

SINCE 1839

BRINLY

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BRINLY

OWNER'S MANUAL

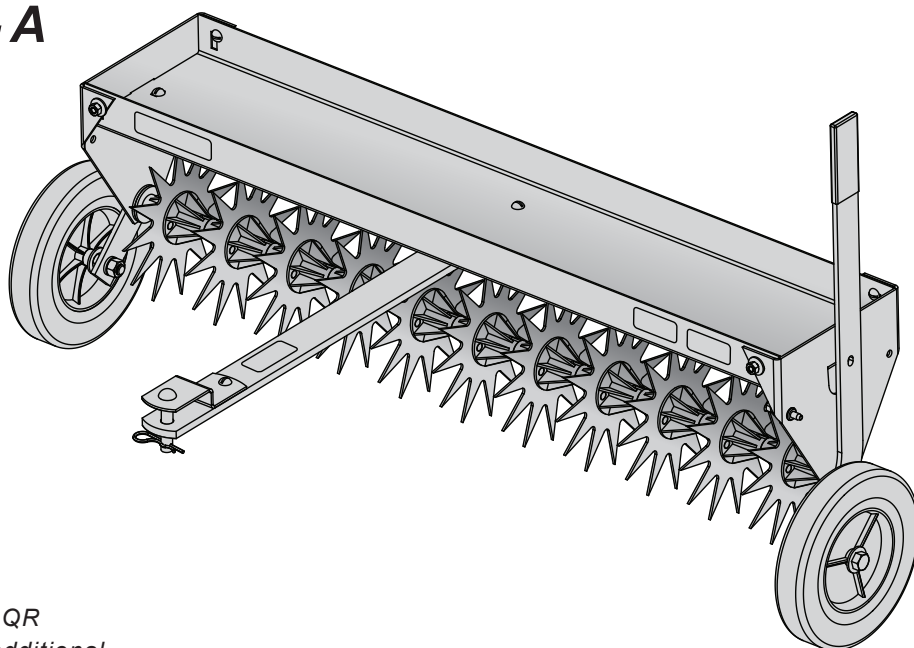
40" LAWN AERATOR

MODEL:

SAT-401BH

SAT-401BH-A

- Assembly
- Installation
- Operation
- Repair Parts



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info on our website.

Call Customer Service, Toll-Free: 877-728-8224

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!

INTRODUCTION AND SAFETY

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

Should you experience any problem you cannot 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 with the assembly and use of your product.



CUSTOMER RESPONSIBILITIES

- Please read & retain this manual. The instructions will enable to assemble and maintain your 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.

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RECORD PURCHASE INFORMATION

Record your purchase information in the spaces provided below:

Date of Purchase _____

Company Name _____

Company Phone _____

Serial Number _____

SAFETY

REQUIRED TOOLS FOR ASSEMBLY



- Pair of pliers (x1)
- Screwdriver, flat blade (x1)
- 7/16" Wrenches (x2)
- 1/2" Wrench (x1)
- 3/4" Wrenches (x2)
- Safety Glasses
- Gloves



This symbol will help to point out important safety precautions throughout this manual. It means: **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.**

The machine safety labels are placed in important areas on your machine to draw attention to potential safety hazards.

On your machine safety labels, the words **DANGER**, **WARNING**, and **CAUTION** are used with this 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.

SAFETY

GENERAL NOTES (Operation)

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

- Ensure the combined weight of the towing vehicle (tow vehicle weight + operator weight) is greater than the maximum towed weight of attachment (empty attachment weight + weight of load).
- Do not exceed maximum towing capacity of towing vehicle.
- Do not exceed the maximum drawbar pull rating of the towing vehicle. Drawbar pull is the horizontal force required to pull the attachment (including weight of load).
- Only tow this product in the vehicle's tow mode/ speed setting or less than 5 mph. Do not exceed 5 mph.
- Towing speed should always be slow enough to maintain control. Travel slowly and use caution when traveling over rough terrain. Avoid holes, rocks and roots.
- Slow down before you turn and do not turn sharply.
- Use wide turning angles to ensure the attachment follows the path of the towing vehicle.
- Do not use attachment on steep slopes. A heavy load could cause loss of control or overturn attachment and towing vehicle. Additional weights may need to be added to your vehicle; check with towing vehicle manufacturer for recommendations.
- Reduce towed weight when operating on slopes.
- 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 or the towing vehicle may tip. Do not start or stop suddenly when going uphill or downhill. Avoid uphill starts.
- Slow down and use extra care on hillsides. Turf conditions can affect vehicle stability. Use extreme caution while operating near drop-offs.
- Do not drive close to creeks, ditches and public highways.
- Watch out for traffic when crossing near roadways.
- Use care when loading or unloading the vehicle into a trailer or truck.
- The attachment can obstruct the view to the rear. Use extra care when operating in reverse.
- When reversing, carefully back-up straight to avoid jackknifing. Do not allow towing vehicle wheels to contact attachment draw bar. Damage could result.
- Stop on level ground, disengage drives, set the parking brake, and shut off engine before leaving the operator's position for any reason including emptying the attachment.
- Use this attachment for intended purpose only.
- This attachment is intended for use in lawn care & home applications. Do not tow behind a vehicle on a highway or in any high speed applications. Do not tow at speeds higher than the maximum recommend towing speed.
- Do not tow this product behind a motor vehicle such as a car or truck.
- Always wear substantial footwear. Do not wear loose fitting clothing that can get caught in moving parts.
- Keep your eyes and mind on your towing 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 towing vehicle and attachment in good operating condition and keep safety devices in place.
- The towing 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 towing vehicle or attachment may impair its function, safety and void the warranty.

TOWING VEHICLE AND TOWING SAFELY

- Know your towing vehicle controls and how to stop safely. READ YOUR TOWING VEHICLE OWNER'S MANUAL before operating.
- Check the towing vehicle brake action before you operate. Adjust or service brakes as necessary.
- Stopping distance increases with speed and weight of towed load. Travel slowly and allow extra time and distance to stop.
- Use only approved hitches. Tow this attachment only with a towing vehicle that has a hitch designed for towing. Do not connect this attachment except at the approved hitch point.
- Follow the tow vehicle manufacture's recommendations for weight limits for towed equipment & towing on slopes.

Continues on page 4

SAFETY / PARTS

TOWING VEHICLE AND TOWING SAFELY ...continued

- Use counterweights or wheel weights as described in the towing vehicle operator's manual.
- Do not shift to neutral and coast downhill.
- Do not allow children to operate the towing vehicle. Do not allow adults to operate the towing vehicle without proper instruction or without having read the owner's manual.

PROTECT THOSE AROUND YOU

- Before you operate any feature of this attachment or towing 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 TOWED ATTACHMENT AND TOWING VEHICLE

- Do not carry passengers.
- Do not let anyone, especially children, ride in/on this attachment, the towing vehicle or hitch 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.

PARTS

Installation Questions?
Missing Parts?
Replacement Parts?



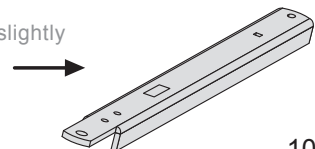
**DON'T GO BACK
TO THE STORE!**

Please call our Customer
Service Department,
Toll Free: 877-728-8224 or
customerservice@brinly.com

PART #s
(vary by model)

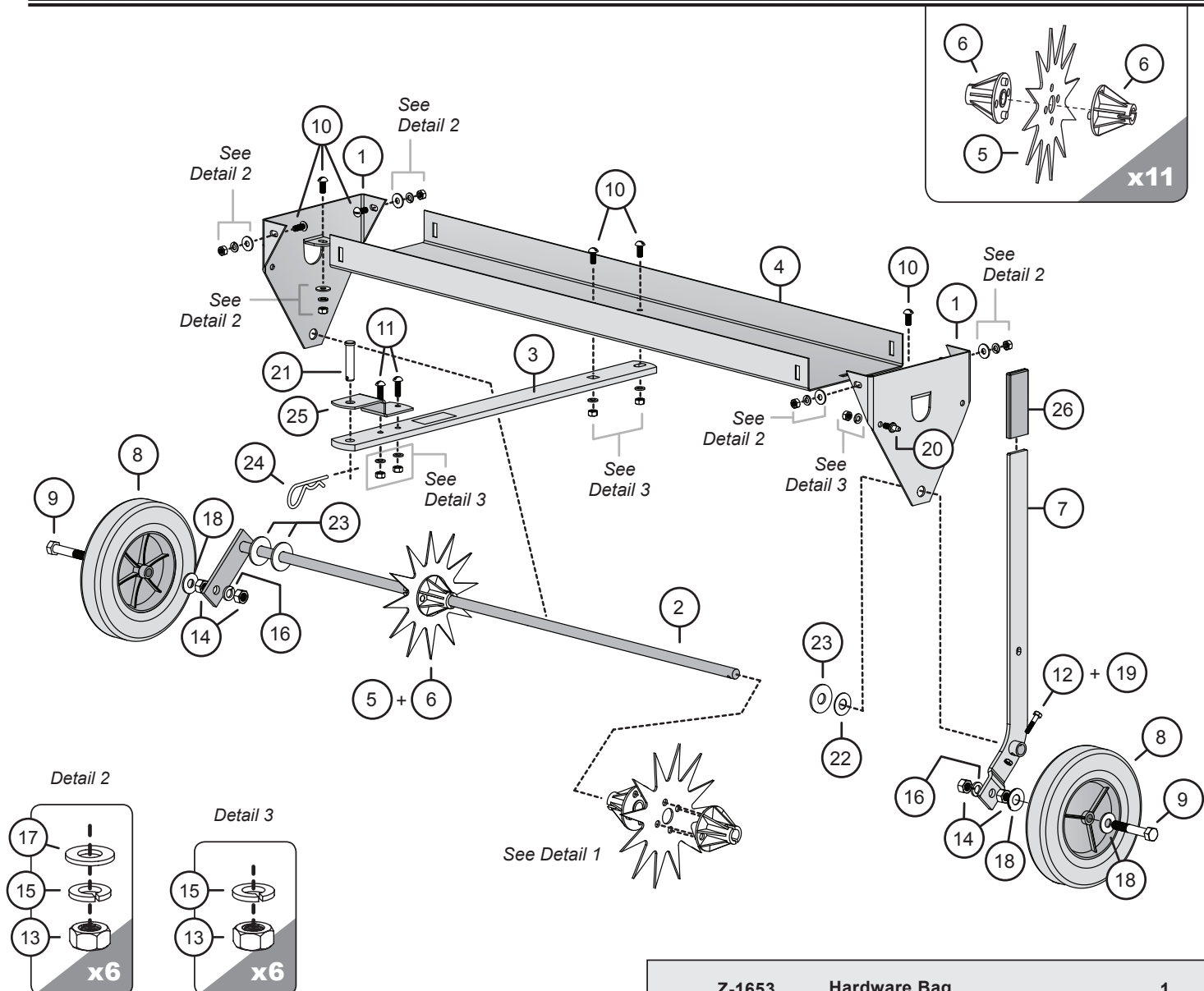
Ref.	Description	Qty.	SAT-401BH	SAT-401BH-A
1	End Plate	2	B-4892-10	B-4892-10
2	Axle Assembly	1	B-5832-10	B-5832-10
3	Drawbar, with Decals	1	B-3593-1	1020062 *
4	Tray, with Decals	1	B-5453-1	1020081
5	Tine	11	1018833-SER	1018833-SER
6	Bearing	22	B-5425	B-5425
7	Handle Assembly	1	B-4888-10	B-4888-10
8	Wheel	2	R-891	R-891

* The SAT-401BH-A drawbar (3) has a slightly
different appearance, illustrated here:



PARTS

Detail 1



Z-1653	Hardware Bag		1
9	1M1648P	Bolt; Hex Head, 1/2 x 3"	2
10	20M1012P	Screw; Round Head, 5/16"-18 x 3/4"	8
11	20M1016P	Screw; Round Head, 5/16" x 1"	2
12	2M0820P	Bolt; Hex Head, 1/4 x 1-1/4"	1
13	30M1000P	Nut; Hex, 5/16"-18	11
14	30M1600P	Nut; Hex, 1/2"-13	4
15	40M1000P	Washer; Lock, 5/16"	11
16	40M1600P	Washer; Lock, 1/2"	2

Z-1653	Hardware Bag		1
17	45M1111P	Washer; Flat, 5/16"	6
18	45M1717P	Washer; Flat, 1/2"	4
19	B-1673P	Nut; Hex Lock, 1/4"-20	1
20	B-3307-S	Pin; Transport Lock	1
21	B-3861	Pin; Hitch, 1/2" x 2-1/2"	1
22	B-4768	Bushing; Machine, 5/8" ID x 0.74"	2
23	B-5456	Bushing; Machine, 5/8" ID x 0.134"	5
24	D-146P	Cotter; Hairpin, 1/8" - #211	1
25	R-821-10	DrawBar, Clevis	1
26	B-4867	Grip	1

HARDWARE IDENTIFIER

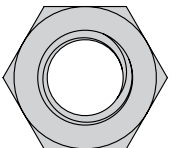
Illustrations on this page are to scale for faster identification of hardware during assembly.

DO NOT RETURN PRODUCT IF YOU ARE MISSING PARTS.
Please Call: 1 (877) 728-8224

13 Nut; Hex
5/16"-18 (x11)
30M1000P



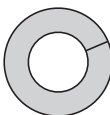
14 Nut; Hex
1/2"-13 (x4)
30M1600P



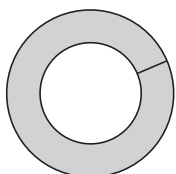
19 Nut; Hex Lock
1/4"-20 (x1)
B-1673P



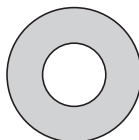
15 Washer; Lock
5/16" (x11)
40M1000P



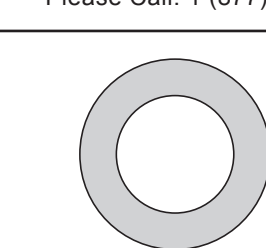
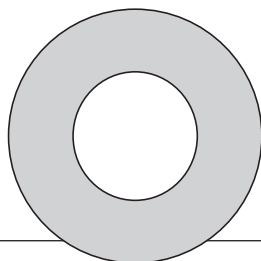
16 Washer; Lock
1/2" (x2)
40M1600P



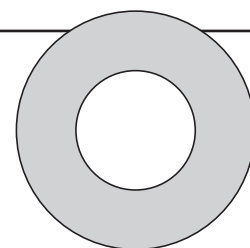
17 Washer; Flat
5/16" (x6)
45M1111P



18 Washer; Flat
1/2" (x4)
45M1717P



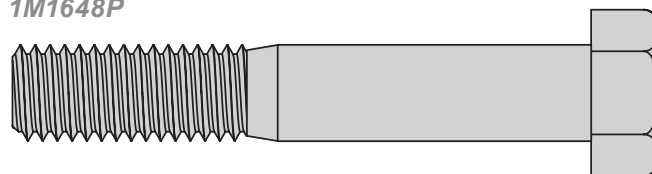
22 Machine Bushing; 5/8"
0.074" thick (x2)
B-4768



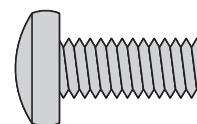
23 Machine Bushing; 5/8"
0.13" thick (x5)
B-5456



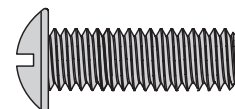
9 Bolt; Hex Head, 1/2" x 3" (x2)
1M1648P



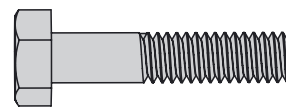
10 Screw: Round Head
5/16"-18 x 3/4" (x8)
20M1012P



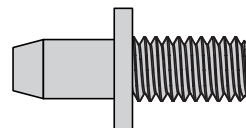
11 Screw: Round Head
5/16" x 1" (x2)
20M1016P



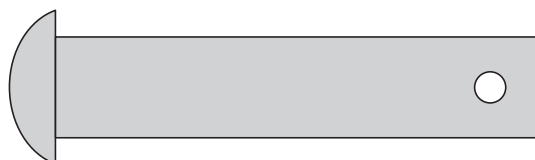
12 Screw: Hex Head
1/4" x 1-1/4" (x1)
2M0820P



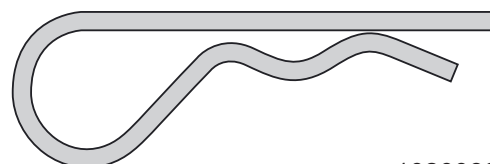
20 Transport
Locking Pin (x1)
B-3307-S



21 Hitch Pin; Drawbar, 1/2" x 2-1/2" (x1)
B-3861



24 Hairpin Cotter, 1/8" (x1)
D-146P



ASSEMBLY

Assembly Tip

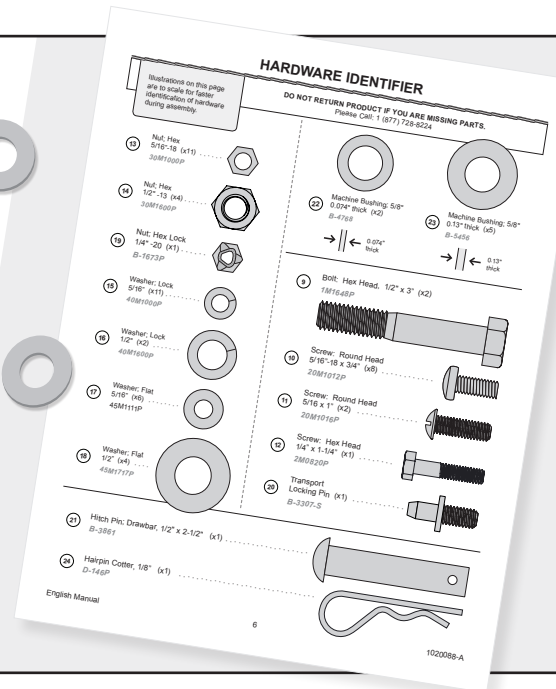
Illustrations on page 6 are to-scale.

For faster identification of hardware during assembly, simply lay the hardware on top of the illustration.



Additional info and videos are available on our website: brinly.com

This QR code links directly to the product page.

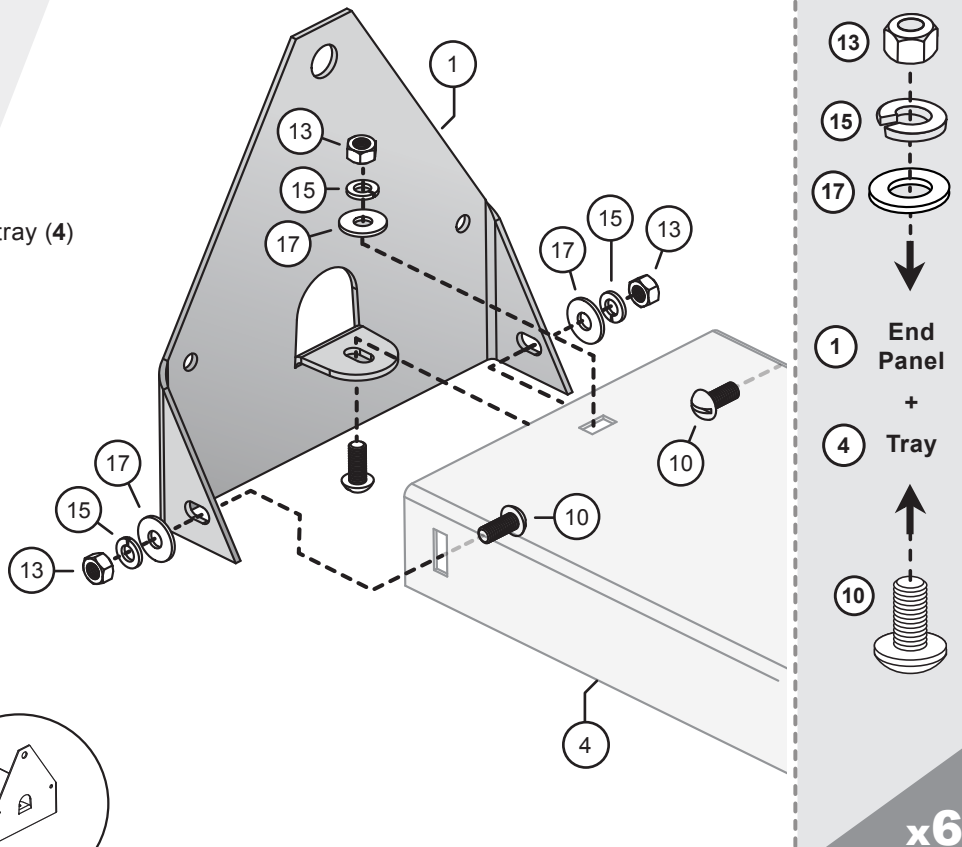
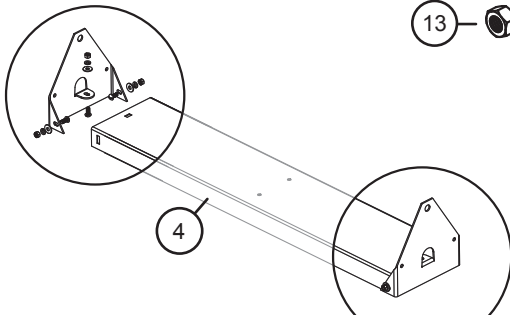


Step 1

STARTING WITH THE TRAY (4) FACING DOWN:

Attach the two end panels (1) to the tray (4) using the following as illustrated:

- x6 Round Head Screws (10)
5/16" x 3/4"
- x6 Flat Washers, 5/16" (17)
- x6 Lock Washers, 5/16" (15)
- x6 Hex Nuts, 5/16" (13)

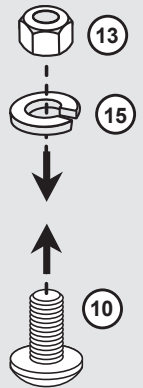
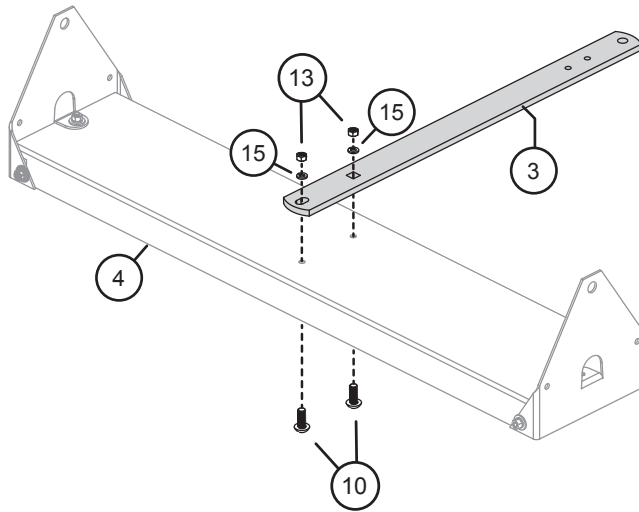


ASSEMBLY

Step 2

1. Install drawbar (3) to the tray (4) using the following as illustrated:

- x2 Round Head Screws (10)
5/16" x 3/4"
- x2 Lock Washers, 5/16" (15)
- x2 Hex Nuts, 5/16" (13)

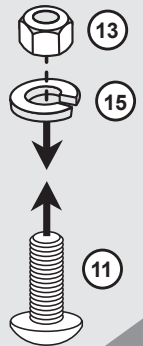
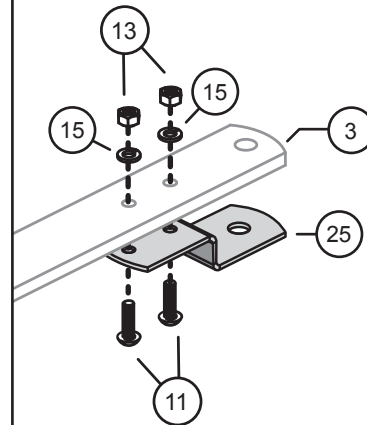
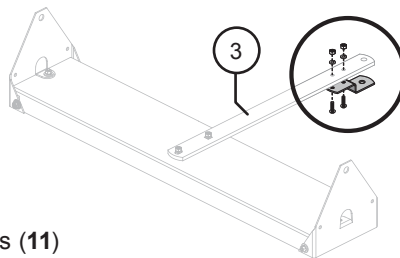


x2

2. At the other end of the drawbar (3):

Attach the clevis (25) using the following as illustrated:

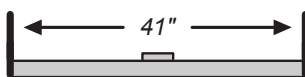
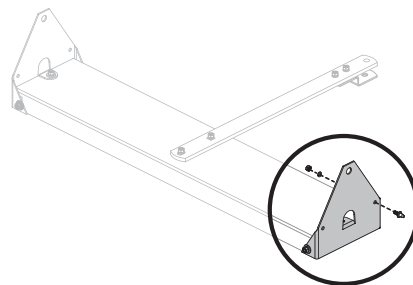
- x2 Round Head Screws (11)
5/16" x 1"
- x2 Lock Washers, 5/16" (15)
- x2 Hex Nuts, 5/16" (13)



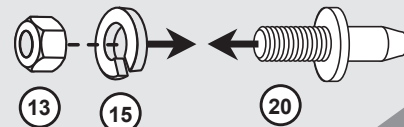
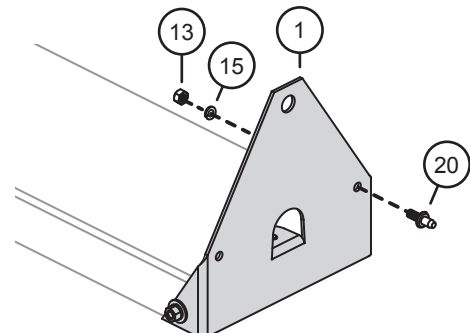
x2

3. Attach the transport locking pin (20) to the end panel (1) as illustrated, using:

- x1 Lock Washer (15)
5/16"
- x1 Hex Nut (13)
5/16"



NOTE: The inside distance between the two end panels should be 41 inches to ensure proper installation.



x1

ASSEMBLY

Step 3

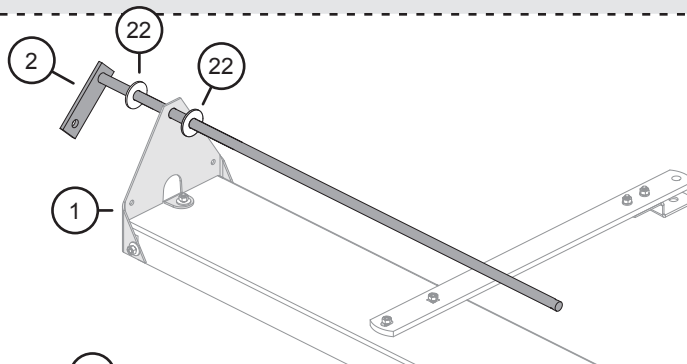


CAUTION: Gloves are **REQUIRED** when handling aerator tines. Tines have extremely sharp points. Use caution when handling.



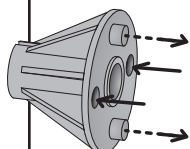
1. Place a 5/8" thick machine bushing (22) on the axle assembly (2).

As illustrated, next slide the axle assembly (2) through the hole in the right side end panel (1). Add another 5/8" thick machine bushing (22).

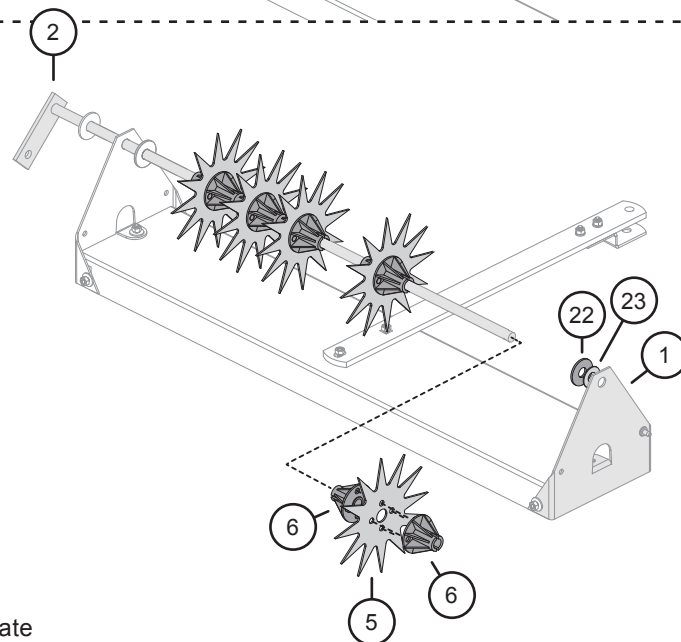


2. Position the eleven tines (5) and twenty-two spacer bearings (6) onto the axle assembly (2) as follows:

- Bearing (6) (small end first)
- Tine (5)
- Bearing (6) (large end first)



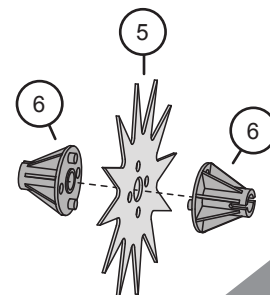
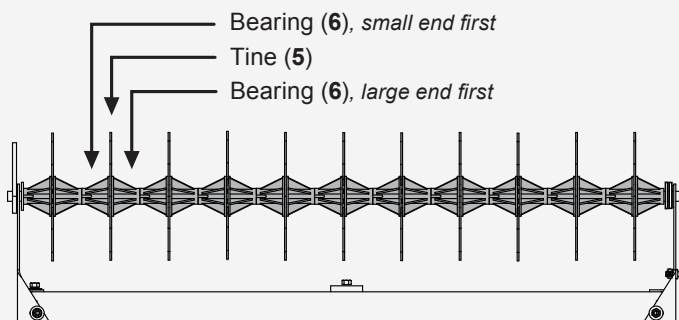
NOTE: The Bearings (6) have two small openings and extensions. These are designed to sandwich the Tines (5), sliding through and connecting.



3. Add additional bushings (22 or 23) as needed to eliminate any side-to-side movement and push axle assembly (2) through the hole in the left end panel (1) as far as possible. See layout below.

NOTE:
Tines must not move from side to side inside opening of end panels.

If looseness exists, use additional 5/8" thick or thin washers (22 or 23) inside end panel to eliminate any side movement.



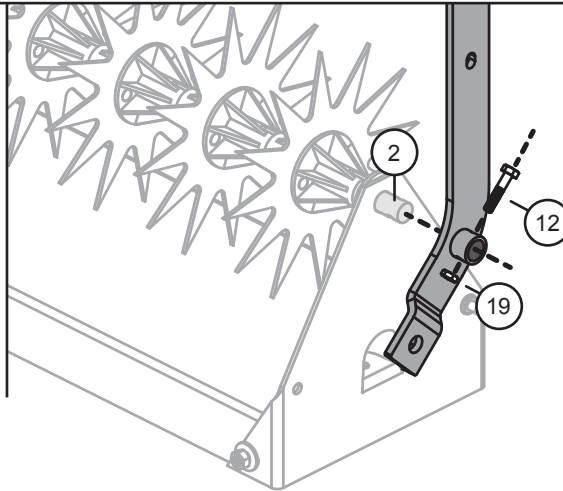
x11

ASSEMBLY

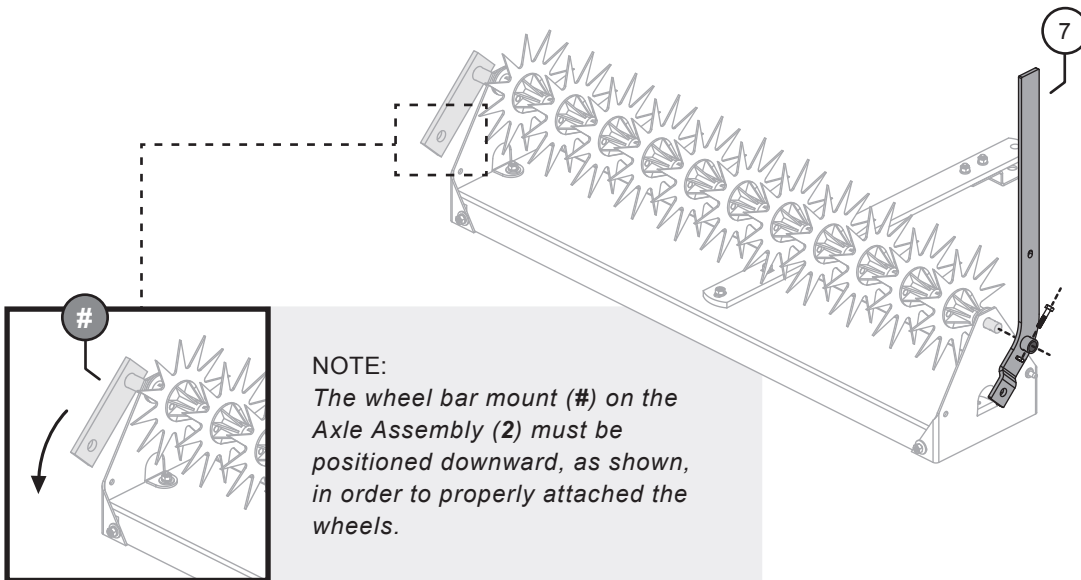
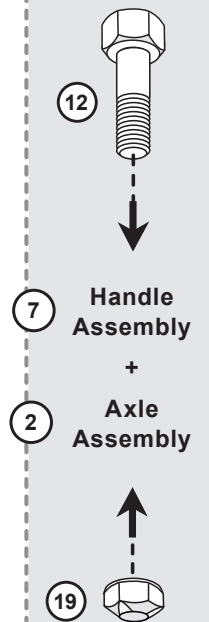
Step 4

1. Slide the handle assembly (7) over the end of the axle assembly (2)

Secure by inserting one 1/4" x 1-1/4" hex bolt (12) through the hole in the end of the axle (2) and secure with a 1/4" Hex Lock Nut (19), as shown.

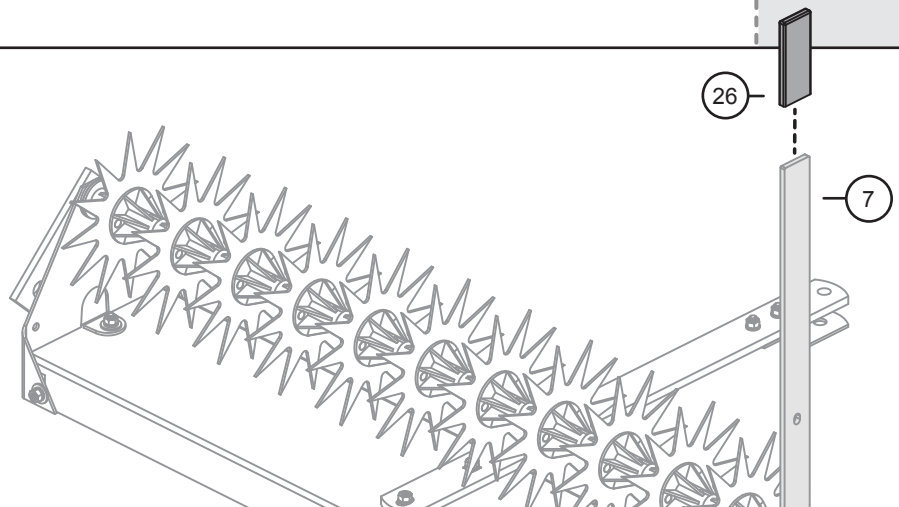


x1



NOTE:
The wheel bar mount (#) on the Axle Assembly (2) must be positioned downward, as shown, in order to properly attach the wheels.

2. Next, slide the handle grip (26) on the handle assembly (7).



ASSEMBLY

Step 5



CAUTION: GLOVES ARE RECOMMENDED
Carefully rotate the Spike Aerator for this step.



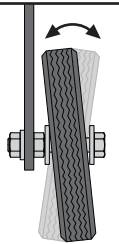
1. Attach one Wheel (9) to the Handle Assembly (8) and the other wheel to the wheel bar mount on the Axle (6). Secure to each side using hardware in the following order:

- 1/2" x 3" Hex Bolt (9)
- 1/2" Flat Washer (18)
- Wheel (8)
- 1/2" Flat Washer (18)
- 1/2" Hex Nut (14)

(Mounting Location Here)

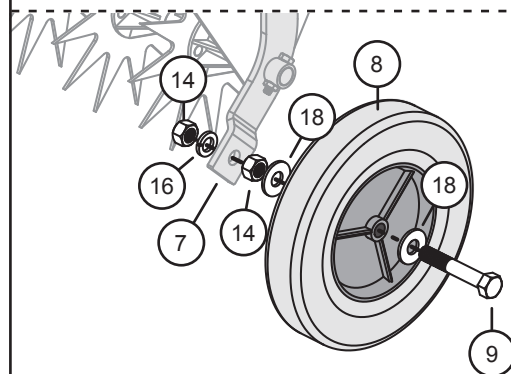
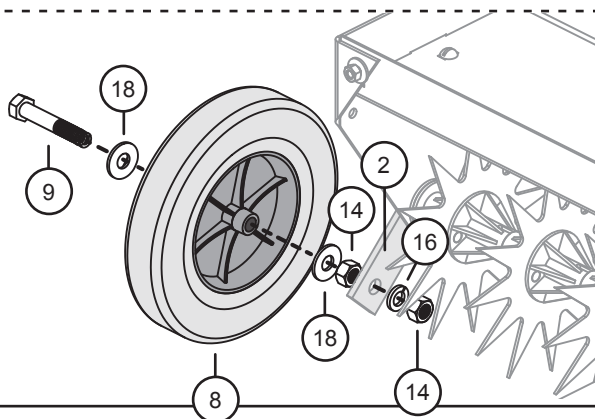
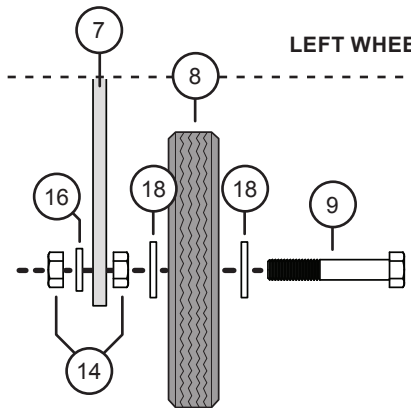
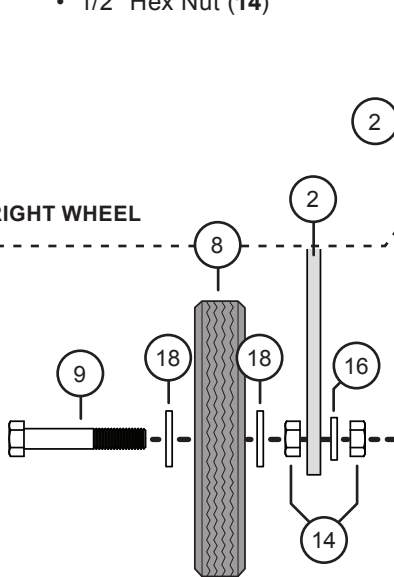
- 1/2" Lock Washer (16)
- 1/2" Hex Nut (14)

NOTE: Follow this step closely to prevent wobbly wheels. Attaching a wheel without all of the proper hardware will cause the wheel to wobble. To ensure all hardware is used, see insets below.



RIGHT WHEEL

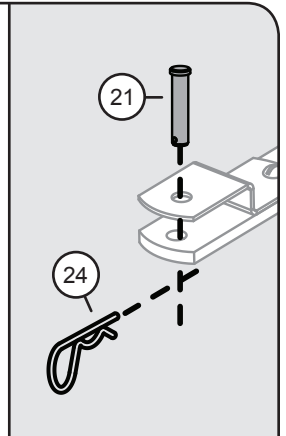
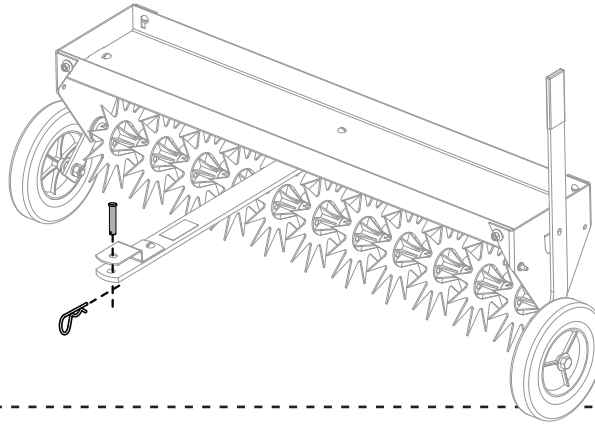
LEFT WHEEL



ASSEMBLY

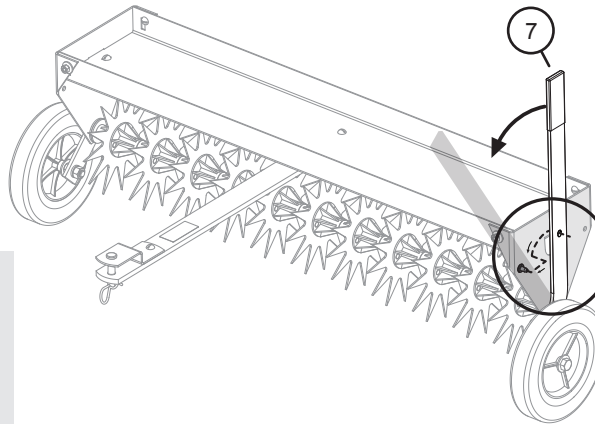
Step 6

1. Attach Aerator to your towing vehicle using the supplied drawbar pin (21) and hairpin cotter (24).



2. To place in TRANSPORT POSITION:

- Pull **FORWARD** on the handle assembly (7).
- Pull out slightly and position over transport lock pin (24). Aerator rests on wheels.



CAUTION: Avoid damage to tines.

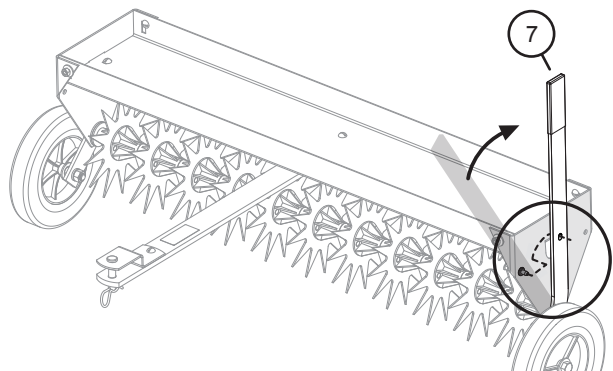


Engage the transport wheels when crossing concrete or asphalt driveways and walkways.

3. To place in OPERATING POSITION:

Pull **OUT** on the handle assembly (7), releasing from transport position, and push handle **BACK**.

NOTE: Aerator should rest on the tines.

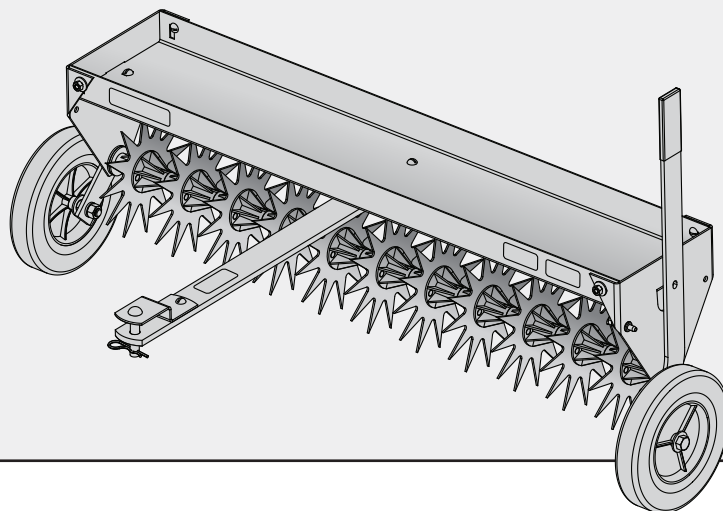


Assembly is Complete!

USE AND CARE

MODEL:

SAT-401BH SAT-401BH-A USE & CARE SECTION



SPECIFICATIONS

Empty Weight 42 lbs.

Maximum
Load 150 lbs.

Maximum
Towed Weight 192 lbs.

SPEED

Best Operating
Speed 3 mph (*or less*)

Maximum
Towing Speed 5 mph.

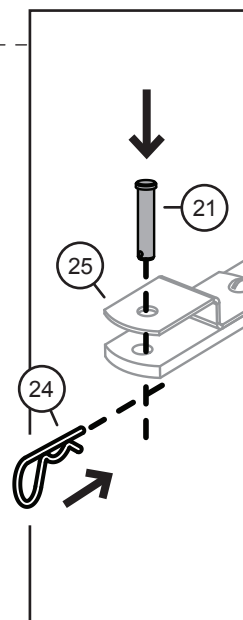


CAUTION: Avoid injury while installing & removing!

Make sure feet and hands are clear of Tine Tips. Keep body parts away from under drawbar. Do not attempt to disconnect aerator from towing vehicle with weight on the tray.

INSTALLING

1. Park machine safely.
(*See towing vehicle manual*).
2. Align aerator clevis (25) with towing machine drawbar.
3. Install drawbar pin (21) through clevis and machine drawbar. Secure drawbar pin with Hairpin Cotter (24).



REMOVING

1. Secure towing vehicle parking brake.
(*See towing vehicle manual*).
2. Place Aerator in the Transport Position.
3. Unload Aerator tray.
4. Remove cotter pin and drawbar pin.
5. Push aerator away from towing vehicle.
6. Install drawbar pin and cotter pin to towbar for storage.

USE AND CARE

USAGE



CAUTION: AVOID INJURY!

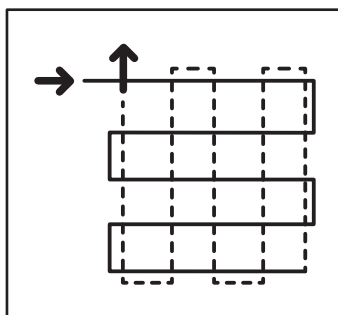
Avoid damage to tines. Do not tow the aerator across concrete or asphalt driveways and walkways.

CAUTION: Excessive towed load can cause loss of control on slopes. Stopping distance increases with speed and the weight of the towed load.

CAUTION: Total towed weight must not exceed combined weight of towing vehicle, ballast and operator.

FREQUENCY

Aeration is not accomplished in a single pass. It will normally take several passes over the lawn.



Alternating the direction by 90° will improve the aeration effect. The aerator may be used in an independent operation or may be used when mowing your lawn.



REPLACEMENT TINES ARE AVAILABLE

Part Number: **1018833-SER**

USING THE WEIGHT TRAY

The following maximum loaded weight capacity is the weight of the aerator plus the weight loaded in the tray:

WEIGHT CAPACITY

42 lbs. EMPTY
150 lbs. MAXIMUM LOAD
192 lbs. MAXIMUM TOWED WEIGHT



CAUTION: AVOID INJURY! THE AERATOR TINES ARE VERY SHARP.

Keep body parts away from under drawbar. Do not attempt to disconnect aerator from towing vehicle with weight on the tray.

Towing capacity will vary with weight of towing vehicle and operator. Add the weight of your machine to operator weight to find the maximum capacity for towing.

DEPTH / PENETRATION

- Weight should be added to tray after installing to the towing machine.
- Weight should be secured by rope, straps, or other suitable means to contain the weight in the tray.
- Weight tray maximum capacity = 150 pounds.
- **Moderate soil moisture is important for proper tine penetration.**
 - *Extremely **DRY** conditions will not permit tine penetration and may damage the tines.*
 - *Extremely **WET** conditions will cause full penetration of tines (up to tine bearings). This condition will cut slots in the turf.*

USE AND CARE

MAINTENANCE

- After the first 30 minutes of use check all fasteners for tightness.
- Tines are manufactured with galvanized steel to resist wear of abrasive soil. Striking objects can cause tines to curl or break. Contact our Customer Service Department to purchase replacement Tines (Part # 1018833-SER).
- Aerator is essentially maintenance free. However as with any steel product, it can rust. Apply a light coat of oil on tines after use to prevent rust. For rust appearing on painted surfaces, sand lightly and coat with enamel.
- Periodically remove debris that builds up between tines.
- Apply lubricating oil at each tine and bearing before use.



STORAGE

CAUTION: AVOID INJURY! THE AERATOR TINES ARE VERY SHARP.

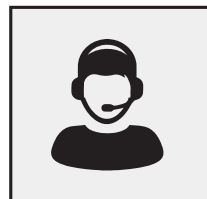


Care should be taken when choosing a storage location for this product. Store Aerator in low traffic aisle ways.

- Store Aerator with tine points facing the wall or ground.
- Store Aerator on the ground or low to the ground.
- Do not store Aerator hanging from the wall, ceiling or with Tine points facing outward.
- Product packaging can be used to offer a protective area around the Tines.
- Drawbar is a trip hazard. Avoid leaving drawbar in aisle ways and walking paths.

SERVICE

QUALITY CONTINUES WITH QUALITY SERVICE



If you have installation questions, are missing parts or need replacement parts, don't go back to the store!

Please find your product serial number and model number, then contact our Customer Service department:



In North America and Canada call
Toll-Free: **877-728-8224**



Chat online: **www.brinly.com**



Email: **customerservice@brinly.com**

ONLINE: BRINLY.COM

Additional info and videos are available on our website. Please visit the URL above OR scan this QR code.

SAT-401BH
SAT-401BH-A





MANUFACTURER'S LIMITED WARRANTY FOR BRINLY PULL-BEHIND ACCESSORIES

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.
- b) 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 than 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: Steel Frame Parts - 3 Years, Tires and Tines are normal wear parts - 90 days.