

**SINCE 1839** 

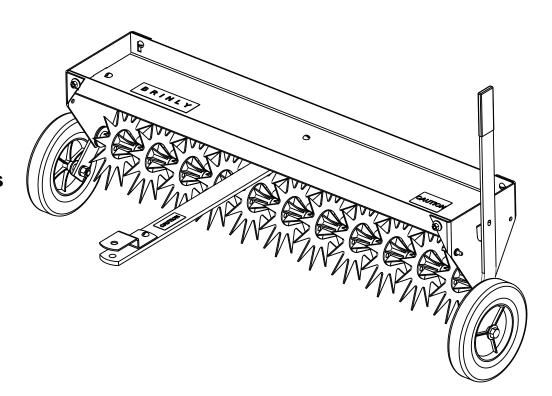
# OWNER'S MANUAL

40" LAWN AERATOR

MODEL:

SAT-40 BH

- 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!

#### INTRODUCTION

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

#### **CUSTOMER RESPONSIBILITIES**

Please read and retain this manual. The instructions enables you to assemble and maintain your lawn aerator properly. And please, always observe the "Safety" instructions.

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#### PRODUCT COMPATIBLIITY

This lawn aerator is designed for use with lawn tractors and garden tractors.

#### RECORD PURCHASE INFORMATION

Record your purchase information in the spaces provided below.

DATE OF PURCHASE:	
COMPANY NAME:	
COMPANY PHONE:	
SERIAL NUMBER:	

#### SAFETY LABELS

#### UNDERSTANDING THE MACHINE SAFETY LABELS



Safety-Alert Symbol

The machine safety labels shown in this section 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.

# A CAUTION

TO PREVENT
PERSONAL
INJURY REMOVE
WEIGHT FROM
TRAY BEFORE
DISCONNECTING
AERATOR FROM
TRACTOR.

### A PRECAUCIÓN

PARA EVITAR
LESIONES
PERSONALES –
RETIRE EL PESO
DE LA BANDEJA
ANTES DE
DESCONECTAR
EL AIREADOR
DEL TRACTOR.

#### A ATTENTION

AFIN D'ÉVITER
TOUTE
BLESSURE
PHYSIQUE,
DÉLESTER LE
PLATEAU AVANT
DE DÉTACHER
L'AÉRATEUR DU
TRACTEUR.





#### **SAFETY**

# TO HELP PREVENT BODILY INJURY DUE TO LOSS OF STABILITY OR CONTROL:

- Do not exceed maximum towing capacity of towing vehicle listed in the vehicle operator's manual.
- Do not tow this machine behind a motor vehicle such as a car, truck or ATV.
- Towing this machine behind a ZTR (Zero Turning Radius)
  mower is not recommended due to the sharp turning ability
  of the ZTR. Damage to this machine or the ZTR may result.
  ZTR's typically operate at higher speeds. Operating above
  5 mph may result in damage to this machine.

#### SAFETY

Read the general safety operating precautions in your towing vehicle operator's manual for additional safety information.

#### **OPERATE SAFELY**

- · Use this machine for intended purpose only.
- This machine is intended for use in lawn care and home applications. Do not tow behind a vehicle on a highway or in any high speed applications. Do not tow at speeds higher than maximum recommended towing speed.
- Towing speed should always be slow enough to maintain control. Travel slowly over rough ground.
- Do not let children or an untrained person operate machine.
- Do not let anyone, especially children, ride on this machine
  or the towing vehicle. Riders are subject to injury such as
  being struck by foreign objects and being thrown off. Riders
  may also obstruct the operator's view, resulting in this
  machine being operated in an unsafe manner.
- Check towing vehicle brake action before you operate.
   Adjust or service brakes as necessary.
- 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.
- Do not modify the machine or safety devices. Unauthorized modifications to the towing vehicle or machine may impair its function and safety, and void the warranty.
- · Keep all nuts, bolts and screws tight.

#### **TOWING SAFELY**

- Stopping distance increases with speed and weight of towed load. Travel slowly and allow extra time and distance to stop.
- Total towed weight must not exceed limits specified in towing vehicle operator's manual.
- Excessive towed load can cause loss of traction and loss of control on slopes. Reduce towed weight when operating on slopes.
- Never allow children or others in or on towed equipment.
- Use only approved hitches. Tow only with a machine that has a hitch designed for towing. Do not attach this machine except at the approved hitch point.
- Follow the manufacturer's recommendations for weight limits for towed equipment and towing on slopes. Use counterweights or wheel weights as described in the towing vehicle operator's manual.
- Do not turn sharply. Use additional caution when turning or operating under adverse surface conditions. Use care when reversing. To avoid jack-knifing, do not allow towing vehicle wheels to contact drawbar.
- · Do not shift to neutral and coast downhill.

#### **PROTECT BYSTANDERS**

- · Keep bystanders away when you operate this machine
- · Before you back look carefully behind for bystanders.
- Before you operate any feature of this machine, observe your surroundings and look for bystanders.

#### KEEP RIDERS OFF TOWED ATTACHMENT

- Keep riders off towed attachment.
- Riders on a towed attachment are subject to injury, such as being struck by objects and being thrown off the attachment during sudden starts, stops and turns.
- Riders obstruct the operator's view, resulting in the attachment being used in an unsafe manner.
- · Keep riders off of hitch bracket.

#### KEEP BODY PARTS FROM UNDER DRAWBAR

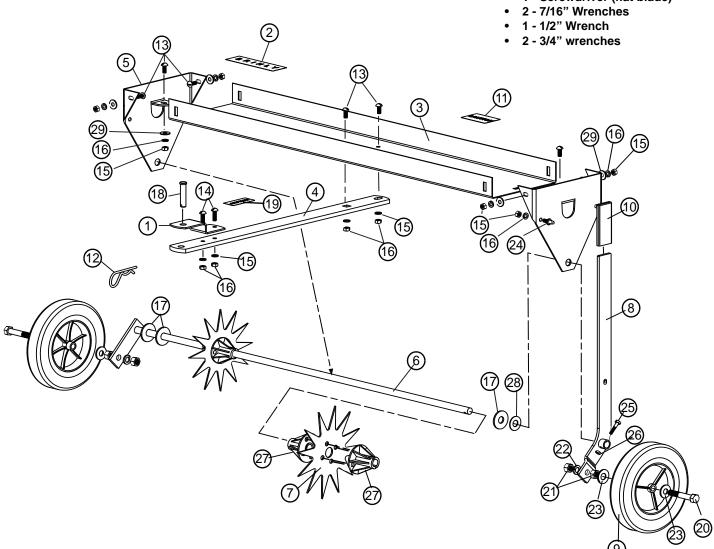
Before disconnecting this machine from towing vehicle hitch plate:

- · Stop on level ground.
- · Stop towing vehicle engine.
- · Lock towing vehicle park brake.
- · Block wheels of the machine.
- · Make sure body parts are not under drawbar.

# **PARTS REFERENCE**

#### **TOOLS REQUIRED FOR ASSEMBLY:**

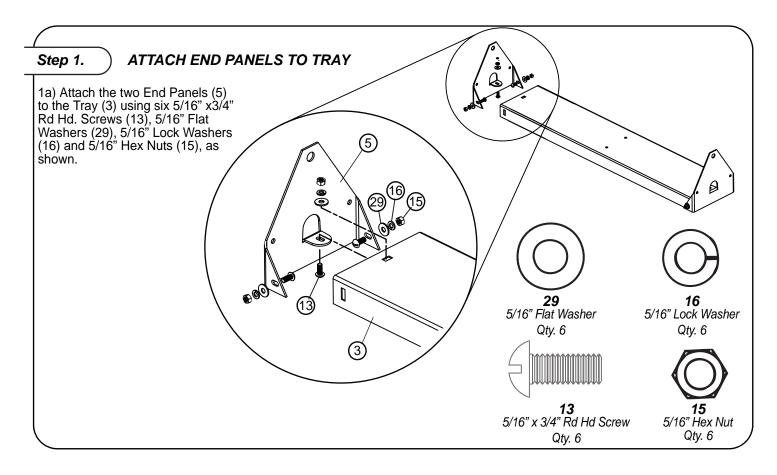
- 1 Pair of work gloves
- 1 Pair of pliers
- 1 Screwdriver (flat blade)

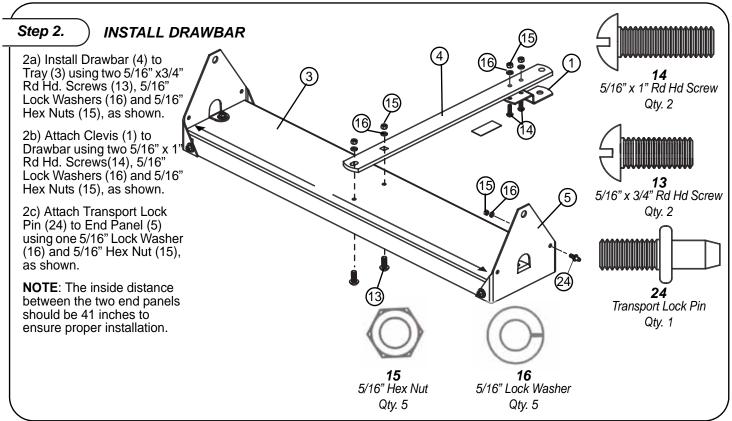


#### **PARTS LIST**

**EXPLODED VIEW** 

REF	PART NO.	DESCRIPTION	QTY.	REF	PART NO.	DESCRIPTION	QTY.
1.	R-821-10	Drawbar Clevis	1	15.	30M1000P	Hex Nut, 5/16"	11
2.	B-5925	Logo Decal	1	16.	40M1000P	Lock Washer, 5/16"	11
3.	B-5453-10	Tray	1	17.	B-5456	Flat Washer, 5/8" (think)	5
4.	B-3593-10	Drawbar	1	18.	B-3861	Drawbar Pin	1
5.	B-3593-10	End Panel	2	19.	B-3922	Caution Decal	1
6.	B-5832-10	Axle Assembly	1	20.	1M1648P	Hex Bolt, 1/2"x3"	2
7.	B-5423-10	Tine	11	21.	30M1600P	Hex Nut, 1/2"	4
8.	B-4888-10	Handle Assembly	1	22.	40M1600P	Lock Washer, 1/2"	2
9.	R-891	Wheel	2	23.	45M1717P	Flat Washer, 1/2"	4
10.	B-4867	Handle Grip	1	24.	B-3307-S	Transport Lock Pin	1
11.	R-1946	Caution Decal	1	25.	2M0820P	Hex Bolt, 1/4"x1-1/4"	1
12.	D-146P	Hairpin Cotter	1	26.	B-1673P	Hex Lock Nut, 1/4"	1
13.	20M1012P	Round Head Screw, 5/16"x3/4"	8	27.	B-5425	Spacer/Bearing, Tube	22
14.	20M1016P	Round Head Screw, 5/16"x1"	2	28.	B-4768	Flat Washer, 5/8" (thin)	2
				29.	45M1111P	Flat Washer, 5/16"	6





#### Step 3.

#### ASSEMBLE TINES TO AXLE

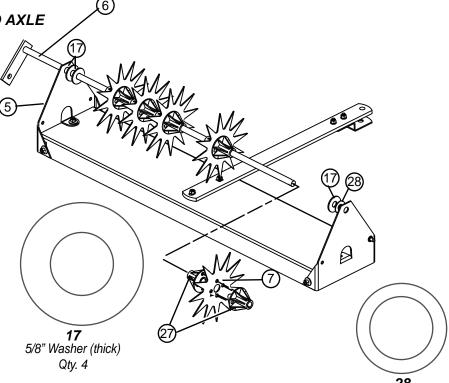
3a) Place a 5/8" Flat Washer, Thick (17) onto the Axle Assembly (6), then slide it through the hole in End Panel (5 right Side) and add another Flat Washer Thick (17) if needed.

3b) Position the eleven Tines (7) and twenty-two Spacer/Bearing Tubes (27) onto the Axle Assembly (6) as follóws:

- · Bearing, small end first
- Aerator Tine
- · Bearing, large end first

Note: Round projections on Spacer/ Bearing flanges must fit into small holes in aerator tines and into two holes of opposite Spacer/Bearing

3c) Position one or two Washers (17 or 28) as needed to eliminate any side-to-side movement and push Axle Assembly (6) through hole in the left End Panel (5) as far as possible. See layout below



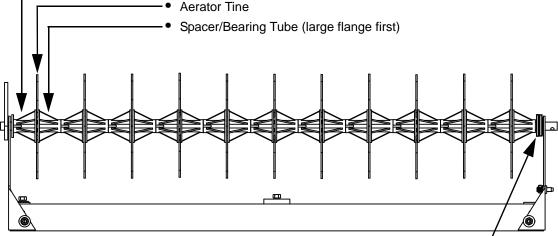
28 5/8" Washer (thin) Qty. 2



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

#### Tine and Spacer/Bearing Tube Layout:

- Spacer/Bearing Tube (small end first)



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 (17 or 28) inside End Panel to eliminate any side movement.

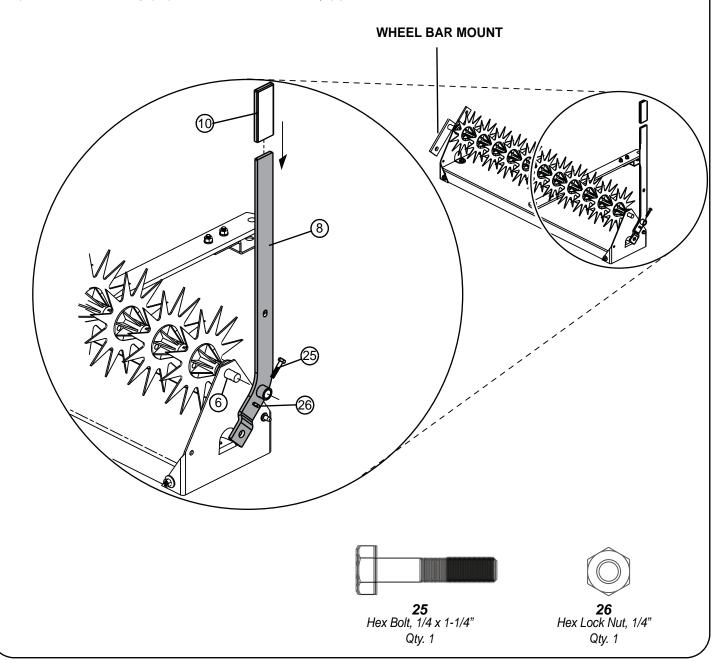
#### Step 4.

#### ATTACH HANDLE ASSEMBLY

4a) Attach the Handle Assembly (8) to end the of the Axle Assembly (6) by inserting one 1/4" x 1-1/4" Hex Bolt (25) though the hole in the end of the Axle Assembly) and secure with 1/4" Hex Nut(26), as shown.

**Note:** The wheel bar mount on the Axle Assembly must be positioned downward, as shown, in order to properly attached the wheels.

4b) Slide the Handle Grip (10) on to the Handle Assembly (8).



#### **ASSEMBLY**

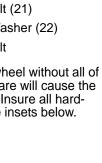
#### Step 5.

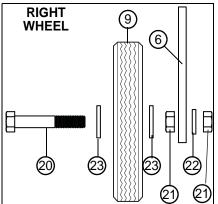
#### **INSTALL WHEELS**

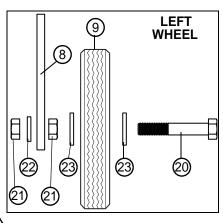
4a) Attach one Wheel (9) to the Handle Assembly (8) and the other wheel to the wheel bar mount on the Axle (6). Secure to each side using hardware in the following order:

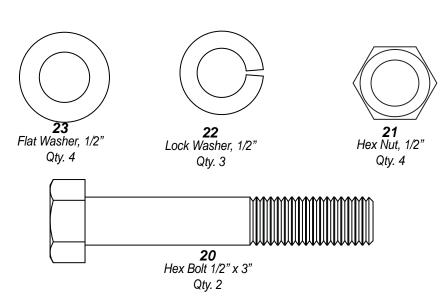
- 1/2" x 3" Hex Bolt (20)
- 1/2" Flat Washer (23)
- Wheel (9)
- 1/2" Flat Washer (23)
- 1/2" Hex Bolt (21)
- 1/2" Lock Washer (22)
- 1/2" Hex Bolt

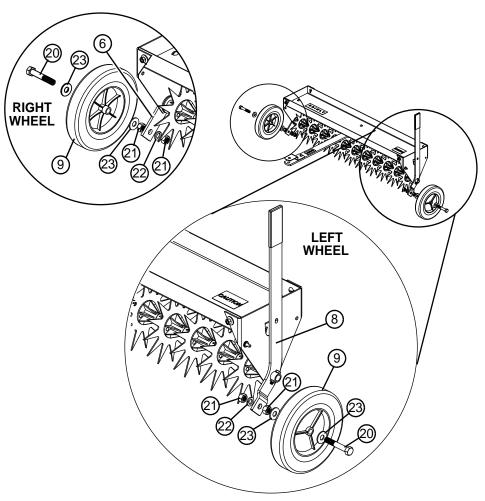
Note: Attaching wheel without all of the proper hardware will cause the wheel to wobble. Insure all hardware is used, see insets below.











#### Step 6.

#### **MOUNTING & TRANSPORTING**

6a) Attach Aerator to your towing vehicle using Drawbar Pin (18) and Hairpin Cotter (12) supplied.

#### 6b) To place in Transport Position:

- Pull FORWARD on Handle Assembly (8).
- Pull out slightly and position over Transport Lock Pin (24). Aerator rests on wheels.

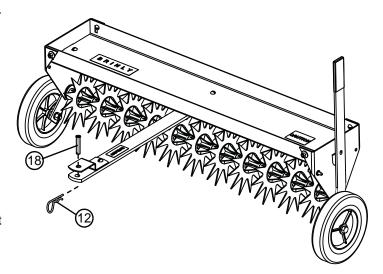


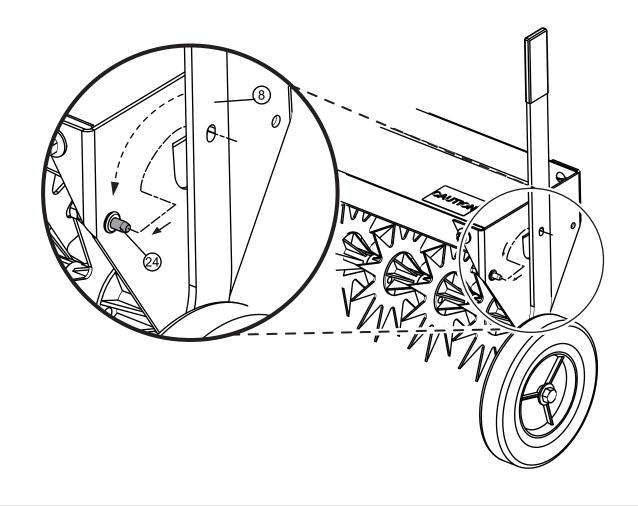
**CAUTION:** Avoid damage to tines. Engage the transport wheels when crossing concrete or asphalt driveways and walkways

#### 6c) To place in Operating Position:

Pull OUT on Handle Assembly (releasing from Transport Position) and push Handle BACK.

Aerator should rest on Tines.





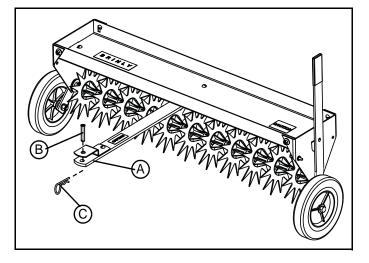
#### **OPERATION**

#### INSTALLING YOUR AERATOR



**CAUTION:** Avoid injury! Make sure feet and hands are clear of Tine Tips.

Avoid injury! Do not operate lift handle unless attachment is installed to towing vehicle



- 1. Park machine safely. (See towing vehicle manual).
- 2. Align aerator clevis (A) with towing machine drawbar.
- 3. Install drawbar pin (B) through clevis and machine drawbar. Secure drawbar pin with Hairpin Cotter (C).

#### REMOVING AERATOR



**CAUTION:** Avoid injury! Keep body parts away from under drawbar. Do not attempt to disconnect aerator from towing vehicle with weight on the tray.

- Secure towing vehicle parking brake. (See towing vehicle manual)
- 2. Place Aerator in the Transport Position
- 3. Unload aerator tray.



**CAUTION:** Avoid injury! Keep body parts away from under drawbar. Do not attempt to disconnect aerator from towing vehicle with weight on the tray.

- 4. Remove cotter pin and drawbar pin.
- Push aerator away from towing vehicle.
- 6. Install drawbar pin and cotter pin to towbar for storage.

#### **OPERATING**



**CAUTION:** Avoid injury! Avoid damage to tines. Engage the transport wheels when crossing concrete or asphalt driveways and walkways.

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

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

#### USING THE WEIGHT TRAY

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

Model	Weight Capacity
SAT 40BH	42 lbs. (Empty)
	150 lbs (Max Load).
	192 lbs Max Towed Weight



**CAUTION:** Avoid injury! 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 the 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 penetration. Extremely dry conditions will not permit penetration and may damage the tines. Extremely wet conditions will cause full penetration to the tine spacers. This condition will cut slots in the turf.

#### SPEED

The best operating speed is 3 mph or less.

#### **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.

#### SERVICE

#### **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 # B-5423).

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.

#### **SPECIFICATIONS**

Maximum Towing Speed	5 mph.
Maximum Load	150 lbs.
Empty Weight	42 lbs.
Maximum Towed Weight	192 lbs.

#### **GETTING QUALITY SERVICE**

Quality Continues with Quality Service

We provide a process to handle your questions or problems.

Follow the steps below to get answers to any questions you may have about your product:

- Refer to your attachment and machine operator manuals.
- In North America or Canada, call 1-877-728-8224 and provide product serial number (if available) and model number.

# MANUFACTURER'S LIMITED WARRANTY FOR



# **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 Pull Behind Accessories 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 this Lawn Aerator is as follows: Steel Frame Parts - 3 Years, Tires and Tines are normal wear parts - 90 days.