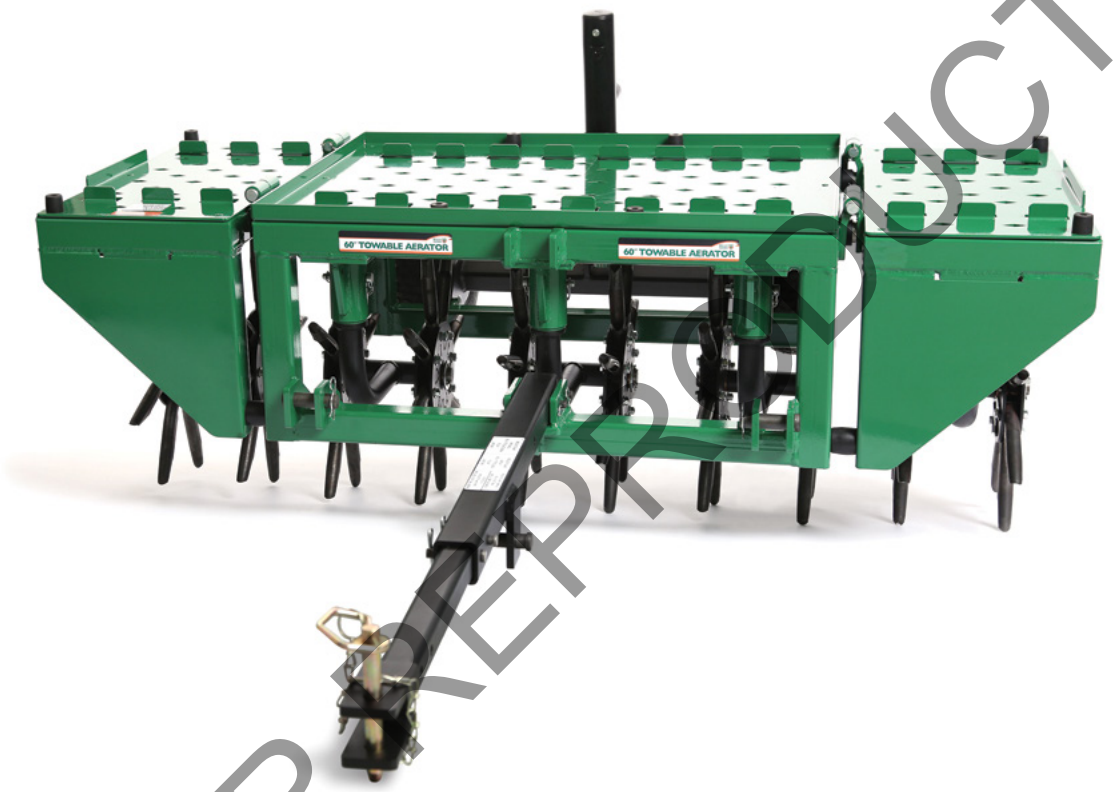


AERATOR 60" Owner's Manual

AET60

Beginning Serial #: 022417472

NOT FOR REPRODUCTION

Original Instructions

IMPORTANT- READ CAREFULLY BEFORE USE AND KEEP FOR FUTURE REFERENCE

Table of Contents

Specifications, Intended Use, Replacement Parts & Safety 3

Instruction Labels, Packing Checklist, & Assembly 4

Operation 5-6

Maintenance and Troubleshooting 6

Illustrated Parts and Part Lists 7-8

Tine Replacement Kit Information 9

NOT FOR REPRODUCTION

Specifications

Total Unit Weight	443lb (201kg)
Width	37”-48”-60”
Maximum Operating Slope	15 °

Table 1: Specifications

Intended Use

Your Billy Goat® Aerator
This machine is designed for aerating established lawns and large grass covered areas. The machine should not be used for any other purpose than that stated above.

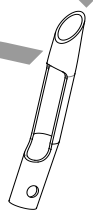
⚠ DO NOT OPERATE IF EXCESSIVE VIBRATION OCCURS!
If excessive vibration occurs, stop use of the unit immediately and check for damaged or worn reel, loose hardware, or lodged debris.

Handling and Transporting
Always use four or more people to lift this machine. Lift holding on either side of the machine, using the handles and the frame. Secure in place during transportation. See specifications for unit weight.

For safety use gloves when lifting.

Replacement Parts

TINE REPLACEMENT
Replacement tip for aerating tines.
P/N 360100



Safety

PROPOSITION 65 STATEMENT

WARNING

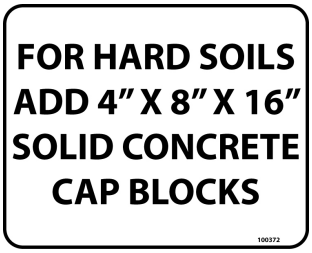
This product can expose you to chemicals including gasoline engine exhaust, which is known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

NOT FOR REPRODUCTION

Instruction Labels

The labels shown below were installed on your Billy Goat® Aerator. If any labels are damaged or missing, replace them before operating this equipment. Part numbers from the Illustrated Parts List are provided for convenience in ordering replacement labels. The correct position for each label may be determined by referring to the part numbers shown.

LABEL DANGER CLEAR
P/N 100311



LABEL HARD SOIL
P/N 100372

LABEL MAX LOAD
P/N 100356

LABEL HITCH MOUNT
P/N 100374

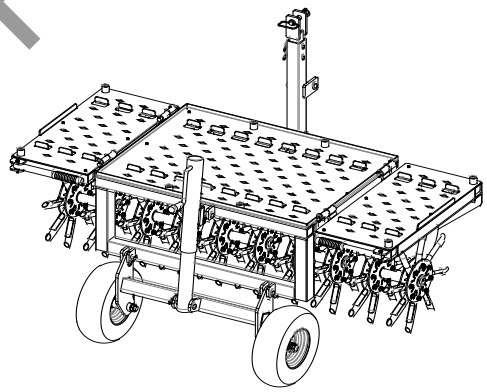
Packing Checklist

Your Billy Goat® AET60 is shipped from the factory in one carton, completely assembled.

Read all safety instructions before assembling unit.
Take caution when removing the unit from the box.

Parts Bag and Literature Assembly

- Warranty Card P/N - 400972
- Owner's Manual P/N - 100384
- General Safety and Warranty Renovation Manual P/N - 100295
- General Safety and Warranty Manual P/N - 100295



Boxing Parts Checklist
☐ Owner's Manual P/N 100384

Assembly

1. The machine is fully assembled; you will need to attach to a vehicle in the desired configuration (see operation section for details).

NOT FOR REPRODUCTION

Operation

Item numbers in parentheses can be referenced in the Parts Illustration and Parts List on pages 7-9.

Operating Instructions
The AET60 is a combination of a tow-behind aerator and a 3-point aerator with two wings for adjustable aeration widths. When used behind a tractor in the 3-point application, there are pins on each tine assembly that can be removed to allow tines to swivel, enabling the tractor to turn while still aerating with the tines in the ground. When being towed, the tine assemblies must be locked in place for proper tracking.

Aerating Operation
NEVER PARK THIS UNIT ON A SLOPE OF ANY KIND. Always keep tines in the up position when parking the unit.

Using as a Tow-Behind
When using this machine as a towable aerator, the tow link should be in the down position and attached to the frame of the aerator using the two clevis pins (item 19). The tow behind is telescoping so that it can be extended to accommodate various vehicles. Make sure all five lock pins (item 21) are in place on the axle assembly to prevent the assembly from swiveling. When operating, the wings can either be up or down depending on the width of aeration desired. In normal conditions, there will be adequate weight for proper penetration when the wings are up; when the wings are down, additional weight may be required.

Using in a 3-Point Application
When used with a tractor and a 3-point hook up, the inner and outer tow link should slide together and be in the upright position holding it to the frame with the two clevis pins (item 19). The two table on the outer tow link are for the center link on the 3-point. Remove the five lock pins (item 21) from the tine axle to allow the assembly to swivel.

Raising and Lowering Tines
The tines are raised or lowered into the ground by operating the crank on the cylinder to raise or lower the tines to the desired depth. Tine penetration is very dependent on surface preparation. READ the entire operation section before aerating.

- *Set Tine Depth*: With the aerator in the work area, lower the tines into the ground by rotating the crank at the rear.

- *Transport*: Be sure to raise tines out of the ground before transporting away from the work area.

Caster Raising/Lowering
The caster can be raised or lowered by removing the pin and rotating the caster then reinserting the pin to lock it into position. DO NOT transport with the caster in the down position so that it comes into contact with the ground. DO NOT unhitch the unit on uneven terrain with the caster down as the unit may roll. To prevent unwanted roll, chock the wheels.

NOT FOR REPRODUCTION

Operation Continued

Tips

• Mow - Mow the lawn to its normal cut height.

• Water - For the best performance and maximum tine penetration the lawn should be thoroughly watered the day before aeration.

• Inspect - Check the lawn before beginning work. Remove all rocks, wire, string, or other objects that can present a hazard during work prior to starting

• Identify - Mark all fixed objects to be avoided during work, such as sprinkler heads, water valves, buried cables, or clothes line anchors, etc.

• Slopes - Do not operate the aerator on steep slopes (any slope exceeding 15°). Use extreme caution when operating on any sloped surface. For lesser sloped areas operate the unit, traversing up and down at a 45° angle to the slope rather than straight across. Extended operation on steep slopes can cause engine damage.

Maintenance

Item numbers in parentheses can be referenced in the Parts Illustration and Parts List on pages 7-9.

Periodic Maintenance

Periodic maintenance should be performed at the following intervals:

Maintenance Operation*	Every Use (or daily)	Every 10 hrs	Every 50 hrs
Inspect for loose, worn, or damaged parts		•	
Thoroughly clean all debris from unit and tines	•		
Grease wheel bearings and tine hubs			•

*Engine must be level when checking or filling oil

Table 2: Maintenance

Individual Tine Replacement

1. Remove the bolt and nut (Items 46 and 43, respectively).
2. Replace the tine and then secure it in place with hardware previously removed.

Note: Tines are a normal wear item and should be inspected regularly for signs of wear or damage.

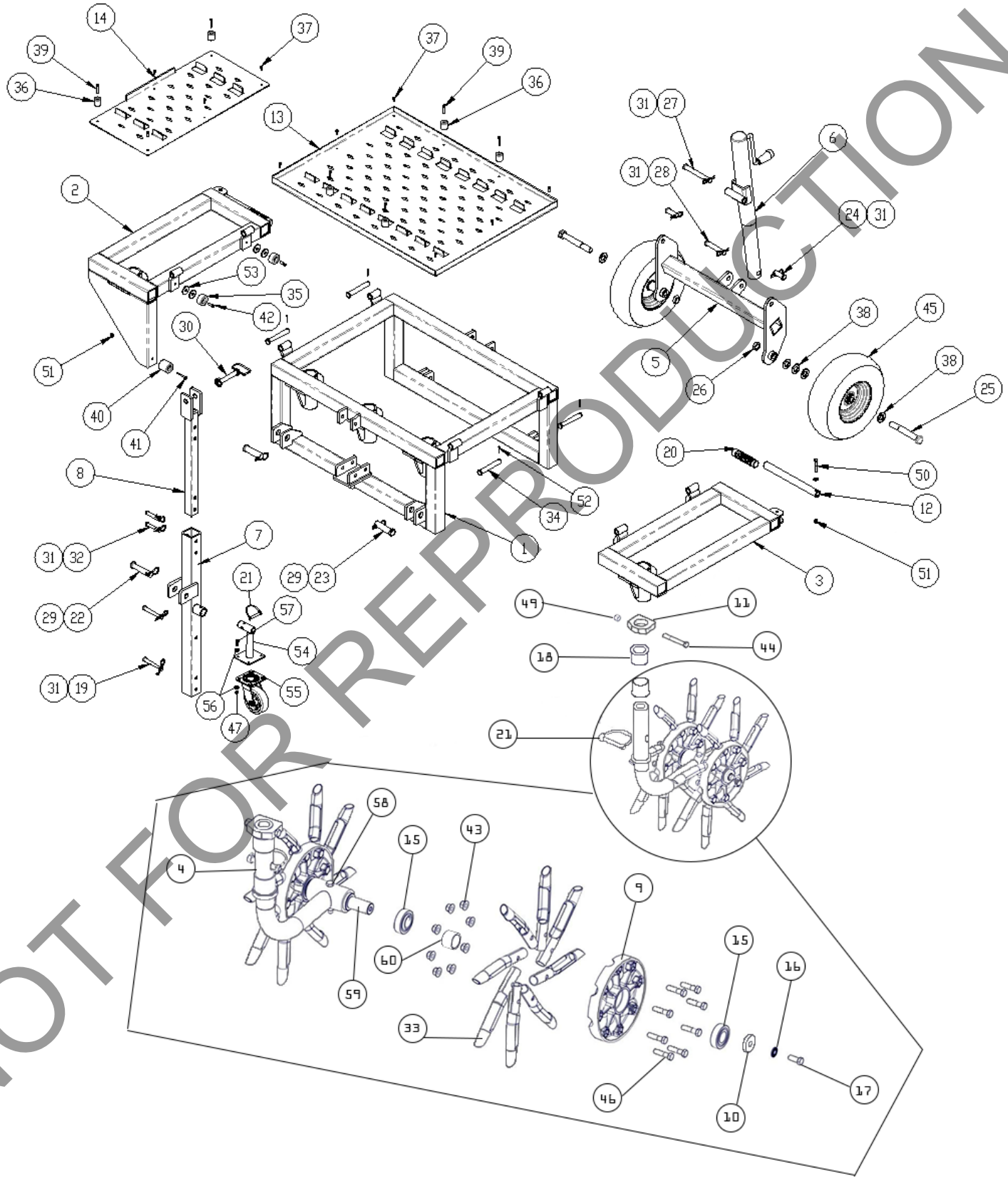
Troubleshooting

Problem	Possible Cause	Solution
Abnormal Vibration	Damaged or missing tines. Loose bolts.	Stop work immediately. Replace any damaged or missing tines. Tighten all loose nuts and bolts.

Table 3: Troubleshooting

NOT FOR REPRODUCTION

AET60 Parts Drawing



NOT FOR REPRODUCTION

AET60 Parts List

Item No.	Part No.	Description	Quantity
1	381556	BASE FRAME WELDMENT	1
2	381557	LEFT WING FRAME WELDMENT	1
3	381558	RIGHT WING FRAME WELDMENT	5
4	380237	TINE ARM WA AET60 GEN 2	5
5	381560	WHEEL ASSEMBLY	1
6	381561	JACK ASSEMBLY	1
7	381562	OUTER TOW LINK	1
8	381563	INNER TOW LINK	1
9	380234	HUB, EIGHT TINE	10
10	440153	WASHER 1.5 OD X 0.453 ID X 0.25 THK	10
11	381566	ARM SWIVEL STOP	5
12	381567	WING HANDLE	2
13	381568	BASE LOAD PAN	1
14	381569	WING LOAD PAN	2
15	373280	BEARING, 6205 25mm BORE ARMORED SEALS	20
16	8181011	WSHR-STL, BLV, 0.402 X 0.877 X 0.63 CN MZ	10
17	8041050	SCREWCAP 3/8”-16 X 1” HCS ZP	10
18	381573	TINE ARM SHOULDER BUSHING	10
19	381574	CLEVIS PIN 7/16” X 3.5”	2
20	500267	GRIP HANDLE 1” X 5.5”	2
21	381576	LOCK PIN 3/8” X 2.5”	6
22	381577	CLEVIS PIN 3/4” X 3.5”	1
23	381578	CLEVIS PIN 7/8” X 3”	2
24	381579	CLEVIS PIN 5/8” X 1.75”	2
25	8041175	SCREWCAP 3/4”-10 X 5 1/2” HCS ZP	2
26	381581	NUT JAM 3/4”-10	2
27	381582	CLEVIS PIN 5/8” X 5”	1
28	381583	CLEVIS PIN 5/8” X 3.5”	1
29	281584	COTTER HAIR PIN 1/8" FOR 3/4 TO 7/8"	3
30	281585	HITCH PIN 5/8” X 4” W/LYNCH PIN	3
31	381586	COTTER HAIR PIN 1/8” FOR 7/16 TO 5/8	8
32	381587	CLEVIS PIN 7/16” X 2.5”	2
33	360100	TINE CORING 3/4”	80
34	381589	CLEVIS PIN 5/8” X 4”	4
35	381590	RUBBER BUMPER 1.5” X .75” THK	4

NOT FOR REPRODUCTION

Item No.	Part No.	Description	Quantity
36	381591	RUBBER BUMPER 1.0” X 1.0” THK	8
37	80150057	SHCS 10-32 X 1/2”	14
38	8171008	WASHER 3/4” SAE	8
39	381158	SHCS 10-32 X 1.25”	8
40	381595	RUBBER BUMPER 1.5” X 1.5” THK	2
41	381596	SHCS 1/4”-20 X 1.5”	2
42	381597	SHCS 1/4”-20 X .75”	4
43	8165003	NUT-HEX-NYLK, FLG 0.375” - 16 ZP	85
44	8041058	SCREWCAP 3/8”-16 X 3” HCS ZP	5
45	381440	WHEEL 13”	2
46	8041052	SCREWCAP 3/8”-16 X 1 1/2” HCS-ZP	80
47	8160002	NUTLOCK 5/16”-18	4
49	816003	NUTLOCK 3/8”-16 HEX ZP	5
50	8041010	SCREWCAP 1/4”-20 X 2” HCS ZP	2
51	8160001	NUTLOCK 1/4”-20 HEX ZP	4
52	8197031	COTTER PIN 1/8” X 1”	4
53	8172020	WASHER FENDER 5/16”	8
54	380134	TRANSPORT WHEEL STAND	1
55	610101	CASTER 5” DIA X 2”	1
56	8171003	WASHER 5/16” FLAT	8
57	8041028	SCREWCAP 5/16”-18 X 1” GR 5 HCS ZP	4
58	8041057	SCREWCAP 3/18”-16 X 2 3/4” ZP	5
59	380235	AXLE TINE ARM GEN 2	5
60	380236	SPACER, SPINDLE BEARING AET60	10

NOT FOR REPRODUCTION

Tine Replacement Kit Information

The new Billy Goat® AET60 is built with newly designed tines. Owners of previous Billy Goat AET60 models can purchase new tines in the form of a service kit (Part No. 380238). New owners can replace old or worn tines with the same service kit.

To order a service kit, please visit www.billygoat.com or contact Billy Goat customer service at (816) 524-9666.

Your Billy Goat® Tine Replacement Kit will include the necessary instructions/literature and the following parts:

Item No.	Part No.	Description	Quantity
4	380237	TINE ARM WA AET60 GEN 2	1
9	380234	HUB, EIGHT TINE	2
10	440153	WASHER 1.5 OD X 0.453 ID X 0.25 THK	2
11	381566	ARM SWIVEL STOP	1
15	373280	BEARING, 6205 25mm BORE ARMORED SEALS	4
16	8181011	WSHR-STL, BLV, 0.402 X 0.877 X 0.63 CN MZ	2
17	8041050	SCREWCAP 3/8”-16 X 1” HCS ZP	2
21	381576	LOCK PIN 3/8” X 2.5”	1
33	360100	TINE CORING 3/4”	16
43	8165003	NUT-HEX-NYLK, FLG 0.375” - 16 ZP	16
44	8041058	SCREWCAP 3/8”-16 X 3” HCS ZP	1
46	8041052	SCREWCAP 3/8”-16 X 1 1/2” HCS-ZP	16
49	8160003	NUTLOCK 3/8”-16 HEX ZP	1
58	8041057	SCREWCAP 3/18”-16 X 2 3/4” ZP	1
59	380235	AXLE TINE ARM GEN 2	1

NOT FOR REPRODUCTION