

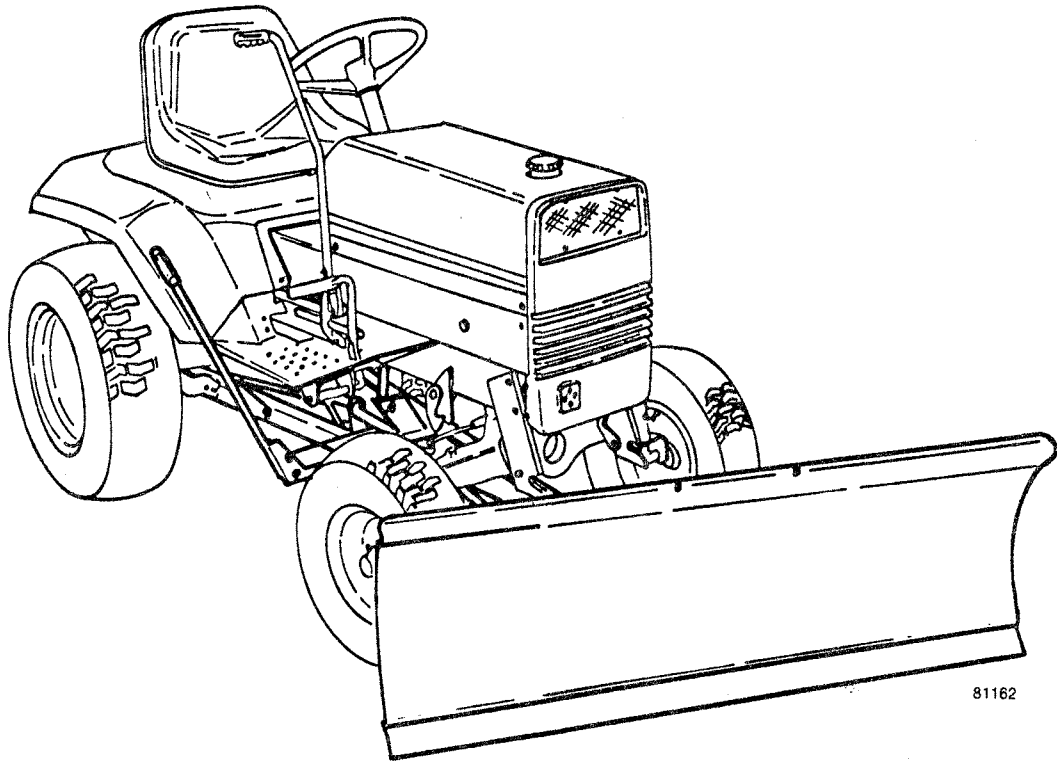
GRAVELLY OPERATOR'S MANUAL

NAME: 48 INCH SNOWDOZER

PART NUMBER(S): 24678

L-1112

BB-848



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The 48 Inch Snowdozer is for use with Gravely 800 and 8000 Series tractors.

All references to left side, right side, front and rear are given from the operator's position.

To continue its program of quality and design improvement, the manufacturer reserves the right to change specifications, designs and prices without notice and incurring obligation.

Form No. 34216 (9-81)

Printed in U.S.A.


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1.0 INSTRUCTIONS FOR SAFETY



NOTE: This warning symbol  indicates that there is danger to people. Read these warnings carefully and follow them.

Using this equipment the wrong way can cause injury to people and damage to the equipment. People operating or maintaining this equipment must read the Operator's Manual and follow the instructions.

It is important to understand that this Operator's Manual and any other Gravelly instruction books do not list every possible danger. It is not possible for Gravelly to know and describe all the dangers in operating and servicing the equipment.

The purchaser must give these instructions to the people operating and maintaining this equipment. The purchaser must get the operators and people maintaining this equipment to use eye and foot protection.

1.1 Instructions Before Operation

1. Read this Operator's Manual and the Operator's Manual for the tractor carefully before operating or doing maintenance.
2. Learn the location and the function of all the tractor and the attachment controls.
3. Know how to use the controls to stop the tractor quickly.

1.2 Preparation For Operation

1. Keep areas in which the snowdozer may be operated free of material or objects that might be damaged or present a hazard if struck by the dozer.
2. Use foot protection that will help prevent sliding.
3. Before starting the engine of the tractor, put the direction control lever in the "NEUTRAL" position and the power take off (PTO) control in the "OFF" position.
4. Keep the tractor and the snowdozer in good operating condition. Do the maintenance described in the Operator's Manual.
5. Do not operate the tractor and the snowdozer when the area of operation is too dark for the operator to see.
6. Never operate the tractor or the snowdozer when any part is damaged or out of place. Replace all parts that are damaged or missing.



1.3 Operation

1. Keep away from moving parts.
2. Never let anyone other than the operator ride on the tractor or attachment.
3. Keep the PTO control in the "OFF" position.
4. After hitting an object, stop the tractor and the engine. Inspect for damage. If there is damage, make repairs before starting the engine.
5. Use caution when changing direction on slopes.
6. Go slow on surfaces where the tractor can slide.
7. If there is a sudden change in the sound or vibration of the tractor or the snowdozer, stop the tractor. Stop the engine on the tractor. Check for damage. If there is damage, make repairs before operating.
8. Always stop the engine and lower the blade before leaving the operator's position.



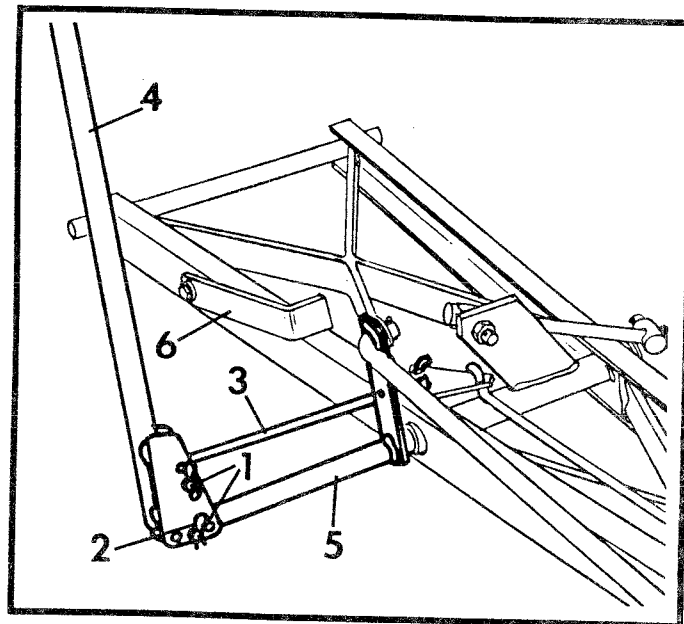
2.0 CONNECTING THE SNOWDOZER TO THE TRACTOR



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WARNING: Before working on, around, or under the tractor, turn the key in the ignition switch to the "OFF" position. Engage the brake lock.

Remove the hair pin cotters, clevis pin and latch control rod from the control handle and remove the handle from the pivot shaft on the push frame. See figure 2.0-1.

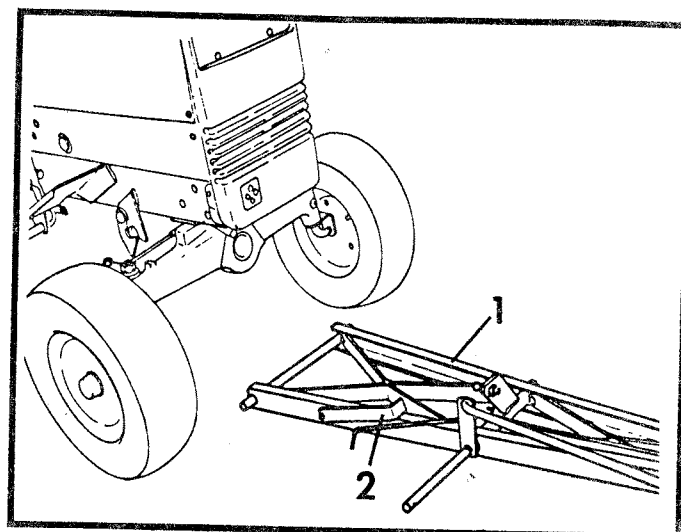


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- 1 - Hair Pin Cotters
- 2 - Clevis Pin
- 3 - Latch Control Rod
- 4 - Control Handle
- 5 - Pivot Shaft
- 6 - Kick Stand (Up)

Figure 2.0-1

2. Put the tractor in position so that the snowdozer push frame is between the front wheels of the tractor. Put the kick stand up. See figure 2.0-2.

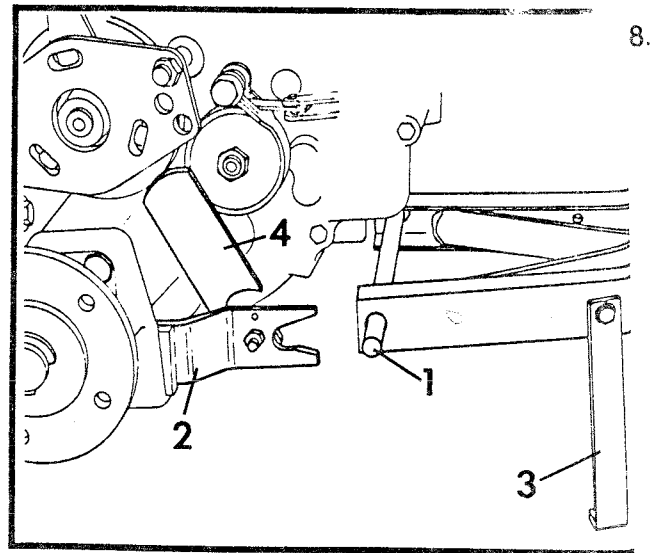


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- 1 - Push Frame
- 2 - Kick Stand (Up)

Figure 2.0-2

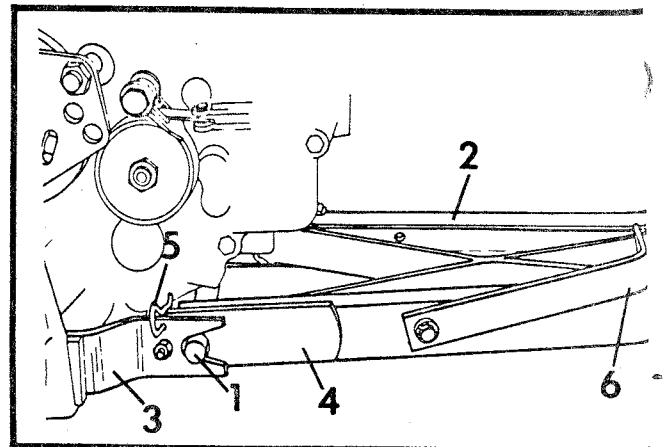
3. Roll the tractor forward over the push frame until the cross rod is near the axle latches.
4. Raise the rear of the push frame and put the kick stand down. Raise the locking straps on the axle latches. See figure 2.0-3.



- 1 - Cross Rod
- 2 - Axle Latch
- 3 - Kick Stand (Down)
- 4 - Locking Strap

Figure 2.0-3

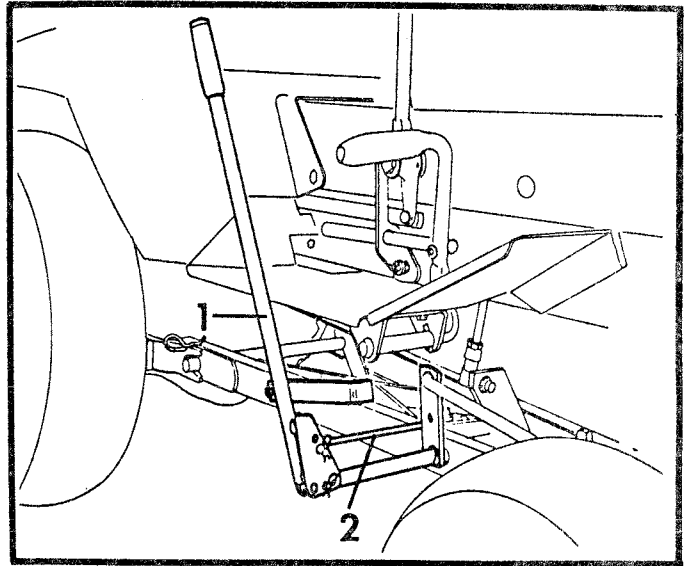
5. Slowly roll the tractor forward so that the cross rod on the push frame engages the axle latch on each side of the tractor. See figure 2.0-4.
6. Close the locking straps on the cross rod. Fasten the locking straps down with the hair pin cotters. See figure 2.0-4.
7. Raise the kick stand and lock it over the push frame. See figure 2.0-4.



- 1 - Cross Rod
- 2 - Push Frame
- 3 - Axle Latch
- 4 - Locking Strap
- 5 - Hair Pin Cotter
- 6 - Kick Stand (Up)

Figure 2.0-4

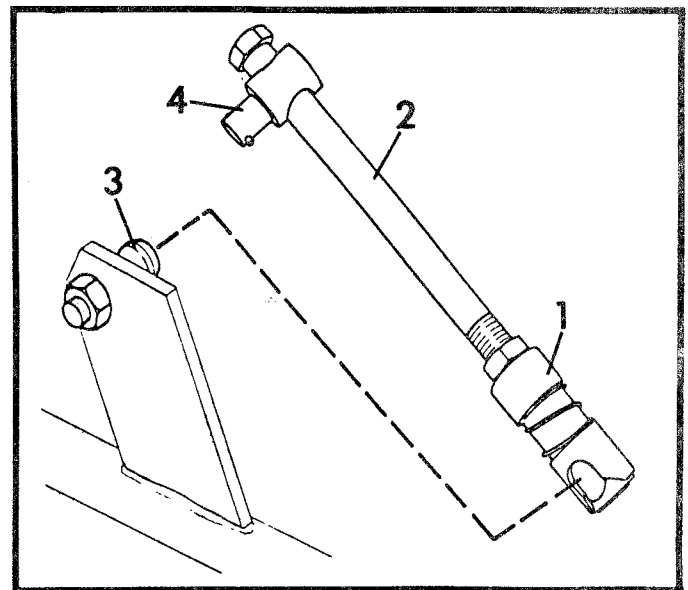
8. Connect the control handle and latch control rod as shown in figure 2.0-5.



- 1 - Control Handle
2 - Latch Control Rod

Figure 2.0-5

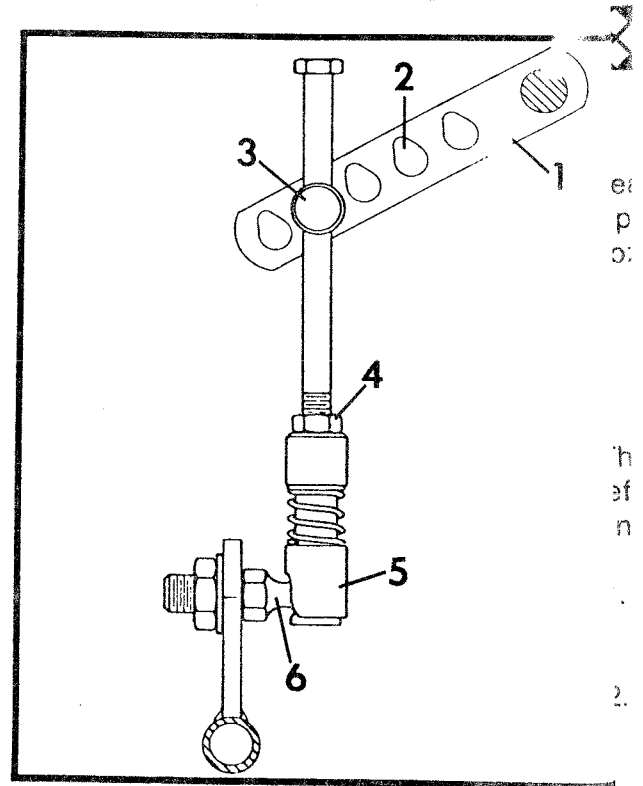
9. Pull the locking collar on the quick disconnect assembly towards the bolt and remove the assembly from the ball. See figure 2.0-6.
10. Put the tractor's attachment lift in the down position.



- 1 - Locking Collar
2 - Bolt
3 - Ball
4 - Lift Pivot

Figure 2.0-6

11. Hold the quick disconnect assembly with the head of the bolt down and put the lift pivot in the second hole from the bottom of the tractor attachment lift. Then rotate the quick disconnect assembly so the bolt head is up. See figures 2.0-6 and 2.0-7.
12. Pull the locking collar up and connect the quick disconnect assembly to the ball.
13. Raise the blade to the transport position. To change the transport height of the blade, adjust the position of the bolt in the quick disconnect assembly.



- 1 - Attachment Lift
- 2 - Teardrop Holes
- 3 - Lift Pivot
- 4 - Quick Disconnect Assembly
- 5 - Locking Collar
- 6 - Ball

Figure 2.0-7

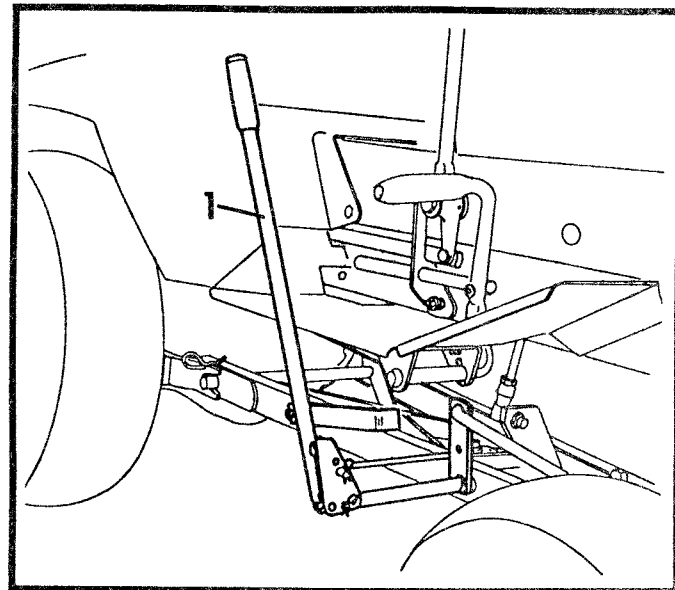
3.0 OPERATING THE SNOWDOZER

Read this Operator's Manual and the tractor Operator's Manual before operating the snowdozer.

3.1 How To Change The Angle Of The Blade

The snowdozer has three blade angle positions, left angle, center and right angle. To change the angle of the blade follow these procedures:

1. Use the tractor attachment lift to raise the blade to the up position.
2. Push the control handle out away from the operator. At the same time, push the control handle forward to rotate the blade to the left or pull the control handle backwards to rotate the blade to the right. See figure 3.0-1.



1 - Control Handle

Figure 3.0-1

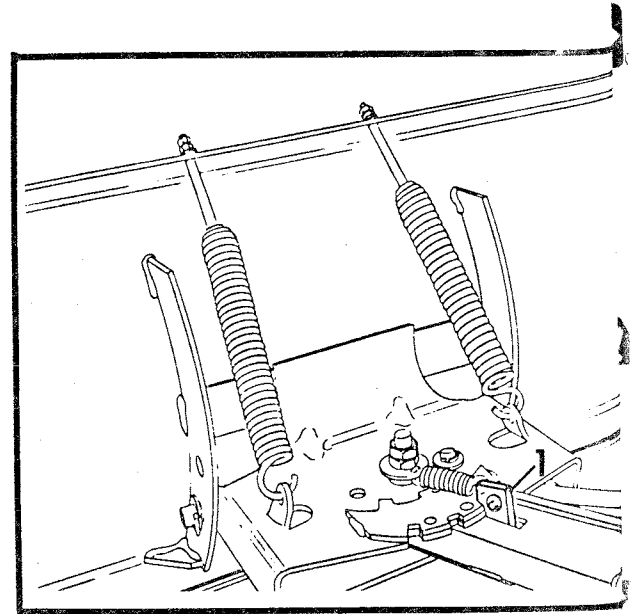
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3.2 How To Move Snow With The Snowdozer

1. Start the tractor engine. Wait until the engine is running smoothly before operating.
2. Move the blade to the angle position needed.

⚠ WARNING: Be sure the pivot lock bar has fastened the blade in the selected position before operating the tractor. See figure 3.0-2.

3. Lower the blade to the ground.
4. Select a speed that is safe. Operate the snowdozer slowly at first.
5. Move the throttle lever to the "FAST" position.
6. Put the direction control lever in the forward position. Always use caution on surfaces where the tractor can slide.



1 - Pivot Lock Bar

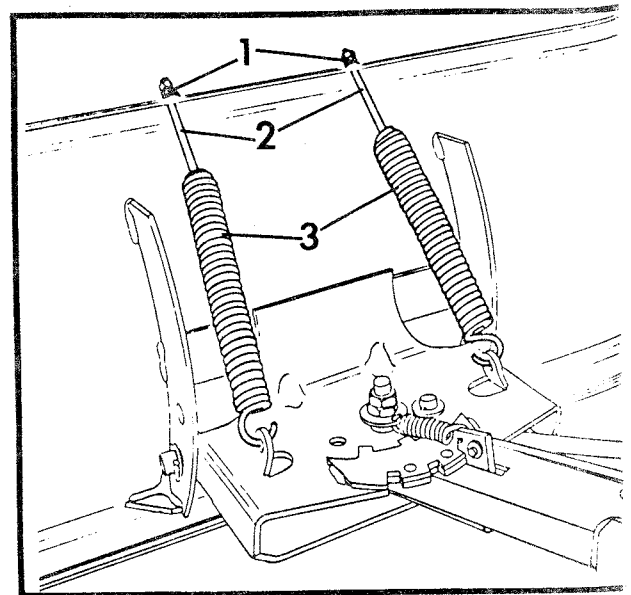
Figure 3.0-2

3.3 How To Adjust The Trip Springs

If the adjustment on the trip springs is too loose to hold the blade in position while moving snow, follow these procedures:

1. Loosen the jam nuts on both trip spring bolts shown in figure 3.0-3.
2. Turn the hex nuts next to the blade three complete turns clockwise.
3. Tighten the jam nuts.
4. If the springs need more adjustment, repeat steps 1, 2 and 3.

⚠ WARNING: Do not make the trip springs too tight. The springs must be adjusted to let the bottom of the blade move backwards when it hits an object that does not move.



1 - Jam Nuts
2 - Trip Spring Bolts
3 - Trip Springs

Figure 3.0-3

4.0 DISCONNECTING THE SNOWDOZER FROM THE TRACTOR



Lower the snowdozer blade to the ground and stop the engine.

2. Reverse the procedures described in section 2.0 above.

WARNING: Before working on, around, or under the tractor, turn the key in the ignition switch to the "OFF" position. Engage the brake lock.

5.0 MAINTAINING THE SNOWDOZER



Clean the snowdozer.

Inspect for loose or missing fasteners, excess wear and missing or broken parts. Tighten, repair or replace as required.

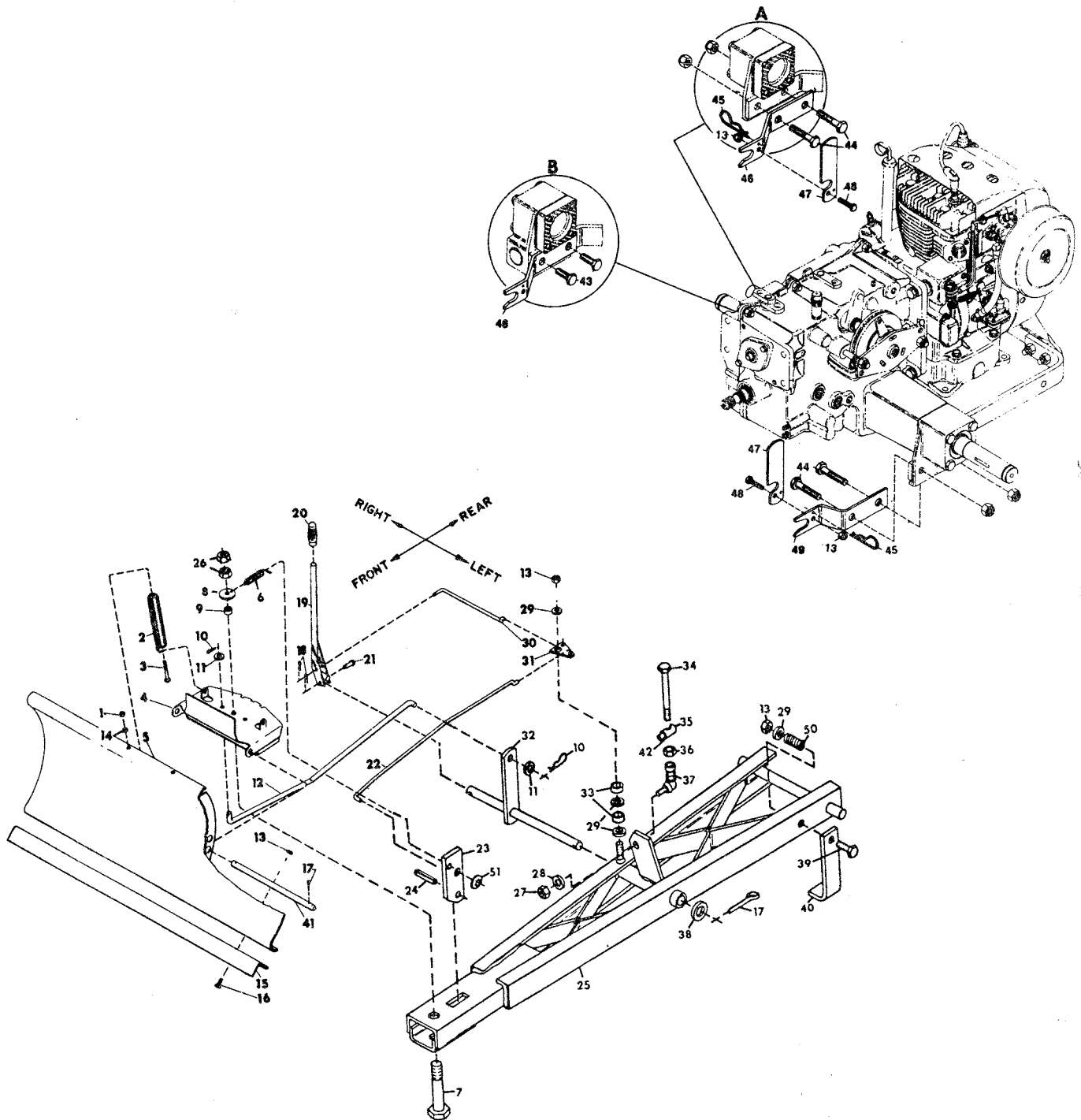
3. Put lubricant on the quick disconnect assembly, the ball, and the pivot lock bar.
4. To prevent rust, put paint or lubricant on any area where the paint has been removed.



6.0 ILLUSTRATED PARTS LIST



48 INCH SNOWDOZER



48 INCH SNOWDOZER

2-2543



<u>Item No.</u>	<u>Part No.</u>	<u>Qty.</u>	<u>Description</u>
1	124829	2	Nut, Jam; 3/8-16 Hex
2	11865	2	Spring, Trip
3	18505	2	Bolt, Special; 3/8-16 x 4-1/2
4	18501	1	Plate, Pivot Assembly
5	18499	1	Blade Assembly 48"
6	11851	1	Spring, Blade Angling
7	271781	1	Bolt, Hex; 3/4-10 x 4-1/2
8	11850	1	Washer, Spring Anchor
9	18506	1	Spacer
10	14412	2	Pin, Hair Cotter
11	131016	2	Washer, Flat; .656 x 1.312 x .095
12	11864	1	Rod, Angling Control
13	456004	8	Nut, Lock; 3/8-16
14	120377	2	Nut, Hex; 3/8-16
15	18500	1	Plate, Wear
16	120915	4	Bolt, 3/8-16 x 1 RD HD SQ NK
17	137218	3	Pin, Cotter 5/32 x 1-1/4
18	11860	2	Pin, Hair Cotter
19	18503	1	Handle Assembly
20	11861	1	Grip, Handle
21	18507	1	Pin, Clevis
22	34096	1	Rod, Latch Control (Long)
23	34098	1	Bar, Pivot Lock
24	412281	1	Pin, Spring; 1/4 x 1
25	34101	1	Frame, Push Assembly
26	426897	2	Nut, Jam; 3/4-10 Hex
27	190171	1	Nut, Lock; 1/2-20 Washer Insert Hex
28	417098	1	Washer, Flat; .531 x 1.000 x .063
29	120394	4	Washer, Flat; .406 x .812 x .065
30	18504	1	Rod, Latch Control (Short)
31	14421	1	Bell Crank
32	18502	1	Shaft, Pivot Assembly
33	18508	2	Spacer
34	193496	1	Bolt, Hex; 1/2-20 x 7
35	11317	1	Pivot, Mower Lift Assembly
36	124934	1	Nut, Jam; 1/2-20 Hex
37	11315	1	Joint, Ball Assembly Quick Disconnect
38	131017	1	Washer, Flat; .812 x 1.496 x .134
39	180130	1	Bolt, Hex; 3/8-16 x 2
40	34097	1	Stand, Kick
41	11846	1	Pivot, Blade
42	142485	1	Pin, Groove; 1/8 x 5/8 Type A
NS	19365	1	Decal, Gravely
43	180175	2	Bolt, Hex; 1/2-13 x 1-1/4
44	180181	4	Bolt, Hex; 1/2-13 x 2
45	10405	2	Pin, Hair Cotter
46	19766	1	Plate, Axle Latch R.H.
47	19172	2	Strap, Locking
48	180124	2	Bolt, Hex; 3/8-16 x 1-1/4
49	19767	1	Plate, Axle Latch L.H.
50	34099	1	Spring, Compression
51	14424	1	Nut, 5/16 Push

NOTE: Item 44 (Part No. 180181) in circle "A" to be used on tractor with standard axle bearing retainer.

Item 43 (Part No. 175) in circle "B" to be used on tractor with axle bearing retainer for rear PTO.

GRAVELY LIMITED WARRANTY

This Limited Warranty is issued by Gravelly International, Inc., and consists of the following terms:

1. Only the original purchaser of new Gravelly equipment is covered by this Warranty.
2. This Warranty covers repair or replacement of parts manufactured by Gravelly which are defective in material or workmanship. Gravelly will pay for parts and labor only.
3. The Warranty starts the date of purchase and lasts for TWELVE (12) MONTHS.
4. Some components of Gravelly equipment are not covered by the Gravelly Warranty. These components are covered by the original manufacturer's warranty, which is included with the product. They are:
 - a. Engines
 - b. Tires
5. To obtain warranty service on Gravelly equipment including components not manufactured by Gravelly, use this procedure:
 - a. Notify the Gravelly dealer from whom you purchased the equipment.
 - b. If you have moved and it is not convenient to notify the selling dealer, notify the nearest Gravelly dealer. You should supply this dealer with a copy of the bill of sale as proof of the date of purchase.
 - c. Make arrangements to have the equipment delivered to the dealer (refer to paragraph 6(a) below).
 - d. If you have any questions concerning the Gravelly Limited Warranty, they should be referred to:

Gravelly International, Inc.
One Gravelly Lane
Clemmons, NC 27012
- e. Warranty service on Gravelly equipment must be performed by an authorized Gravelly dealer or Gravelly factory branch.

Attn: Manager of Customer Services

6. This Warranty does not cover the following:
 - a. Transportation between owner's home or place of business and the dealership. If the dealer provides the transportation of the equipment, he will charge the owner his usual rate for such service.
 - b. Normal maintenance services and normal replacement of items such as spark plugs, belts, oil, oil filters, air filters, and mower, plow or cultivator blades.
 - c. Alterations or Modifications - All obligations under this warranty shall be terminated if the equipment is altered or modified in any way.
 - d. Customer Neglect or Lack of Proper Maintenance - The purchaser is responsible for making sure that the tractor is operated and serviced as directed in the operator's manual. Incorrect use or maintenance will void the warranty.

7. GRAVELLY MAKES NO OTHER EXPRESS WARRANTIES. ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE PERIOD SET OUT IN PARAGRAPH 3 ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE STATEMENT MAY NOT APPLY TO YOU.
8. GRAVELLY SHALL HAVE NO RESPONSIBILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE BREACH OF ANY WARRANTY, INCLUDING, BUT NOT LIMITED TO, INCONVENIENCE, RENTAL OR PURCHASE OF REPLACEMENT EQUIPMENT, LOSS OF PROFITS OR COMMERCIAL LOSS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.
9. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.
10. A Gravelly product registration card is supplied with each Gravelly product. Please complete the card and return it to Gravelly at the address listed on the card. The equipment registration card will be used by Gravelly for:
 - a. Recording date of purchase.
 - b. Notification of owners in compliance with the Consumer Product Safety Act, should any notification be necessary.The return of registration card is not required in order to take advantages of this Warranty.
11. This Warranty is not subject to change or modification by anyone, including Gravelly dealers and no Gravelly dealer is authorized to make any representations or promises on Gravelly's behalf.

 **GRAVELLY**