

Electric Riding Lawn Mower Safety & Operating Instructions LAZER ECO68



Important:

READ SAFETY RULES AND INSTRUCTIONS CAREFULLY BEFORE OPERATING EQUIPMENT.

Introduction

Thank you for Purchasing the LAZER ECO68.

We appreciate having you as a customer and wish you many years of safe and satisfied use of this machine using clean and green electric power.

Using your Operator's Manual

This manual is an important part of your electric lawn mower and should remain with the machine for quick reference.

Reading the operator's manual will help you and others avoid personal injury or damage to the machine. Information located in this manual will provide the operator with the safest and most effective use of the machine.

You can use this manual to answer any specific operating or service question.

Important Message

Please read all the information in this manual in order to avoid injury and machine damage.

SAFETY LABELS

























General Safety Operation of the LAZER ECO68

Read, understand, and follow all instructions on the LAZER ECO68 machine and manual(s) before attempting to assemble and operate.

- 1. Be familiar with all controls and the proper operation.
- 2. When not using the mower turn off the ignition key and REMOVE for safety.
- 3. Charge the batteries immediately...avoid running them until empty.
- 4. When batteries are fully charged remove the battery charger.
- 5. When the lawn mower is not being used the **batteries should be charged every two months**, otherwise the battery could be damaged.
- 6. Never allow children under 16 years old to operate this machine. Children over 16 years old should be trained and supervised by an adult.
- 7. Keep bystanders, children and pets at least **50 feet** from the machine while in operation.
- 8. Thoroughly inspect the area where the equipment is to be used. Remove all material such as stones, sticks, toys, and other materials which could be picked up, and thrown by the blades.
- 9. Plan your mowing pattern to avoid discharge of materials toward bystanders roads and sidewalks.
- 10. Always wear safety glasses or safety goggles during operation. This will prevent injury if objects ricochet back toward the operator.
- 11. Loose fitting clothes and jewelry can be caught in movable parts. Never operate this machine in bare feet or sandals. Wear rough-soled work shoes and close fitting slacks and shirts.
- 12. **Do not put hands or feet near rotating parts or under the cutting deck**. Contact with the blades can amputate hands and feet.
- 13. Stop the blades when crossing gravel drives, walks, or roads and while not cutting grass.
- 14. This machine is not intended for use on any public roadway. Watch for traffic when operating near or crossing roadways.
- 15. Do not operate the LAZER ECO68 while under the influence of alcohol or drugs.
- 16. Mow only in daylight.
- 17. Never carry passengers.
- 18. Slow down before turning. Operate the machine smoothly. Avoid erratic operation.
- 19. Always look down and behind before backing to avoid a back-over accident.
- 20. Never leave a running machine unattended. Always turn off blades. Stop engine and remove key before dismounting.
- 21. This unit should not be driven up or down ramps, because the unit could tip over, causing serious personal injury. The unit must be pushed manually on ramps to load or unload properly.
- 22. This machine is designed to cut normal residential grass of a height no more than 6". Do not attempt to mow through unusually tall, dry or wet grass.
- 23. If situations occur which are not covered in this manual, use care and good judgment. Contact your customer service representative for assistance.

SAFETY LABELS

WARNING



READ MANUAL

- This lawn cutting machine is capable of amputating hands and feet.
- Read and follow Operating Instructions before operating machine.
- Be familiar with all controls and their proper operation. Know how to stop the machine and disengage them quickly.

DANGER



ROTATING BLADES

- Rotating blades can cut off legs and arms, as well capable of throwing objects. Failure to observe safety instructions could result in serious injury or death.
- Do not put hands or feet under or into mower when engine is running.
- This machine will disengage from cutting when in reverse.
- Shut off blades when not mowing.
- Park machine safely before leaving the operating station.
- Be alert and turn machine off if a child or other enters the area.

DANGER



THROWN OBJECTS

- Before mowing, clear area of objects that may be thrown by blade.
- Keep people and pets out of mowing area.
- Slow down when you travel over rough ground.

WARNING



AVOID SERIOUS INJURY OR DEATH

- Drive up and down slopes, not across.
- Avoid sudden turns.
- If machine stops going uphill, stop blades and back down slowly.
- Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2 ½ feet every 10 feet).
- Use extra care with attachments. They can change the stability of the machine.
- Avoid starting or stopping on a slope.
- Keep all movement on the slopes slow and gradual.
- Do not make sudden changes in speed or direction.
- Do not try to stabilize machine by putting foot on the ground.
- Keep safety devices (guards, shields, and switches) in place and working.
- Remove objects that could be thrown by blades.
- Read operator's manual.

When leaving machine: Stop engine + Set park brake + Remove key

DANGER



ROTATING BLADES CUT OFF ARMS AND LEGS

- Do not mow when children or other people including pets are around.
- Do not mow in reverse. The unit is designed NOT to mow in reverse.
- Look down and behind before and while backing.
- Keep children indoors, out of mowing area, and always in the watchful eye of a responsible adult.
- Stay alert at all times

DANGER



PROTECT PEOPLE AND PETS

- Do not mow when children or other people including pets are around.
- Look down and around you when in forward motion.
- Keep children indoors, out of mowing area, and always in the watchful eye of a responsible adult.
- Stay alert at all times

DANGER



NEVER CARRY PASSENGERS

- Never carry passengers.
- Never allow children or others in or on towed equipment.

WARNING



BATTERY PACKS

• Do not attempt to alter or open the battery

WARNING



BATTERY

- Always charge the Battery indoors in a garage or other covered area where the machine is protected from the weather.
- If the Motor will not run after you have fully charged the Battery make sure the breaker under the seat is in the "ON" position
- Do not mow your lawn in the rain.
- Do not mow wet grass.

WARNING



PINCH POINT

- Keep hands and body out of hitch area
- Park machine safely
- Lock the park brake
- Try to push machine safely
- Attach hitch to hitch area

ASSEMBLY-How To Set Up:

Before you open the carton of your New LAZER ECO68, please review the following:

WE RECOMMEND YOU HAVE A SECOND PERSON ASSISTING-BEFORE YOU BEGIN

- The unit is virtually ready to go when received.
- Carefully CUT the straps that secure the over shipper carton to the base-remove the straps and dispose.
- Remove the over shipper carton by lifting straight up and over the enclosed metal frame that houses and protects the unit.
- You will find that there are a few items that need to be installed. DO NOT assemble until you remove the metal frame portion-this is done using a Philips (star) head screwdriver and pliers or adjustable wrench.
- Remove the nuts and bolts-they are NOT reused.
- Once the nuts and bolts are removed-lift off the metal frame. Again-this is NOT reused. Finish un-assembling the frame.
- NOW-Lift the **Steering wheel section**-it is prewired-so handle with care. Remove any packaging and dispose.
- The steering wheel will then be inserted into the steering wheel sleeve on the unit. It is designed to fit in 1 (one) direction-please take your time and slide the steering wheel into the shaft (Step 2).
- Install the bolt to secure the steering wheel to the shaft (Step 3).







Step 1

Step 2

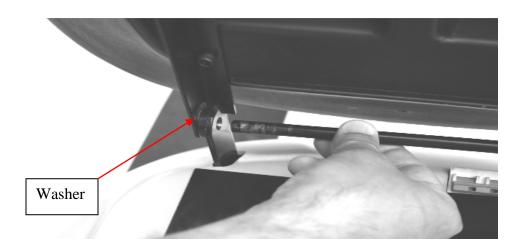
Step 3

ENSURE THAT THE WIRES HAVE BEEN PUSHED DOWN ALONG THE SHAFT TO PREVENT DAMAGE!

SEAT-Remove all packaging

- Carefully remove the left cotter pin. While sliding the seat bar out-ENSURE you collect the washers that will be installed.
- Have your assistant position the seat. |The front of the seat should be positioned over the metal bars protruding from the base.
- Ensure 1 (one) washer is on the bar and to the far right. The cotter pin will keep it from falling off.

Insert the seat bar through the base of the seat AND then the bar protruding through the frame-you will need the larger washer.

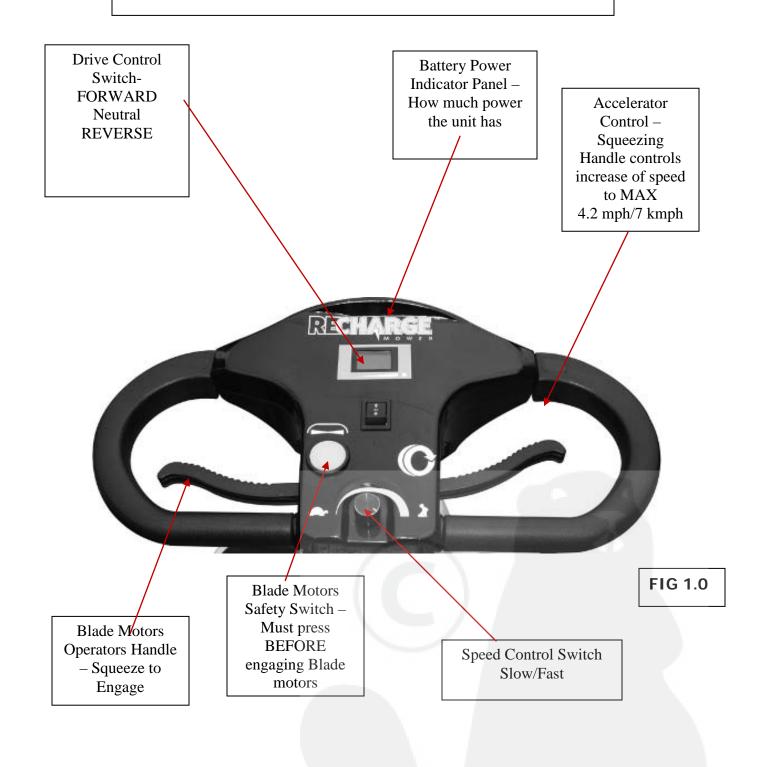


Grass Catcher- Remove all packaging

Carefully open bag
Position bars to position holders
Place plates over rod and tighten screws supplied



OPERATING CONTROLS



Using the Parking Brake





FIG 1.1

- Lock the park brake, lever location is up
- Unlock the park brake, lever location is down

Result:

Park brake must prevent machine from moving. If machine moves, Parking brake needs to be adjusted.

Using the Key Switch





FIG 1.2

- Sit on seat.
- Lock the park brake.
- Sit on seat.
- Lock the park brake.
- Check starting conditions.
- Turn key to start position
- If engine does not start, check battery level.
- If engine does not start, make sure breaker located under seat is in the "ON" position.

Charging the Batteries



FIG 1.3

- Make sure the ignition key is in the off position
- Plug the charger's round plug into the Mating Plug on the machine
- Plug the charger into a wall outlet. The RED light on the Battery charger will light up indicating a connection between the Battery and Charger.

NOTE: A full charge takes at least twelve (12) hours, and up to sixteen (16) hours. When battery is fully charged the RED light on the charger will switch to GREEN.

Disconnecting the Charger

Remember to disconnect the charger from the machine using the sequence:

- 1. Pull the plug from the charger out of the wall outlet.
- 2. Disconnect the charger from the machine.

Warning!

ALWAYS DISCONNECT THE CHARGER FROM THE ELECTRICAL (WALL) OUTLET FIRST, AND THEN DISCONNECT THE ROUND CHARGER PLUG FROM THE MACHINE. IF YOU REMOVE THE ROUND CHARGER PLUG FIRST, THE EXPOSED CONNECTOR COULD BE ACCIDENTALLY SHORT-CIRCUITED BY FOREIGN MATERIAL, WHICH MIGHT CAUSE A FIRE.

RECHARGING AFTER EACH USE OF THE MOWER

Always fully charge the battery after each use during off peak hours. This is important in order to maintain maximum Mower performance and extend the useful life of the Battery.

Headlight



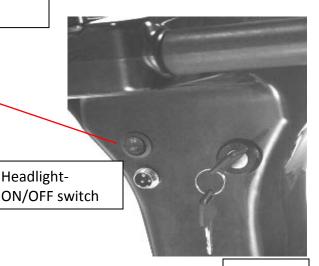


FIG 1.4

FIG 1.5

Replacing the Headlight Bulb

- 1. Ensure machine is off.
- 2. Park machine safely by applying hand break.
- 3. Reach under machine just behind headlight.
- 4. Locate light bulb socket.
- 5. Turn bulb socket ¼ turn counterclockwise to remove.
- 6. Replace defective bulb with a new bulb.
- 7. Insert bulb socket into housing, and turn clockwise to install.

TIRES

WARNING:

Never exceed the maximum inflation pressure shown on the sidewall of tire.

Checking Tire Pressure

- 1. Always check tires for damage.
- 2. Check tire pressure with proper tool.

The recommended operating tire pressure is:

• Approximately 20 psi for the tire inflation.

OPERATING CONTROL

CUTTING HEIGHT CONTROL –
This allows the cutting head –
featuring 2 Cutting Motors and Blades
– to be raised and lowered to the
preferred height of the finished grass...

- Adjust mower deck level
- make sure machine is on a flat, level service
- Lower mower deck to the desired cutting height position



PARKING BRAKE -

Prevents unit from moving – when engaged – an internal control switch – disengages power to the drive motor for ADDED safety,

- = ON
- = OFF

FIG 1.6

FOOT BRAKE PEDAL

Stops unit from moving-when pressed- an internal control switch-disengages power to the drive motor .

- Parking brake must prevent machine from moving
- If machine moves, parking brake needs to be adjusted

NOTE:

When using the lowest settings for cutting – the best results are accomplished while using the grass deflector rather than the grass catcher option.

At the lower settings, you may experience the chute clogging and needing to be cleared more often. This is as a result of the reduced level of air flow being produced while the deck is positioned lower to the ground.

BLADE REPLACEMENT

Before making an attempt to replace the DUAL blades, order genuine replacement parts for your LAZER ECO68 by contacting your dealer

Note:

The left and right blades have specific orientation. Never exchange blades and only use genuine replacement parts.



FIG 1.7

CAUTION: Avoid injury! Rotating blades are dangerous. Before replacing blades:

- Turn unit OFF and remove key.
- Always wear gloves when handling mower blades.
- Block mower blade with a piece of wood to prevent it from spinning.

Grass Catcher – Maintenance

In order to ensure proper non-restricted operation of your LAZER ECO68 you should empty the Grass Catcher regularly. This unit is designed to cut grass ONLY with the Grass Catcher in place and or the grass deflector. Once you have dismounted the unit and ensure that the blades have come to a complete stop, remove and empty the Grass Catcher or remove the grass deflector. With the grass catcher unit removed or grass deflector – always check to ensure that the Chute is clear before returning the grass catcher/grass deflector into place.



Grass removal unit- Always use the safety grass removal unit when clearing the chute

FIG 1.8

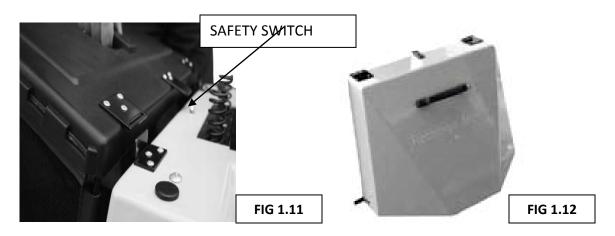
How to Operate:

REVIEW THIS CAREFULLY TO ENSURE SAFE AND LASTING OPERATION

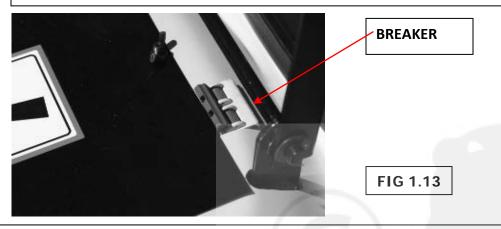
Please ensure that the mower has been fully charged before beginning. That involves connecting the specially designed end to the connector on the steering wheel section Fig 1.3. This is designed to fit in only one position. Then plug the other end into a standard 220V wall outlet. Full charge is usually achieved overnight. The charger will automatically shut off and the indicator will turn GREEN when the unit I fully charged.

- 4. Always follow the safety rules.
- 5. To prepare for use-adjust the cutting height by shifting the blade adjustment arm either up or down until desired height is achieved. Fig 1.6.
- 6. Ensure that the parking brake is applied by pulling up to the top Fig 1.6.
- 7. Install the rear grass catcher making certain that both the upper connections and the bottom corner catchers are in place fully, or install the grass deflector again making certain that both the upper connections and the bottom corner catchers are in place fully.

1. NOTE: The LAZER ECO68 includes safety switches to prevent the unit from operating without the grass catcher in place Fig 1.11., or without the grass deflector Fig 1.112.



1. Lift the seat forward by pivoting. Check to ensure that the breaker switch is flipped to the "ON" position Fig 1.13. Return the seat to the ready position.

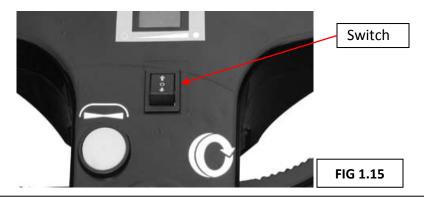


- 1. Mount the LAZER ECO68 and position yourself comfortably in the seat.
- 2. You MUST remain seated for the mower to operate. The unit includes an Operator Presence Switch that requires the operator to be seated properly. If you are not seated the unit will not operate.
- 3. Turn the key to the right you will see the LCD Display screen indicate your battery charge level.

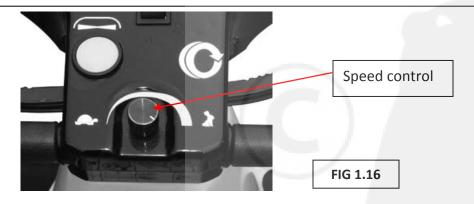


FIG 1.14

- 4. Turn the key to the right you will see the display screen become active indicating your charge level.
- 5. To begin you MUST release the hand brake, and or foot brake.
- 6. Engage the cutting blades by depressing the yellow safety button and then squeezing the LEFT handle. Doing this will cause the blades to immediately begin to operate.
- 7. Release the handle and the blades will come to a stop.
- 8. To proceed forward press the switch on the top of the steering wheel to the forward position.



- 9. Release the handle and the blades will come to a stop.
- 10. To proceed forward- press the switch on the top of the steering wheel to the forward position Fig 1.15.
- 11. When you squeeze the right handle the unit will then begin to move.
- 12. NOTE: ROTATE the speed control dial to slow or speed your movement. Small adjusts will change the momentum of the unit. Fig 1.16



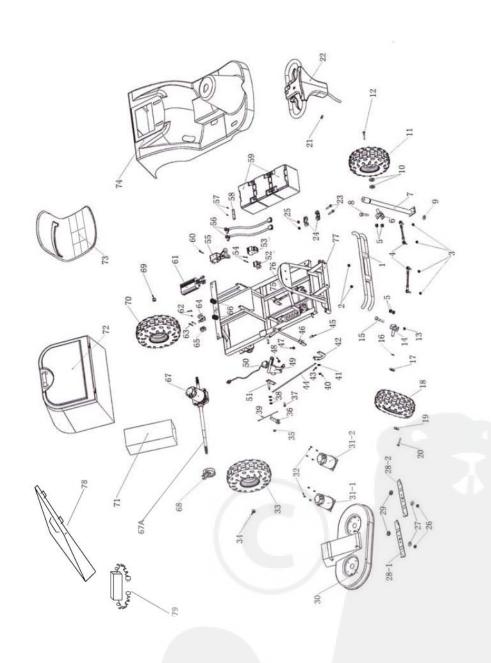
- 13. Once you are moving- ALWAYS- be aware of your surroundings. Always take precautions to ensure that the area you are moving is clear of debris, obstruction, obstacles or any power wires.
- 14. If this is the FIRST TIME you are riding the unit- we suggest you drive the unit around the area for a few minutes to allow you to become accustom to the movement and speed of the unit.
- 15. When you are in position to begin cutting. Engage the cutting blades. Then engage the drive motor and begin cutting.
- 16. NOTE: Added Safety features require that BOTH HANDS are on the unit holding the blade and wheel drive handles. If you release a handle-that element will stop operating. You would need to re-engage the appropriate handle to activate this component.

- 17. NOTE: Added Safety features require that BOTH HANDS are on the unit holding the blade and wheel drive handles. If you release a handle-that element will stop operating. You would need to re-engage the appropriate handle to activate this component.
- 18. To stop-press the brake pedal.
- 19. NOTE: As an added safety feature when the brakes are applied-the drive motor is disengaged preventing the unit from being moved-either forward or reverse.
- 20. If you reach an area that requires you to reverse. Depress the brake and come to a complete stop and release the LEFT handle to disengage the blades.
- 21. You would then need to move the switch on the top of the steering backward to the rear facing arrow position Fig 1.14. When the unit is switched into reverse an audible alert is immediately activated.
- 22. BEFORE REVERSING- always check behind you to ensure safe movement and also ensure no persons, pets, or obstacles are present.
- 23. Engage the drive handle Fig 1.0- the unit will immediately begin to reverse.
- 24. NOTE: As a safety feature the unit is designed to disengage the cutting blades when switched into reverse. ALSO the speed of the unit in reverse is only half that of the forward speed. Safety in operating your LAZER ECO68 is a priority. All these features have been included to support the safe operation of the unit and the operator.
- 25. Press the brake to come to a complete stop. Then move the switch on the steering wheel to the forward arrow position Fig 1.14.
- 26. Engage the blades by following step 15 and then engage the RIGHT handle to begin the forward motion once again.
- 27. Depending on the height of the grass you are cutting-we suggest you check the rear grass catcher every 15 minutes to ensure the bag in not too full. To do this, stop the unit and apply the hand brake-switch the key to the OFF position step off the unit and physically look to determine the level of clippings captured in the bag. We suggest that you avoid filling past the half way point to ensure easy movement of clippings. If needed, remove he bag by lifting it from the rear of the unit. Dump the clippings into a garden bag, composter or where you feel is most appropriate.
- 28. Reinstall the bag as per number 6 (Fig 1.11).
- 29. Board the unit again-turn the key to the ON position and release the hand brake.
- 30. Begin mowing once again.
- 31. Grass deflector. When using the grass deflector section 31, 32, 33, 34 are not required.
- 32. When you are done-safely park the unit. Engage the parking brake Fig 1.6. When you leave the unit, lift the seat and switch the breaker (Fig 1.12) to the OFF position.
- 33. Connect the charger end to the specially designed connection point Fig 1.3. Plug the other end of the charger into a standard 110v wall outlet to reenergize the batteries. The charger will automatically shut off and the light will indicate the color GREEN when the unit is fully charged.

By following these procedures, you should have many years of safe operation of your LAZER ECO68 ... A greener lawn. A greener planet.

Parts of Your LAZER ECO68:

REF	DESCRIPTION	PART N°	REF	DESCRIPTION	PART N°
1.	Bumper	BU	40.	Foot brake unit	FBU
2.	Bumper nut	BUN	41.	Foot brake washer	FBW
3.	Steering link nut	STLN	42.	Foot brake	FB
4.	Steering link	STL	43.	Foot brake link bar screw	FBLS
5.	Left/Right steering nut	LRSN	44.	Foot brake rod	FBR
6.	Left/Right steering	LRST	45.	Height gear screw	HGS
7.	Steering column	STC	46.	Blade adjustment	BA
8.	Left/Right steering screw	LRSS	47.	Height adjustment nut	HAN
9.	Steering column screw	SCS	48.	Height adjustment screw	HAS
10.	Front wheel bearing	FWB	49.	Brake handle	ВН
11.	Front wheel	FW	50.	Trip switch	TW
12.	Front wheel screw	FWS	51.	Brake link washer screw	BLWS
13.	Left/Right steering nut	LRSN	52.	Circuit breaker holder	СВН
14.	Left/Right steering	LRST	53.	Circuit breaker	СВ
15.	Left/Right steering screw	LRSS	54.	Circuit breaker screw	CBS
16.	Washer	W1	55.	Mowing relay control	MRC
17.	Front wheel bearing	FWB	56.	Battery connect wire	BCW
18.	Front Wheel	FW	57.	Wire baffle	WB
19	Front wheel bearing	FWB	58.	Wire baffle nut	WBN
20.	Front wheel screw	FWS	59.	Batterry system	BS
21.	Steering wheel screw	STWS	60.	Mowing relay control screw	MRCS
22.	Steering wheel	SWA	61.	Drive control	DC
23.	Steering wheel column screw	SWCS	62.	Drive control screw	DCS
24.	Steering wheel column washer	SWCW	63.	Safe switch nut	SSN
25.	Steering wheel column nut	SWCN	64.	Hall switch holder	HSH
26.	Blade nut	BN	65.	Hall switch	HS
27.	Blade baffle	BB	66.	Seat spring	SS
28-1	Left blade	В	67.	Drive motor	DM
28-2	Right blade	В	67A	Gear shaft assembly	GSA
29.	Blade baffle	BB	68.	Drive brake	DB
30.	Mowing deck	MD	69.	Rear wheel nut	RWN
31-1	Left mowing motor	MM	70.	Right rear wheel	RRW
31-2	Right mowing motor	MM	71.	Grass chute	GC
32.	Mowing motor screw	MMS	72.	Grass catcher	GC
33.	Left rear wheel	RW	73.	Seat-OPS	OPSS
34.	Left rear wheel nut	RWN	74.	Body	BODY
35.	Brake link nut	BLN	75.	Height link disc	HLD
36.	Brake link	BL	76.	Height link bar	HLB
37.	Brake link cotter pin	BLCP	77.	Frame	FRAM
38.	Brake link washer	BLW	78.	Grass deflector	GD
39.	Brake link bar	BLB	79.	Charger	CHAR



PRODUCT DETAILS:			
PRODUCT NAME	LAZER		
MODEL NUMBER	ECO68		
Warranty	2 year limited non commercial		
Battery Warranty	6 months limited non commercial		
Drive Motor	1 Forward and Reverse		
Drive system	Electric		
Battery Capacity –	36V 55Ah battery system		
Volts & Amphour Rating	comprised of (3) batteries		
Ground Speed	4.2 mph, 7 kmph		
DECK			
Deck Construction	Steel		
Number of spindles	2		
Blade Tip Speed	3800 rpm		
Spindle Material	Steel motor shaft		
Deck Drive	2 x Cutting Motors		
Deck Engagement	Electric-Blade mounted		
5. U	directly to motor shaft		
Deck Lift System	Hand operated		
Cutting width	27"		
Cutting Heights	34" - 1 14" - 1 34" - 2 14" - 2 34"		
	19mm – 32mm – 44mm – 57mm – 70mm		
Cutting positions	5		
WHEELS			
Front	9" * 300-4		
Rear	13" * 500-6		
FEATURES			
Safety	UL 1447 certified + ANSI B71.1 certified + CE Certification		
Headlights	Included		
Seat	Fixed with springs		
Hour meter	N/A		
MACHINE DIMENTION			
Weight (lbs)	276		
Length (inches)	45		
Width (inches)	29		
Height (inches)	40		
ATTACHMENTS			
36V 3A Charger	220V 5Ah cULus / CE Certified Smart Charger		
Grass catcher	3 bushels (90 litres)		
Grass deflector	Included		

