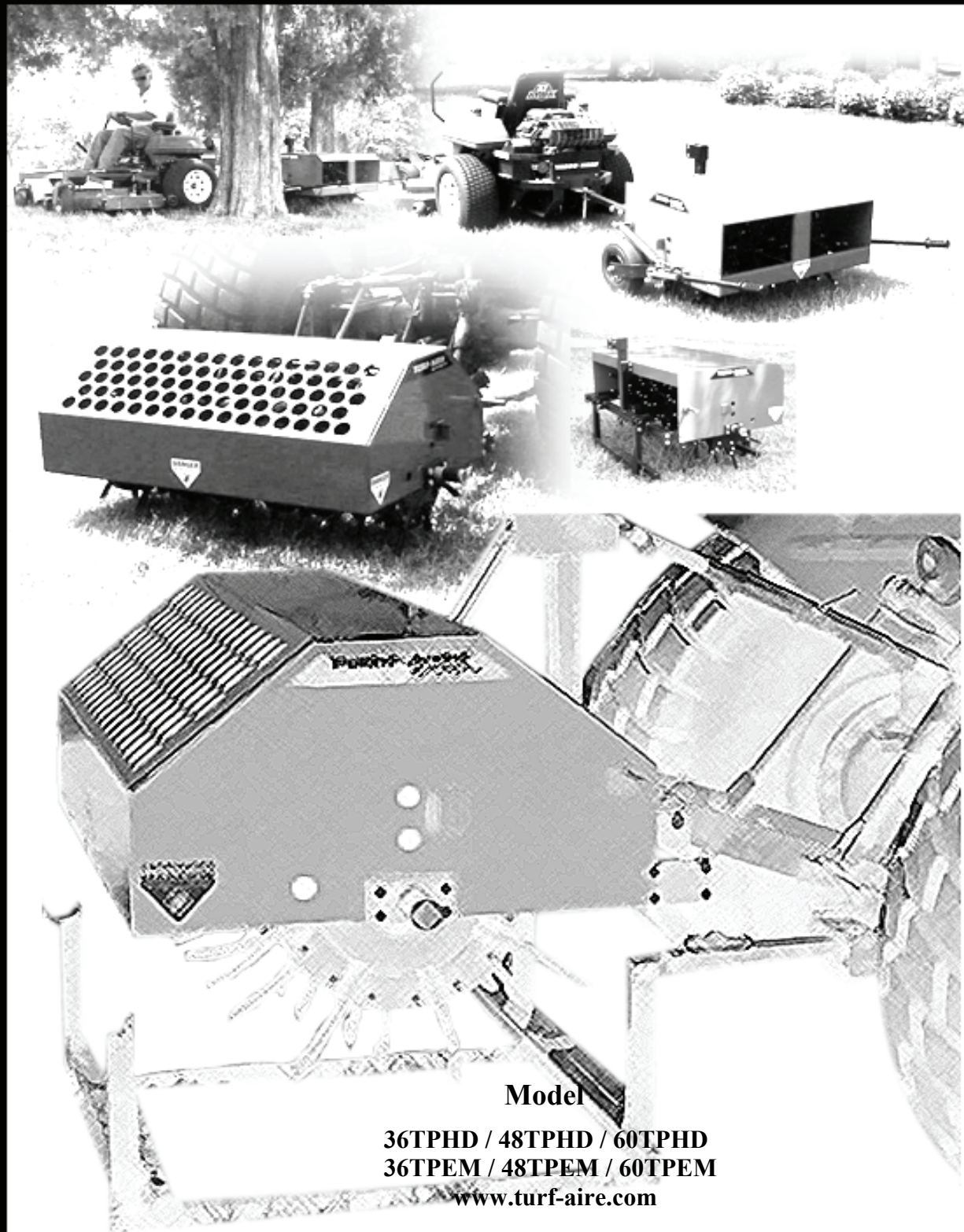


TURF-AIRE®

Operator's Manual
with illustrated parts lists



Model

**36TPHD / 48TPHD / 60TPHD
36TPEM / 48TPEM / 60TPEM**

www.turf-aire.com



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INTRODUCTION

This operator's manual applies only to the following Turf-Aire® models:

36" Three-Point Hitch Economy (36TPEM)
48" Three-Point Hitch Economy (48TPEM)
60" Three-Point Hitch Economy (60 TPEM)

36" Three-Point Hitch Heavy Duty (36TPHD)
48" Three-Point Hitch Heavy Duty (48TPHD)
60" Three-Point Hitch Heavy Duty (60TPHD)

Notice Regarding the Use of this Manual

This manual is designed to aid you in the safe operation and proper maintenance of your Turf-Aire® aerator. It is essential that you read the manual thoroughly before attempting any installation procedure and/or operation of the machine. If you do not understand any or all of the information contained in this manual, please contact an authorized Turf-Aire® distributor/dealer for clarification before proceeding.



The information provided herein is intended to instruct you as to the proper methods of installation and operation that are necessary to avoid serious injury to yourself or others. Please heed all safety warnings. If you do not follow these instructions and warnings carefully, you could cause injury to yourself or others, and/or damage the Turf-Aire® aerator. Keep this manual within easy access of the Turf-Aire® operator at all times.

The **WARNING** symbol located to the left is used throughout this manual to garner your attention. It is particularly important to read and adhere to these warnings in order to avoid serious injury. You will also notice that there are numerous "Notes" set apart from the normal text to draw your attention to specific instructions to help you maintain and operate your Turf-Aire® aerator properly.

Service & Parts Information

All information, illustrations, and specifications contained herein are based on the most current product information available at the time of publishing. Bishop Enterprises, Inc. reserves the right to make changes at any time and without prior notice. If a change has been made to your Turf-Aire® which is not reflected in this Operator's Manual or the associated Illustrated Parts List, see your Turf-Aire® distributor/dealer for current information and updates.

Turf-Aire® products should **NEVER** be modified in any way (other than installing any of the factory authorized kits specifically listed in this Operator's Manual) without the manufacturer's authorization. Use only original equipment (O.E.M.) replacement parts, if necessary. **REMEMBER:** All warranty repair and service must be performed by an authorized Turf-Aire® dealer.

NOTE:

- Any unauthorized alterations and/or modifications to your Turf-Aire® releases Bishop Enterprises, Inc. from any warranty agreement and liability resulting from use of the modified equipment.

Introduction (cont.)

Product Registration

The enclosed PRODUCT REGISTRATION form must be completed and signed by both the distributor / dealer and the new equipment owner to validate warranty protection (details on pages 16-18). Bishop Enterprises, Inc. makes every effort to keep owners informed of all safety-related information. Therefore, it is imperative that you register your Turf-Aire® product with us and keep us abreast of any changes in address and/or ownership. Your Turf-Aire® dealer can forward this information to the manufacturer, or you can forward the information yourself directly to: Bishop Enterprises, Inc., 9033 Shelbyville Highway, Bell Buckle, Tennessee, 37020, Re: Registration Changes

Replacement Manuals

Additional copies of this Operator's Manual are available for a nominal fee. Please send your request to: Bishop Enterprises, Inc., 9033 Shelbyville Highway, Bell Buckle, Tennessee, 37020, Re: Turf-Aire® Operator's Manual



Read all warnings before proceeding. . .

WARNING!

- This manual contains vital operation and safety information and must be stored with your Turf-Aire® aerator at all times in order to provide quick and easy access by the operator.
- DO NOT alter this equipment in any manner. Doing so may cause hazardous conditions affecting the operation and/or performance of your Turf-Aire® aerator.
- DO NOT remove the safety decals located on your Turf-Aire® aerator. These decals are meant to remind you of important safety precautions. These decals should be replaced if they come off or become illegible.

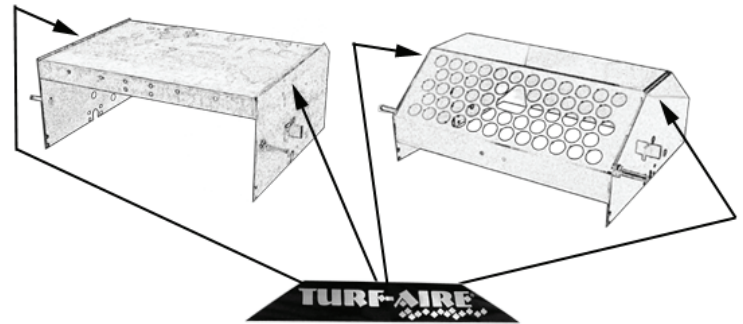
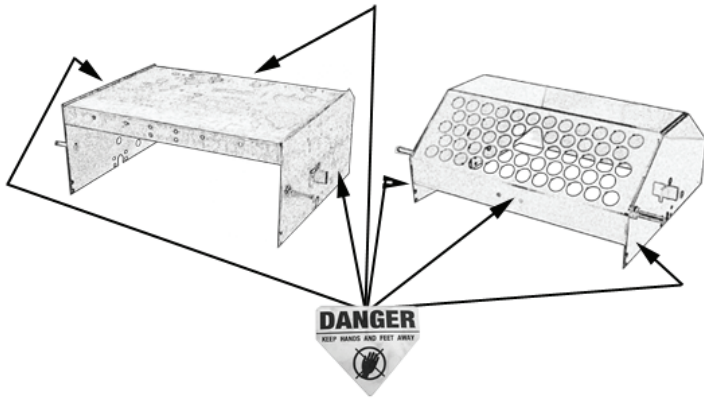
Read all warnings before proceeding. . .

WARNING!

INTRODUCTION (CONT)



- This manual contains vital operation and safety information and must be stored with your Turf-Aire® aerator at all times in order to provide quick and easy access by the operator.
- **DO NOT** alter this equipment in any manner. Doing so may cause hazardous conditions affecting the operation and/or performance of your Turf-Aire® aerator.
- **DO NOT** remove the safety decals located on your Turf-Aire® aerator. These decals are meant to remind you of important safety precautions. These decals should be replaced if they come off or become illegible.



Pro-aire and Heavy Duty models

36", 48", & 60" Three-Point Hitch



Read all warnings before proceeding. . .
WARNING!

- Stay clear of band–banding is under tension and may snap back when cut.
- Always wear eye and hand protection.
- Always use caution when handling your Turf-Aire® aerator because the preinstalled tines are sharp and can cause serious injury.
- Use a certified jack stand to support the aerator anytime it is stored, serviced, or repaired.
- Before operating the aerator, check area to be aerated and remove any objects which may present a safety hazard or cause damage the aerator (rocks, cans, etc.)
- To prevent injury, **DO NOT** operate aerator without cover in place.
- **DO NOT** make any adjustments or perform any maintenance while tractor engine, or alternative power source, is running.
- **DO NOT** leave tractor, or any power source, unattended without stopping the engine.

Instructions

- 1) Carefully remove and discard banding from aerator.
- 2) Attach tractor, or alternative power source, to aerator and lift off pallet.
- 3) Move and position the tractor, or alternative power source, with the aerator attached to the location you plan to aerate
- 4) Lower aerator on to the ground and begin aerating.

NOTE:

- Failure to lubricate aerating wheels can cause damage to axle, bushings, and wheels.
- NEVER cross hard objects or surfaces (sidewalks, driveways, stepping stones, etc.) with tines lowered.
- Aerators attached by three-point hitch should be raised completely out of the ground to avoid turf damage while turning
- DO NOT BACK UP when tines are in the ground or damage to the tines and clamps may occur.

A double set of tines may be mounted onto the aerating wheels on all Turf-Aire® models for increased performance. Be advised that additional nuts, bolts and tines are required for this application.

Pro-Aire Model
Illustrated Parts List

Ref#	Part#	Description	Quantity
1	030004	36" EM Cover & Weight Tray	1
1	030005	48" EM Cover & Weight Tray	1
1	030006	60" EM Cover & Weight Tray	1
2	030007	Side Arms	2
3	030011	36"EM Three-Point Hitch Frame	1
3	030012	48"EM Three-Point Hitch Frame	1
3	030013	60"EM Three-Point Hitch Frame	1
4	031105	7/8" Hitchpins	2
5	030015	Hairpins, #10	2
6	030019	Outside Collar	2
7	030018	Tine Wheel	36"= 6 48"=8 60"=10
7a	030022	Tine Wheel Complete Econ. Model	1
8	030023	Grease Zerk Fittings	36"= 6 48"=8 60"=10
9	030024	Tine Wheel Bushings	36"= 6 48"=8 60"=10
13	030029	3/4" Coring Tine	36"= 48 48"=60 60"=80
15	030031	Tine Wheel Bolt	36"=144 48"=192 60" =240
17	030033	Flange Nut 5/16"-18	36"=144 48"=192 60" =240
19	030035	36" EM Axle Shaft	1
19	030036	48" EM Axle Shaft	1
19	030037	60" EM Axle Shaft	1
20	030052	Inside Spacer Tube	2
21	030051	Outside Spacer Tube	2
22	030053	3" Spacers	36"= 6 48"=8 60"=10
25	030042	Bolt 1/2 x 1-1/2 x 13	6
27	030043	1/2" Lockwashers	22
28	030044	Decal- Turf-Aire®	2
29	030045	Decal- WARNING	4
31	030047	Center Arm	1
32	030054	Cover Plate Bushing	2
33	030035A	Cover Plate	2
34	030055	Flange Nut (1/2"x 13)	8
35	030056	Bolt (1/2 x 1 x 13)	4
37	030058	Bolt (1/4"x2x13)	2
38	030059	Nut (1/4"x13)	2
40	030049	Nut (1/2"x13)	14
41	030062	Bolt 1/2x1-3/4x13	12

Heavy Duty Model Parts List

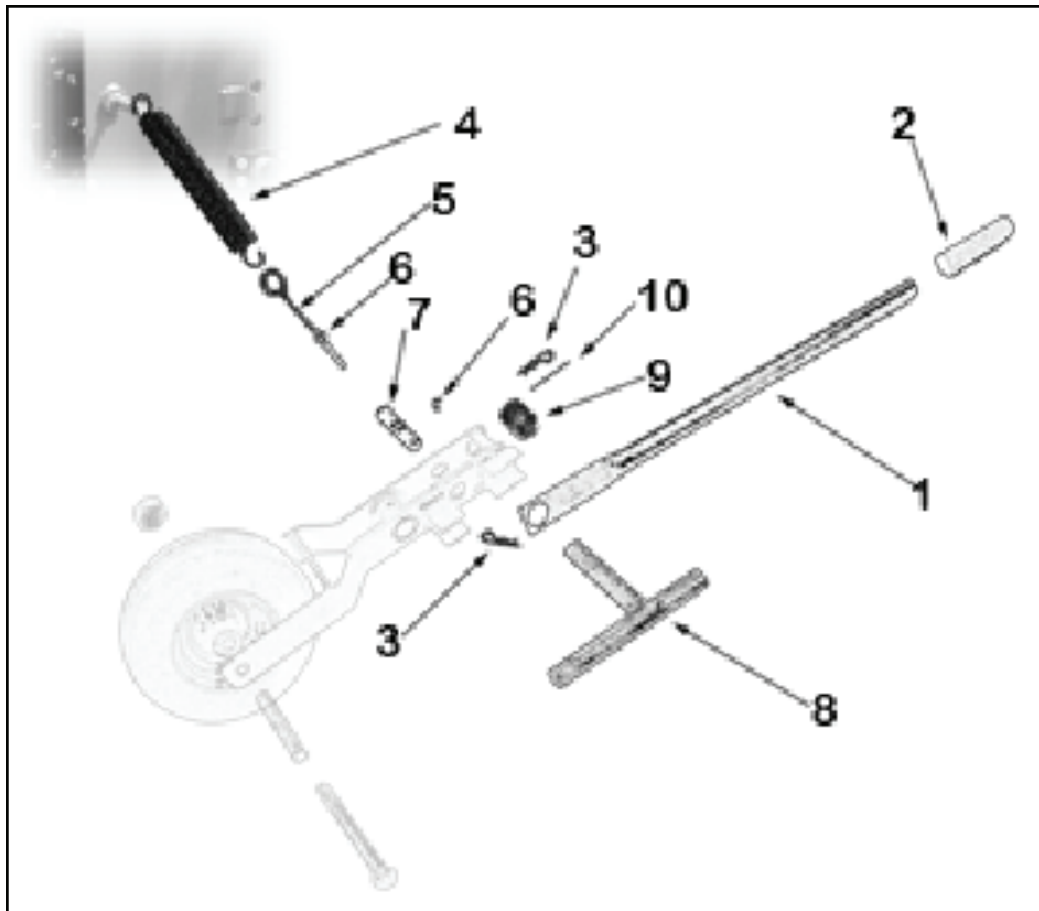
Ref#	Part#	Description	Quantity
1	030001	36" HD Aerator Cover	1
1	030002	48" HD Aerator Cover	1
1	030003	60" HD Aerator Cover	1
2	030007	Side Arms	2
3	030008	36"HD Three-Point Hitch Frame	1
3	030009	48"HD Three-Point Hitch Frame	1
3	030010	60"HD Three-Point Hitch Frame	1
4	031105	Hitchpins	2
5	030015	#10 Hairpin	2
6	030016	HD Tine Wheel	36"= 6 48"=8 60"=10
6a	030017	Tine Wheel Complete Heavy Duty	1
8	030023	Grease Zerk Tine Wheel	36"=12 48"=16 60"=20
9	030025	Tine Wheel Bushings	36"=96 48"=128 60"=160
10	030063	Bolt 3/8"x16 x 2-1/4"	36"=96 48"=128 60"=160
11	030027	Nut, Flange 3/8" x 16	36"=96 48"=128 60"=160
12	030028	Clamp, Tine	36"=48 48"=64 60"=80
13	030029	Coring Tine (3/4" closed)	36"=48 48"=64 60"=80
22	030038	36" Heavy Duty Axle Shaft	1
22	030039	48" Heavy Duty Axle Shaft	1
22	030040	60" Heavy Duty Axle Shaft	1
25	030041	Bolt 1/2" x 1-1/4" x 13	4
26	030062	Bolt 1/2"-13 x 1-3/4"	12
27	030043	1/2" Lockwashers	18
28	030044	Decal- Turf-Aire®	2
29	030045	Decal- WARNING	4
30	030046	Wheel Spacer 2x1.656	36"=2 48"=4 60"=6
31	030060	Center Brace	1
33	030049	Nut 1/2"-13	10
36	030056	Bolt 1/2"x1"-13	2
37	030019	Outside Collar	2
38	030053	3" Spacer Tube	2
39	030035A	Cover Plate	2
40	030058	Bolt 1/4"x2"x13	2
41	030059	Nut 1/4"x13	2
42	030061	Threaded Rod 3/4"x13	1
43	030034	Nut 3/4"x13	2
44	030054	Cover Plate Bushing	2
46	030064	Washer 1"x5/16x2	2
50	030034	Nut 3/4"-10	2
51	030055	1/2" Flange Nut	8
51	030042	1/2-13x1-1/2 Bolt	4

Ma Kit #38682 (Lift Handle Kit w/spring)

Read all warnings before proceeding. . .
WARNING!

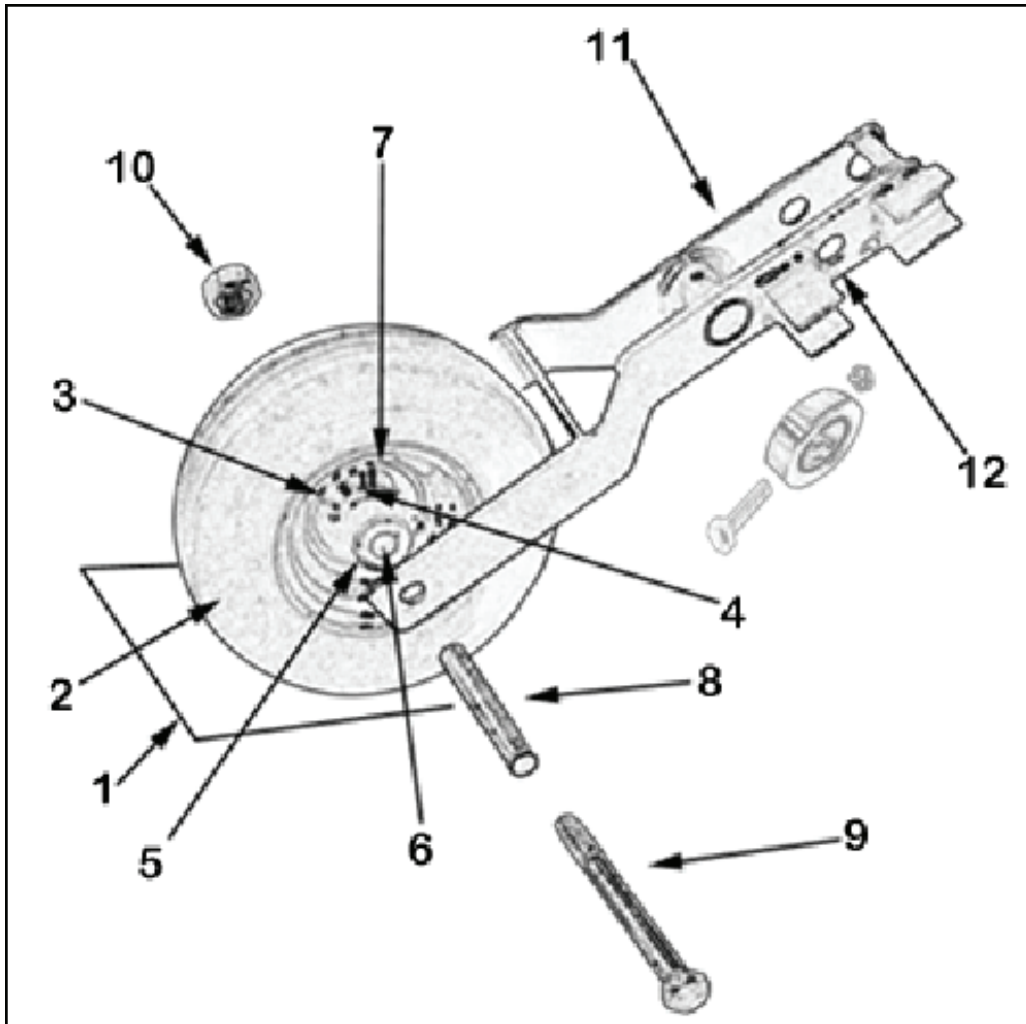


- **DO NOT** use hydraulics on a unit with a manual lift kit installed. Serious injury and/or accidents can occur.



Ref#	Part#	Description	Quantity
1	031021	Lift handle	1
2	031022	Handle grip	1
3	030015	Hair pin #10	3
4	031022A	Spring lift assist	2
5	031023	I-Bolt (3/8 x 4-1/2")	2
6	031024	3/8" Nut	4
7	031025	3/4" Hitch pin w/hole	2
8	031017	T Bar	1
9	031016	Compression Spring	2
10	030048	Roll Pin	1

**Wheel Kit Accessory
Illustrated Parts List – Kit #38681**

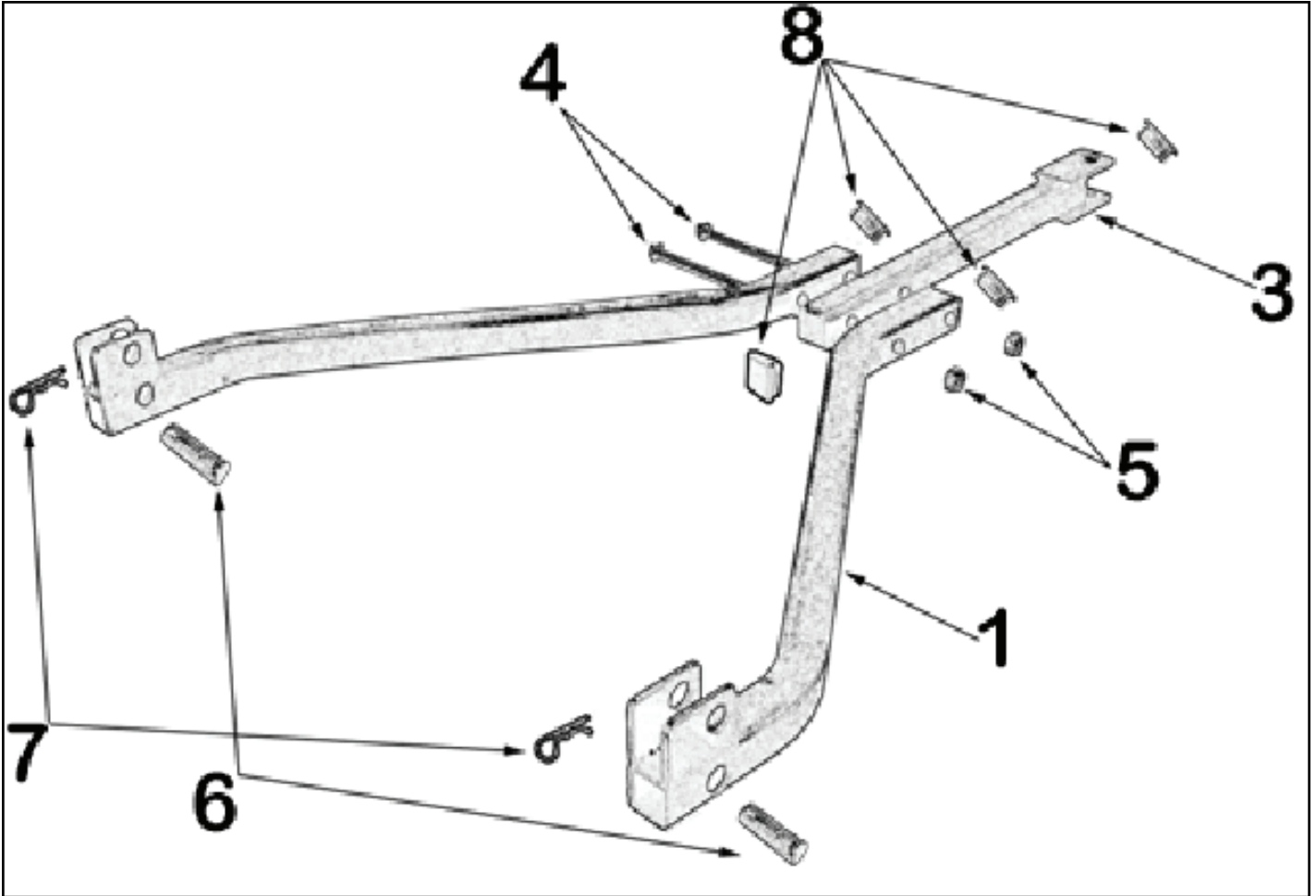


Ref#	Part#	Description	Quantity
1	031005	Wheel/Tire assembly	2
2	031006	Tire only	2
3	031007	Wheel only	2
4	031008	Valve stem	2
5	031009	Bearing, wheel	4
6	031010	Open Caged Retainer	4
7	031011	Grease zerk wheel assembly	2
8	031012	Spanner bushing, wheel	2
9	031013	Bolt 5/8 x 5-1/2-18"	2
10	031014	Lock nut 5/8"-18	2
11	031018	Wheel lift weldment	2
12	031020	Woodruff Key	2



**Tow Hitch Complete
Kit #38680**

- Fasten Securely in the aerate position.



Ref#	Part#	Description	Quantity
1	031100	Right side tow bar	1
2	031101	Left side tow bar	1
3	031102	Center draw bar	1
4	031103	Bolts—(1/2-13 x 5-1/2)	2
5	030049	Nuts (1/2"-13)	2
6	031105	Hitch pins, 7/8"	2
7	030015	Hairpin #10	2
8	031106	Tubing plug, plastic	

Operation (Transport & Aeration)

Read all warnings before proceeding. . .

WARNING!

- **DO NOT** allow children or persons without proper instruction to operate the Turf-Aire®.
- **NEVER** stand behind the aerator while it is in use. Maintain a safe distance from people and pets, especially small children.
- **DO NOT** tow this unit at speeds in excess of 10 m.p.h. (16 km/h).
- **BE AWARE** of your surroundings. Watch for holes or deep depressions in the landscape. Inspect area for any objects which may present a safety hazard or cause damage to the aerating unit (large rocks, cans, bottles, etc.). **AVOID** rough terrain.
- **STOP and INSPECT** the aerator if you hit a foreign object before continuing with aeration.
- Wear hand protection while inspecting or removing debris from tines.
- **AERATE DURING DAYLIGHT HOURS** for best visibility.
- **DO NOT** operate aerator without cover in place.
- **DO NOT** leave tractor, or alternative power source, unattended while engine is running.
- **DO NOT OPERATE IN REVERSE** while aerating unit is lowered to the ground.
- **DO NOT** use your aerator if the unit is not properly serviced and maintained.

Transport Instructions

- 1) With transport wheels lowered and locked into place, tow the aerator to and from job sites with aerator properly hitched to tractor drawbar. Maximum towing speed should never exceed 10 m.p.h. (16 km/h).

Aerating Instructions

- 1) Position tractor and aerator where you wish to begin aerating. On models with hydraulic lift, lower unit and begin aerating. On models with manual lift, use the lift handle to lower the aerator to the ground.
- 2) Tow Turf-Aire® over area to be aerated.
- 3) After aeration, clean and service your Turf-Aire® before storing the unit.

NOTE:

- Avoid crossing hard objects or surfaces with tines lowered (i.e., sidewalks, driveways).
- Operating at excessive speeds will cause damage to the Turf-Aire®. Damage to wheels or frame caused by towing unit at excessive speeds will not be repaired under warranty.
- Aerators attached by three-point hitch should be raised completely out of the ground to avoid turf damage while turning.
- Operating unit in reverse may cause serious damage to tines and/or clamps.

Service (*Lubrication, Tire Pressure & Storage*)

Read all warnings before proceeding. . .

WARNING!

- **DO NOT** use tractor hydraulics to support the aerator while servicing. Hydraulic lines may rupture, causing unit to fall suddenly. To prevent injury, place jack stands at each corner of the aerator and make sure they are securely in place.
- When replacement parts are required, only use genuine Turf-Aire® replacement parts. Failure to do so may result in product malfunction and possible injury to the operator and/or bystanders.
- **CAUTION** must be used when re-inflating or bringing a low tire up to the recommended pressure. **USE A PRESSURE GAUGE** – Over-inflation of a tire can cause the tire to explode.

Lubrication Instructions

- 1) Wipe off lubrication fittings before and after lubrication of aerating wheels.
- 2) Lubricate aerating wheels after every four hours of use or before storing the unit for a lengthy period of time. Use a standard lithium based grease.
- 3) Lubricate transport wheels before use.

Tire Pressure Instructions

Tire Pressure max. 45 psi
Tires 11 x 4.00, 4-ply

NOTE:

- These tires are not designed for highway use.
- Keep the tires inflated to the proper tire pressure recommended. Improper tire inflation will shorten the life of the tires.

Service (cont.)

Storage Instructions

- (1) Clean all tines thoroughly after each use. Apply a light coat of oil onto the tines to help prevent rust and ensure proper coring in the future.
- (2) Store unit in a dry location, on boards, to protect tines from rust and damage.
- (3) Lubricate before long storage periods to help prevent moisture build up in the cavities.
- (4) Check for loose bolts or damaged parts (tighten and replace, as needed).

NOTE:

- **Proper maintenance and responsible storage of your Turf-Aire® unit will extend its life and performance.**

Limited Warranty

Bishop Enterprises, Inc. (hereinafter referred to as “Bishop”) warrants for one (1) year all new Turf-Aire® units. This warranty extends to the original retail purchaser only and commences on the date of original retail purchase. Accordingly, this warranty is not transferable to any subsequent purchasers.

Any part of the Turf-Aire® unit or accessory manufactured by Bishop and found in the reasonable judgment of Bishop to be defective in material or workmanship will be repaired or replaced by an authorized Turf-Aire® distributor/dealer without charge for parts and labor. The Turf-Aire® unit, including any defective part, must be returned to an authorized Turf-Aire® distributor/dealer within the warranty period of one-year. The owner/operator will be responsible for the expense of returning the Turf-Aire® unit to an authorized distributor/dealer for warranty service, as well as the expense for having it returned to them after said repair or replacement.

Bishop’s responsibility is limited to making the required repairs or replacements. No claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Turf-Aire® unit. Proof of purchase will be required by the authorized Turf-Aire® distributor/dealer to substantiate any warranty claim and all warranty work must be performed by an authorized Turf-Aire® distributor/dealer.

Bishop makes no warranty with respect to engines, tires, or other parts not of their manufacture. (Such parts are usually warranted separately by their respective manufacturers.) This warranty does not include service items subject to normal wear (i.e., tines). This warranty does not cover any Turf-Aire® unit that has been subject to misuse, neglect, negligence, or accident, or that has been operated or maintained in any way contrary to the operating or maintenance instructions as specified in the Turf-Aire® Operator’s Manual. The warranty does not apply to any Turf-Aire® unit that has been altered or modified so as to adversely affect the machine’s operation, performance, or durability or that has been altered or modified so as to change its intended use. In addition, the warranty does not extend to repairs made necessary by normal wear, or by the use of parts or accessories which, in the reasonable judgment of Bishop, are either incompatible with the Turf-Aire® unit or adversely affect its ability to function properly.

Bishop reserves the right to change or improve the design of any Turf-Aire® unit, without prior notice, and without assuming any obligation to modify any unit previously manufactured.

ALL IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE APPLICABLE ONE-YEAR PERIOD. ALL IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, ARE DISCLAIMED IN THEIR ENTIRETY AFTER THE EXPIRATION OF THE ONE-YEAR WARRANTY PERIOD.

BISHOP’S OBLIGATION UNDER THIS WARRANTY IS STRICTLY AND EXCLUSIVELY LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS, AND BISHOP DOES NOT ASSUME OR AUTHORIZE ANYONE TO ASSUME FOR THEM ANY OTHER OBLIGATION.

Limited Warranty (cont.)

Bishop assumes no responsibility for incidental, consequential, or other damages including, but not limited to, expense for gasoline, expense of returning the product to an authorized distributor/dealer and/or the expense of returning it back to the owner, mechanic's travel time, telephone or mobile/cell charges, freight, trailering or towing charges, rental of a like product during the time warranty service is being performed, travel, lodging, loss or damage to personal property, loss of revenue, loss of use of the Turf-Aire® unit, loss of time or inconvenience.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty applies to all Turf-Aire® units sold in the United States.

Bishop Enterprises, Inc.
9033 Shelbyville Highway
Bell Buckle, TN 37020

Warranty Service

To make a claim under warranty, contact the distributor/dealer immediately upon realizing a problem exists. We recommend having the warranty work performed by the distributor/dealer who originally sold you the product; however, warranty work can be sought from any authorized Turf-Aire® distributor/dealer. Remember, your Turf-Aire® product must be delivered to an authorized Turf-Aire® distributor/dealer within the warranty period. All warranty work must be performed only by an authorized Turf-Aire® distributor/dealer. Proof of purchase will be required by the distributor/dealer to substantiate any warranty claim.

EXAMPLES OF ITEMS NOT COVERED UNDER WARRANTY

Provisions of the warranty will not apply to:

- * Normal service work over and above the repair and replacement of defective parts
- * Units subject to misuse, neglect, negligence, or accident
- * Units that have been altered or modified, thereby adversely affecting their ability to function properly
- * Repairs made necessary by the use of parts or accessories which are not genuine Turf-Aire® replacement parts or standard accessory kits
- * Units not operated or maintained in accordance with the instructions in the Turf-Aire® Operator's Manual
- * Normal cleaning, adjusting, or replacing of normal wear items (i.e., tines)
- * Periodic checking/adding of lubricants to the unit, service check-up, or diagnosis
- * Expense of delivering and returning the unit for repair or any associated costs regarding loss of use
- * Tires or parts manufactured by anyone other than Bishop are not covered under this warranty

NOTE: This warranty applies only to the original retail purchaser. Second-owner or subsequently owned products are not covered under warranty.

OWNER'S OBLIGATION AND RESPONSIBILITY

Normal maintenance service and replacement of normal wear items are the responsibility of the owner/operator and, as such, are not considered defects in material or workmanship within the terms of the warranty. Individual operating habits and usage contribute to the need for maintenance service.

Proper care, maintenance, and responsible storage will extend the life and performance of your Turf-Aire® unit and keep your overall operating cost at a minimum (see Operator's Manual).

To validate a warranty claim, it is the owner/operator's responsibility to maintain all components in proper adjustment and service the product as specified in the Turf-Aire® Operator's Manual. It is the owner's responsibility to provide proper lubrication for all components. It is the owner's responsibility to maintain the correct tire pressures, where applicable.