

SINCE 1839

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# OWNER'S MANUAL

## LAWN SWEEPER

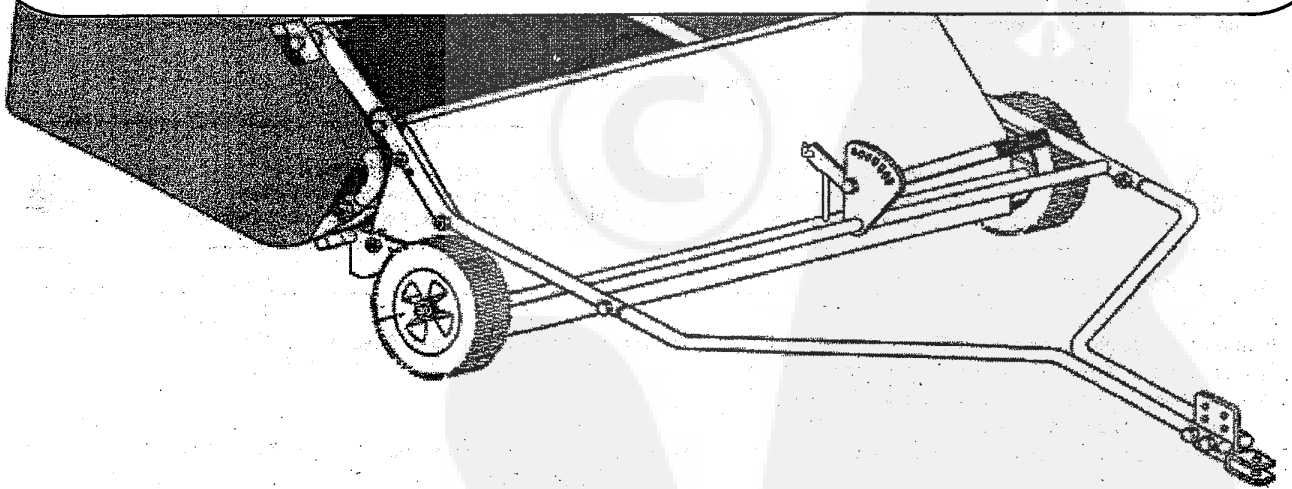
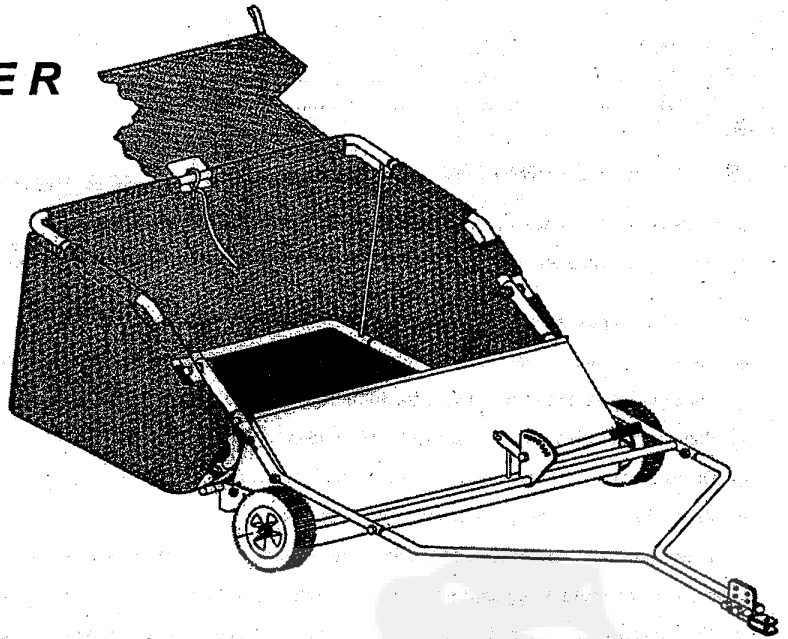
SWEeper MODEL:

**STS-423LX**

PATENT PENDING

- Assembly
- Installation
- Operation
- Repair Parts

For use with Riders  
and 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-1659-LJ

CONGRATULATIONS on your new Brinly-Hardy Sweeper! Your Sweeper 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 and the proper tools to service or repair your Sweeper.

Please read and retain this manual. The instructions will enable you to assemble and maintain your sweeper properly. And please, always observe the "Safety Rules".

## CUSTOMER RESPONSIBILITIES

Read and Observe the "Safety Rules".

Follow a regular schedule in maintaining, caring-for and using your Brinly-Hardy Sweeper.

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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!

This product is not designed for use in sand or gravel, or to carry extra weight.  
Lock nuts must be used where specified. They have a nylon insert in the hole where used.  
When backing - carefully back straight to avoid jackknifing, which could result in damage to equipment.

## OPERATING HINTS

Remove any large objects (Branches, Rocks, Wood, etc.) from area that is too big to be picked up by Sweeper.

Mow Lawn before Sweeping, especially when Leaves are present.

Windrow Grass or Leaves with Side Discharge Mowers before Sweeping.

For best results, Sweep only when conditions are DRY.

When Sweeping heavy amounts of leaves or grass, start with Sweeper adjusted in a HIGHER than recommended setting, LOWERING after each pass.



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

**HARDWARE REFERENCE**

This page is for reference use only  
All items shown full size unless otherwise specified

**Hardware Bag "A" (Part No. Z1710)**

- 45  
(2)Hex Bolt, 5/16"x 2-1/2"
- 37  
(2)Hex Bolt, 5/16x 1-1/2"
- 36  
(1)Hex Bolt, 5/16x 1"
- 44  
(1)Lock Pin
- 62  
(4)Carriage Bolt, 5/16"x 1-1/2"
- 41  
(1)Hitch Pin, 1/2" dia.
- 42  
(1)Large Hairpin Cotter
- 40  
(1)Lock Washer, 5/16"
- 32  
(1)Flat Washer, 5/16"
- 39  
(1)Hex Nut, 5/16"
- 9  
(10)Nylon Insert Lock Nut, 5/16"
- 43  
(1)Flat Grip  
(not shown to scale)
- 14  
(1)Lift Link  
(not shown to scale)

**Hardware Bag "B" (Part No. Z1691)**

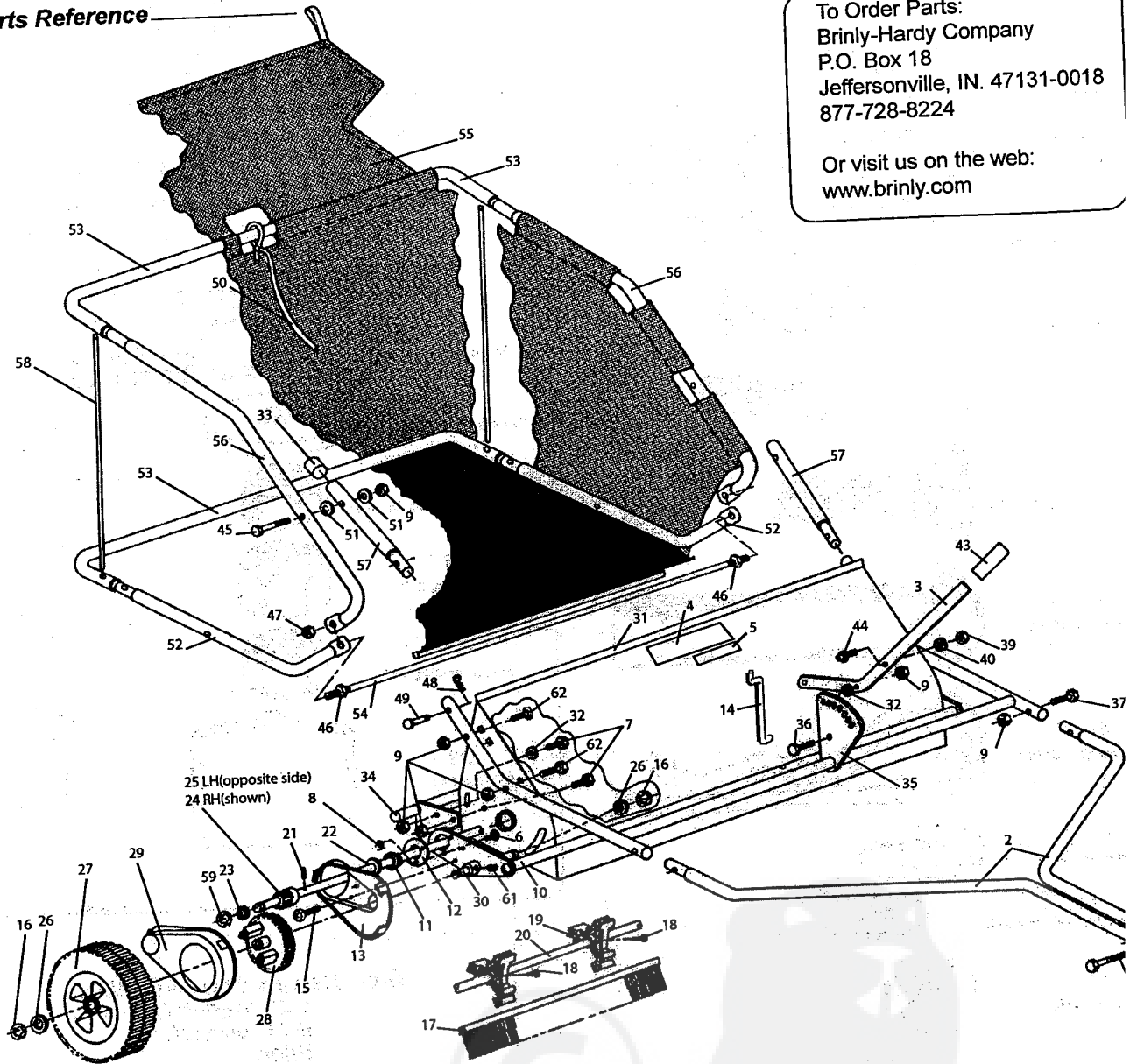
- 45  
(2)Hex Bolt, 5/16"x 2-1/2"
- 49  
(2)Clevis Pin, 5/16"x 1-1/2"
- 48  
(2)Small Hairpin Cotter
- 51  
(4)Special Flat Washer
- 9  
(2)Nylon Insert Lock Nut, 5/16"
- 46  
(2)Hex Nut, 3/8"
- 47  
(2)Hex Lock Nut, 3/8"
- 33  
(2)Vinyl Cap, 1"

**Tools Required for Assembly:**  
1/2" wrench (2)  
9/16" wrench (2)  
Pliers

Parts Reference

To Order Parts:  
Brinly-Hardy Company  
P.O. Box 18  
Jeffersonville, IN. 47131-0018  
877-728-8224

Or visit us on the web:  
[www.brinly.com](http://www.brinly.com)



## Parts List

REF. NO.	PART NO.	DESCRIPTION	QTY.	
1	R-2251-10	Hitch Clevis Assembly	1	
2	R-2254-10	Tow Tube	2	
3	R-2270-10	Lift Handle	1	
4	B-5924	Logo Decal	1	
5	R-1946	Instructions Decal	1	
6	11M0808P	Carriage Bolt, 1/4" x 1/2"	6	
7	2M1012P	Hex Bolt, 5/16" x 3/4"	6	
8	B-1673P	Hex Lock Nut, 1/4"	6	
***	9	B-4786	Nylon Insert Lock Nut, 5/16"	10
10	R-2415-10	Lower Pivot Assembly	1	
11	R-2288	Bearing Assembly	2	
12	R-2289-10	Bearing Retainer	2	
13	R-2293-1	Inner Dust Shield	2	
*	14	R-2416-01	Lift Link	2
15	R-2321	Self-Taping Screw #12x3/8"	4	
16	F-577	"E" Ring, 5/8"	4	
17	R-2205	Brush Section	6	
18	R-2260	Thread Form Screw, #12	4	
19	R-2281	Brush Holder	4	
20	R-2259-01	Brush Axle	1	
21	R-2261	Dowel Pin, 1/4" x 1"	2	
22	R-2262	Washer, 5/8" I.D. x 1-3/8"	2	
23	R-2263	Washer, 5/8" I.D. x 7/8"	2	
24	R-2279-LH	Drive Pinion, Left Hand	1	
25	R-2279-RH	Drive Pinion, Right Hand	1	
26	B-5456	5/8" Machinery Bushing	4	
27	R-2265-BT	Wheel, 12" x 3" Bar Trd.	2	
28	R-2280	Drive Gear, 60 Tooth	2	
29	R-2293-2	Outer Gear Cover	2	
30	R-2306-01	Wheel Axle	2	
31	R-2413-10	Brush Housing Assembly	1	
*	32	45M1111P	5/16" Flat Washer	3
**	33	B-4107	Vinyl Cap, 1" dia.	2
34	R-2296-10	Hamper Stop Assembly	1	
35	R-2290-10	Upper Frame Assembly	1	
*	37	2M1024P	Hex Bolt, 5/16" x 1-1/2"	2
*	39	30M1000P	Hex Nut, 5/16"	1
*	40	40M1000P	Lock Washer, 5/16"	1
*	41	B-3861	Hitch Pin, 1/2" dia.	1
*	42	D-146P	Hairpin Cotter, Large	1
*	43	R-1882	Flat Grip	1
*	44	R-1945	Lock Pin	1
***	45	2M1040P	Hex Bolt, 5/16" x 2-1/2"	4
**	46	30M2000P	Hex Nut, 3/8"	2
**	47	B-1675P	Lock Nut, 3/8"	2
**	48	B-983	Hairpin Cotter, Small	2
**	49	R-2303	Clevis Pin, 5/16" x 1-3/8"	2
50	R-2304	Hamper Pull Rope	1	
**	51	R-618	Special Washer, 5/16"	4
52	R-1806-10	Lower Tube	2	
53	R-2194-10	Rear Tube	2	
54	R-2195	Hamper Stop Rod	1	
55	R-2299	Hamper/Wind Screen	1	
56	R-2300-10	Hamper Side Tube, Upper	2	
57	R-2301-10	Hamper Mount Tube	2	
58	R-2307	Hamper Spring Rod	2	
59	R-2320	External Retaining Ring, 5/8"	2	
61	R-2257	Set Screw, 1/4"	2	
*	62	11M1024P	Carriage Bolt, 5/16" x 1-1/2"	4

\* - Hardware Bag "A"

\*\* - Hardware Bag "B"

\*\*\* - Both Hardware Bags

## Notes:

\* 36 2M1016P Hex Bolt, 5/16" x 1" 1

## FRONT FRAME & LIFT ASSEMBLY

Figure 1. Use Hardware Bag "A"

1. Rotate the **Lift Link**(14) upwards to a vertical position as shown.
2. Position the **Upper Frame Assembly**(35) over the top of the **Brush Housing Assembly**(31) as shown. Align the holes of the **Upper Frame Assembly**(35) and the **Brush Housing Assembly**(31). From the inside of the Brush Housing, install four- 5/16" x 1-1/2" **Carriage Bolts**(37).
3. Install four **Nylon Insert Lock Nuts**(9) finger tight. With a 1/2" wrench, tighten all four **Nylon Insert Lock Nuts** at this time.

Figure 1.

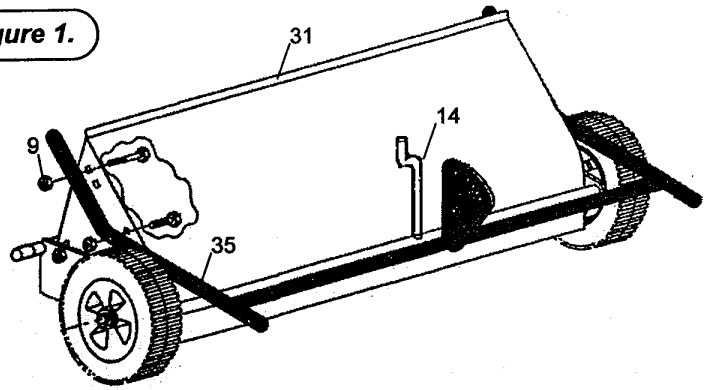


Figure 2.

4. Locate the **Lift Handle**(3). Insert the **Lock Pin**(44) with the threaded end through the upper hole in Lift Handle as shown. Secure using a 5/16" **Lock Washer**(40) and **Hex Nut**(39). Do not use a Lock Nut! Hold the pin with pliers and with a 1/2" wrench tighten securely.
5. Insert the **Flat Grip**(43) over the end of the Lift Handle(3).
6. Insert the end of the **Lift Link**(14) through the opening in the **Lift Handle**(3).
7. Place a 5/16"x 1" **Hex Bolt**(36) in the hole on the right side (looking forward toward the tractor) of the Lock Plate. On the left side, place a 5/16" **Flat Washer**(32) on the Hex Bolt. Install the **Lift Handle**(3) and secure with a **Nylon Insert Lock Nut**(9). NOTE: The finished assembly (see fig. 3) will have a washer between the Lift Handle and the Lock Plate. The Lock Pin will be in one of the 7 holes of the Lock Plate. Proper tension of the Lock Nut will permit easy height adjustment.

Figure 2.

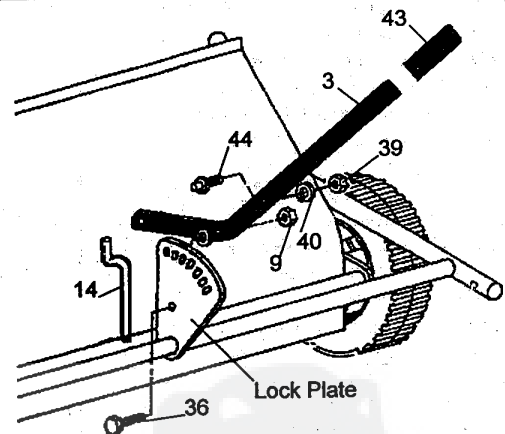
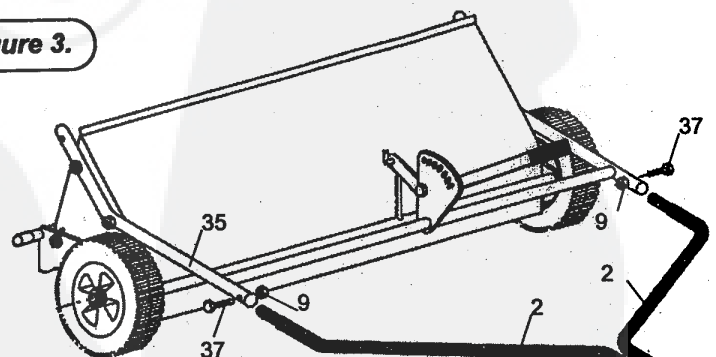


Figure 3.

8. Locate the two **Tow Tubes**(2). One end has a reduced diameter with a single hole. Insert this end into the **Upper Frame Assembly**(35) as shown. Install two 5/16" x 1-1/2" **Hex Bolts**(37). Install two **Nylon Insert Lock Nuts**(9) finger tight.

Figure 3.



## HITCH ASSEMBLY

Figure 4a 4b. Use Hardware Bag "A"

9. Locate the **Hitch Clevis Assembly**(1) and notice the series of adjusting holes. This part assembles BETWEEN the **Tow Tubes**(2) as shown.

**NOTE:** *Hitch Clevis Assembly must be positioned according to your tractor or riding mower drawbar height!*  
 (The Drawbar, is the part of your Tractor/Riding Mower, extending rearward, with a hole furnished to mount attachments.) Refer to the diagrams on this page to help you determine your drawbar height.

Figure 5.

10. With your Tractor/Riding Mower on a flat, level surface (concrete floor, asphalt driveway, etc.) as shown at the bottom of the page, position this manual at the drawbar and measure its height from ground to top surface.
11. Using the diagram at the right of the page, determine the set of holes on the **Sweeper Hitch Clevis Assembly**(1) required for your particular use.
12. Position the **Hitch Clevis Assembly**(1) BETWEEN the **Tow Tubes**(2). Align the holes selected and assemble using two  $\frac{5}{16}$ " x 2- $\frac{1}{2}$ " **Hex Bolts**(45) and two **Nylon Insert Lock Nuts**(9). Using two  $\frac{1}{2}$ " wrenches, tighten these and the two bolts previously assembled in step #8.
13. Insert the **Hitch Pin**(41) Through the front holes of the Hitch Clevis Assembly and secure with the **Large Hairpin Cotter**(42).

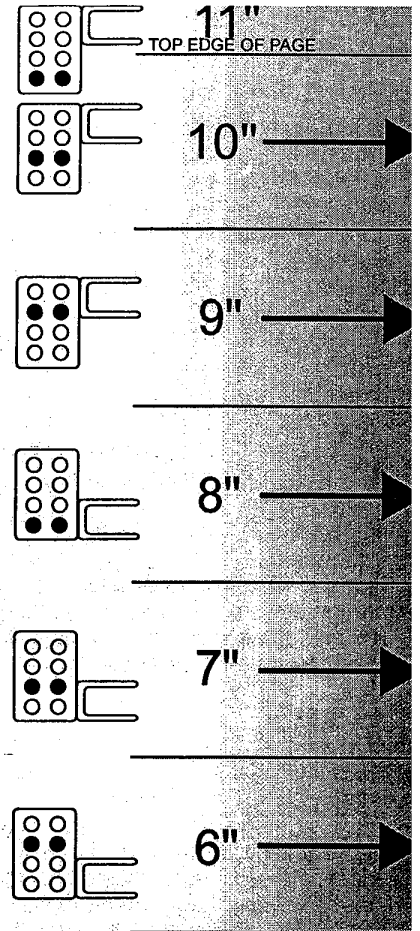
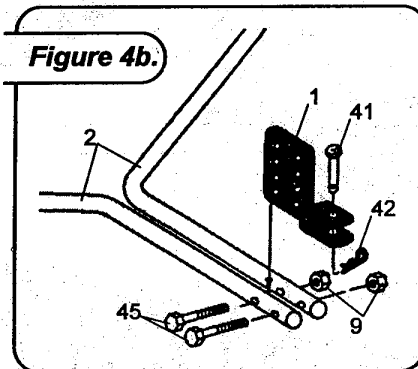
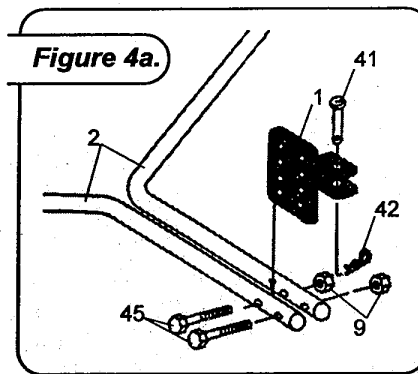
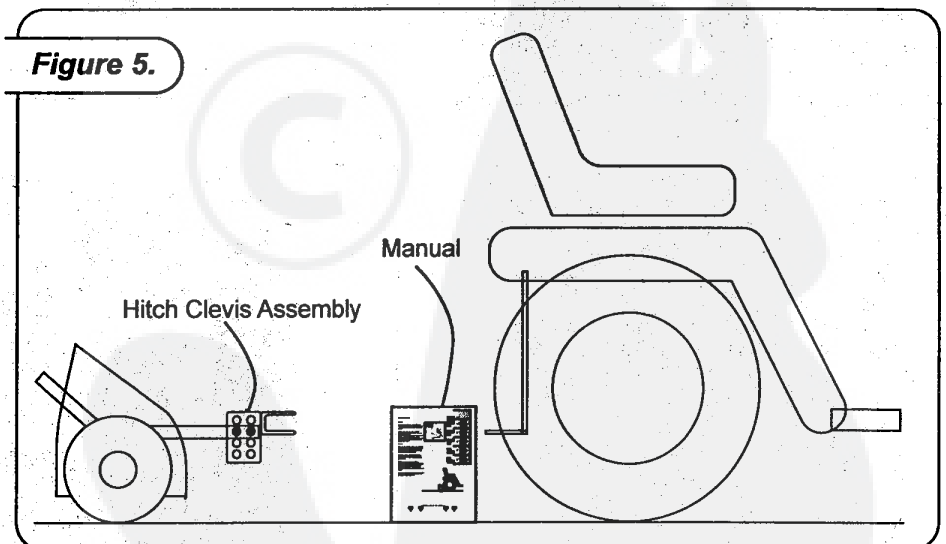


Figure 5.



BOTTOM EDGE TO GROUND



## HAMPER ASSEMBLY

Figure 6. Use Hardware Bag "B"

14. Locate the two "U" shaped **Rear Hamper Tubes**(53). Carefully feed one **Rear Tube** through the UPPER sewn pocket at rear of Hamper(55).  
*Tip: Material will need to be "bunched" together as **Rear Tube** is fed through.*  
Lay the other **Rear Tube** at the bottom rear of Hamper Base.
15. Push the **Hamper Stop Rod**(54) through the formed plastic guide on front edge of Hamper Base. Thread a  $\frac{3}{8}$ " **Hex Nut**(46) on approximately  $\frac{3}{4}$ " at each end of the **Hamper Stop Rod**. Do not use a Lock Nut!

Figure 7.

16. Slide the two **Upper Hamper Side Tubes**(56) through sewn pockets at each side of Hamper (reduced ends first). Insert reduced ends of **Upper Hamper Side Tubes** into **Rear Tube**(53).

Figure 8.

17. Insert the reduced end of the **Lower Tube**(52) into the lower **Rear Tube**(53).
18. Align the holes in the flattened ends of the Upper & Lower Hamper Side Tubes(52,56). Insert **Stop Rod**(54) through holes at each side.  
*Tip: It may be necessary to "rotate" the Side Tubes OUT to complete the assembly.*  
Secure with two  $\frac{3}{8}$ " **Hex Lock Nuts**(47). Using a  $\frac{9}{16}$ " wrench, tighten by holding the **Stop Rod**(54) with Pliers.
19. Snap buttons at each side of Hamper at lower front corners (not shown).
20. Open Hamper(55), tightening Hamper material. Align the small holes in the **Rear Hamper Tubes**(53) with the holes in the **Side Tubes**(52,56). Insert the two **Hamper Spring Rods**(58) in the small holes located in the bottom tubes.  
*Tip: Flex (bow out) Hamper Spring Rod while inserting the rod into the holes on underside of the Upper Tubes.*

Figure 6.

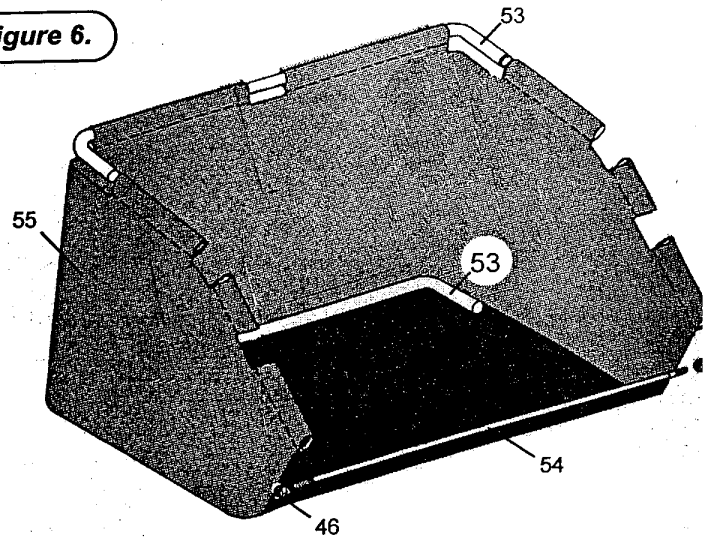


Figure 7.

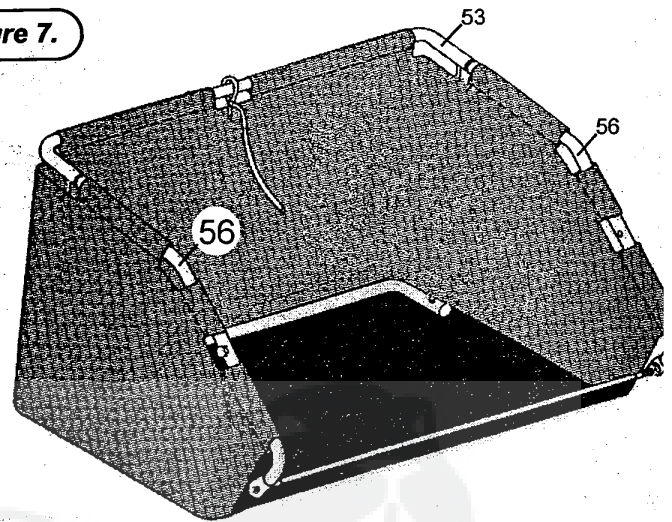
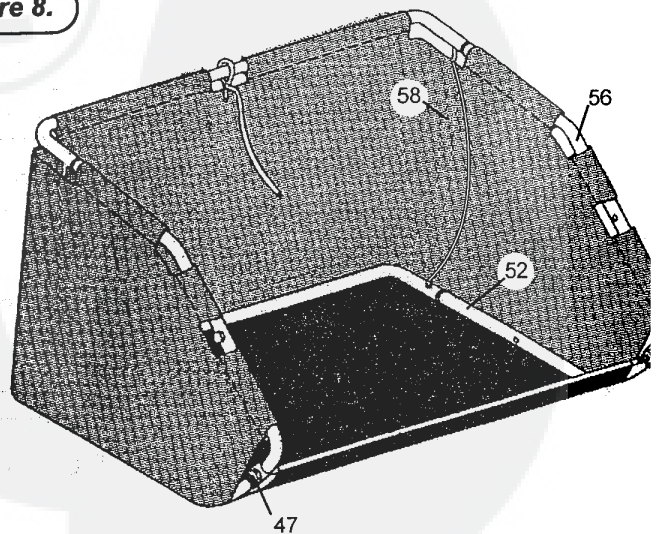


Figure 8.



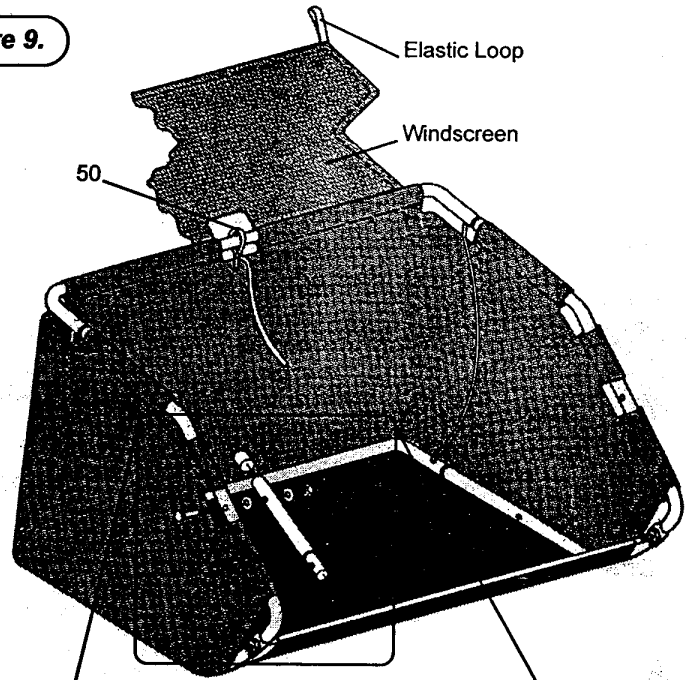


**HAMPER ASSEMBLY cont.**

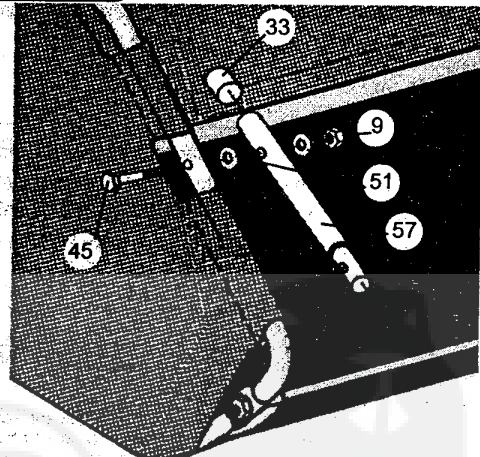
**Figure 9 & 10. Use Hardware Bag "B"**

21. Notice the holes through the Upper Hamper Side Tubes(56), mid way up. (Hamper has cutout in this area)
22. Insert 5/16" x 2-1/2" **Hex Bolts(45)** through these holes from the **OUTSIDE**.
23. Slide a 5/16" **Special Washer(51)** over Hex Bolt(45).
24. Locate the two **Hamper Mount Tubes(57)** and install them onto the Hex Bolts(45).
25. Slide on another **Special Washer(51)** and secure with a **Nylon Insert Lock Nut(9)**. Using two 1/2" wrenches, tighten all the nuts. **Do not overtighten! Hamper Mount Tubes must be free to pivot during assembly and operation!**
26. Position the completed Hamper at rear of Sweeper. Align the reduced ends of the Hamper Mount Tubes(57) with openings of the Upper Frame Assembly(35) and slide in. Align holes and secure with two 5/16" **Clevis Pins(49)** and **Small Hairpin Cotter(48)**.
27. Insert two **Vinyl Caps(33)** over ends of Hamper Mount Tubes.
28. Tie the **Hamper Pull Rope(50)** around the upper Rear Tube(53) at cutout in Hamper.  
*Tip: End of Rope can be tied to rear of Tractor/Riding Mower for easy access. To operate, pull forward on Rope, and Hamper must pivot freely.*
29. Secure **Windscreen** by placing **Elastic Loop** around inside nut and washer as shown below. (figure 10a & 10b)

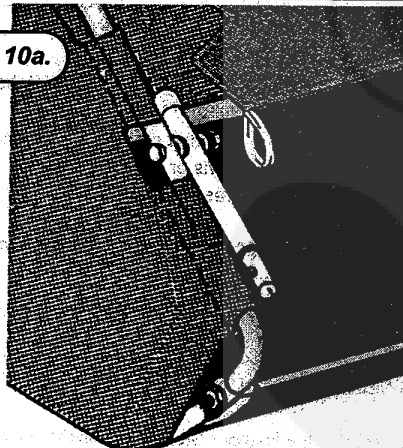
**Figure 9.**



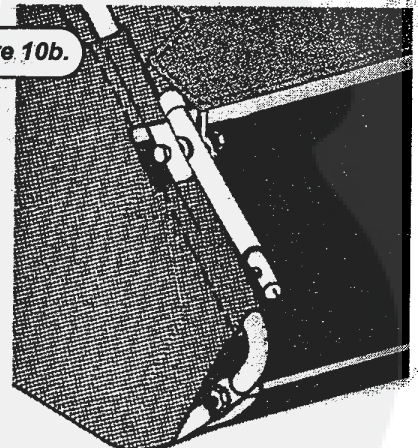
**Figure 10.**



**Figure 10a.**



**Figure 10b.**



## STORAGE

Figure 11.

**Your Sweeper can be stood up and stored in a minimum amount of space.**

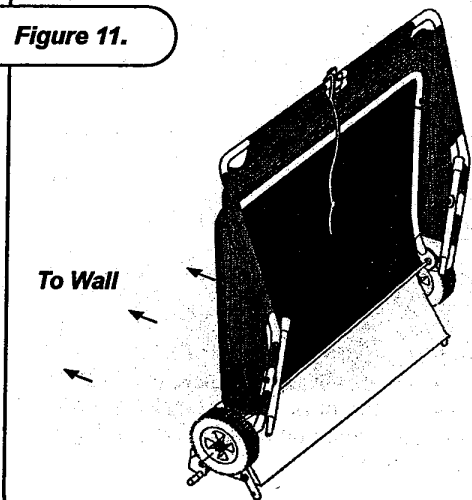
Remove Hamper by pulling **Clevis Pins(49)** from **Hamper Mount Tubes(57)** and removing.

Remove the two **Hamper Spring Rods(58)** from the rear of Hamper and collapse Hamper (**Rear Tubes meet at front, against one another**).

Roll Sweeper to area to be stored (*ex. back-up to wall*). Grasp Hitch Clevis Assembly and raise until Sweeper is in a vertical position, resting on Tubes at rear of Sweeper (**Brushes towards you**).

Hang the collapsed Hamper (**Rear Tubes**) over opening in **Hitch Clevis Assembly(1)** and replace Drawbar Pin and Hairpin Cotter (*as shown*).

Figure 11.



### MAINTENANCE

The key to years of trouble-free service is to keep your Sweeper clean and dry.

Never allow wet material to remain in Hamper for extended periods of time.

Occasionally check all moving parts for free movement and, if necessary, lubricate with oil.

Should rust develop, sand lightly and then paint area with enamel.

Periodically check all fasteners for tightness.



### IMPORTANT:

Avoid over filling Hamper, especially when picking up freshly mowed grass

Extremely heavy loads will be difficult to dump. Fill to capacity that is comfortable for you to dump.

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

To remove Hamper, pull the two Clevis Pins(49) from Hamper Mount Tubes(57) and slide out.



### TRACTOR/RIDING MOWER SPEED

The faster the Tractor/Riding Mower speed the further the material is thrown into Hamper. Operate at a speed that will throw material to back of Hamper. Under normal conditions, 3-4 M.P.H. or the speed of a brisk walk.

To calibrate your tractor to 3 m.p.h.:

Measure a distance of 20 feet on a 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 the same measured distance in 3.4 seconds.



### OPERATION:

#### BRUSH HEIGHT ADJUSTMENT

Adjust Brush Tip Height by pulling OUT on Lift Handle(3) and moving Lift Handle FORWARD to RAISE Brush height or BACK to LOWER Brush height. Release Lift Handle and position Lock Pin into nearest hole.

**LOW SETTINGS:** on Ground to 1" above (for smooth surfaces such as Driveways, Parking Lots, and Sidewalks).

**MEDIUM SETTINGS:** 1" to 2" above Ground ( for Mowed Lawns under normal conditions or Light Leaves).

**HIGH SETTINGS:** 2" to 3" above Ground (for High Grass, Heavy Leaves or Heavy Grass Clippings).

**IMPORTANT:** having Brushes too low for sweeping conditions causes Excessive Wheel Slippage. For maximum performance, operate Sweep Brushes adjusted as high as possible for Sweeping conditions.

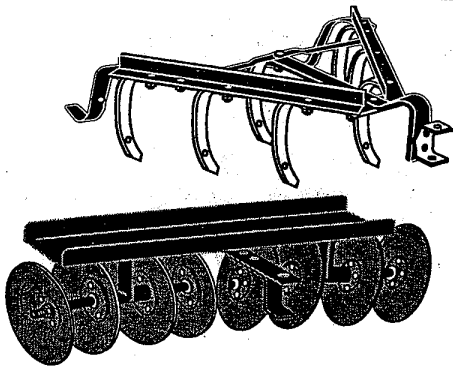


### HAMPER LEVELING

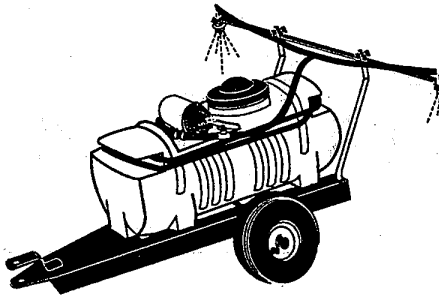
Observe the Ground Clearance at Rear of Hamper, WITH THE SWEEPER BRUSH ADJUSTED FOR YOUR SWEEPING CONDITION.

Hamper Adjustment is made by loosening (slightly) the four Bolts securing the Hamper Stop Assembly(34) located at rear of Brush Housing Assembly(31). Move Cross Tube UP to RAISE Hamper or move Cross Tube DOWN to LOWER Hamper.

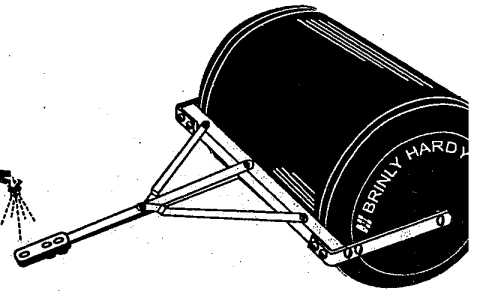
Caring for the quality of your lawn  
with the products from  
**Brinly-Hardy Company**



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 truning. 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.  
BRINLY-HARDY COMPANY TOLL-FREE 1-877-728-8224

Register Online at: [www.brinly.com](http://www.brinly.com)

#### 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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