

SINCE 1839

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OWNER'S MANUAL

DETHATCHER KIT

MODEL:

DK-422LX

FOR USE WITH SWEEPER MODELS:

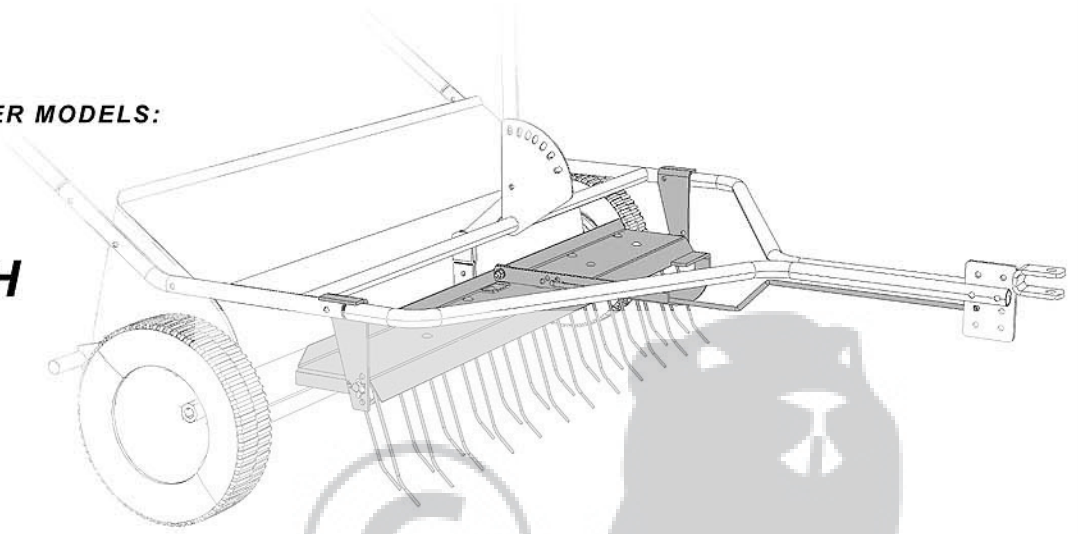
STS-422LX

STS-423LX

STS-423LXH

- 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

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

L-1660-LX.00

CONGRATULATIONS on your new Brinly-Hardy Dethacher Kit! Your kit 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 and Dethacher Kit.

Please read and retain this manual. The instructions will enable you to assemble and maintain your dethacher 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 Products.

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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 w/Dethacher Kit.

Mow Lawn before Sweeping, especially when Leaves are present.

For best results, Sweep only when conditions are DRY.

To Dump load, carefully back up to pile and pull Rope until material is clear of Hamper, then drive away from pile. Release Rope to return Hamper.



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

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Hardware Bag "A" (Part No. Z1689)

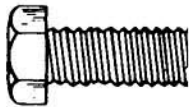
9
(13) Carriage Bolt, 5/16" x 3/4"




10
(1) Carriage Bolt, 5/16" x 1"




11
(2) Hex Bolt, 5/16" x 3/4"




13
(16) 5/16" Nylon Lock Nut




12
(3) 5/16" Flat Washer



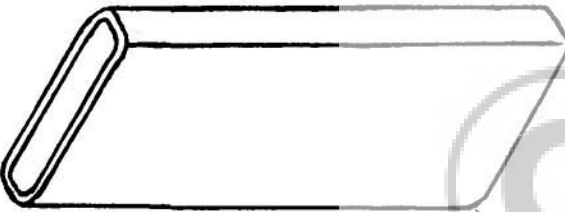
16
(12) Special Washer (.390 i.d)



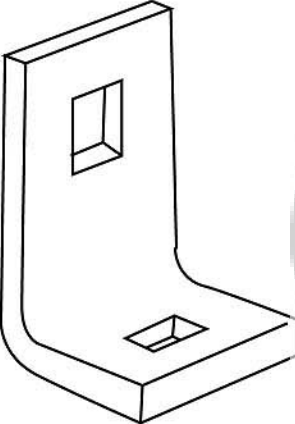
14
(2) Hairpin Cotter



15
(1) Flat Grip (5/16" x 4")
not to scale

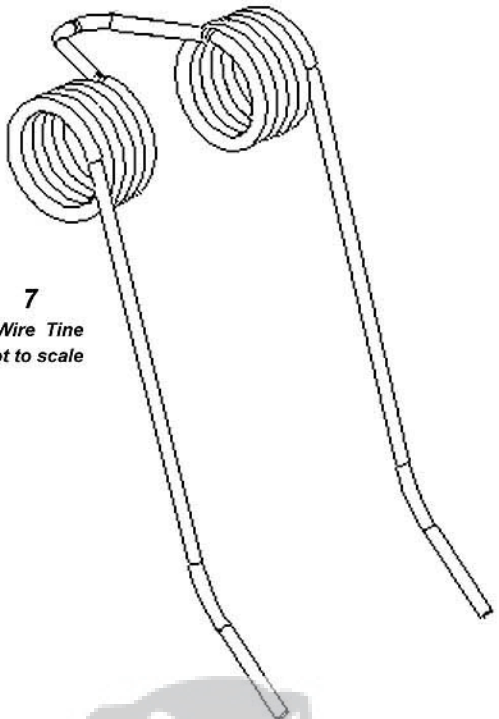


8
(1) Pivot Bracket
not to scale



Hardware Bag "B" (Part No. Z1688)

7
(12) Wire Tine
not to scale



Tools Required for Assembly:

- * 1/2" wrench (2)
- * Pair slip joint pliers
- * Level
- * Tape Measure



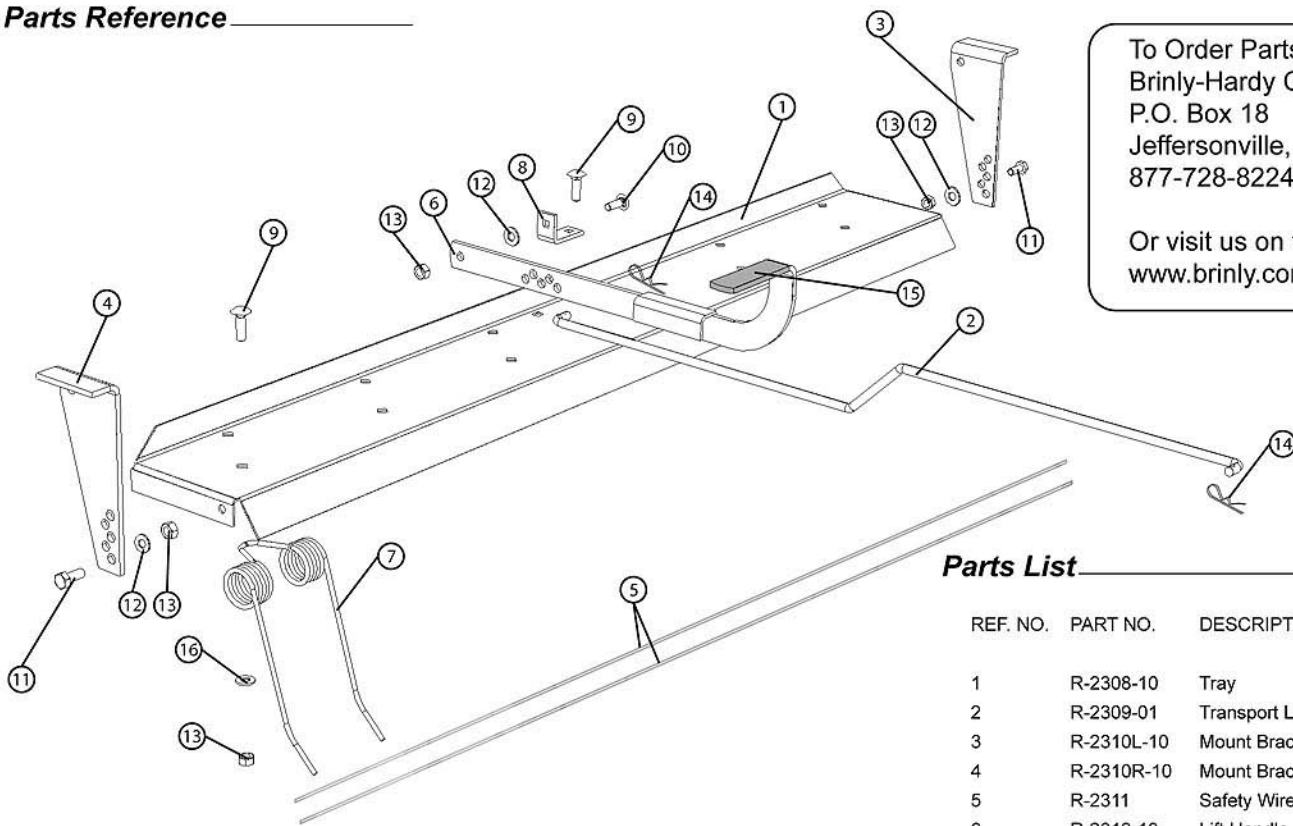
IMPORTANT!

This unit mounts to your STS-422 LX 42" Lawn Sweeper. Make sure your Sweeper Hitch Clevis Assembly is assembled as called out in it's Owner's Manual (Page 7, Fig. 4 & 5).



IMPORTANT: To insure proper adjustment of Dethatcher Kit, the Sweeper Upper Frame Assembly must be Parallel to Ground.

With your Tractor/Riding Mower on a flat, level surface, attach the Sweeper and adjust the Lift Handle of Sweeper to position Brushes approximately 1" off ground. Using a Level, check Upper Frame Assembly for "level" FRONT TO BACK. Adjust the Hitch Clevis Assembly of Sweeper UP or DOWN to maintain "level" position of Frame. (Refer to Pg. 6, Fig 6 of Sweeper Manual).



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

Parts List

| REF. NO. | PART NO. | DESCRIPTION | QTY. | |
|----------|------------|---------------------|----------------------------|----|
| 1 | R-2308-10 | Tray | 1 | |
| 2 | R-2309-01 | Transport Link | 1 | |
| 3 | R-2310L-10 | Mount Bracket, L.H. | 1 | |
| 4 | R-2310R-10 | Mount Bracket, R.H. | 1 | |
| 5 | R-2311 | Safety Wire | 2 | |
| 6 | R-2312-10 | Lift Handle | 1 | |
| ** | 7 | R-628 | Wire Tine | 12 |
| * | 8 | R-2315-10 | Pivot Bracket | 1 |
| * | 9 | 11M1012P | 5/16" x 3/4" Carriage Bolt | 13 |
| * | 10 | 11M1016P | 5/16" x 1" Carriage Bolt | 1 |
| * | 11 | 2M1012P | 5/16" x 3/4" Hex Bolt | 2 |
| * | 12 | 45M1111P | 5/16" Flat Washer | 3 |
| * | 13 | B-4786 | 5/16" Nylon Lock Nut | 16 |
| * | 14 | B-983 | Hairpin Cotter | 2 |
| * | 15 | R-1882 | Flat Grip (5/16" x 4") | 1 |
| * | 16 | R-618 | Special Washer (.390 i.d.) | 12 |

** - Hardware Bag "A" - Z-1690

** - Hardware Bag "B" - Z-1688

! MAINTENANCE

The key to years of trouble-free service is to keep your Sweeper and Dethacher Kit 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.

! 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:

The use of the Dethatcher Sweeper combination will accomplish Thatch removal and Sweeping at the same time. When adjusted properly, the Dethatcher is designed to comb through your lawn flipping out harmful Thatch and collecting it in the Hamper. Tines can be lowered to actually contact ground for more aggressive operation (such as seedbed preparation, etc.). Refer to Fig. 6. For best results Lawn should be normal height (not too high) and relatively dry prior to Dethatching. If you prefer to operate Sweeper only, simply move Lift Handle to vertical position (Tines facing to REAR).

FRONT FRAME & LIFT ASSEMBLY

Figure 1. Use Hardware Bags "A" & "B"

1. Lay the **Tray**(1) upside down. The front of the Tray will have three sides (flanges) facing **UP**.
 2. Assemble the twelve **Wire Tines**(7) to underside of **Tray**(1) as shown using **5/16" x 3/4" Carriage Bolts**(9), **Special Washers**(16 - over "U" loops in Tines) and **5/16" Nylon Lock Nuts**(13).
- NOTE: Center hole in back row of Tray(1) (fourth hole from end) is for the Pivot Bracket later in step 6.*
3. With Tine Tips **FORWARD** and positioned **PARALLEL** with front flange of **Tray**(1), tighten all securely.

Figure 1.

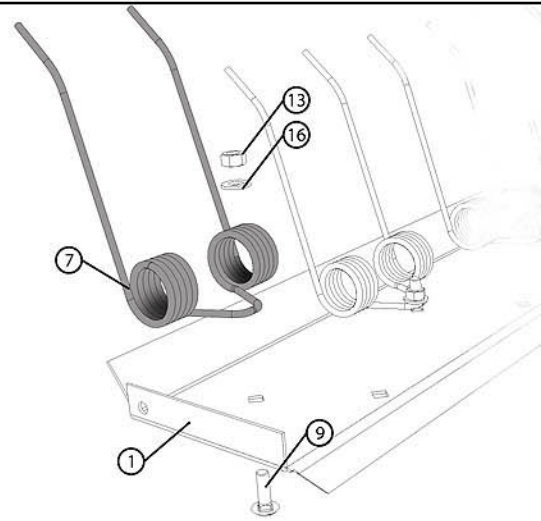


Figure 2.

4. Feed and center each Safety Wire through the two rows of **Wire Tines**(7) (inside of coils) to opposite sides.
5. Using Pair of Pliers, bend both ends of each **Safety Wire**(5) as shown in Fig. 2.

NOTE: Safety Wires connect all Wire Tines together in case one loosens or breaks.

Figure 2.

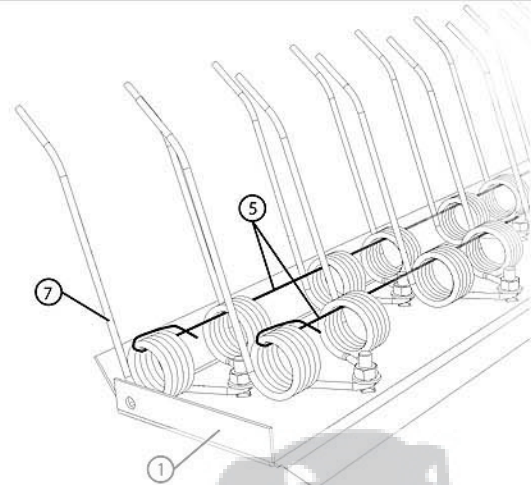
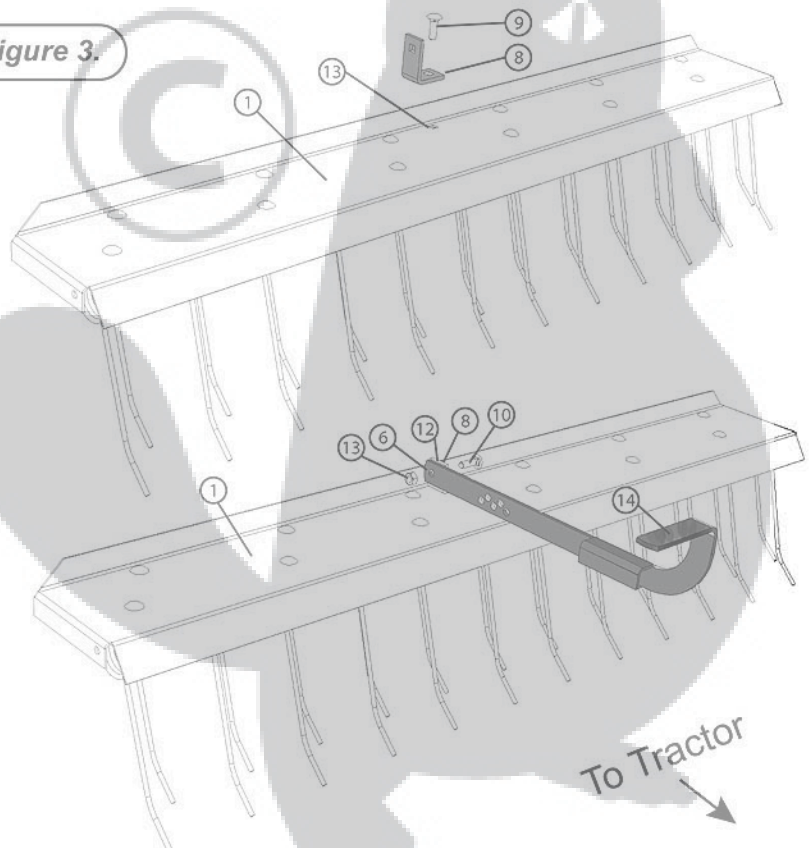


Figure 3.

6. Attach **Pivot Bracket**(8 - short formed leg against the tray as shown, long leg to face left side) to **center hole** at back of the **Tray**(1).
7. Secure using **5/16" x 3/4" Carriage Bolt**(9) and **5/16" Lock Nut**(13). Tighten securely.
8. Attach **Lift Handle**(6) to outside of **Pivot Bracket**(8) using **5/16" x 1" Carriage Bolt**(10), **5/16" Flat Washer**(12 - between Pivot Bracket and Lift Handle) and **5/16" Nylon Lock Nut**(13). Tighten until Lift Handle is barely free to move.
9. Slide **Flat Grip**(14) over end of Lift Handle.

Figure 3.



HITCH ASSEMBLY

Figure 4. Use Hardware Bag "A"

9. Remove the two 5/16" x 1-1/2" **Hex Bolts** attaching Tow Tubes and Upper Frame Assembly of Sweeper (at sides).
10. Attach the Left and Right-hand Mount Brackets (3 & 4) to inside of Tow Tubes on Sweeper using the previously removed hardware. (FINGER TIGHTEN ONLY)
11. Notice that the formed legs on **Mount Brackets** (3&4) assemble over top of Tow Tubes and the "straight" edge is to front of Sweeper (lower group of adjusting holes FORWARD).

PLEASE BE SURE YOU HAVE READ THE NOTE ON PAGE 3 BEFORE CONTINUING.

Figure 5.

12. Position the previously assembled Dethatcher inside Tow Tubes with Dethatcher Tine Tips facing FORWARD.
13. Notice the series of adjusting holes on the **Right and Left-hand Mount Brackets** (3&4). Measuring from Ground UP, locate the holes at each side that are approximately 6-1/2" (*this page has a large arrow with a 6-1/2" mark for your convenience*).

14. Position the Dethatcher **Tray** (1) so the holes at sides line up with the selection made in step 13.
15. Attach at these holes using two 5/16" x 3/4" **Hex Bolts** (11), 5/16" **Flat Washers** (12 - between Tray and Mount Brackets) and 5/16" **Lock Nuts** (13). Tighten both sides until Dethatcher Tray is barely free to pivot. (TIGHTEN FASTENERS FROM STEP 10)

Figure 6.

16. Connect **Transport Link** (2) to front hole in Sweeper Hitch Clevis Assembly (directly above or below Tow Tubes as shown) and secure with small **Hairpin Cotter** (14).
17. Raise **Lift Handle** (6) to vertical position and attach opposite end of **Transport Link** (2) into CENTER adjusting hole in **Lift Handle** (6). Secure with other **Hairpin Cotter** (14).

Figure 4.

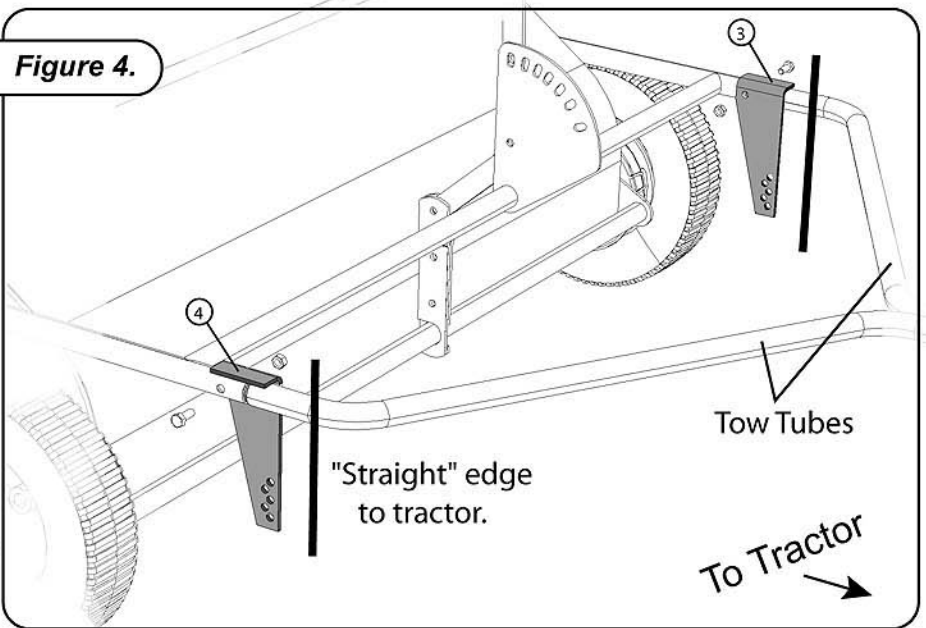


Figure 5.

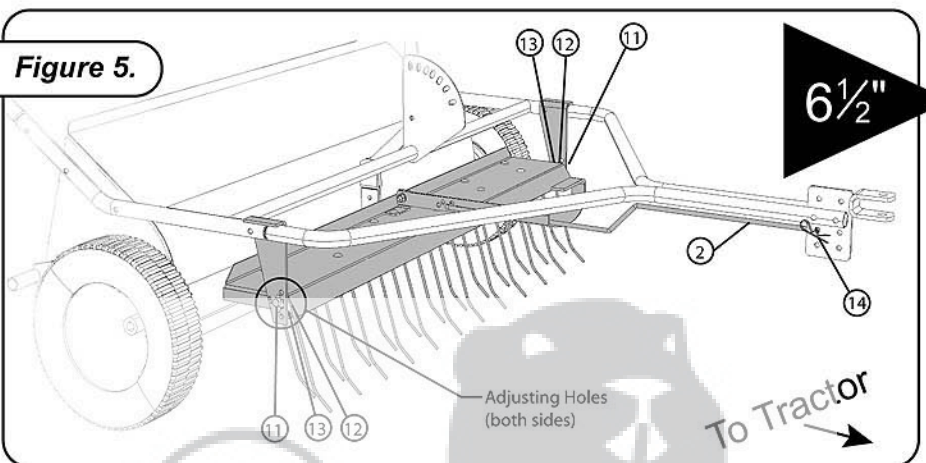
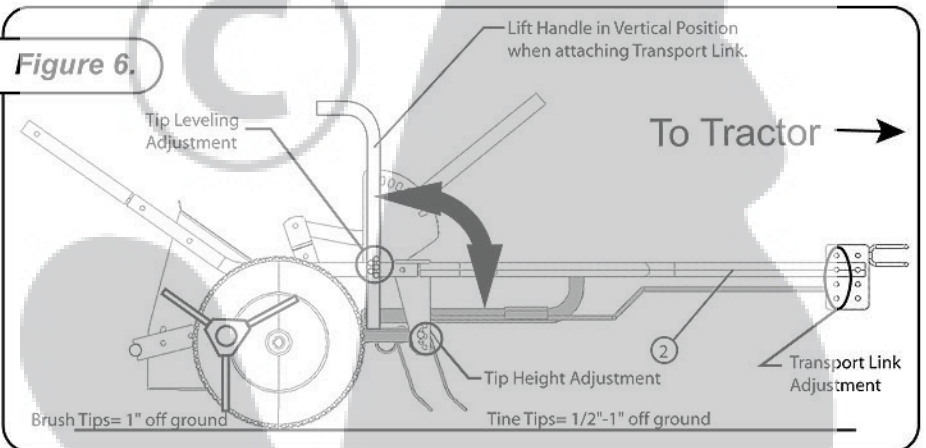


Figure 6.



DETHACHER TINE TIP ADJUSTMENT

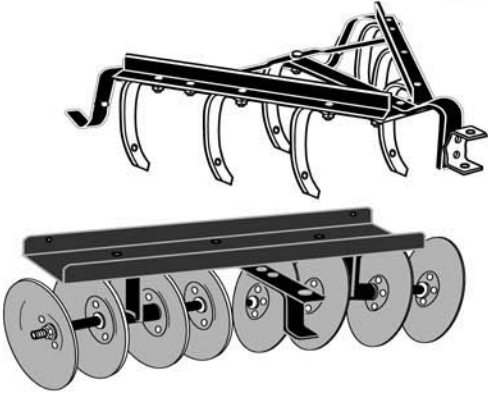
IMPORTANT: Sweeper must be connected to Tractor/Riding Equipment and Brush Height adjusted to approximately 1" off ground.

Lower Lift Handle (6), locking Transport Link (2) inside "pocket" of Lift Handle. Tray should be LEVEL to slightly higher at front*.

* **If Tray is too HIGH at front-** raise Handle to vertical position, remove Hairpin Cotter at Lift Handle and move Transport Link one hole to REAR. Reattach with Hair Pin Cotter. Check for proper position and move additional hole, if necessary, to obtain proper position.

* **If Tray is too LOW at front-** raise Handle to vertical position, remove Hairpin Cotter at Lift Handle and move Transport Link one hole to FRONT. Reattach with Hair Pin Cotter. Check for proper position and move additional hole, if necessary to obtain proper position.

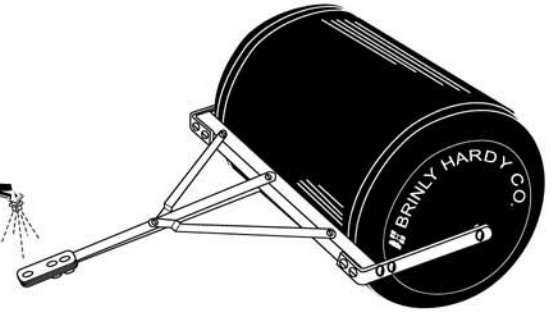
Caring for the quality of your lawn
with the products from
Brinly-Hardy Company



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 sown 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

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

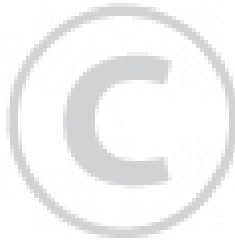
To register your new product for warranty, please complete and return this card.

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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