

SINCE 1839

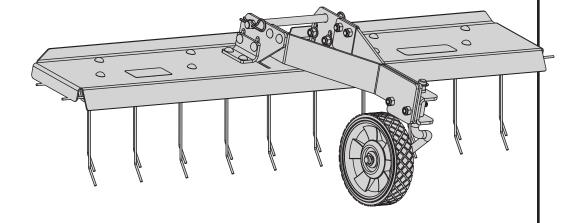
OWNER'S MANUAL

FRONT MOUNT DETHATCHER

MODEL:

DT-38RY

- Assembly
- Installation
- Operation
- Repair Parts



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

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INTRODUCTION

Congratulations on the purchase of your new Brinly-Hardy Front-Mount Dethatcher! This product has been designed, engineered and manufactured to give you the best possible dependability and performance.



- Please read and retain this manual. The instructions enable you to assemble and maintain your new Brinly-Hardy product properly.
- Please carefully read and observe the SAFETY section of this manual.
- · Follow a regular schedule in maintaining and caring for your Brinly-Hardy product.

TABLE OF CONTENTS SAFETY 2-3 PARTS LIST AND REFERENCE 4-5 ASSEMBLY 6-15 OPERATION 16-21 STORAGE 22 MAINTENANCE 23 LIMITED WARRANTY 24

RECORD PURCHASE INFORMATION

Record your purchase information in the spaces provided below:

DATE OF PURCHASE	
COMPANY NAME	
COMPANY PHONE	
SERIAL NUMBER	

SAFETY



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

SAFETY LABELS AND NOTATION

The safety labels shown in this section are placed in important areas on your product to draw attention to potential safety hazards.

On your product safety labels, the words **DANGER**, **WARNING** and **CAUTION** are used with the safety-alert symbol. DANGER identifies the most serious hazards.

The operator's manual also explains any potential safety hazards whenever necessary in special safety messages that are identified with the word, **CAUTION**, and the safety-alert symbol.



CAUTION: Keep feet and hands clear of dethatcher while raising and lowering it. Pay close attention to your surrounding and people in your immediate area at all times.

SAFETY



GENERAL NOTES (OPERATION)

Caution should be taken when using any attachment. This attachment combined with the weight distribution, turning radius, and speed of vehicle can result in severe injury or death to operator, damage to vehicle, and/or attachment if not used properly. Follow all safety precautions noted in the vehicle owner's manual, including the following precautions:

- Only use this product in the vehicle's tow mode/speed setting or less than 5 mph. Do not exceed 5 mph.
- Operating speed should always be slow enough to maintain control. Travel slowly, using caution when traveling over rough terrain. Avoid holes, rocks and roots.
- · Slow down before you turn and do not turn sharply.
- Use caution when operating around retaining walls and other raised embankments.
- Do not use attachment on steep slopes. A heavy load could cause loss of control or overturn attachment and vehicle.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed, directions or turning.
- If you start and stop suddenly on hills, you may lose steering control.
- Do not start or stop suddenly when going uphill or downhill.
 Avoid uphill starts.
- Slow down & use extra care on hillsides. Use extreme caution while operating near drop-offs.
- Do not drive close to creeks, ditches and public highways.
- Watch out for traffic when crossing roadways.
- Use care when loading or unloading the vehicle into a trailer or truck.
- When reversing, back up straight using caution.
- Stop on level ground, disengage drives, set the parking brake, and shut off engine before leaving the operator's position for any reason.
- Use this attachment for intended purpose only.
- Always wear substantial slip-resistant footwear. Do not wear loose-fitting clothing, tie back long hair and do not wear jewelry.
- Keep your eyes and mind on your vehicle, attachment and area being covered. Do not let other interests distract you.
- Stay alert for holes and other hidden hazards in the terrain.
- Keep the vehicle and attachment in good operating condition and keep safety devices in place.

- The vehicle and attachment should be stopped and inspected for damage after striking a foreign object. Any damage should be repaired before restarting and operating the equipment.
- Keep all parts in good condition and properly installed. Fix damaged parts immediately. Replace worn or broken parts.
- Replace all worn or damaged safety and instruction decals.
 Keep all nuts. bolts and screws tight.
- Do not modify the attachment or safety devices. Unauthorized modifications to the vehicle or attachment may impair its function, safety and void the warranty.

VEHICLE AND ITS SAFETY

- Know your vehicle controls and how to stop safely. READ YOUR VEHICLE OWNER'S MANUAL before operating.
- Check the vehicle's brake action before you operate. Adjust or service brakes as necessary.
- Stopping distance increases with speed and weight of load.
 Travel slowly and allow extra time and distance to stop.
- Do not shift to neutral and coast downhill.
- Do not allow adults to operate the vehicle without proper instruction or without having read the owner's manual.
- · Do not allow children to operate the vehicle.

PROTECT THOSE AROUND YOU

- Before you operate any feature of this attachment or vehicle, observe your surroundings and look for bystanders.
- Keep children, bystanders and pets at a safe distance away while operating this or any attachment.
- Use care when reversing. Before you back up, look carefully behind for bystanders.

KEEP RIDERS OFF ATTACHMENT & VEHICLE

Do not carry passengers.

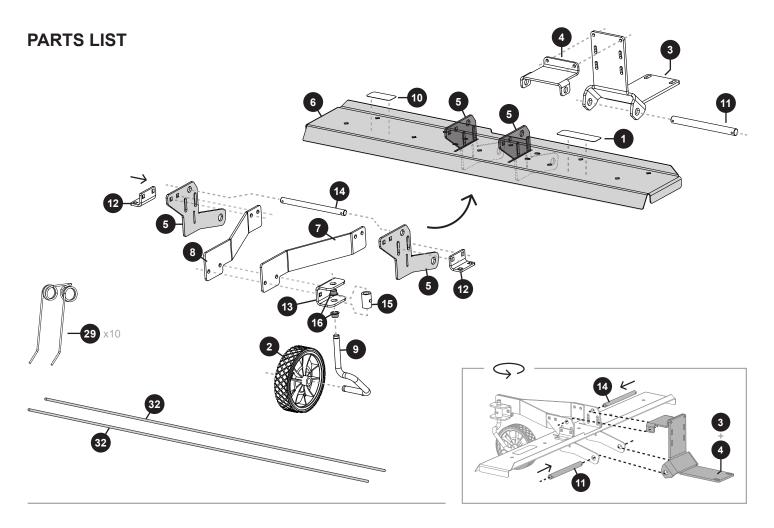
3

- Do not let anyone, especially children, ride in/on this attachment, the vehicle or mount bracket.
- Riders are subject to injury such as being struck by foreign object and/or being thrown off during sudden starts, stops and turns.
- Riders may also obstruct the operator's view resulting in this attachment being operated in an unsafe manner.

DETHATCHER-SPECIFIC SAFETY INSTRUCTIONS

- Follow the instructions in this manual to make sure the dethatcher is mounted correctly.
- · Do not use the dethatcher tray as a step.
- Do not allow the dethatcher to strike hard surfaces like curbs, driveways or steps.
- Use the dethatcher on dirt or grass surfaces only.
- When not in use, pivot the dethatcher into transport mode to prevent damage to the tines.
- Do not add or stack weight on the dethatcher tray.

PARTS LIST AND REFERENCE



REF	PART NO.	DESCRIPTION	QTY
1	1008563	Brinly-Hardy Decal	1
2	1008587	Wheel, 6 x 1.5 Gray	1
3	1017835-10	Front Mount, Painted	1
4	1018083-10	Travel Bracket, Painted	1
5	1018084-10	Pivot Plate, Painted	2
6	1018337	Dethatcher Tray, Painted	1
7	1018090LH-10	Left Wheel Bracket, Painted	1
8	1018090RH-10	Right Wheel Bracket, Painted	1
9	1018136-01	Wheel Axle, Plated	1
10	B-7063	Label, Caution Pictorial	1
11	1017741-01	Rod, Hinge Plated	1
12	1018085-10	Bracket, Support Painted	2

REF	PART NO.	DESCRIPTION	QTY
13	1018091-10	Bracket, Support Painted	1
14	1018092-01	Rod, Transport Plated	1
15	1018135-01	Collar, Plated	1
16	R-704	Bearing, Nylon/Type5-8L5	2
17	1018344	Hardware Bag (Contents on page 5)	1
29	R-628	Tine	10
32	R-1503	Wire, Safety 40"	2

* Not shown

PARTS LIST AND REFERENCE

HARDWARE BAG (1018344)







21 0 0 0 0

23 () ()











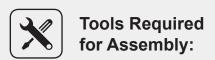




REF	PART NO.	DESCRIPTION	QTY
18	1017742	U-bolt	2
19	11M1016P	Carriage Bolt, 5/16 x 1	2
20	2M0816P	Hex Head Bolt, 1/4 x 1	2
21	45M0909P	Washer, SAE Flat, 1/4"	4
22	45M1111P	Washer, Flat 5/16"	4
23	45M1717P	Washer, Flat 1/2"	2
24	B-4785	Nut, Nylon Lock 1/4-20	6
25	D-146P	Cotter, Hairpin 1/8", #211	4
26	F-621	Snap E-Ring, 1/2"	2
27	R-618	Washer, Special	10

REF	PART NO.	DESCRIPTION	QTY
28	V-336	Screw, Rd., 5/16-18X1/4	1
30	1018368	Manual, Front DT*	1
33	1018345	Sub Hardware Bag*	1
34	11M1012P	Bolt, Carriage 5/16 x 3/4	22
35	B-4786	Nut, Nylon Lock 5/16-18	24

* Not shown

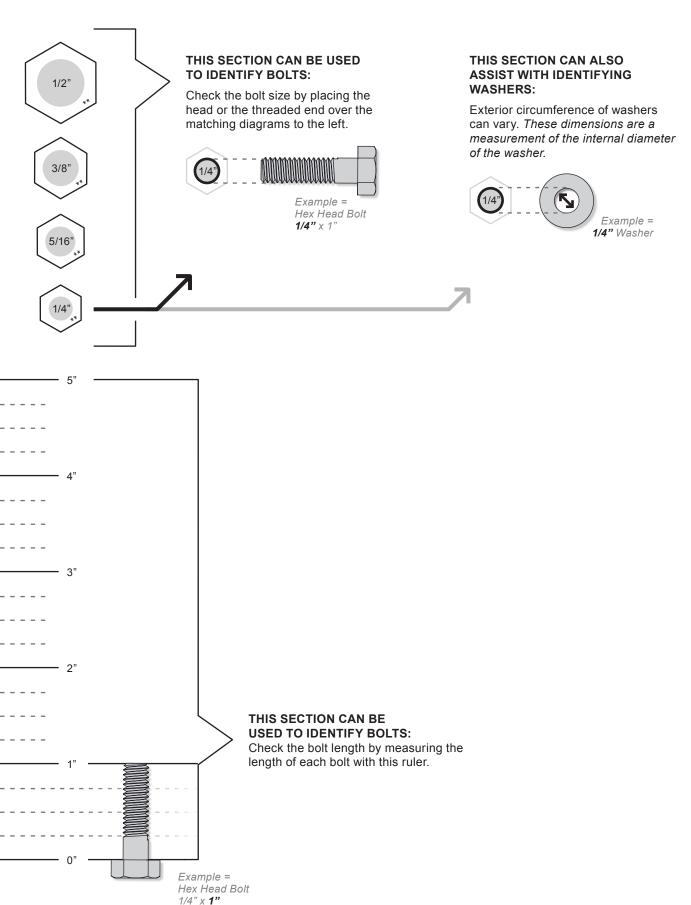


- (x2) 1/2" Socket & Wrench
- (x2) 7/16" Socket & Wrench

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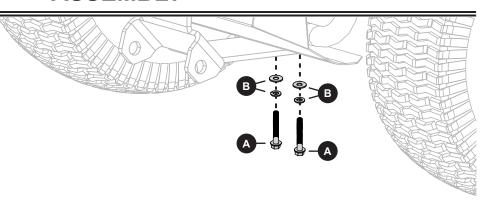
- 3/16" Allen Wrench
- 12 mm Wrench
- Pliers
- · Gloves

Each spread of the assembly has a guide to help with hardware identification.



For the first step, you'll need to remove hardware from the front of your mower.





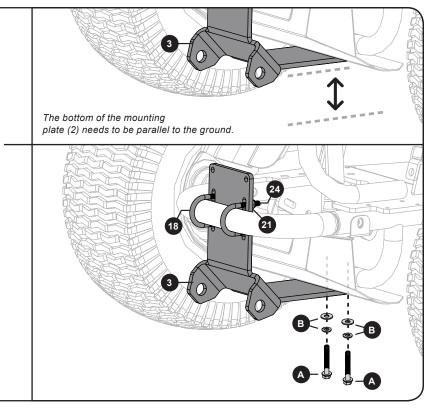
Assembly Step 1

Unscrew the two skid plate bolts (A) and two sets of washers (B).

- Loosely start to attach the mounting plate (3) to your mower by reusing the removed hardware (A & B) as well as U-bolts found in the hardware bag:
 - x2 U-Bolts (18)
 - x4 Washers (21) 1/4"
 - x4 Lock Nuts (24) 1/4"



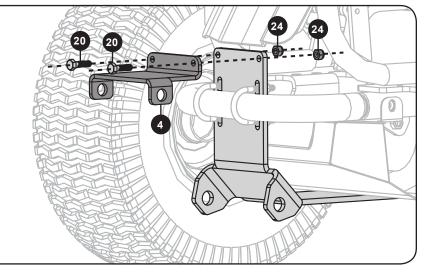
2. Align the bottom of the mounting plate (3) parallel to the ground and make sure the front of the mounting plate is touching the inside edge of the bumper tubing. *Tighten all hardware*.



Assembly Step 2

- 3. Attach the travel bracket (4) to the mount plate (3) using:
 - x2 Hex Head Bolts (20) 1/4" x 1"
 - x2 Lock Nuts (24) 1/4"





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CAUTION: Avoid injury! Take care when handling Tray and Tine sub-assembly. Tine tips are sharp and can cause injury.

Assembly Step 3

Tine Assembly

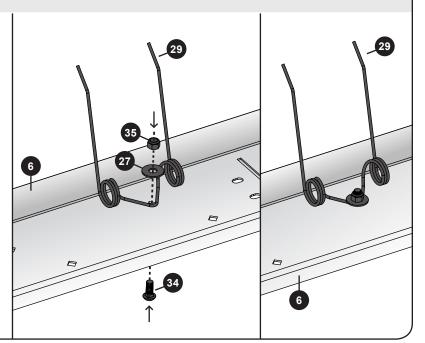
Install tines (29) to tray (6) using:

- x1 Carriage Bolt (34) 5/16 x 3/4"
- x1 Special Washer (27) 5/16"
- x1 Nylon Lock Nut (35) 5/16"

Note: Side of tray (6) with logos / stickers will face the ground during this step. Ensure tine tips are facing towards the long lip of the of tray, as shown.



1/2" Wrench



Tip: Start adding the back row of tines first.

Assembly Step 4

Tine Assembly

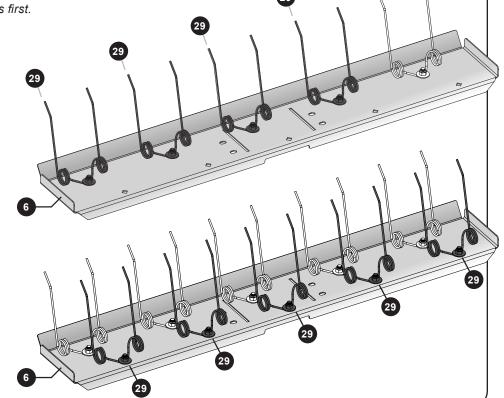
Install the remaining 9 tines (29) to tray (6) with:

- x9 Carriage Bolts (34) 5/16 x 3/4"
- x9 Special Washers (27) 5/16"
- x9 Nylon Lock Nuts (35) 5/16"

Note: Ensure tine tips are facing towards the long lip of the the of tray, as shown.



1/2" Wrench



Assembly Step 5

Pivot Plate Assembly #1

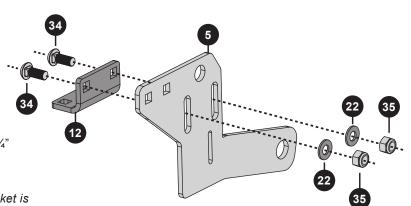
Attach a pivot plate (5) to the tray support bracket (12) using:

- x2 Carriage Bolts (34) 5/16 x 3/4"
- x2 Washers (22) 5/16"
- x2 Nylon Lock Nuts (35) 5/16"

Note: Tighten hardware so the bracket is in the center of the pivot plate slots.



1/2" Wrench











Assembly Step 6

Pivot Plate Assembly #2

Use 2nd pivot plate (5) and the tray support bracket (12).

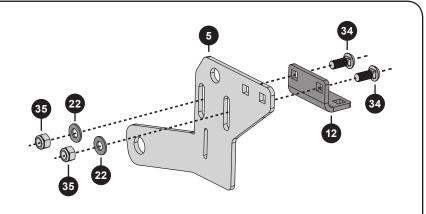
Place tray support bracket (12) on the opposite side as in prior step. Secure with:

- x2 Carriage Bolts (34) 5/16 x 3/4"
- x2 Washers (22) 5/16"
- x2 Nylon Lock Nuts (35) 5/16"

Note: Tighten hardware so the bracket is in the center of the pivot plate slots.



1/2" Wrench



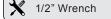
Assembly Step 7

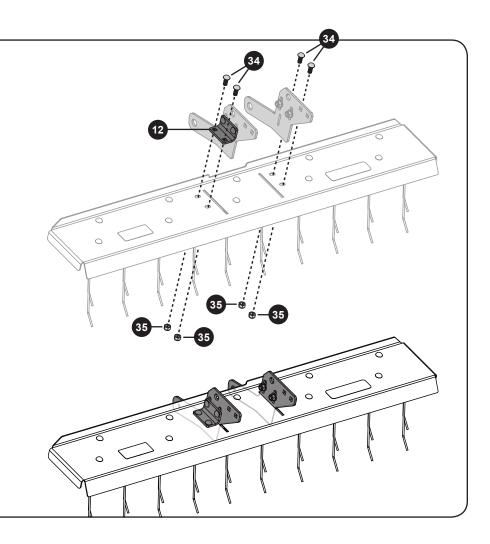
Adding Pivot Plates

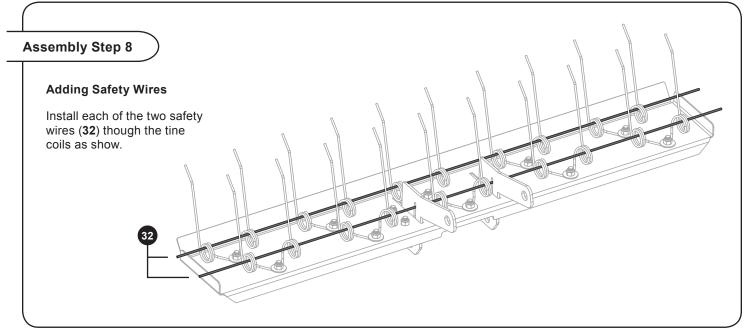
Angle the two pivot plate assemblies (from steps 5 and 6) through the top of the tine tray (6).

Align the support brackets (12) and secure in place using:

- x4 Carriage Bolt (34) 5/16 x 3/4"
- x4 Nylon Lock Nut (35) 5/16"









WARNING: Avoid injury! Failure to install safety wires can result in personal injury if a tine should dis-engage from the tine tray.



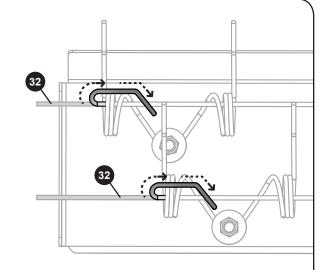
Assembly Step 9

Adding Safety Wires

Bend each end of the safety wire (32) around the end of the tine coils and completely over the straight portion of the safety wire.

Complete for each end of both safety wires.











Assembly Step 10

Adding Wheel

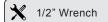
Secure both of the wheel brackets

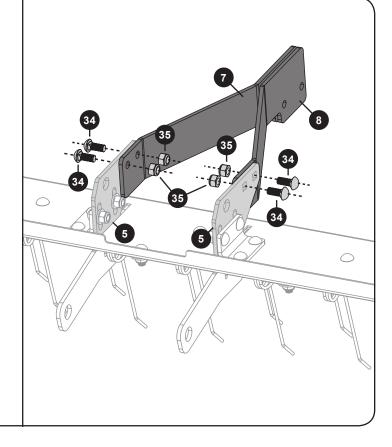
- Left Side (7)
- Right Side (8)

to the INSIDE of both pivot plates (5) with:

- x4 Carriage Bolts (34) 5/16 x 3/4"
- x4 Nylon Lock Nuts (35) 5/16"

Tighten hardware.





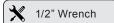
Assembly Step 11

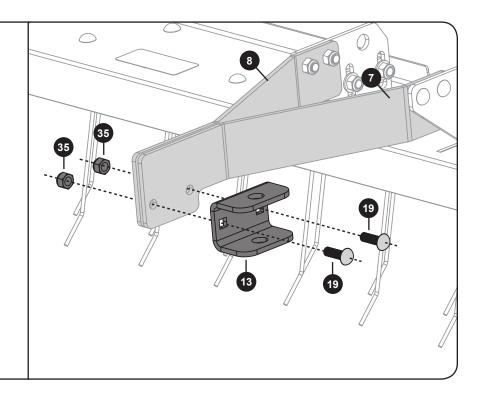
Adding Wheel

Secure support bracket (13) to the left wheel bracket (7) and right wheel bracket (8) using:

- x2 Carriage Bolts (19) 5/16 x 1"
- x2 Nylon Lock Nuts (35) 5/16"

Tighten hardware.



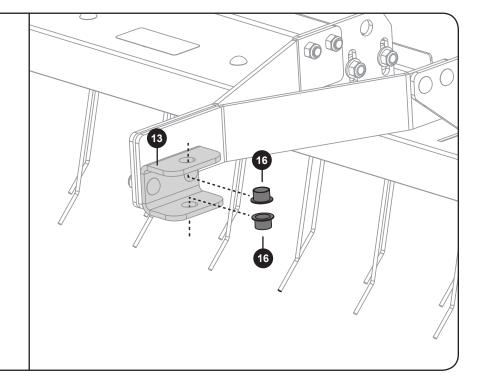


Assembly Step 12

Adding Wheel

Insert a nylon bearing (16) into the top and bottom holes of the support bracket (13).

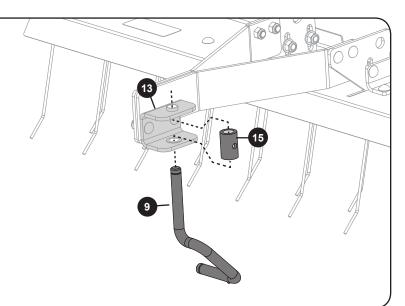
Note: The nylon bearing lip (flange) needs to be on the inside of the support bracket.



Assembly Step 13

Adding Wheel

- Slide collar (15) into the center of the support bracket (13).
- 2. Slide wheel axle (9) through support bracket (13) and collar.











Assembly Step 14

Adding Wheel

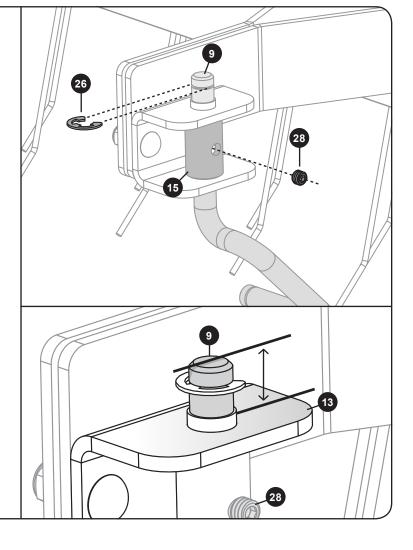
 Slide one e-ring (26) onto the top of the wheel axle (9).
 Slightly tighten the set screw (28) into the collar (15).

2. Adjust wheel axle (9) up/down so there is a 3/4" distance between the top of the axle (9) and the top of support bracket (13).

Note: Some pressure may be necessary to push the E-Ring in place as it must slightly open to encircle the axle groove.

Tighten set screw (28) fully.







Assembly Step 15

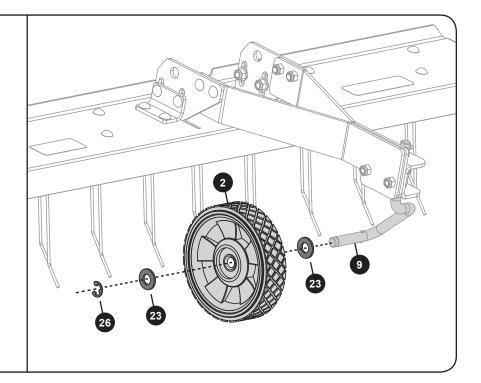
Adding Wheel

Add the following to the axle (9):

- x1 Washer (23) $-\frac{1}{2}$ "
- x1 Wheel (2)
- x1 Washer (23) 1/2"

Secure with an E-Ring (26) by sliding it into the groove on the end of the wheel axle.

Note: Some pressure may be necessary to push the E-Ring in place as it must slightly open to encircle the axle groove.



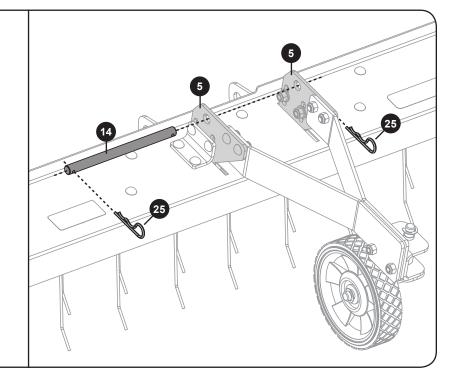
Assembly Step 16

Adding Transport Rod

Insert a hairpin (25) through the end of the transport rod (14).

Note: The transport rod (14) will slide through the two remaining openings of the pivot plates (5). See illustration.

Secure in place with a second hairpin (25) on the outside of the second pivot plate (5).



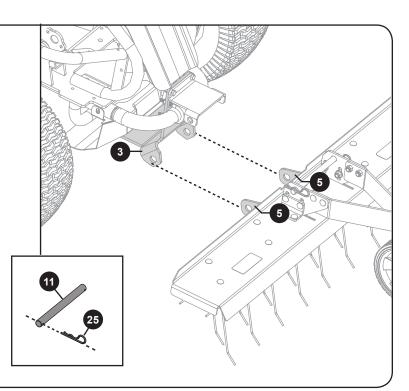
Assembly Step 17

Mounting dethatcher to your mower.

Slide dethatcher pivot plates (5) toward the mounting plate (3) attached on Assembly Step 1.

Note: Dethatcher plates will align on the outside of the mounting plate.

Insert a hairpin (25) through the end of the hinge rod (11).











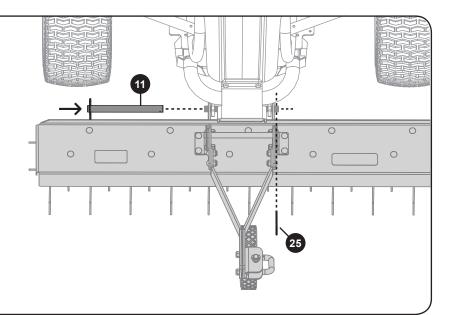
5" —

Assembly Step 18

Mounting dethatcher to your mower.

Slide the hinge rod (11) through the two sets of aligned plate openings. See illustration.

Secure in place using a hairpin (25).







WARNING: Avoid injury! Make sure feet and hands are clear of Tine tips.

Operation Step 1-A

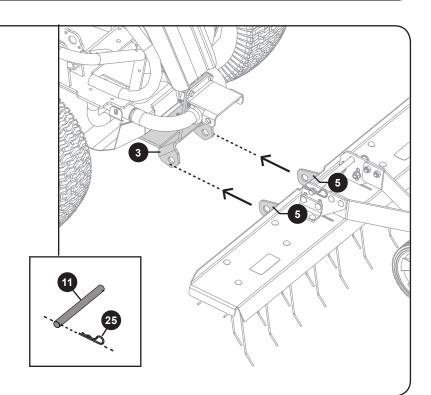
Mounting dethatcher to your mower.

Park riding mower safely and set parking brake.

Align dethatcher pivot plates (5) to the front mounting plate (3) on riding mower.

Note: Dethatcher plates will align on the outside of the mounting plate.

Insert a hairpin (25) through the end of the hinge rod (11).

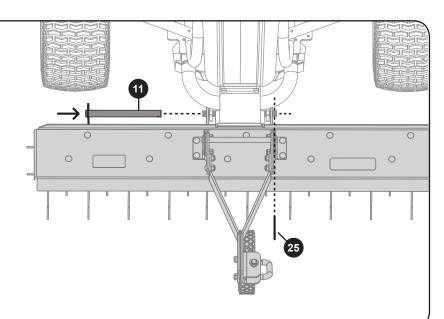


Operation Step 1-B

Mounting dethatcher to your mower.

Slide the hinge rod (11) through the two sets of aligned plate openings. *See illustration*.

Secure in place using a hairpin (25).





WARNING: Avoid injury! Make sure feet and hands are clear of Tine tips.

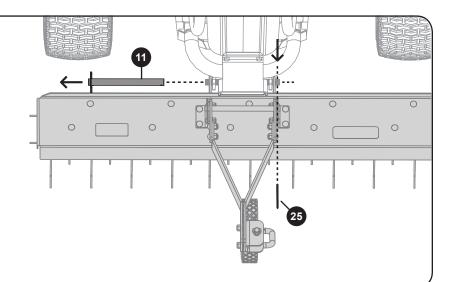
Operation Step 2-A

Removing dethatcher from your mower.

Park riding mower safely and set the parking brake.

Remove one hairpin (25) from 5/8" rod (11).

Remove rod (11) from dethatcher. See illustration.

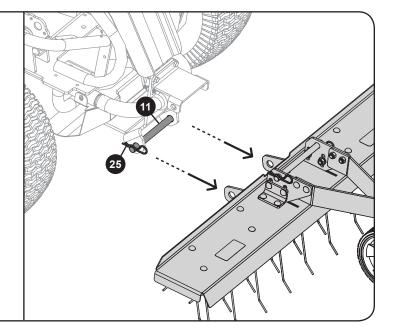


Operation Step 2-B

Removing dethatcher from your mower.

Pull dethatcher away from riding mower.

Slide 5/8" rod (11) back into front mount and re-attach hairpin (25).



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WARNING: Avoid injury! When changing dethatcher tine height settings from the towing vehicle seat: Park safely and set the parking brake (see towing vehicle operator's manual), shift to neutral and disengage dethatcher.

Operation Step 3-A

Adjusting Tine Heights.

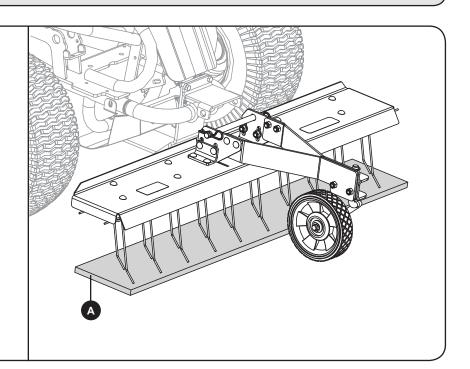
Select a smooth, flat surface such as a driveway, sidewalk or garage floor.

Note: Park riding mower safely and set parking brake.

Ensure dethatcher is installed per Installing Dethatcher section of manual.

Place tines on $\frac{1}{2}$ " Shim* (A) to support the tines off the ground.

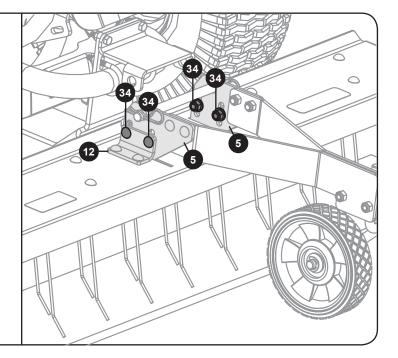
*Shim is not provided



Operation Step 3-B

Adjusting Tine Heights.

Loosen the four $5/16 \times 3/4$ " carriage bolts (34) that secure the support brackets (12) to the pivot plates (5), as illustrated here.

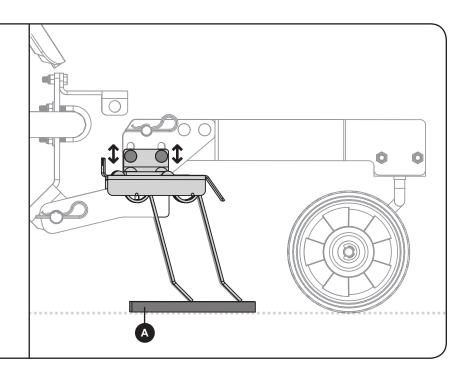


Operation Step 3-C

Adjusting Tine Heights.

Raise/lower the tray to allow the tines to rest on the $\frac{1}{2}$ " Shim (A) and ensure the front wheel rests on the ground.

Tighten all hardware from Step 3-B, so the tines are held securely ½" off the ground without the shim.





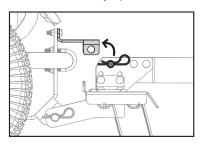
WARNING: Avoid injury! Place dethatcher in transport mode when dethatcher is not being used.

Operation Step 4

Placing in Transport Mode.

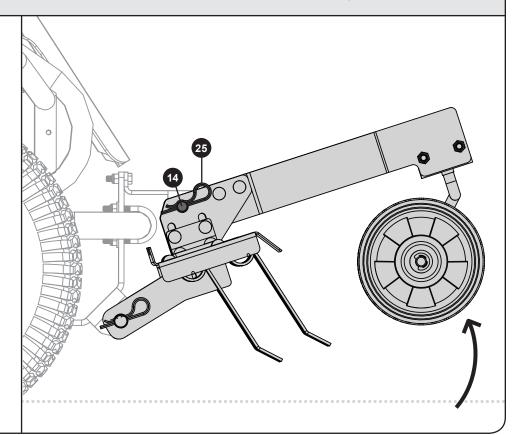
Park riding mower safely and set parking brake.

Remove ½" transport rod (14) and rotate the tray upwards.



Replace ½" transport rod (14) back into the travel bracket.

Secure the rod with hairpin cotters (25).



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CAUTION: Keep feet and hands clear of tray while raising and lowering the tray. Pay close attention to your surrounding and people in your immediate area at all times.

Dethatcher-Specific Safety Reminders:



- · Follow the instructions in this manual to make sure the dethatcher is mounted correctly.
- Do not use the dethatcher tray as a step.
- Do not allow the dethatcher to strike hard surfaces like curbs, driveways or steps.
- · Use the dethatcher on dirt or grass surfaces only.
- · When not in use, pivot the dethatcher into transport mode to prevent damage to the tines.
- · Do not add or stack weight on the dethatcher tray.

Operation Step 5

Do NOT Add Weight to the Dethatcher

Tine action – grass should be less than 3" tall for proper tine action

When in use, all tines on the dethatcher should deflect back and "flip" the thatch forward as shown.

If the tines seem to drag without flipping forward, the tine tray is too low and should be slightly raised.

Make adjustments as necessary, up or down, by no more than 1/4" each time, until proper results are achieved.

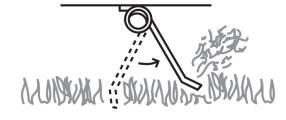




Dethatching Position



Released Position



Operation Step 6

Speed. The best operating speed is 3 mph or less. *Maximum operating speed is 5 mph.*



Operation Step 7

Frequency.

You can dethatch your lawn in summer, fall and when the lawn is dormant in winter. Dethatching is not recommended during the start of active growth. An appropriate time to dethatch a cool-season lawn is early fall or early spring. An appropriate time to dethatch a warm-season lawn is early summer.

A moderate to dry lawn condition is recommended when dethatching.

It may take several passes to entirely dethatch your lawn. Make each pass in the same direction to avoid damage to grass roots.

The process of dethatching can leave your lawn unsightly. Be patient. With proper fertilization and watering, your lawn will grow strong and full.

The dethatcher may be used in an independent operation or may be used when mowing your lawn.

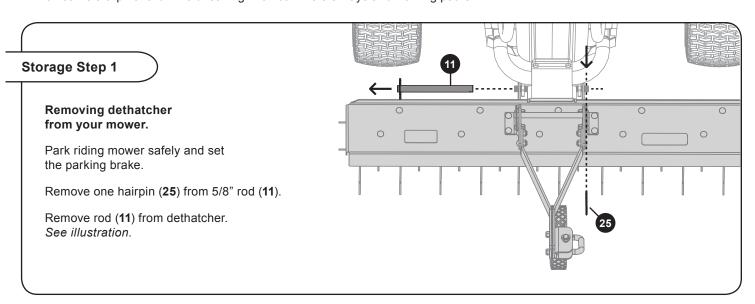
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STORAGE



WARNING: Avoid injury! The Dethatcher Tines are sharp. Care should be taken when choosing a storage location for this product. Store Dethatcher in low traffic aisle ways.

- Store Dethatcher in low traffic aisle ways.
- Store Dethatcher with Tine points facing the wall or ground.
- Store Dethatcher on the ground or low to the ground.
- Do not store Dethatcher hanging from the wall, ceiling or with Tine points facing outward.
- Drawbar is a trip hazard. Avoid leaving Drawbar in aisle ways and walking paths.

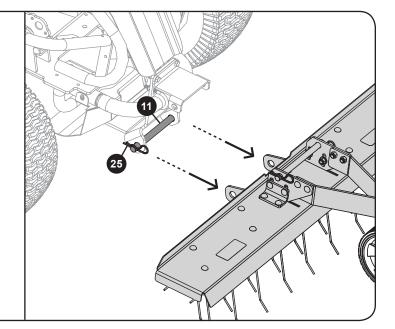


Storage Step 2

Removing dethatcher from your mower.

Pull dethatcher away from riding mower.

Slide 5/8" rod (11) back into front mount and re-attach hairpin (25).



MAINTENANCE

A

WARNING: Avoid injury! Make sure feet and hands are clear of Tine tips. Pay close attention to your surrounding and people in your immediate area at all times.

Tines are manufactured and tested for high quality and durability. However, should a Tine need replacement, contact the Brinly-Hardy customer service department to purchase replacement Tines and Safety Wires.

Tines can be serviced as follows:

- Straighten bend at the end of the safety wire and remove from tine row.
- 2. Remove the bolt (34), washer (27) and nut (35) that are securing each tine to the tray.
- 3. Remove tine and replace with a new tine.
- 4. Attach the tine to the tray using the bolt (34), washer (27) and nut (35).
- 5. Reinstall the safety wire.

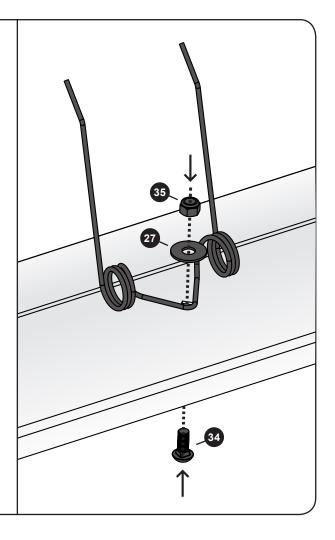
Note: Thread the Safety Wire through each and every tine loop and holes in Tray tabs. Re-Bend end of the Safety Wire to hold Tine row. Ensure both bent ends of the Safety Wire are bent around the outer most Tine loop.

Apply a light coat of oil on tines after use to prevent rust.

For rust appearing on painted surfaces, sand lightly and paint affected area with enamel.

Periodically remove debris that builds up between Tines.

Check all moving parts for free movement and if necessary lubricate with oil.



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MANUFACTURER'S LIMITED WARRANTY FOR



The limited warranty set forth below is given by Brinly-Hardy Company with respect to new merchandise purchased and used in the United States, its possessions and territories.

Brinly-Hardy Company warrants the products listed below against defects in material and workmanship, and will at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been assembled, operated, and maintained in accordance with the Operator's manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster.

Normal Wear Parts or components thereof are subject to separate terms as follows: All normal wear parts or component failures will be covered on the product for a period of 90 days.

Parts found to be defective within the warranty period will be replaced at our expense. Our obligation under this warranty is expressly limited to the replacement or repair, at our option, of parts found to be defective in material and workmanship.

HOW TO OBTAIN SERVICE: Warranty parts replacements are available, ONLY WITH PROOF OF PURCHASE, through our Customer Service Department. Call 877-728-8224.

This limited warranty does not provide coverage in the following cases:

- a) Routine maintenance items such as lubricants and filters.
- Normal deterioration of the exterior finish due to use or exposure.
- c) Transportation and/or labor charges.
- d) The warranty does not include commercial and/or rental use.

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of express written warranty above as to the part as identified below. No other express warranty whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Brinly-Hardy Co. During the period of the warranty, the exclusive remedy is repair or replacement of the product as set forth above.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. Brinly-Hardy Co. shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

During the warranty period, the exclusive remedy is replacement of the part. In no event shall recovery of any kind be greater that the amount of the purchase price of the product sold. Alteration of safety features of the product shall void this warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use this product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

HOW STATE LAW RELATES TO THIS WARRANTY: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IMPORTANT: The Warranty period stated below begins with the PROOF OF PURCHASE. Without the proof of purchase, the Warranty period begins from the date of manufacture determined by the serial number manufacturing date.

WARRANTY PERIOD:

The warranty period for the product shown in this manual is as follows: Steel Frame Parts: 2 Years. Tires, Wheels and Drive are normal wear parts – 90 days.

Brinly-Hardy Company, 3230 Industrial Parkway, Jeffersonville, IN 47130 (877) 728-8224