

2005

SINCE 1839

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# OWNER'S MANUAL

## **AERATOR SPREADER**

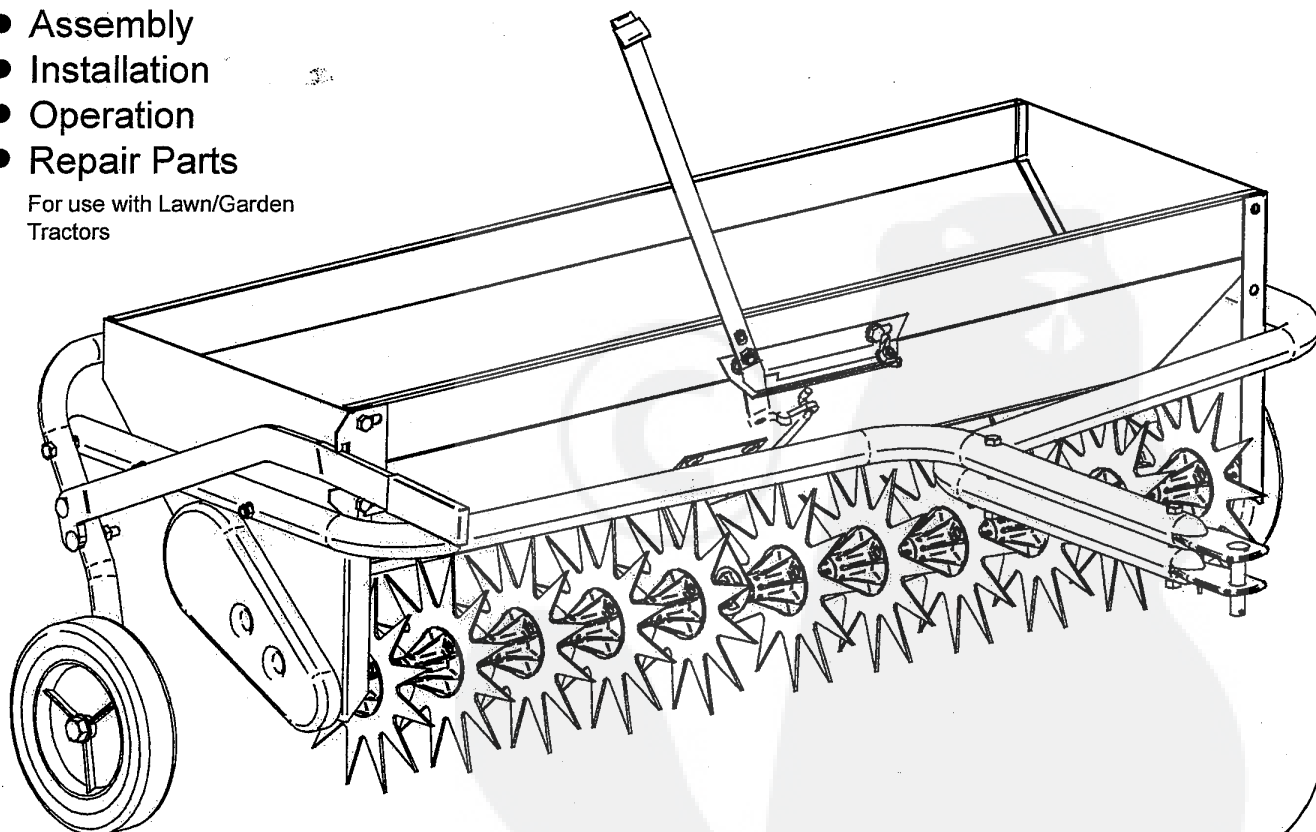
MODEL:

**AS-302**

**AS-402**

- Assembly
- Installation
- Operation
- Repair Parts

For use with Lawn/Garden Tractors



For the latest product updates and setup tips:

Visit us on the web!  
[www.brinly.com](http://www.brinly.com)

Important: This manual contains information for the safety of persons and property. Read it carefully before assembly and operation of the equipment!

L-1711-BH

CONGRATULATIONS on your new Brinly-Hardy Lawn Aerator. It has been designed, engineered, and manufactured to give you the best possible dependability and performance.

Should you experience any problem you can not easily remedy, please do not hesitate to contact our knowledgeable customer service department toll-free at 1-877-728-8224. We have competent, well trained technicians to help you service your Aerator.

### CUSTOMER RESPONSIBILITIES

Please read and retain this manual. Familiarize yourself with the entire manual before beginning and verify that all hardware is present. And please, Observe the "Safety Rules". Follow a regular schedule in maintaining, caring-for and using your Aerator Spreader.

**The instructions will enable you to assemble and maintain your Aerator Spreader properly. Always observe the "SAFETY RULES".**

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### RULES FOR SAFE OPERATION

- Know controls and how to stop quickly, READ THE OWNER'S MANUAL.
- Do not allow children to operate the vehicle, do not allow adults to operate without proper instruction or without having read the owner's manual.
- Do not carry passengers. Keep children and pets a safe distance away.
- Always wear substantial footwear. Do not wear loose fitting clothing that can get caught in moving parts.
- Keep your eyes and mind on your tractor/attachment and area being covered. Do not let other interests distract you.
- Stay alert for holes in the terrain and other hidden hazards.
- Do not drive close to creeks, ditches and public highways.
- Watch out for traffic when crossing or near roadways.
- When using any attachment, don't allow anyone near the vehicle while in operation.
- Keep the vehicle and attachment in good operating condition and keep safety devices in place.

- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- The vehicle and attachment should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
- See tractor equipment owner's manual for safe operation of the equipment.



### CAUTION:

To avoid damage to Tines, always engage transport wheels raise the Tines when crossing concrete or asphalt walks, drives, or roads.

Use the Aerator-Spreader only on an established lawn, never on newly laid sod.

To avoid personal injury and/or equipment damage never exceed the recommended operating speed range of 3 to 5 MPH.

Tines have sharp points. Wear gloves and handle with care.

Only tow your Aerator-Spreader behind vehicles for which it was designed, riders and lawn/garden tractors.

Do not stand/ride on Aerator-Spreader, bodily injury could result.

Never exceed the Hopper weight capacity of 70 pounds for AS-302 and 100 pounds for AS-402.

Do not attempt to disconnect Aerator from tractor with weight in Hopper.

When backing-carefully back straight to avoid jack-knifing which could result in damage to equipment.

INSTALLATION QUESTIONS?  
MISSING PARTS?  
REPLACEMENT PARTS?

**DON'T GO BACK TO THE STORE!**

Please call our Customer Service Department Toll-Free at  
**877.728.8224**  
or  
[www.customerservice@brinly.com](http://www.customerservice@brinly.com)



This symbol will help to point out important safety precautions throughout this manual. It means - ATTENTION! BECOME ALERT! Your safety is involved.

## REFERENCE

### *Tools Required for Assembly:*

- \*  $\frac{1}{2}$ " wrench (2)
- \* Pair work gloves
- \* Hammer

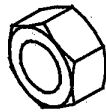
- \*  $\frac{3}{4}$ " wrench (2)
- OR
- \* 10" Adjustable wrench (2)

A note about nuts used in the assembly of your Aerator Spreader:

1. Jam Nuts and Hex Nuts spin freely on the bolt threads. Usually a lock washer is used to lock the nut securely in place.



Jam Nut

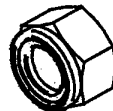


Hex Nut

2. Lock Nuts and Nylon Lock Nuts provide resistance after several turns on the bolt threads. A wrench is normally required during installation.



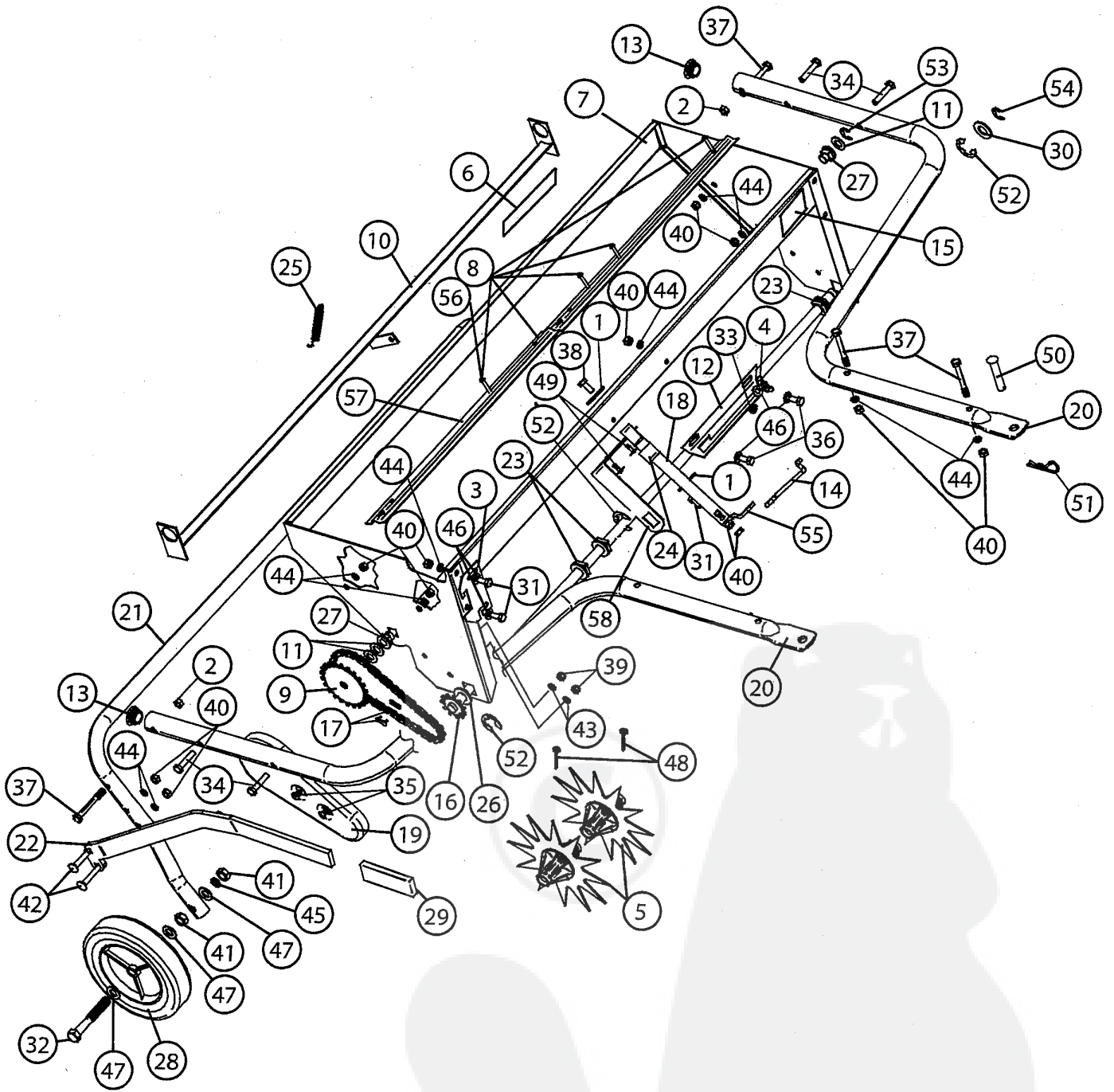
Lock Nut



Nylon Lock Nut

### **Notes:**

Parts Reference



## Parts List

REF. NO.	AS-302 PART NO.	AS-402 PART NO.	DESCRIPTION	QTY.
1	R-774	R-774	Flat Washer - Large	2
*2	B-1674P	B-1674P	5/16" Hex Lock Nut	3
*3	B-6520	B-6520	Transport Lock	1
4	B-4030	B-4030	1/4" Wing Nut	1
5	B-6407	B-6407	Aerator Tine Assembly	8 or 11
6	B-5922	B-5922	Brinly Logo Decal	1
7	B-4701-10	B-5718-10	Hopper Assembly	1
8	K-653	K-654	Agitator Kit (Hwd. Incl.)	2
9	B-5474-10	B-5720-10	Agitator Shaft Assembly	1
10	B-4709-10	B-5726-10	Shutter Assembly	1
11	B-4713	B-4713	1/2" Washer	3
12	B-4715Y	B-4715Y	Calibration Plate	1
*13	B-6484	B-6484	Cap Tube	2
14	B-4719-01	B-4719-01	Shutter Link	1
15	R-1946	R-1946	Decal Instruction/ "CE" Label	1
16	B-5472	B-5722	Tine Shaft Assembly	1
17	B-4724-CPT	B-4724-CPT	Drive Chain and Offset Link	1
18	B-6515-10	B-6515-10	Upper Lever	1
19	B-4726	B-4726	Chain Shield	1
20	B-6409-10	B-6410-10	Tow Bar	2
21	B-6411-10	B-6412-10	Wheel Support Assembly	1
22	B-6413-10	B-6413-10	Lift Handle	1
23	B-4732	B-4732	5/8" Square Bearing (large)	2 or 3
*24	B-4733	B-4733	Vinyl Grip (1/8" x 3/4")	1
25	B-4747	B-4747	Tension Spring	1
26	B-4768	B-4768	5/8" (Thin) Washer	3
27	F-383	F-383	1/2" Square Bearing (small)	2
28	B-6526	B-6526	Wheel	2
*29	R-2435	R-2435	Handle Grip (5/16" x 1-1/4")	1
30	B-5456	B-5456	5/8" (Thick) Washer	4
*31	2M1012P	2M1012P	Hex Bolt, 5/16" x 3/4"	3
*32	B-6517	B-6517	Hex Bolt, 1/2" x 3-1/2"	2
33	10M0808P	10M0808P	Carriage Bolt, 1/4" x 1/2"	1
*34	2M1032P	2M1032P	Hex Bolt, 5/16" x 2"	4
35	2M0808P	2M0808P	Hex Bolt, 1/4" x 1/2"	2
36	2M1008P	2M1008P	Hex Bolt, 5/16" x 1/2"	2
*37	B-6516	B-6516	Hex Bolt, 5/16" x 3"	4
38	2M1016P	2M1016P	Hex Bolt, 5/16" x 1"	1
39	30M0800P	30M0800P	Hex Nut, 1/4"	2
*40	30M1000P	30M1000P	Hex Nut, 5/16"	14
*41	31M1600P	31M1600P	Hex Jam Nut, 1/2"	4
*42	11M1028P	11M1024P	Carriage Bolt, 5/16" x 1-3/4"	2
43	40M0800P	40M0800P	Lock Washer, 1/4"	2
*44	40M1000P	40M1000P	Lock Washer, 5/16"	14
*45	40M1600P	40M1600P	Lock Washer, 1/2"	2
*46	45M1111P	45M1111P	Flat Washer, 5/16"	5
*47	45M1717P	45M1717P	Flat Washer, 1/2"	6
48	50M0524P	50M0524P	Cotter Pin, 5/32 x 1-1/2"	2
49		V-302P	Pop Rivet, 3/16" x .277	4
*50	B-3861	B-3861	Drawbar Pin	1
*51	D-146P	D-146P	Hairpin Cotter	1
52	B-4307	B-4307	"E" Ring, 1"	2 or 3
53	F-621	F-621	"E" Ring, 1/2"	1
54	F-577	F-577	"E" Ring, 5/8"	1
55	B-6414-10	B-6414-10	Lower Lever	1
56	B-5804	B-5804	Pop Rivet, 3/16" x .815	4
57	B-4705-10	B-5461-10	Agitator	2
58		B-5680-10	Center Strap	1

\* Parts in Hardware Bag

Figure 1.

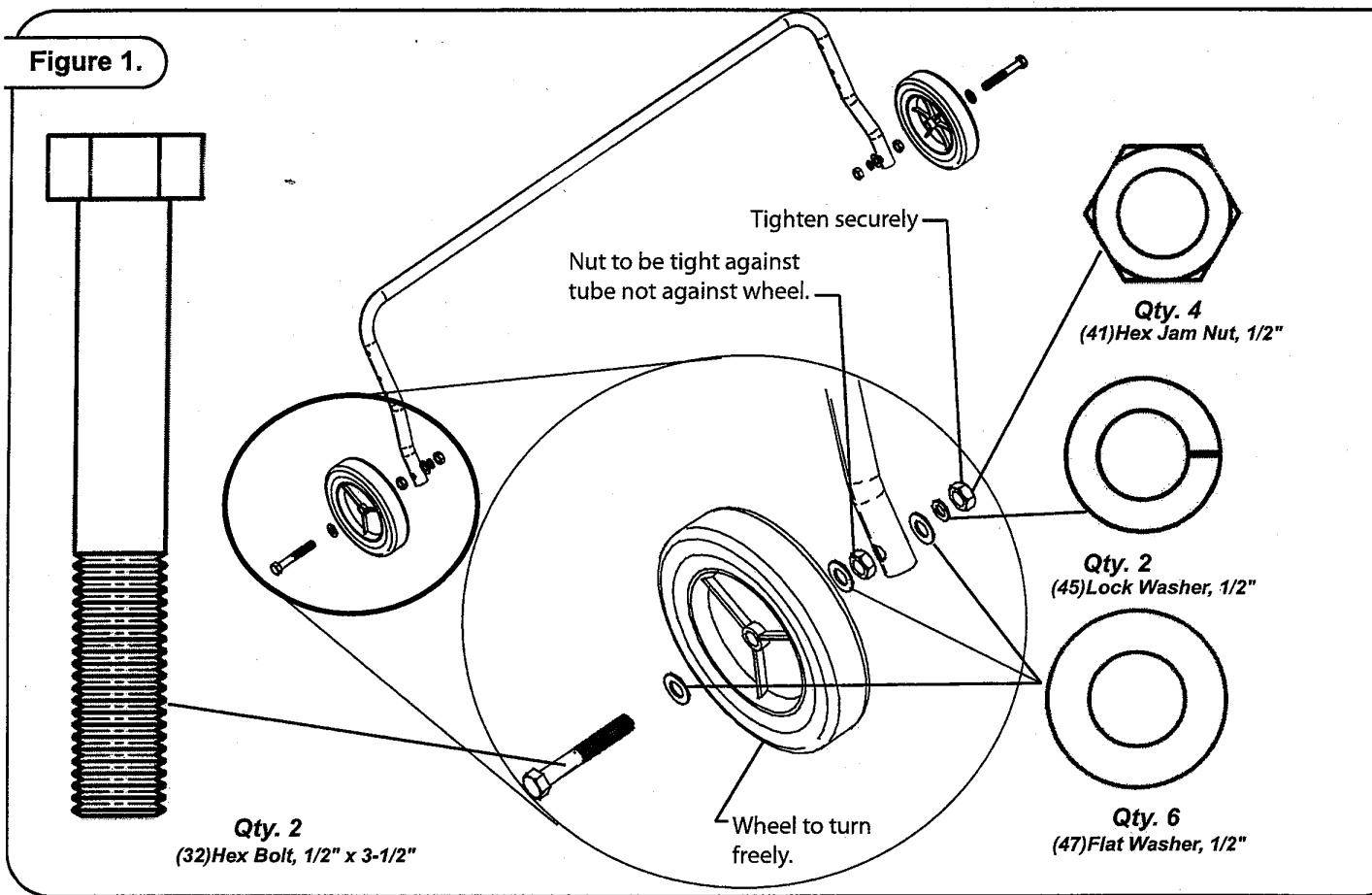
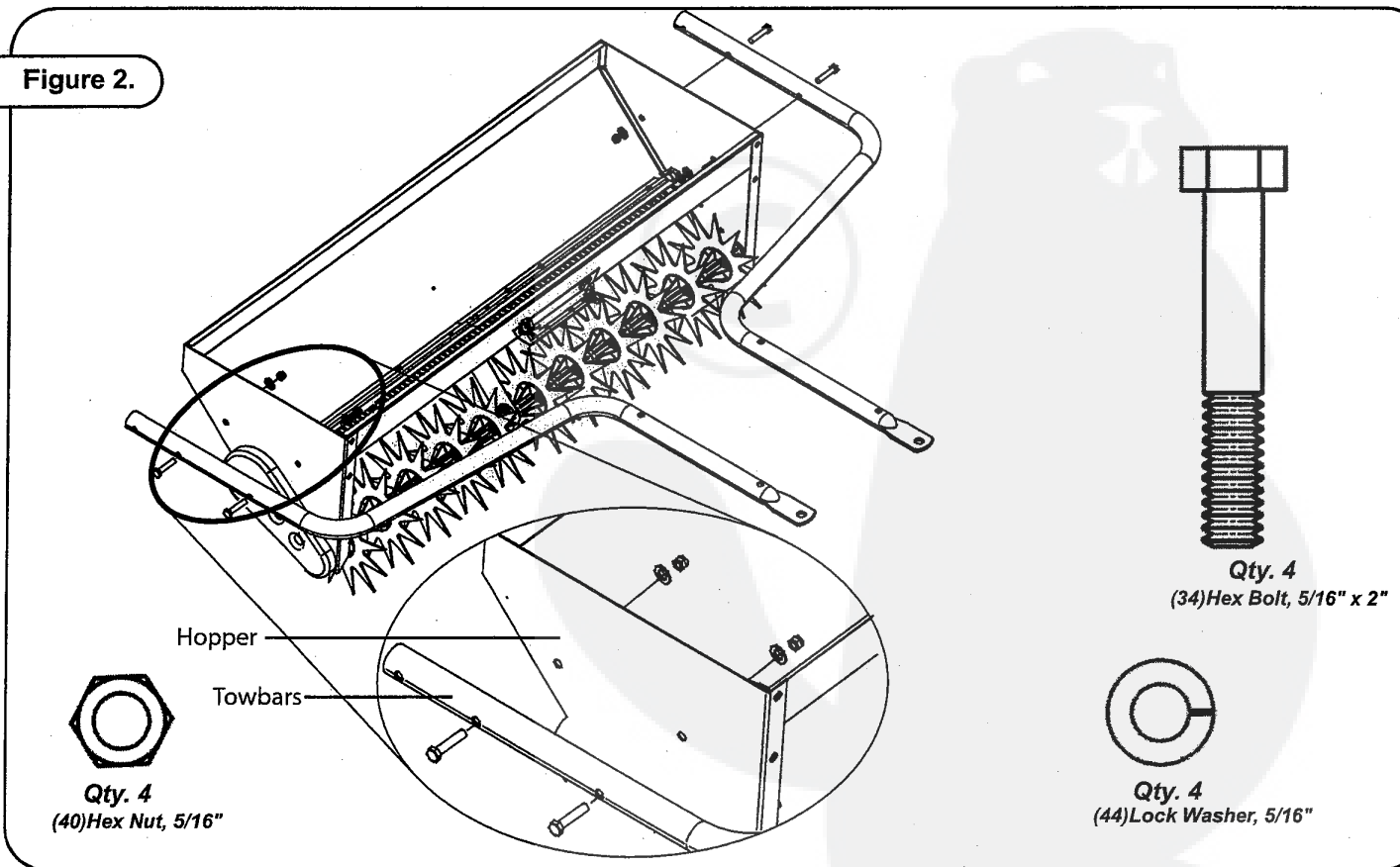
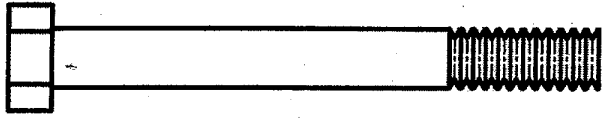


Figure 2.



**Figure 3.**



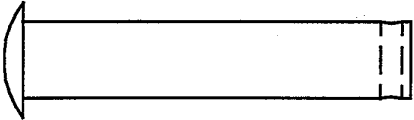
Qty. 2  
(37)Hex Bolt, 5/16" x 3"



Qty. 2  
(40)Hex Nut, 5/16"

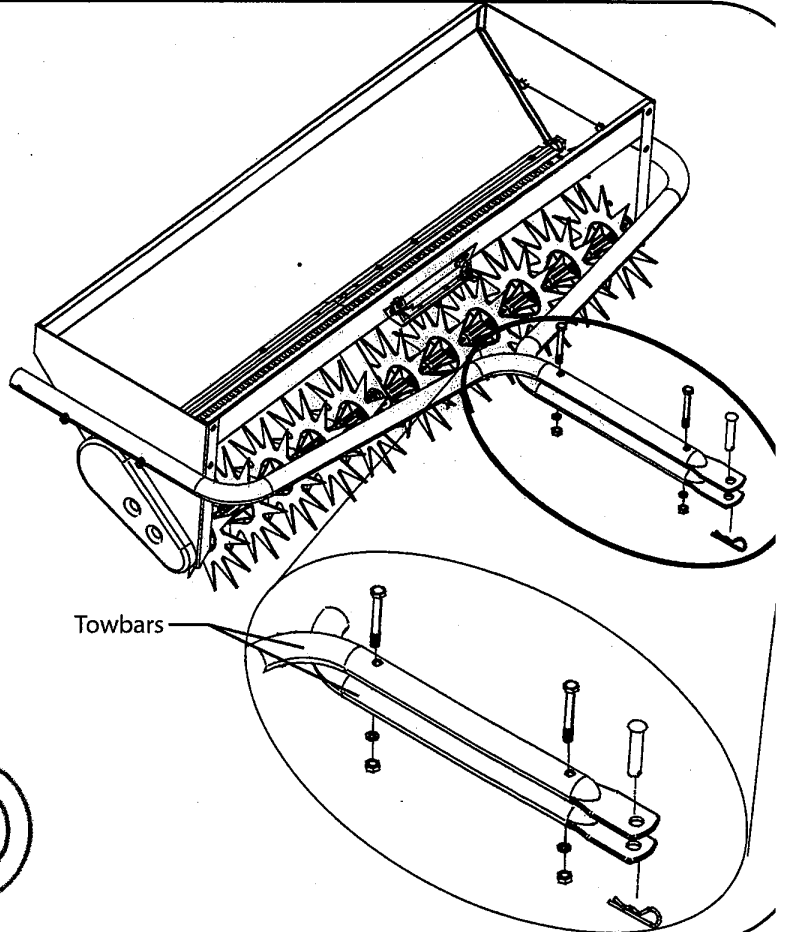
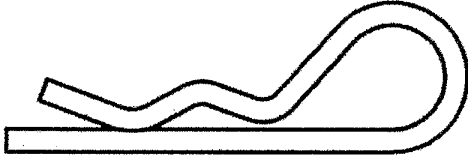


Qty. 2  
(44)Lock Washer, 5/16"



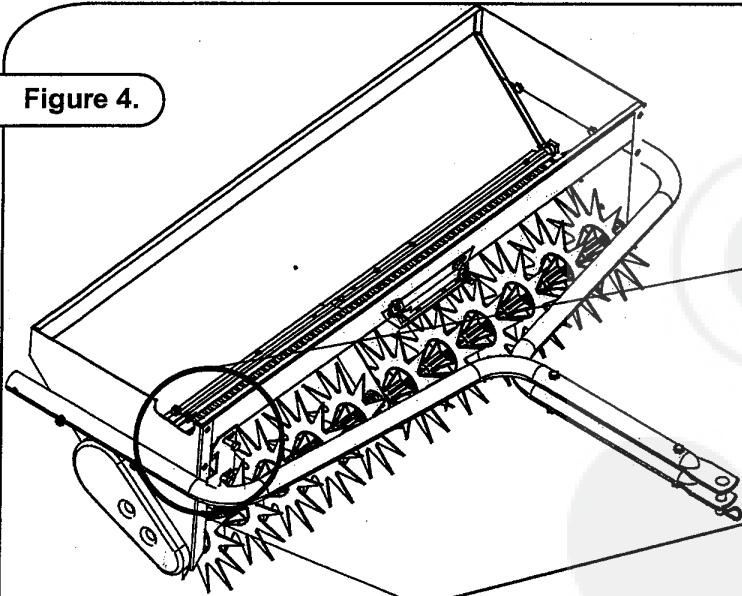
Qty. 1  
(50)Drawbar Pin  
1/2" x 2-1/2"

Qty. 1  
(51)Hairpin Cotter  
(NOT TO SCALE)



Towbars

**Figure 4.**



Qty. 2  
(46)Flat Washer, 5/16"

Qty. 2  
(31)Hex Bolt, 5/16" x 3/4"



Qty. 2  
(40)Hex Nut, 5/16"

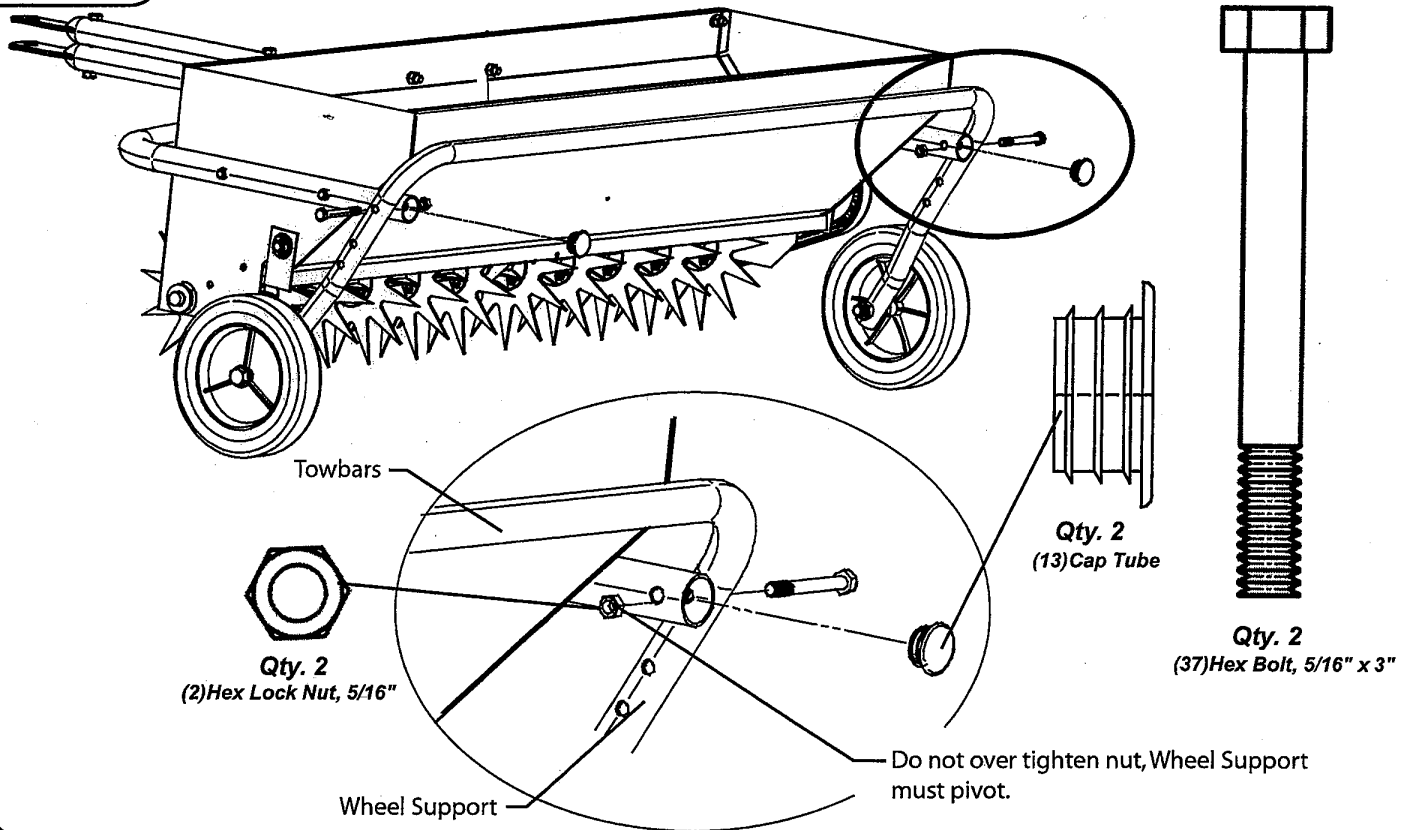


Qty. 2  
(44)Lock Washer, 5/16"

Hopper

Transport Plate

**Figure 5.**



**Figure 6.**

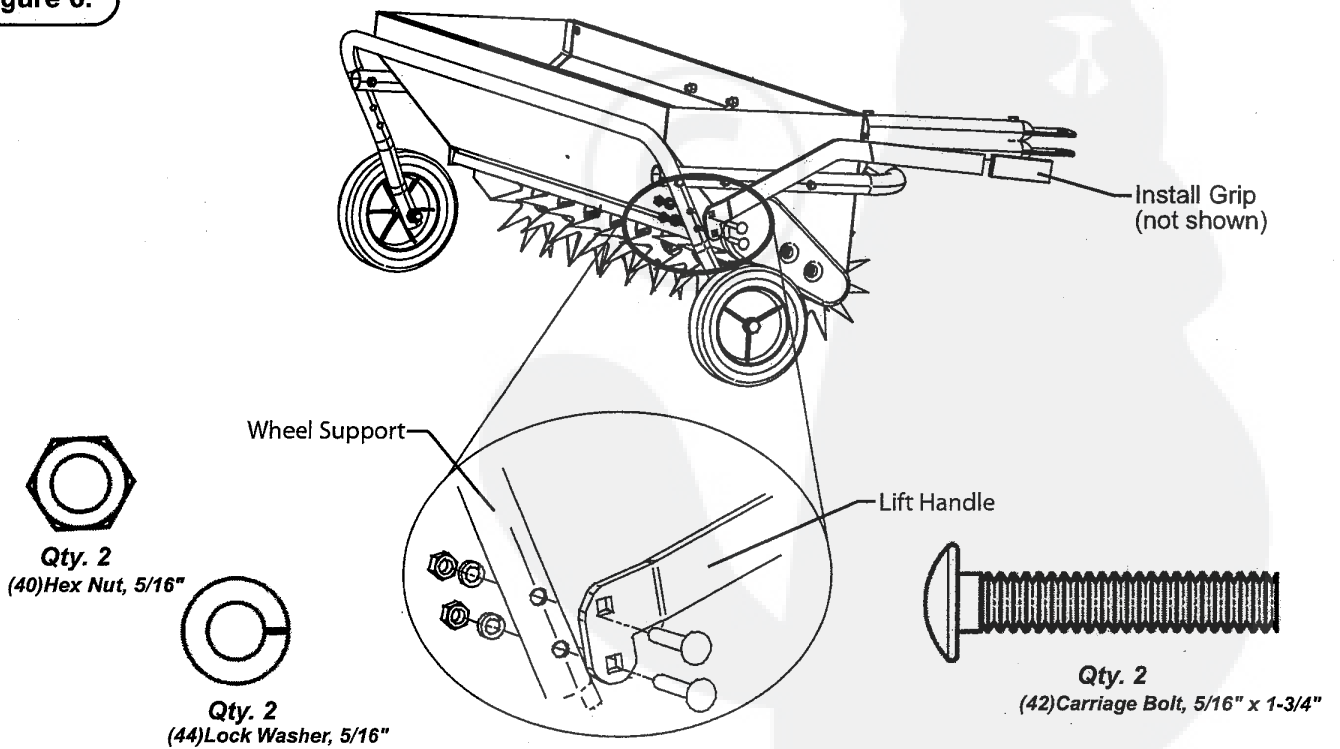
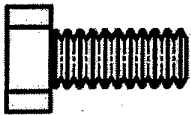




Figure 7.



Qty. 1  
(40)Hex Nut, 5/16"

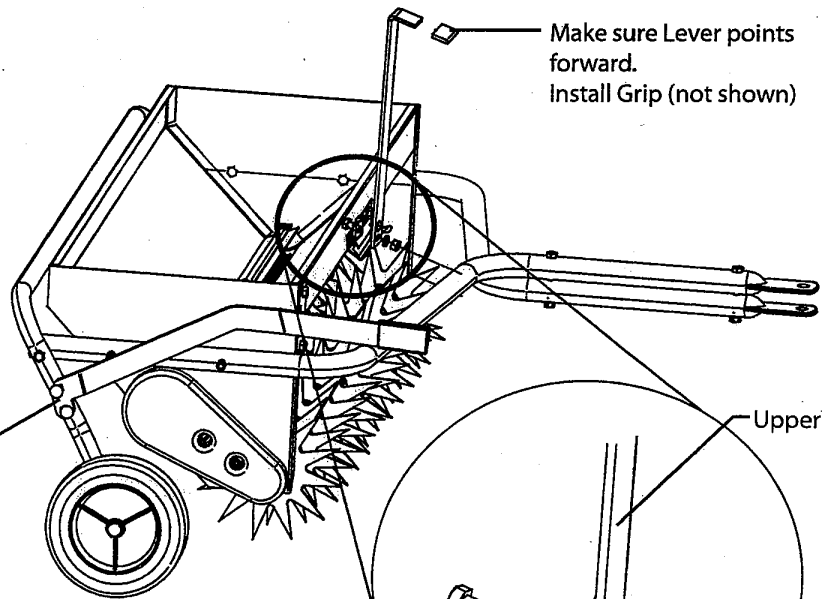


Qty. 1  
(31)Hex Bolt, 5/16" x 3/4"



Qty. 1  
(44)Lock Washer, 5/16"

Transport position



Make sure Lever points forward.  
Install Grip (not shown)

Upper Lever

Lower Lever

## OPERATION

### WHEN TO USE:

Your Aerator-Spreader should not be used when lawn conditions are too wet or too dry. This can be determined by digging a small amount of soil (about three inches deep) and checking it. If soil appears powdery and brittle- its too dry. Wait until a later date, after a rainfall. If soil appears damp, roll it up in the palm of your hand- if it forms a ball that doesn't break up when it hits the ground, it is too wet. Wait until a later date for soil to dry some. Ideally, the soil should fall apart.

**NOTE:** If soil is too wet, the aerator tines will penetrate too deep and your tractor could loose traction, causing lawn damage. If soil is too dry, the aerator tines will not penetrate soil properly.

### OPERATING TIPS:

Attach the Aerator-Spreader to your tractor using the 1/2" Drawbar Pin and Hairpin Cotter furnished (See Fig. 3). Pull Transport Handle towards tractor and lock into raised position (transport wheels are engaged) (See Fig. 7).

Set the Flow Control to proper setting using the Nylon Wing Nut (see Alternative Flow Control Setting Chart on p.10) and move the Control Lever to closed ("0") position.

Fill Hopper with material to be spread at operating site.

Break up all lumps as material as you fill the Hopper.

The recommended operating speed is slightly faster than a brisk walk- 3 to 5 MPH. Set the throttle/gear selector to obtain this speed. To obtain this speed Calibrate your tractor to 3 M.P.H. by:

Measure a distance of 20 feet on flat, level surface. Adjust tractor throttle and select a gear to cover this distance in 4.5 seconds.

To adjust for 4 m.p.h., cover same distance in 3.4 seconds.

Drive tractor/mower forward as you open the flow control with the Control Lever.



**CAUTION!** Avoid stopping unit with flow control in "OPEN" position- material will continue to flow through hopper opening. If fertilizer is deposited too heavily in a small area, soak down thoroughly with a garden hose to prevent burning of lawn.

Aerating tines must be in the lowered position in order for Aerator-Spreader to operate. Agitator is driven off of the aerator tines.

### IMPORTANT:

When backing up, carefully back STRAIGHT to avoid "jack-knifing", which can cause damage to your equipment.

**OPERATION Continued...**

**FLOW CONTROL ADJUSTMENT**

Open and Close: The material flow is shut off by moving Control Lever to the left and locking into "V" notch on calibration plate.

Flow Setting: To set the flow rate, put the Control Lever in the shut-off position (in "V" notch). Determine your required number setting as described below. Loosen the nylon wing nut and slide to the desired number setting and retighten the wing nut. Release the control strap and it will open to the pre-set position.

**DETERMINING FLOW CONTROL SETTING NUMBER**

**NOTE:** Fertilizer application rates as described are affected by humidity and the moisture content of the material; therefore, minor setting adjustments may be necessary to compensate for these conditions.

**APPLICATION RATE CHART**

MATERIAL TYPE	AVERAGE RECOMMENDED USAGE	FLOW CONTROL SETTING
<b>SEEDS:</b>		
Ky. Bluegrass	1 lb/1000 sq. ft.	4
Rye	2 lb/1000 sq. ft.	7
Tall Lawn & #31 Fescue	3 lb/1000 sq. ft.	12
<b>FERTILIZER:</b>		
Lawn	3.2 lb/1000 sq. ft.	5-1/4
Food(33-3-10)		
Weed & Feed(33-3-5)	3.2 lb/1000 sq. ft.	5-1/4

**ALTERNATIVE FLOW CONTROL SETTING**

To determine the required setting for materials not listed on chart, proceed as follows:

Determine from material bag, the amount of material to be spread over a designated area. Example: "The contents of this bag (25 lbs.) will cover 5000 square feet."

Determine the amount of material required to cover 100 square feet as follows:

- Add two zeros to bag weight. Example: 2500
- Divide this number by the number of square feet on the bag. Example: 2500 divided by 5000 = .5 pounds of material for 100 square feet. NOTE: To convert this weight to ounces, simply multiply by 16 (16 oz./lb) Example: .5 lb. x 16 = 8 oz.

Determine approximate Flow Control Setting by using chart below showing type of material to spread.

Measure off a distance of 40 feet in your yard. This is the distance your 30" spreader must travel in order to cover 100 square feet. (2.5 ft. (30") x 40 ft. = 100 sq ft.) For 40" spreader measure off a distance of 30 feet in your yard, the distance to cover 100 square feet. (3.33 ft. (40") x 30 ft. = 100 sq ft.)

Set the spreader flow control at the approximate flow control setting.

Place 5 pounds of material in the Hopper. Weigh the material before and after spreading 100 square feet to determine amount of material used.

Move unit to measure area, lower aerator tines, open Flow Control Lever. Drive the 40 ft. course, stop unit and close Flow Control Lever.

Remove and weigh remaining material. Subtract this weight from 5 pounds to determine material used: If too much material is used: Set Flow Control ONE number LOWER and try again. If too little material is used: Set Flow Control ONE number HIGHER and try again.

After determining proper setting always record the type of material and the setting for future use.

**ALTERNATIVE FLOW CONTROL SETTING CHART**

MATERIAL COARSENESS	APPROX. COVERAGE		APPROX. FLOW CONTROL
	Wt.	Sq. Ft. Cov.	
<b>FERTILIZER:</b>			
Very Coarse (large, heavy pellets, & grain)	.5lb.	100	9
	1.0lb.	100	12
	1.5lb.	100	15
Medium Coarse (Pellets & granules)	.5lb.	100	7
	1.0 lb.	100	10
	1.5 lb.	100	13
Light Material (Nitrogen, etc.)	.1 lb.	100	3 1/2
	.2 lb.	100	4 1/2
	.3 lb.	100	5 1/2
<b>SEEDS:</b>			
Large (Ky, 31 Fescue, etc.)	.3 lb.	100	12
	.5 lb.	100	16
	.7 lb.	100	19
Medium (Rye, etc.)	.2 lb.	100	7
	.4 lb.	100	11
	.6 lb.	100	14
Fine (Blugrass, Lawn Fescue, etc.)	.1 lb.	100	4
	.2 lb.	100	4 1/2
	.3 lb.	100	5

**MAINTENANCE:**

Should rust appear on any other part of your Aerator-Spreader, sand lightly to remove rust and coat lightly with enamel.

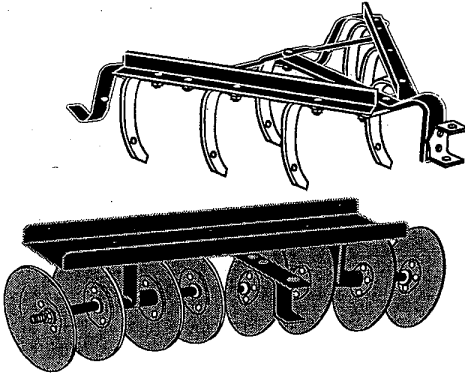
Apply a drop of lubricating oil to each nylon bearing (aerator tine shaft, agitator shaft, and wheels) before each use.

Be sure to remove all unused fertilizers from hopper immediately after use and clean with water.

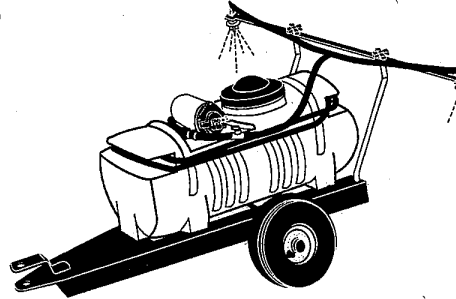
To prevent rust in aerator tines, apply a light coat of oil on the working areas of tines after each use.

After each use, service unit as described and store in a dry area, shielding tines to avoid injury.

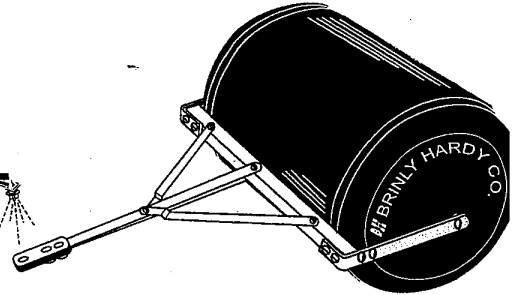
**Caring for the quality of your lawn  
with the products from  
Brinly-Hardy Company**



Brinly's garden tractor items offer the largest selection to turn your garden tractor into a year-round tool. We have box scrapers, blades, cultivators, disk harrows, and even a plow! Remember that a sleeve hitch is required to hook up these items to your garden tractor.



Brinly sprayers are designed to be easy to use, extremely accurate, and long lasting. Our in-line mounted tank design means that even the biggest tank is easy to maneuver and can fit through a garden gate. Each unit comes with a tractor-mounted on/off control.



No more rust or dents with these poly lawn rollers. These units are much easier to deal with than the steel versions. They have rounded end caps that won't tear or gouge the lawn when turning. Erase the harmful effects of front heaving and moles, or pack down newly sewn seed or sod.

**Limited Warranty**

Brinly-Hardy Company warrants only to the original retail purchaser that this product will remain free of defects in workmanship and materials under normal use and service for a period of two (2) years (NOTE: ninety (90) days for commercial or rental use) commencing with the date of purchase.

Any parts found to be defective within the warranty period will be replaced, with proof of date of purchase, at Brinly-Hardy Company's expense. Our obligation under this warranty is expressly limited to replacement or repair, at our option of parts, which are defective in material or workmanship within thirty (30) days of receipt of the parts. This warranty does not apply to damage caused by unreasonable use, including failure to provide necessary maintenance, nor does it apply to any transportation or labor charges.

WE MAKE NO OTHER EXPRESS WARRANTY NOR IS ANYONE AUTHORIZED TO MAKE ANY ON OUR BEHALF. ANY IMPLIED OR STATUTORY WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. WE SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND.

MADE IN THE U.S.A.  
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**Quality Insurance**

Dear Customer,  
We are very proud of our quality and endeavor to produce each product to meet high standards. Should your purchase not meet your expectations, we have a Quality Insurance Policy.

If you purchase a product and a part is missing or defective, please inform us of the problem on the "Comments" section of the Warranty Registration Card in this manual or online, or feel free to contact us toll free at 1-877-728-8224. PLEASE DO NOT RETURN THE PRODUCT TO THE STORE!

We will make every effort to ship a new replacement part to you within 24 hours at no charge.

Thank you,

Jane Hardy  
President,  
Brinly-Hardy Company

**WARRANTY REGISTRATION CARD**

To register your new product for warranty, please complete and return this card.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

Product Purchased: \_\_\_\_\_ Model#: \_\_\_\_\_

Packing# (on carton): \_\_\_\_\_

Where purchased: \_\_\_\_\_ Date: \_\_\_\_\_

Type of Tractor Owned: Make: \_\_\_\_\_

Model: \_\_\_\_\_

HP: \_\_\_\_\_

Size of Lawn: \_\_\_ 1/4-1/2acre \_\_\_ 1/2-1acre \_\_\_ 1-5 acre \_\_\_ 5+

Do you garden? \_\_\_ Use a tractor? \_\_\_ Tiller? \_\_\_

Your Occupation? \_\_\_\_\_

Your Email Address? \_\_\_\_\_

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