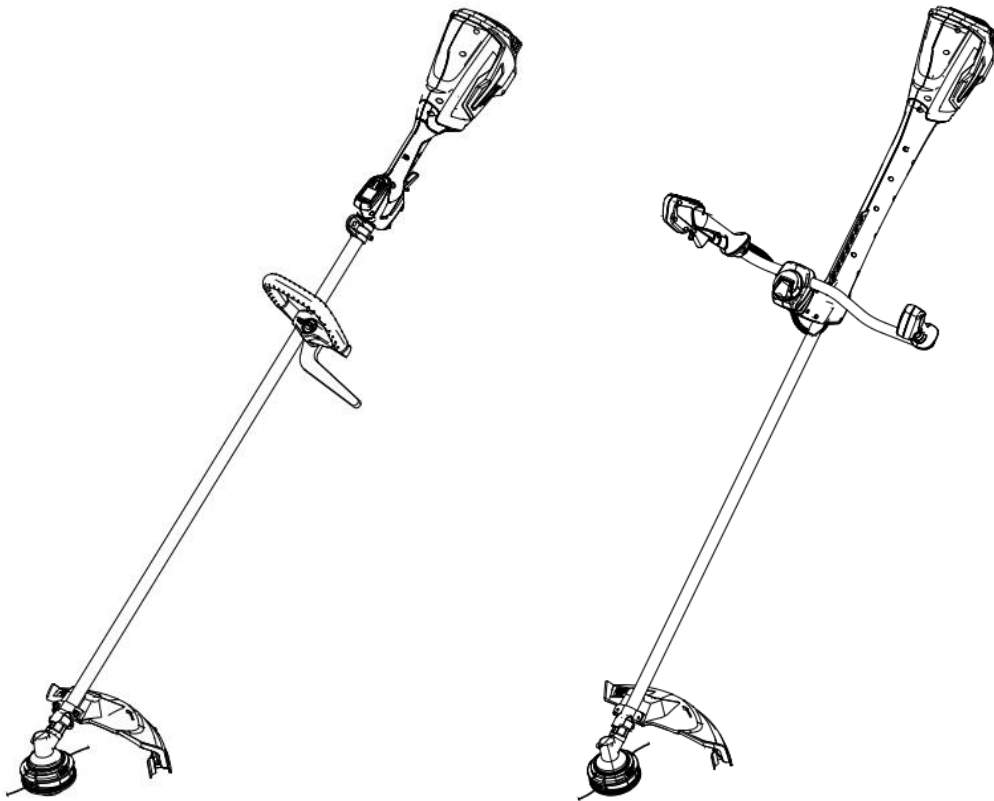




**60V Lithium-Ion Cordless**

**Commercial Series**

**Brush Cutter & Grass Trimmer**



**OPERATOR'S MANUAL**

Model number:

**CBC7611P**

**CBC7611U**



**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.

# READ ALL INSTRUCTIONS!



## READ & UNDERSTAND OPERATOR'S MANUAL

**⚠ WARNING:** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemical: work in a well-ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

## SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.



**⚠ WARNING:** Be sure to read and understand all safety instructions in this Operator's Manual, including all safety alert symbols such as "DANGER," "WARNING," and "CAUTION" before using this tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.














**SYMBOL MEANING SAFETY ALERT SYMBOL:** Indicates DANGER, WARNING, OR CAUTION. May be used in conjunction with other symbols or pictographs.









**⚠ WARNING!** The operation of any power tools can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full-face shield when needed. We recommend a Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields.

# SAFETY INSTRUCTIONS

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.

	CE marking	The product complies with the applicable European directives and an evaluation method of conformity for this directives was done.
	Safety Alert	Indicates a potential personal injury hazard.
	Read & Understand Operator's	To reduce the risk of injury, user must read and understand the operator's manual before using this product. Failure to do so can result in serious injury to the operator and/or bystander.
	Wear Eye Protection	Always wear safety goggles or safety glasses with side shields when operating this product that comply with ANSI Z87.1 USA or EN 166 in EU countries.
	Wear Ear Protection	Wear ear protection when using the product.
	Wear Head Protection	Wear head protection when using the product.
	Wear Gloves	Wear gloves when using the product.
	Wear Boots	Wear slip-resistant footwear when using the device.
	Danger of injury	Danger of injury! Pay attention to objects being blown away. Keep others at a distance
	Safety alert	Beware of blade thrust.
	Do not expose to rain	Do not expose to rain

	Forbidden saw blade	Saw blade is forbidden
	Safe distance	Keep other people out of working area during operation. The distance between the machine and bystanders should be at least 15 meters.
		Take the replaceable battery from the appliance before any extension, cleaning and servicing works
	Danger of injury	Danger of injury! Pay attention to objects being bounced back. Keep others at a distance
	Noise level	Noise level for grass trimmer/ brush cutter.
	Recycle Symbols	Any damaged or disposed electric or electronic devices must be delivered to appropriate collection centers. Do not dispose electric tools, batteries/re-chargeable batteries together with household waste material. Electric tools and batteries that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility. Check with your local authority or retailer for recycling advice and collection point.
IPX5	Ingress Protection Degree	Protection from water jets
V	Volt	Voltage
---	Direct Current	Type or a characteristic of current
$n_0$	No-Load Speed	Rotational speed, at no load
RPM	Revolutions per minute	Rotational speed
cm	Centimeter	Length or size
mm	Millimeter	Length or size
in.	Inch	Length or size
kg	Kilogram	Weight
lb	Pound	Weight

# GENERAL BATTERY-OPERATED POWER TOOL SAFETY WARNINGS

**⚠ WARNING!** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. 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.

## WORK AREA SAFETY

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.
- **Avoid Dangerous Environment** - Don't use appliances in damp or wet locations.

## PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Always use personal protective equipment.** Personal protective equipment such as eye protection, dust mask, non-skid safety shoes, hard hat and/or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to the battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a moving part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

- **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.

## POWER TOOL USE AND CARE

- **Do not force the power tool. Use the correct power tool for your application.**

The correct power tool will do the job better and safer at the rate for which it was designed.

- **Do not use the power tool if the switch does not turn it on and off.**

Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- **Remove the battery pack, if detachable, from the power tool and/or activate any battery disabling device before clearing jammed material, making any adjustments, changing accessories, cleaning, or storing power tools.**

Such preventive safety measures reduce the risk of starting the power tool accidentally.

- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**

Power tools are dangerous in the hands of untrained users.

- **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.**

Many accidents are caused by poorly maintained power tools and accessories.

- **Keep cutting tools sharp and clean.**

Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- **Use the power tool, accessories, tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.**

Use of the power tool for operations different from those intended could result in a hazardous situation.

- **Keep handles and grasping surfaces dry, clean and free from oil and grease.**

Slippery handles and grasping surfaces may lead to unsafe handling and/or loss of control of the tool.

- **Keep cables away from the working area of the tool.**

During operation cables may be hidden from view and can be accidentally damaged by the tool.

## BATTERY TOOL USE AND CARE

- **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. Use only with the battery packs and chargers listed below.

BATTERY PACK	CHARGER
BP7615	CG768E
BP7625	CGB6055 (use with adapter AD7625)
LBC60140	CGB6055
LBC60280	CG768E(Use with single battery harness AH7608)

- **Use power tools only with specifically designated battery packs.**

Use of any other battery packs may create a risk of injury and fire.

- **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.

- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contact eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
- **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
- **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 212 °F (100°C) may cause explosion.
- **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.

## **SERVICE**

- **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.

- **Never service damaged battery packs.**

Service of battery packs should only be performed by the manufacturer or authorized service providers

## **SAFETY INSTRUCTIONS FOR BRUSH CUTTER & TRIMMER**

- When replacing the cutting line, use no more than 2.4 mm nylon line; using heavier lines than recommended by the manufacturer increases the load on the motor and reduces its operating speed. This results in overheating and damage to the trimmer.
- To reduce the risk of serious injury, never use wire or metal-reinforced line or other material in place of the nylon cutting lines.  
Pieces of wire could break off and be thrown at high speed toward the operator or bystanders.
  - Replace a cracked, damaged or worn-out cutting head immediately, even if damage is limited to superficial cracks.
 Such attachments may shatter at high speed and cause serious or fatal injury.

## **IMPORTANT SAFETY INSTRUCTIONS**

- If the power tool should start to vibrate abnormally or become noisy, stop the motor and check immediately for the cause. Abnormal noise is generally a warning of trouble.
- Make sure all proper guards and other safety devices are properly and securely attached before using this product. Do not operate without guards in place.
- Do not charge the battery pack in rain, or in wet locations.
- Do not dispose of the battery in a fire.  
The cells may explode. Check with local codes for possible special disposal instructions.
- Do not open or mutilate the battery.  
Released electrolyte is corrosive and may cause damage to the eyes or skin. It may be toxic if swallowed.
- Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. Be aware of possible hazards even when the tool is not operating. Take care when performing maintenance or service.
- Do not wash with a hose; avoid getting water in motor and electrical connections.

▪ If situations occur that are not covered in this manual, use care and good judgment. Contact the Customer Service Center for assistance.

▪ **SAVE THESE INSTRUCTIONS.** Refer to them frequently and use them to instruct others who may use this tool. If you lend this tool to someone else, also lend these instructions to them to prevent misuse of the product and possible injury.

**SAVE THESE INSTRUCTIONS!**

## SPECIFICATIONS

Model number	CBC7611P CBC7611U
Voltage	60V
No Load Speed (n <sub>0</sub> )	Up to 5800 RPM
Cutting Mechanism	Bump Feed Trimmer Head
Cutting Line Type	2.4 mm
Trimmer Head Cutting Width	42 cm
3 Teeth Blade Cutting Width	25.4 cm
Operating Temperature	0°C~40°C
Storage Temperature	-20°C~70°C
Net Weight (including the guard)	4.7 kg / 5.0kg

### Recommended Accessories

PART NAME	MODEL NUMBER
Cutting Line (2.4 mm twist line)	
Trimmer Head	TECOMEC
Trimmer Spool	TECOMEC
Trimmer Head Bump Feed Button	TECOMEC

## PACKING LIST

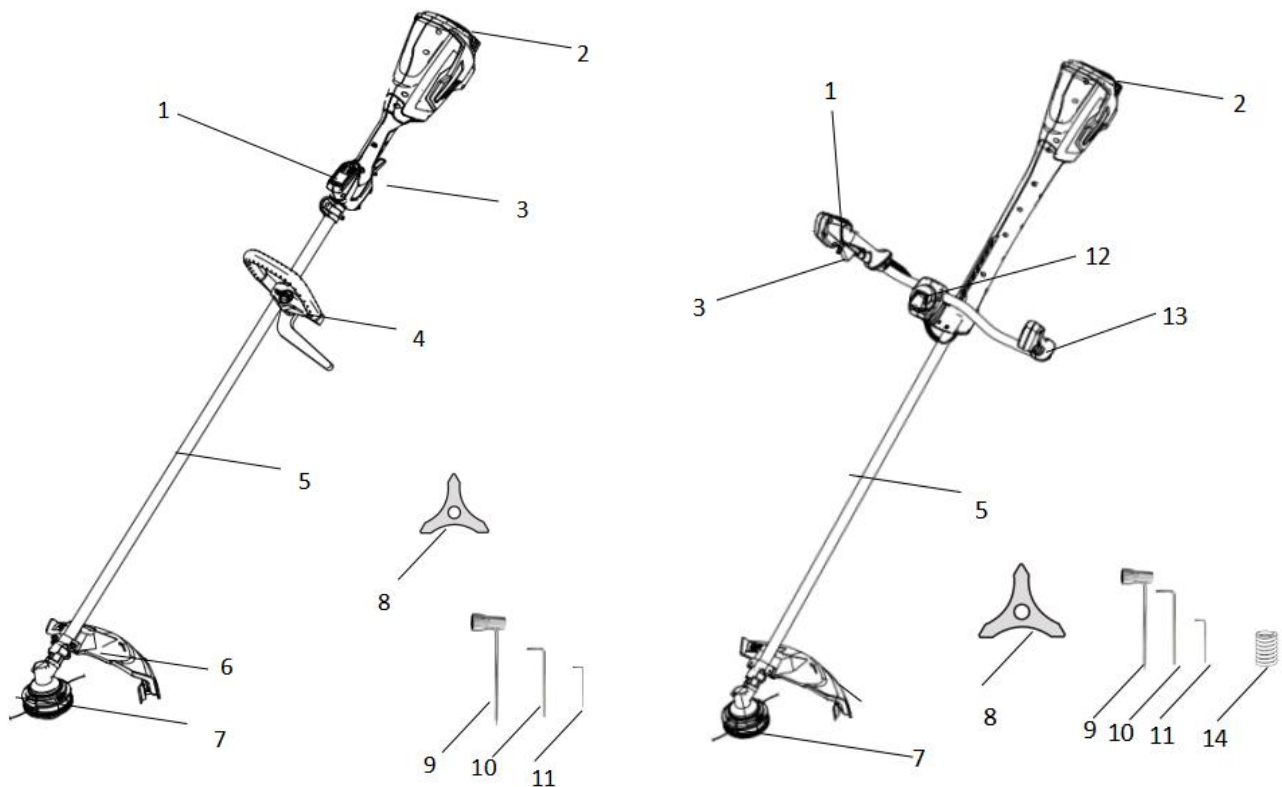
PART NAME	QUANTITY
Bare tool	1
Guard	1
Loop Handle or Bike Handle	1
Allen Key	2
Socket spanner	1
Operator's Manual	1
3T Blade	1
Trimmer head	1
Spring (Bike handle only)	1



## DESCRIPTION

### KNOW YOUR BRUSH CUTTER & GRASS TRIMMER (Fig. 1)

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



1.MCDU (Multiple control display unit)	8. 3T blade
2.Battery Socket	9. Socket spanner
3.Main trigger & Lock off button	10. S5 Allan key
4. Loop handle	11. S4 Allan key
5. Shaft	12. Adjustment knob
6. Guard	13.Bike handle
7. Trimmer head	14.Spring

**⚠ WARNING:** Never operate the tool without the guard firmly in place. The guard must always be on the tool to protect the user.

### LOOP HANDLE OR BIKE HANDLE

For easy control of the trimmer during cutting.

## GUARD

Reduces the risk of injury from foreign objects flung backwards toward the operator and from contact with the cutting attachment.

## TRIMMER HEAD

Steel blade on the guard that maintains the cutting line at the proper length.

## 3T BLADE

Check the blades, pins and cutter for visible damage or wear before each use. Replace worn or damaged blades and screws in pairs to ensure balance during operation.

## MAIN TRIGGER/LOCK-OFF TRIGGER

Turns the tool ON and OFF; the lock-off trigger must be squeezed before pressing the main trigger.

## MCDU (Multi Control Display Unit)

Control the ON and OFF of the unit, adjust cutting speed, monitor the remaining capacity of battery, total working time, error type, and maintenance reminding.

## BATTERY SOCKET

Directly insert the battery package.

## ALLEN KEYS/ MULTI-FUNCTION WRENCH

Assists in trimmer head replacement.

# ASSEMBLY

**⚠ WARNING:** If any part is damaged or missing, do not operate this product until the part is replaced. Use of this product with damaged or missing parts could result in serious personal injury.

**⚠ WARNING:** Do not attempt to modify this product or create accessories not recommended for use with this grass trimmer/ brush cutter. Any such alteration or modification is misuse and could result in a hazardous condition leading to possibly serious personal injury.

**⚠ WARNING:** Always wear heavy gloves when doing any maintenance on the blade. Be careful of the blade and protect your hands from being injured by the blade.

**⚠ WARNING:** To prevent accidental starting that could cause serious personal injury, always remove the power plug from the tool when assembling parts, making adjustments, cleaning, or when not in use.

## UNPACKING

- This product requires assembly.
- Carefully remove the product and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure that no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and

satisfactorily operated the tool.

- If any part is damaged or missing, please return the product to the place of purchase.

## MOUNTING THE Trimmer head

**⚠ WARNING:** Always wear gloves when mounting or replacing the guard. Be careful of the blade on the guard and protect your hands from being injured by the blade.

1. Disassemble the nut(clockwise), Dust cover, and support plate from gear case; (Fig. 2&3).

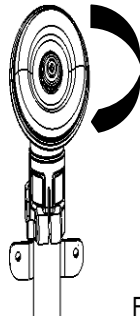


Fig.2

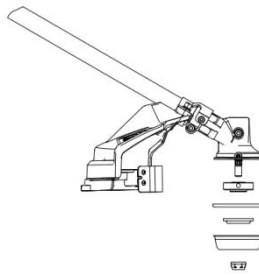


Fig.3

2. Rotate the drive shaft until you can see a hole inside the gear case side (Fig4), put the #1 Allen key inside the inside hole, and rotate the trimmer head onto the drive shaft by anti-clockwise, until it's tight enough (Fig.5)

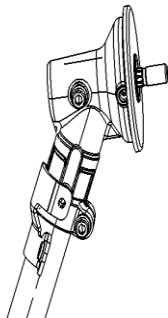


Fig.4

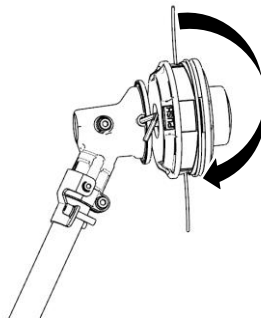


Fig.5

## MOUNTING THE GUARD

**⚠ WARNING:** Always wear gloves when mounting or replacing the guard. Be careful of the blade on the guard and protect your hands from being injured by the blade.

1. Lift the trimmer head and face it downward; align the two mounting holes in the guard with the two assembly holes in the base of shaft. Make sure that the internal surface of the guard faces towards the trimmer head, use the supplied #2 Allen key lock the guard bolts in place (Fig. 6).

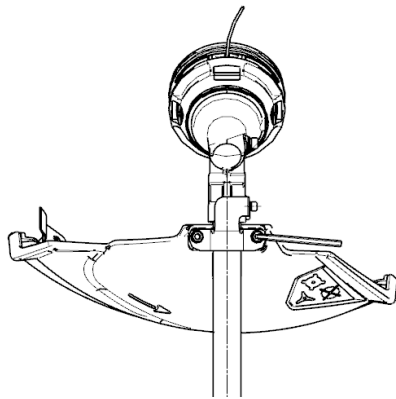


Fig.6

## MOUNTING THE BLADE

1. Disassemble the nut(clockwise), spool retainer, and support plate from gear case (Fig.7&8)



Fig.7

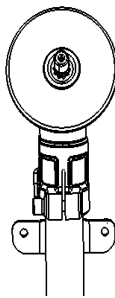


Fig.8

2. Align the blade onto the support plate, insert the #1 Allen key inside the hole, and put the blade on the support plate, align the flange, dust cover, and screw the nut with provided socket wrench by anti-clockwise direction until it is tight enough (Fig.9&10&11)

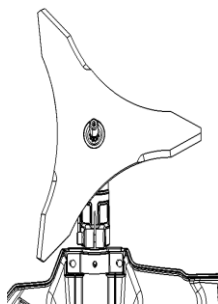


Fig.9

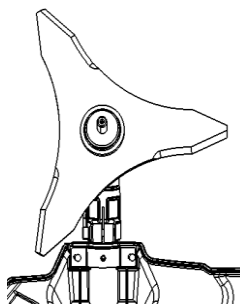


Fig.10

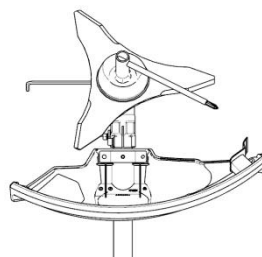


Fig.11

**⚠ WARNING:** Always wear gloves when mounting or replacing the blade. Be careful of the 3T blades and line cutting blade on the guard and protect your hands from being injured by the blades.

## MOUNTING AND ADJUSTING THE LOOP HANDLE

1. Push the loop handle onto the shaft, push the upper and lower parts together, tight the handle by rotating the loop handle knob in clockwise direction (Fig. 12&13).

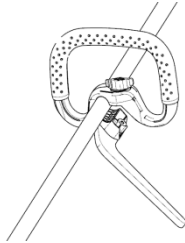


Fig.12

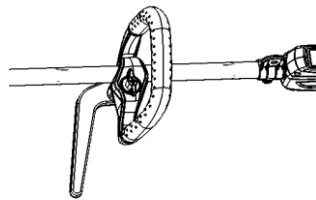
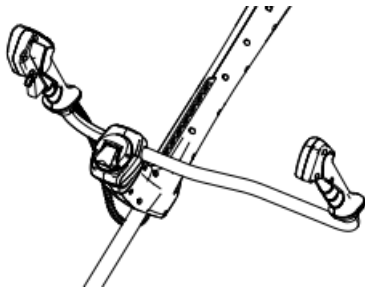


Fig.13

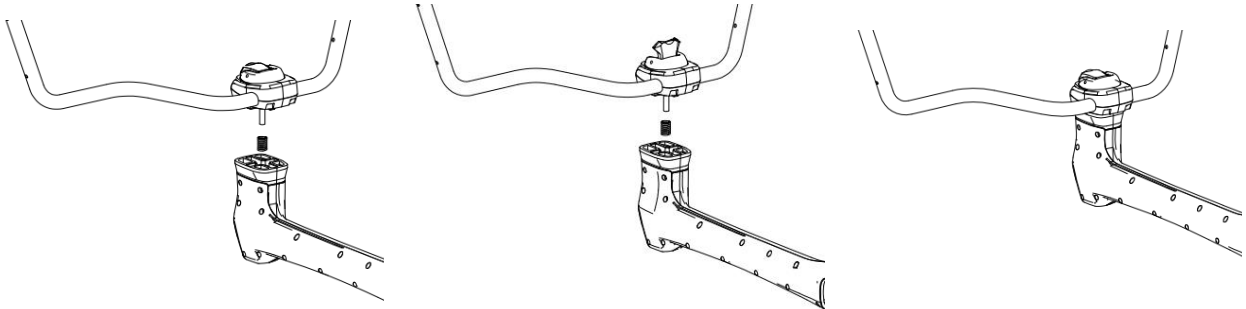
2. Loosen the knob on handle so that you can easily move/rotate the loop handle to where you feel comfortable.

## MOUNTING AND ADJUSTING THE BIKE HANDLE

1. The bike handle is preinstalled onto the tool, loosen the adjustment knob and adjust the handle as below position



2. Install the spring and tighten the knob, the knob is tool-less. Then the bike handle installation is complete.



**⚠ WARNING:** Do not use the tool without the loop handle or bike handle securely attached.

## OPERATION

**⚠ WARNING:** Do not allow familiarity with this product to make you careless. Remember that a careless fraction of a second is sufficient to inflict serious injury.



**WARNING:** Always wear eye protection that is marked to comply with ANSI Z87.1. or EN 166. Failure to do so could result in objects being thrown into your eyes and other possible serious injuries.

**⚠ WARNING:** Do not use any attachments or accessories not recommended by the manufacturer of this product. The use of attachments or accessories not recommended can result in serious personal injury.

**⚠ WARNING:** To prevent serious personal injury, remove the power plug from the tool before servicing, cleaning, changing attachments or removing material from the unit.

## APPLICATION

You may use this product for the purposes listed below:

- Trimming grass and weeds from around porches, fences, and decks
- Cutting grass that is difficult to reach with a normal lawn mower.
- For cutting wild growth, shrubs and undergrowth.

## CONNECTING WITH/ DISCONNECTING FROM THE BATTERY

**NOTE:** Fully charge the battery pack before first use.

This brush cutter & grass trimmer has a quick insert battery package connection. Please use it with the battery and charger listed above on Battery Tool Use and Care section.

The battery is not included in the packing ,both being sold separately.

### To Connect and disconnect with the Battery

Align the battery plug with the tool 's electric socket, then insert the plug into the tool.(Fig 16)

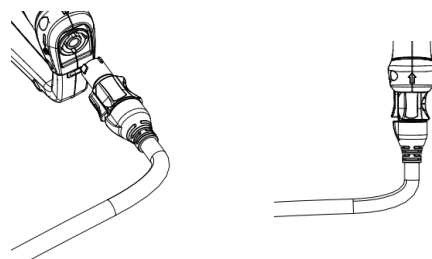


Fig. 16

### HOLDING AND USING THE BRUSH CUTTER & GRASS TRIMMER (Fig. 17)

**⚠ WARNING:** Dress properly to reduce the risk of injury when operating this tool. Do not wear loose clothing or jewelry. Wear eye and ear/hearing protection. Wear heavy-duty, long trousers, boots and gloves. Do not wear short trousers, sandals or go barefoot. Wear a face mask or dust mask in dusty locations.

Before operating, look around you to ensure a safe working area without other people or animals. Make sure that others are at least 100 ft.(30m)



away. Clear the area to be cut before each use. Remove all objects, such as rocks, broken glass, nails, wire, or string that can be thrown or become entangled in the cutting attachment. Check that you have eye protection, proper clothing and balanced footing. There still may be risk to bystanders from thrown objects. Bystanders should be encouraged to wear eye protection. If they are approached, stop the motor and cutting attachment immediately.

### Before each use check for damaged/worn parts

Check the trimmer head, guard, and loop handle and replace any parts that are cracked, warped, bent, or damaged in any way.

The line-cutting blade on the edge of the guard can dull over time. It is recommended that you periodically sharpen it with a file or replace it with a new blade.

**⚠ WARNING:** Always wear gloves when mounting or replacing the guard or when sharpening or replacing the blade. Note the location of the blade on the guard and protect your hand from injury.

### Clean the trimmer after each use

See the maintenance section for cleaning instruction.

**⚠ WARNING:** Never use water for cleaning your trimmer. Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents. Use clean clothes to remove dirt, dust, oil, grease, etc.

## STARTING/STOPPING THE BRUSH CUTTER & GRASS TRIMMER

### To Start


1. Press the power button “” on Multi Control Display Unit to light the screen.
2. Move the lock-off trigger forwards and then press the main trigger. The tool will start working. Press the gear shift button on MCDU to change the gear shift to adjust cutting speed of the tool, 1P is the lowest gear, 3P is the highest gear (Fig. 18).



Fig.18

### To stop

1. Move the tool away from the cutting area and release the main trigger to stop the tool.
2. Press the power button on MCDU to shut down the tool to avoid accidental starting.

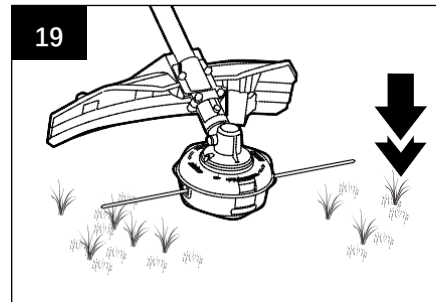
**⚠ WARNING:** Always remove the battery from the tool during work breaks and after finishing work.

**⚠ WARNING:** Make sure that the display screen is OFF before next use to avoid serious personal

injury.

## ADJUSTING THE CUTTING LINE LENGTH

The trimmer head allows the operator to release more cutting line without stopping the motor. As line becomes frayed or worn, additional line can be released by lightly tapping the trimmer head on the ground while operating the trimmer (Fig.19).

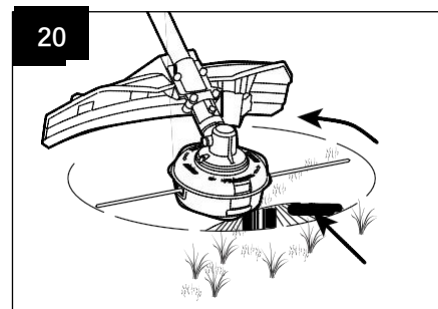


**⚠ WARNING:** Do not remove or alter the line-cutting blade assembly. Excessive line length will cause the motor to overheat and may result in serious personal injury.

For best results, tap the trimmer head on bare ground or hard soil. Always keep the trimming line fully extended. Line release becomes more difficult as the cutting line becomes shorter. Replace the line when necessary. Details, please see section "**LINE REPLACEMENT**".

### Tips for best trimming results (Fig.20)

- The correct angle for the cutting attachment is parallel to the ground.
- Do not force the trimmer. Allow the very tip of the line to do the cutting (Especially along walls). Cutting with more than the tip will reduce cutting efficiency and may overload the motor.
- The cutting height is determined by the distance of the cutting line from the lawn surface.
- Grass over 8 inches (200 mm) should be cut by working from top to the bottom in small increments to avoid premature line wear.
- Slowly move the trimmer into and out of the area being cut, maintaining the cutting head position at the desired cutting height. This movement can be either a forward-backward motion or a side-to-side motion. Cutting shorter lengths produces best results.
- Avoid trimming when grass and weeds are wet.
- Wire and picket fences can cause extra string wear or breakage. Stone and brick walls, curbs, and wood may wear cutting line rapidly.
- Avoid trees and shrubs. Tree bark, wood moldings, siding, and fence posts can easily be damaged by the cutting line.



## LINE REPLACEMENT

**NOTICE:** Always use the recommended nylon cutting line with a diameter that does not exceed 2.4 mm. Using line other than that specified may cause the tool to overheat or become damaged.

1. Press the "PUSH" button on trimmer head to disassemble the release tabs inward to unlock them from the upper



cover, and then pull out the spool retainer, double the line and hang it and rotate it on the spool retainer, (Fig. 21&22).

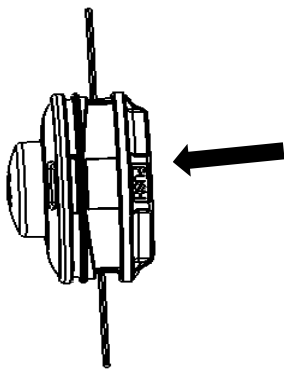


Fig.21

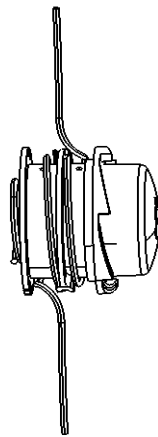


Fig.22

2. Place the trimmer line end through the metal position part, align the upper cover to spool retainer, and push them hard until you hear a clear “click” sound (Fig.23&24)

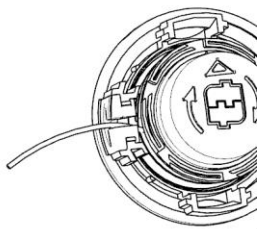


Fig.23

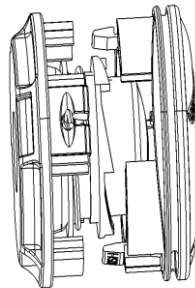


Fig.24

**NOTICE:** Always thoroughly clean the spool retainer and upper cover before reassembling the trimmer head.

**⚠ WARNING:** Make sure that the release tabs on the spool retainer snap into place, otherwise the spool assembly will come out during operation, which may result in serious personal injury.

## OPERATION

**⚠ 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 an authorized dealer/distributor.

**⚠ WARNING:** To avoid serious personal injury, always remove the power cord from the product when cleaning or performing any maintenance.

All grass trimmer/ brush cutter service, other than the items listed in these maintenance instructions, should be performed by an authorized dealer/distributor.

## MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use a clean cloth to remove dirt, dust, oil, grease, etc.

**⚠ WARNING:** Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken, or destroy plastic, which may result in serious personal injury.

**⚠ WARNING:** When cleaning the tool, DO NOT immerse it water or other liquids.

### CLEANING

- Remove the power plug from the tool.
- After each use, clear the debris, clogged soils, grass on the blade or the guard or the grass that may have wrapped itself around the drive shaft or trimmer head with a soft brush.
- Wipe the tool surface with a clean cloth moistened with a mild soap solution.
- Use a small brush or a small vacuum cleaner to clean the air vents on the rear housing. Keep the air vents free of obstructions.
- Do not use any strong detergents on the plastic housing or the handle. They can be damaged by certain aromatic oils, such as pine and lemon, and by solvents such as kerosene. Moisture can also cause a shock hazard. Wipe off any moisture with a soft dry cloth.

### TRIMMER HEAD REPLACEMENT

**⚠ WARNING:** If the head loosens after it is fixed in position, replace it immediately. Never use a trimmer with a loose cutting attachment. Replace a cracked, damaged, or worn-out cutting head immediately, even if damage is limited to superficial cracks. Such attachments may shatter at high speed and cause serious injury.

### SHARPEN THE LINE-CUTTING BLADE

**⚠ WARNING:** Always protect your hands by wearing heavy gloves when performing any maintenance on the line-cutting blade.

1. Remove the line-cutting blade from the guard accessory.
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, being careful to maintain the original cutting-edge angle.
5. Replace the blade onto the guard and secure it in place with the two screws.

## LUBRICATING THE DRIVE GEAR

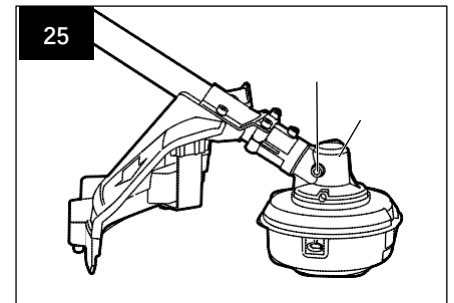
For best operation and longer lifetime, lubricate the tool drive gear with a special grease as described below after every 50 hours operation. Remove the sealing screw on the gear case with the provided Allen key and apply the grease into the oil hole up to 0.011lb (5g) (Fig. 25). **DO NOT FULLY FILL THE GEAR CASE WITH THE GREASE**

The grease should meet the following requirements:

- NLGI Grade Penetration: NLGI-1
- Thickener Type: Ester
- Recommended Operating Temperature Range: 0°C to 40°C
- Other than above, the grease should also have excellent low-temperature startup, EP, mechanical shearing, abrasion resistance and oxidative stability properties.

## TRANSPORTING AND STORING

- Clean the tool thoroughly before storing.
- Store the tool indoors, in a dry place that is inaccessible to children.
- Keep away from corrosive agents such as garden chemicals and deicing salts.



# TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
When trimming, the trimmer head does not advance line.	<ul style="list-style-type: none"> <li>■ The drive shaft or trimmer head is bound with grass.</li> <li>■ There is not enough line on the spool.</li> <li>■ The trimmer line is tangled in the trimmer head.</li> <li>■ The trimmer line is too short.</li> </ul>	<ul style="list-style-type: none"> <li>■ Stop the grass trimmer/brush cutter, disconnect the power cord and then clean the drive shaft or the trimmer head thoroughly.</li> <li>■ Disconnect the power cord and replace with new cutting line; refer to "<b>LINE REPLACEMENT</b>" section in this manual.</li> <li>■ Disconnect the power cord and reload the cutting line; refer to "<b>LINE REPLACEMENT</b>" section in this manual.</li> <li>■ Disconnect the power cord and pull the lines manually while alternately pressing down and releasing the trimmer head.</li> </ul>
When trimming, grass wraps around the trimmer head.	<ul style="list-style-type: none"> <li>■ Cutting tall grass at ground level.</li> </ul>	<ul style="list-style-type: none"> <li>■ Cut tall grass from the top down, removing no more than 8 inches in each pass to prevent wrapping.</li> </ul>
When trimming, the line-cutting blade on the guard cannot cut the line.	<ul style="list-style-type: none"> <li>■ The line-cutting blade on the guard has become dull.</li> </ul>	<ul style="list-style-type: none"> <li>■ Sharpen the line-cutting blade with a file or replace with a new one.</li> </ul>
Cracks on the trimmer head or the spool retainer comes loose with upper cover.	<ul style="list-style-type: none"> <li>■ The trimmer head is worn out.</li> </ul>	<ul style="list-style-type: none"> <li>■ Before further use, replace with a new trimmer head; refer to "<b>TRIMMER HEAD REPLACEMENT</b>" section in this manual.</li> </ul>

Error alarm indicator	Cause	Solution
E01	<ul style="list-style-type: none"> <li>•the controller voltage wrong</li> <li>•wrongly starting</li> </ul>	<ul style="list-style-type: none"> <li>•contact the service point for a professional consultant or repairing.</li> <li>•release the switch,and restart in the right way</li> </ul>
E02	<ul style="list-style-type: none"> <li>•over currenxy</li> </ul>	<ul style="list-style-type: none"> <li>•release the switch</li> </ul>
E03	<ul style="list-style-type: none"> <li>•low speed protection,blade</li> </ul>	<ul style="list-style-type: none"> <li>•release the switch</li> </ul>

	blocked	
E04	•the controller temperature protection	•release the switch,wait the machine temperature cool down to normal
E05	•the battery temperature protection	•restart the tool till the temperature
E06	•voltage problem	•stop the machine ,restart the machine, •charge the battery pack with the specified charger •check if the right voltage battery pack is used.
E07	•short circuit on the motor	•contact the service point for a professional consultant or repairing.
E08	•phase loss fault	•contact the service point for a professional consultant or repairing.
E09	•other fault	•stop the machine ,restart the machine, if still not workable,contact with the service
E10	•battery fault	•use the right battery which compatible the machine
E11	•MOS fault	•contact the service point for a professional consultant or repairing.
E20	•UI fault	•contact the service point for a professional consultant or repairing.