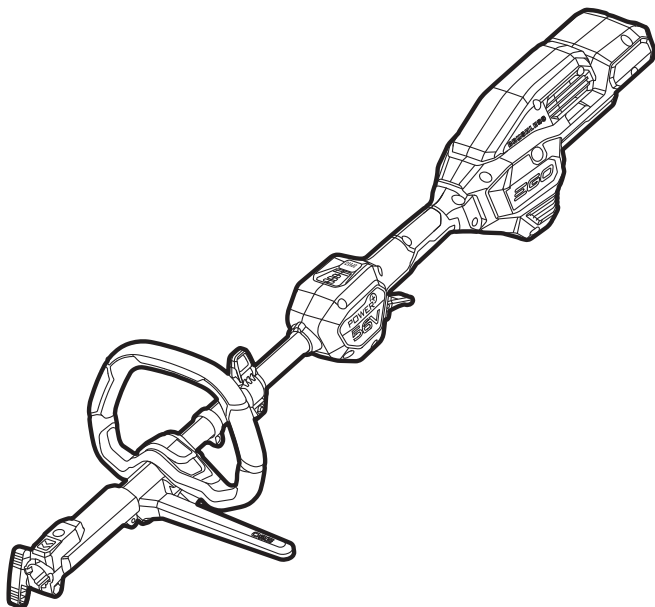


# EGO<sup>TM</sup>

## COMMERCIAL

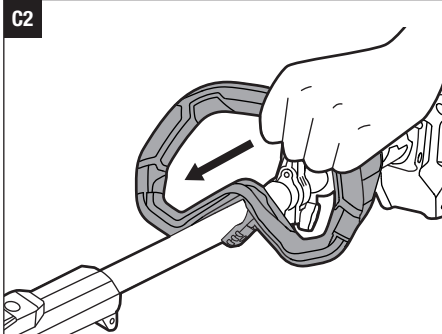
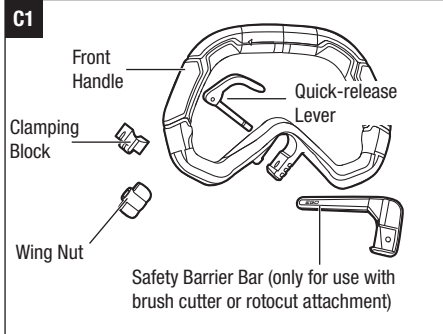
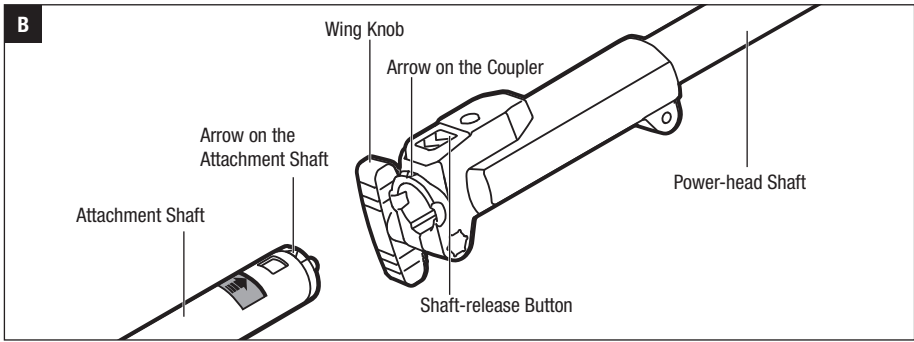
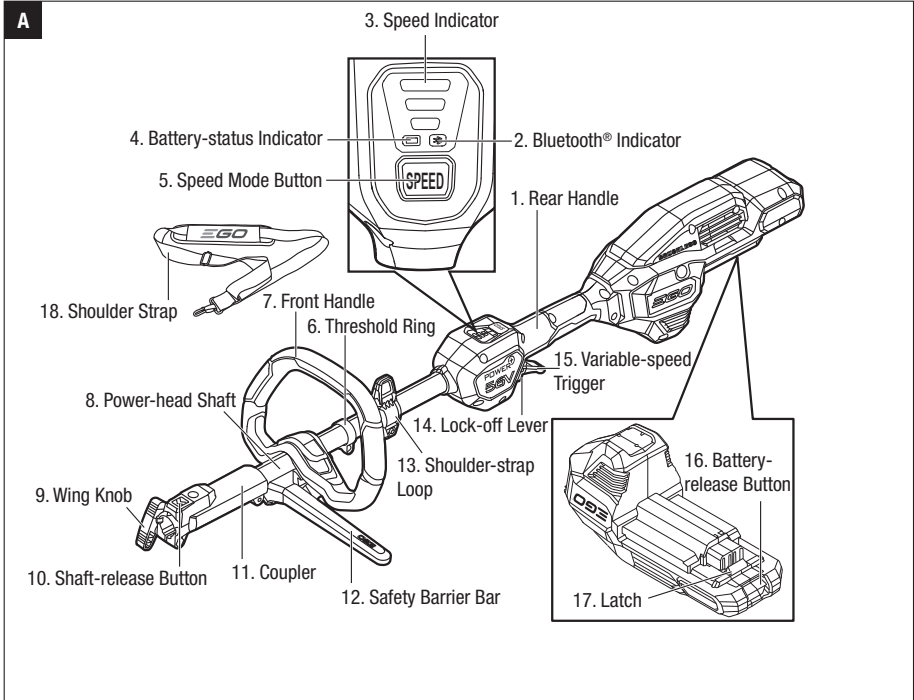


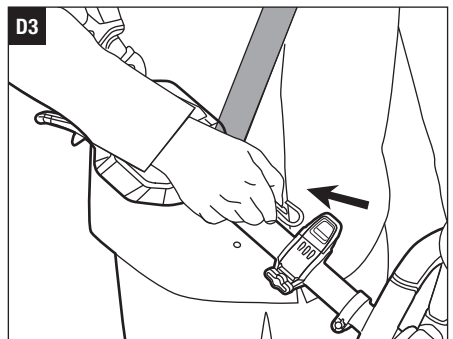
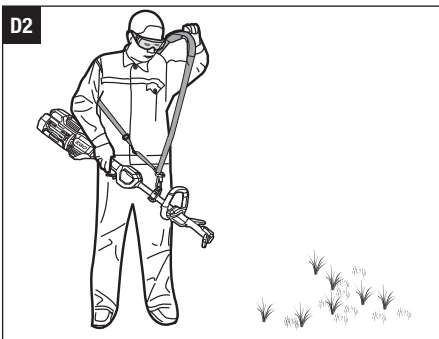
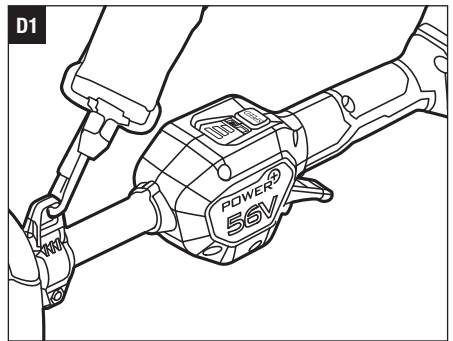
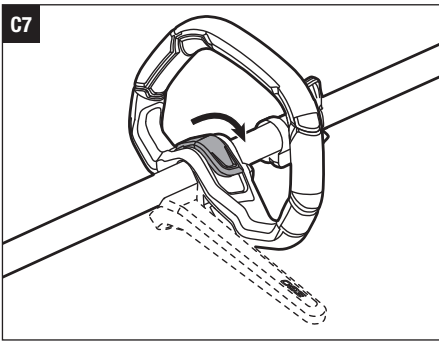
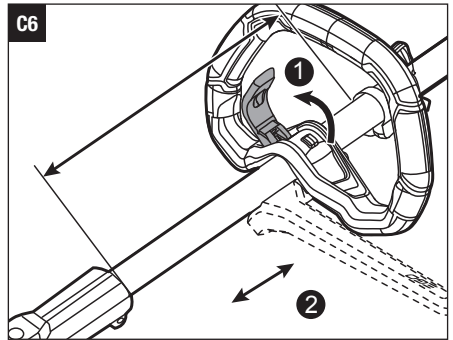
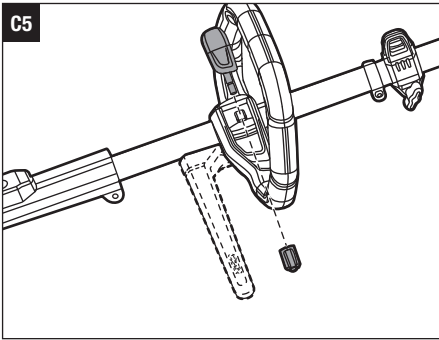
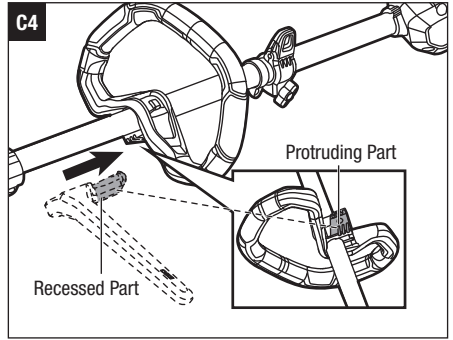
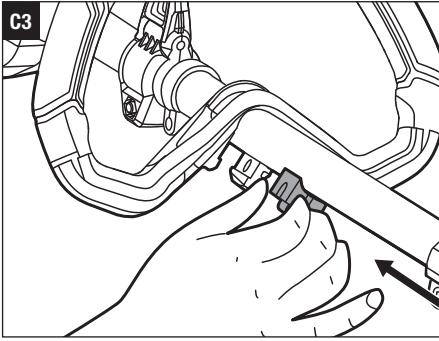
### OPERATOR'S MANUAL

# 56-VOLT LITHIUM-ION MULTI TOOL POWER HEAD

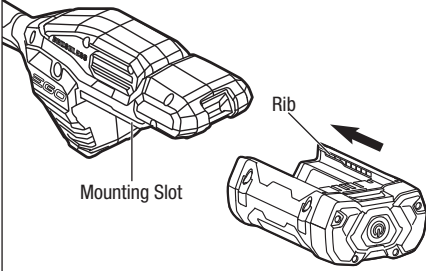
## MODEL NUMBER PHX1600

**⚠ 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.

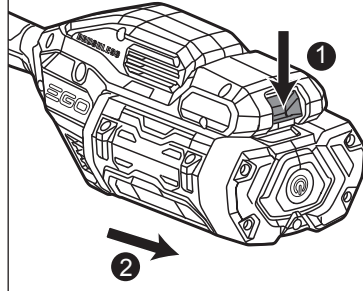




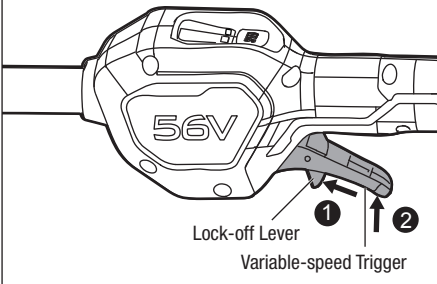
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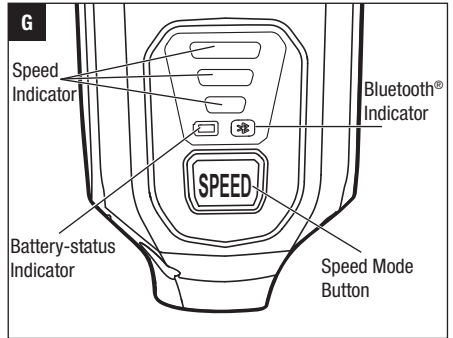
E2



F



G



## READ ALL INSTRUCTIONS!



**READ OPERATOR'S MANUAL**

## 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 machine. 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 machines can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning machine 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.

	Safety Alert	Indicates a potential personal injury hazard.
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	Read operator's manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Wear Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
	Wear Ear Protection	Always wear ear protection when operating this product.
	Wear Head Protection	Wear an approved safety hard hat to protect your head.
	Wear Protective Gloves	Protect your hands with gloves when handling blade or blade guard.
	Wear Safety Footwear	Wear non-slip safety footwear when using this equipment.
	Beware of thrown objects	Alerts user to beware of thrown objects.
	Bluetooth®	Bluetooth® symbol
	WARNING – A lithium coin battery is fully enclosed inside the product.	The battery is hazardous and is to be kept away from children (whether the battery is new or used);  The battery can cause severe or fatal injuries in 2 hours or less if it is swallowed or placed inside any part of the body;  Medical attention should be sought immediately if it is suspected the battery has been swallowed or placed inside any part of the body.
	Beware of blade thrust	Alerts user to beware of blade thrust.
	Disconnect battery before maintenance	Alerts user to disconnect battery before maintenance.
	Regulatory Compliance Mark	This product complies with applicable Australian standards.

	Noise	Guaranteed sound power level.
	WEEE	Waste electrical products should not be disposed of with household waste. Take to an authorized recycler.
IPX5	Ingress Protection Rating	Protection against water jets
V	Volt	Voltage
mm	Millimetre	Length or size
cm	Centimetre	Length or size
kg	Kilogram	Weight
	Direct Current	Type or a characteristic of current

## GENERAL BATTERY-OPERATED MACHINE SAFETY WARNINGS

**⚠ WARNING:** Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term “machine” in the warnings refers to your mains-operated (corded) machine or battery-operated (cordless) machine.

### WORK AREA SAFETY

- **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Do not operate machines in explosive atmospheres, such as in the presence of flammable liquids, petrol or dust.** Machines create sparks which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a machine.** Distractions can cause you to lose control.

### ELECTRICAL SAFETY

- **Machine plugs must match the outlet. Never modify the plug in anyway. Do not use any adaptor plugs with earthed (grounded) machines.** Unmodified plugs and matching outlets will reduce risk of electric shock.

- **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.
- **Do not expose machines to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the machine. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a machine outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a machine in a damp location is unavoidable, use a Ground-fault circuit interrupter protected supply.** Use of GFCI reduces the risk of electric shock.

### PERSONAL SAFETY

- **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.
- **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.
- **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.
- **Remove any adjusting key or wrench before turning the machine on.** A wrench or a key left attached to a rotating part of the machine may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the machine in unexpected situations.
- **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.

- If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust devices 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.

## MACHINE USE AND CARE

- 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.
- 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.
- Disconnect the plug from the power source and/or the battery pack from the machine before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the machine accidentally.
- 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.
- 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 before use. Many accidents are caused by poorly maintained power tools.
- Keep cutting machines sharp and clean. Properly maintained cutting machines with sharp cutting edges are less likely to bind and are easier to control.
- Use the machine, accessories and machine 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.
- 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 machine in unexpected situations.
- Use machines only with specifically designated battery packs listed below. Use of any other battery packs may create a risk of injury and fire.

BATTERY PACK	CHARGER
BA1400, BA1400T, BA2800, BA2800T, BA4200, BA4200T, BA5600T, BA6720T	CH2100E, CH5500E, CH7000E, CH7000E-T

## BATTERY MACHINE 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 machines 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 contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- Do not use a battery pack or machine 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 machine to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion.
- Follow all charging instructions and do not charge the battery pack or machine 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 machine serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the machine is maintained.
- Never service damaged battery packs. Service of battery packs should only be performed by the manufacturer or authorized service providers.

- If situations occur that are not covered in this manual, use care and good judgment. Contact the EGO Service Centre for assistance.

## SAVE THESE INSTRUCTIONS

ADDITIONAL SPECIFIC SAFETY RULES CAN BE FOUND IN THE APPLICABLE ATTACHMENT'S OPERATOR'S MANUAL.

## SPECIFICATIONS

Voltage	56 V $\overline{\text{---}}$
Weight (Without battery pack)	2.95 kg

## PACKING LIST

PART NAME	QUANTITY
Power Head	1
Front Handle	1
Operator's Manual	1
Safety Barrier Bar (only for use with brush cutter head)	1
Shoulder Strap	1

## DESCRIPTION

### KNOW YOUR POWER HEAD (Fig. A)

1. Rear Handle
2. Bluetooth® Indicator
3. Speed Indicator
4. Battery-status Indicator
5. Speed Mode Button
6. Threshold Ring
7. Front Handle
8. Power-head Shaft
9. Wing Knob
10. Shaft-release Button
11. Coupler
12. Safety Barrier Bar
13. Shoulder-strap Loop
14. Lock-off Lever
15. Variable-speed Trigger
16. Battery-release Button
17. Latch
18. Shoulder Strap

## ASSEMBLY

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

**⚠ WARNING:** Always remove the battery pack from the product when you are assembling parts, making adjustments, cleaning, or when the product is not in use.

### INSTALLING A POWER HEAD ATTACHMENT

**⚠ WARNING:** Read and understand entire Operator's Manual for each optional attachment used on this power head and follow all warnings and instructions. Failure to follow all instructions could result in electric shock, fire and/or serious personal injury.

**⚠ WARNING:** This 56 V power head PHX1600 is designed to be used only with the EGO attachment models that are specified in this Operator's Manual or subsequently introduced by EGO for use with this power head. Use of other, unauthorized attachments could cause serious personal injuries or property damage.

**⚠ WARNING:** Never install, remove, or adjust any attachment while the power head is running or with the battery installed. Failure to stop the motor and remove the battery can cause serious personal injury. **NEVER OPERATE THE POWER HEAD WITHOUT AN ATTACHMENT.**

The attachment connects to the power head by means of a coupler device.

1. Stop the motor and remove the battery pack.
2. Loosen the wing knob.
3. Remove the end cap from the attachment. Align the arrow on the attachment shaft with the arrow on the coupler and push the attachment shaft into the coupler until you hear a clear "click" sound, which indicates that the attachment shaft is mounted into place (Fig. B).
4. Pull the shaft of the attachment to verify it is securely locked into the coupler. If not, rotate the attachment shaft from side to side in the coupler until it snaps into place.

5. Tighten the wing knob securely.

**⚠ WARNING:** Be certain the wing knob is fully tightened before operating equipment; check it periodically for tightness during use to avoid serious personal injury.

### REMOVING THE ATTACHMENT FROM THE POWER HEAD

1. Stop the motor and remove the battery pack.
2. Loosen the wing knob.
3. Press the shaft-release button, with the button depressed, pull or twist the attachment shift out of the coupler.

### MOUNTING AND ADJUSTING THE FRONT HANDLE

**⚠ WARNING:** Always remove the battery pack from the product when you are assembling parts, making adjustments, cleaning, or when the product is not in use.

1. Stop the motor and remove the battery pack, if installed.
2. Loosen the wing nut and remove the quick-release lever, clamping block, and wing nut from the front handle (Fig. C1).

**⚠ WARNING:** When the machine is used with brush cutter or rotocut attachment, the safety barrier bar must also be installed.

3. Push the front handle onto the shaft between the threshold ring and the coupler, make sure that the front handle is positioned upwards and points toward the top of the rear handle (Fig. C2).
4. Insert the clamping block into the handle slot (Fig. C3).
5. Align the recessed part in the barrier bar with the protruding part on the front handle, press the barrier bar onto the front handle (Fig. C4).
6. Mount the quick-release lever and tighten the wing nut (Fig. C5).
7. Pull the quick-release lever up to move/rotate the front handle to a comfortable operating position (Fig. C6).

**⚠ WARNING:** When installing the safety barrier, for safety purpose, the wing nut cannot be loosened during the adjustment of the front handle operating position.

8. Fold the quick-release lever to secure the front handle in place (Fig. C7).

**⚠ WARNING:** Never use the machine without the front handle securely attached.

### MOUNTING THE SHOULDER STRAP

Depress the strap carabiner to open it and attach it onto the shoulder-strap loop (Fig. D1).

There are two ways to release the strap. Take it off from your shoulder directly (Fig. D2) or depress the carabiner and disconnect the shoulder strap from the shoulder-strap loop (Fig. D3).

When wearing the strap, no other wearable should interfere with the release and removal of the strap.

**⚠ WARNING:** When an emergency occurs, take it off from your shoulder immediately, no matter what way the strap is in.

You should not use the single-shoulder strap and double-shoulder strap simultaneously.

### 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. 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: NEVER OPERATE THE POWER HEAD WITHOUT AN ATTACHMENT.**

### INSTALLING/REMOVING THE BATTERY PACK

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

#### To Install

Align the battery ribs with the mounting slots and press the battery pack down until you hear a “click” (Fig. E1).

Fig. E1 parts description see below:

#### To Remove

Depress the battery-release button and pull the battery pack out (Fig. E2).

**⚠ WARNING:** To avoid serious personal injury, always remove the battery pack and keep hands clear of the lock-off lever and variable speed trigger when carrying or transporting the tool.

## STARTING/STOPPING THE POWER HEAD

**⚠ WARNING:** NEVER OPERATE THE POWER HEAD WITHOUT AN ATTACHMENT. Do not attempt to start the power head without an attachment.

### To start the power head (Fig. F)

1. Move the lock-off lever forward and then press the variable-speed trigger. The power head will start.
2. The rotational speed of the machine is controlled with the variable-speed trigger. More pressure on the trigger results in higher speed; less pressure on the trigger results in lower speed. Adjust the speed to suit the task at hand.

**NOTE:** The motor starts only when the lock-off lever is moved forward and the variable-speed trigger is depressed at the same time.

### To stop the power head

Move the attachment away from the cutting area and release the variable speed trigger to stop the power head.

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

## Changing Speed Mode (Fig. G)

This machine features three speed modes.

The speed mode will change with every press of the speed mode button.











The speed indicator will display the active speed mode: one light for low speed, two lights for medium speed, three lights for high speed. The low speed mode provides better control of the machine and longer operating time per charge.

**NOTE:** The speed mode can be set before the machine is turned on or during operation.

When the machine is re-started after a break, the speed mode will return to the previous speed.

## BATTERY-STATUS INDICATOR AND SPEED INDICATOR

The battery-status indicator shows the charge level and the working status of the battery pack, and the speed indicator shows the working status of the machine as shown in the chart below. The battery-status indicator and the speed indicator will illuminate when the machine is started or the speed mode button is pressed.

Indicator Lights		Meaning
Battery-status Indicator	Solid green	 Battery charge level of 20% to 100%
	Flashing green	 Battery charge level of 10% to 20%
	Solid red	 Battery charge level of less than 10%
	Flashing red	 The battery pack charge is nearly depleted and needs to be charged immediately.
	Solid orange	 The battery pack is overheated. Cool the battery pack until the temperature drops below 67°C. See " <b>Battery High-temperature Protection</b> " below.
	Flashing red/green alternately	  The battery pack electronics error. Replace the battery pack or contact EGO customer service. See " <b>Battery Electronics Error Protection</b> ".
Speed Indicator (the illustration shows the high speed)	Solid green	 The machine is working properly.
	Solid orange	 The machine is overheated. Cool the machine until the temperature drops below 80°C. See " <b>Machine High-temperature Protection</b> " below.
	Flashing orange	 The machine is overloaded. See " <b>Machine Overload Protection</b> " below.

### Battery High-temperature Protection

If the battery temperature exceeds 70°C during operation, the temperature-protection circuit will immediately shut off the machine to protect the battery pack from overheating damage. The battery-status indicator will glow solid orange. Release the trigger and wait until the overheated battery cools down and the indicator turns green, then restart the machine.

### Battery Electronics Error Protection

When the battery pack electronics error occurs, the battery-status indicator will flash red/green alternately and the machine will shut off in 3 seconds. Replace the battery pack or contact EGO customer service.

### Machine Overload Protection

This machine features a built-in overload circuit protection. When the machine is overloaded, the motor will stop and the speed indicator will flash orange. Remove the battery pack from the machine, then reattach the battery pack and restart the machine. Decrease the load on the machine, avoid too long or oversize cutting line or cutting of the heavy/woody shrubs.

### Machine High-temperature Protection

If the machine temperature exceeds 90°C during operation, the temperature-protection circuit will immediately shut off the machine to prevent overheating damage. The speed indicator will glow solid orange. Release the trigger and wait until the overheated machine cools down and the speed indicator turns green, then restart the machine.

## MAINTENANCE

**⚠ WARNING:** Before inspecting, cleaning or servicing the unit, stop the motor, wait for all moving parts to stop, and remove the battery pack. Failure to follow these instructions can result in serious personal injury or property damage.

**⚠ WARNING:** When servicing, use only identical replacement parts. Use of any other parts can create a hazard or cause product damage. To ensure safety and reliability, all repairs, other than the items listed in these maintenance instructions, should be performed by a qualified service technician.

**NOTICE:** Before each use, inspect the entire product for damaged, missing, or loose parts such as screws, nuts, bolts, caps, etc. Tighten securely all fasteners and caps and do not operate this product until all missing or damaged parts are replaced. Please contact customer service or a qualified service technician.

## GENERAL 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 clean cloths to remove dirt, dust, oil, grease, etc.

### CLEANING THE POWER HEAD

1. Stop the motor and remove the battery pack.
2. Clean dirt and debris from the power head using a damp cloth with a mild detergent.

**NOTICE:** 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.

### STORING THE POWER HEAD

1. Remove the battery pack from the power head before storing.
2. Clean all foreign material from the power head.
3. Store it in a place that is inaccessible to children.
4. Keep away from corrosive agents such as garden chemicals and de-icing salts.

### PROTECTING THE ENVIRONMENT



Do not dispose of electrical equipment, battery charger and batteries/rechargeable batteries into household waste!

Take this product to an authorized recycler and make it available for separate collection. Electric tools must be returned to an environmentally compatible recycling facility.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

## TROUBLESHOOTING

See the applicable attachment's operator's manual.



## **WARRANTY**

### **EGO WARRANTY POLICY**

For full warranty terms and conditions, warranty service or to make a claim, please visit our website [egopowerplus.com.au/warranty-policy](http://egopowerplus.com.au/warranty-policy).

Also see full warranty details & warranty table on the 'NEED HELP?' flyer contained within this product.

Alternatively you can contact EGO customer service via the following:

#### **Australia**

Address: Chervon Australia Pty Ltd, Unit 14, 5 Kelletts Rd, Rowville, VIC, 3178.

Phone: 1300 000 346

Email: [support@egopowerplus.com.au](mailto:support@egopowerplus.com.au)

#### **New Zealand**

Address: Chervon New Zealand Subsidiary Ltd, 4th Floor, Smith & Caughey Building, 253 Queen St, Auckland, 1141.

Phone: 0508 000 346

Email: [support@egopowerplus.co.nz](mailto:support@egopowerplus.co.nz)