE

Recommendations When Storing

1. When the snow blade is not being used, remove all dirt and rust and touch up with paint.
2. Touch up bare metal with paint or apply a light coat of grease or rust preventive.
3. Lubricate all pivot points as instructed in the maintenance section.
4. Store in a dry area, protected from weather.

To Remove Blade From Tractor

5. Lower the blade to the ground with the blade in the center (straight ahead) position.
6. Remove the hairpin cotter which fastens the blade pivot rod to the blade pivot shaft. See figure 19 on page 9.
7. Remove the hairpin cotter which fastens the lift handle rod to the lift link pin. See figure 16, page 8.
8. Remove the hairpin cotter from the channel pivot pin and remove the pivot pin from the channel assembly. See figure 15 on page 8.
9. Remove the blade, the channel assembly and the lift handle assembly from the tractor. The brackets assembled to the tractor frame may be left in place.
10. To remove the brackets assembled to the tractor frame (side plates and pivot support assembly) refer to the figures appropriate for your tractor on pages 4 to 6.
11. If the side plates are removed from the tractor frame, be sure to reassemble any bolts that were removed from the frame. Refer to the figures appropriate for your tractor on pages 4 to 6.

SUPPLEMENT SHEET

SUBJECT:

INTERFERENCE WITH BROWNING SHIELD AND LOWER DASH COVER

If your Husqvarna tractor is equipped with the browning shield shown below, it will be necessary to remove it in order to mount this attachment. (Does not apply for front mount scoops). It is critical that you reinstall the browning shield when the attachment is removed.



CAUTION! Allow muffler to cool down before removing browning shield.



BROWNING SHIELD

If your Husqvarna TS200 Series tractor is equipped with lower dash covers as shown below, it will be necessary to remove them in order to mount this attachment. (Does not apply for front mount dethatchers). Refer to your tractor manual for removal instructions.



LOWER DASH
COVER

NOTES

