

Ride-on Aerator

Models Available
TA2816KA





TA2816KA Owner's Manual

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INTRODUCTION

READ THIS MANUAL

Read this manual carefully in its entirety. It contains safety, operating, maintenance and adjustment procedures for your product. By following the operating and maintenance instructions you will prolong the life of your equipment. Failure to do so could result in personal injury or equipment damage. You are responsible for operating the product properly and safely as well as training.

INTRODUCTION

Thank you for purchasing your Lawn Solutions Ride-on Aerator. It has been designed for years of use in commercial applications. Take the time to carefully read and understand this manual which provides complete operating and maintenance instructions that will help maintain your unit.

Whenever you need service, parts or additional information, contact an Authorized Servicing Dealer or Lawn Solutions Customer Service and have the model number for you product available.

PRODUCT INFORMATION

Keep your Model Number and Serial Number plate here.

Date Purchased _____
Model No. _____
Serial No. _____
Engine Model No. _____
Engine Serial No. _____



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SAFETY PRECAUTIONS

TRAINING & SAFETY

1. Like all powered equipment, reasonable care must be used when operating this machine.
2. It is the **owner's** responsibility to ensure each user is properly trained on how to **safely** operate and use this piece of equipment.
3. Read the instructions carefully and understand how to use the controls.
4. Avoid operating this equipment around bystanders especially children and animals.
5. Make sure you understand how to stop the aerator at any time.
6. While operating, always wear substantial foot wear. Do not operate this equipment while barefoot or with sandals.
7. The work area should be free of obstacles and debris.
8. Mark all utilities prior to operating this equipment.
9. Never bypass kill switches.

ENGINE SAFETY –Consult the engine owner's manual for the engine installed on your product. They were shipped with your unit or available from the Engine OEM or Lawn Solution's website.

1. DO NOT refuel this equipment while the engine is running.
2. DO NOT refuel this equipment while the engine is hot.
3. If you spill fuel during refueling, clean up the excess fuel, move the unit to another location while waiting for the remainder of the fuel to evaporate prior to starting.
4. DO NOT smoke while filling the gas tank.
5. DO NOT run the engine in an enclosed area.
6. DO NOT touch the muffler, engine, and cooling fins when hot.
7. DO NOT leave the unit running while unattended.
8. DO NOT over rev the engine. The maximum RPMs for the engine is:
 - Kawasaki 3,600 RPMs
 - Briggs & Stratton 3,600 RPMs
 - Subaru – 3,600 RPMs
 - Honda – 3,000 RPMs
9. DO NOT operate with grass, leaves, or other combustible materials near the muffler.
10. DO NOT operate on slopes exceeding 35% grade.
11. Always disconnect sparkplug before servicing.



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OPERATION

1. The Lawn Solutions Ride-on Aerator handles and operates like a commercial mower. Drive the unit in the same manner that you would mow a lawn. Trim out the parameter and the make passes back and forth until completed.
2. **To Aerate** - You must stand on the foot switch on the operator platform to keep the tines in the ground.
3. **To Make Zero Turns** – Lift your foot off the switch or raise your toe and the tines will raise in ½ second to make a quick ZERO turn. After the turn, place pressure on the switch to resume aerating.
4. **Gentle Turning** – To make gentle turns and maneuvers while aerating, keep the tines in the ground and turn easily. You can aerate while making gentle turns or following flower beds.
5. **Adjusting Plug Depth** – To adjust the plug depth, adjust the down pressure from the control panel using the knob on the left. Turn it to the left to decrease down pressure and to the right to increase down pressure. First time use, set the pressure to ~350 psi using the gauge on the control panel. The pressure gauge measures the down pressure while aerating. To get an accurate reading, press the aerating button on the platform and then make your adjustments.
6. **How Deep to Aerate** – This aerator can easily penetrate the ground down to 5" or more on soft ground. Ideally, you will aerate at 3"-4". Going deeper than 4" will bog the engine and use a lot of extra fuel. Set the aerator to pull plugs between 3"-4" and make fine adjustments on the fly by turning the pressure gauge on the control panel. You will make changes to the down pressure based on soil condition, moisture in the ground, sunny vs. shady areas, etc...
7. **Maximum Pressure** - This aerator can apply more than 1,200 lbs of down pressure over the tines. When aerating, keep the rear wheels on the ground. If they begin to lift off the ground you have the pressure set too high.
8. **When Aerating Slopes** – Use caution on slopes. Do not exceed 15 degree slopes. To aerate on slopes, lower the tine pressure because the side slope can cause the rear tires to come off the ground. If this happens while aerating, raise the tines, and then reduce the down pressure by turning the pressure knob on the control panel. On steeper slopes it is easier to go side to side or at a 45 degree angle to the slope.
9. **Starting the Engine** – When starting, turn the pressure knob all the way to the left to turn off the hydraulics. This is important for cold starting.

MAINTENANCE

Daily

1. Check chain tension
2. Lubricate chains

Weekly

1. Check oil level in hydro tanks (use sight glass on tank; use 10-30 oil or 0-30 Synthetic for colder starting conditions.)
2. Clean and lubricate chains (use spray lubricant)
3. Apply grease to front casters and floating tines

Monthly/Seasonal

1. Change engine oil (every 100 hours)
2. Grease bearings; **all 14 of them** (every 100 hours)
3. Replace air filter (every 200 hours)

Chain Tightening: (Tool required – 9/16" Gear Wrench) Chains should be snug but not tight. Chains should be able to move up and down $\frac{1}{2}$ " – $\frac{3}{4}$ ". The chains from the pivot point to the tines will stretch the most because they are the longest and are what drives the machine during use.

NOTE - If you hear a snap or pop sound from the drive chains, one is too loose and needs lubrication. This is especially important during the break-in period while the chains seat and do their initial stretching to fit the sprockets.

Tine Chains – Loosen the "locking bolts" on all three trail arms. Turn the tension bolt to extend the trail arm and tighten the chain. Do the outside arms first and then the inside arm. Check the tension chain on the chain. Check that the rear axle is aligned by checking the "gaps" on all three trail arms to make sure they are extended the same distance. Below is a picture of the adjustable trail arm assembly. Each arm can be extended to tighten the chains the drive the tines.



Rear Wheel Chains – Loosen the idler sprocket with 9/16" wrench and tighten chain.

Service Panel – To access the chains or tines, you can lift the machine with a lift or remove the service panel on the back of the machine for servicing. It is also easier to make adjustments with tines in the down position, press the button to lower the tines and turn the engine off using the kill switch on the engine. This will allow the tines to stay down when the engine is off. Turning the engine off with the key will raise the tines as it shuts down.



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TROUBLE SHOOTING

TROUBLE SHOOTING

Problem	Possible Cause	Solutions
Engine will not start	Too much hydraulic load on the engine; often when starting in cold temps.	See Operating Instruction – always turn hydraulics off by turning pressure knob all the way to the left when starting.
	Out of gas	Add Fuel
	Spark Plug Disconnected	Check plug wire connection, check plug.
	Fuel Turned Off for Transport	Turn fuel back on, wait 30 second, then start.
	Low Oil	Add oil to engine.
Chains make a snapping or pop sound.	Chains are too loose and / or dry.	Tighten chains, see maintenance section. To finish the current job, make slow maneuvers and aerate in a straight line. Reduce turning maneuvers until you can service the chains.
Unit will not pull itself up hills	Drive belt to hydrostatic pump is loose	Turn off engine, disconnect spark plug; tip unit back and inspect belt; tighten if needed
Engine is stalling or gets bogged down.	Tines are set too deep in the ground.	Set tine depth to 3"-4" using pressure knob. Deeper than 4" will bog the engine and uses lots of excess fuel.
Engine hard to start after transporting	Engine is flooded due to bouncing while transporting.	Turn off fuel during transport.



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WARRANTY

Limited Warranty for Ride-on Aerator (TA2814SU)

The product carries a 2-year limited warranty from the date of purchase for the original purchaser. Lawn Solutions will replace for the original purchaser free of charge any part or parts found to be defective in material or workmanship. Lawn Solutions may require the defective parts to be returned for further examination.

In the event that the warranty work exceeds the expertise of the user, the unit may be taken to a Lawn Solutions service center or authorized dealer to receive further servicing.

This is a limited warranty and does not cover damage from abuse to include failure to transport the product correctly. The warranty does not cover standard service items like belts, blades, tines, bushings, bearings, chains, or sprockets.

On 3rd party items like an engine and transmission, Lawn Solutions may provide replacement parts, but it will be up to the OEM to refund any warranty work or part costs.

Lawn Solutions will overnight parts if requested and at the cost of the requester, otherwise Lawn Solutions will pay standard shipping charges except for 3rd party items (engine and transmission).