

# OPERATOR'S MANUAL

## AERATOR MODEL:

# TA-17D

## POWERSTEER AERATORS

(S.N. 1140064404 AND ABOVE)



# ***CLASSEN***<sup>®</sup>

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## INTRODUCTION

### THANK YOU

Thank you for purchasing a CLASSEN Aerator

### READ THIS MANUAL

Read this manual carefully in its entirety. It contains safety, operating, maintenance, and adjustment instructions for your Aerator. By following the operating and maintenance instructions you will prolong the life of your equipment and maintain its maximum efficiency. Failure to do so could result in personal injury or equipment damage.

This manual should be considered a permanent part of your Aerator and should remain with it if you sell it.

### WARRANTY

Refer to last page.

### MEASUREMENTS

U.S. Units of measure are used in this manual.

### SERIAL NUMBERS

Write frame and engine serial numbers, plus model numbers in "Owner's Record" section below. You may need these numbers when you order parts. The serial number stick plate is located on the right rear of the Aerator frame.

### ORDERING PARTS

When ordering parts, always give the serial number and model of your Aerator as well as the quantity, part number and description of the part needed.

### DIRECTIONS

"Right Hand" and "Left Hand" sides of the Aerator are determined by facing the "back" of the Aerator as you would operate the machine.

## OWNER'S RECORD

DATE PURCHASED \_\_\_\_\_  
AERATOR MODEL NUMBER \_\_\_\_\_  
AERATOR SERIAL NUMBER \_\_\_\_\_  
ENGINE MODEL NUMBER \_\_\_\_\_  
ENGINE SERIAL NUMBER \_\_\_\_\_

## PRE-DELIVERY CHECK LIST

Check the following before you deliver the Aerator to the customer.

1. Guards and shields fastened in place.
2. Decals fastened and legible.
3. Weight bar installed.
4. Gas lever on engine turned on.
5. All lubrication points greased.
6. 6:1 gearbox oil level.
7. Engine oil level.
8. Air cleaner.
9. Touch up scratches.
10. Chain(s) tight.
11. Lowering handle working properly.
12. Control handle(s) working to tighten V-belt(s).
13. Add fuel, start engine, test run.

DATE SET UP \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

## DELIVERY CHECK LIST

Review the operators manual with the customer.

1. Schiller Grounds Care, Inc. warranty.
2. Safe operation and service.
3. How to use controls.
4. Operating the machine correctly.
5. Transporting the Aerator.
6. Correct fuel and lubricants.
7. Daily and periodic inspections.
8. Changing oil after break-in period.
9. Servicing the Aerator regularly and correctly.
10. Schiller Grounds Care, Inc. parts and service.
11. Give the customer the operators manual and encourage customer to read it.

DATE DELIVERED \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

SIGNATURE \_\_\_\_\_

# SAFETY PRECAUTIONS

## TRAINING

1. Regard the unit as a piece of power equipment and teach this regard to all who operate this unit.
2. Read the instructions carefully. Be familiar with the controls and the proper use of the equipment.
3. Never allow children, teenagers or people unfamiliar with these instructions to use this piece of equipment.
4. Avoid operating unit while people, especially children or pets, are nearby. Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
5. Be sure you know how to stop the Aerator at a moments notice.

## PREPARATION SAFETY

1. The use of personal protective equipment, such as (but not limited to) protection for the eyes, ears, feet and head is recommended.
2. While operating, always wear substantial foot wear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
3. Area should be free of all obstacles and debris.

## ENGINE SAFETY

1. Handle gasoline with care; it is highly flammable.
2. Use an approved gasoline container.
3. Always add fuel before starting the engine.
4. Fill the fuel tank outdoors.
5. If fuel is spilled, do not attempt to start the engine. Move away from the area of the spill and avoid creating any source of ignition until fuel vapors have dissipated.

## OPERATIONAL SAFETY

1. Carefully read and follow all caution decals. (See Pg. 5.)
2. Operate only in daylight or good artificial light.
3. Do not operate machine unless all guards, shields and covers are in place and in proper working condition.
4. It is essential all operator safety mechanisms be connected and in operating condition prior to use.
5. Do not change the engine governor settings or over-speed the engine. Operating an engine at excessive speed may increase the hazard of personal injury.
6. Disengage the drive control(s) and tine lowering handle before starting. (See Pg. 3, Fig 1.)
7. Start the engine carefully with feet well away from the tines.
8. Do not put hands, feet or clothing near rotating parts while the unit is being operated.
9. Travel up and down slopes at a 45 degree angle rather than across, to prevent unit from tipping over.
10. Exercise extreme caution when changing direction on slopes. Do not get too close to sharp drop-offs or operate unit on excessively steep slopes. **DO NOT** release control handle(s) on a slope, this will cause free wheeling, allowing unit to roll back down the slope. Make sure to leave yourself room to correct the problem if one arises.
11. Use caution when pulling the unit towards you.
12. Always stop the tines if unit has to be tilted for transportation or when crossing surfaces (i.e. sidewalks, driveways, stepping stones, etc.).
13. Never pick up or carry an Aerator while the engine is running.
14. Stop the engine and disconnect the spark plug wire: a) before checking, cleaning or working on unit, and b) after striking a foreign object (inspect the unit for damage and make repairs before restarting and operating).
15. Stop the engine: a) whenever you leave the unit, b) before refueling, and c) before clearing blockages.
16. Reduce the throttle setting during engine run-out and, if the engine is provided with shut-off valve, turn the fuel off at the conclusion of operating.



### WARNING



**DO NOT FILL TANK COMPLETELY FULL. DO NOT SMOKE WHILE YOU FILL FUEL TANK. DO NOT REMOVE GAS CAP IF ENGINE IS RUNNING.**

**DO NOT OPERATE ENGINE IN A CONFINED SPACE WHERE DANGEROUS CARBON MONOXIDE FUMES CAN COLLECT.**

# OPERATION

## PREPARATION

1. Carefully read this manual and operate Aerator correctly.
2. Always check machine on level ground.
3. Visually check all moving parts and all fasteners, if loose or broken, tighten or replace. Check for broken or bent tines, replace if necessary.
4. Lubricate all fittings after every four hours of using machine, using a pressurized gun with standard lithium base lubricant (see "General Maintenance" section). Wipe off fittings before and after lubricating.
5. Check engine crankcase and gear reduction case oil levels with engine resting in a level position. Add oil if necessary. (Refer to engine manufacturer's owners manual for the correct type and amount of oil.)
6. Fill the fuel tank according to engine manufacturer specifications.
7. For best performance and maximum tine penetration, thoroughly water lawn the day before aeration.
8. Police lawn area for obstacles and debris (i.e. sprinklers, hoses, toys, etc.)
9. Mark underground sprinkler heads and other hidden obstacles to prevent damage.

**WARNING**  
**CAUTION: TO AVOID INJURY, DO NOT PLACE YOUR FEET OR OTHER BODY PARTS UNDER THE TINES WHILE STARTING THE ENGINE.**

## STARTING ENGINE

1. Turn fuel cock to the "open" position.
2. Turn choke on (closed).
3. Turn ignition switch to "on".
4. Pull recoil starter rope until engine starts.
5. After engine is warm, turn off choke (open).
6. Allow engine to run one minute before operating.
7. Check engine rpm setting before operating.  
**DO NOT** exceed 3600 rpm.

## TRANSPORTING AERATOR

1. Raise tines before transporting unit across surfaces or before transporting from one work area to another by lifting up on lowering handle (see Fig. 1).
2. Aerator can be transported with the engine running or with the engine off.

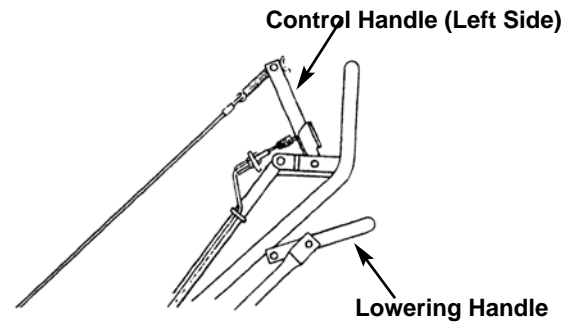
## TO OPERATE AERATOR

1. Start engine. (See "Starting Engine" section.)

### WARNING

**CAUTION: TO AVOID INJURY, DO NOT PLACE FEET OR OTHER BODY PARTS UNDER TINES WHILE STARTING THE ENGINE.**

2. Make sure the rear tires are in the down position (tines not touching ground). Slowly pull back on control handle(s). (See Fig. 1.)



**Fig. 1**

3. Move Aerator to the work area. (See "Transporting Aerator" section.)
4. Upon reaching the work area, release control handle(s) and push down on lowering handle (see Fig. 1) putting tines in the turf.
5. Pull back slowly on the control handle(s) to begin aerating.
6. For maximum tine penetration into turf, apply downward pressure on handle.
7. **Models TA-17:** These models have two control handles designed so it can be steered around corners, obstacles, etc. By pulling back only the left control handle, the Aerator will turn left, by pulling back only the right control handle, unit will turn right. Pull both control handles back to go straight.
8. When finished aerating, lift up on lowering handle to move wheels into transport position. (See "Transporting Aerator" section.)
9. To stop engine, take hands off control handle(s).
10. Turn off ignition switch.

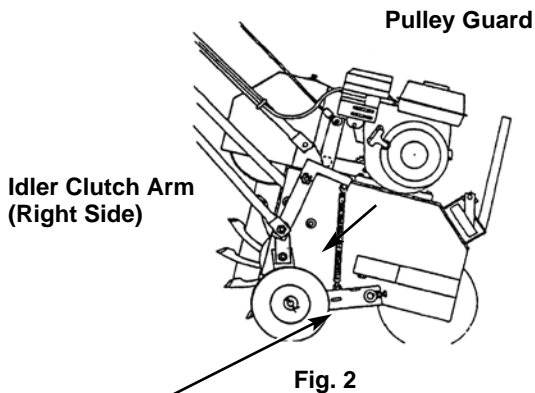
# GENERAL MAINTENANCE

## AERATOR MAINTENANCE

### TO KEEP THE AERATOR IN GOOD OPERATING CONDITION, PERFORM THE FOLLOWING:

- When replacement parts are required, use genuine Classen parts or parts with equivalent characteristics including type, strength, and material. Failure to do so may result in product malfunction and possible injury to the operator and/or bystanders.
- Any warning decal that becomes illegible should be replaced immediately. (See Pg. 5.)
- Do not operate equipment without shield(s) in place. Do not make any adjustments or perform any maintenance while the engine is running.
- Thoroughly clean all tines inside and out when aerating is completed and apply a light coat of oil to prevent rust on tines.
- Always lubricate Aerator each time it is put into service. Wipe off lubrication fittings before and after each lubrication. The number of lubrication fittings vary depending on model of Aerator.

**Models TA-17** - Qty. 4, one in each wheel assembly and one in each idler/clutch arm pivot bearing. (See Fig. 2.)

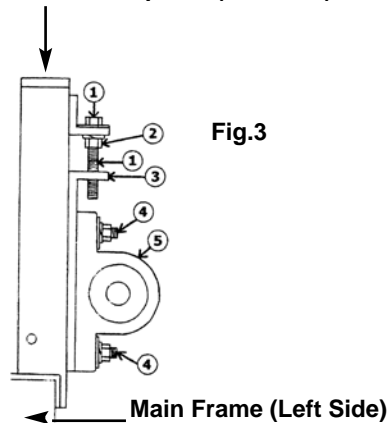


### Model TA-17 (See Fig. 3.)

1. Disconnect spark plug.
2. Take off pulley guard (see Fig. 2) by removing bolts, etc. which attach it to the frame.
3. Loosen the bolts, nuts, lock washers, and flat washers (Key 4) to allow movement of the pillow block bearings only (Key 5). Loosen nuts only, do not remove.
4. Loosen and unthread the two 5/16" nuts (Key 2) down to top of chain tightening bracket (Key 3).
5. Turn the tap bolts (Key 1) evenly clockwise so jack shaft stays level with frame until chain(s) is/are tight.
6. When adjustment is complete, retighten the bolts (Key 4) on the pillow block bearings (Key 5) and replace the pulley guard and fasteners.

**NOTE:** Excessive roller chain tightness will shorten the life of the bearings. Chain(s) should have movement of 0.18 in./4mm free play back and forth at center point between front drive sprocket and rear tine assembly sprocket.

### Main Frame Top Flat (Left Side)



- Keep drive belt(s) free of oil and dirt.

**Models TA-17**- If belts slip due to normal belt stretch, engine can be adjusted forward within slotted holes to tighten belts.

- Check roller chain(s) for wear. Apply a light coat of No. 30 oil or penetrating chain lubricant to keep the chain(s) clean and in proper running order.
- Check roller chain(s) for tightness. Follow these steps:

## **ENGINE MAINTENANCE**

(Refer to engine manufacturer's owners manual) Check engine and gear reduction case oil level with engine resting in a level position. Inspect air filter element and replace if necessary.

## **AERATOR STORAGE**



**SAFETY WARNING: TO PREVENT POSSIBLE EXPLOSION OR IGNITION OF VAPORIZED FUEL, DO NOT STORE EQUIPMENT WITH FUEL IN TANK OR CARBURETOR OR NEAR OPEN FLAME (I.E. FURNACE, WATER HEATER, PILOT LIGHT).**

## **STORAGE INSTRUCTIONS**

Before the Aerator is put into storage for any period exceeding 30 days, the following steps should be taken.

1. Drain all fuel from fuel tank and fuel lines.
2. Start engine and run until all fuel is used from carburetor float bowl.
3. While engine is still warm, drain the crankcase oil and replace with the proper weight oil corresponding to the season the Aerator will next be used.
4. Remove the spark plug and squirt a small quantity of engine oil into the cylinder. Turn the engine over a few times to distribute that oil.
5. Lubricate all lubrication fittings.

To put Aerator into operation after an extended storage:

1. Check for loose parts and tighten if necessary.
2. Check for cracked or broken tines and replace.
3. Fill fuel tank.
4. Check engine and gear reduction case oil levels (with engine in a level position).
5. Start engine.
6. Check for fuel leaks.
7. Check operation of control handle(s) to make sure unit stops when lever is released forward.
8. Aerator is equipped with fuel shut-off valve, close valve before transporting.

## **SAFETY DECALS**



# **CLASSEN<sup>®</sup>** 2 YEAR LIMITED SERVICE AND WARRANTY POLICY

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**Schiller Grounds Care, Inc.**  
**1028 Street Road • Southampton, PA 18966**  
**Telephone: 1-800-366-6268**

## **TWO YEAR LIMITED WARRANTY**

Effective April 1, 2007

For the period of two years from the date of purchase, CLASSEN will repair or replace for the original purchaser free of charge, any part or parts found upon the examination of our factory authorized service station, or by the factory in Southampton, PA to be defective in material or workmanship. All transportation charges on parts submitted for repair or replacement under this warranty shall be borne by the purchaser.

This warranty does not include engines or engine parts, tires, batteries, or gearboxes that are covered under separate warranties furnished by their manufacturer or supplier, nor does it include normal maintenance parts, including but not limited to, spark plugs, points, filters, blades, and lubricants.

All service under this warranty will be furnished or performed by our factory authorized service stations.

There is no other expressed warranty. Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to two years from the date of purchase and to the extent permitted by law, any and all implied warranties are excluded. The above remedy of repair and replacement of defective parts is the purchaser's exclusive remedy for any defect, malfunction or breach of warranty. Liability for incidental or consequential damages under any and all warranties is excluded to the extent permitted by law.

### **NORMAL RESPONSIBILITIES OF THE SELLER AND THE USER**

1. The Distributor or Dealer is responsible for the proper assembly and preparation of the product for delivery to the end user.
2. The User is responsible for reading the Manual and Instructions.
3. The User is responsible for proper operation and maintenance as described in the manual.
4. The User is responsible for the replacement of wear items such as blades, belts, tires, batteries, etc.
5. The User is responsible for damage due to improper operation and maintenance, as well as abuse.

All claims must be received by the factory 30 days after the end of the warranty period to receive warranty consideration.

**CLASSEN<sup>®</sup>**  
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