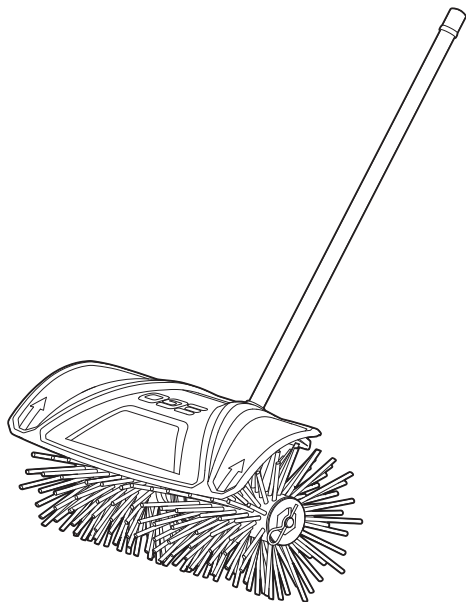




POWER<sup>+</sup> BRISTLE BRUSH ATTACHMENT



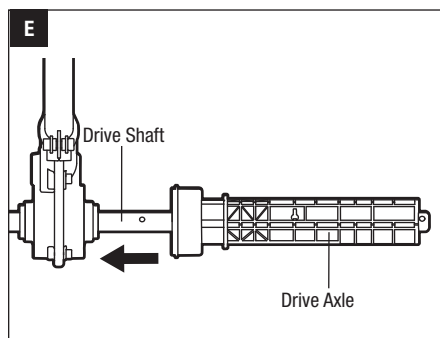
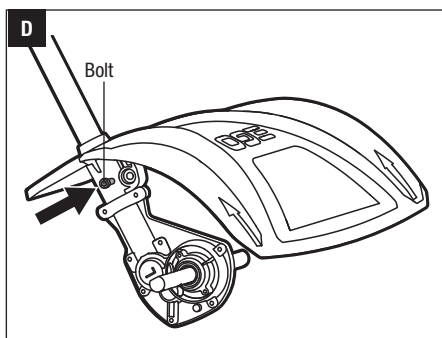
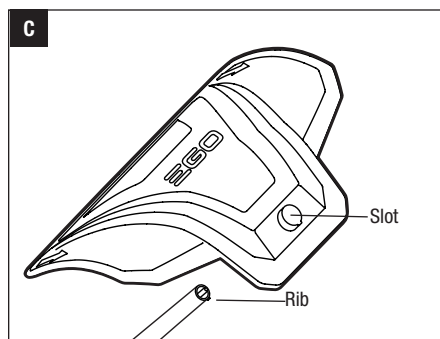
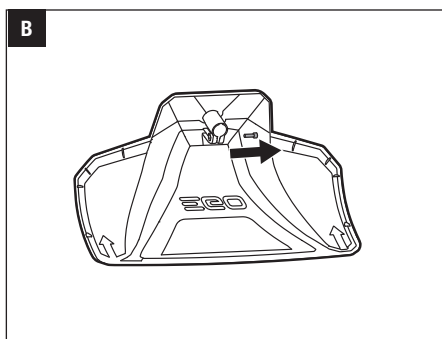
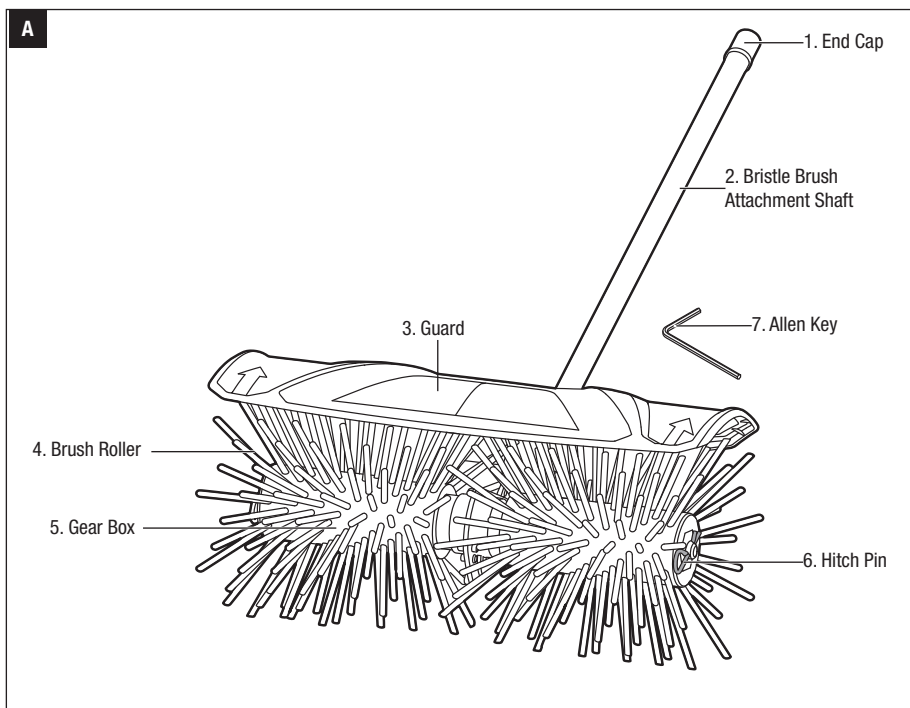
OPERATOR'S MANUAL

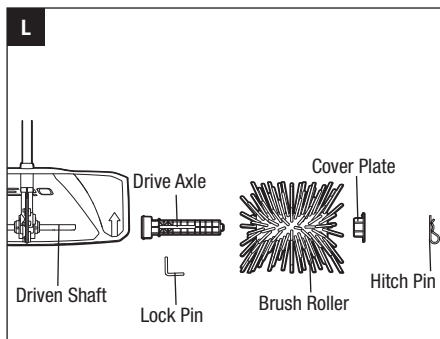
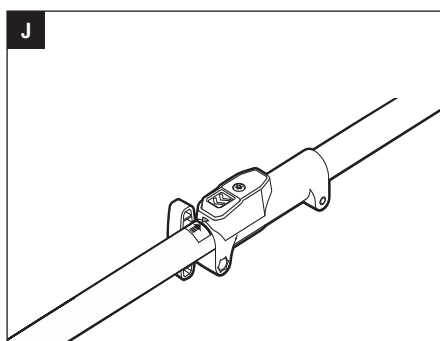
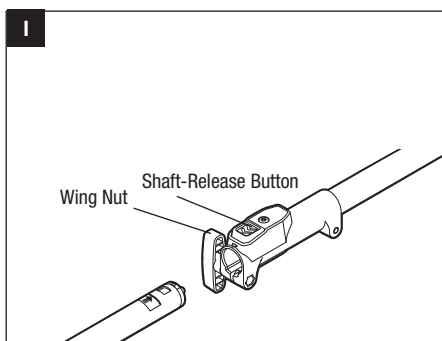
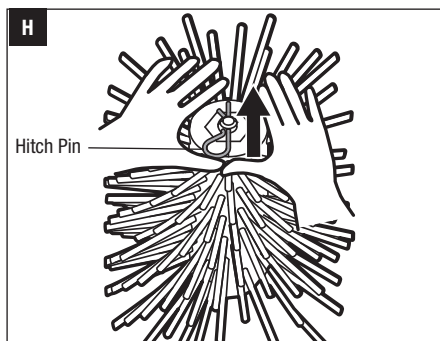
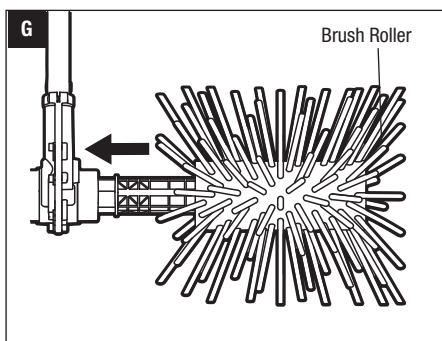
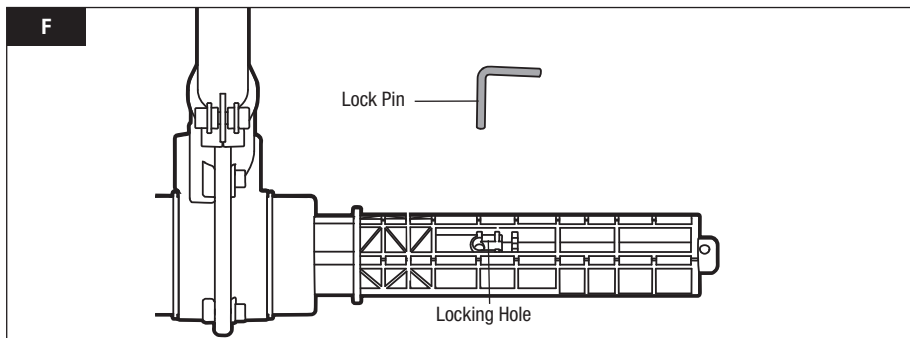
# BRISTLE BRUSH ATTACHMENT

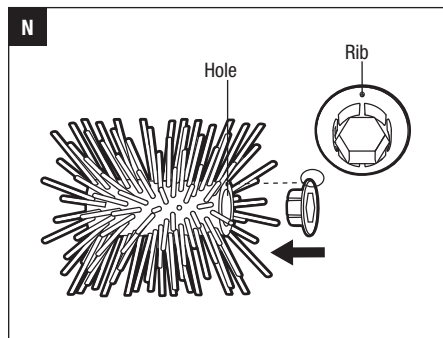
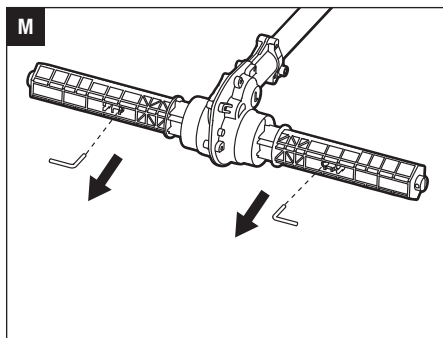
MODEL NUMBER BBA2100

FOR USE ONLY WITH THE 56V LITHIUM-ION POWER HEAD PH1400E

**⚠ 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 OPERATOR'S MANUAL

**⚠ Residual risk!** 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.

**⚠ WARNING:** To ensure safety and reliability, all repairs and replacements should be performed by a qualified service technician.

## 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.

	Safety Alert	Indicates a potential personal injury hazard.
	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.
	Keep Bystanders Away	Keep Bystanders at a Safe Distance
	Wear Safety Footwear	Wear non-slip safety footwear when using this equipment.
	Ricochet	Thrown objects can ricochet and result in personal injury or property damage.
	Do Not Expose To Rain	Do not use in the rain or leave outdoors while it is raining.
	WEEE	Waste electrical products should not be disposed of with household waste. Take to an authorized recycler.
	Noise	Guaranteed sound power level.
V	Volt	Voltage
mm	Millimeter	Length or size
kg	Kilogram	Weight

## GENERAL 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.

## ELECTRICAL SAFETY

- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

## 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 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 power source and/or 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 rotating 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 jewellery. 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.

## 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 and 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 surface 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.

## 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 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 contacts 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 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.

## OTHER SAFETY WARNINGS

### Training

- Read the instructions carefully. Be familiar with the controls and the proper use of the machine.
- Never allow people unfamiliar with these instructions or children to use the machine. Local regulations can restrict the age of the operator.
- Never work while people, especial children or pets are nearby.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

### Preparation

- While working, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
- Thoroughly inspect the area where the equipment is to be used and remove all objects which can be thrown up by machine.
- Before using, always visually inspect to see that the tools are not worn out or damaged. Replace worn out or damaged elements and bolts in sets to preserve balance.

### Operation

- Do not operate the engine in the confined space where dangerous carbon monoxide fumes can collect.
- Work only in daylight or in good artificial light.
- Always be sure of your footing on slopes.
- Walk, never run with the machine.
- For wheeled rotary machines, work across the slopes, never up and down.
- Exercise extreme caution when changing direction on slopes.
- Do not work on excessively steep slopes.
- Use extreme caution when reversing or pulling the machine towards you.
- Do not change the engine governor settings or over speed the engine.
- Start the engine carefully according to manufacturer instructions and with feet well away from tool.
- Do not put your hands or feet near or under rotating parts.
- Never pick up or carry a machine while the engine is running.

### OPERATION ON A SLOPE:

Slopes are a major factor related to slip-and-fall accidents, which can result in severe injury. Always be sure of your footing on slopes. Operation on slopes requires extra caution. If you feel uneasy on a slope, do not use it.

- Watch for holes, ruts, rocks, hidden objects, or bumps which can cause you to slip or trip. Tall grass can hide obstacles.

### 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.

**⚠ 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.

### SAVE THESE INSTRUCTIONS



## SPECIFICATIONS

Brush Drum Diameter	250mm
Cleaning Swath	560mm
Recommended Operating Temperature	-15°C -40°C
Recommended Storage Temperature	-20°C-70°C
Weight (including the guard)	5.05 kg

- The above parameters are tested and measured equipped with power head PH1400E.
- 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.

**NOTICE:** The vibration emission during actual use of the power tool can differ from the declared value in which the tool is used; In order to protect the operator, user should wear gloves and ear protectors in the actual conditions of use.

## PACKING LIST

PART NAME	QUANTITY
Bristle Brush Attachment	1
Brush Roller	2
Drive Axle	2
Guard (with bolt)	1
Allen Key	1
Hitch pin	2
Lock pin	2
Operator's Manual	1

## DESCRIPTION

### KNOW YOUR BRISTLE BRUSH ATTACHMENT (Fig.A)

1. End Cap
2. Bristle Brush Attachment Shaft
3. Guard
4. Brush Roller
5. Gear Box
6. Hitch Pin
7. Allen Key

## 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:** Do not attempt to modify this product or create accessories not recommended for use with this product. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

**⚠ WARNING:** To prevent accidental starting that could cause serious personal injury, always unplug the battery connector from the socket when assembling parts.

**⚠ WARNING:** Do not connect the bristle brush to the power head until assembly is complete. Failure to comply could result in accidental starting and possible serious personal injury.

### MOUNTING THE GUARD

**⚠ WARNING:** Install the guard before the bristle brush attachment is connected to the power head.

1. Loosen and remove the bolt from the guard with the supplied Allen key (Fig. B).
2. Lift the bristle brush attachment shaft and remove the end cap from the shaft.
3. With the slot in the guard aligned with the rib on the end of the shaft, pass the guard through the shaft until the screw holes in the guard and in the shaft are aligned (Fig. C & D).
4. Use the supplied Allen key to tighten the bolt clockwise to lock the guard securely.

### MOUNTING THE BRUSH ROLLERS

1. Push the drive axle onto the driven shaft (Fig. E).
2. To secure the drive axle to the driven shaft, insert the lock pin into the locking hole.

**NOTICE:** The lock pin needs to be installed into place (Fig. F).

3. Follow the same steps to mount the other drive axle.
4. Push the brush roller onto the drive axle (Fig. G).
5. Insert the hitch pin into the hole at the end to secure the brush roller to the drive axle (Fig. H).
6. Follow the same steps to mount the other brush roller.



## CONNECTING THE BRISTLE BRUSH ATTACHMENT TO THE POWER HEAD

**⚠ WARNING:** Never attach or adjust any attachment while the power head is running or with the battery installed. Failure to stop the motor and remove the battery may cause serious personal injury.

This bristle brush attachment is designed for use with EGO Power Head PH1400E

1. Stop the motor and remove the battery pack.
2. Loosen the wing nut on the power head coupler.
3. If the end cap is on the attachment shaft, remove it and save it in a safe place for later use.

Align the arrow on the bristle brush shaft with the arrow on the coupler (Fig. I) and push the bristle brush shaft into the coupler until you hear a clear “CLICK” sound (Fig. J).

4. Slightly pull the shaft of the bristle brush attachment to verify that it is securely locked into the coupler. If not, move the bristle brush shaft back and forth in the coupler until a clear “CLICK” sound indicates that it is engaged.
5. Tighten the wing nut securely.

**⚠ WARNING:** Be sure the wing nut on the coupler is fully tightened before operating the 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 nut.
3. With the shaft-release button depressed, pull or twist the bristle brush attachment shaft out of the coupler to remove it from the power head.

## 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, along with hearing 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.

## APPLICATIONS

You may use this product for the purpose listed below:

- Cleaning areas and paths, including uneven and jointed surfaces.
- Cleaning the pavement/concrete/asphalt driveways, walkways, and yards.

**⚠ WARNING:** Dress properly to reduce the risk of injury when operating this tool. Do not wear loose clothing or jewelry. Wear eye protection. Wear heavy, long pants, boots and gloves. Do not wear short pants or sandals or go barefoot.

If the surface to be cleaned is dry, spray it with water to reduce the amount of dust created.

You should work with the bristle brush forward. Hold the bristle brush with one hand on the rear handle and the other hand on the front-assist handle. Keep a firm grip with both hands while operating the bristle brush.

Hold and guide the bristle brush at a shallow angle. If the bristle brush is held at too steep an angle, it tends to push back towards the operator.

Maintain your grip and balance on both feet (Fig. K).

Thrown materials may seriously injure the operator or bystander. To reduce the risk of personal injury, it is essential to take the following precautions:

- Always hold the bristle brush with both hands when operating. Use a firm grip on both handles.
- Move the bristle brush to the work area before starting and start the bristle brush at a lower speed.
- To reduce the risk of injury from loss of control, hold and guide the bristle brush at a shallow angle. If the bristle brush is held at too steep an angle, it tends to push back towards the operator.

## Before each use check for damaged/worn parts

Check the brush roller, guard, front-assist handle, and drive axle and replace any parts that are cracked, warped, bent, or damaged in any way.

## Clean the bristle brush after each use

See the Maintenance section for cleaning instructions.

## TO START/STOP THE TOOL

See “STARTING/STOPPING THE POWER HEAD” section in the power head PH1400E operator’s manual

## MAINTENANCE

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

**⚠ WARNING:** Battery tools do not have to be plugged into an electrical outlet; therefore, they are always in operating condition. To prevent serious personal injury, take extra precautions and care when performing maintenance, service or for changing the cutting attachment or other attachments.

**⚠ WARNING:** To prevent serious personal injury, remove the battery pack from the power head and wait for the brush roller stop before servicing, cleaning, changing add-on attachments or when the product is not in use.

### GENERAL MAINTENANCE

**⚠ 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 bristle brush attachment, DO NOT immerse it in water or other liquids. Do not clean your machine with a pressure washer. The solid jet of water may damage parts of the machine.

### BRUSH ROLLER MAINTENANCE

#### REPLACING THE BRUSH ROLLERS

**⚠ WARNING:** A damaged brush roller may break into pieces after long-time use, which may cause dangerous projectiles. Thrown objects can cause serious injury. Inspect it regularly and do not operate the bristle brush with worn or damaged parts.

#### To Remove (Fig. L)

1. Remove the hitch pin from the end of the drive axle.
2. Pull the brush roller, together with cover plate on it, off the drive axle.
3. If the drive axle is damaged, remove the lock pin from the hole of the drive axle and pull the drive axle off the driven shaft (Fig. M).
4. If the cover plate is damaged, pull it from the brush roller and replace it.
5. Follow the same steps to remove the other brush roller.

#### To Install

1. Install the drive axle onto the driven shaft and insert the lock pin into the hole on the drive axle (see Fig. F).
2. Install the cover plate onto the brush roller with the rib in the cover plate aligned with the hole on the brush roller (Fig. N).
3. Push the brush roller onto the drive axle (see Fig. G).
4. Insert the hitch pin in the hole at the end of the drive axle and fold it flat.
5. Follow the same steps to mount the other brush roller.

#### CLEAN THE UNIT

- Remove the battery.
- Clear the pieces of roots, clogged soils, or plants from the brush rollers, guard, or the gear box. For thorough cleaning, remove the brush rollers and guard to wash them thoroughly. For detailed replacement steps please see above section "REPLACING THE BRUSH ROLLERS".
- Keep the air vents free of obstructions.

#### STORING THE UNIT

- Remove the battery pack from the tool.
- Clean the tool thoroughly and inspect the brush rollers.
- Remove the bristle brush attachment from the power head and cover the attachment shaft with end cap to avoid dirt getting into the coupling.
- Store the tool in a dry, well-ventilated area, locked-up or up high, out of the reach of children. Do not store the unit on or adjacent to fertilizers, gasoline, or other chemicals.

#### Protecting the environment



Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

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.



## TROUBLE SHOOTING

PROBLEM	CAUSE	SOLUTION
Bristle brush fails to start.	<ul style="list-style-type: none"><li>■ The battery pack is not properly attached to the power head.</li><li>■ No electrical contact between the power head and the battery pack.</li><li>■ The battery pack is depleted.</li><li>■ The lock-off lever and trigger of the power head are not depressed simultaneously.</li><li>■ Still not start beyond the above reasons.</li></ul>	<ul style="list-style-type: none"><li>■ Attach the battery pack to the power head.</li><li>■ Remove battery, check contacts and reinstall the battery pack so that it snaps into place.</li><li>■ Charge the battery pack with an EGO charger listed in this manual.</li><li>■ Press the lock-off lever and hold it, then depress the trigger to turn on.</li><li>■ Contact EGO Customer Service.</li></ul>
Bristle brush is obviously damaged.	<ul style="list-style-type: none"><li>■ Abnormal damage during transportation or use.</li></ul>	<ul style="list-style-type: none"><li>■ Contact EGO Customer Service.</li></ul>
Bristle brush stops while brushing.	<ul style="list-style-type: none"><li>■ The motor is overloaded.</li><li>■ The battery pack or the power head is too hot.</li><li>■ The battery pack is disconnected from the tool.</li><li>■ The battery pack is depleted.</li><li>■ Still not start beyond the above reasons.</li></ul>	<ul style="list-style-type: none"><li>■ The motor will recover when the load is removed. For continuous work, decrease the load on the bristle brush.</li><li>■ Allow the battery pack or the power head to cool until the its temperature drops below 67°C.</li><li>■ Re-install the battery pack.</li><li>■ Charge the battery pack with an EGO charger listed in this manual.</li><li>■ Contact EGO Customer Service.</li></ul>



## WARRANTY

### EGO WARRANTY POLICY

5 year warranty on EGO outdoor power equipment and 3 year warranty on EGO Power+ System battery packs and chargers.

**Please contact EGO customer service on Australia 1300 000 EGO(1300 000 346), New Zealand 0508 000 EGO (0508 000 346) any time you have questions or warranty claims.**

### LIMITED SERVICE WARRANTY

FOR FIVE YEARS from the date of original retail purchase, this EGO product is warranted against defects in material or workmanship. Defective product will receive free repair.

FOR THREE YEARS from the date of original retail purchase, the EGO Power+ System battery pack and charger are warranted against defects in material or workmanship. Defective product will receive free repair.

This warranty does not cover routine maintenance parts and consumables that can wear out from normal use within the warranty period.

- This warranty applies only to the original purchaser at retail and may not be transferred.
- The warranty period for any EGO product or part used for industrial, professional or commercial purpose is one year.
- This warranty is void if the product has been used for rental purpose.
- This warranty does not cover the damage resulting from modification, alteration or unauthorised repair.
- This warranty only covers defects arising under normal usage and does not cover any malfunction, failure or defect resulting from misuse, abuse (including overloading of the product beyond capacity and exposure to water or rain), accidents, neglect or lack of proper installation, and improper maintenance or storage.
- This warranty does not cover normal deterioration of the exterior finish, including but not limited to scratches, dents, paint chips, or to any corrosion or discoloring by heat, abrasive and chemical cleaners.

## HOW TO OBTAIN SERVICE

For warranty service, please contact EGO customer service on Australia 1300 000 EGO(1300 000 346),

New Zealand 0508 000 EGO (0508 000 346). When requesting warranty service, you must present the original dated sales receipt. An authorized service center will be selected to repair the product according to the stated warranty terms.

### ADDITIONAL LIMITATIONS

Chervon Australia Pty Ltd ABN 36 165 077 501("Chervon") warrants to the original domestic purchaser that this product will be free from defects in materials and workmanship for 5 years from date of purchase, and any battery or charger will be free from defects in materials and workmanship for 3 years from date of purchase. To make a claim, return the faulty item together with proof of purchase directly to your closest service agent or to the place of purchase. Any handling and transportation costs (and other expenses incurred in claiming this warranty) are not covered by this warranty and will not be borne by Chervon. The replacement product or part or repaired product will be made available for your collection at an address nominated by Chervon. Where a valid warranty claim is made, Chervon will replace the defective product or repair the fault. Where the product is repaired, Chervon may use refurbished parts. This warranty does not cover normal wear and tear, misuse or abuse. This warranty may also be further limited or voided as specifically detailed in the product Manual. Chervon has no other liability under this warranty. The benefits to you given by this warranty are in addition to other rights and remedies imposed by State and Federal legislation that cannot be excluded. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. Chervon Australia Pty Ltd, Unit 14, 5 Kelleets Road, Rowville, VIC 3178. Phone Number: Australia 1300 000 EGO(1300 000 346), New Zealand 0508 000 EGO (0508 000 346). Email address: support@egopowerplus.com.au.