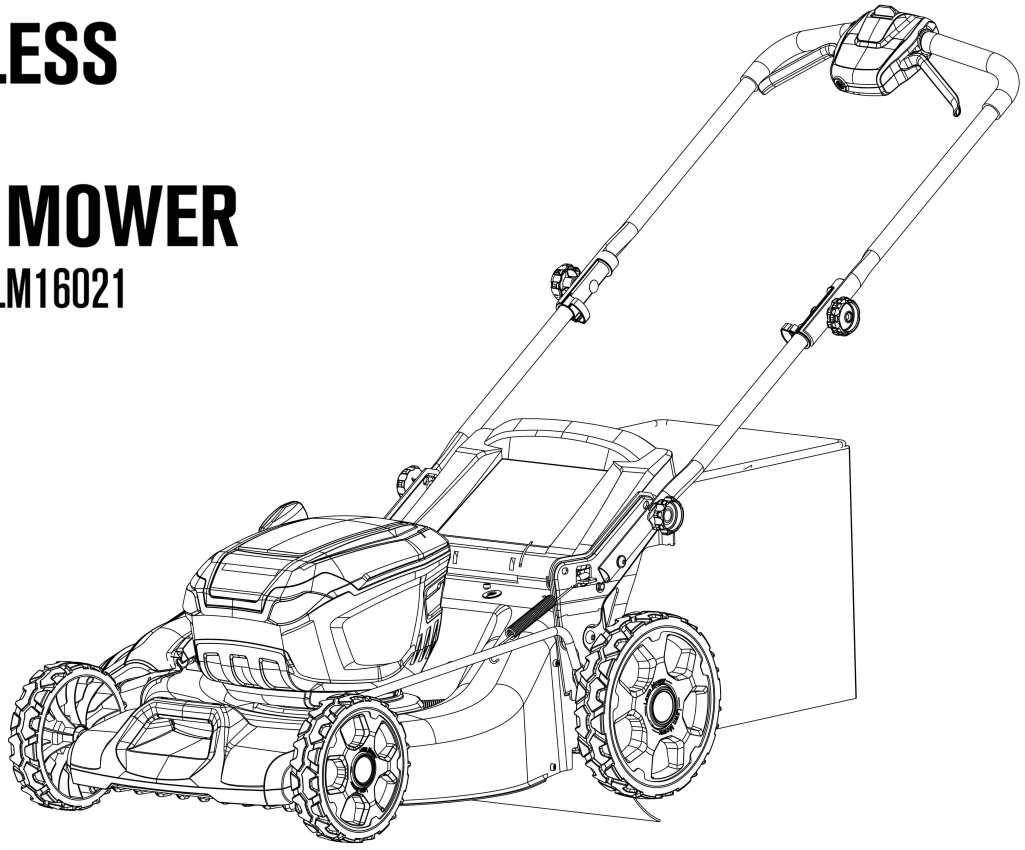
PRORUN®

60V/// Lithium-Ion

Operator's Manual

CORDLESS PUSH LAWN MOWER

MODEL: PLM16021



Everything PRORUN

Before charging, read the instructions.

⚠ **IMPORTANT - READ CAREFULLY BEFORE USE**

⚠ **IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS**

WARNING: To reduce the risk of injury, the user must read and understand the Operator's Manual before using this product. Save these instructions for future reference.

Please let us know what you think.
To leave a review and see our full line of products, visit:

proruntech.com ★★★★★

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1. General machine safety warnings

⚠ **WARNING Read all safety warnings, instructions, illustrations and specifications provided with this machine.** *Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injuries.*

Save all warnings and instructions for future reference.

The term "machine" in all of the warnings listed below refers to your battery operated (cordless) machine.

1) Work area safety

a) Keep work area clean and well lit. *Cluttered or dark areas invite accidents.*

b) Do not operate machines in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. *machines create sparks which may ignite the dust or fumes.*

c) Keep children and bystanders away while operating a machine. *Distractions can cause you to lose control.*

2) Electrical safety

a) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. *There is an increased risk of electric shock if your body is earthed or grounded.*

b) Do not operate the lawnmower in rain or wet conditions. *This may increase the risk of electric shock.*

c) Do not abuse the cord. Never use the cord for carrying. *Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.*

3) Personal safety

a) Stay alert, watch what you are doing and use common sense when operating a machine. Do not use a machine while you are tired or under the influence of drugs, alcohol or medication. *A moment of inattention while operating machines may result in serious personal injury.*

b) Use personal protective equipment. Always wear eye protection. *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*

c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the machine. *Carrying machines with your finger on the switch or energizing machines that have the switch on invites accidents.*

d) Remove any adjusting key or wrench before turning the machine on. *A wrench or a key left attached to a rotating part of*

machine may result in personal injury.
e) Do not overreach. Keep proper footing and balance at all times. *This enables better control of the machine in unexpected situations.*
f) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. *Loose clothes, jewelry, or long hair can be caught in moving parts.*
g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. *Use of these devices can reduce dust-related hazards.*
h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. *A careless action can cause severe injury within a fraction of a second.*

4) Machine use and care

a) Do not force the machine. Use the correct machine for your application. *The correct machine will do the job better and safer at the rate for which it was designed.*
b) Do not use the machine if the switch does not turn it on and off. *Any machine that cannot be controlled with the switch is dangerous and must be repaired.*
c) Remove the battery pack from the machine before making any adjustments, changing accessories, or storing machines. *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
d) Store idle machines out of the reach of children and do not allow persons unfamiliar with the machine or these instructions to operate the machine. *machines are dangerous in the hands of untrained users.*
e) Maintain machines and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the machine's operation. If damaged, have the machine repaired by a PRORUN approved service provider before use. *Many accidents are caused by poorly maintained machines.*
f) Keep cutting tools sharp and clean. *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
g) Use the machine, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. *Use of the machine for operations different from those intended could result in a hazardous situation.*
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 tool in unexpected situations.*

5) Battery tool use and care

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

b) Use machines only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.

c) When battery pack is not in use, keep it 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.*

d) Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. *Liquid ejected from the battery may cause irritation or burns.*

e) Do not use a battery pack or tool that is damaged or modified. *Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.*

f) Do not expose a battery pack or tool to fire or excessive temperature. *Exposure to fire or temperature above 130 °C may cause explosion.*

g) Follow all charging instructions and do not charge the battery pack or tool 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.*

6) Service

a) Have your power tool serviced by a qualified repair person using only identical replacement parts. *This will ensure that the safety of the power tool is maintained.*

b) Never service damaged battery packs. *Service of battery packs should only be performed by the manufacturer or PRORUN service providers.*

2. Safety instructions for lawnmowers

1) Lawnmower safety warnings:

a) Do not use the machine in bad weather conditions, especially when there is a risk of lightning. *This decreases*

the risk of being struck by lightning.
b) Thoroughly inspect the area for wildlife where the lawnmower is to be used. *Wildlife may be injured by the lawnmower during operatione.*
c) 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.*
d) 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.*
e) Check the grass catcher frequently for wear or deterioration. *A worn or damaged grass catcher may increase the risk of personal injury.*
f) 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.*
g) Keep all cooling air inlets clear of debris. *Blocked air inlets and debris may result in overheating or risk of fire.*
h) 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.*
i) While operating the lawnmower, always wear long trousers. *Exposed skin increases the likelihood of injury from thrown objects.*
j) 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.*
k) 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.*
l) 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.*
m) 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.*
n) Do not touch blades and other hazardous moving parts while they are still in motion. *This reduces the risk of injury from moving parts.*
o) 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.

3. Battery and battery charger

This section describes the battery and battery charger safety for your battery product.
Only use original batteries for products and only charge them in an original battery charger.

1) Battery charger

The battery chargers, are only used for fast charging of TOPSUN replacement batteries.
This manual contains important safety and operating instructions for battery charger.
Before using battery charger, read all instructions and cautionary markings on battery charger, and product using battery.
CAUTION! Charge only Li-ion batteries recommanded by manufacturer. Other types of batteries may burst causing personal injury and damage.
If the shape of the plug does not fit the power outlet, use an attachment plug adapter of the proper configuration for the power outlet.
WARNING! Minimise the risk of electric shock or short circuit as follows:
Never insert any object into the charger's cooling slots. Do not try to dismantle the battery charger. Never connect the charger terminals to metal objects as this can short circuit the battery charger. Use approved and intact wall sockets.
WARNING! This machine produces an electromagnetic field during operation. This field may under some circumstances interfere with active or passive medical implants. To reduce the risk of serious or fatal injury, we recommend persons with medical implants consult their physician and the medical implant manufacturer before operating this machine. Do not use product when a thunderstorm is approaching.
• Unplug the charger from the wall outlet before inspecting or cleaning the charger.
• Regularly check that the battery charger connection wire is intact and that there are no cracks in it. Replace the charger if the power supply cord becomes worn or damaged. The power supply cord cannot be repaired or replaced.
• Never carry the battery charger using the cord and never pull out the plug by pulling the cord.
• Keep the power cord and all extension cords away from water, oil and sharp edges. Make sure the power cord is not pinched in doors, fences, or the like. Otherwise, it can cause the object to become live.

Never clean the battery or the battery charger with water.
Never allow the children to use the battery charger.
When charging, the charger must be placed in a well ventilated area and under a roof to keep out moisture.
WARNING! Do not charge non-rechargeable batteries in the battery charger or use them in the machine.
WARNING! Do not use the battery charger close to corrosive or flammable materials. Do not cover the battery charger. Pull out the plug to the battery charger in the event of smoke or fir. Risk of fire.
Use the battery charger only when the surrounding temperature is between 41 °F (5 °C) and 113 °F (45 °C). Use the charger in an environment which is well ventilated, dry and free from dust.
Do not use:
– A faulty or damaged battery charger
– The battery in the battery charger outdoors.
Do not charge:
– Or never use a faulty, damaged or deformed battery.
– The battery in the rain or in wet conditions.
– The battery in direct sunlight.
– The battery in the battery charger outdoors.

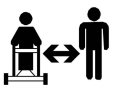
2) Battery

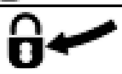
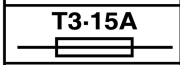
Do not dismantle, open or shred secondary batteries.
Keep batteries out of the reach of children.
Do not expose batteries to heat or fire. Avoid storage in direct sunlight.
Do not short-circuit a battery. Do not store batteries haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects.
Do not remove a battery from its original packaging until required for use.
Do not subject batteries to mechanical shock.
In the event of a cell leaking, do not allow the liquid to come in contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.
Do not use any charger other than that specifically provided for use with the equipment.
Do not use any battery which is not designed for use with the equipment.
Always purchase the battery recommended by the device manufacturer for the equipment.
Keep batteries clean and dry.
Wipe the battery terminals with a clean dry cloth if they become dirty.
Secondary batteries need to be charged before each use. Always use

the correct charger and refer to the manufacturer's instructions or equipment manual for proper charging instructions.
Do not leave a battery on prolonged charge when not in use.
After extended periods of storage, it may be necessary to charge and discharge the batteries several times to obtain maximum performance.
Retain the original product literature for future reference.
Use the battery only in the application for which it was intended.
When possible, remove the battery from the equipment when not in use.
Dispose of properly.

4. Symbols

This page depicts and describes safety symbols that may appear on this product. Read, understand, and follow all instructions on the machine before attempting to assemble and operate it.

	Safety Alert	Because a mower is a high-speed cutting tool, special safety precautions must be observed to reduce the risk of personal injury.
	Read the User's Manual	It is important that you read, fully understand and observe the following safety precautions and warnings. Read the instruction manual and the safety precautions periodically.
	Do not expose to rain	Protect the tool, battery and charger from rain, water, liquids and damp conditions. Keep the tool, battery and charger dry.
	Beware of thrown objects	Watch out for thrown objects and ricochets to reduce the risk of serious or fatal injury to the operator or bystanders.
	Keep bystanders away	The distance between the machine and bystanders shall be at least 50 feet (15 m).
	Keep hands and feet away from the blades blades	Beware of sharp blades. The blade can still be moved even though the power is switched off. Pull out the key and remove the battery before replacing or servicing blade.
	Remove the battery	Disconnect or remove the battery before cleaning or maintenance.
	Wear eye protec-tion	To reduce the risk of injury to you, always wear safety goggles or safety glasses when operating this product.

	Never tilt over 15 degree	Never operate the machine on a slope of tilting over 15 degree.
	Unlock	Show the direction of loosen the blade bolt.
	Lock	Show the direction of tighten the blade bolt.
	Never expose to fire	Risk of fire, explosion and/or burns, including chemical burns. Never incinerate or place the battery on or near fires, stoves or other high-temperature locations.
	Never heat the battery	Do not disassemble, crush, heat above 212°F (100°C). Never expose the battery to high pressures.
	Never immerse in water	To reduce the risk of personal injury or property damage from a short circuit, fire or explosion. Never immerse the battery in water or other liquids.
	Recycling	Take the machine, charger, accessories and packaging to an approved disposal site for environmentally friendly recycling.
	Waste	Symbols on the product or its packaging indicate that this product cannot be handled as domestic waste. This product must be deposited at an appropriate recycling facility.
	Indoor use only	Use and store charger only indoors in dry rooms.
	Class II tool	Battery charger is belong to Class II tools. It intended for charging Li-ion batteries, and having an output at safety extra-low voltage.
	Fuse	T3.15A time-lag miniature fuse-link
~	Alternating Current	Type of current
Li-Ion	Lithium-ion battery	Type of battery
⎓	Direct Current	Type of characteristic of current

This below units may be used in mannual:

V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency(cycles per second)
W	Watts	Power
min	Minutes	Time
mm	Millimeter	Length or size
in.	Inch	Length or size
Kg	Kilogram	Weight
lb	Pound	Weight
RPM	Revolutions per minute	Rotational speed

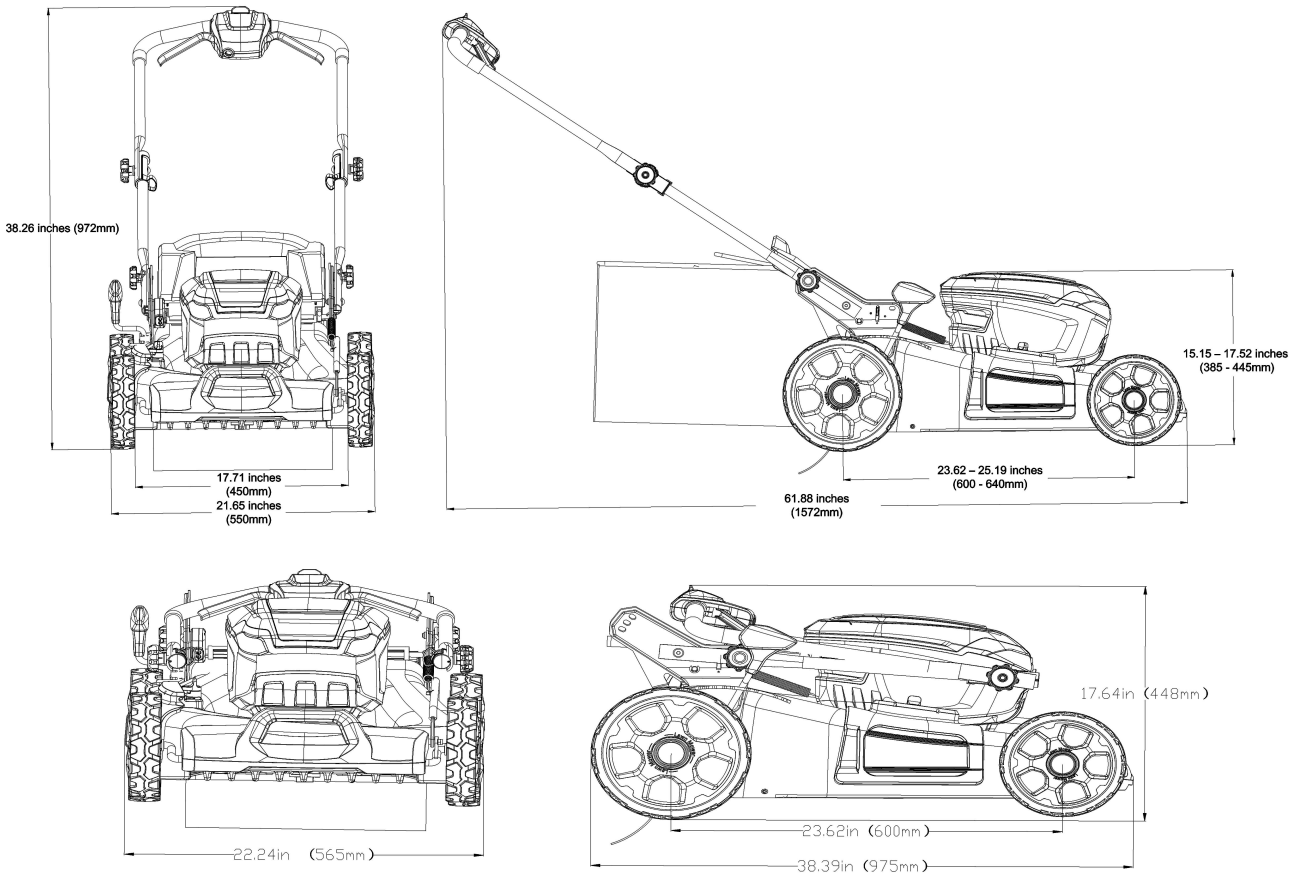
⚠DANGER! People with electronic devices, such as pacemakers, should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

5. Specifications

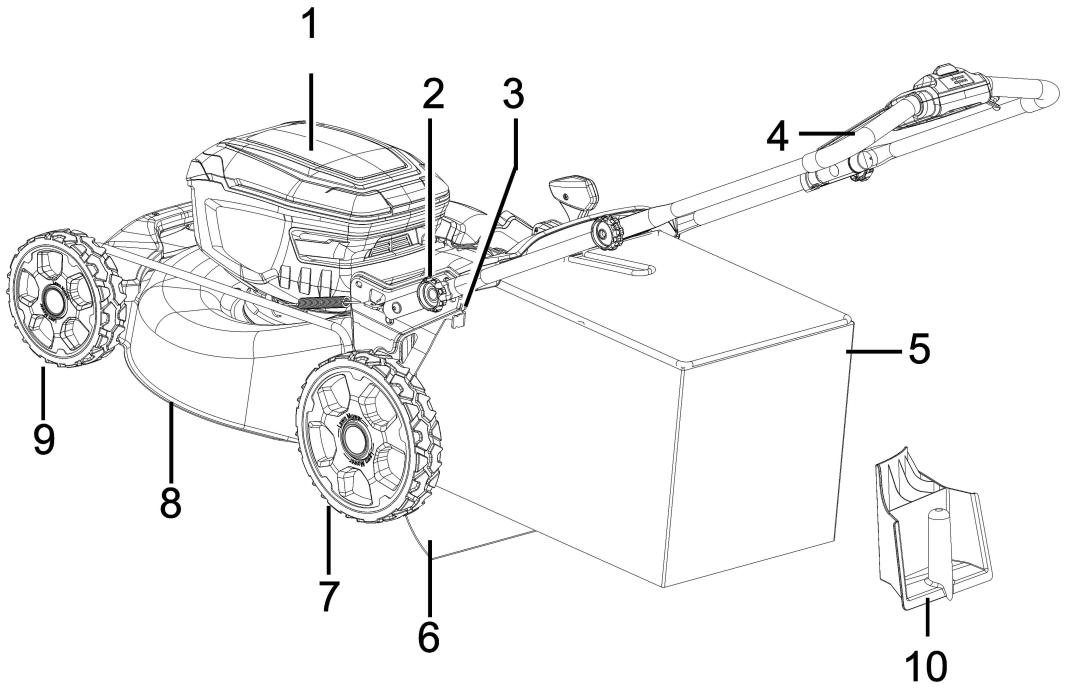
Machine model	PLM16021
Voltage	DC 60V
Motor type	PMDC
Maximum speed of output shaft	2900r/min
Cutting width	20 inches(508 mm)
Cutting blade model	M60.0101.0007
Weight (without battery)	57.76 lbs. (26.2 kg) (with grass catcher), 57.45 lbs. (24.7 kg) (side discharge/mulching mode)
Cutting height (adjustable)	1.8, 2.2, 2.6, 3.0, 3.4, 3.75 inches (45, 55, 65, 75, 85, 95mm)
Grass catcher capacity	1.7 Bushes (2.12 Ft3 / 60L)
Degrees of protection	IPX4
Sound pressure level L_{pA} according to IEC 62841-4-3	75.6 dB(A)
The noise uncertainties values	K = 3.0 dB(A)
Sound power level L_{WA} according to IEC 62841-4-3	86.9 dB(A)
The noise uncertainties values	K = 0.6 dB(A)
Declared sound power level L_{WAd} according to directive 2000/14/EC	88 dB(A)
Vibration according to IEC 62841-4-3	Left handle: 0.56 m/s^2 Right handle: 0.52 m/s^2
The vibration uncertainties value	K=1.5 m/s^2
Battery charger	PC16026
Input	AC 100-120 V, 50/60 Hz, 170 w
Output	DC 62.4 V, 2.6 A
Battery	PB16025, PB16050
Rated parameter	DC 54 V(Nominal), 2.5 Ah or 5.0 Ah

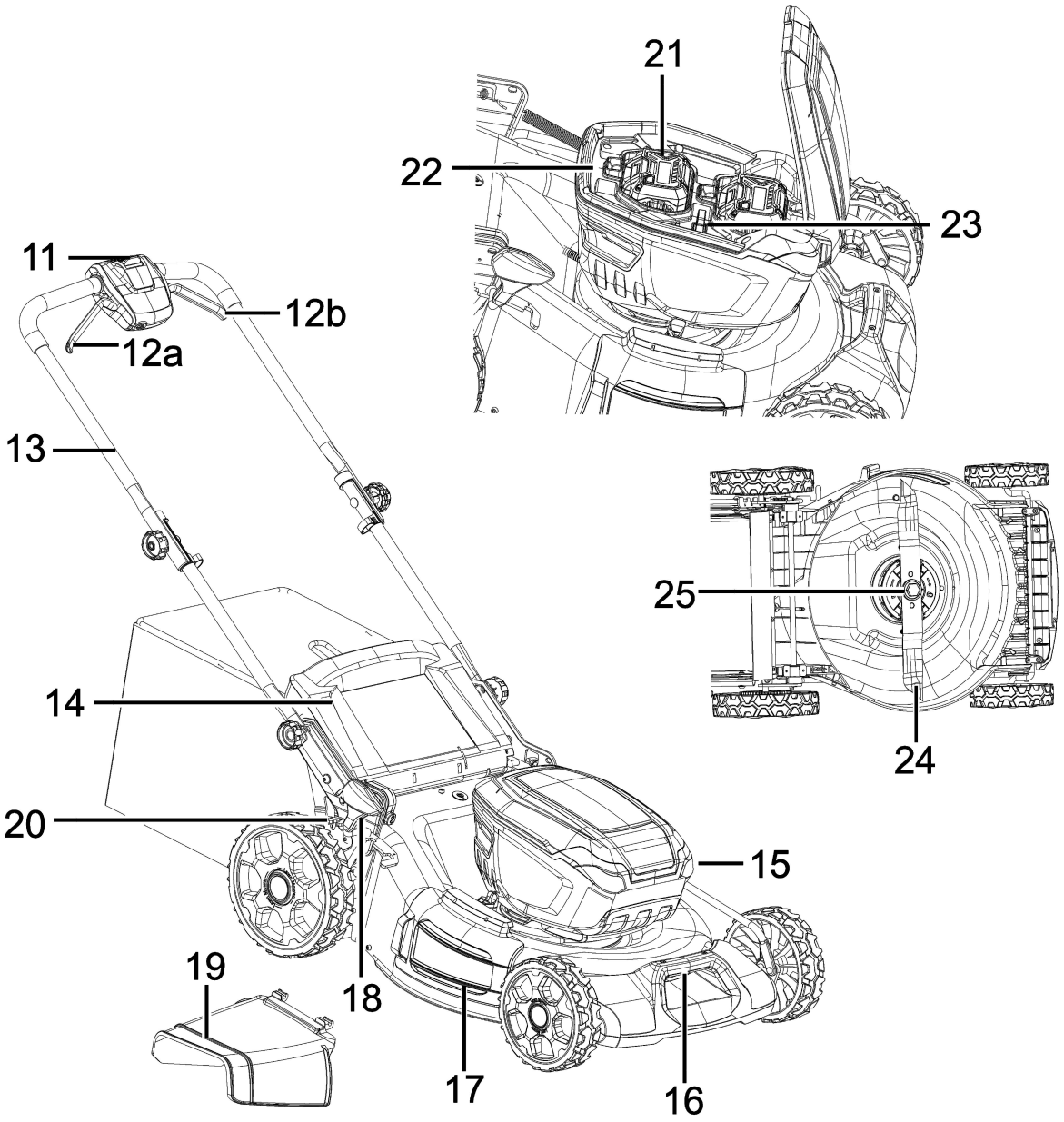
The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another. The declared vibration total value may also be used in a preliminary assessment of exposure. The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used.

PLM16021 overall dimension



6. Know your machine





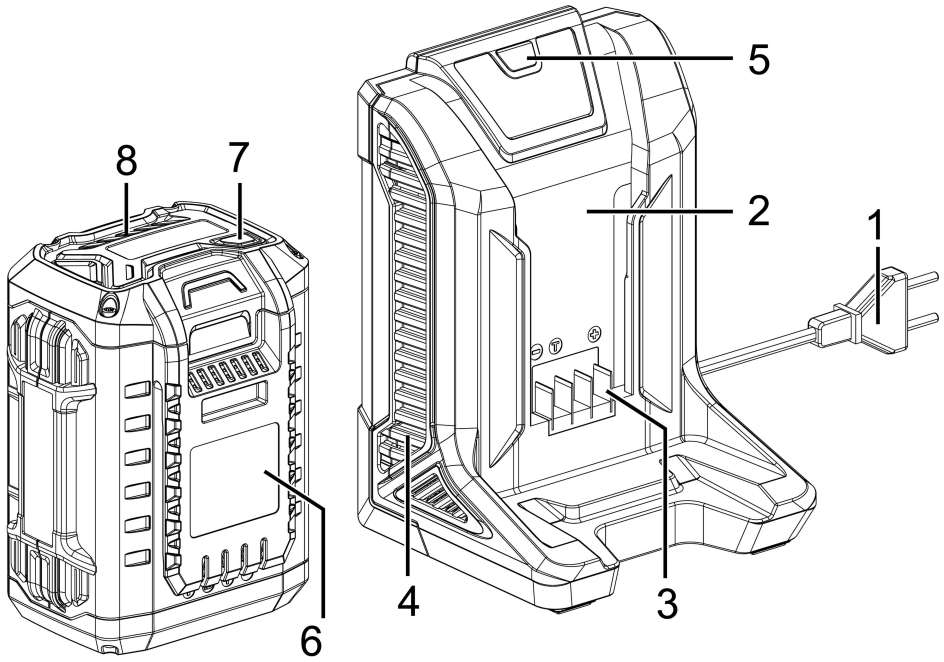
1. Battery chamber cover
Protect the batteries from contact with water or/and foreign objects.
2. Fold operation handle
A handle that controls the folding and unfolding of the operating handle.
3. Side support brackets
Support the handlebar and rails.
4. Handlebar
Grasp and control the lawnmower.
5. Grass catcher
collecting material such as grass clippings.
6. Trailing shield
A protective shield provided at the rear of the mower.
7. Rear wheels
5” high strength plastic wheels.
8. Deck
Prevent unintended contact with the cutting blades.
9. Front wheels
4” high strength plastic wheels.
10. Mulch plug
Used for mulching mode.
11. Blade drive switch
Switch on/off the cutting blade, prevent the blade start unintentional.

12a/12b. Power switch handles
Switch on/off the power source.
13. Folding handle rails rails
Collapse handle for easy storage
14. Rear discharge door
Device prevent personal injury from thrown objects.
15. LED headlights
Lit always when the lawnmower power on for alert.
16. Front transporting handle
Handle for lifting and transporting.
17. Side discharge cover
Prevent unintended contact with the cutting blades.
18. Cutting height lever
Adjust the cutting height.
19. Side discharge chute
Guide the grass clippings.
20. Limiter
Position the cutting height lever.
21. Battery
Supply the power to the lawnmower.
22. Battery release buttons.
Secure the battery in the machine, and release it from the machine.
23. Safety key
Prevent unauthorized operation of the machine.
24. Cutting blade
Perform the cutting action.
25. Blade bolt
Secures the blade.

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

This machine is intended to cut lawn grass. This machine must not be used for cutting brush, wooden vegetation and other materials, such as plastic, stone, metal, wood that contains foreign objects, or materials that are harmful to health.

7. Battery and charger operation



1. Electric plug
2. Battery charger
3. Electrical terminal
4. Cooling slots
5. Charger LED light
6. Battery
7. Electric energy button
8. Electric energy LED light

NOTE! The specifications of the plugs are inconsistent in different countries, the picture is only for reference, If the shape of the plug does not fit the power outlet, use an attchment plug adapter of the proper configuration for the power outlet.

⚠ **WARNING!** Risk of electric shock and short circuiting. Use approved and intact wall sockets. Make sure that the cable is not damaged. Replace cable if it appears to be damaged in any way.

Connect the battery charger

Connect the battery charger to the voltage and frequency specified on the rating plate. Put the electric plug in an earthed or grounded socket-outlet. The charging LED light will shine green indicating that the charger is working correctly. After 5seconds, the light will turn off if no battery in the charger.

Connect the battery to the battery charger

The battery must be charged before using it the first time. The battery is only 30% charged when delivered.

NOTE! Monitor the charging process while charging a battery. It is recommended to remove ehe battery from the battery charger when the battery is full charged, or the charger is diaconnected from the power supply.

- Align the raised ribs of the battery pack with the mounting slots in the charger, slide the battery pack down onto the charger and engage ehe battery with the charger's electrical terminals.
- The charger will communicate with the battery packto evaluate the condition of the battery pack.
- While the battery pack is charging, the charger's indication LED will shine as follows to indicate the charging process and levels:


The charging LED light always flashes green when the battery is charging.


The charging LED light shines consistently green if the battery is fully charged.


The battery will not be charged if the battery temperature is deviation from normal. In that case the fault LED light flashes red until the battery cool down or heat to normal temperature.


The battery will never be charged if the battery is damaged. In that case the charger LED light always lit red.

- The five LEDs on the battery pack indicate the current charged power level. Press the battery's electric energy button to check the power lever of the battery.
- When the battery is full charged, the battery charger will stop charging (switch to stand by).
- It is recommended to remove the battery from the battery charger when the battery is fully charged, or the charger is disconnected from the power supply.
- Pull out the plug. Never use the power supply cable to disconnect the charger from the wall socket.

Maintenance

- Make sure the battery and battery charger are clean and that the terminals on the battery and the battery charger are always clean and dry before the battery is placed in the battery charger.
- Keep the battery guide tracks clean. Clean plastic parts with a clean and dry cloth.

Transport and storage

- Store the equipment in a lockable area so that it is out of reach of children and unauthorized persons.
- Store the battery and the battery charger in a dry, moisture-free and frost-free space.
- Store the battery where the temperature is between41 °F (5 °C) and 77 °F (25 °C) and never in direct sunlight.
- Store the battery charger only in an enclosed and dry space.
- Be sure to store the battery separate from the battery charger.

Fault codes

Troubleshooting the battery and the battery charger during charging.

LED display	Possible faults	Possible action
Charger LED flashing red.	The battery is ok, but temperature deviation.	Charge the battery in surroundings where temperatures are between 41 °F (5 °C) and 113 °F (45 °C). Wait the battery cool down.
Charger LED always light red.	Battery is damaged. Charger is damaged.	Contact PRORUN Customer Service.

8. Assembly instruction

Unpacking

• Carefully take the lawnmower out of the box by holding thetransporting handle (16) by hands. Make sure that all items listed in the packing list are included.

• Inspect the product carefully to make sure no breakage or damage occurred during shipping.

• Do not discard the packing material until you have carefully inspected and satisfactorily operated the product. Keep instruction manual in a dry area for further consultation.

Packing list

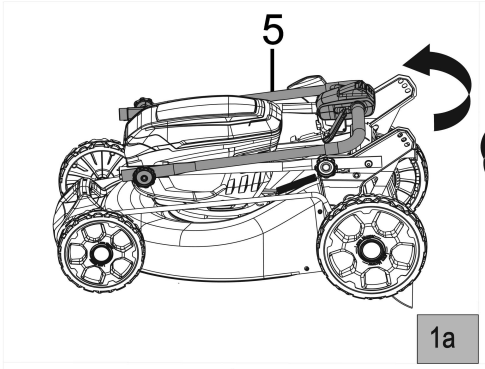
1. Lawnmower
2. Grass catcher
3. Mulch plug
4. Side discharge cover
5. Battery Charger
6. Battery
7. Operator's Manual

Set up the lawn mower

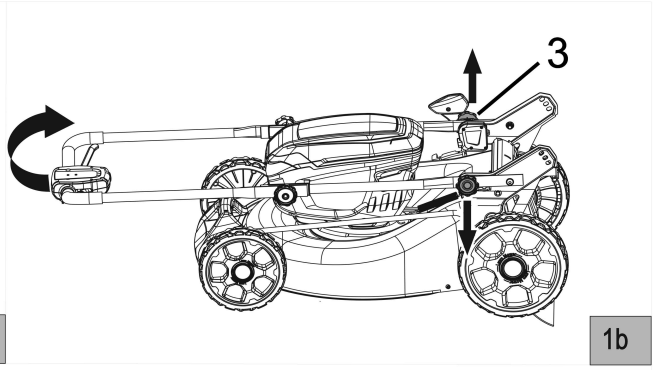
1. Set up the lawn mower on flat and firm ground to ensure safe and sturdy operating.

2.The lawnmower is packed in the folded position. Turn the handlebar (5) over until it is parallel to the lower rails, and tighten the nut (Fig.1a).

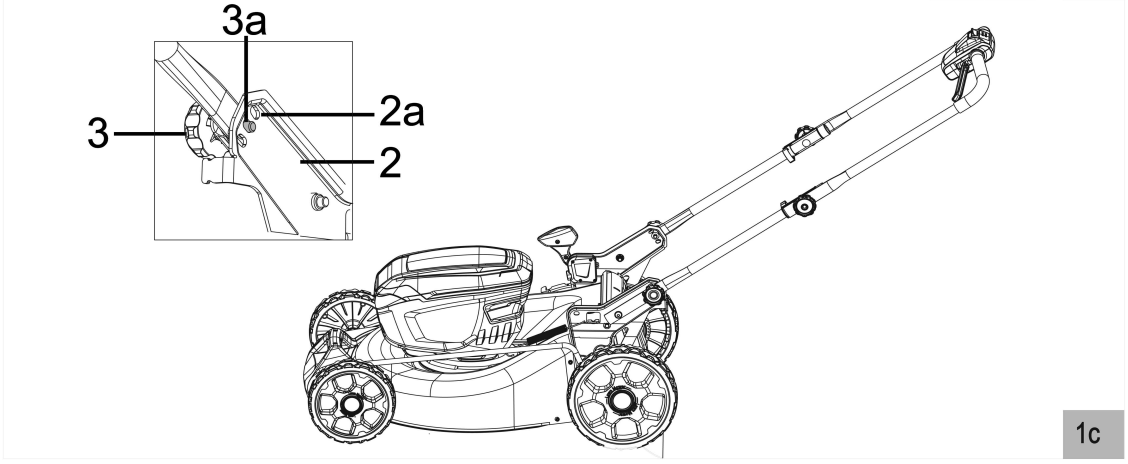
3. Pull the folding handle (3) outward and turn the handlebar over until the folding latch is checked into the side support brackets (2). (Fig. 1b&1c)



1a



1b

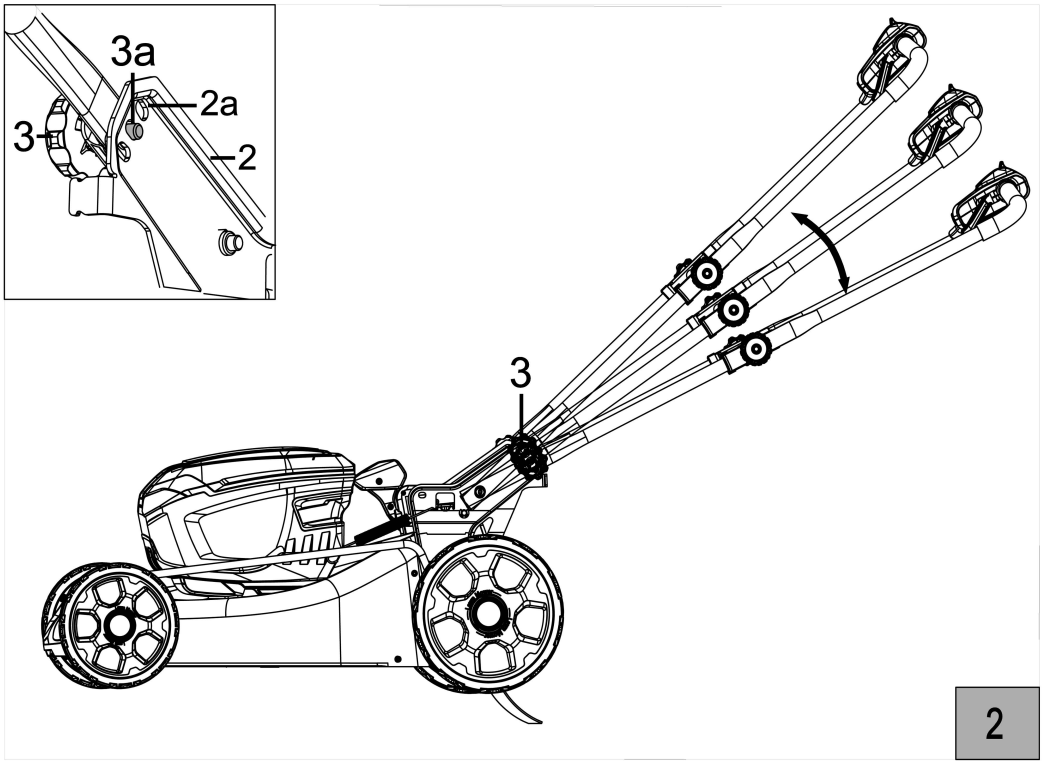


1c

⚠ **WARNING:** Make sure the handlebar is locked at the user's designated operating position before starting the lawn mower.
To prevent accidental start during assembly, remove the safety key and batteries before setting.

Adjust the handle height

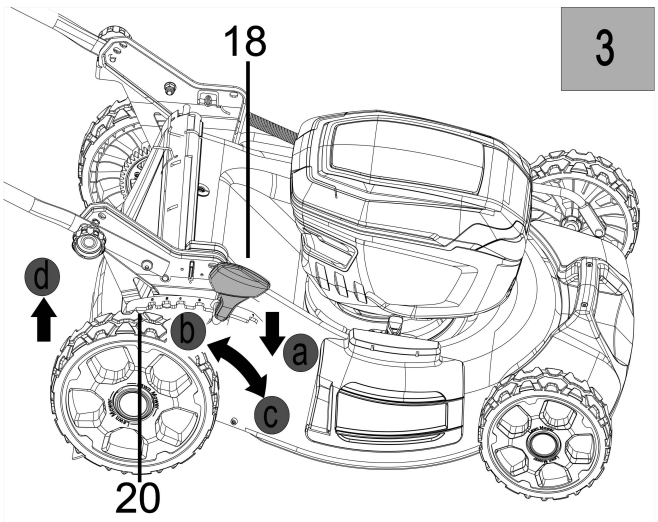
1. There are three different designated operation positions on the side of the lower rails to vary the handlebar height.
2. Press the fold operation handle (3) and adjust the handlebar height into other one of the three available positions. (Fig. 2)



⚠ **WARNING:** Make sure the lower rails position pin (2a) insert into the holes (3a) on the side support bracket (3).

Set the cutting height

There are 6 designated height adjustments.
1. Pull the cutting height lever (18) out (a), move it backwards to increase the cutting height (b), move it forward to decrease the cutting height (c).
2. Push (d) the cutting height lever into the one of six grooves of the limiter (20). (Fig. 3)

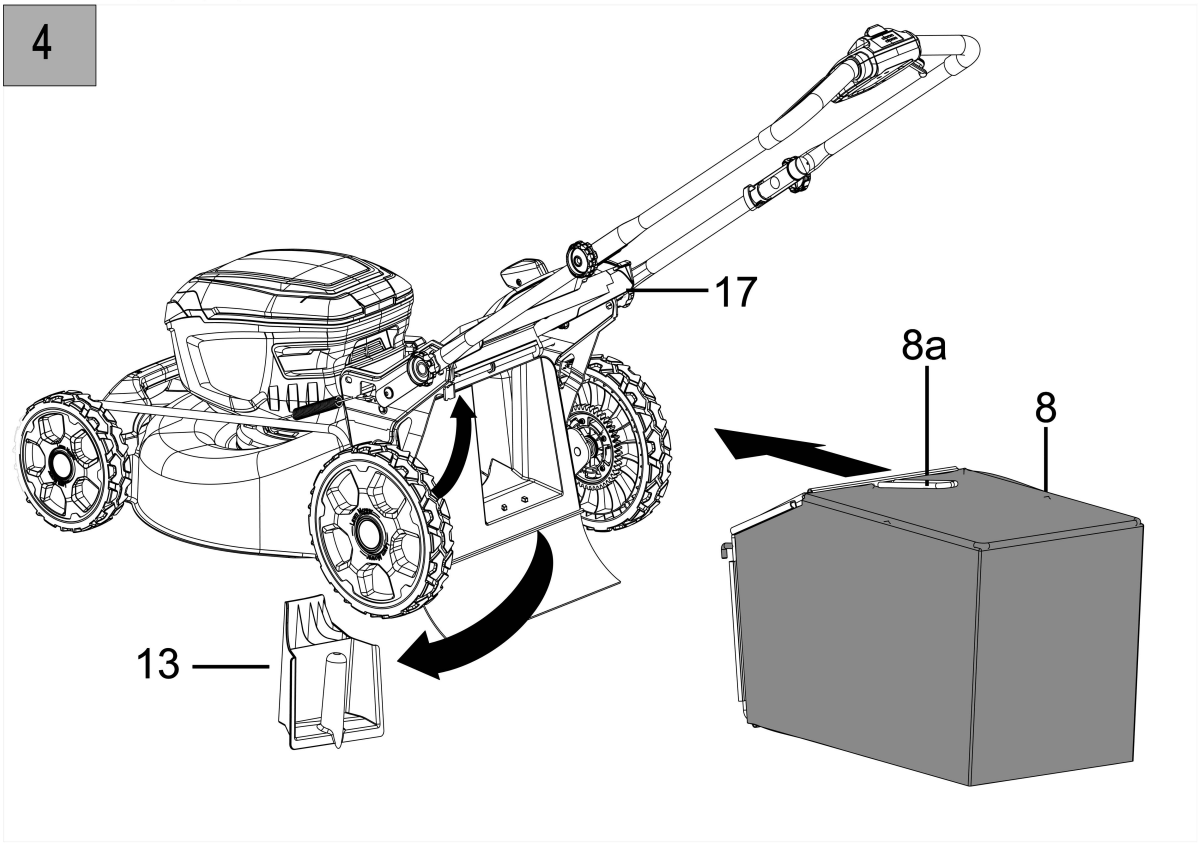


Installing/Removing the grass catcher

Before installing, make sure the grass catcher (8) has been properly attached to the metal grass catcher frame via the clips around the open of the grass catcher.

1. To install the grass catcher, stop the blades, lift the rear discharge door (17)
2. While holding the door open, use the top handle (8a) and hang the grass catcher onto the hinge beam of the rear discharge door. Make sure that the two hooks (8b) hang property,
3. To remove the grass catcher, stop the blades, lift the rear discharge door, and lift the grass catcher up and away. (Fig 4)

4



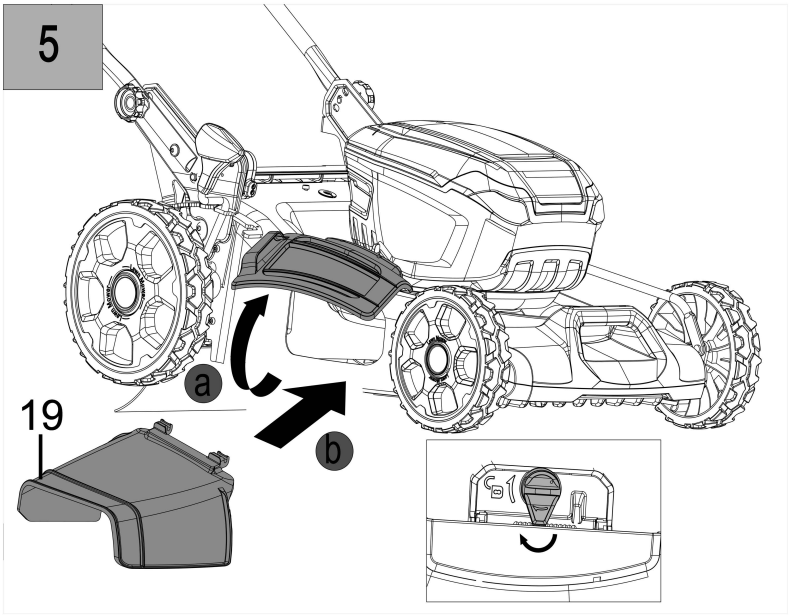
Caution: Make sure the mulch plug (13) has been removed before installing the grass catcher.

To assemble the side discharge chute

1. Remove the grass catcher. Install the mulch plug and close the rear discharge door. (Fig.4)
2. Lift the side discharge cover up (a) and install the side discharge chute (b). (Fig. 5)
3. When properly installed, the side discharge cover rests on top of the side discharge chute.

The mulching mode of this product produces smaller grass clippings and scatters them across the lawn.
Mulched grass biodegrades quickly and add nutrients for the lawn.

5



Installing/Removing the battery pack (Fig. 6)

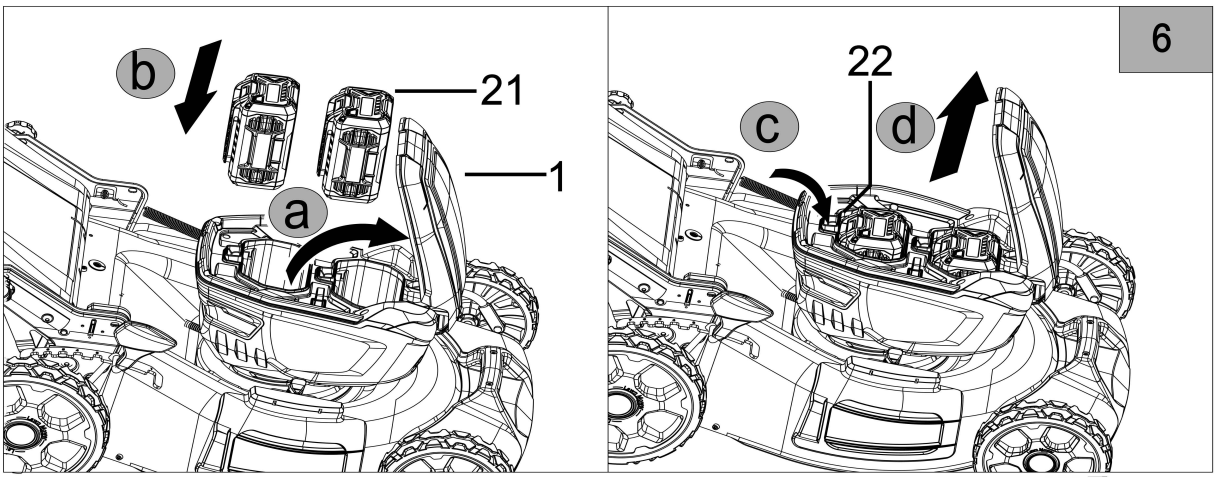
Install the battery pack: Open the battery chamber cover (a), and insert the batteries (b). Push battery pack into the bottom of the battery chamber until it clicks, and make sure that battery pack is secured in the product before beginning operation. Close the battery chamber cover.

Remove the battery pack: Open the battery chamber cover. Depress the battery release buttons (c) and pull out (d) the battery simultaneously.

⚠ WARNING : Make sure the battery pack is fully seated and secure in the battery chamber before beginning operation. Failure to securely seat the batteries could cause the batteries to fall out, resulting in serious personal injury or machine damage.

⚠ WARNING: The battery chamber cover must be closed. If it can't be closed completely, the mower won't be started.

Use a battery can operate the mower. Use a second battery can achieve a longer operation time.



9. Operation

General working instructions

⚠ WARNING ! Read the "Safety warning" and "Safety instructions" section at the beginning of this manual including all text under subheading therein before using this product.

⚠ WARNING ! Sharp moving blade. Never attempt to override the operation of this switch and safety key system as a serious injury could result.

⚠ WARNING ! When the motor has been switched off, the cutter continues to run for several seconds. Therefore, do not touch the underside of the mower until the cutter has come to a standstill.

Before starting work please:

– Daily inspection before use, do not use the machine if it is damaged or shows wear;

– Double check that accessories and the attachment are properly fixed;

– Wear correct personal protection equipment to protect yourself from hidden objects that may be thrown from the cutting attachments;

– Check that handgrips and protection devices are clean and dry, correctly mounted and well fastened to the machine; Always hold the machine by its handles;

– Ensure the area to be worked is clear of stones, sticks, wires, electrical lines etc. or other objects that could damage the tool;

– The battery is not fully charged at the time of purchase. Charge the battery fully before using the product for the first time.

⚠ WARNING : if you strike a foreign object, stop the motor. Remove the safety key, thoroughly inspect the mower for any damage and repair the damage before restarting and operating the mower.

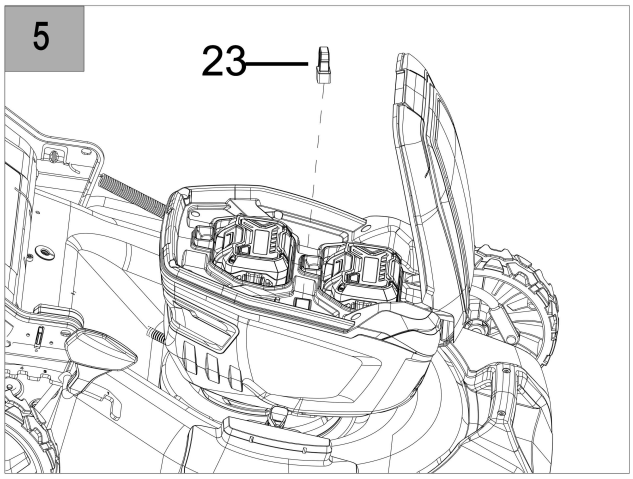
Stop the machine immediately if you are disturbed while working by other people entering the working area.

Do not overwork yourself. Take regular breaks to ensure you can concentrate on the work and have full control over the machine.

Understand the purpose and use of all safety equipment.
Cutting height and handle adjustments should be made with the motor stopped and the battery or safety key removed;
Ensure the machine is in the completely unfolded position, and make sure the handle bar and rails are tightened securely.
Firmly hold the handle with both hands when mowing. Do not try to cut long grass all at once. Instead, mow the lawn in steps. Leave a day or two between mowings until the lawn becomes evenly short. When mowing at the edge, be sure to face the left side of the machine toward the edge, and then move the machine along the edge.
Extensive vibration of the mower during operation is an indication of damage. The mower should be promptly inspected and repaired.
A sharp blade will greatly enhance the performance of the mower, especially when cutting tall blades of grass.
Mow across the face of slopes, never up and down.
Exercise extreme caution when changing direction on slopes.
Do not mow excessively steep slopes.
Use extreme caution when reversing or pulling the machine towards you.
Stop the machine and wait blade(s) to stop if the product has to be tilted (for transportation when crossing surfaces other than grass, when transporting the machine to and from the area to be used).
Always carry the product by its transporting handles.
Do not tilt the machine when switching on the motor.
Do not start the machine when standing in front of the discharge opening.
Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
Operate the product only at reasonable hours – not early in the morning or late at night when people might be disturbed.
Do not operate the product in an explosive atmosphere.
Avoid using the product in bad weather conditions, especially when there is a risk of lightning. Do not operate the product in poor lighting. The operator requires a clear view of the work area to identify potential hazards.
The operator must pay extra attention to what is going on in the work area. Do not get distracted, and always concentrate on the task.
Operating similar tools nearby increases both the risk of hearing injury and the potential for other persons to enter your work area.
Keep firm footing and balance.
Do not overreach. Overreaching can result in loss of balance. Always be sure of the footing on slopes.
Walk, never run. Keep all parts of your body away from any moving part.
Do not modify the product in any way or use parts and accessories that are not recommended by the manufacturer.
To reduce the risk of injury associated with contacting rotating parts, always stop the machine, remove the batteries and safety key, and make sure all moving parts have come to a complete stop:
- after striking a foreign object, and to inspect the machine for damage and make repairs before restarting and operating the machine;
- if the machine starts to vibrate abnormally, and then to immediately inspect for damage, replace or repair any damaged parts and to check for and tighten any loose parts;
- before cleaning or clearing a blockage;
- when leaving the product unattended;
- before installing or removing attachments;
- before checking, maintaining or working on the product.

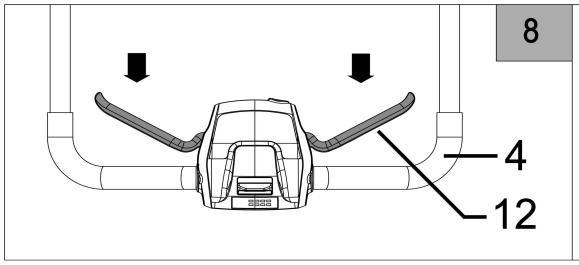
Safety key (See Fig. 7)

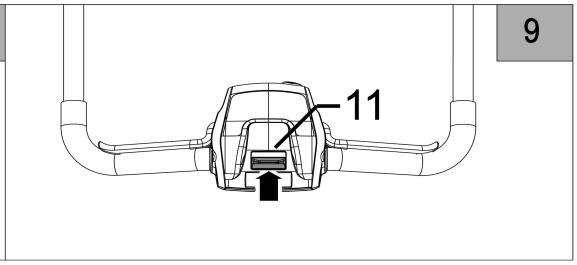
The safety key (23) connects the battery that supplies the motor with power.
The motor can only start when the safety key inserting into the socket.



Power on the mower

Push the power switch handle (12) in the direction of the handlebar (4). The mower is powered on and in standby, and the LED headlights will come on. (Fig. 8)



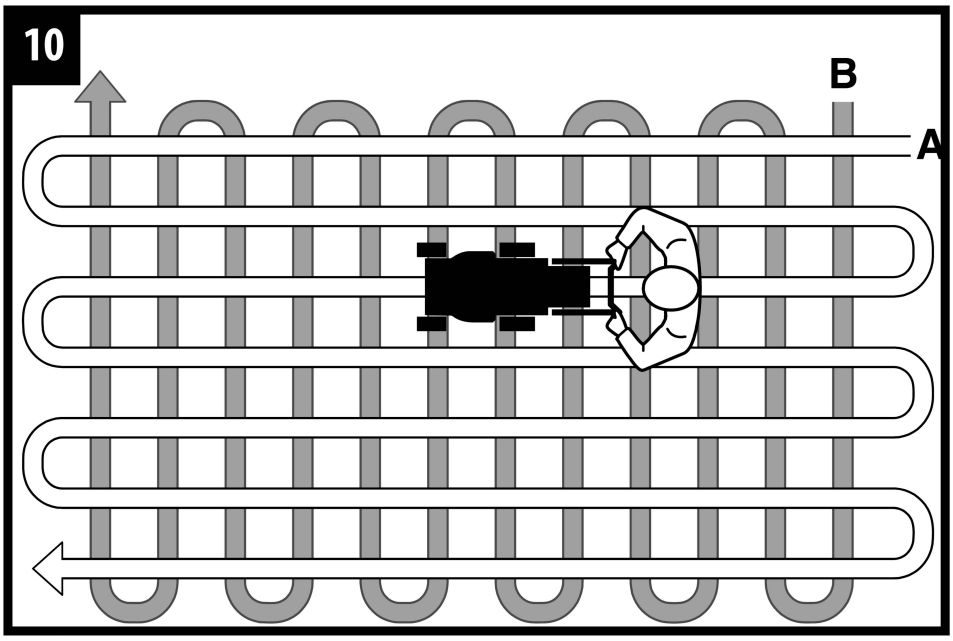


To start the cutting blade

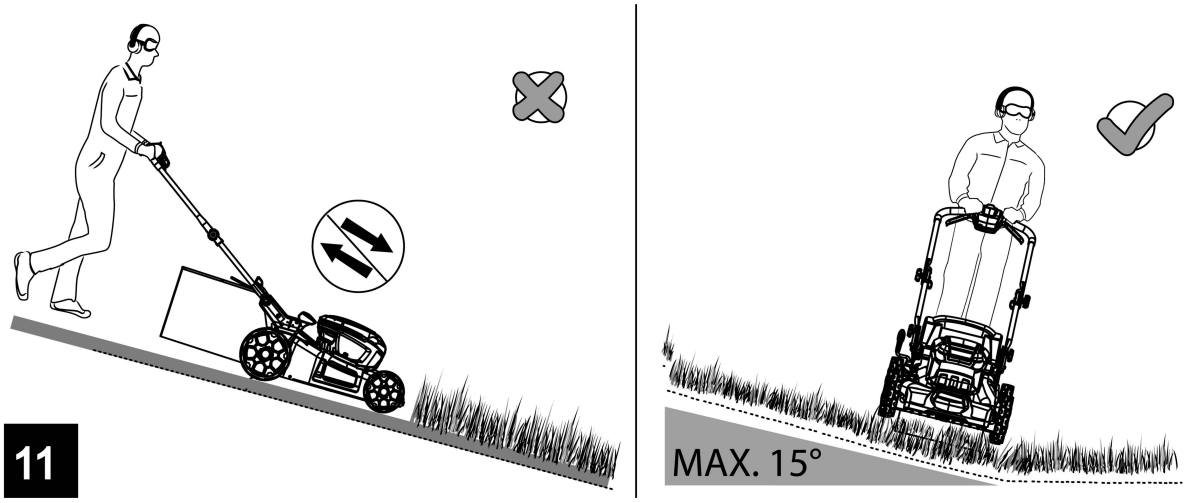
Push the blade drive switch (11) forwards to start the cutting blade. Once the blade have started, you may release the blade drive switch. The blade will rotate continuously until the power switch handles are released. (Fig 9)

Lawn care practice

Each type of grass has different characteristics and may thus require different ways of caring for the lawn; always read the instructions on seed boxes for mowing height for the growing conditions in the work area.
Keep in mind that most grass is made up of a stem and one or more leaves. If leaves are fully cut, the lawn is damaged and growth is more difficult.
The following indications generally apply:
– cutting too low tears and uproots the grass, giving it a “spotted” appearance;
– in the summer, cutting must be higher to prevent the ground from drying;
– do not cut wet grass; this could reduce blade efficiency due to sticky grass and can tear the lawn.
– for particularly high grass, initially mow at the maximum height allowed by the machine then mow again after two or three days.
– do not cut more than ⅓ of the height of the grass. Cut first with the cutting height set high. Examine the result and lower the cutting height to an applicable level. If the grass is very long, drive slowly a ıd cut 2 or more times if necessary.
The appearance of the lawn will improve if you alternate cutting in both directions at the same height. (Fig. 10)



Do not operate the product on slopes that are more than 15 degrees. Operate the product along slopes. Do not move up and down the slope. (Fig. 11)



10. Maintenance

General introduction

Regular maintenance routines are essential to maintain the original efficiency and safety of the machine overtime.

- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition. Make sure that the cables on the product are not in a position where they can get damaged.
- Check the grass collector frequently for wear or deterioration.
- Never use the machine with worn or damaged parts. Damaged or worn parts are to be replaced in sets to preserve balance.
- Only use original spare parts. Use of nonconforming replacement components, or removal or modification of safety components can seriously damage the equipment and compromise safety.
- Be careful during adjustment of the machine to prevent entrapment of the fingers between moving cutting means and fixed parts of the machine.

If your machine has a malfunction or is damaged or requires servicing: Contact PRORUN Customer Service.Have worn, missing or damaged safety labels replaced. Contact PRORUN Customer Service.

Cleaning

Wipe off the housing and the plastic components using a moist, soft cloth. Do not use water to clean the product. Water can enter the battery or the motors since the blade motor and drive motor have no water proof protection and may cause short circuit or damage to the product.

- Do not use a high pressure washer to clean the product.
- Use a brush to remove leaves, grass and dirt.
- Certain household cleaners may cause damage, and may cause a shock hazard.
- Make sure that the battery and the battery charger are clean and dry before you put the battery into the battery charger.
- Clean the battery terminals with compressed air or use a soft and dry cloth.
- Clean the surfaces of the battery and the battery charger with a soft and dry cloth.

Replacing or sharpen cutting blade

⚠ **WARNING! To prevent accidental start, switch off the machine, remove the battery and wait a minimum 5 seconds. Be aware that the cutting blade can still be moved even though the power source is switched off.**

⚠ **WARNING: Use protective gloves when you do maintenance on the cutting blade. The blade is sharp and cuts can easily occur.**

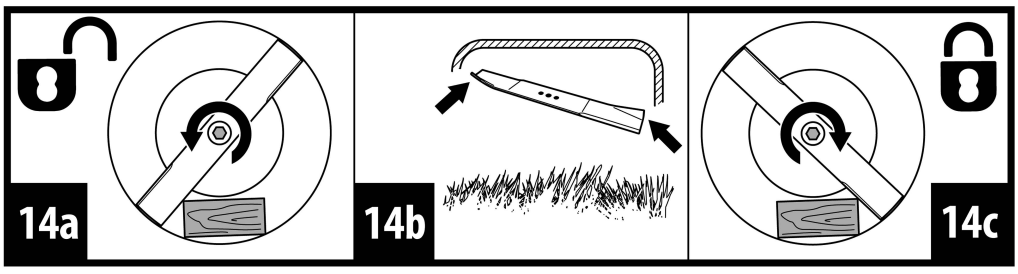
Look at the blade to see if it is damaged or blunt. Always replace a damaged cutting blade.

– If the battery has a malfunction or is damaged: Replace the battery.

Note: It is necessary to balance the blade after it is sharpened. Have a PRORUN approved service station sharpen, replace and balance the blade. If you hit an obstacle that causes the product to stop, replace the damaged blade. Let the service center estimate if the blade can be sharpened or must be replaced.

- Turn the mower onto its side to reveal the underside of the machine. Place a block of wood or a stop of some kind between the blade and the edge of the deck to prevent the blade from turning freely.
- Using a wrench , loosen the blade nut on the bottom of the unit . Remove the blade nut, the washer, and the blade from the machine. (Fig. 14a)

⚠ **WARNING! Lock the blade with a block of wood to prevent injury to fingers when you replace the blade. The blade can be moved when the motor is off and fingers can become trapped between the blade and stationary parts.**



- Examine the blade support and blade bolt to see if there are damages.
- Examine the motor shaft to make sure that it is not bent.
When you attach the new blade, point the angled ends of the blade in the direction of the cutting deck. (Fig. 14b)
- Put the new blade onto the shaft and replace the blade washer and the blade nut. Lock the blade with a block of wood. Tighten the bolt and washer with a torque of 25-30 N•m. Once the blade is secure, check by hand that everything rotates as it should. (Fig. 14c)
- Start the product to do a test of the blade. If the blade is not correctly attached, there may be vibration in the product or the cutting result is unsatisfactory.

Servicing the Battery.
If the battery has a malfunction or is damaged: Replace the battery.
The battery requires no servicing and cannot be repaired.
To avoid injury and risk of fire, explosion, or electric shock, and to avoid damage to the environment: Cover the battery's terminals with heavy-duty adhesive tape.
- DO NOT attempt to remove or destroy any of the battery pack components.
- DO NOT attempt to open the battery pack.
If a leak develops, the released electrolytes are corrosive and toxic. DO NOT get the solution in the eyes or on skin, and do not swallow it.
- DO NOT place these batteries in your regular household trash.
- DO NOT incinerate.
- DO NOT place them where they will become part of any waste landfill or municipal solid waste stream.
Take them to a certified recycling or disposal center.
DO NOT ATTEMPT TO REPAIR THE BATTERY!
⚠ **WARNING! If the battery pack cracks or breaks, with or without leaks, do not recharge it and do not use.** Dispose of it and replace with a new battery pack.

Servicing and Repairing the Charger
The charger requires no servicing and cannot be repaired.
If the charger has a malfunction or is damaged: Replace the charger.
If the connecting cable has a malfunction or is damaged: Do NOT use the charger and contact PRORUN Customer Service.

Limitations
The manufacturer disclaims any responsibility if the device has not been used for its intended purpose or if the user has not followed the safety instructions for use.
Read the instructions carefully before each use of the machine.
Keep your receipt, this is absolutely necessary for a guarantee.

11. Transporting and storing

Transporting the machine

The Dangerous Goods Legislation requirements apply to the contained Li-ion batteries.
When transporting the machine:
– Switch off the machine and remove the battery pack.
– Remove the grass catcher (if installed).
– Press the fold operation handle and the telescopic control button to fold the handlebar. When transporting the machine by hand, hold it by the transporting handle.
– When transporting the machine in a vehicle, secure and position the machine to prevent it from slipping, falling over, impact and damage.

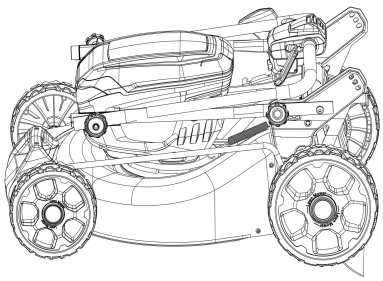
Transporting the battery

Transporting the machine or battery may require that you meet certain requirements specific to your country. Please make sure to respect them by contacting the authorities of your country, in order to respect them all.
Switch off the machine and remove the battery. Make sure the battery is in a safe condition. Observe the following points when packing the battery:
- The packaging must be non-conductive.
- Make sure the battery cannot shift inside the packaging.
- Secure the packaging so that it cannot move.

Storing the machine

When storing the lawnmower (Fig. 12):
– Always allow the machine to cool down before storing.
– Switch off the machine and remove the battery pack.
– Do a cleaning and maintenance for the machine.
– Store the machine indoors in a dry and secure location, out of the reach of children.
– Protect the machine against dampness and corrosive agents such as garden chemicals and deicing salts.
– Empty the grass catcher before storage.
– Do not expose the product to sunlight.
– Clean the product and do a complete servicing before you put the product in storage for a long time.

12



Storing the battery

We recommends that you store the battery with a charge between 40% and 60%.
Observe the following points when storing the battery:
– Battery is out of the reach of children.
– Battery is clean and dry.
– Battery is in an enclosed space.
– Battery is stored separately, away from the machine and charger.
– Battery is in non-conductive packaging.
– Do not keep the battery where static electricity can occur. Do not keep the battery in a metal box.
– Store the battery where the temperature is between 41°F (5°C) and 77°F (25°C) and never in direct sunlight.

Storing the Charger

– Disconnect the charger from the wall outlet. Remove the battery from the charger.
– Store the charger indoors in a dry and secure location.
– Keep it out of the reach of children.
– Keep the battery charger where the temperature is between 41°F (5°C) and 113°F (45°C) and out of sunlight.

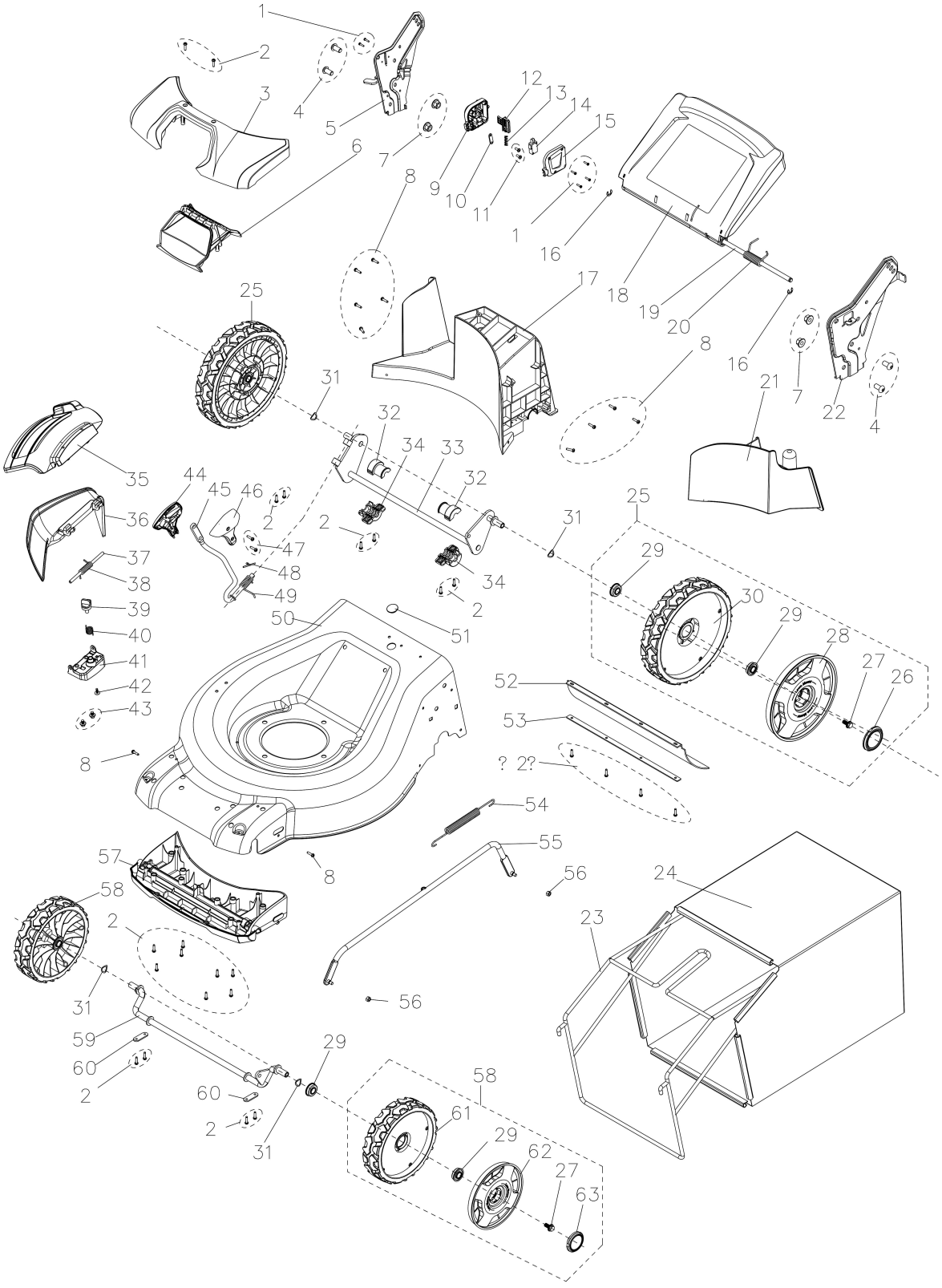
12. Troubleshooting

Problem	Possible cause	Solution
Motor fails to start when power switch are depressed.	Battery is not secure. Battery is not charged. The handle bar is not unfolded, and the telescopic rails is not pulled out fully. Faulty with the machine.	To secure the battery pack, make sure the latches on the top of the battery pack snap into place. Charge the battery pack according to the instructions included with your model. Unfold the handle bar and pull out the telescopic rails completely refer to chapter “Set up the lawn mower”. Contact PRORUN Customer Service for an approved dealer or service.
Mulching is not done correctly.	The grass cuttings are damp and sticking to the mower.	Wait for the lawn to dry before mowing.
The mower is difficult to move.	The grass is long, or the cutting height is set too low. The grass catcher is full.	Raise the cutting height. Empty the grass catcher.
The grass debris are not collected properly in the grass catcher.	The cutting height is too low.	Raise the cutting height.
The mower cuts unevenly.	The cutting blade is blunt.	Replace a new blade or contact dealer for sharpen of the blade.
The mower vibrates at high speed.	The blade is out of balance or worn. The motor shaft is twisted.	Replace a new blade. Turn off the motor and inspect the mower. Get the mower repaired.
Mower suddenly stopped while mowing.	The battery is discharged. Mower maybe occur overload. Battery too hot.	Recharge the battery. Stop the mower and wait for 3 minutes to restart. Raise the cutting height. Remove battery pack and let it cool down.
Product does not reach full power.	Battery pack capacity too low.	Recharge the battery. Contact PRORUN Customer Service for an approved dealer or replacement.
Vibration or noise is excessive.	Bolts/nuts are loose.	Tighten bolts/nuts.

13. Disposal

All toxic materials must be disposed of in a specified manner to prevent contamination of the environment. Before disposing of damaged or worn out Lithium-Ion battery packs, contact your local waste disposal agency, or the local Environmental Protection Agency for information and specific instructions. Take the batteries to a local recycling and/or disposal center, certified for lithium-ion disposal.

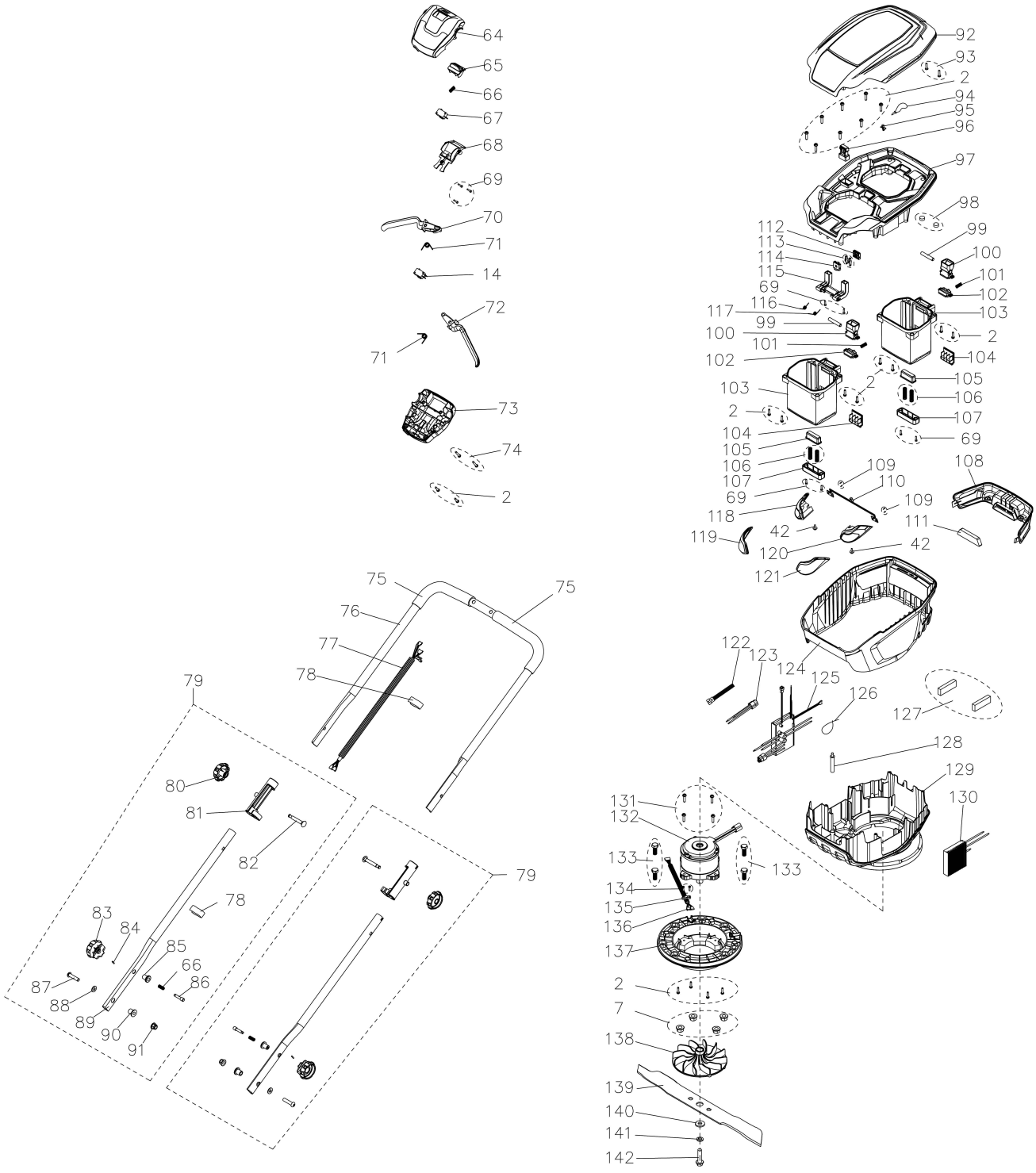
14. Exploded view



14. Exploded view

NO.	DESCRIPTION	QTY.	NO.	DESCRIPTION	QTY.
1	screw ST2.9*12	6	33	rear axle	1
2	screw ST4*16	44	34	retainer sleeve upper	2
3	front cover	1	35	side discharge chute	1
4	bolt M10*20	4	36	side discharge cover	1
5	Right height adjustment bracket	1	37	side cover shaft	1
6	front transporting handle	1	38	Knob torsion spring	1
7	nut M10*1.5	8	39	knob	1
8	screw ST4.8*16	22	40	side cover torsion spring	1
9	Self-locking switch box lower cover	1	41	side support plate	1
10	Double Crimp Plate	1	42	screw ST4.2*16	2
11	screw ST4*10	2	43	bolt M6×8	2
12	Self-locking slider	1	44	adjust handle left cover	1
13	Trigger spring	1	45	height-adjusting rod	1
14	fold operation switch	2	46	adjust handle right cover	1
15	Self-locking switch box upper cover	1	47	tapping screw ST4×10	2
16	E ring 8	2	48	cotter pin 3×20	1
17	rear guard	1	49	lever torsion spring	1
18	Protective plate	1	50	cutting-means enclosure	1
19	Protective plate shaft	1	51	plug	1
20	Protection plate torsion spring	1	52	rubber baffle	1
21	mulch plug	1	53	layer	1
22	left bracket	1	54	height-adjusting spring	1
23	grass catcher bracket	1	55	connecting rod	1
24	grass catcher bag	2	56	nut M6	2
25	rear wheel assy	2	57	front guard	1
26	rear wheel cap	2	58	front wheel assy	1
27	bolt M8×20	4	59	front wheel shaft	1
28	rear wheel panel	2	60	flat plate	2
29	bearing	8	61	front wheel	1
30	rear wheel	2	62	front cover of wheel	2
31	spring washer Φ12	4	63	front wheel cover	2
32	retainer sleeve lower	2	64	operation panel cover	1

14. Exploded view



14. Exploded view

NO.	DESCRIPTION	QTY.	NO.	DESCRIPTION	QTY.
65	blade drive switch knob	1	97	upper housing	1
66	spring	3	98	strong magnet	2
67	blade drive switch	1	99	Trigger pin	2
68	blade drive switch base	1	100	Battery pack release button	2
69	tapping screw ST2.9×12	6	101	spring	2
70	Right main trigger	1	102	clip	2
71	trigger spring	2	103	battery chamber	2
72	left main trigger	1	104	terminal base	2
73	Switch box lower cover	1	105	eject button	2
74	tapping screw ST4.2*28	2	106	spring	4
75	handlebar grip sleeve	2	107	Eject button limit plate	2
76	push rod up	1	108	back lift	1
77	switch box conductor	1	109	screw ST2.9x8F	4
78	wire clip	2	110	plate as-light	1
79	lower push rod	2	111	rear filter	1
80	locking knob	2	112	right key case	1
81	Lower push rod bushings	2	113	left key case	1
82	bolts M8	2	114	key connector	2
83	locking knob	2	115	swivel arm	1
84	pin	2	116	spring	1
85	bushing	2	117	spring	1
86	plug	1	118	right lamp holder	1
87	bolt M8*35	2	119	right lampshade	1
88	washer 8.1*17*1.6	2	120	left lamp holder	1
89	push rod	2	121	left lampshade	1
90	revolving collar	2	122	Signal Harness	1
91	Nut M8	2	123	Power Harness	1
92	battery chamber cover	1	124	Decorative cover	1
93	tapping screw ST4*16	2	125	controller	1
94	roping	1	126	nylon cable tie	1
95	hook	1	127	filter	2
96	safety key	1	128	amortisseur	1

14. Exploded view

NO.	DESCRIPTION	QTY.	NO.	DESCRIPTION	QTY.
129	lower base	1			
130	switching controller	1			
131	screw ST4.9*19	4			
132	blade motor	1			
133	bolt M10*20	4			
134	screw ST4*12	2			
135	crimping plate	2			
136	power conductor	1			
137	Motor holder	1			
138	fan	1			
139	blade	1			
140	blade garsket	1			
141	spring washer	1			
142	bolt M10*1.25*35	1			

15. EC Declaration

1) Herewith we, Zhejiang Zhongjian Technology Co., Ltd.
No.155 Mingyuan North AVE, Economic Development Zone, Yongkang, Zhejiang, 321300, P.R. China
declare that the following appliance complies with the appropriate basic safety and health requirements of the EC Directives based on its design and type, as brought into circulation by us.

This declaration relates exclusively to the machinery in the state in which it was placed on the market, and excludes components which are added and/or operations carried out subsequently by the final user.

2) Designation/ function: Battery chain saw for forest work, e.g. felling, delimbing, bucking.

3) Type: PLM16021

4) Serial number: MM/YY-XXXXX

5) Applicable EC Directives: Machinery Directive 2006/42/EC

6) Used harmonized Standards: EN 62841-1:2015, FprEN IEC 62841-4-4:2020

7) Additional used EC Directives: EMC Directive 2014/30/EU on electromagnetic compatibility
Noise Directive 2000/14/EC as amended by Directive 2005/88/EC on the noise emission in the environment by equipment for use outdoors
2011/65/EU as amended Directive (EU) 2015/863 Restriction of the use of certain hazardous substances in electrical and electronic equipment

8) Used other technical standards/ specifications: EN 55014-1:2017+A11:2020, EN 55014-2:2015

9) Responsible for documentation:

10) EC type approval: XXXXXXXXX-01 Intertek Deutschland GmbH (NB 905) Stangenstraße 1, 70771 Leinfelded-Echterdingen

Measured sound power level 95.1 dB(A)
Guaranteed sound power level 96 dB(A)
Conformity assessment method to Annex VI/ Directive 2000/14/EC and 2005/88/EC

11) Date /Place/Name/ Authorized Signature:
2022-02-12/ Yongkang/ Yang Haiyue

12) Title of Signatory:
Chief Engineer

PRORUN regularly improves our products, and you may find slight differences between your machine and the descriptions contained within this operator's manual. Modifications can be made to the machine without notice and without the obligation to update the manual, providing that the essential safety and functional characteristics remain unaltered. Contact PRORUN Customer Service with any questions and for current specifications.

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