

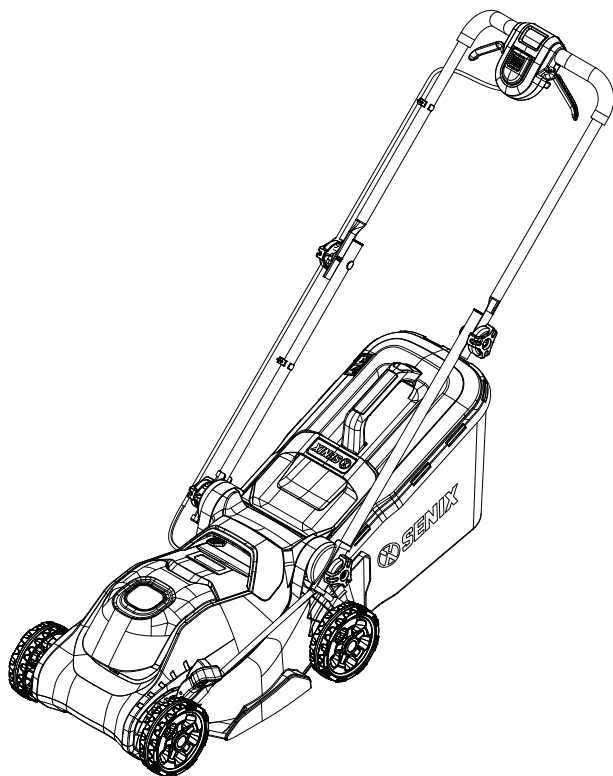


**X2 20V<sup>\*</sup>** **||||**  
LITHIUM-ION

---

# CORDLESS PUSH LAWN MOWER

Model: LPPX2-L-EU



For customer service please find all information on [www.senixtools.com](http://www.senixtools.com)  
CAUTION: BEFORE USING THIS PRODUCT, READ THIS MANUAL AND  
FOLLOW ALL ITS SAFETY RULES AND OPERATING INSTRUCTIONS.

ORIGINAL INSTRUCTIONS

# TABLE OF CONTENTS

SAFETY & INTERNATIONAL SYMBOLS.....	2
SAFETY INSTRUCTIONS.....	2
KNOW YOUR UNIT .....	6
SPECIFICATIONS* .....	7
ASSEMBLY.....	7
OPERATION.....	9
MAINTENANCE.....	12
TROUBLESHOOTING.....	16

## SAFETY & INTERNATIONAL SYMBOLS

Explanation of Safety & international symbols describes safety and international symbols and pictographs that may appear on this product. Read the operator's manual for complete safety, assembly, operating and maintenance and repair information.



Caution / Warning.



**WARNING** - To reduce the risk of injury, user must read instruction manual.



Wear eye protection.



Wear a dust mask.



Wear safety footwear.



Wear protective gloves.



Do not expose the product to rain or wet conditions.



**WARNING** – Beware of thrown objects – keep bystanders away.



**WARNING** – Keep hands and feet away from the blades.



Look behind when backing up with the lawn mower.



**WARNING** – Disconnect battery before maintenance.



Blades continue to rotate after machine is switched off.



Class II equipment (Charger)



RCM Mark



Power tools that are no longer usable and defective or used battery packs/batteries, must be collected separately and disposed of in an environmentally correct manner.

## SAFETY INSTRUCTIONS

### ORIGINAL INSTRUCTIONS

### LAWNMOWER SAFETY WARNINGS



#### **WARNING!**

Read all safety warnings, instructions, illustrations and specifications provided with this lawnmower. *Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.*

Save all warnings and instructions for future reference.

#### **1) Work Area Safety**

- To avoid bystander contact with the moving blade or a thrown object injury, keep the area of operation clear of all bystanders, particularly small children. Stop the lawnmower and any attachment(s) if anyone enters the area. Contact with the moving blade or thrown objects may result in serious personal injury or death.

- b. Only operate the lawnmower in daylight or good artificial light. Low light or dark areas are more prone to accidents.
- c. Do not operate lawnmowers in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. *Lawnmowers create sparks which may ignite the dust or fumes.*
- d. Thoroughly inspect the area where the lawnmower is to be used and remove all stones, sticks, wires, bones, and other foreign objects. *Thrown objects can cause personal injury.*
- h. To avoid operator blade contact or a thrown object injury, stay in the operator zone behind the lawnmower handles. *Blade contact or thrown objects may result in serious personal injury.*
- i. Do not touch blades and other hazardous moving parts while they are still in motion. *This reduces the risk of injury from moving parts.*
- j. *Use of rubber gloves and footwear is recommended when working outdoors.*
- k. *Use Safety Glasses – Always use face or dust mask if operation is dusty.*

## 2) Electrical Safety

- a. Do not expose the lawnmower to rain or wet conditions.

## 3) Personal Safety

- a. Use personal protective equipment. *Always wear eye protection. Protective equipment will reduce personal injuries.*
- b. Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts. *Loose clothes, jewellery or long hair can be caught in moving parts.*
- c. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or batteries, picking up or carrying the lawnmower. *Carrying a lawnmower with your finger on the switch or energising a lawnmower that has the switch on invites accidents.*
- d. Remove any adjusting key or wrench before turning the lawnmower on. *A wrench or a key left attached to a rotating part of the lawnmower may result in personal injury.*
- e. Don't Overreach –Keep proper footing and balance at all times. *This enables better control of the lawnmower in unexpected situations.*
- f. Stay alert, watch what you are doing and use common sense when operating a lawnmower. Do not use a lawnmower while you are tired or under the influence of drugs, alcohol or medication. *A moment of inattention while operating a lawnmower may result in serious personal injury.*
- g. Do not let familiarity gained from frequent use of lawnmower allow you to become complacent and ignore lawnmower safety principles. *A careless action can cause severe injury within a fraction of a second.*

## 4) Lawnmower Use And Care

- a. Use the lawnmower and accessories in accordance with these instructions, taking into account the working conditions and the work to be performed. *Use of the lawnmower for operations different from those intended may result in a hazardous situation.*
- b. Before using the lawnmower, always visually inspect to see that the blade(s) and the blade(s) assembly are properly secured and not worn or damaged. *Loose, worn, or damaged parts may increase the risk of injury.*
- c. Do not use the lawnmower if the switch does not turn it on and off. *Any lawnmower that cannot be controlled with the switch is dangerous and must be repaired.*
- d. Do not force the lawnmower. Use the correct lawnmower for your application. *The correct lawnmower will do the job better and safer at the rate for which it was designed.*
- e. Be aware of the mower and attachment discharge direction and do not point the mower discharge at anyone. *Thrown objects can cause personal injury.*
- f. Use extreme caution when reversing or pulling the lawnmower towards you. Always be aware of your surroundings. *This reduces the risk of tripping during operation.*
- g. Operate the disabling device and/or remove all battery packs, if removable, from the lawnmower before making any adjustments, changing accessories, or storing the lawnmower. *Such preventive safety measures reduce the risk of starting the lawnmower accidentally.*
- h. Keep handles and grasping surfaces dry, clean and free from oil and grease. *Slippery handles and grasping surfaces do*

*not allow for safe handling and control of the lawnmower in unexpected situations.*

- i. Check the grass bag frequently for wear or deterioration. *A worn or damaged grass bag may increase the risk of personal injury.*
- j. Before removing the grass bag, turn off the motor and wait until the blade(s) comes to a complete stop. The cutting blade(s) continues to rotate after the blade control is released. Never place any part of the body in the blade(s) area until you are certain the motor is off and the blade(s) has stopped rotating. *Contact with the moving cutting blade(s) may result in serious personal injury.*
- k. Before unclogging the chute, turn off the motor, wait until the blade(s) comes to a complete stop, operate the disabling device and/or remove all batteries, if removable. The cutting blade(s) continues to rotate after the blade control is released. Never place any part of the body in the blade(s) area until you are certain the motor is off and the blade(s) has stopped rotating. *Contact with the moving cutting blade(s) may result in serious personal injury.*
- l. Before cleaning or inspecting the lawnmower, turn off the motor, wait until the blade(s) comes to a complete stop, operate the disabling device and/or remove all batteries, if removable. *Accidental contact with the moving blade and moving parts may result in personal injury.*
- m. Maintain the lawnmower and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the lawnmower's operation. *If damaged, have the lawnmower repaired before use. Many accidents are caused by poorly maintained lawnmowers.*
- n. Store idle lawnmowers out of the reach of children and do not allow persons unfamiliar with the lawnmower or these instructions to operate the lawnmower. *Lawnmowers are dangerous in the hands of untrained users.*

## **5) Battery Lawnmower Use And Care**

- a. Use lawnmowers only with specifically designated battery packs. *Use of any other battery packs may create a risk of injury and fire.*
- b. Recharge only with the charger specified

*by the manufacturer. A charger that is suitable for one type of battery pack(s) may create a risk of fire when used with another battery pack(s).*

- c. Follow all charging instructions and do not charge the battery pack(s) or lawnmower outside the temperature range specified in the instructions. *Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.*
- d. Do not use a battery pack or lawnmower that is damaged or modified. *Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.*
- e. Do not expose a battery pack(s) or lawnmower to fire or excessive temperature. *Exposure to fire or temperature above 100°C may cause an explosion.*
- f. Under abusive conditions, liquid may be ejected from the battery(ies); avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. *Liquid ejected from the battery(ies) may cause irritation or burns.*
- g. When battery packs are not in use, keep them away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects that can make a connection from one terminal to another. *Shorting the battery terminals together may cause burns or a fire.*



## **WARNING!**

Use only SENIX X2 batteries (B40X2/B50X2/B60X2/B80X2) and chargers (CHX2/CHQX2/CHQX2-M-EU/CHDX2-M-EU).

## **6) Service**

- a. Have your lawnmower serviced by a qualified repair person using only identical replacement parts. *This will ensure that the safety of the lawnmower is maintained. Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety.*
- b. Never service damaged battery packs. *Service of battery packs should only be performed by the manufacturer or authorized service providers.*



# LAWNMOWER SAFETY WARNINGS

- c. **Do not use the lawnmower in bad weather conditions, especially when there is a risk of lightning.** *This decreases the risk of being struck by lightning.*
- d. **Thoroughly inspect the area for wildlife where the lawnmower is to be used.** *Wildlife may be injured by the lawnmower during operation.*
- e. **Thoroughly inspect the area where the lawnmower is to be used and remove all stones, sticks, wires, bones, and other foreign objects.** *Thrown objects can cause personal injury.*
- f. **Before using the lawnmower, always visually inspect to see that the blade and the blade assembly are not worn or damaged.** *Worn or damaged parts increase the risk of injury.*
- g. **Check the grass catcher frequently for wear or deterioration.** *A worn or damaged grass catcher may increase the risk of personal injury.*
- h. **Keep guards in place. Guards must be in working order and be properly mounted.** *A guard that is loose, damaged, or is not functioning correctly may result in personal injury.*
- i. **Keep all cooling air inlets clear of debris.** *Blocked air inlets and debris may result in overheating or risk of fire.*
- j. **While operating the lawnmower, always wear non-slip and protective footwear. Do not operate the lawnmower when barefoot or wearing open sandals.** *This reduces the chance of injury to the feet from contact with the moving blade.*
- k. **While operating the lawnmower, always wear long trousers.** *Exposed skin increases the likelihood of injury from thrown objects.*
- l. **Do not operate the lawnmower in wet grass. Walk, never run.** *This reduces the risk of slipping and falling which may result in personal injury.*
- m. **Do not operate the lawnmower on excessively steep slopes.** *This reduces the risk of loss of control, slipping and falling which may result in personal injury.*
- n. **When working on slopes, always be sure of your footing, always work across the face of slopes, never up or down and exercise extreme caution when changing direction.** *This reduces the risk*

*of loss of control, slipping and falling which may result in personal injury.*

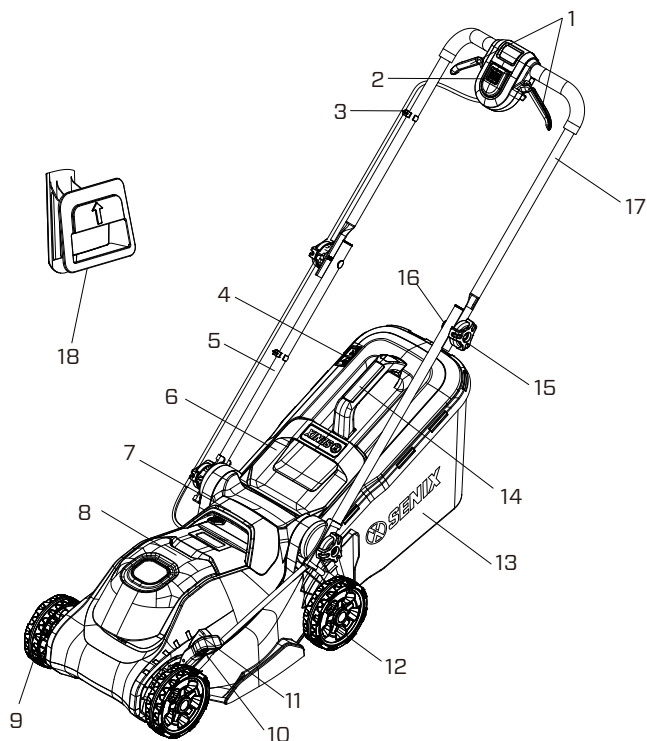
- o. **Use extreme caution when reversing or pulling the lawnmower towards you. Always be aware of your surroundings.** *This reduces the risk of tripping during operation.*
- p. **Do not touch blades and other hazardous moving parts while they are still in motion.** *This reduces the risk of injury from moving parts.*
- q. **When clearing jammed material or cleaning the lawnmower, make sure all power switches are off and the battery pack is disconnected.** *Unexpected operation of the lawnmower may result in serious personal injury.*

## SAVE THESE INSTRUCTIONS

### INTENDED USE

This lawn mower is only intended for cutting grass in domestic use. Do not use it for other purpose.

# KNOW YOUR UNIT



## APPLICATIONS

Model: LPPX2-L-EU

As a cordless lawn mower:

Cutting grass in domestic use.

1	Switch trigger
2	Safety button
3	Cord clip
4	Grass bag volume indicator
5	Lower handle bar
6	Discharge chute door
7	Carry-handle
8	Battery compartment cover
9	Front wheel
10	Cutting-height adjustment lever

11	Adjustment trigger
12	Rear wheel
13	Grass bag
14	Grass bag handle
15	Handle knob
16	Bolt
17	Upper handle
18	Mulching insert

## SPECIFICATIONS\*

Model	LPPX2-L-EU
Input Voltage	18 V $\equiv$ (20 $\equiv$ V Max*)
Motor Type	Brushed
No Load Speed	3 500 RPM
Mowing Functions	2-in-1 (Mulch and bag)
Cutting Capacity	32 cm
Height Adjustment	25-65 mm, 5-position
Wheel Size (Front/Rear)	14 cm/ 14 cm
Grass Bag	25 L
Weight (tool only)	10 kg

\*20V Max battery, maximum initial battery voltage (measured without a workload) is 20V. The nominal voltage is 18V.

## ASSEMBLY

1. Unpack all parts and lay them on a flat, stable surface:
2. Remove all packing materials and shipping devices, if applicable.
3. The scope of delivery varies depending on the country and purchased variant.

Model LPPX2-L-EU

- Lawn mower x1
- Lower handle bars x2
- Upper handle x1
- Mulching insert x1
- Grass bag assembly x1
- Grass bag handle x1
- Handle knob x2
- Bolt x2
- Cord clip x2
- Instruction manual x1

4. If you find that parts are missing or show damage do not use the product but contact your dealer. Using an incomplete

or damaged product represents a hazard to people and property.

5. Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.



### WARNING!



Wear protective gloves for this assembly work and always lay the product on a flat and stable surface while assembling.



Follow the assembly instructions step-by-step and use the pictures provided as a visual guide to easily assemble the product!

Do not insert the battery pack before the power tool is completely assembled or adjusted!



### WARNING!

To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the machine when assembling parts.



### WARNING!

Do not attempt to modify this tool or create accessories not recommended for use with this mower. Any such alteration or modification is misuse and could result in a hazardous condition leading to serious injury.

## INSTALLING THE UPPER HANDLE

1. Rotate the lower handle knob counterclockwise on each side to loose it and then lift the lower handle bars from the storage position.

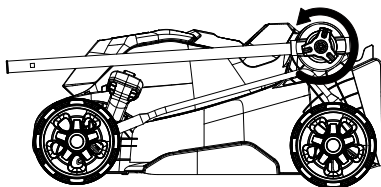


Fig. 1

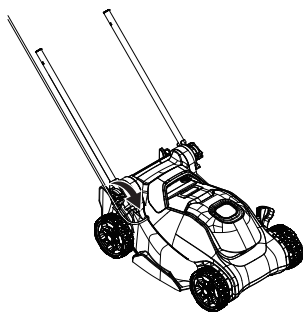


Fig. 2

2. Locked the lower handle bars by tightening the two lower handle knobs.
3. Secure the connection of the upper handle assembly to the lower handle bars using 2 knobs and 2 bolts and tighten them on each side.

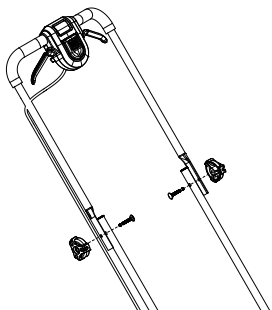


Fig. 3

4. Secure the cord to the machine by using two cord clips.

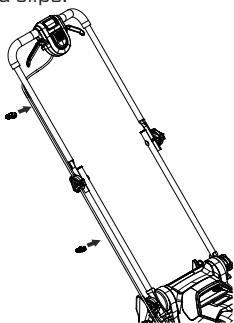


Fig. 4

1. Check the grass bag before assembling, to make sure that there is no damage.
2. Push the grass bag handle into the openings on the grass bag. Check that the handle is securely and correctly positioned.

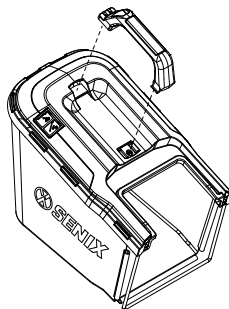


Fig. 5

3. Slide the grass bag onto the frame. To completely assemble grass bag, assemble the two side and the bottom clips to the frame.

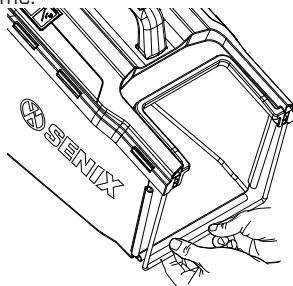


Fig. 6



Fig. 7

## ASSEMBLING THE GRASS BAG ASSEMBLY

## INSTALLING/REMOVING THE GRASS BAG



## NOTE:

Remove the mulching insert before attaching the grass bag on the mower.

1. Lift the discharge chute door with one hand while holding the grass bag assembly by its handle with the other hand. Insert the side frames into the slots on the back of the machine and hook the grass bag assembly on the mower. Release the discharge door so that it rests on the grass bag.

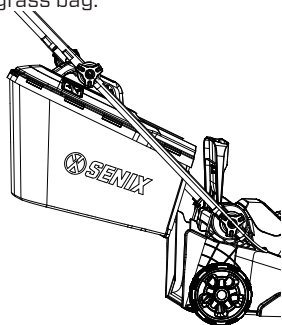


Fig. 8

2. To remove the grass bag, lift the discharge chute door on the mower. Lift the grass bag up and off of the mower. Release the discharge door.



## WARNING!

When using the grass bag, never operate the mower unless the grass bag is firmly seated on the mower and the discharge door rests firmly against the top of the grass bag.



## WARNING!

To reduce the risk of injury, frequently inspect the bag assembly and replace the bag if there are any signs of wear or deterioration. Use only grass bags manufactured for this mower.

## INSTALLING/REMOVING THE MULCHING INSERT

1. Lift the discharge chute door. Grasp the handle of the mulching insert and fully insert it into the mower, so that it is securely seated. Release the discharge door and make sure it rests firmly against the mulching insert.

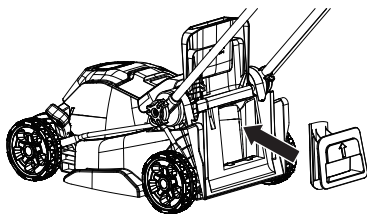


Fig. 9

2. To remove the mulching insert, lift the discharge chute door, grasp the handle of the mulching insert, and pull it out. Release the discharge door.



## NOTE:

The mulching insert must be removed in order to install and use the grass bag and must be re-installed when the grass bag is removed.

## OPERATION



## WARNING!

The safe use of this product requires an understanding of the information on the machine and in this operator's manual, as well as knowledge of the project you are attempting. Before use of this product, familiarize yourself with all operating features and safety rules.

## INSTALLING/REMOVING THE BATTERY PACK



## WARNING!

If any parts are broken or missing, do not attempt to attach the battery pack to the mower or operate the mower until the broken or missing parts are replaced. Failure to do so could result in serious injury.



## WARNING!

Charge the battery pack before first use.

1. Raise the battery cover by lifting the front of the cover.
2. Align the grooves in the battery pack with the raised ribs in the battery compartment and then insert the battery pack into the compartment until you hear a "click".

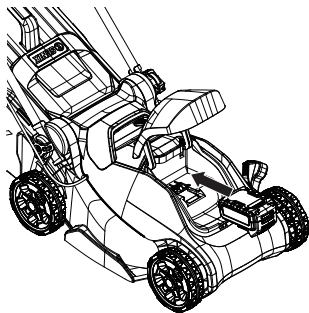


Fig. 10

3. To detach the battery pack, depress the battery-release button to release the battery pack, and then lift it out of the compartment.
4. Close the battery cover.



## NOTE:

Refer to the manuals for the charger and the battery pack for more details about how to charge the battery pack and other information.

## STARTING/STOPPING THE LAWN MOWER

Before operating, make sure the handle is locked into position and the battery pack is attached to the machine securely.



## WARNING!

The operation of any lawn mower can result in foreign objects being thrown into your or others' eyes, which can damage eyes severely. Always wear safety glasses while operating the mower or while performing any adjustments or repairs on the mower.



## NOTE:

The blade will continue to rotate for a few seconds after the mower is turned off. Allow the motor/blade to stop rotating before starting it again.

### To start:

Press the safety button and pull the switch trigger upward to meet the handle and grasp it. Release the safety button and begin operation.

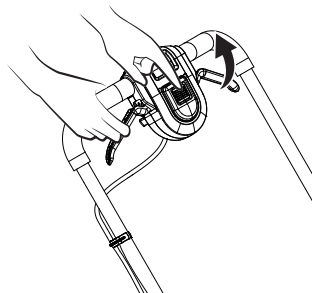


Fig. 11

### To stop:

Fully release the switch trigger to stop it.

## CUTTING-HEIGHT ADJUSTMENT



## WARNING!

Do not at any time make any adjustment to the lawn mower without first stopping the motor and waiting until the blade has stopped rotating.



## WARNING!

Keep your feet away from the deck when adjusting its height.

The mower can be set to 5 height-cutting positions between 25 mm and 65 mm. Choose the proper cutting height according to the type and condition of the grass to be cut.

1. Hold the cutting-height adjustment lever and press the adjustment trigger on the lever with your thumb.
2. Move the cutting-height adjustment lever forward or backward to adjust the cutting height.
3. Once arriving at the desired cutting-height position, release the adjustment trigger.

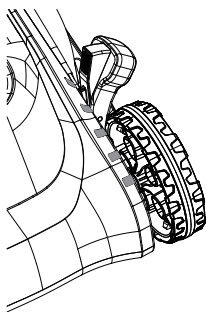


Fig. 12

## GRASS BAG VOLUME INDICATOR

1. If the grass bag is empty or is not completely full with grass, the grass indicator flap will remain open due to the flow of air or will flutter open and close as the grass accumulates in the bag.
2. When the grass bag reaches its maximum capacity, the grass indicator flap will remain closed due to the restricted air flow. This shows that it is time to empty the bag.

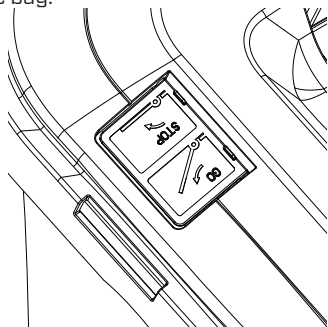


Fig. 13

## MOWER OVERLOAD PROTECTION

To prevent overload conditions, do not try to remove too much grass at one time. Please raise the cut height. Your mower has built-in overload circuit protection. When the mower is overloaded, the motor will stop. Remove the battery pack from the mower. Check to see if grass has collected beneath the deck and clear it if necessary, then install the battery and restart the mower.

## MOWER OVERHEAT PROTECTION

This lawn mower has a overheat protection function. When the temperature of PCB is too high during operation, the lawn mower will be shut down automatically. Wait it to cool down and then restart the product.

## MOWING TIPS



### NOTE:

A sharp blade will greatly enhance the performance of the mower, especially when cutting tall grass. Make sure to check the sharpness of the blade before mowing.

Verify that the lawn is free of stones, sticks, wires, and other objects which could damage the lawn mower or motor. Such objects could be accidentally thrown by the mower in any direction and could cause serious personal injury to the operator and to others.



### WARNING!

If you strike a foreign object, stop the motor and remove the battery. Thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower. Excessive vibration of the mower during operation is an indication of damage. The unit should be promptly inspected and repaired.

- For best results, do not mow in circles. Travel back and forth across the lawn.

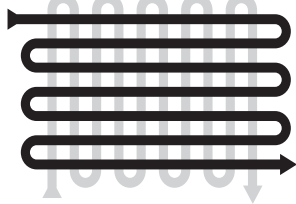


Fig. 14

- When cutting thick grass, reduce your walking speed in order to allow for a more effective cut and a proper discharge of the

- clippings.
- To maintain a healthy lawn, cut off only one-third or less of the total length of the grass.

## MULCHING TIPS



### WARNING!

Inspect the area where the mower is to be used and remove all stones, sticks, wire and other debris that might be thrown by the rotating blade.

- Release the switch trigger to turn off the mower blade rotation when crossing any graveled areas; stones can be thrown by a rotating blade.
- Set the mower to the highest cutting height when mowing on uneven ground or in tall growth.
- For effective mulching, do not cut wet grass; it tends to stick to the underside of the deck, preventing the proper mulching of grass clippings. The best time to mow grass is in the late afternoon, when the grass is dry and the newly cut area will not be exposed to direct sunlight.
- For the best mulching performance, set the cutting height to remove approximately one third of the grass blade length, ideally no more than 38.1 mm at one time. If the grass is overgrown, it may be necessary to increase the cut height to make it easier to mow and to prevent overloading the motor. Slow your cutting pace in tall or thick grass conditions. For mulching extremely thick or tall grass, it is advisable to first cut at a high cut-height setting, and then re-cut to the final cut height. Otherwise, make narrower cuts and mow slowly. ALWAYS MAKE SURE THAT THE BLADE IS SHARP.

## MAINTENANCE



### WARNING:

Always switch the product off, remove the battery pack and let the product cool down before performing cleaning and maintenance work!



### WARNING!

Only perform cleaning and maintenance work

according to these instructions! All further works must be performed by a qualified specialist! And only use specified spare parts for replacement.



### WARNING!

When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by a qualified service technician.

## REPLACING THE BLADE



### WARNING:

Always protect your hands by wearing heavy gloves or wrapping the cutting edges with rags or other materials when performing any maintenance on the mower blade. Always remove the battery pack when servicing or transporting the mower.

#### To remove the blade:

- Switch off the product and remove the battery pack from the mower.
- Turn the mower on its side to expose the underside of the blade housing.
- Wear heavy-duty gloves, or use a cloth to grip the blade. This is to prevent the blade from rotating while loosening the bolt.
- To remove the blade bolt, hold the blade firmly by one hand and use a wrench to loosen the blade bolt by turning it counterclockwise.
- Remove the bolt, the washer and the blade in turn. If the retaining bracket is worn or damaged, replace the bracket with a new one.

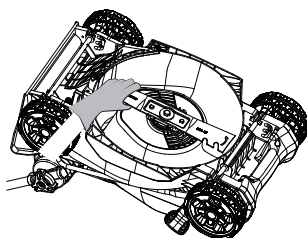


Fig. 15



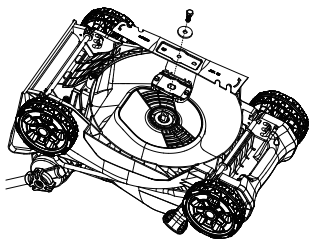


Fig. 16

#### To install the blade:

1. Wear protective gloves.
2. Replace the old blade with a new one and put the new blade on the retaining bracket.
3. Wear heavy-duty gloves, or use a cloth to grip the blade. This is to prevent the blade from rotating while tightening the bolt.
4. Put the washer on the blade and insert the bolt into the hole in the blade. Tighten the bolt clockwise to secure the blade by using a wrench.

## SHARPENING THE BLADE



### WARNING!

Always protect your hands by wearing heavy gloves or wrapping the cutting edges with rags or other materials when performing any maintenance on the mower blade. Always remove the battery pack when servicing or transporting the mower.



### WARNING!

A worn, cracked, or damaged blade can break and pieces of the damaged blade can become dangerous projectiles. Thrown objects can cause serious injury. Inspect the blade regularly and do not operate the mower with a worn or damaged blade.



### NOTE:

Keep the blade sharp for best mower performance. A dull blade does not cut grass cleanly or mulch properly.

To remove the blade, follow the “REPLACING THE BLADE” section in this manual.

A dull blade can be sharpened, but a blade that is excessively worn, bent, cracked, or otherwise damaged must be replaced. A worn or damaged blade can break, causing blade

pieces to be thrown from the mower.

#### Sharpening frequency:

Sharpening the blade twice during a mowing season is usually sufficient under normal circumstances. Sand causes the blade to dull quickly; if your lawn has sandy soil, more frequent sharpening may be required.

#### When sharpening the blade:

- Make sure that the blade remains balanced.
- Sharpen the blade at the original cutting angle.
- Sharpen the cutting edges on both ends of the blade, removing an equal amount of material from each end.

## TO SHARPEN A BLADE IN A VISE

1. Remove the blade from the mower (please see the “REPLACING THE BLADE” section).
2. Secure the blade in a vise.
3. Wear proper eye protection and gloves and be careful not to cut yourself.
4. Carefully file the cutting edges of the blade with a fine tooth file or sharpening stone, maintaining the original cutting edge angle.
5. To check the blade balance: clamp a nail or a screw driver with a round shank in the horizontal position. Position the blade so that the nail or round shank of the screwdriver supports the blade through its center hole. Balance the blade horizontally. If either end of the blade rotates downward, remove some metal from the heavy or lower end until the blade is balanced. It is balanced when neither end drops.
6. Replace the blade on the mower and tighten it securely (please see the “REPLACING THE BLADE” section).

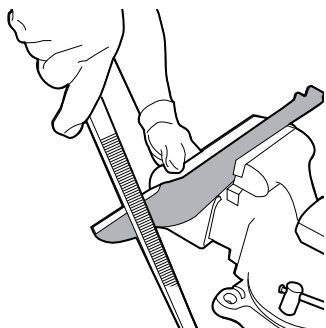


Fig. 17

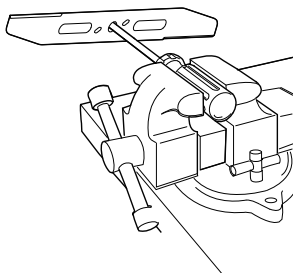


Fig. 18



## WARNING!

An unbalanced blade may cause excessive vibration. It may also cause damage to the mower and could break, causing personal injury.

## LIFETIME LUBRICATION

Lubrication is not necessary and may damage the product. The lawn mower is lubricated for lifetime use at the factory before shipment.

## CLEANING

- Switch the product off, pull out the battery pack from the product.
- Always keep the lawn mower clean and free of grass, dirt, or other debris.
- Keep the handles dry, clean, and free of oil and grease.
- Use a small brush to clean the outside of the product. Do not use strong detergents. Household cleaners that contain aromatic oils such as pine and lemon, and solvents such as kerosene, can damage plastic. Wipe off any moisture with a soft cloth.
- After each cutting session, remove

accumulated grass clippings and debris using either a dry cloth or hand brush.

- Inspect the product before and after each use for worn and damaged parts. Do not operate it if you find worn and damaged parts.



## NOTE:

If the cutting blade is blocked by foreign objects during the operating, stop the product, wait for the cutting blade stops entirely, remove the foreign objects and clean the cutting blade.

## STORAGE

- Remove the battery pack from the mower and store it at room temperature in a dry location.
- Clean the mower as described above.
- Inspect the blade and replace it or sharpen it if required.
- Store the mower in a dry, clean location. Do not store it next to corrosive materials, such as fertilizer or rock salt.
- Store the mower in a covered and enclosed space that is cool and dry and out of the reach of pets and children.
- Do not cover the lawn mower with a solid plastic sheet. Plastic coverings trap moisture around the mower, which causes rust and corrosion.

### The handle can be folded away completely for storage:

1. Remove the grass bag/mulching insert.
2. Refer to the "CUTTING-HEIGHT ADJUSTMENT" section to move the cutting-height adjustment lever to the lowest position.
3. Loosen the two lower handle knobs and completely fold away the handle.
4. Store the mower upright or flat.

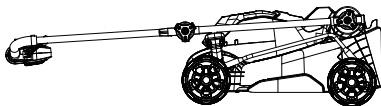


Fig. 19

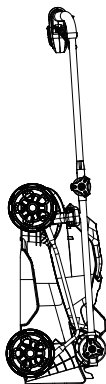


Fig. 20

5. It's recommended to store the mower with the grass bag hooked on the mower and the mulching insert installed in the mower.

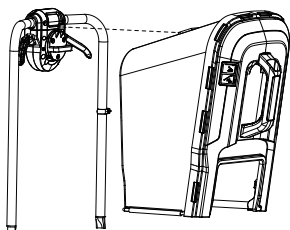


Fig. 21

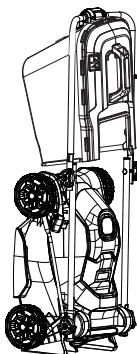


Fig. 22

6. To save space, you can choose to fold down the upper handle while storing the mower.

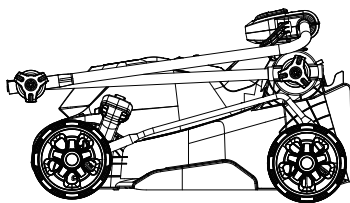


Fig. 23



## WARNING!

If the mower tips over from the upright position, mower damage or personal injury may result. Always keep the mower stable and out of the reach of children when it is in the upright position. If possible, lay it flat for storage.

## TRANSPORTATION

- Clean the product as described above.
- Make sure the handle is folded away completely.
- Always carry the product by its handle.
- Protect the product from any heavy impact or strong vibrations which may occur during transportation in vehicles.
- Secure the product to prevent it from slipping or falling over, damage or injury.

## DISPOSAL

Waste product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice. Users should clean up dust generated during operation to protect environment.



Electrical products should not be discarded with household products. Used electrical products must be collected separately and disposed of at collection points provided for this purpose. Talk with your local authorities or dealer for advice on recycling.

## TROUBLESHOOTING

Suspected malfunctions are often due to causes that the users can fix themselves. Therefore, check the product using this section. In most cases the problem can be solved quickly.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The mower fails to start.	The battery pack is depleted.	Charge the battery pack.
	The battery pack is not mounted in place in the battery compartment..	Reattach the battery pack to the mower; press it until you hear a click.
	The battery pack or mower circuitry is too hot.	Allow the battery pack or mower to cool down.
	The mower deck is clogged with grass and debris.	Clean the mower deck and make certain that the blade has freedom of movement.
The mower cuts unevenly.	The blade is dull.	Sharpen or replace the blade.
	The grass-cutting height is not set properly.	Move the deck height to a higher setting.
	The blade is assembled incorrectly.	Clean the mower deck and make certain that the blade has freedom of movement.
Unsatisfactory result.	Damaged or worn blade.	Replace with a new one.
Short running time of the mower with included battery.	Grass conditions and cutting height setting will greatly affect the battery run time. The claimed run time is based on a light load condition.	Raise the blade height and slow your pace to reduce the cutting load.
The mower does not mulch properly	Wet grass clippings are sticking to the underside of the deck.	Wait until the grass dries before mowing.
	The mower is set to cut too much grass at once.	Raise the deck to a higher cutting-height setting.

The mower stops while mowing	The battery pack is depleted.	Charge the battery pack.
	Mower is in overload condition.	Raise the cutting height or slow down the mowing.
	Mower deck is clogged with grass and debris.	Unclog the mower deck. Raise the cutting height and/or cut a narrower swath.
	The battery pack or mower circuitry is too hot.	Allow the battery pack or mower to cool down.
There is excessive vibration	The cutting blade is loose.	Tighten the blade bolt.
	The cutting blade set is unbalanced.	Balance the blade set following the "SHARPENING THE BLADE".
	The cutting blade is bent.	Replace the blade.
	The motor shaft is bent.	Contact the service center.
	The mower is set to cut too much grass at once.	Raise the deck to a higher cutting-height setting.